











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

A Tale of Two Cities - Charles Dickens, 1859

Preface

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

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

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

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

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

Professor Arturo Bris Director - IMD World Competitiveness Center

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

Bruno Lanvin President - IMD Smart City Observatory

1



Table of content

Preface	
Preface	1
Table of content	
The IMD World Competitiveness Center	5
City performance overview	6
Alphabetical	
By ranking	8
User's Guide to the Smart City Index	10
Methodology in a nutshell	12
City profiles	13

City Profiles

Abu Dhabi	14
Abuja	16
Amsterdam	18
Ankara	20
Athens	22
Auckland	24
Bangkok	26
Barcelona	
Beijing	30
Bengaluru	32
Berlin	34
Bilbao	36
Birmingham	38
Bogota	40
Bologna	42
Boston	44
Bratislava	46
Brisbane	48
Brussels	50
Bucharest	52
Budapest	54
Buenos Aires	56
Busan	58
Cairo	60
Cape Town	62
Chengdu	64
Chicago	66
Chongqing	68

Copenhagen70
Denver72
Dubai74
Dublin76
Dusseldorf78
Geneva80
Gothenburg82
Guangzhou84
Hangzhou86
Hanoi
Hanover90
Helsinki92
Ho Chi Minh City94
Hong Kong96
Hyderabad98
Jakarta100
Kiev102
Krakow104
Kuala Lumpur106
Lagos108
Lisbon 110
London 112
Los Angeles 114
Lyon
Madrid 118
Makassar120
Manila
Medan

City Profiles

Medellin	126
Melbourne	128
Mexico City	130
Milan	132
Montreal	134
Moscow	136
Mumbai	138
Nairobi	140
Nanjing	142
New Delhi	144
New York	146
Osaka	148
Oslo	150
Paris	152
Philadelphia	154
Prague	156
Rabat	158
Rio de Janeiro	160
Riyadh	162
Rome	164
Rotterdam	166
San Francisco	168
Santiago	170
São Paulo	172
Seattle	174
Seoul	176
Shanghai	178
Shenzhen	180

Singapore	
Sofia	
St. Petersburg	
Stockholm	
Sydney	190
Taipei City	192
Tel Aviv	
The Hague	
Tianjin	198
Tokyo	
Toronto	
Vancouver	
Vienna	
Warsaw	
Washington D.C.	210
Zaragoza	
Zhuhai	214
Zurich	216

The IMD World Competitiveness Center

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

The IMD World Competitiveness Center team:

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

City performance overview

Alphabetical

Overall Overall Rating ranking		City Overall Rating
B 56	Chicago	Chicago B B
D 97	Chongqir	Chongqing B B
A 11	Copenha	Copenhagen A A
CCC 74	Denver	Denver B B B
C 95	Dubai	Dubai B B
A 6	Dublin	Dublin B B B
C C C 75	Dusseldo	Dusseldorf A
B B 48	Geneva	Geneva A A
B 60	Gothenb	Gothenburg B B B
C C 79	Guangzh	Guangzhou B
B B B 39	Hangzho	Hangzhou B B
A 9	Hanoi	Hanoi C C C
B B 52	Hanover	Hanover B B B
D 98	Helsinki	Helsinki A
B B B 18	Ho Chi M	Ho Chi Minh City C C C
B B B 32	Hong Ko	Hong Kong B B B
C C 84	Hyderaba	Hyderabad C C C
B B B 27	Jakarta	Jakarta C C
B 64	Kiev	Kiev C
C C 85	Krakow	Krakow C C C
C C 83	Kuala Lu	Kuala Lumpur C C C C
C C 87	Lagos	Lagos D
B B 50	Lisbon	Lisbon C C C
D 99	London	London B B B
C 93	Los Ange	Los Angeles B B B
B 58	Lyon	Lyon B B B

6

City Overall Rating	Overall ranking	City	City Overall Rating
id B B B	21	Santiago	Santiago C C
issar C C	80	São Paulo	São Paulo C C
la C	94	Seattle	Seattle B B B
an C.C	82	Seoul	Seoul B B
ellin C	91	Shanghai	Shanghai B
ourne BBB	24	Shenzhen	Shenzhen B B
co City C C	88	Singapore	Singapore A A A
B B B	22	Sofia	Sofia C C
real A	16	St. Petersburg	St. Petersburg C C C
cow CCC	72	Stockholm	Stockholm B B B
bai C C	78	Sydney	Sydney A
bi D	100	Taipei City	Taipei City A
ng B	55	Tel Aviv	Tel Aviv B B
Delhi CCC	68	The Hague	The Hague B B B
York B B B	38	Tianjin	Tianjin B B
a B	63	Tokyo	Tokyo B
AA	3	Toronto	Toronto A
BB	51	Vancouver	Vancouver A
delphia B B	54	Vienna	Vienna B B B
ue B B B	19	Warsaw	Warsaw B
t D	101	Washington D.C.	Washington D.C. B B B
e Janeiro C	96	Zaragoza	Zaragoza B B
Ih CCC	71	Zhuhai	Zhuhai B B
e CCC	77	Zurich	Zurich A A A
rdam B B B	36		
Francisco A	12		

By ranking

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

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

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

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

User's Guide to the Smart City Index

Smart City Ranking

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

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

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

The Methodology section provides the exact procedure for these calculations.



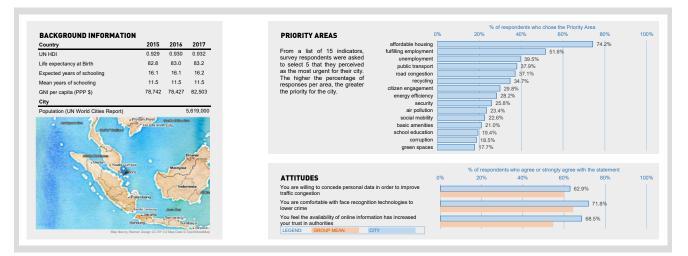
Background Information

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

Priority Areas: Summarizes the areas that the respondents perceive as the priority area for their city. From a list of 15 indicators, survey respondents

were asked to select 5 that they perceived as the most urgent for their city. The response rates indicate the preferences of the respondents; however, they were not asked to prioritize their choices.

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



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

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

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

STRUCTURES	LEGEND: GROUP MIN O GROUP MAX		TECHNOLOGIES	LEGEND: GROUP MIN GROUP MAX
Health & Safety	Score 0 20 40 60 80 100	1	Health & Safety	20 40 60 80 100
Basic sanitation meets the needs of the poorest areas.	0	87.23	Online reporting of city maintenance problems provides a speedy solution.	0
Recycling services are satisfactory.		61.69	A website or App allows to give away unwanted items to other city residents.	
Public safety is not a problem.	0	74.60	Free public wifi has improved access to services.	0
Air pollution is not a problem.		63.04	CCTV cameras make residents feel safer.	0
Medical services provision is satisfactory.	0	79.44	A website or App allows effective monitoring of air pollution.	0
			Arranging medical appointments online has improved access.	0
Mobility			Mobility	
Traffic congestion is not a problem.	O	44.49	Car-sharing Apps have reduced congestion.	•
Public transport is satisfactory.		66.53	Apps that direct you to an available parking space have reduced journey time.	
			Bicycle hiring has reduced congestion.	
			Online scheduling and ticket sales make public transport easier to use.	0
Activities			Activities	
Green spaces are satisfactory.	0	76.88	Online purchasing of tickets to shows and museums has made it easier to attend.	
Cultural activities (shows, bars, and museums) are satisfactory.	Ó	76.61		
Opportunities (Work & School)			Opportunities (Work & School)	
Employment finding services are available.		75.67	Online access to job listings has made it easier to find work.	
Most children have access to a good school.		78.23	IT skills are taught well in schools.	
Lifelong learning opportunities are provided by local institutions.	0	80.51	Online services provided by the city has made it easier to start a new business.	
		62.23		
Businesses are creating new jobs.				
Businesses are creating new jobs. Minorities feel welcome.	0	69.35		
			Governance	
Minorities feel welcome.			Bovernance Online public access to city finances has reduced comption.	0
Minorities feel welcome.	0	69.35		0
Minorities feel welcome. Sovernance Information on local government decisions are easily accessible.		69.35 76.08	Online public access to city finances has reduced corruption.	

Methodology in a nutshell

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

2. The first edition of the SCI ranks 102 cities worldwide by capturing the perceptions of 120 residents in each city.

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

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

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

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

7. Rankings are then presented in two formats:

- an overall ranking (1 to 102)
- a rating for each pillar and overall



Abu Dhabi

SMART CITY RANKING	5 Out o	5 th of 102
GROUP	;	3
RATING		B A A to D
FACTOR RATINGS	B B Structures	B

BACKGROUND INFORMATION

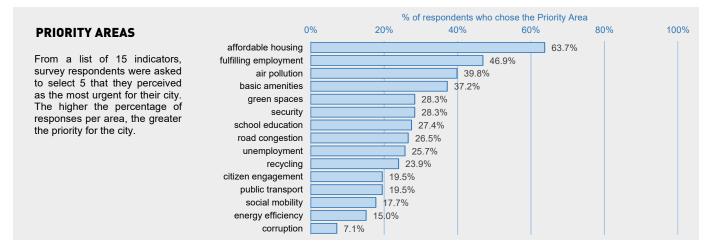
Country	2015	2016	2017
UN HDI	0.860	0.862	0.863
Life expectancy at Birth	77.1	77.3	77.4
Expected years of schooling	13.8	13.6	13.6
Mean years of schooling	10.6	10.8	10.8
GNI per capita (PPP \$)	66,923	68,121	67,805
City			

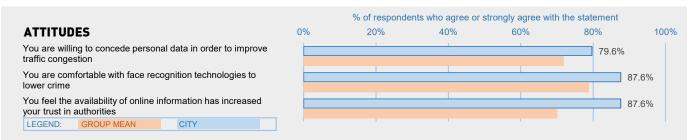
Population (UN World Cities Report)



	Г		CITY	GROUP I	MEAN		
STRUCTURES	Ľ	LEGEND:			GROUP	MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.					\bigcirc		83.78
Recycling services are satisfactory.					\bigcirc		82.15
Public safety is not a problem.					\bigcirc		73.30
Air pollution is not a problem.				\bigcirc			59.73
Medical services provision is satisfactory.					\bigcirc		85.99
Mobility							
Traffic congestion is not a problem.				\bigcirc			67.85
Public transport is satisfactory.					\bigcirc		78.61
Activities							
Green spaces are satisfactory.					\bigcirc		80.24
Cultural activities (shows, bars, and museums) are satisfactory.							82.30
Opportunities (Work & School)							
Employment finding services are available.				(71.24
Most children have access to a good school.					\bigcirc		78.02
Lifelong learning opportunities are provided by local institutions.					\bigcirc		75.66
Businesses are creating new jobs.							69.91
Minorities feel welcome.					\bigcirc		81.56
Governance							
Information on local government decisions are easily accessible.					\bigcirc		79.50
Corruption of city officials is not an issue of concern.							70.06
Residents contribute to decision making of local government.				0			67.11
Residents provide feedback on local government projects.				(71.24

Abu Dhabi





		LEGEND:		GRO	UP MEAN		
TECHNOLOGIES		LEGEND.	GROUP MIN		GROU	JP MAX	
Health & Cafety	0	20	Score 40	60	80	100	
Health & Safety Online reporting of city maintenance problems provides a speedy solution.	0			00		100	74.
A website or App allows to give away unwanted items to other city residents.							71.0
Free public wifi has improved access to services.							75.
CCTV cameras make residents feel safer.							84.
A website or App allows effective monitoring of air pollution.				\bigcirc			56.
Arranging medical appointments online has improved access.				0			81.
Arranging metical appointments online has improved access.							01.
Mobility							
Car-sharing Apps have reduced congestion.				\bigcirc			62.
Apps that direct you to an available parking space have reduced journey time.					\bigcirc		68.
Bicycle hiring has reduced congestion.				(66.
Online scheduling and ticket sales make public transport easier to use.							78
					-		
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc		84.
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.							77.
IT skills are taught well in schools.							75.
Online services provided by the city has made it easier to start a new business.					\bigcirc		77.
Covernance							
Governance		_					69.
Online public access to city finances has reduced corruption.							69.
Online voting has increased participation.							70
An online platform where residents can propose ideas has improved city life.							
Processing Identification Documents online has reduced waiting times.						1	81.

Abuja

SMART CITY RANKING	? Out c	7th of 102
GROUP		4
RATING		A A to D
FACTOR RATINGS	C	D Technologies

BACKGROUND INFORMATION

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

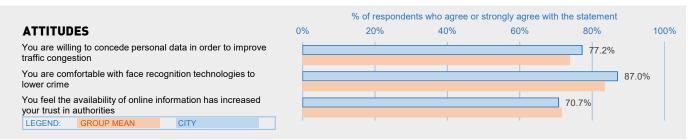
City



				GROUP MEA	NNI .	_
STRUCTURES		LEGEND:		GROUP MEA	GROUP MA	X
			Score			
Health & Safety	0	20	40	60	80 I	00
Basic sanitation meets the needs of the poorest areas.			(\bigcirc		
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.						
Medical services provision is satisfactory.			\bigcirc			
Mobility						
Traffic congestion is not a problem.			\bigcirc			
Public transport is satisfactory.			Ŭ			
Activities						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0	0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Green spaces are satisfactory.						

Abuja

% of respondents who chose the Priority Area 20% 40% 60% 80% 100% 0% **PRIORITY AREAS** corruption 69.1% From a list of 15 indicators, 66.7% security survey respondents were asked to select 5 that they perceived unemployment 63.4% affordable housing 62.6% as the most urgent for their city. basic amenities 44.7% The higher the percentage of fulfilling employment 39.0% responses per area, the greater energy efficiency 31.7% the priority for the city. school education 28.5% road congestion 18.7% citizen engagement 16.3% 16.3% recycling public transport 16.3% social mobility 7.3% green spaces 6.5% air pollution 6.5%



TECHNOLOGIES		LEGEND:	CITY GROUP MIN	GROUP N	/IEAN GROU	P MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			5	51.7
A website or App allows to give away unwanted items to other city residents.						3	39.0
Free public wifi has improved access to services.			\bigcirc			4	40.5
CCTV cameras make residents feel safer.			\bigcirc			4	43.0
A website or App allows effective monitoring of air pollution.		\bigcirc				2	22.9
Arranging medical appointments online has improved access.				\bigcirc		5	57.′
Mobility							
Car-sharing Apps have reduced congestion.			(\bigcirc		5	56.3
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			3	33.8
Bicycle hiring has reduced congestion.)			2	23.0
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		e	64.2
Activities							
Activities Online purchasing of tickets to shows and museums has made it easier to attend	d			(72.6
	u.			(,	12.0
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				(7	71.8
IT skills are taught well in schools.			(5	55.5
Online services provided by the city has made it easier to start a new business.				\bigcirc		5	59.7
Governance							
Online public access to city finances has reduced corruption.			\bigcirc			2	29.0
Online voting has increased participation.		\bigcirc				2	22.0
An online platform where residents can propose ideas has improved city life.			\bigcirc			3	31.1
Processing Identification Documents online has reduced waiting times.			\bigcirc			5	50.4

Amsterdam

SMART CITY RANKING		th of 102
GROUP		I.
RATING		A A to D
FACTOR RATINGS	A Structures	A Technologies

BACKGROUND INFORMATION

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

City

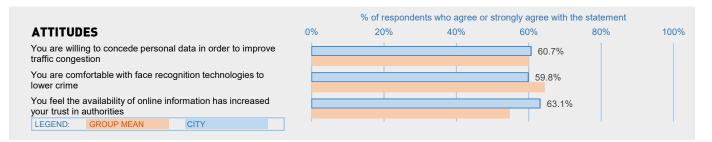
Population (UN World Cities Report)



			CITY	GROUP ME	EAN	
STRUCTURES		LEGEND:	GROUP MIN		GROUP N	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.						
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.				\bigcirc		
Public transport is satisfactory.						
Public transport is satisfactory.						
Public transport is satisfactory.						
Activities			_	0		
Activities Green spaces are satisfactory.			_	0	0	
Activities Green spaces are satisfactory.				0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Winorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Public transport is satisfactory. Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Amsterdam

% of respondents who chose the Priority Area 20% 40% 80% 100% 0% 60% **PRIORITY AREAS** affordable housing 65.6% From a list of 15 indicators, 50.8% security survey respondents were asked to select 5 that they perceived air pollution 41.8% public transport 36.1% as the most urgent for their city. road congestion 32.8% The higher the percentage of green spaces 31.1% responses per area, the greater basic amenities 28.7% the priority for the city. recycling 27.9% school education 27.9% unemployment 24.6% social mobility 23.0% citizen engagement 18.0% fulfilling employment 17.2% energy efficiency 13.9% corruption 13.1%



			CITY GRO		1
TECHNOLOGIES		LEGEND:		GROUP MAX	I
			Score		
Health & Safety	0	20	40 60	80 100)
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		57.65
A website or App allows to give away unwanted items to other city residents.					59.70
Free public wifi has improved access to services.			\bigcirc		51.09
CCTV cameras make residents feel safer.					61.75
A website or App allows effective monitoring of air pollution.			\bigcirc		39.07
Arranging medical appointments online has improved access.			(\bigcirc	65.71
Mobility					
Car-sharing Apps have reduced congestion.			\bigcirc		40.98
Apps that direct you to an available parking space have reduced journey time.					53.42
Bicycle hiring has reduced congestion.					54.92
Online scheduling and ticket sales make public transport easier to use.					58.74
Activities					
Online purchasing of tickets to shows and museums has made it easier to atter	nd.				70.08
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.			(65.44
IT skills are taught well in schools.			\bigcirc		56.42
Online services provided by the city has made it easier to start a new business.					54.64
Governance					
Online public access to city finances has reduced corruption.			\bigcirc		42.49
Online voting has increased participation.			\bigcirc		47.27
An online platform where residents can propose ideas has improved city life.			\bigcirc		47.81
Processing Identification Documents online has reduced waiting times.			\bigcirc		56.69

Ankara

SMART CITY	74th
RANKING	Out of 102
GROUP	3
RATING	CCCC From AAA to D
FACTOR	CCC CCC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

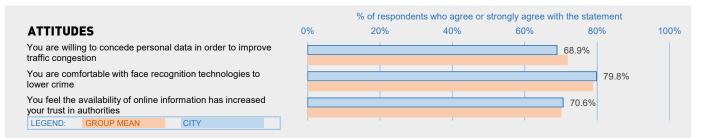
Population (UN World Cities Report) 4,750,000 • Budapest Noldova ngary • Odessa Romania . Belgr Buc Serbia Eleak See • Sofia Bulgaria Georg M Ankara Istanbul Turkey Aleppo Cyprus Syria Lebanon Damascus Tel Avy Stamen Design CC BY 3.0 Map Data © Opr Baghda

Map tiles by Sta

			CITY	GROI	JP MEAN		
STRUCTURES		LEGEND:	GROUP MIN			GROUP	P MAX
			Score				
Health & Safety	0	20	40	60	80	0	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc		
Recycling services are satisfactory.				\bigcirc			
Public safety is not a problem.			\bigcirc				
Air pollution is not a problem.			\bigcirc				
Medical services provision is satisfactory.				C)		
Mobility							
Traffic congestion is not a problem.			\bigcirc				
Public transport is satisfactory.				\bigcirc			
·							
Activities			0				
Activities Green spaces are satisfactory.			0	0			
Activities Green spaces are satisfactory.			0				
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			0	0		-	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			0	0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0	0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.							
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.							
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.							
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.							
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.							
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance							
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.							
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.							

Ankara

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** unemployment 60.5% From a list of 15 indicators, 48.7% corruption survey respondents were asked to select 5 that they perceived affordable housing 44.5% green spaces 42.9% as the most urgent for their city. The higher the percentage of road congestion 42.0% security 41.2% responses per area, the greater air pollution 38.7% the priority for the city. fulfilling employment 32.8% public transport 26.1% school education 23.5% basic amenities 21.8% recycling 20.2% energy efficiency 16.0% citizen engagement 11.8% social mobility 7.6%



TECHNOLOGIES		LEGEND:	CITY GROUP MIN	GROUP M	IEAN GROUP	MAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		
A website or App allows to give away unwanted items to other city residents.				Õ		
Free public wifi has improved access to services.				0		
CCTV cameras make residents feel safer.						
A website or App allows effective monitoring of air pollution.						4
Arranging medical appointments online has improved access.					\bigcirc	4
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			
Bicycle hiring has reduced congestion.			\bigcirc			4
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	nd.					
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				(
IT skills are taught well in schools.				\bigcirc		
Online services provided by the city has made it easier to start a new business.				\bigcirc		:
Covernance						
Governance Online public access to city finances has reduced corruption.						
Online public access to city infances 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.						
recessing remaindation becaments offine has reduced watting tilles.						

Athens

SMART CITY RANKING	9 Out c	5 th of 102
GROUP	;	3
RATING		A A to D
FACTOR RATINGS	C	C Technologies

BACKGROUND INFORMATION

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

3,052,000

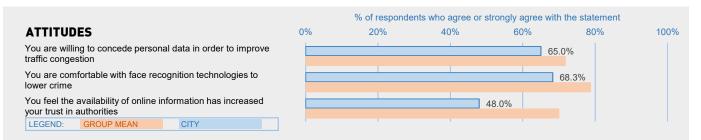
Population (UN World Cities Report)



STRUCTURES		LEGEND:		GROUP N		OUP MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.						
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.						
Air pollution is not a problem.						
Medical services provision is satisfactory.			\bigcirc			
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.						
Activities						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.		()		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.		()		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)		(0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.		(•	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Green spaces are satisfactory.						

Athens

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** security 69.9% From a list of 15 indicators, 61.0% unemployment survey respondents were asked to select 5 that they perceived corruption 45.5% road congestion 41.5% as the most urgent for their city. green spaces 39.8% The higher the percentage of public transport 30.9% responses per area, the greater fulfilling employment 30.1% the priority for the city. recycling 26.8% air pollution 26.0% school education 24.4% 23.6% basic amenities affordable housing 19.5% citizen engagement 14.6% energy efficiency 13.8% social mobility 8.9%



	[CITY	GROUP M	IEAN	
TECHNOLOGIES		LEGEND:	GROUP MIN		GROUP	MAX
			Score			to a l
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			3
A website or App allows to give away unwanted items to other city residents.						5
Free public wifi has improved access to services.			\bigcirc			3
CCTV cameras make residents feel safer.			\bigcirc			3
A website or App allows effective monitoring of air pollution.			\bigcirc			3
Arranging medical appointments online has improved access.				\bigcirc		5
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			3
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			3
Bicycle hiring has reduced congestion.			\bigcirc			3
Online scheduling and ticket sales make public transport easier to use.						5
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	d.				\bigcirc	8
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		6
IT skills are taught well in schools.			\bigcirc			3
Online services provided by the city has made it easier to start a new business.			\bigcirc			3
Governance						
Online public access to city finances has reduced corruption.		C				2
Online voting has increased participation.			0			3
An online platform where residents can propose ideas has improved city life.			\bigcirc			3
Processing Identification Documents online has reduced waiting times.			(5

Auckland

SMART CITY	5 th
RANKING	Out of 102
GROUP	2
RATING	From AAA to D
FACTOR	A A
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

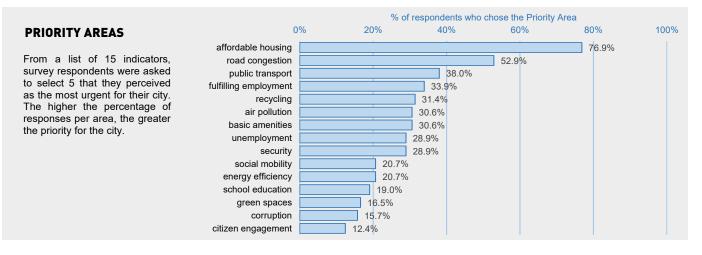
Population (UN World Cities Report)

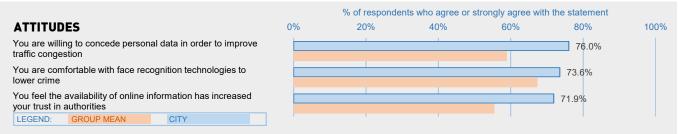
1,344,000



			CITY	GROUP MEAN		1
STRUCTURES		LEGEND:		GROOP WEAR	GROUP MAX	
			Score			
Health & Safety	0	20	40	60	80 100	
Basic sanitation meets the needs of the poorest areas.				\bigcirc		73.00
Recycling services are satisfactory.				\bigcirc		71.49
Public safety is not a problem.				\bigcirc		62.26
Air pollution is not a problem.				\bigcirc		68.18
Medical services provision is satisfactory.				C)	76.45
Mobility						
Traffic congestion is not a problem.			\bigcirc			41.60
Dublis to out is set of stars.			(56.89
Public transport is satisfactory.			,			
Public transport is satisfactory.			, , , , , , , , , , , , , , , , , , ,			
Activities			Ň			
						74.66
Activities						74.66 77.82
Activities Green spaces are satisfactory.)	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.						77.82
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						77.82 74.93 70.52
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						77.82 74.93 70.52 70.80
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						77.82 74.93 70.52 70.80 71.07
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						77.82 74.93 70.52 70.80
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						77.82 74.93 70.52 70.80 71.07
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						77.82 74.93 70.52 70.80 71.07
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						77.82 74.93 70.52 70.80 71.07 73.28
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						77.82 74.93 70.52 70.80 71.07 73.28 67.63

Auckland





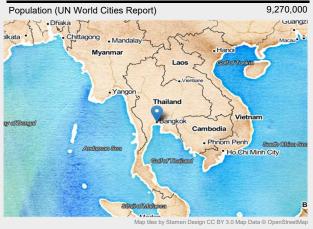
TECHNOLOGIES GROUP M	
Health & Safety 0 20 40	Score 60 80 100
Online reporting of city maintenance problems provides a speedy solution.	64.
A website or App allows to give away unwanted items to other city residents.	75.
Free public wifi has improved access to services.	75.
CCTV cameras make residents feel safer.	68.
A website or App allows effective monitoring of air pollution.	53.
Arranging medical appointments online has improved access.	71.
Mobility	
Car-sharing Apps have reduced congestion.	62.
Apps that direct you to an available parking space have reduced journey time.	61.
Bicycle hiring has reduced congestion.	61.
Online scheduling and ticket sales make public transport easier to use.	76.
Activities	
Online purchasing of tickets to shows and museums has made it easier to attend.	81.
Opportunities (Work & School)	
Online access to job listings has made it easier to find work.	82.
IT skills are taught well in schools.	66.
Online services provided by the city has made it easier to start a new business.	63.
Governance	
Online public access to city finances has reduced corruption.	62.
Online voting has increased participation.	70.
An online platform where residents can propose ideas has improved city life.	64.
Processing Identification Documents online has reduced waiting times.	74.

Bangkok

SMART CITY	7 .	5 th
RANKING	Out a	of 102
GROUP		3
RATING		CC AA to D
FACTOR	C C	CCC
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

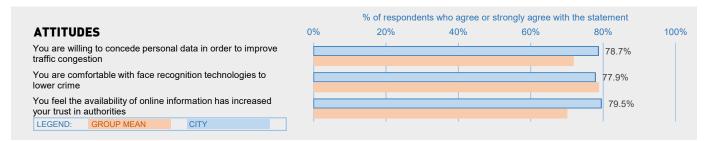
Country	2015	2016	2017
UN HDI	0.741	0.748	0.755
Life expectancy at Birth	75.1	75.3	75.5
Expected years of schooling	13.9	14.3	14.7
Mean years of schooling	7.6	7.6	7.6
GNI per capita (PPP \$)	14,455	14,971	15,516
City			



			CITY	GROUP M	FAN		
STRUCTURES		LEGEND:		GROOP M		UP MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.				\bigcirc			63.39
Recycling services are satisfactory.			\sim)			53.01
Public safety is not a problem.			\bigcirc				43.85
Air pollution is not a problem.		\bigcirc					25.14
Medical services provision is satisfactory.				\bigcirc			65.98
Mobility							
Traffic congestion is not a problem.		\bigcirc					25.14
Public transport is satisfactory.			\bigcirc				34.43
Activities							
Green spaces are satisfactory.			\bigcirc				50.00
Cultural activities (shows, bars, and museums) are satisfactory.				\bigcirc			58.61
Opportunities (Work & School)							
Employment finding services are available.				\bigcirc			67.76
Most children have access to a good school.				\bigcirc			57.92
Lifelong learning opportunities are provided by local institutions.			\bigcirc				51.78
Businesses are creating new jobs.			-	\bigcirc			65.44
Minorities feel welcome.			C)			53.01
Governance							
Information on local government decisions are easily accessible.			\bigcirc				47.81
			\bigcirc				30.46
Corruption of city officials is not an issue of concern.			<u> </u>				
Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.			0				44.40

Bangkok

% of respondents who chose the Priority Area 20% 40% 60% 80% 100% 0% **PRIORITY AREAS** air pollution 68.0% From a list of 15 indicators, 59.0% road congestion survey respondents were asked to select 5 that they perceived corruption **5**3.3% security 48.4% as the most urgent for their city. public transport 43.4% The higher the percentage of 36.9% basic amenities responses per area, the greater social mobility 32.0% the priority for the city. green spaces 20.5% affordable housing 20.5% school education 18.9% unemployment 15.6% fulfilling employment 14.8% citizen engagement 10.7% recycling 10.7% energy efficiency 8.2%



			CITY	GROUP	MEAN		
TECHNOLOGIES		LEGEND:				UP MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			C				55
A website or App allows to give away unwanted items to other city residents.				\bigcirc			58
Free public wifi has improved access to services.			C)			54
CCTV cameras make residents feel safer.				\bigcirc			61
A website or App allows effective monitoring of air pollution.				C			67
Arranging medical appointments online has improved access.				\bigcirc			60
Mobility							
Car-sharing Apps have reduced congestion.			C				55
Apps that direct you to an available parking space have reduced journey time.			\bigcirc)			54
Bicycle hiring has reduced congestion.			\bigcirc				53
Online scheduling and ticket sales make public transport easier to use.					\bigcirc		72
Activities							
Online purchasing of tickets to shows and museums has made it easier to attend	d.				\bigcirc		76
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					\bigcirc		78
IT skills are taught well in schools.				(\bigcirc		70
Online services provided by the city has made it easier to start a new business.							68
Governance							
Online public access to city finances has reduced corruption.			\bigcirc				47
Online voting has increased participation.				\bigcirc			63
An online platform where residents can propose ideas has improved city life.				\bigcirc			62
Processing Identification Documents online has reduced waiting times.				\bigcirc			65

Barcelona

SMART CITY	4	9 th
RANKING	Out o	of 102
GROUP	2	2
RATING		B A A to D
FACTOR	BBB	BB
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

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

5,258,000

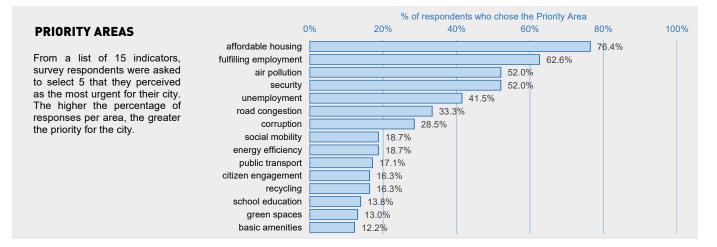
ity

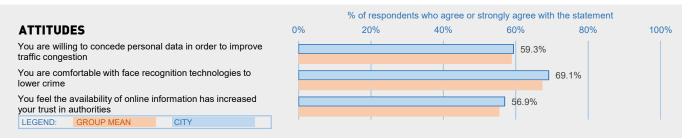
Population (UN World Cities Report)



GROUP MEAN CITY LEGEND: STRUCTURES GROUP MIN GROUP MAX Score 0 20 40 60 80 100 **Health & Safety** 61.65 Basic sanitation meets the needs of the poorest areas. \bigcirc 60.03 Recycling services are satisfactory. \bigcirc 46.88 Public safety is not a problem. \bigcirc 24.53 Air pollution is not a problem. Medical services provision is satisfactory. 57.05 Mobility 29.13 Traffic congestion is not a problem. \bigcirc Public transport is satisfactory. \bigcirc 64.91 **Activities** 63.14 Green spaces are satisfactory. \bigcirc 80.89 Cultural activities (shows, bars, and museums) are satisfactory. \bigcirc **Opportunities (Work & School)** 74.25 Employment finding services are available. \bigcirc 62.20 Most children have access to a good school. \bigcirc Lifelong learning opportunities are provided by local institutions. 66.94 Businesses are creating new jobs. 46.21 \bigcirc 48.92 Minorities feel welcome. (Governance 47.02 Information on local government decisions are easily accessible. 40.24 Corruption of city officials is not an issue of concern. \bigcirc Residents contribute to decision making of local government. 39.97 Residents provide feedback on local government projects. 47.70

Barcelona





TECHNOLOGIES		LEGEND:			UP MAX	
IEUMNULUGIES				GRU		
Health & Safety	0	20	Score 40 60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		4	49.1
A website or App allows to give away unwanted items to other city residents.					5	57.0
Free public wifi has improved access to services.					5	54.3
CCTV cameras make residents feel safer.					4	49.3
A website or App allows effective monitoring of air pollution.					4	45.6
Arranging medical appointments online has improved access.				\bigcirc	7	70.4
Mobility						
Car-sharing Apps have reduced congestion.					4	49.7
Apps that direct you to an available parking space have reduced journey time.						48.1
Bicycle hiring has reduced congestion.					5	57.4
Online scheduling and ticket sales make public transport easier to use.					e	63.2
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.			\bigcirc	7	77.3
Opportunities (Mark & Cohest)						
Opportunities (Work & School) Online access to job listings has made it easier to find work.					F	66.2
IT skills are taught well in schools.						55.4
Online services provided by the city has made it easier to start a new business.						51.7
Online services provided by the city has made it easier to start a new business.						51.7
Governance						
Online public access to city finances has reduced corruption.					4	40.6
Online voting has increased participation.					4	43.0
An online platform where residents can propose ideas has improved city life.					5	52.4
Processing Identification Documents online has reduced waiting times.					e	63.2

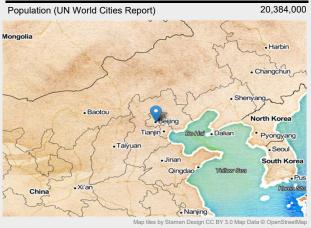
Beijing

SMART CITY	6) th
RANKING	Out o	of 102
GROUP	;	3
RATING		B A A to D
FACTOR	B	BB
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

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

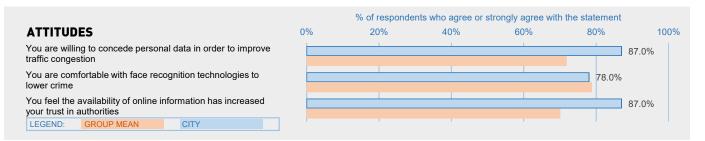
Population (UN World Cities Report)



			CITY	GRO	JP MEAN	
STRUCTURES		LEGEND:		Gitte		GROUP MAX
			Score)		
Health & Safety	0	20	40	60	80	001
Basic sanitation meets the needs of the poorest areas.						
Recycling services are satisfactory.					\bigcirc	
Public safety is not a problem.					\bigcirc	
Air pollution is not a problem.)			
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.			0			
Public transport is satisfactory.			\bigcirc			
Activities						
Cultural activities (shows, bars, and museums) are satisfactory.					0	
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Beijing

% of respondents who chose the Priority Area 0% 60% 80% 100% 20% 40% **PRIORITY AREAS** road congestion 73.2% From a list of 15 indicators, air pollution 73.2<mark>%</mark> survey respondents were asked to select 5 that they perceived affordable housing 51.2% public transport 32.5% as the most urgent for their city. corruption 31.7% The higher the percentage of basic amenities 30.1% responses per area, the greater social mobility 26.0% the priority for the city. school education 25.2% 23.6% security green spaces 22.8% fulfilling employment 22.8% citizen engagement 16.3% unemployment 14.6% energy efficiency 12.2% recycling 8.9%



		LEGEND:		GROUP			
TECHNOLOGIES			GROUP MIN		GRUU	IP MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.					\bigcirc		84.4
A website or App allows to give away unwanted items to other city residents.				0	Ŭ		65.8
Free public wifi has improved access to services.				Ĩ	\bigcirc		80.6
CCTV cameras make residents feel safer.					Õ		81.0
A website or App allows effective monitoring of air pollution.							76.6
Arranging medical appointments online has improved access.					0		88.
No. 1.111							
Mobility							64.
Car-sharing Apps have reduced congestion.				0			64. 74.
Apps that direct you to an available parking space have reduced journey time.							74.
Bicycle hiring has reduced congestion. Online scheduling and ticket sales make public transport easier to use.							72. 88.
Online scheduling and licket sales make public transport easier to use.							00.
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				(92.
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.							89.
IT skills are taught well in schools.					0		80.3
Online services provided by the city has made it easier to start a new business.					0		80.
Governance					-		
Online public access to city finances has reduced corruption.					\bigcirc		74.
Online voting has increased participation.							67.
An online platform where residents can propose ideas has improved city life.					\bigcirc		80.
Processing Identification Documents online has reduced waiting times.							79.

Bengaluru

SMART CITY	79th				
RANKING	Out of 102				
GROUP	4				
RATING	CC From AAA to D				
FACTOR	C C	C C			
RATINGS	Structures	Technologies			

BACKGROUND INFORMATION

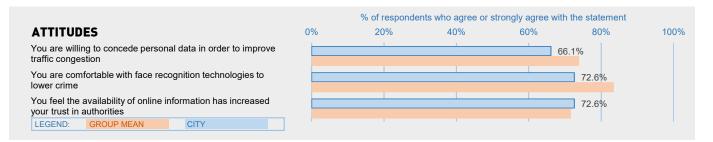
Country	2015	2016	2017
UN HDI	0.627	0.636	0.640
Life expectancy at Birth	68.3	68.6	68.8
Expected years of schooling	12.0	12.3	12.3
Mean years of schooling	6.3	6.4	6.4
GNI per capita (PPP \$)	5,691	6,026	6,353



STRUCTURES			CI	TY GROUP	MEAN	
STRUCTURES		LEGEND:	GROUP MIN		GROUF	PMAX
	0	20	Sco 40	re 60	80	100
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc		-	
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.				\bigcirc		
Activities						
Green spaces are satisfactory.			_	0		
Green spaces are satisfactory.				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Bengaluru

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** road congestion 64.5% From a list of 15 indicators, air pollution 62.9% survey respondents were asked to select 5 that they perceived basic amenities 53.2<mark>%</mark> green spaces 44.4% as the most urgent for their city. security 36.3% The higher the percentage of corruption 34.7% responses per area, the greater recycling 34.7% the priority for the city. affordable housing 30.6% public transport 29.8% unemployment 24.2% fulfilling employment 20.2% school education 15.3% energy efficiency 13.7% citizen engagement 11.3% social mobility 11.3%



		LEGEND:	CITY GROUP MEAN			P MAX	
TECHNOLOGIES					51001		
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc			59.95
A website or App allows to give away unwanted items to other city residents.							54.17
Free public wifi has improved access to services.			Õ				53.09
CCTV cameras make residents feel safer.							73.92
A website or App allows effective monitoring of air pollution.			\bigcirc				47.18
Arranging medical appointments online has improved access.					\bigcirc		80.6
Mahilian							
Mobility Car-sharing Apps have reduced congestion.							64.7
Apps that direct you to an available parking space have reduced journey time.							55.9
Bicycle hiring has reduced congestion.							59.0 ⁻
Online scheduling and ticket sales make public transport easier to use.							76.3
							10.0
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc		79.5
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.							79.7
IT skills are taught well in schools.							62.2
Online services provided by the city has made it easier to start a new business.							74.7
Governance							
Online public access to city finances has reduced corruption.			\bigcirc				53.4
Online voting has increased participation.			\bigcirc				52.4
An online platform where residents can propose ideas has improved city life.				\bigcirc			60.0
Processing Identification Documents online has reduced waiting times.							73.3

Berlin

SMART CITY	39th
RANKING	Out of 102
GROUP	1
RATING	BBB From AAA to D
FACTOR	A BB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

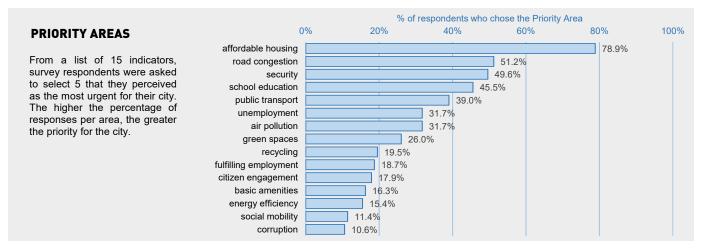
City

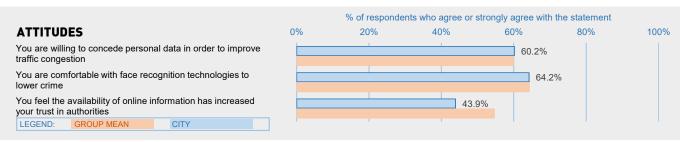
Population (UN World Cities Report)



			OITV			
STRUCTURES		LEGEND:		GROUP MI		JP MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				C)	
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				C)	
Mobility						
Traffic congestion is not a problem.			\bigcirc			
				N I I I I I I I I I I I I I I I I I I I		
Public transport is satisfactory.)		
Public transport is satisfactory.						
Public transport is satisfactory.				/		
Public transport is satisfactory.				/		
Activities						
Activities Green spaces are satisfactory.					0	
Activities Green spaces are satisfactory.					0	
Public transport is satisfactory. Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Berlin





	Г		CITY	GROUP I	MEAN	
TECHNOLOGIES		LEGEND:			GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			3
A website or App allows to give away unwanted items to other city residents.						5
Free public wifi has improved access to services.			\bigcirc			4
CCTV cameras make residents feel safer.						5
A website or App allows effective monitoring of air pollution.			\bigcirc			2
Arranging medical appointments online has improved access.			\bigcirc			4
Mobility						
Car-sharing Apps have reduced congestion.						3
Apps that direct you to an available parking space have reduced journey time.						4
Bicycle hiring has reduced congestion.			\bigcirc			4
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		6
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	nd.				\bigcirc	7
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		6
IT skills are taught well in schools.			\bigcirc			4
Online services provided by the city has made it easier to start a new business.			\bigcirc			4
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			3
Online voting has increased participation.						4
An online platform where residents can propose ideas has improved city life.			0			4
Processing Identification Documents online has reduced waiting times.						4

Bilbao

SMART CITY	9) th
RANKING	Out c	of 102
GROUP	2	2
RATING		A A to D
FACTOR	A	BB
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

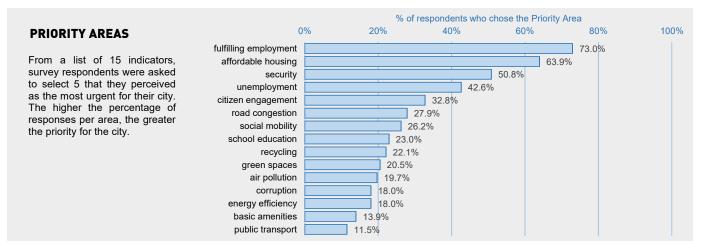
Country	2015	2016	2017
UN HDI	0.885	0.889	0.891
Life expectancy at Birth	83.0	83.1	83.3
Expected years of schooling	17.8	17.9	17.9
Mean years of schooling	9.7	9.8	9.8
GNI per capita (PPP \$)	32,217	33,307	34,258
City			

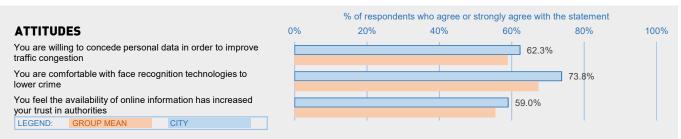
Population (Eurostat)



			CITY	GROUP M		
STRUCTURES		LEGEND:		GROUP IM		OUP MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc	
Recycling services are satisfactory.					\bigcirc	
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.			\bigcirc			
Public transport is satisfactory.			Ŭ		\bigcirc	
Activities						
					0	
Green spaces are satisfactory.			_		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.						

Bilbao





TECHNOLOGIES		LEGEND:	CITY GROUP MIN	GROUP ME	AN GROUP	MAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.				0		59
A website or App allows to give away unwanted items to other city residents.			C)		53
Free public wifi has improved access to services.				\bigcirc		62
CCTV cameras make residents feel safer.						5
A website or App allows effective monitoring of air pollution.			\bigcirc			50
Arranging medical appointments online has improved access.					\bigcirc	70
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			4
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			52
Bicycle hiring has reduced congestion.				\bigcirc		58
Online scheduling and ticket sales make public transport easier to use.				(74
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	d.				\bigcirc	8
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		69
IT skills are taught well in schools.				\bigcirc		6
Online services provided by the city has made it easier to start a new business.				\bigcirc		59
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			46
Online voting has increased participation.			\bigcirc			43
An online platform where residents can propose ideas has improved city life.				\bigcirc		58
Processing Identification Documents online has reduced waiting times.				\bigcirc		63

Birmingham

SMART CITY RANKING		2 nd of 102
GROUP	2	2
RATING		B A A to D
FACTOR RATINGS	B B Structures	B

BACKGROUND INFORMATION

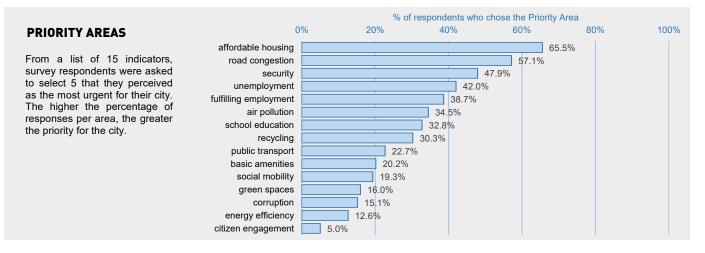
Country	2015	2016	2017
UN HDI	0.918	0.920	0.922
Life expectancy at Birth	81.4	81.6	81.7
Expected years of schooling	17.4	17.4	17.4
Mean years of schooling	12.8	12.9	12.9
GNI per capita (PPP \$)	38,146	38,680	39,116
City			

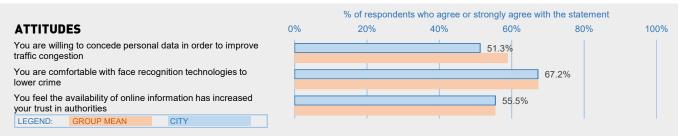
City Population (UN World Cities Report)



STRUCTURES		LEGEND:		GROUP MEAN	GROUP MAX
			Score		
Health & Safety	0	20	40	60 8	80 100
Basic sanitation meets the needs of the poorest areas.				\bigcirc	
Recycling services are satisfactory.			(
Public safety is not a problem.			\bigcirc		
Air pollution is not a problem.			\bigcirc		
Medical services provision is satisfactory.			\bigcirc		
Mobility					
Traffic congestion is not a problem.					
Public transport is satisfactory.			\bigcirc		
Activities Green spaces are satisfactory.					
Cultural activities (shows, bars, and museums) are satisfactory.				0	
Opportunities (Work & School)				0	
Opportunities (Work & School) Employment finding services are available.				0	
Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.		-	C	0	
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.		-	C		
Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.		-			
Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.		-			
Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance		-			
Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.					
Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					

Birmingham





TECHNOLOGIES CITY GROUP MEAN Health & Safety O 20 40 60 80 100 Online reporting of city maintenance problems provides a speedy solution. Image: City maintenance problems provides a speedy solution. Image: City GROUP MEAN Image: City GROUP MEAN A website or App allows to give away unwanted items to other city residents Image: City GROUP MEAN Image: City GROUP MEAN Image: City GROUP MEAN
Health & Safety 0 20 40 60 80 100 Online reporting of city maintenance problems provides a speedy solution. Image: Constraint of the second
Health & Safety 0 20 40 60 80 100 Online reporting of city maintenance problems provides a speedy solution. Image: Constraint of the second
Online reporting of city maintenance problems provides a speedy solution.
A website or App allows to give away unwanted items to other city residents.
Free public wifi has improved access to services.
CCTV cameras make residents feel safer.
A website or App allows effective monitoring of air pollution.
Arranging medical appointments online has improved access. 55
Mobility
Car-sharing Apps have reduced congestion.
Apps that direct you to an available parking space have reduced journey time. 44
Bicycle hiring has reduced congestion.
Online scheduling and ticket sales make public transport easier to use.
Activities
Online purchasing of tickets to shows and museums has made it easier to attend.
Opportunities (Work & School)
Online access to job listings has made it easier to find work.
IT skills are taught well in schools.
Online services provided by the city has made it easier to start a new business.
Governance
Online public access to city finances has reduced corruption.
Online voting has increased participation.
An online platform where residents can propose ideas has improved city life.
Processing Identification Documents online has reduced waiting times.

Bogota

SMART CITY	9	9th
RANKING	Out c	of 102
GROUP		4
RATING		A A to D
FACTOR	D	C
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

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

Population (UN World Cities Report)

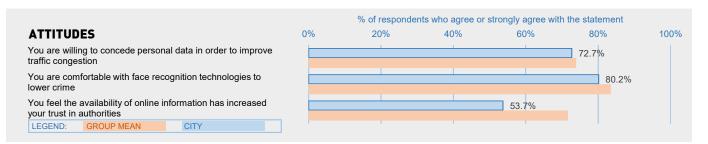


Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStr

STRUCTURES		LEGEND:		GROUP ME	EAN GROUP MA	AX
STROOTORES			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.			\bigcirc			
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.		(
Air pollution is not a problem.		\bigcirc				
Medical services provision is satisfactory.			\bigcirc			
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.		C)			
Activities						
				0		
Green spaces are satisfactory.			_	0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			_		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.			0		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.			0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						

Bogota

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** security 86.8% From a list of 15 indicators, air pollution 62.0% survey respondents were asked to select 5 that they perceived corruption 57.0% road congestion 52.9% as the most urgent for their city. public transport 48.8% The higher the percentage of unemployment 37.2% responses per area, the greater fulfilling employment 33.9% the priority for the city. social mobility 26.4% school education 18.2% basic amenities 18.2% affordable housing 16.5% recycling 15.7% citizen engagement 6.6% green spaces 5.0% energy efficiency 0.8%



			CITY	GROUP M	FAN	
TECHNOLOGIES		LEGEND:		5.100.1	GROUF	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			51.5
A website or App allows to give away unwanted items to other city residents.			\bigcirc			41.6
Free public wifi has improved access to services.				\bigcirc		65.9
CCTV cameras make residents feel safer.						55.2
A website or App allows effective monitoring of air pollution.			\bigcirc			46.2
Arranging medical appointments online has improved access.				\bigcirc		62.6
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			42.5
Apps that direct you to an available parking space have reduced journey time.)		53.5
Bicycle hiring has reduced congestion.				\bigcirc		59.0
Online scheduling and ticket sales make public transport easier to use.			\bigcirc			52.0
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc	79.2
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		63.0
IT skills are taught well in schools.				\bigcirc		58.5
Online services provided by the city has made it easier to start a new business.				\bigcirc		58.2
Governance						
Online public access to city finances has reduced corruption.		C				23.4
Online voting has increased participation.			\bigcirc			31.2
An online platform where residents can propose ideas has improved city life.			\bigcirc			39.5
Processing Identification Documents online has reduced waiting times.				\bigcirc		60.7

Bologna

SMART CITY	18th
RANKING	Out of 102
GROUP	2
RATING	BBB From AAA to D
FACTOR	BBB BB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

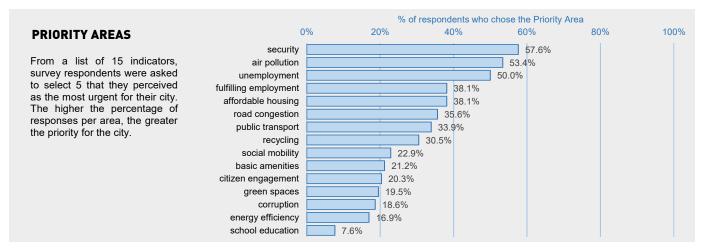
Country	2015	2016	2017
UN HDI	0.876	0.878	0.880
Life expectancy at Birth	82.8	83.0	83.2
Expected years of schooling	16.3	16.3	16.3
Mean years of schooling	10.2	10.2	10.2
GNI per capita (PPP \$)	34,115	34,733	35,299

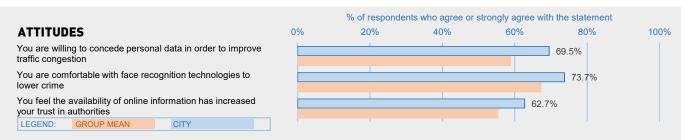
City



		LEGEND:	GROUP MIN	GROUP MEAI	GROUP MAX
STRUCTURES					GROUP WAA
Health & Safety	0	20	Score 40	60	80 100
Basic sanitation meets the needs of the poorest areas.				\bigcirc	
Recycling services are satisfactory.					
Public safety is not a problem.			\bigcirc		
Air pollution is not a problem.					
Medical services provision is satisfactory.				\bigcirc	
Mobility					
Traffic congestion is not a problem.			\bigcirc		
Public transport is satisfactory.				\bigcirc	
Activities					
				0	
Green spaces are satisfactory.			_	0	0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.		_	0		0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.			0		•
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.		•			
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.					

Bologna





TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP MEAI	GROUP MAX	
Health & Safety	0	20	Score 40	60	80 100	
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		63.56
A website or App allows to give away unwanted items to other city residents.				\bigcirc		64.69
Free public wifi has improved access to services.						65.40
CCTV cameras make residents feel safer.				\bigcirc		58.62
A website or App allows effective monitoring of air pollution.						54.52
Arranging medical appointments online has improved access.				\bigcirc		71.33
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			50.71
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			50.00
Bicycle hiring has reduced congestion.						55.65
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		65.82
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc	81.50
					Ŭ	
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		66.10
IT skills are taught well in schools.				\bigcirc		58.05
Online services provided by the city has made it easier to start a new business.			\bigcirc			49.44
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			50.56
Online voting has increased participation.			\bigcirc			44.63
An online platform where residents can propose ideas has improved city life.			\bigcirc			52.82
Processing Identification Documents online has reduced waiting times.				\bigcirc		59.46

Boston

SMART CITY	32nd
RANKING	Out of 102
GROUP	1
RATING	BBB From AAA to D
FACTOR	A BBB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

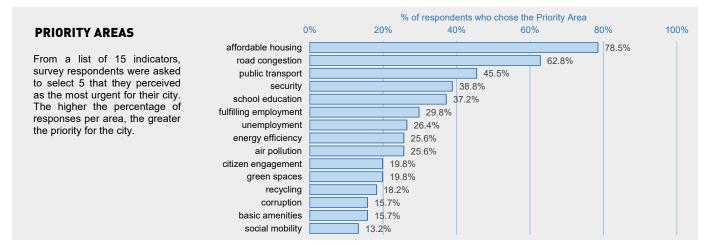
City

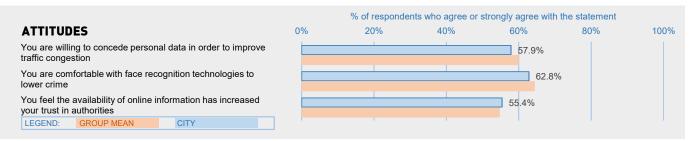
Population (UN World Cities Report)



	LEGEND:		GROUP ME		
STRUCTURES	LEOLIND.	GROUP MIN		GROUP MAX	
		Score			
Health & Safety 0	20	40	60	80 10	0
Basic sanitation meets the needs of the poorest areas.			\bigcirc		59.50
Recycling services are satisfactory.			\bigcirc		64.60
Public safety is not a problem.		\bigcirc			50.41
Air pollution is not a problem.		\bigcirc			43.53
Medical services provision is satisfactory.			\bigcirc		71.76
Mobility					
Traffic congestion is not a problem.	\bigcirc				18.46
Public transport is satisfactory.		\bigcirc			47.93
Activities					
Green spaces are satisfactory.			\bigcirc		60.74
Cultural activities (shows, bars, and museums) are satisfactory.					81.96
Opportunities (Work & School)					
Employment finding services are available.			\bigcirc		65.43
Most children have access to a good school.)		54.68
Lifelong learning opportunities are provided by local institutions.			\bigcirc		64.46
Businesses are creating new jobs.			\bigcirc		63.36
Minorities feel welcome.			\bigcirc		62.53
Governance					
Information on local government decisions are easily accessible.			\bigcirc		62.12
Corruption of city officials is not an issue of concern.		\bigcirc			50.00
Residents contribute to decision making of local government.		C)		54.13
Residents provide feedback on local government projects.			\bigcirc		58.68
					1

Boston





			CITY GR	OUP MEAN	1
TECHNOLOGIES		LEGEND:		GROUP MAX	
			Score		
Health & Safety	0	20	40 60	80 100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		45.59
A website or App allows to give away unwanted items to other city residents.			\bigcirc		58.95
Free public wifi has improved access to services.					53.31
CCTV cameras make residents feel safer.			\bigcirc		43.53
A website or App allows effective monitoring of air pollution.			\bigcirc		27.82
Arranging medical appointments online has improved access.			\bigcirc		58.26
Mobility					
Car-sharing Apps have reduced congestion.					37.88
Apps that direct you to an available parking space have reduced journey time.					46.14
Bicycle hiring has reduced congestion.					42.42
Online scheduling and ticket sales make public transport easier to use.					58.13
Activities					
Online purchasing of tickets to shows and museums has made it easier to attend	d.			\bigcirc	74.93
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.				\bigcirc	70.66
IT skills are taught well in schools.			\bigcirc		51.93
Online services provided by the city has made it easier to start a new business.					45.73
Governance					11.05
Online public access to city finances has reduced corruption.					44.35
Online voting has increased participation.					42.84
An online platform where residents can propose ideas has improved city life.					44.35
Processing Identification Documents online has reduced waiting times.					50.55

Bratislava

SMART CITY	84th
RANKING	Out of 102
GROUP	3
RATING	C C From AAA to D
FACTOR	CCC CC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

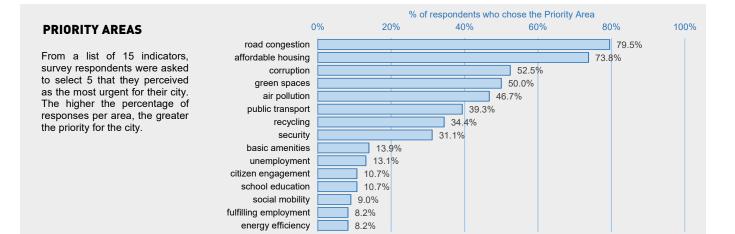
Country	2015	2016	2017
UN HDI	0.851	0.853	0.855
Life expectancy at Birth	76.7	76.9	77.0
Expected years of schooling	15.0	15.0	15.0
Mean years of schooling	12.5	12.5	12.5
GNI per capita (PPP \$)	27,851	28,546	29,467

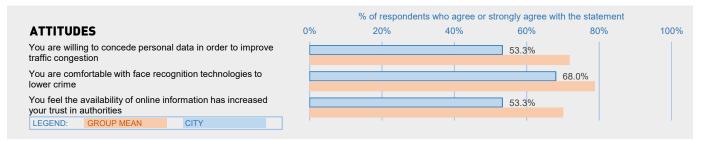
City



STRUCTURES		LEGEND:		GROUP MEA	IN GROUP MAX	x
			Score			
Health & Safety	0	20	40	60	80 I	00
Basic sanitation meets the needs of the poorest areas.						
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.			\bigcirc			
Mobility						
raffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.			\bigcirc			
Activities						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.		-	0			
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			0	0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)		_	0	0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Dpportunities (Work & School) Employment finding services are available.			0			
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Comportunities (Work & School) Employment finding services are available. Most children have access to a good school. Ifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Dpportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Green spaces are satisfactory.						

Bratislava





TECHNOLOGIES		LEGEND:		GROUP		UP MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc				42.62
A website or App allows to give away unwanted items to other city residents.			\bigcirc				48.7
Free public wifi has improved access to services.				\bigcirc			60.79
CCTV cameras make residents feel safer.				\bigcirc			56.5
A website or App allows effective monitoring of air pollution.			\bigcirc				33.2
Arranging medical appointments online has improved access.							49.8
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				38.1
Apps that direct you to an available parking space have reduced journey time.			\bigcirc				35.7
Bicycle hiring has reduced congestion.			\bigcirc				44.4
Online scheduling and ticket sales make public transport easier to use.				С)		67.0
Activities							
Online purchasing of tickets to shows and museums has made it easier to atter	nd.				\bigcirc		74.4
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					\bigcirc		73.7
IT skills are taught well in schools.			C)			51.7
Online services provided by the city has made it easier to start a new business.			\bigcirc				42.4
Governance							
Online public access to city finances has reduced corruption.							34.4
Online voting has increased participation.			\bigcirc				37.4
An online platform where residents can propose ideas has improved city life.			\bigcirc				45.6
Processing Identification Documents online has reduced waiting times.				\bigcirc			57.1

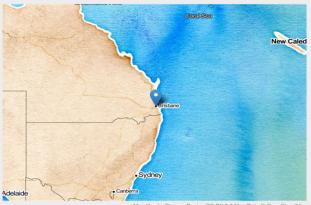
Brisbane

SMART CITY RANKING		7th of 102
GROUP	,	1
RATING		B B
FACTOR RATINGS	A Structures	BBB Technologies

BACKGROUND INFORMATION

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

Population (UN World Cities Report)



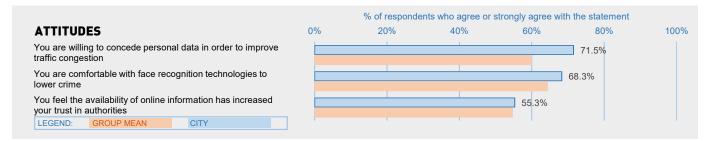
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

2,202,000

					A IT A NI	
STRUCTURES		LEGEND:		Y GROUP		OUP MAX
			Scor	ē		
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc	
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.				\bigcirc		
Medical services provision is satisfactory.				C		
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.						
1 ,						
Activities					0	
Activities Green spaces are satisfactory.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Brisbane

% of respondents who chose the Priority Area 40% 60% 80% 100% 0% 20% **PRIORITY AREAS** affordable housing 76.4% From a list of 15 indicators, 69.9% road congestion survey respondents were asked to select 5 that they perceived unemployment 39.8% public transport 39.8% as the most urgent for their city. fulfilling employment 38.2% The higher the percentage of security 36.6% responses per area, the greater energy efficiency 32.5% the priority for the city. corruption 25.2% recycling 21.1% school education 21.1% green spaces 19.5% air pollution 17.1% social mobility 13.8% citizen engagement 10.6% basic amenities 10.6%



TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP N	/IEAN GROU	P MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			49	9.46
A website or App allows to give away unwanted items to other city residents.						55	5.42
Free public wifi has improved access to services.				\supset		56	5.10
CCTV cameras make residents feel safer.				\bigcirc		65	5.58
A website or App allows effective monitoring of air pollution.			\bigcirc			28	3.86
Arranging medical appointments online has improved access.				\bigcirc		62	2.47
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc			37	7.26
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			34	4.55
Bicycle hiring has reduced congestion.			\bigcirc			39	9.57
Online scheduling and ticket sales make public transport easier to use.						55	5.83
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	d.				\bigcirc	76	5.83
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				\bigcirc		66	5.26
IT skills are taught well in schools.				\bigcirc		57	7.32
Online services provided by the city has made it easier to start a new business.						43	3.22
Governance							
Online public access to city finances has reduced corruption.						34	4.82
Online voting has increased participation.							1.73
An online platform where residents can propose ideas has improved city life.							4.17
Processing Identification Documents online has reduced waiting times.							0.27
recording technication bootments online has readed waiting times.						00	

Brussels

SMART CITY	6	5 th		
RANKING	Out o	of 102		
GROUP	2	2		
RATING	B From AAA to D			
FACTOR	BB	CCC		
RATINGS	Structures	Technologies		

BACKGROUND INFORMATION

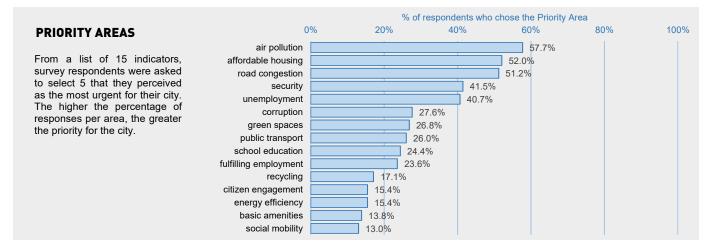
Country	2015	2016	2017	
UN HDI	0.913	0.915	0.916	
Life expectancy at Birth	81.0	81.1	81.3	
Expected years of schooling	19.8	19.8	19.8	
Mean years of schooling	11.7	11.8	11.8	
GNI per capita (PPP \$)	41,727	41,588	42,156	
•				

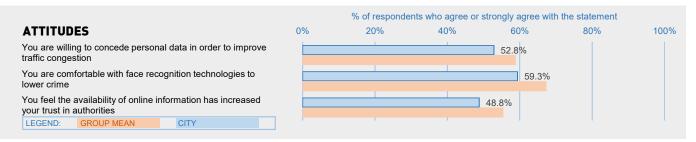
City



STRUCTURES		LEGEND:	GROUP MIN	GROUP MEAN	GROUP MAX
Health & Safety	0	20	Score 40	60	80 100
Basic sanitation meets the needs of the poorest areas.					
Recycling services are satisfactory.)	
Public safety is not a problem.					
Air pollution is not a problem.		(
Medical services provision is satisfactory.				\bigcirc	
Mobility					
Traffic congestion is not a problem.		\bigcirc			
Public transport is satisfactory.			\bigcirc		
Green spaces are satisfactory.					
Cultural activities (shows, bars, and museums) are satisfactory.					
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.		_	0		
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.		_			
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.		•			
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance		•			
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					

Brussels





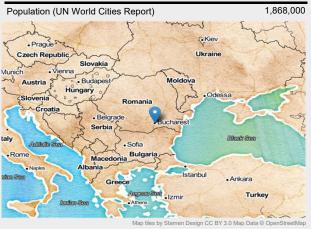
TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP MEA	N GROUP MAX]
Health & Safety	0	20	Score 40	60	80 100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			41.87
A website or App allows to give away unwanted items to other city residents.						55.69
Free public wifi has improved access to services.			\bigcirc			52.17
CCTV cameras make residents feel safer.			\bigcirc			47.70
A website or App allows effective monitoring of air pollution.			\bigcirc			40.51
Arranging medical appointments online has improved access.			\bigcirc			52.17
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			29.81
Apps that direct you to an available parking space have reduced journey time.						34.01
Bicycle hiring has reduced congestion.			\bigcirc			48.92
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		60.30
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	d.			\bigcirc		73.04
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.						51.36
IT skills are taught well in schools.			\bigcirc			47.97
Online services provided by the city has made it easier to start a new business.						39.70
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			37.53
Online voting has increased participation.			\bigcirc			34.82
An online platform where residents can propose ideas has improved city life.			\bigcirc			34.69
Processing Identification Documents online has reduced waiting times.			(56.50

Bucharest

SMART CITY	8	5 th
RANKING	Out o	of 102
GROUP		3
RATING		C A A to D
FACTOR	C C	C C
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

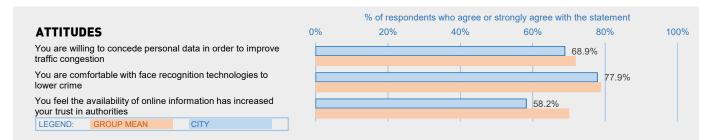
Country	2015	2016	2017
UN HDI	0.805	0.807	0.811
Life expectancy at Birth	75.3	75.4	75.6
Expected years of schooling	14.5	14.3	14.3
Mean years of schooling	10.9	11.0	11.0
GNI per capita (PPP \$)	20,049	21,060	22,646
City			



			CITY	GROUP M	FAN	
STRUCTURES		LEGEND:			GROUI	P MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.			(
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.		\bigcirc				
Medical services provision is satisfactory.			\bigcirc			
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.			\bigcirc			
Activities						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			0		0	
Green spaces are satisfactory.			0		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0	0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.			0		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Copportunities (Work & School) Employment finding services are available. Most children have access to a good school. Ifelong learning opportunities are provided by local institutions.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Dpportunities (Work & School) Employment finding services are available. Most children have access to a good school. Ifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. .ifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Dpportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Dpportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.						

Bucharest

% of respondents who chose the Priority Area 40% 60% 80% 100% 0% 20% **PRIORITY AREAS** corruption 67.2% From a list of 15 indicators, 66.4% road congestion survey respondents were asked to select 5 that they perceived air pollution 64.8% green spaces 39.3% as the most urgent for their city. security 34.4% The higher the percentage of public transport 32.8% responses per area, the greater recycling 24.6% the priority for the city. affordable housing 24.6% fulfilling employment 23.8% school education 23.0% unemployment 22.1% basic amenities 22.1% citizen engagement 20.5% energy efficiency 13.9% social mobility 7.4%



TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP MEA	GROUP MAX]
Health & Safety	0	20	Score 40	60	80 100	1
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			52.
A website or App allows to give away unwanted items to other city residents.			(55.
Free public wifi has improved access to services.				\bigcirc		62.
CCTV cameras make residents feel safer.			\bigcirc			52.
A website or App allows effective monitoring of air pollution.			\bigcirc			48.
Arranging medical appointments online has improved access.			(56.
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			51.
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			42.
Bicycle hiring has reduced congestion.			\bigcirc			46
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		59
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	d					82
						02.
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		72
IT skills are taught well in schools.				\bigcirc		61.
Online services provided by the city has made it easier to start a new business.			C)		53.
Governance						
Online public access to city finances has reduced corruption.						31
Online public access to city infances has reduced compilion.						33
An online platform where residents can propose ideas has improved city life.						45
Processing Identification Documents online has reduced waiting times.						51
roossing renuncation bootiments offine has reduced waiting tilles.						1 31

Budapest

SMART CITY	83rd
RANKING	Out of 102
GROUP	3
RATING	CCC From AAA to D
FACTOR	CC CC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

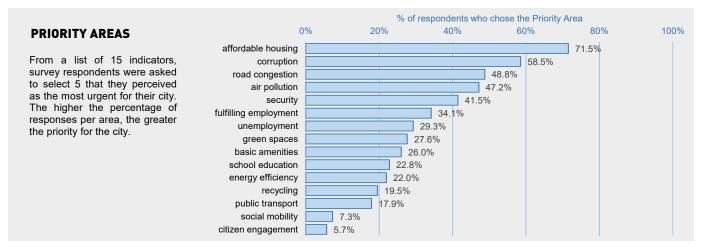
Population (UN World Cities Report)

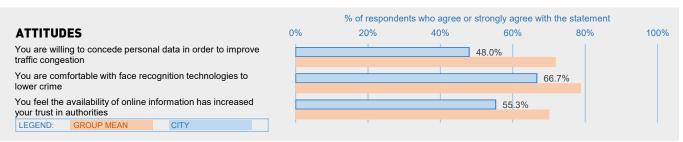
1,714,000



STRUCTURES		LEGEND:		GROUP MEA	N GROUP MAX
STRUCTURES			Score		
Health & Safety	0	20	40	60	80 100
Basic sanitation meets the needs of the poorest areas.			\bigcirc		
Recycling services are satisfactory.			\bigcirc		
Public safety is not a problem.			\bigcirc		
Air pollution is not a problem.			\bigcirc		
Medical services provision is satisfactory.			\bigcirc		
Mobility					
Traffic congestion is not a problem.		(
Public transport is satisfactory.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			0		0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			0		0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0		0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.			0		0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.			0		0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.			0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.			0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.			• •		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Green spaces are satisfactory.					

Budapest





TEOLINOLOOJEC		LEGEND:		GROUP	MEAN GROUI	ΟΜΔΥ	
TECHNOLOGIES					GILOUI		
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc				35.
A website or App allows to give away unwanted items to other city residents.			Ŭ	0			58.
Free public wifi has improved access to services.							54.
CCTV cameras make residents feel safer.				0			66.
A website or App allows effective monitoring of air pollution.							54.
Arranging medical appointments online has improved access.							51.
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				38.
Apps that direct you to an available parking space have reduced journey time.			\bigcirc				40.
Bicycle hiring has reduced congestion.			\bigcirc				50.
Online scheduling and ticket sales make public transport easier to use.					\bigcirc		72.
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.			\bigcirc			63.
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				~	\bigcirc		76.
IT skills are taught well in schools.							56.
Online services provided by the city has made it easier to start a new business.							52.
0							
Governance							30.4
Online public access to city finances has reduced corruption.							
Online voting has increased participation.							41.
An online platform where residents can propose ideas has improved city life.							39.
Processing Identification Documents online has reduced waiting times.				\bigcirc			56.6

Buenos Aires

SMART CITY RANKING	Out c	7th
GROUP	;	3
RATING		C A A to D
FACTOR RATINGS	C C Structures	C C Technologies

BACKGROUND INFORMATION

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

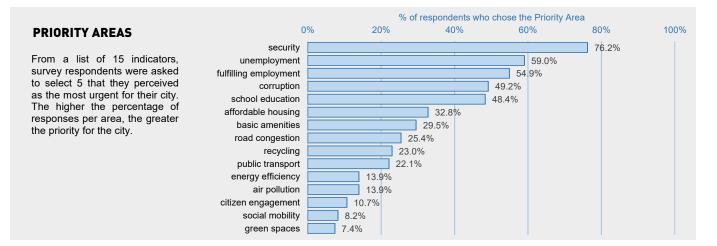
Population (UN World Cities Report)

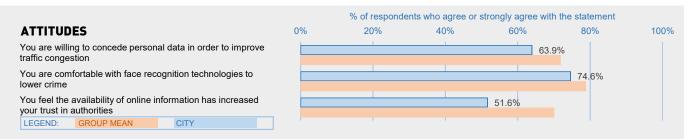


Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetM

STRUCTURES		LEGEND:	GROUP MIN	GROUP N	/IEAN GROUP M/	AX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.			\bigcirc			
Recycling services are satisfactory.			C)		
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.			\bigcirc			
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.			\bigcirc			
Activities						
					0	
Green spaces are satisfactory.					0	
Green spaces are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.						

Buenos Aires





			CITY	GROUP N	EAN	
TECHNOLOGIES		LEGEND:			GROUP M	IAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			48
A website or App allows to give away unwanted items to other city residents.			\bigcirc			51
Free public wifi has improved access to services.				\bigcirc		61
CCTV cameras make residents feel safer.			\bigcirc			48
A website or App allows effective monitoring of air pollution.			\bigcirc			30
Arranging medical appointments online has improved access.			(56
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			4(
Apps that direct you to an available parking space have reduced journey time.						47
Bicycle hiring has reduced congestion.			\bigcirc			52
Online scheduling and ticket sales make public transport easier to use.						53
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	d.				\bigcirc	78
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.			\bigcirc			51
IT skills are taught well in schools.			\bigcirc			36
Online services provided by the city has made it easier to start a new business.			\bigcirc			48
Governance						
Online public access to city finances has reduced corruption.						35
Online voting has increased participation.						36
An online platform where residents can propose ideas has improved city life.			\bigcirc			45
Processing Identification Documents online has reduced waiting times.				C		69

Busan

SMART CITY	50th					
RANKING	Out of 102					
GROUP	2	2				
RATING		B A A to D				
FACTOR	B B	BB				
RATINGS	Structures	Technologies				

BACKGROUND INFORMATION

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

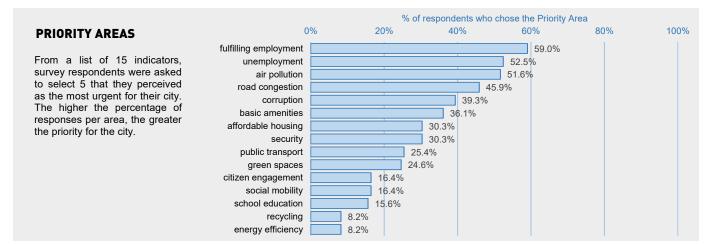
City

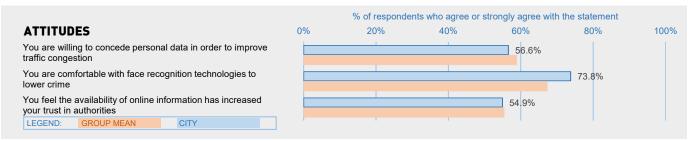
Population (UN World Cities Report)



		LEGEND:		GROUP MEA		
STRUCTURES			GROUP MIN		GROUP MA	IX.
Health & Safety	0	20	Score 40	60	80 I	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.				0		
Public safety is not a problem.				0		
Air pollution is not a problem.		(
Medical services provision is satisfactory.			-	\bigcirc		
Mobility						
Traffic congestion is not a problem.			\bigcirc			
Public transport is satisfactory.				\bigcirc		
Activities Green spaces are satisfactory.					_	
Activities Green spaces are satisfactory.			0)		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			0)		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School))		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Busan





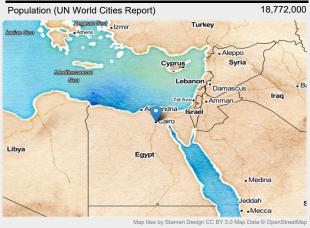
			CITY	GROUP ME	AN	
TECHNOLOGIES		LEGEND:			GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		58
A website or App allows to give away unwanted items to other city residents.						55
Free public wifi has improved access to services.				\bigcirc		68
CCTV cameras make residents feel safer.					\bigcirc	77.
A website or App allows effective monitoring of air pollution.				\bigcirc		61
Arranging medical appointments online has improved access.				\bigcirc		63
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			39
Apps that direct you to an available parking space have reduced journey time.						40
Bicycle hiring has reduced congestion.			\bigcirc			38
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		66
Activities						
Online purchasing of tickets to shows and museums has made it easier to atter	nd.			\bigcirc		68
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.						63
IT skills are taught well in schools.				\bigcirc		60
Online services provided by the city has made it easier to start a new business.			\bigcirc			51
0						
Governance				_		40
Online public access to city finances has reduced corruption.						43
Online voting has increased participation.			0			52
An online platform where residents can propose ideas has improved city life.			0			52
Processing Identification Documents online has reduced waiting times.						67

Cairo

SMART CITY	9	9 th
RANKING	Out c	of 102
GROUP		4
RATING		A A to D
FACTOR	D	D
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

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

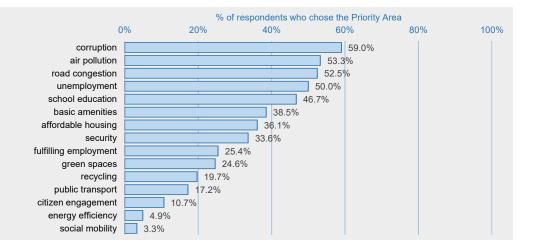


TRUCTURES Iealth & Safety asic sanitation meets the needs of the poorest areas.	0	LEGEND:		GROUP MEA	GROUP MAX	
	0					
			Score			
asic sanitation meets the needs of the poorest areas.	0	20	40	60	80 100	
			\bigcirc			50.55
ecycling services are satisfactory.			\bigcirc			37.43
ublic safety is not a problem.			\bigcirc			37.57
ir pollution is not a problem.		\bigcirc				19.26
ledical services provision is satisfactory.						45.63
1 obility						
raffic congestion is not a problem.		\bigcirc				14.34
ublic transport is satisfactory.			\bigcirc			37.70
Activities						
Freen spaces are satisfactory.			\bigcirc			33.20
cultural activities (shows, bars, and museums) are satisfactory.				\bigcirc		61.07
)pportunities (Work & School)						
mployment finding services are available.			\bigcirc			37.02
lost children have access to a good school.			\bigcirc			34.43
ifelong learning opportunities are provided by local institutions.			\bigcirc			36.75
usinesses are creating new jobs.			\bigcirc			42.08
linorities feel welcome.						55.05
Governance						
formation on local government decisions are easily accessible.			\bigcirc			53.01
corruption of city officials is not an issue of concern.						25.27
esidents contribute to decision making of local government.		(26.64
esidents provide feedback on local government projects.						34.15

Cairo

PRIORITY AREAS

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



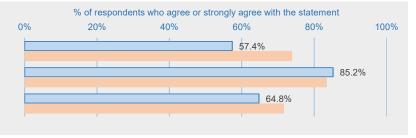
ATTITUDES

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

You are comfortable with face recognition technologies to lower crime

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

LEGEND: GROUP MEAN CITY



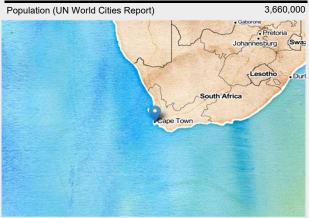
			CITY	GROUP N	IEAN		
TECHNOLOGIES		LEGEND:			GRO	UP MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc				41.67
A website or App allows to give away unwanted items to other city residents.							41.94
Free public wifi has improved access to services.			\bigcirc				43.99
CCTV cameras make residents feel safer.				\bigcirc			58.06
A website or App allows effective monitoring of air pollution.			\bigcirc				37.30
Arranging medical appointments online has improved access.				\bigcirc			60.25
Mobility							
Car-sharing Apps have reduced congestion.							53.69
Apps that direct you to an available parking space have reduced journey time.							59.02
Bicycle hiring has reduced congestion.				Ŭ			45.90
Online scheduling and ticket sales make public transport easier to use.				\bigcirc			57.51
Activities							
Online purchasing of tickets to shows and museums has made it easier to attend	I.			\bigcirc			65.98
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.	_			\bigcirc			65.44
IT skills are taught well in schools.			\bigcirc				40.16
Online services provided by the city has made it easier to start a new business.							51.23
Governance							
Online public access to city finances has reduced corruption.			\bigcirc				40.16
Online voting has increased participation.			\bigcirc				41.26
An online platform where residents can propose ideas has improved city life.			\bigcirc				42.08
Processing Identification Documents online has reduced waiting times.			\bigcirc				51.23

SMART CITY RANKING		Brd of 102
GROUP		4
RATING		A A to D
FACTOR RATINGS	C	C Technologies

BACKGROUND INFORMATION

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

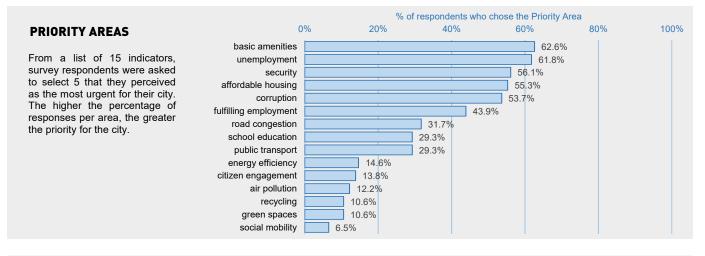
Population (UN World Cities Report)

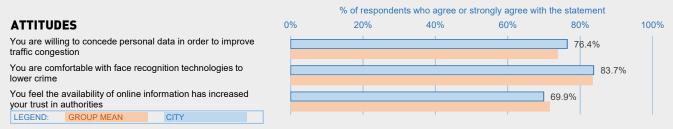


Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMag

STRUCTURES		LEGEND:	CITY GROUP MIN	GROUP ME	AN GROUP MAX
Health & Safety	0	20	Score 40	60	80 10
Basic sanitation meets the needs of the poorest areas.					
Recycling services are satisfactory.					
Public safety is not a problem.					
Air pollution is not a problem.					
Medical services provision is satisfactory.					
Mobility					
Traffic congestion is not a problem.			\bigcirc		
Public transport is satisfactory.			\bigcirc		
Public transport is satisfactory.			\bigcirc		
Public transport is satisfactory.			\bigcirc		
			0		
Activities			0		
Activities Green spaces are satisfactory.)
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0)
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0)
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.))
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.))
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.)
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Public transport is satisfactory. Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.					

Cape Town





			CITY	GROUP ME	AN	
TECHNOLOGIES		LEGEND:			GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			50.2
A website or App allows to give away unwanted items to other city residents.						53.9
Free public wifi has improved access to services.			\bigcirc			52.0
CCTV cameras make residents feel safer.						53.7
A website or App allows effective monitoring of air pollution.			\bigcirc			31.5
Arranging medical appointments online has improved access.						52.0
Mobility						
Car-sharing Apps have reduced congestion.						54.8
Apps that direct you to an available parking space have reduced journey time.						41.6
Bicycle hiring has reduced congestion.			\bigcirc			39.8
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		58.9
Activities						
Online purchasing of tickets to shows and museums has made it easier to atte	nd.				\bigcirc	80.7
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		71.8
IT skills are taught well in schools.				\bigcirc		59.3
Online services provided by the city has made it easier to start a new business	•			\bigcirc		57.8
Governance						
Online public access to city finances has reduced corruption.						41.6
Online voting has increased participation.			\bigcirc			46.7
An online platform where residents can propose ideas has improved city life.			\bigcirc			45.2
Processing Identification Documents online has reduced waiting times.				\bigcirc		59.6

Chengdu

SMART CITY RANKING	5	9th of 102
GROUP		3
RATING		B A A to D
FACTOR RATINGS	B Structures	BB Technologies

BACKGROUND INFORMATION

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

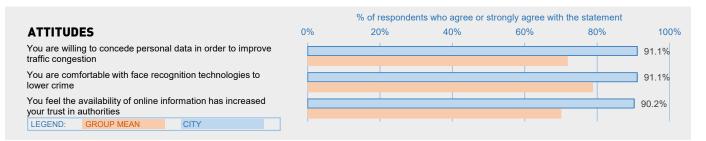


Map tiles by S en Design CC BY 3.0 Map Da

			CITY	GROUF		
STRUCTURES		LEGEND:		GROUP		OUP MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc	
Recycling services are satisfactory.				C		
Public safety is not a problem.				(\bigcirc	
Air pollution is not a problem.						
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.			\bigcirc			
Public transport is satisfactory.						
Activities						
					0	
Green spaces are satisfactory.					0)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School))
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.)
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.)

Chengdu

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** road congestion 61.0% From a list of 15 indicators, air pollution 57.7% survey respondents were asked to select 5 that they perceived corruption 43.1% affordable housing 41.5% as the most urgent for their city. basic amenities 35.8% The higher the percentage of fulfilling employment 34.1% responses per area, the greater social mobility 30.1% the priority for the city. green spaces 25.2% school education 25.2% security 23.6% public transport 20.3% recycling 19.5% energy efficiency 17.9% citizen engagement 16.3% unemployment 14.6%



TECHNOLOGIES		LEGEND:	GROUP MIN	GROUF	P MEAN GROUP	MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.					\bigcirc		85
A website or App allows to give away unwanted items to other city residents.				(\bigcirc		70
Free public wifi has improved access to services.					\bigcirc		79
CCTV cameras make residents feel safer.					\bigcirc		79
A website or App allows effective monitoring of air pollution.					\bigcirc		72
Arranging medical appointments online has improved access.					\bigcirc		89
Mobility							
Car-sharing Apps have reduced congestion.				\bigcirc			65
Apps that direct you to an available parking space have reduced journey time.					\bigcirc		80
Bicycle hiring has reduced congestion.					\bigcirc		78
Online scheduling and ticket sales make public transport easier to use.					\bigcirc		90
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	d.						90
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.							87
IT skills are taught well in schools.							77
Online services provided by the city has made it easier to start a new business.					\bigcirc		81
Governance							
Online public access to city finances has reduced corruption.				(69
Online voting has increased participation.					0		72
An online platform where residents can propose ideas has improved city life.					\bigcirc		82
Processing Identification Documents online has reduced waiting times.					\bigcirc		72

Chicago

SMART CITY	53rd
RANKING	Out of 102
GROUP	1
RATING	BB From AAA to D
FACTOR	BB BBB
RATINGS	Structures Technologies

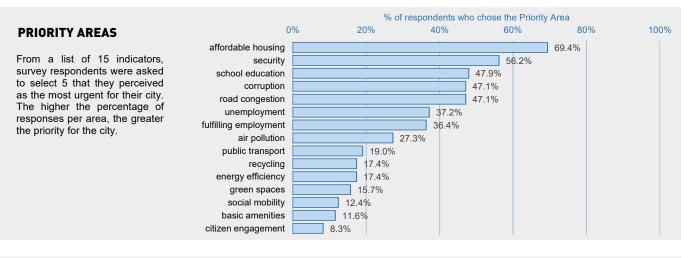
BACKGROUND INFORMATION

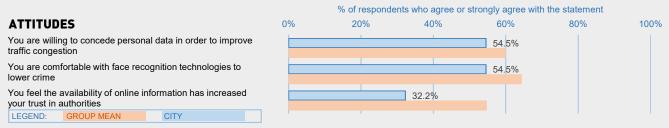
Country	2015	2016	2017
UN HDI	0.920	0.922	0.924
Life expectancy at Birth	79.2	79.4	79.5
Expected years of schooling	16.5	16.5	16.5
Mean years of schooling	13.3	13.4	13.4
GNI per capita (PPP \$)	53,741	54,104	54,941
City			



			CITY	GROUP MEAN	J	1
STRUCTURES		LEGEND:			GROUP MAX	
			Score			
Health & Safety	0	20	40	60	80 100	
Basic sanitation meets the needs of the poorest areas.			\bigcirc			43.94
Recycling services are satisfactory.						56.47
Public safety is not a problem.		(26.58
Air pollution is not a problem.			\bigcirc			34.16
Medical services provision is satisfactory.			C)		54.41
Mobility						
Traffic congestion is not a problem.						25.62
Public transport is satisfactory.			\bigcirc			43.94
Activities						
Activities Green spaces are satisfactory.						52.20
			•	0		52.20 73.83
Green spaces are satisfactory.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						73.83
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						73.83 63.36
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						73.83 63.36 37.33
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						73.83 63.36 37.33 52.48
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						73.83 63.36 37.33 52.48 56.61 51.38
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						73.83 63.36 37.33 52.48 56.61 51.38 50.00
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						73.83 63.36 37.33 52.48 56.61 51.38 50.00 26.45
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						73.83 63.36 37.33 52.48 56.61 51.38 50.00

Chicago





TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP		JP MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc				48.21
A website or App allows to give away unwanted items to other city residents.							54.96
Free public wifi has improved access to services.				\bigcirc			59.09
CCTV cameras make residents feel safer.							47.38
A website or App allows effective monitoring of air pollution.			\bigcirc				32.23
Arranging medical appointments online has improved access.				\bigcirc			59.92
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				46.56
Apps that direct you to an available parking space have reduced journey time.			(\supset			56.89
Bicycle hiring has reduced congestion.			\bigcirc				49.86
Online scheduling and ticket sales make public transport easier to use.				\bigcirc			66.25
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	d.			(72.18
Opportunities (Work & School)							00.00
Online access to job listings has made it easier to find work.				C			69.83
IT skills are taught well in schools.							47.25
Online services provided by the city has made it easier to start a new business.							46.56
Governance							
Online public access to city finances has reduced corruption.			\bigcirc				31.13
Online voting has increased participation.			\bigcirc				48.48
An online platform where residents can propose ideas has improved city life.			\bigcirc				47.52
Processing Identification Documents online has reduced waiting times.							49.72

Chongqing

SMART CITY RANKING		2nd of 102
GROUP	;	3
RATING		B A A to D
FACTOR RATINGS	BB Structures	BB Technologies

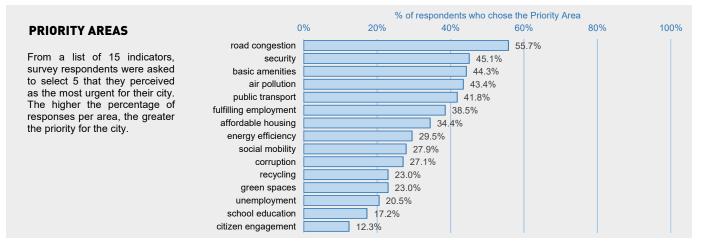
BACKGROUND INFORMATION

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



STRUCTURES		LEGEND:	GROUP MIN	GROUP MEAN	GROUP MAX	
Health & Safety	0	20	Score 40	60 8	30 100	
Basic sanitation meets the needs of the poorest areas.					\bigcirc	82.92
Recycling services are satisfactory.						70.22
Public safety is not a problem.						75.55
Air pollution is not a problem.				\circ		69.13
Medical services provision is satisfactory.				(80.05
Mobility						
Traffic congestion is not a problem.				\bigcirc		60.66
Public transport is satisfactory.				0		72.81
Activities						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.						81.56 80.19
Cultural activities (shows, bars, and museums) are satisfactory.						
Cultural activities (shows, bars, and museums) are satisfactory.						
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						80.19
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						80.19 81.28 81.42 66.12
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						80.19 81.28 81.42 66.12 74.73
						80.19 81.28 81.42 66.12
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						80.19 81.28 81.42 66.12 74.73
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						80.19 81.28 81.42 66.12 74.73
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						80.19 81.28 81.42 66.12 74.73 82.65
Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						80.19 81.28 81.42 66.12 74.73 82.65 79.10

Chongqing



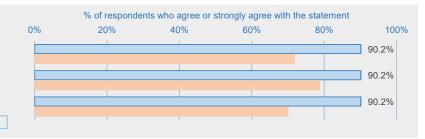


You are willing to concede personal data in order to improve traffic congestion

You are comfortable with face recognition technologies to lower crime

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

LEGEND: GROUP MEAN CITY



TECHNOLOGIES		LEGEND:		GRO	UP MEAN	GROUP MA	X
Health & Safety	0	20	Score 40	60	8	0 1	00
Online reporting of city maintenance problems provides a speedy solution.						\bigcirc	8
A website or App allows to give away unwanted items to other city residents.					\bigcirc		7
Free public wifi has improved access to services.					\bigcirc		7
CCTV cameras make residents feel safer.						\bigcirc	8
A website or App allows effective monitoring of air pollution.						\bigcirc	8
Arranging medical appointments online has improved access.						\bigcirc	8
Mobility							
Car-sharing Apps have reduced congestion.					\bigcirc		7
Apps that direct you to an available parking space have reduced journey time.							7
Bicycle hiring has reduced congestion.				(\bigcirc		6
Online scheduling and ticket sales make public transport easier to use.						\bigcirc	8
Activities							
Online purchasing of tickets to shows and museums has made it easier to attend	d.					\bigcirc	ę
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.						\bigcirc	ç
IT skills are taught well in schools.						\bigcirc	8
Online services provided by the city has made it easier to start a new business.							7
Governance							
Online public access to city finances has reduced corruption.					C)	7
Online voting has increased participation.					C		7
An online platform where residents can propose ideas has improved city life.					\bigcirc		7
Processing Identification Documents online has reduced waiting times.					\bigcirc		7

Copenhagen

SMART CITY	5	th
RANKING	Out c	of 102
GROUP	,	1
RATING		A A A to D
FACTOR	A A	A
RATINGS	Structures	Technologies

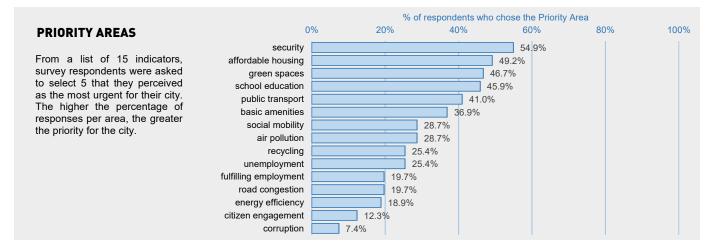
BACKGROUND INFORMATION

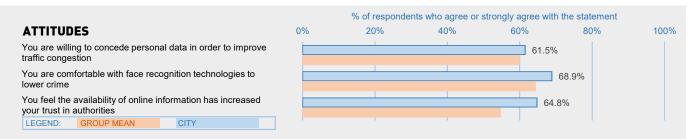
Country	2015	2016	2017
UN HDI	0.926	0.928	0.929
Life expectancy at Birth	80.6	80.7	80.9
Expected years of schooling	19.2	19.1	19.1
Mean years of schooling	12.5	12.6	12.6
GNI per capita (PPP \$)	47,000	47,209	47,918
City			



			CITY	GROUP MEA	ΔNI	
STRUCTURES		LEGEND:			GROUP N	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.						
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.				U		
Public transport is satisfactory.						
Public transport is satisfactory.						
Public transport is satisfactory.						
Activities Green spaces are satisfactory.			_			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Copenhagen





TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP ME	AN GROUP MAX]
Health & Safety	0	20	Score 40	60	80 100	
Online reporting of city maintenance problems provides a speedy solution.			C)		53.83
A website or App allows to give away unwanted items to other city residents.						67.35
Free public wifi has improved access to services.				\bigcirc		61.48
CCTV cameras make residents feel safer.						49.04
A website or App allows effective monitoring of air pollution.			\bigcirc			39.48
Arranging medical appointments online has improved access.				\bigcirc		68.72
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			43.31
Apps that direct you to an available parking space have reduced journey time.						50.41
Bicycle hiring has reduced congestion.				\bigcirc		57.24
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		71.99
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	d.				\bigcirc	78.55
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		67.08
IT skills are taught well in schools.)		54.10
Online services provided by the city has made it easier to start a new business.				\bigcirc		57.65
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			42.90
Online voting has increased participation.						53.96
An online platform where residents can propose ideas has improved city life.						54.92
Processing Identification Documents online has reduced waiting times.				\bigcirc		59.70

Denver

SMART CITY	33rd
RANKING	Out of 102
GROUP	1
RATING	BBB From AAA to D
FACTOR	A BBB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

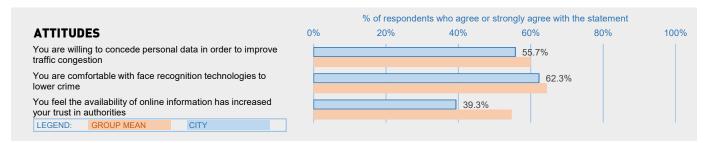
ly



			CITY	GROUP MEA		
STRUCTURES		LEGEND:		GROOP MILP	GROUP	P MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.						
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.				\bigcirc		
Public transport is satisfactory.						
rubic transport is Sausiactory.						
Activities			_	0		
Activities Green spaces are satisfactory.			_	0		
Activities Green spaces are satisfactory.			_	0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.)	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.)	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						

Denver

% of respondents who chose the Priority Area 20% 40% 60% 80% 0% 100% **PRIORITY AREAS** affordable housing 86.1% From a list of 15 indicators, 70.5% road congestion survey respondents were asked to select 5 that they perceived air pollution 47.5% school education 41.0% as the most urgent for their city. security 32.8% The higher the percentage of public transport 30.3% responses per area, the greater unemployment 27.0% the priority for the city. energy efficiency 26.2% 25.4% recycling fulfilling employment 24.6% corruption 17.2% basic amenities 13.1% citizen engagement 11.5% green spaces 11.5% social mobility 9.0%



TECHNOLOGIES		EGEND:	GROUP MIN	GROUP M	EAN GROUP	MAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			41.
A website or App allows to give away unwanted items to other city residents.				\bigcirc		60.
Free public wifi has improved access to services.			\bigcirc			43.
CCTV cameras make residents feel safer.						43.
A website or App allows effective monitoring of air pollution.			\bigcirc			37.3
Arranging medical appointments online has improved access.				\bigcirc		63.3
Mobility						
Car-sharing Apps have reduced congestion.			0			38.
Apps that direct you to an available parking space have reduced journey time.						36.
Bicycle hiring has reduced congestion.						43.
Online scheduling and ticket sales make public transport easier to use.			(56.
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	nd.					78.
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		69.
IT skills are taught well in schools.						42.
Online services provided by the city has made it easier to start a new business.						45.4
Governance						
Online public access to city finances has reduced corruption.						34.
Online voting has increased participation.						53.
An online platform where residents can propose ideas has improved city life.						42.
Processing Identification Documents online has reduced waiting times.						55.0

Dubai

SMART CITY	4	5th
RANKING	Out c	of 102
GROUP	:	3
RATING		B A A to D
FACTOR	BB	B
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

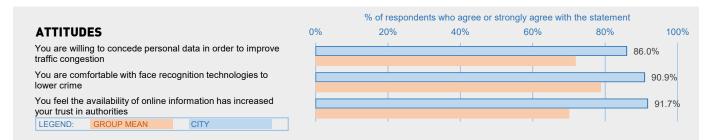
Country	2015	2016	2017
UN HDI	0.860	0.862	0.863
Life expectancy at Birth	77.1	77.3	77.4
Expected years of schooling	13.8	13.6	13.6
Mean years of schooling	10.6	10.8	10.8
GNI per capita (PPP \$)	66,923	68,121	67,805
City			



			CITY	GROUP	MEAN	
STRUCTURES		LEGEND:			GROU	P MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc	
Recycling services are satisfactory.					\bigcirc	
Public safety is not a problem.					\bigcirc	
Air pollution is not a problem.				\bigcirc		
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.			\bigcirc			
Public transport is satisfactory.					\bigcirc	
Activities						
Green spaces are satisfactory.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				_	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Dubai

% of respondents who chose the Priority Area 20% 40% 60% 80% 100% 0% **PRIORITY AREAS** affordable housing 62.0% From a list of 15 indicators, 46.3% road congestion survey respondents were asked to select 5 that they perceived air pollution 44.6% fulfilling employment 42.1% as the most urgent for their city. unemployment 42.1% The higher the percentage of basic amenities 34.7% responses per area, the greater security 28.9% the priority for the city. recycling 28.1% green spaces 24.8% citizen engagement 20.7% public transport 19.0% energy efficiency 16.5% school education 15.7% social mobility 9.1% corruption 5.8%



TECHNOLOGIES		LEGEND:		GRO	JP MEAN GROUP I	//AX	
			Score				
Health & Safety	0	20	40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.					\bigcirc		76
A website or App allows to give away unwanted items to other city residents.					\bigcirc		72
Free public wifi has improved access to services.							80
CCTV cameras make residents feel safer.							8
A website or App allows effective monitoring of air pollution.				\bigcirc			5
Arranging medical appointments online has improved access.					\bigcirc		8
Mobility							
Car-sharing Apps have reduced congestion.				\bigcirc			6
Apps that direct you to an available parking space have reduced journey time.							6
Bicycle hiring has reduced congestion.				\bigcirc			5
Online scheduling and ticket sales make public transport easier to use.					\bigcirc		7
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc		8
					Ŭ		
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					\bigcirc		7
IT skills are taught well in schools.					\bigcirc		7
Online services provided by the city has made it easier to start a new business.					\bigcirc		8
Governance							
Online public access to city finances has reduced corruption.					\bigcirc		73
Online voting has increased participation.					\bigcirc		6
An online platform where residents can propose ideas has improved city life.							7
Processing Identification Documents online has reduced waiting times.					\bigcirc		8

Dublin

SMART CITY	30th
RANKING	Out of 102
GROUP	1
RATING	BBB From AAA to D
FACTOR	BBB BBB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

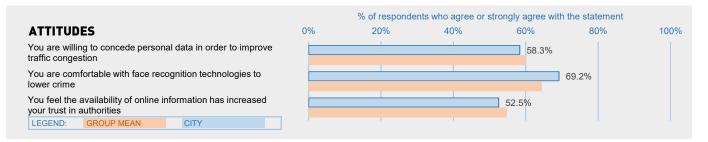
Population (UN World Cities Report)



CITY GROUP MEAN LEGEND: STRUCTURES GROUP MAX Score 0 20 40 60 80 100 **Health & Safety** 60.69 Basic sanitation meets the needs of the poorest areas. \bigcirc 61.53 Recycling services are satisfactory. \bigcirc 37.22 Public safety is not a problem. \bigcirc 48.61 Air pollution is not a problem. \bigcirc Medical services provision is satisfactory. 40.56 Mobility 24.58 \bigcirc Traffic congestion is not a problem. Public transport is satisfactory. \bigcirc 49.17 **Activities** Green spaces are satisfactory. 68.33 \bigcirc 77.78 Cultural activities (shows, bars, and museums) are satisfactory. \bigcirc **Opportunities (Work & School)** \bigcirc 70.14 Employment finding services are available. 63.75 Most children have access to a good school. \bigcirc Lifelong learning opportunities are provided by local institutions. 63.89 Businesses are creating new jobs. \bigcirc 65.00 64.72 Minorities feel welcome. \bigcirc Governance \bigcirc 56.25 Information on local government decisions are easily accessible. \bigcirc 41.81 Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government. 47.92 Residents provide feedback on local government projects. \bigcirc 52.22

Dublin

			% of	responde	ents who chose th	ne Priority Area		
PRIORITY AREAS	0	%	20%	40	% 6	0%	80%	100%
	affordable housing						82.5%	
From a list of 15 indicators,	security					58.3%		
survey respondents were asked	road congestion				45.8%			
to select 5 that they perceived	public transport				40.0%			
as the most urgent for their city.	fulfilling employment			32.5%	/ 0			
The higher the percentage of	unemployment			30.8%				
responses per area, the greater the priority for the city.	air pollution		2	28.3%				
the phonty for the city.	recycling		25	.8%				
	energy efficiency		23.39	%				
	social mobility		18.3%					
	school education		18.3%					
	basic amenities		17.5%					
	corruption		16.7%					
	green spaces		15.8%					
	citizen engagement	1	15.0%					



TECHNOLOGIES		LEGEND:		GROUP MEA	N GROUP MAX	
Health & Safety	0	20	Score 40	60	80 10	0
Online reporting of city maintenance problems provides a speedy solution.						42.50
A website or App allows to give away unwanted items to other city residents.						55.42
Free public wifi has improved access to services.						48.89
CCTV cameras make residents feel safer.			(\bigcirc		56.53
A website or App allows effective monitoring of air pollution.			\bigcirc			36.94
Arranging medical appointments online has improved access.			\bigcirc			47.08
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			40.56
Apps that direct you to an available parking space have reduced journey time.						39.72
Bicycle hiring has reduced congestion.				\bigcirc		62.22
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		61.81
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	nd.					72.78
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		72.78
IT skills are taught well in schools.				\bigcirc		60.56
Online services provided by the city has made it easier to start a new business.				\bigcirc		60.28
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			37.78
Online voting has increased participation.						44.31
An online platform where residents can propose ideas has improved city life.						43.61
Processing Identification Documents online has reduced waiting times.				\bigcirc		60.97

Dusseldorf

SMART CITY RANKING) th of 102
GROUP	,	1
RATING		A A to D
FACTOR RATINGS	A A Structures	A Technologies

BACKGROUND INFORMATION

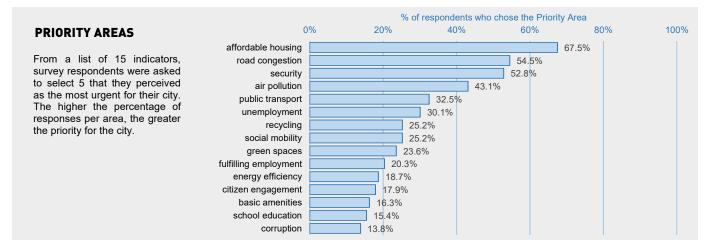
Country	2015	2016	2017
UN HDI	0.933	0.934	0.936
Life expectancy at Birth	80.8	81.0	81.2
Expected years of schooling	17.0	17.0	17.0
Mean years of schooling	14.1	14.1	14.1
GNI per capita (PPP \$)	44,766	45,203	46,136
-			

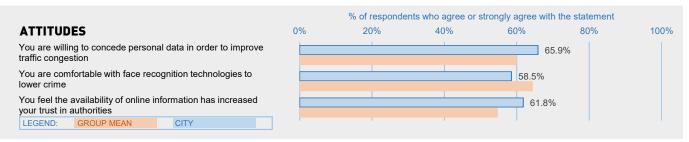
City



				GROUP	MEAN	
STRUCTURES		LEGEND:	GROUP MIN		GROU	UP MAX
llastab 9 Cafatu	0	20	Score 40	60	80	100
Health & Safety Basic sanitation meets the needs of the poorest areas.	0	20		00	00	100
Recycling services are satisfactory.						
Public safety is not a problem.						
				0		
Air pollution is not a problem.						
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.						
r ubilo transport lo satisfactory.						
Activities						
Green spaces are satisfactory.						
Green spaces are satisfactory.			_	(
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			-		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School))	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Dusseldorf





Health & Safety 0 20 40 60 80 100 Online reporting of city maintenance problems provides a speedy solution. Image: Constraint of the system	53.79 60.03 59.49 53.25 46.75 54.34
A website or App allows to give away unwanted items to other city residents. Free public wifi has improved access to services. CCTV cameras make residents feel safer. A website or App allows effective monitoring of air pollution. Arranging medical appointments online has improved access.	60.03 59.49 53.25 46.75
Free public wifi has improved access to services. CCTV cameras make residents feel safer. A website or App allows effective monitoring of air pollution. Arranging medical appointments online has improved access.	59.49 53.25 46.75
CCTV cameras make residents feel safer. Image: CCTV cameras make residents feel safer. A website or App allows effective monitoring of air pollution. Image: CCTV cameras make residents feel safer. A rranging medical appointments online has improved access. Image: CCTV cameras make residents feel safer.	53.25 46.75
A website or App allows effective monitoring of air pollution. Arranging medical appointments online has improved access.	46.75
Arranging medical appointments online has improved access.	
	54.34
Mobility	
· · · · · · · · · · · · · · · · · · ·	
Car-sharing Apps have reduced congestion.	38.89
Apps that direct you to an available parking space have reduced journey time.	49.19
Bicycle hiring has reduced congestion.	44.04
Online scheduling and ticket sales make public transport easier to use.	61.38
Activities	
Online purchasing of tickets to shows and museums has made it easier to attend.	68.83
Opportunities (Work & School)	
Online access to job listings has made it easier to find work.	70.87
IT skills are taught well in schools.	55.83
Online services provided by the city has made it easier to start a new business.	48.92
Governance	
Online public access to city finances has reduced corruption.	49.46
Online voting has increased participation.	54.34
An online platform where residents can propose ideas has improved city life.	53.66
Processing Identification Documents online has reduced waiting times.	58.94

Geneva

SMART CITY	4 th				
RANKING	Out of 102				
GROUP	,	1			
RATING		A A A to D			
FACTOR	A A	A			
RATINGS	Structures	Technologies			

BACKGROUND INFORMATION

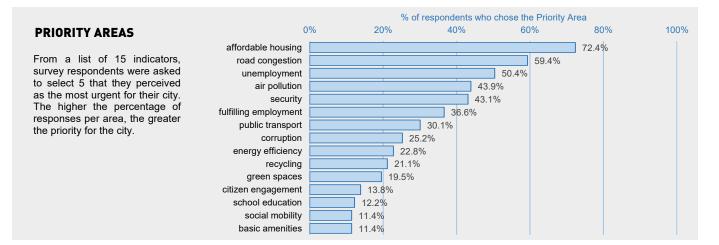
2015	2016	2017
0.942	0.943	0.944
83.1	83.3	83.5
16.2	16.2	16.2
13.4	13.4	13.4
58,280	57,636	57,625
	0.942 83.1 16.2 13.4	0.942 0.943 83.1 83.3 16.2 16.2 13.4 13.4

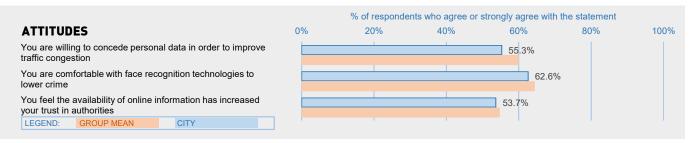
City



			CITY	GROUP ME	AN	
STRUCTURES		LEGEND:	GROUP MIN		GROUP MA	AX
			Score			
Health & Safety	0	20	40	60	80 I	100
Basic sanitation meets the needs of the poorest areas.						
Recycling services are satisfactory.						
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.						
Mobility						
Traffic congestion is not a problem.						
				\bigcirc		
Public transport is satisfactory.				Ŭ		
Public transport is satisfactory.				Ŭ		
Public transport is satisfactory.						
Activities					0	
Activities Green spaces are satisfactory.			_			
Activities Green spaces are satisfactory.			_		0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. .ifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Public transport is satisfactory. Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						

Geneva





			CITY	GROUP MEAN		
TECHNOLOGIES		LEGEND:			JP MAX	
			Score			
Health & Safety	0	20	40 6	60 80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		55	5.01
A website or App allows to give away unwanted items to other city residents.					63	3.96
Free public wifi has improved access to services.				\bigcirc	64	4.63
CCTV cameras make residents feel safer.					59	9.21
A website or App allows effective monitoring of air pollution.					49	9.19
Arranging medical appointments online has improved access.					53	3.79
Mobility						
Car-sharing Apps have reduced congestion.					38	8.08
Apps that direct you to an available parking space have reduced journey time.						0.65
Bicycle hiring has reduced congestion.			\bigcirc			9.59
Online scheduling and ticket sales make public transport easier to use.					74	4.53
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	id.				82	2.38
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.			(60	0.03
IT skills are taught well in schools.						5.99
Online services provided by the city has made it easier to start a new business.						0.54
Governance						
Online public access to city finances has reduced corruption.					38	8.89
Online voting has increased participation.					55	5.42
An online platform where residents can propose ideas has improved city life.			0		41	1.33
Processing Identification Documents online has reduced waiting times.					58	8.67
ç						

Gothenburg

SMART CITY RANKING		9th of 102
GROUP	,	1
RATING		B B AA to D
FACTOR RATINGS	BBB Structures	BBB Technologies

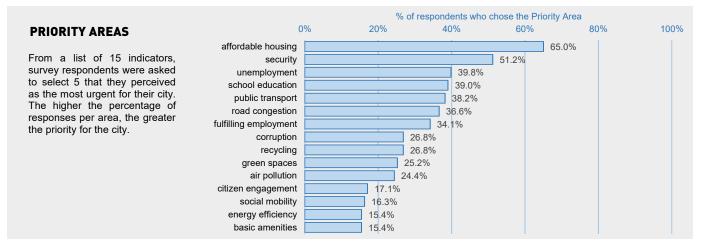
BACKGROUND INFORMATION

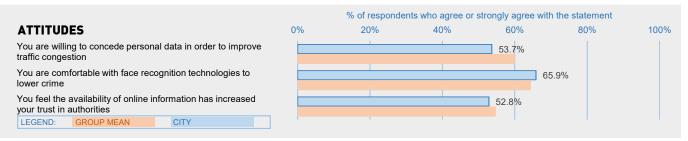
Country	2015	2016	2017
UN HDI	0.929	0.932	0.933
Life expectancy at Birth	82.3	82.5	82.6
Expected years of schooling	17.6	17.6	17.6
Mean years of schooling	12.4	12.4	12.4
GNI per capita (PPP \$)	46,380	47,378	47,766
City			



			CITY	GROUP ME	ΞΔΝΙ	_
STRUCTURES		LEGEND:			GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.			\bigcirc			
Mobility						
Traffic congestion is not a problem.			\bigcirc			
				\bigcirc		
Public transport is satisfactory.				\smile		
Public transport is satisfactory.				Ŭ		
Public transport is satisfactory.						
				Ŭ		
Activities						
Activities Green spaces are satisfactory.			_			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Public transport is satisfactory. Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.						

Gothenburg





		LEGEND:		UP MEAN GROUP M	AX
TECHNOLOGIES					U.
Health & Safety	0	20	Score 40 60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		49.0
A website or App allows to give away unwanted items to other city residents.					57.1
Free public wifi has improved access to services.					58.6
CCTV cameras make residents feel safer.					43.3
A website or App allows effective monitoring of air pollution.					33.7
Arranging medical appointments online has improved access.					54.3
Mobility					
Car-sharing Apps have reduced congestion.					33.7
Apps that direct you to an available parking space have reduced journey time.					43.9
Bicycle hiring has reduced congestion.			\bigcirc		49.0
Online scheduling and ticket sales make public transport easier to use.				\bigcirc	72.2
Activities					
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				75.6
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.					63.9
IT skills are taught well in schools.			\bigcirc		53.5
Online services provided by the city has made it easier to start a new business.					46.2
Governance					
Online public access to city finances has reduced corruption.			\bigcirc		36.8
Online voting has increased participation.					44.1
An online platform where residents can propose ideas has improved city life.					52.1
Processing Identification Documents online has reduced waiting times.			\bigcirc		45.5

Guangzhou

SMART CITY RANKING		7th of 102
GROUP		3
RATING		B A A to D
FACTOR RATINGS	B Structures	BB Technologies

BACKGROUND INFORMATION

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

City

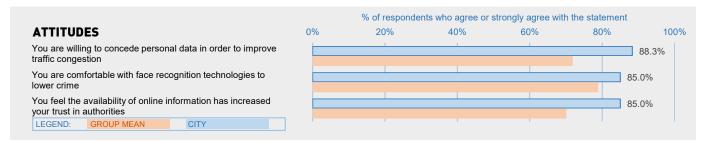
Population (UN World Cities Report)



CITY GROUP MIN GROUP MEAN LEGEND: GROUP MAX **STRUCTURES** Score 0 20 40 60 80 100 **Health & Safety** 80.42 Basic sanitation meets the needs of the poorest areas. \bigcirc 67.22 Recycling services are satisfactory. \bigcirc 61.94 Public safety is not a problem. \bigcirc 45.28 Air pollution is not a problem. \bigcirc Medical services provision is satisfactory. 80.42 \bigcirc **Mobility** 36.39 \bigcirc Traffic congestion is not a problem. Public transport is satisfactory. \bigcirc 58.89 **Activities** 80.42 Green spaces are satisfactory. \bigcirc \bigcirc 84.03 Cultural activities (shows, bars, and museums) are satisfactory. **Opportunities (Work & School)** 80.83 Employment finding services are available. \bigcirc 80.97 \bigcirc Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. \bigcirc 63.47 Businesses are creating new jobs. \bigcirc 79.17 75.56 Minorities feel welcome. Governance \bigcirc 74.44 Information on local government decisions are easily accessible. \bigcirc 43.47 Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government. \bigcirc 63.33 Residents provide feedback on local government projects. 68.06

Guangzhou

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** road congestion 65.8% From a list of 15 indicators, air pollution 59.2% survey respondents were asked to select 5 that they perceived affordable housing 49.2% public transport 41.7% as the most urgent for their city. The higher the percentage of basic amenities 40.8% corruption 30.8% responses per area, the greater fulfilling employment 30.0% the priority for the city. security 26.7% green spaces 24.2% recycling 22.5% social mobility 20.8% citizen engagement 19.2% school education 19.2% energy efficiency 15.0% unemployment 14.2%



TECHNOLOGIES		LEGEND:	CITY GROUP MIN	GROL	JP MEAN GROUP	MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.					\bigcirc	;	85.5
A website or App allows to give away unwanted items to other city residents.					\bigcirc		70.
Free public wifi has improved access to services.					\bigcirc	;	82.
CCTV cameras make residents feel safer.						;	80.
A website or App allows effective monitoring of air pollution.							72.
Arranging medical appointments online has improved access.					\bigcirc	;	88.
Mobility							
Car-sharing Apps have reduced congestion.				\bigcirc			62.
Apps that direct you to an available parking space have reduced journey time.					\bigcirc		77.
Bicycle hiring has reduced congestion.					\bigcirc		77.
Online scheduling and ticket sales make public transport easier to use.) !	92.
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	d.						93.
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					0		91.
IT skills are taught well in schools.					\bigcirc	:	81.
Online services provided by the city has made it easier to start a new business.					\bigcirc	:	85.
Governance							75
Online public access to city finances has reduced corruption.							75.
Online voting has increased participation.					0		71.
An online platform where residents can propose ideas has improved city life.							80.
Processing Identification Documents online has reduced waiting times.							83.

Hangzhou

SMART CITY RANKING	Gut o	th of 102
GROUP	;	3
RATING		B A A to D
FACTOR RATINGS	B Structures	BB Technologies

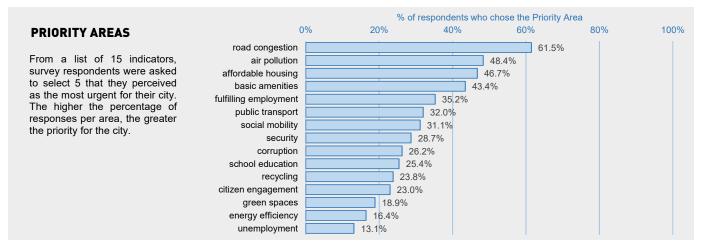
BACKGROUND INFORMATION

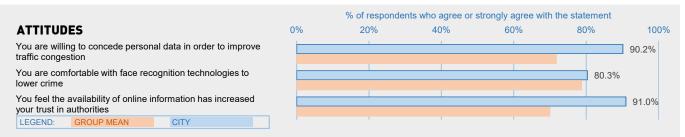
Country	2015	2016	2017
UN HDI	0.743	0.748	0.752
Life expectancy at Birth	76.1	76.3	76.4
Expected years of schooling	13.8	13.8	13.8
Mean years of schooling	7.7	7.8	7.8
GNI per capita (PPP \$)	13,519	14,354	15,270
City			



STRUCTURES		LEGEND:		GROUP MEAN	GROUP MAX
			Score		
Health & Safety	0	20	40	60	80 100
Basic sanitation meets the needs of the poorest areas.					\bigcirc
Recycling services are satisfactory.				\bigcirc	
Public safety is not a problem.				\bigcirc	
Air pollution is not a problem.			\bigcirc		
Medical services provision is satisfactory.				\bigcirc	
Mobility					
Traffic congestion is not a problem.					
Public transport is satisfactory.			Ŭ		
Activities					
Activities Green spaces are satisfactory.					
Activities Green spaces are satisfactory.					0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.					

Hangzhou





			CITY	GROU	IP MEAN		
TECHNOLOGIES		LEGEND:		GROU		UP MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.					\bigcirc		85.
A website or App allows to give away unwanted items to other city residents.					\bigcirc		73.
Free public wifi has improved access to services.					\bigcirc		82.
CCTV cameras make residents feel safer.					\bigcirc		78
A website or App allows effective monitoring of air pollution.					\bigcirc		76
Arranging medical appointments online has improved access.					(90
Mobility							
Car-sharing Apps have reduced congestion.					\bigcirc		72
Apps that direct you to an available parking space have reduced journey time.					\bigcirc		80
Bicycle hiring has reduced congestion.					\bigcirc		83
Online scheduling and ticket sales make public transport easier to use.						\bigcirc	92
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.					\bigcirc	92
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.						0	93
IT skills are taught well in schools.					\bigcirc		82
Online services provided by the city has made it easier to start a new business.					\bigcirc		85
Governance					<u> </u>		
Online public access to city finances has reduced corruption.					0		77
Online voting has increased participation.					0		77
An online platform where residents can propose ideas has improved city life.					\bigcirc		81
Processing Identification Documents online has reduced waiting times.					\bigcirc		84

Hanoi

SMART CITY	66th
RANKING	Out of 102
GROUP	4
RATING	CCCC From AAA to D
FACTOR	CCC CCC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

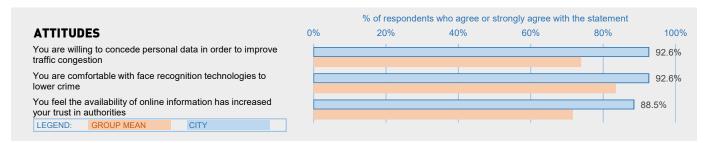
City



			CITY	GROUP ME		
STRUCTURES		LEGEND:		GROOP ML	GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc	
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.					\bigcirc	
Air pollution is not a problem.						
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.		(
Public transport is satisfactory.			U U			
Activities						
Activities Green spaces are satisfactory.						
Activities Green spaces are satisfactory.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Winorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						

Hanoi

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** air pollution 67.2% From a list of 15 indicators, 59.0% road congestion survey respondents were asked to select 5 that they perceived corruption 48.4% basic amenities 43.4% as the most urgent for their city. public transport 37.7% The higher the percentage of green spaces 36.9% responses per area, the greater security 31.1% the priority for the city. affordable housing 29.5% school education 19.7% fulfilling employment 18.9% 16.4% recycling unemployment 14.8% social mobility 9.8% energy efficiency 8.2% citizen engagement 6.6%



TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP MEA	N GROUP MAX	
Health & Safety	0	20	Score 40	60	80 100	
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		69.26
A website or App allows to give away unwanted items to other city residents.				\bigcirc		64.21
Free public wifi has improved access to services.				\bigcirc		70.08
CCTV cameras make residents feel safer.				\bigcirc		69.40
A website or App allows effective monitoring of air pollution.			(56.42
Arranging medical appointments online has improved access.						76.23
Mobility						
Car-sharing Apps have reduced congestion.				C)	75.00
Apps that direct you to an available parking space have reduced journey time.				\bigcirc		73.63
Bicycle hiring has reduced congestion.				\bigcirc		60.79
Online scheduling and ticket sales make public transport easier to use.					\bigcirc	80.87
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc	84.02
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.					\bigcirc	83.61
IT skills are taught well in schools.				\bigcirc		73.50
Online services provided by the city has made it easier to start a new business.					\bigcirc	79.78
Governance						
Online public access to city finances has reduced corruption.				\bigcirc		63.39
Online voting has increased participation.				\bigcirc		65.16
An online platform where residents can propose ideas has improved city life.				\bigcirc		72.81
Processing Identification Documents online has reduced waiting times.					\bigcirc	80.46

Hanover

SMART CITY RANKING	26th Out of 102		BACKGROUND IN Country UN HDI Life expectancy at Birth Expected years of school
GROUP	,	1	Mean years of schooling GNI per capita (PPP \$) City Population (Eurostat)
RATING	BBB From AAA to D		Match State
FACTOR RATINGS	A Structures	B B Technologies	ingliste climinal Paris France

NFORMATION

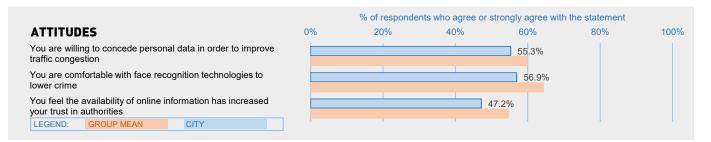
Country	2015	2016	2017	
UN HDI	0.933	0.934	0.936	
Life expectancy at Birth	80.8	81.0	81.2	
Expected years of schooling	17.0	17.0	17.0	
Mean years of schooling	14.1	14.1	14.1	
GNI per capita (PPP \$)	44,766	45,203	46,136	



				GROUP MEAN	1	
STRUCTURES		LEGEND:		GROUP MEAN	GROUP MAX	
			Score			
Health & Safety	0	20	40	60	80 10	0
Basic sanitation meets the needs of the poorest areas.						70.87
Recycling services are satisfactory.				\bigcirc		72.09
Public safety is not a problem.				\bigcirc		59.62
Air pollution is not a problem.						50.00
Medical services provision is satisfactory.						74.39
Mobility						
Traffic congestion is not a problem.			\bigcirc			42.41
Public transport is satisfactory.				\bigcirc		63.69
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			_	0		69.11 75.07
Green spaces are satisfactory.				0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						75.07
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						75.07 60.16
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						75.07 60.16 66.80
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						75.07 60.16 66.80 60.43
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						75.07 60.16 66.80 60.43 60.30 55.56
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						75.07 60.16 66.80 60.43 60.30 55.56 55.83
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						75.07 60.16 66.80 60.43 60.30 55.56
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						75.07 60.16 66.80 60.43 60.30 55.56 55.83

Hanover

% of respondents who chose the Priority Area 20% 40% 60% 80% 100% 0% **PRIORITY AREAS** affordable housing 68.3% From a list of 15 indicators, 49.6% road congestion survey respondents were asked to select 5 that they perceived security 40.7% unemployment 38.2% as the most urgent for their city. recycling 31.7% The higher the percentage of air pollution 30.9% responses per area, the greater school education 29.3% the priority for the city. fulfilling employment 25.2% citizen engagement 23.6% corruption 22.8% public transport 21.1% energy efficiency 21.1% social mobility 19.5% basic amenities 19.5% 16.3% green spaces



TECHNOLOGIES		LEGEND:		GROUP		UP MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc				47.02
A website or App allows to give away unwanted items to other city residents.			0			:	52.03
Free public wifi has improved access to services.							45.93
CCTV cameras make residents feel safer.							45.66
A website or App allows effective monitoring of air pollution.			\bigcirc			:	37.8
Arranging medical appointments online has improved access.			\bigcirc				46.0
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				43.6
Apps that direct you to an available parking space have reduced journey time.			\bigcirc				43.3
Bicycle hiring has reduced congestion.			\bigcirc				43.6
Online scheduling and ticket sales make public transport easier to use.					\bigcirc		71.2
Activities							
Online purchasing of tickets to shows and museums has made it easier to attend	d.			(69.6
Opportunition (Work & Cohool)							
Opportunities (Work & School) Online access to job listings has made it easier to find work.				(69.6
IT skills are taught well in schools.							43.2
Online services provided by the city has made it easier to start a new business.							43.9
Online services provided by the dity has made it easier to start a new business.							40.50
Governance							
Online public access to city finances has reduced corruption.							36.7
Online voting has increased participation.			\bigcirc				48.1
An online platform where residents can propose ideas has improved city life.							44.5
Processing Identification Documents online has reduced waiting times.			\bigcirc				49.8

Helsinki

SMART CITY RANKING	Out c	th of 102
GROUP	2	2
RATING		A A to D
FACTOR RATINGS	A Structures	BBB Technologies

BACKGROUND INFORMATION

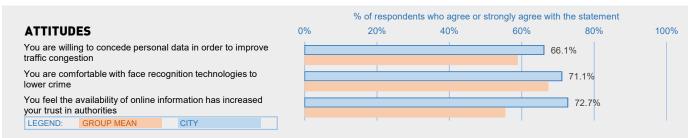
Country	2015	2016	2017
UN HDI	0.915	0.918	0.920
Life expectancy at Birth	81.1	81.3	81.5
Expected years of schooling	17.6	17.6	17.6
Mean years of schooling	12.4	12.4	12.4
GNI per capita (PPP \$)	39,248	40,066	41,002
City			



STRUCTURES		LEGEND:		GROUP ME	AN GROUF	MAX
STRUCTURES						
Health & Safety	0	20	Score 40	60	80	100
Basic sanitation meets the needs of the poorest areas.				0		
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\square)		
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.					\bigcirc	
Activities						
Green spaces are satisfactory.				C)	
Cultural activities (shows, bars, and museums) are satisfactory.					\bigcirc	
Opportunities (Work & School)						
Employment finding services are available.				\bigcirc		
Most children have access to a good school.					\bigcirc	
Lifelong learning opportunities are provided by local institutions.						
Businesses are creating new jobs.				\bigcirc		
Minorities feel welcome.			(\bigcirc		
Governance						
Information on local government decisions are easily accessible.						
Corruption of city officials is not an issue of concern.						
Desidents contribute to desistence the first first for the						
Residents contribute to decision making of local government. Residents provide feedback on local government projects.						

Helsinki

% of respondents who chose the Priority Area 20% 40% 60% 80% 100% 0% **PRIORITY AREAS** affordable housing 56.2% From a list of 15 indicators, 45.5% recycling survey respondents were asked to select 5 that they perceived public transport 42.1% security 39.7% as the most urgent for their city. unemployment 34.7% The higher the percentage of 34.7% air pollution responses per area, the greater fulfilling employment 33.9% the priority for the city. social mobility 31.4% road congestion 29.8% energy efficiency 28.1% green spaces 26.4% basic amenities 23.1% school education 22.3% citizen engagement 19.8% corruption 9.1%



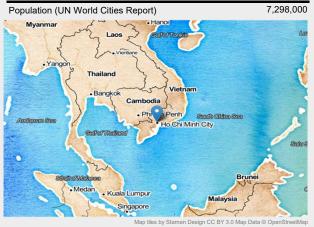
			CITY	GROUP MEA	N	
TECHNOLOGIES		LEGEND:	GROUP MIN		GROUP MAX	
Haalth & Cafabr	0	20	Score 40	60	80 100	
Health & Safety	0	20	40	00	00 100	59.3
Online reporting of city maintenance problems provides a speedy solution.				0		- 59. 68.
A website or App allows to give away unwanted items to other city residents.						62.
Free public wifi has improved access to services.						56.
CCTV cameras make residents feel safer.			(60.
A website or App allows effective monitoring of air pollution.						64.
Arranging medical appointments online has improved access.						04.
Mobility						
Car-sharing Apps have reduced congestion.						46.
Apps that direct you to an available parking space have reduced journey time.)		53.
Bicycle hiring has reduced congestion.						66.
Online scheduling and ticket sales make public transport easier to use.				Ŭ		77
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.			\bigcirc		69.
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.)	74.
IT skills are taught well in schools.				\bigcirc		69.
Online services provided by the city has made it easier to start a new business.				\bigcirc		64.
Covernance						
Governance Online public access to city finances has reduced corruption.						53.
Online voting has increased participation.						51.
An online platform where residents can propose ideas has improved city life.						59.
Processing Identification Documents online has reduced waiting times.						65
rocessing remarkation booments online has reduced walking limes.						05.

Ho Chi Minh City

SMART CITY	65th
RANKING	Out of 102
GROUP	4
RATING	CCCC From AAA to D
FACTOR	CCC CC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

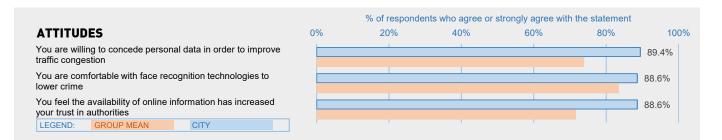
Country	2015	2016	2017
UN HDI	0.684	0.689	0.694
Life expectancy at Birth	76.1	76.3	76.5
Expected years of schooling	12.7	12.7	12.7
Mean years of schooling	8.0	8.1	8.2
GNI per capita (PPP \$)	5,263	5,589	5,859
City			



		LEGEND:		GROUP MEA	
STRUCTURES					GROUP MAX
Health & Safety	0	20	Score 40	60	80 100
Basic sanitation meets the needs of the poorest areas.				C)
Recycling services are satisfactory.				\bigcirc	
Public safety is not a problem.				\bigcirc	
Air pollution is not a problem.					
Medical services provision is satisfactory.					
Mobility					
Traffic congestion is not a problem.			0		
Public transport is satisfactory.					
Activities					
				0	0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0
Activities Green spaces are satisfactory.					0
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					

Ho Chi Minh City

% of respondents who chose the Priority Area 40% 60% 80% 100% 0% 20% **PRIORITY AREAS** road congestion 67.5% From a list of 15 indicators, air pollution 62.6% survey respondents were asked to select 5 that they perceived security 47.2% public transport 45.5% as the most urgent for their city. basic amenities 43.9% The higher the percentage of green spaces 40.7% responses per area, the greater corruption 36.6% the priority for the city. fulfilling employment 28.5% affordable housing 22.8% school education 17.9% 17.9% unemployment recycling 17.1% social mobility 11.4% energy efficiency 10.6% citizen engagement 4.9%



				GROUP M	IEAN		
TECHNOLOGIES		LEGEND:	GROUP MIN		GROUF	PMAX	
	0	20	Score 40	60	80	100	
Health & Safety	0	20	40	60	80		
Online reporting of city maintenance problems provides a speedy solution.					\bigcirc		76.2
A website or App allows to give away unwanted items to other city residents.				0			66.6
Free public wifi has improved access to services.							69.5
CCTV cameras make residents feel safer.					\bigcirc		80.4
A website or App allows effective monitoring of air pollution.				\bigcirc			68.8
Arranging medical appointments online has improved access.					\bigcirc		84.4
Mahilin							
Mobility Constrained Apple have reduced congestion							76.6
Car-sharing Apps have reduced congestion. Apps that direct you to an available parking space have reduced journey time.							80.2
Bicycle hiring has reduced congestion.							57.1
Online scheduling and ticket sales make public transport easier to use.							74.8
Online scheduling and licket sales make public transport easier to use.							74.0
Activities							
Online purchasing of tickets to shows and museums has made it easier to attend	d.						81.3
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					\bigcirc		88.7
IT skills are taught well in schools.					\bigcirc		80.8
Online services provided by the city has made it easier to start a new business.					\bigcirc		81.8
Governance							
Online public access to city finances has reduced corruption.				C)		70.3
Online voting has increased participation.				\bigcirc			69.1
An online platform where residents can propose ideas has improved city life.					\bigcirc		74.6
Processing Identification Documents online has reduced waiting times.					\bigcirc		78.3

Hong Kong

SMART CITY	37th				
RANKING	Out of 102				
GROUP	,	1			
RATING	BBB From AAA to D				
FACTOR	BB	A			
RATINGS	Structures	Technologies			

BACKGROUND INFORMATION

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

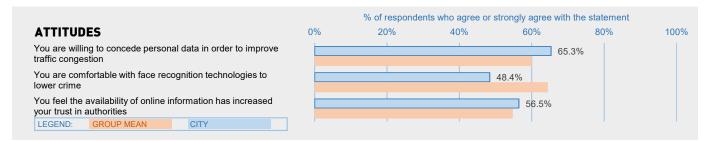
City



			CI	TY GROUP	MEAN	
STRUCTURES		LEGEND:	GROUP MIN			OUP MAX
			Scol			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.						
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.			\bigcirc			
Mobility						
Traffic congestion is not a problem.)			
5						
Public transport is satisfactory.						
Public transport is satisfactory.						
Public transport is satisfactory.						
Activities			0			
Activities Green spaces are satisfactory.			0			
Activities Green spaces are satisfactory.			0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.			0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Public transport is satisfactory. Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.						

Hong Kong

% of respondents who chose the Priority Area 20% 40% 80% 100% 0% 60% **PRIORITY AREAS** affordable housing 79.0% From a list of 15 indicators, 50.8% road congestion survey respondents were asked to select 5 that they perceived air pollution 46.8% social mobility 39.5% as the most urgent for their city. citizen engagement 36.3% The higher the percentage of corruption 34.7% responses per area, the greater recycling 33.9% the priority for the city. green spaces 24.2% basic amenities 24.2% school education 22.6% 22.6% public transport fulfilling employment 20.2% energy efficiency 19.4% security 17.7% unemployment 10.5%



TECHNOLOGIES		LEGEND:		GROUP M	EAN GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			5
A website or App allows to give away unwanted items to other city residents.			C)		5
Free public wifi has improved access to services.				\bigcirc		6
CCTV cameras make residents feel safer.				\bigcirc		6
A website or App allows effective monitoring of air pollution.			(5
Arranging medical appointments online has improved access.			(5
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			4
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			5
Bicycle hiring has reduced congestion.			\bigcirc	~		30
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		5
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	d			\bigcirc		6
	u.					0.
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				0		7
IT skills are taught well in schools.				\bigcirc		6
Online services provided by the city has made it easier to start a new business.				\bigcirc		6
Governance						
Online public access to city finances has reduced corruption.				\bigcirc		5
Online voting has increased participation.						5
An online platform where residents can propose ideas has improved city life.				\bigcirc		5
Processing Identification Documents online has reduced waiting times.				\bigcirc		6

Hyderabad

SMART CITY	67th
RANKING	Out of 102
GROUP	4
RATING	CCC
FACTOR	CCC CCC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

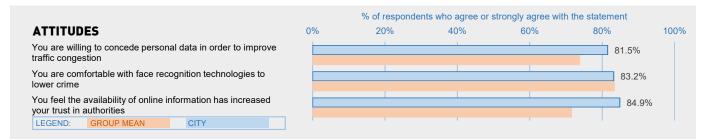


Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStree

			CITY	GROUP ME	A.K.I.	_
STRUCTURES		LEGEND:		GROUP WE	GROUP	P MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.			\bigcirc			
Public transport is satisfactory.				\bigcirc		
Public transport is satisfactory.						
Public transport is satisfactory.						
Activities						
Activities Green spaces are satisfactory.			_	0		
Activities Green spaces are satisfactory.			_)	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.)	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Public transport is satisfactory. Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Hyderabad

% of respondents who chose the Priority Area 20% 40% 60% 80% 100% 0% **PRIORITY AREAS** air pollution 62.2% From a list of 15 indicators, 54.6% basic amenities survey respondents were asked to select 5 that they perceived corruption 42.9% green spaces 38.7% as the most urgent for their city. road congestion 37.8% The higher the percentage of unemployment 35.3% responses per area, the greater security 35.3% the priority for the city. recycling 34.5% fulfilling employment 27.7% affordable housing 23.5% public transport 21.0% school education 19.3% social mobility 17.6% energy efficiency 15.1% citizen engagement 14.3%



				GROUP M		
TECHNOLOGIES		LEGEND:	GROUP MIN		GROUP	MAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		64
A website or App allows to give away unwanted items to other city residents.				Õ		62
Free public wifi has improved access to services.				Õ		63
CCTV cameras make residents feel safer.				Ĩ	0	80
A website or App allows effective monitoring of air pollution.			\bigcirc			51
Arranging medical appointments online has improved access.					\bigcirc	77
Mobility						
Car-sharing Apps have reduced congestion.				\bigcirc		68
Apps that direct you to an available parking space have reduced journey time.				0		58
Bicycle hiring has reduced congestion.				\bigcirc	_	59
Online scheduling and ticket sales make public transport easier to use.					\bigcirc	81
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	nd.					83
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.						84
IT skills are taught well in schools.					\bigcirc	76
Online services provided by the city has made it easier to start a new business.					\bigcirc	82
Governance						
Online public access to city finances has reduced corruption.						60
Online voting has increased participation.						61
An online platform where residents can propose ideas has improved city life.						70
Processing Identification Documents online has reduced waiting times.						74

Jakarta

SMART CITY	81 st				
RANKING	Out of 102				
GROUP	4				
RATING	CC				
FACTOR	C	C C			
RATINGS	Structures	Technologies			

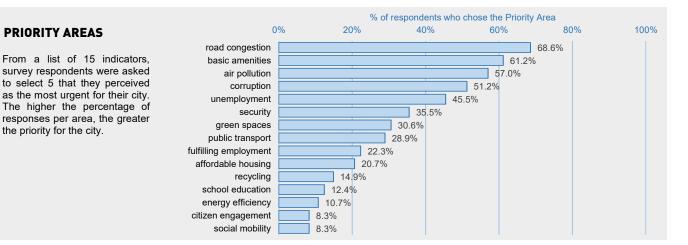
BACKGROUND INFORMATION

Country	2015	2016	2017
UN HDI	0.686	0.691	0.694
Life expectancy at Birth	69.0	69.2	69.4
Expected years of schooling	12.7	12.8	12.8
Mean years of schooling	7.9	8.0	8.0
GNI per capita (PPP \$)	10,037	10,437	10,846
014			



STRUCTURES		LEGEND:		GROUP MEA	N GROUP MAX	C
			Score			
Health & Safety	0	20	40	60	80 1	00
Basic sanitation meets the needs of the poorest areas.			\bigcirc			49.72
Recycling services are satisfactory.			\bigcirc			47.52
Public safety is not a problem.			\bigcirc			46.28
Air pollution is not a problem.		\bigcirc				19.15
Medical services provision is satisfactory.				\bigcirc		63.64
Mobility						
Traffic congestion is not a problem.		\bigcirc				16.25
Public transport is satisfactory.						54.96
. ,						
Activities						
						55.23
Activities						55.23 66.80
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			(•	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.						66.80
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						66.80 60.61
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						66.80 60.61 63.77
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					0	66.80 60.61 63.77 57.99
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					0	66.80 60.61 63.77 57.99 78.65
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						66.80 60.61 63.77 57.99 78.65
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						66.80 60.61 63.77 57.99 78.65 55.65
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						66.80 60.61 63.77 57.99 78.65 55.65 60.74

Jakarta



% of respondents who agree or strongly agree with the statement ATTITUDES 0% 20% 100% 40% 60% 80% You are willing to concede personal data in order to improve 66.1% traffic congestion You are comfortable with face recognition technologies to 81.0% lower crime You feel the availability of online information has increased 72.7% your trust in authorities LEGEND: GROUP MEAN CITY

			CITY	GROUP MEA	AN	1
TECHNOLOGIES		LEGEND:			GROUP MAX	
			Score			
Health & Safety	0	20	40	60	80 100)
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		57.4
A website or App allows to give away unwanted items to other city residents.				\bigcirc		57.3
Free public wifi has improved access to services.						70.
CCTV cameras make residents feel safer.				\bigcirc		71.
A website or App allows effective monitoring of air pollution.						54.
Arranging medical appointments online has improved access.				\bigcirc		64.
Mobility						
Car-sharing Apps have reduced congestion.						55.3
Apps that direct you to an available parking space have reduced journey time.			(\bigcirc		56.
Bicycle hiring has reduced congestion.				\bigcirc		61.
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		71.
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.			\bigcirc		72.
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				C)	74.
IT skills are taught well in schools.				\bigcirc		66.
Online services provided by the city has made it easier to start a new business.				\bigcirc		70.
Governance						
Online public access to city finances has reduced corruption.			\bigcirc)		52.
Online voting has increased participation.						54.
An online platform where residents can propose ideas has improved city life.				\bigcirc		63.
Processing Identification Documents online has reduced waiting times.				\bigcirc		65.

Kiev

SMART CITY RANKING		2nd
GROUP		4
RATING		A A to D
FACTOR RATINGS	C	C Technologies

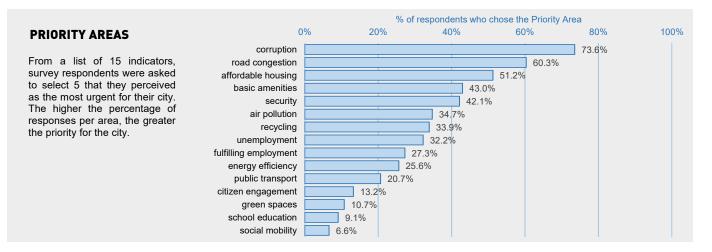
BACKGROUND INFORMATION

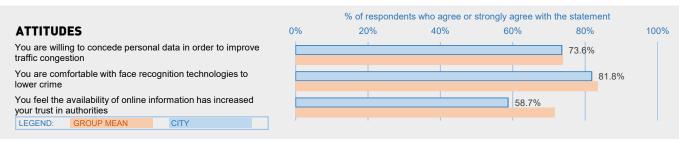
Country	2015	2016	2017
UN HDI	0.743	0.746	0.751
Life expectancy at Birth	71.8	72.0	72.1
Expected years of schooling	15.0	15.0	15.0
Mean years of schooling	11.3	11.3	11.3
GNI per capita (PPP \$)	7,375	7,593	8,130
City			



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

			CITY	GROUP MI	FAN	
STRUCTURES		LEGEND:				IP MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.)		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.			\bigcirc			
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.			\bigcirc			
Activities						
			_			
Green spaces are satisfactory.			_		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			_		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					0	





TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP MEA	N GROUP MAX	<
Health & Safety	0	20	Score 40	60	80 10	00
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		59.3
A website or App allows to give away unwanted items to other city residents.						44.0
Free public wifi has improved access to services.						55.5
CCTV cameras make residents feel safer.			C)		53.5
A website or App allows effective monitoring of air pollution.			\bigcirc			31.8
Arranging medical appointments online has improved access.				\bigcirc		60.3
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			44.2
Apps that direct you to an available parking space have reduced journey time.				\bigcirc		61.2
Bicycle hiring has reduced congestion.			\bigcirc			46.4
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		70.8
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	id.					82.6
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				(77.4
IT skills are taught well in schools.			(56.6
Online services provided by the city has made it easier to start a new business.			С)		53.
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			37.6
Online voting has increased participation.			\bigcirc			52.7
An online platform where residents can propose ideas has improved city life.			(56.2
Processing Identification Documents online has reduced waiting times.				\bigcirc		62.8

Krakow

SMART CITY	69th
RANKING	Out of 102
GROUP	3
RATING	CCCC From AAA to D
FACTOR	CCC CCC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

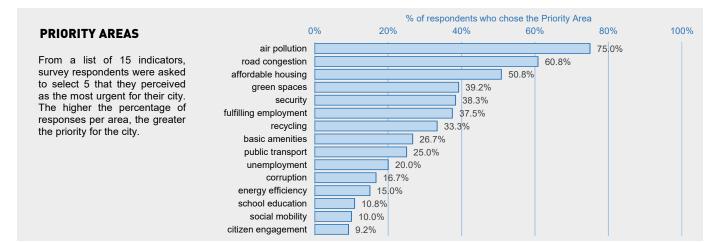
Country	2015	2016	2017
UN HDI	0.855	0.860	0.865
Life expectancy at Birth	77.4	77.6	77.8
Expected years of schooling	16.1	16.4	16.4
Mean years of schooling	12.1	12.2	12.3
GNI per capita (PPP \$)	24,418	24,983	26,150

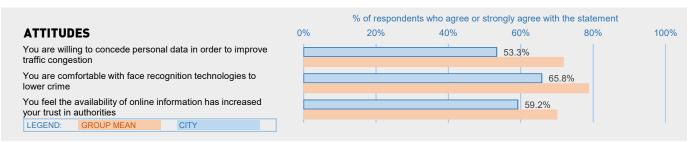
City



			CITY	GROUP MEA	AN	
STRUCTURES		LEGEND:	GROUP MIN		GROUP	MAX
Uselah & Cofety	0	20	Score 40	60	80	100
Health & Safety	0	20	0	00	00	100
Basic sanitation meets the needs of the poorest areas.)	
Recycling services are satisfactory.						
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.		\bigcirc				
Medical services provision is satisfactory.			\bigcirc			
Mahiling						
Mobility Traffic congestion is not a problem.			0			
Public transport is satisfactory.				\bigcirc		
rubic transport is satisfactory.				\bigcirc		
Activities						
				0		
Green spaces are satisfactory.				0		
Green spaces are satisfactory.				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Dpportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Dpportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Winorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.						

Krakow





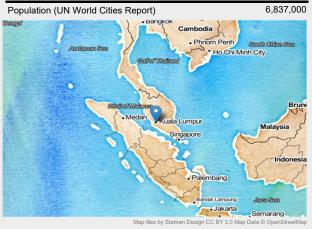
TECHNOLOGIES		LEGEND:		COUP MEAN GROUP MA	X
Health & Safety	0	20	Score 40 60	80 1	00
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		57.2
A website or App allows to give away unwanted items to other city residents.			\bigcirc		56.5
Free public wifi has improved access to services.				\bigcirc	64.4
CCTV cameras make residents feel safer.					73.6
A website or App allows effective monitoring of air pollution.					77.0
Arranging medical appointments online has improved access.					61.1
Mobility					
Car-sharing Apps have reduced congestion.					48.8
Apps that direct you to an available parking space have reduced journey time.					57.9
Bicycle hiring has reduced congestion.			(62.2
Online scheduling and ticket sales make public transport easier to use.					72.3
Activities					
Online purchasing of tickets to shows and museums has made it easier to atter	nd.			\bigcirc	82.3
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.				\bigcirc	79.8
IT skills are taught well in schools.				\bigcirc	66.1
Online services provided by the city has made it easier to start a new business.				0	64.8
Gevernance					
Governance Online public access to city finances has reduced corruption.		_			51.6
Online public access to city finances has reduced corruption. Online voting has increased participation.					51.0
An online platform where residents can propose ideas has improved city life.					64.4
Processing Identification Documents online has reduced waiting times.					71.6
Frocessing identification bocuments online has reduced waiting times.					/1.0

Kuala Lumpur

SMART CITY	70th
RANKING	Out of 102
GROUP	3
RATING	CCC
FACTOR	CCC CC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

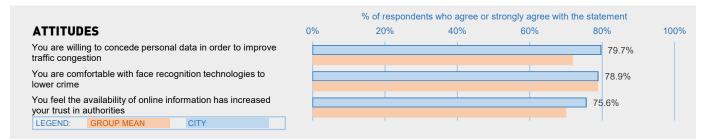
Country	2015	2016	2017
UN HDI	0.795	0.799	0.802
Life expectancy at Birth	75.1	75.3	75.5
Expected years of schooling	13.5	13.7	13.7
Mean years of schooling	10.2	10.2	10.2
GNI per capita (PPP \$)	24,324	24,968	26,107
City			



STRUCTURES		LEGEND:	GROUP MIN	GROUP MEAN	GROUP MAX
Health & Safety	0	20	Score 40	60	80 100
Basic sanitation meets the needs of the poorest areas.				\bigcirc	
Recycling services are satisfactory.					
Public safety is not a problem.			\bigcirc		
Air pollution is not a problem.			0		
Medical services provision is satisfactory.				\bigcirc	
Mobility					
Traffic congestion is not a problem.					_
Public transport is satisfactory.					
				0	
Green spaces are satisfactory.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	-
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					

Kuala Lumpur

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** road congestion 62.6% From a list of 15 indicators, affordable housing 61.8% survey respondents were asked to select 5 that they perceived security 56.1% corruption 50.4% as the most urgent for their city. air pollution 42.3% The higher the percentage of public transport 39.0% responses per area, the greater unemployment 30.9% the priority for the city. basic amenities 28.5% fulfilling employment 26.0% green spaces 25.2% 16.3% recycling social mobility 13.0% citizen engagement 12.2% energy efficiency 12.2% school education 10.6%



		LEGEND:		GROU		ID MAX	
TECHNOLOGIES			GROUP MIN		GRUU	JP MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc			61.6
A website or App allows to give away unwanted items to other city residents.			C)			53.3
Free public wifi has improved access to services.				\bigcirc			59.0
CCTV cameras make residents feel safer.				0			63.6
A website or App allows effective monitoring of air pollution.			C)			53.1
Arranging medical appointments online has improved access.				\bigcirc			61.9
Mobility							
Car-sharing Apps have reduced congestion.					\bigcirc		69.3
Apps that direct you to an available parking space have reduced journey time.				\bigcirc			58.
Bicycle hiring has reduced congestion.			\bigcirc				49.
Online scheduling and ticket sales make public transport easier to use.					\bigcirc		73.8
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	d			_			82.
	iu.				\bigcirc		02.0
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					\bigcirc		83.4
IT skills are taught well in schools.				C			66.
Online services provided by the city has made it easier to start a new business.					\bigcirc		75.2
Governance							54
Online public access to city finances has reduced corruption.							54.8
Online voting has increased participation.							60.4
An online platform where residents can propose ideas has improved city life.				\bigcirc			62.
Processing Identification Documents online has reduced waiting times.					\bigcirc		70.3

SMART CITY RANKING		2nd of 102
GROUP		4
RATING		A A to D
FACTOR RATINGS	D Structures	D Technologies

BACKGROUND INFORMATION

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

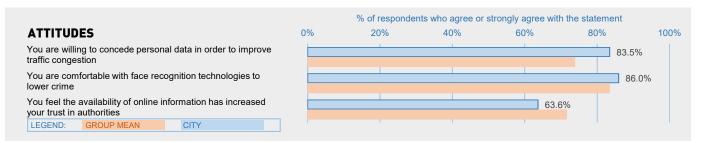
City



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

STRUCTURES	LE	EGEND:	GROUP MIN	GROUP ME	GROUP N	MAX
STRUCTURES			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.			\bigcirc			
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.		\bigcirc				
Medical services provision is satisfactory.			\bigcirc			
Mobility						
Traffic congestion is not a problem.			-			
Public transport is satisfactory.			\bigcirc			
			0			
Green spaces are satisfactory.			0		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			0		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			0		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.					0	

% of respondents who chose the Priority Area 0% 40% 60% 80% 100% 20% **PRIORITY AREAS** road congestion 64.5% From a list of 15 indicators, security 62.8% survey respondents were asked to select 5 that they perceived affordable housing 62.0% unemployment 59.5% as the most urgent for their city. The higher the percentage of basic amenities 58.7% corruption 43.0% responses per area, the greater fulfilling employment 27.3% the priority for the city. energy efficiency 21.5% school education 20.7% public transport 19.0% air pollution 19.0% recycling 14.9% citizen engagement 9.9% green spaces 6.6% social mobility 5.0%



			CITY	GROUP MEAN		
TECHNOLOGIES		LEGEND:			GROUP MAX	
			Score			
Health & Safety	0	20	40	60 80) 100	
Online reporting of city maintenance problems provides a speedy solution.						46.83
A website or App allows to give away unwanted items to other city residents.			\bigcirc			33.75
Free public wifi has improved access to services.			\bigcirc			37.33
CCTV cameras make residents feel safer.			\bigcirc			36.78
A website or App allows effective monitoring of air pollution.		\bigcirc				18.60
Arranging medical appointments online has improved access.			\bigcirc			45.32
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			41.18
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			29.20
Bicycle hiring has reduced congestion.		\bigcirc				22.04
Online scheduling and ticket sales make public transport easier to use.			\bigcirc			53.99
Activities						
Online purchasing of tickets to shows and museums has made it easier to atter	nd.			\bigcirc		77.00
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		76.03
IT skills are taught well in schools.			\bigcirc			54.68
Online services provided by the city has made it easier to start a new business.						54.55
Governance						
Online public access to city finances has reduced corruption.)			23.14
Online voting has increased participation.		\bigcirc				18.32
An online platform where residents can propose ideas has improved city life.						30.85
Processing Identification Documents online has reduced waiting times.						51.79

Lisbon

SMART CITY	76th
RANKING	Out of 102
GROUP	3
RATING	CCC
FACTOR	CCC CCC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

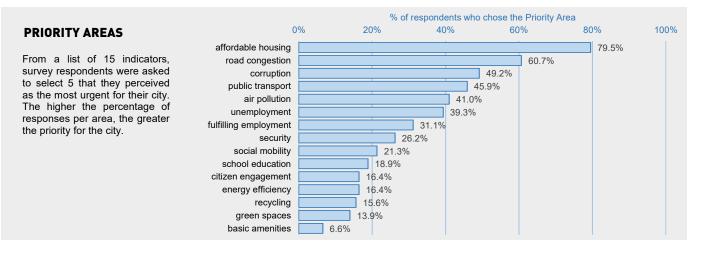
Country	2015	2016	2017
UN HDI	0.842	0.845	0.847
Life expectancy at Birth	81.0	81.2	81.4
Expected years of schooling	16.4	16.3	16.3
Mean years of schooling	9.1	9.2	9.2
GNI per capita (PPP \$)	25,860	26,521	27,315
City			

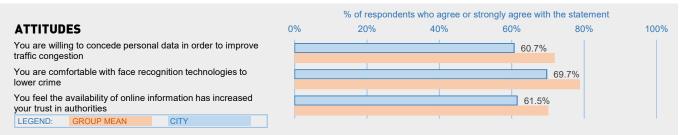
Population (UN World Cities Report)



CITY GROUP MEAN LEGEND: STRUCTURES GROUP MAX Score 0 20 40 60 80 100 **Health & Safety** 67.35 Basic sanitation meets the needs of the poorest areas. \bigcirc 59.15 Recycling services are satisfactory. \bigcirc 58.06 Public safety is not a problem. \bigcirc 36.07 Air pollution is not a problem. 0 Medical services provision is satisfactory. 50.27 Mobility 15.71 Traffic congestion is not a problem. \bigcirc Public transport is satisfactory. 38.93 \bigcirc **Activities** Green spaces are satisfactory. 68.03 \bigcirc 82.92 Cultural activities (shows, bars, and museums) are satisfactory. **Opportunities (Work & School)** \bigcirc 43.72 Employment finding services are available. 60.52 Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. \bigcirc 55.74 Businesses are creating new jobs. 53.28 61.48 Minorities feel welcome. Governance \bigcirc 47.95 Information on local government decisions are easily accessible. 21.72 Corruption of city officials is not an issue of concern. \bigcirc Residents contribute to decision making of local government. \bigcirc 38.25 Residents provide feedback on local government projects. 45.08 \bigcirc

Lisbon





TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP ME	EAN GROUP	MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc			59
A website or App allows to give away unwanted items to other city residents.				0			58
Free public wifi has improved access to services.				\bigcirc			67
CCTV cameras make residents feel safer.				\bigcirc			59
A website or App allows effective monitoring of air pollution.			\bigcirc				40
Arranging medical appointments online has improved access.				\bigcirc			66
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				41
Apps that direct you to an available parking space have reduced journey time.			\bigcirc				44
Bicycle hiring has reduced congestion.			\bigcirc				48
Online scheduling and ticket sales make public transport easier to use.				\bigcirc			65
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc		87
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					\bigcirc		79
IT skills are taught well in schools.				0			64
Online services provided by the city has made it easier to start a new business.				\bigcirc			64
Governance							
Online public access to city finances has reduced corruption.			\bigcirc				36
Online voting has increased participation.			\bigcirc				44
An online platform where residents can propose ideas has improved city life.				\bigcirc			58
Processing Identification Documents online has reduced waiting times.				\bigcirc			68

London

SMART CITY	20th
RANKING	Out of 102
GROUP	2
RATING	BBB From AAA to D
FACTOR	BBB BBB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

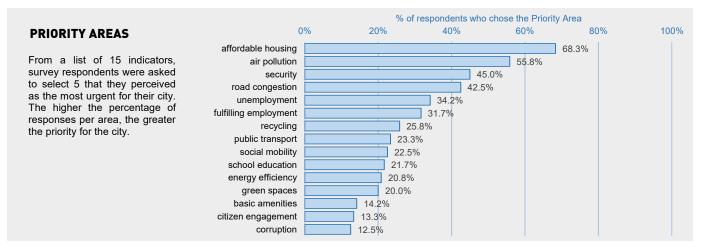
Country	2015	2016	2017
UN HDI	0.918	0.920	0.922
Life expectancy at Birth	81.4	81.6	81.7
Expected years of schooling	17.4	17.4	17.4
Mean years of schooling	12.8	12.9	12.9
GNI per capita (PPP \$)	38,146	38,680	39,116
City			

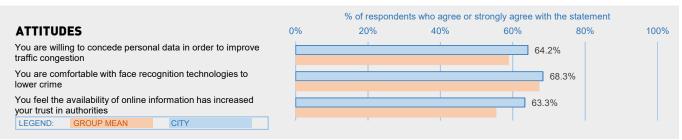
City Population (UN World Cities Report)



STRUCTURES		LEGEND:		GROUP MEA	N GROUP MAX
			Score		
Health & Safety	0	20	40	60	80 100
Basic sanitation meets the needs of the poorest areas.				\bigcirc	
Recycling services are satisfactory.				\bigcirc	
Public safety is not a problem.			\bigcirc		
Air pollution is not a problem.			\bigcirc		
Medical services provision is satisfactory.				\bigcirc	
Mobility					
Traffic congestion is not a problem.			\bigcirc		
Public transport is satisfactory.					
Activities					
Green spaces are satisfactory.				0	
Cultural activities (shows, bars, and museums) are satisfactory.					
Opportunities (Work & School)					
Employment finding services are available.				\bigcirc	
Most children have access to a good school.				\bigcirc	
Lifelong learning opportunities are provided by local institutions.				\bigcirc	
Businesses are creating new jobs.				\bigcirc	
Minorities feel welcome.				\bigcirc	
Governance					
Information on local government decisions are easily accessible.				\bigcirc	
			\bigcirc		
Corruption of city officials is not an issue of concern.					
Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.			\bigcirc		

London





			CITY GROU	P MEAN	1
TECHNOLOGIES		LEGEND:		GROUP MAX	
	0	20	Score	80 10	, I
Health & Safety	0	20	40 60	80 10	
Online reporting of city maintenance problems provides a speedy solution.			0		54.03
A website or App allows to give away unwanted items to other city residents.			0		59.44
Free public wifi has improved access to services.					63.06
CCTV cameras make residents feel safer.					56.11
A website or App allows effective monitoring of air pollution.			0		45.14
Arranging medical appointments online has improved access.					63.06
Makilia					
Mobility Car-sharing Apps have reduced congestion.					47.08
Apps that direct you to an available parking space have reduced journey time.					44.31
Bicycle hiring has reduced congestion.					55.00
Online scheduling and ticket sales make public transport easier to use.					72.22
					12.22
Activities					
Online purchasing of tickets to shows and museums has made it easier to atter	nd.			0	74.86
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.)	66.53
IT skills are taught well in schools.			\bigcirc		58.75
Online services provided by the city has made it easier to start a new business.			\bigcirc		55.97
Governance					
Online public access to city finances has reduced corruption.			\bigcirc		48.61
Online voting has increased participation.			\bigcirc		53.19
An online platform where residents can propose ideas has improved city life.			\bigcirc		52.36
Processing Identification Documents online has reduced waiting times.			\bigcirc		64.44

Los Angeles

SMART CITY	3 .	5th
RANKING	Out o	of 102
GROUP	,	1
RATING		B B A A to D
FACTOR	B B	A
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

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

Population (UN World Cities Report)



CITY GROUP MEAN LEGEND: GROUP MAX Score 40 60 100 0 20 80 Basic sanitation meets the needs of the poorest areas. 51.49 \bigcirc 67.34 \bigcirc 36.59 \bigcirc 29.00 \bigcirc 56.10 \bigcirc

Mobility
Traffic condestion is not a problem

Recycling services are satisfactory.

Medical services provision is satisfactory.

Public safety is not a problem.

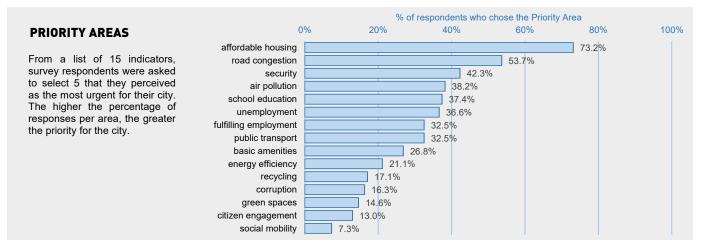
Air pollution is not a problem.

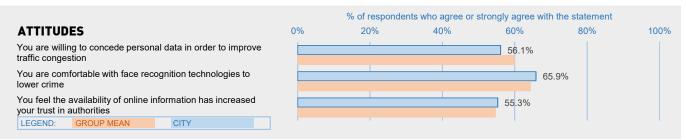
STRUCTURES

Health & Safety

Mobility		
Traffic congestion is not a problem.		19.78
Public transport is satisfactory.		46.34
Activities		
Green spaces are satisfactory.	\bigcirc	51.76
Cultural activities (shows, bars, and museums) are satisfactory.		72.90
Opportunities (Work & School)		
Employment finding services are available.		60.98
Most children have access to a good school.		50.95
Lifelong learning opportunities are provided by local institutions.		54.74
Businesses are creating new jobs.		63.96
Minorities feel welcome.	\bigcirc	57.99
Governance		
Information on local government decisions are easily accessible.		56.50
Corruption of city officials is not an issue of concern.		41.46
Residents contribute to decision making of local government.		50.54
Residents provide feedback on local government projects.		55.96

Los Angeles





TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP N		IP MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			0			4	47.02
A website or App allows to give away unwanted items to other city residents.				\bigcirc		64	64.36
Free public wifi has improved access to services.				\bigcirc		60	60.98
CCTV cameras make residents feel safer.						48	48.78
A website or App allows effective monitoring of air pollution.						44	14.85
Arranging medical appointments online has improved access.			(5	55.96
Mobility							
Car-sharing Apps have reduced congestion.			C)		53	53.66
Apps that direct you to an available parking space have reduced journey time.						46	46.48
Bicycle hiring has reduced congestion.						40	10.65
Online scheduling and ticket sales make public transport easier to use.						50	56.10
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	d.				\bigcirc	70	76.02
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				C)	69	69.78
IT skills are taught well in schools.)		54	54.34
Online services provided by the city has made it easier to start a new business.						5	55.1
Governance							
Online public access to city finances has reduced corruption.						44	14.72
Online voting has increased participation.						55	55.1
An online platform where residents can propose ideas has improved city life.						52	52.98
Processing Identification Documents online has reduced waiting times.			(\bigcirc		5	57.18

Lyon

SMART CITY	23rd
RANKING	Out of 102
GROUP	2
RATING	BBB From AAA to D
FACTOR	BBB BBB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

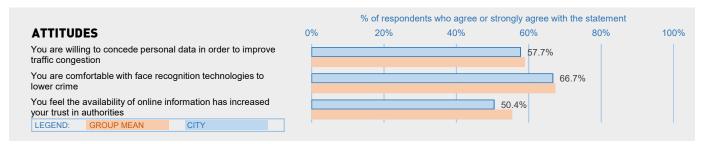
City



			C	TY GROUP	ΜΕΔΝ	
STRUCTURES		LEGEND:			GROUP	MAX
			Sco	ore		
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		56.64
Recycling services are satisfactory.				\bigcirc		61.25
Public safety is not a problem.						50.68
Air pollution is not a problem.		\bigcirc				25.75
Medical services provision is satisfactory.				\bigcirc		59.76
Mobility						
Traffic congestion is not a problem.		\bigcirc)			26.69
Public transport is satisfactory.				\bigcirc		66.40
Activities						
Green spaces are satisfactory.					\bigcirc	80.22
Cultural activities (shows, bars, and museums) are satisfactory.						82.66
Opportunities (Work & School)						
Employment finding services are available.				\bigcirc		66.40
Most children have access to a good school.				C)	68.43
Lifelong learning opportunities are provided by local institutions.				\bigcirc		60.70
Businesses are creating new jobs.				\bigcirc		57.99
Minorities feel welcome.			(\supset		51.63
0						
Governance						64.50
Information on local government decisions are easily accessible.						61.52
Corruption of city officials is not an issue of concern.						50.41
Residents contribute to decision making of local government.						44.04
Residents provide feedback on local government projects.						49.46

Lyon

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** air pollution 67.5% From a list of 15 indicators, affordable housing 60.2% survey respondents were asked to select 5 that they perceived road congestion 52.0% security 38.2% as the most urgent for their city. unemployment 36.6% The higher the percentage of 27.6% fulfilling employment responses per area, the greater recycling 25.2% the priority for the city. corruption 22.0% public transport 22.0% energy efficiency 22.0% green spaces 19.5% school education 15.4% basic amenities 15.4% social mobility 14.6% citizen engagement 13.8%



TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP		JP MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc				52.30
A website or App allows to give away unwanted items to other city residents.				\bigcirc			58.94
Free public wifi has improved access to services.				\bigcirc			59.49
CCTV cameras make residents feel safer.				\bigcirc			61.65
A website or App allows effective monitoring of air pollution.			\bigcirc				46.61
Arranging medical appointments online has improved access.				(71.41
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				44.99
Apps that direct you to an available parking space have reduced journey time.			\bigcirc				47.97
Bicycle hiring has reduced congestion.			(\bigcirc			56.78
Online scheduling and ticket sales make public transport easier to use.				\bigcirc			61.25
Activities							
Online purchasing of tickets to shows and museums has made it easier to atter	nd.			(71.95
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				0			63.82
IT skills are taught well in schools.			\bigcirc				51.49
Online services provided by the city has made it easier to start a new business			\bigcirc				51.63
Governance							
Online public access to city finances has reduced corruption.			\bigcirc				40.65
Online voting has increased participation.			\bigcirc				43.77
An online platform where residents can propose ideas has improved city life.			\bigcirc	_			45.80
Processing Identification Documents online has reduced waiting times.				\bigcirc			57.99

Madrid

SMART CITY RANKING		st of 102
GROUP	2	2
RATING		B B AA to D
FACTOR RATINGS	BBB Structures	BB Technologies

BACKGROUND INFORMATION

Country	2015	2016	2017
UN HDI	0.885	0.889	0.891
Life expectancy at Birth	83.0	83.1	83.3
Expected years of schooling	17.8	17.9	17.9
Mean years of schooling	9.7	9.8	9.8
GNI per capita (PPP \$)	32,217	33,307	34,258
0			

6,199,000

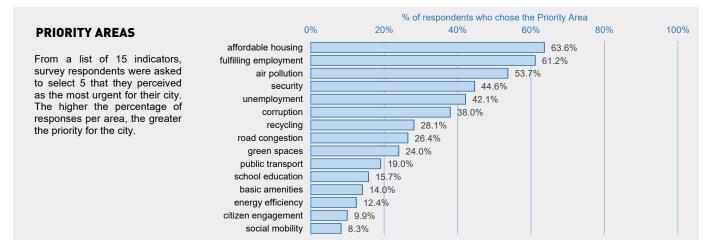
City

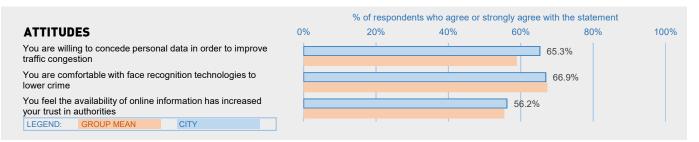
Population (UN World Cities Report)



STRUCTURES		LEGEND:		GROUP MEA	AN GROUP MAX
STRUCTURES			Score		
Health & Safety	0	20	40	60	80 10
Basic sanitation meets the needs of the poorest areas.				\bigcirc	
Recycling services are satisfactory.				0	
Public safety is not a problem.				0	
Air pollution is not a problem.					
Medical services provision is satisfactory.				\bigcirc	
Mobility					
Traffic congestion is not a problem.		C)		
Public transport is satisfactory.				\bigcirc	
Activities					
				0	
Green spaces are satisfactory.				0	
Green spaces are satisfactory.			_		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.					

Madrid





TECHNOLOGIES		LEGEND:		GROUP ME	AN GROUP	MAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.	-					e
A website or App allows to give away unwanted items to other city residents.						Ę
Free public wifi has improved access to services.			(Ę
CCTV cameras make residents feel safer.						Ę
A website or App allows effective monitoring of air pollution.						4
Arranging medical appointments online has improved access.						7
				Ŭ		
Mobility						
Car-sharing Apps have reduced congestion.						Ę
Apps that direct you to an available parking space have reduced journey time.				\bigcirc		Ę
Bicycle hiring has reduced congestion.						ŧ
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		e
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	nd.					8
Opportunities (Work & School)						6
Online access to job listings has made it easier to find work. IT skills are taught well in schools.						Ę
Online services provided by the city has made it easier to start a new business.						Ę
Online services provided by the city has made it easier to start a new business.						
Governance						
Online public access to city finances has reduced corruption.						4
Online voting has increased participation.)		Ę
An online platform where residents can propose ideas has improved city life.				\bigcirc		Ę
Processing Identification Documents online has reduced waiting times.						e

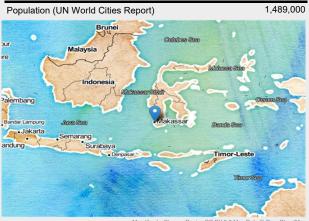
Makassar

SMART CITY	8) th
RANKING	Out c	of 102
GROUP		4
RATING		C A A to D
FACTOR	C C	C C
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

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

Population (UN World Cities Report)

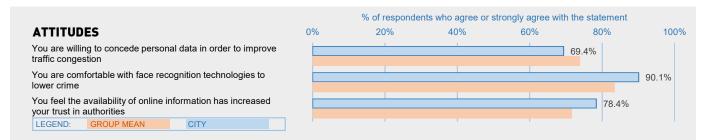


Map tiles by Stamen Design CC BY 3.0 Map Data © C

			CIT	Y GROUP M	EAN	
STRUCTURES		LEGEND:	GROUP MIN		GROUP I	MAX
Health & Safety	0	20	Score 40	e 60	80	100
Basic sanitation meets the needs of the poorest areas.						
Recycling services are satisfactory.			(
Public safety is not a problem.						
Air pollution is not a problem.						
Medical services provision is satisfactory.						
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.				\bigcirc		
Activities						
				0		
Green spaces are satisfactory.			_			
Green spaces are satisfactory.			_		-	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			_	0	-	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	-	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.				0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Makassar

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** road congestion 61.3% From a list of 15 indicators, 53.2% unemployment survey respondents were asked to select 5 that they perceived basic amenities 52.3% security 50.5% as the most urgent for their city. corruption 41.4% The higher the percentage of air pollution 35.1% responses per area, the greater green spaces 31.5% the priority for the city. fulfilling employment 28.8% public transport 26.1% recycling 25.2% affordable housing 18.9% school education 18.0% citizen engagement 15.3% energy efficiency 10.8% social mobility 5.4%



TECHNOLOGIES		LEGEND:		GROUP N		JP MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc			58.4
A website or App allows to give away unwanted items to other city residents.							55.2
Free public wifi has improved access to services.				0			56.7
CCTV cameras make residents feel safer.				\bigcirc)		69.8
A website or App allows effective monitoring of air pollution.			\bigcirc				48.6
Arranging medical appointments online has improved access.							54.9
Mobility							
Car-sharing Apps have reduced congestion.				\bigcirc			61.7
Apps that direct you to an available parking space have reduced journey time.				\bigcirc			57.3
Bicycle hiring has reduced congestion.			\bigcirc				48.9
Online scheduling and ticket sales make public transport easier to use.				C)		69.9
Activities							
Activities Online purchasing of tickets to shows and museums has made it easier to atter	nd .						69.8
	iu.						09.0
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					\bigcirc		76.4
IT skills are taught well in schools.				\bigcirc			66.5
Online services provided by the city has made it easier to start a new business.				\bigcirc)		69.8
Governance							
Online public access to city finances has reduced corruption.			C				53.6
Online voting has increased participation.							53.7
An online platform where residents can propose ideas has improved city life.				\bigcirc			63.9
Processing Identification Documents online has reduced waiting times.				\bigcirc			63.3

Manila

SMART CITY	9	5 th
RANKING	Out o	of 102
GROUP		4
RATING		A A to D
FACTOR	D	C
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

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

Population (UN World Cities Report)



11.92

36.86

CITY GROUP MEAN LEGEND: GROUP MAX Score 40 60 80 100 0 20 43.63 \bigcirc 42.01 \bigcirc 25.88

 \bigcirc

 \bigcirc

Recycling services are satisfactory. Public safety is not a problem. Air pollution is not a problem.

STRUCTURES

Health & Safety

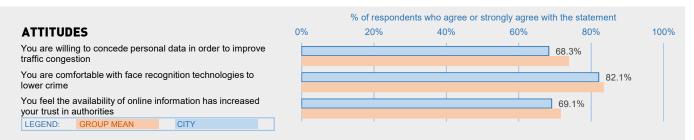
Medical services provision is satisfactory.

Basic sanitation meets the needs of the poorest areas.

Mobility		
Traffic congestion is not a problem.	\bigcirc	5.96
Public transport is satisfactory.		25.47
Activities		
Green spaces are satisfactory.		42.01
Cultural activities (shows, bars, and museums) are satisfactory.	\bigcirc	61.52
Opportunities (Work & School)		
Employment finding services are available.	\bigcirc	57.18
Most children have access to a good school.		44.85
Lifelong learning opportunities are provided by local institutions.		46.07
Businesses are creating new jobs.		71.27
Minorities feel welcome.	\bigcirc	45.93
Governance		
Information on local government decisions are easily accessible.		48.37
Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.		48.37 13.28

Manila

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** basic amenities 56.1% From a list of 15 indicators, 54.5% corruption survey respondents were asked to select 5 that they perceived road congestion 54.5% air pollution 46.3% as the most urgent for their city. security 45.5% The higher the percentage of unemployment 43.1% responses per area, the greater public transport 39.8% the priority for the city. affordable housing 30.9% fulfilling employment 30.1% school education 22.8% 19.5% recycling green spaces 19.5% energy efficiency 10.6% social mobility 7.3% citizen engagement 6.5%



			CITY	GROUP ME	EAN	
TECHNOLOGIES		LEGEND:	GROUP MIN		GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.						47.
A website or App allows to give away unwanted items to other city residents.			\bigcirc			43.
Free public wifi has improved access to services.			\bigcirc			43.
CCTV cameras make residents feel safer.				\bigcirc		66.
A website or App allows effective monitoring of air pollution.			\bigcirc			37.
Arranging medical appointments online has improved access.						55.
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			52.
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			44.
Bicycle hiring has reduced congestion.			\bigcirc			48.
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		64.
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	d.				\bigcirc	76.
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.					\bigcirc	79.
IT skills are taught well in schools.				\bigcirc		65.
Online services provided by the city has made it easier to start a new business.				\bigcirc		67.
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			43.
Online voting has increased participation.)		53.
An online platform where residents can propose ideas has improved city life.			\bigcirc			50.
Processing Identification Documents online has reduced waiting times.						73.

Medan

SMART CITY RANKING		2nd of 102
GROUP		4
RATING		C A A to D
FACTOR RATINGS	C	C C Technologies

BACKGROUND INFORMATION

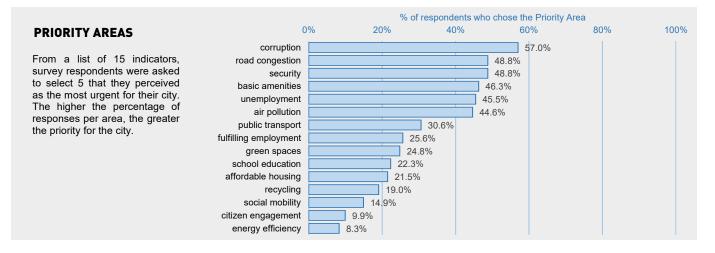
Country	2015	2016	2017
UN HDI	0.686	0.691	0.694
Life expectancy at Birth	69.0	69.2	69.4
Expected years of schooling	12.7	12.8	12.8
Mean years of schooling	7.9	8.0	8.0
GNI per capita (PPP \$)	10,037	10,437	10,846
City			

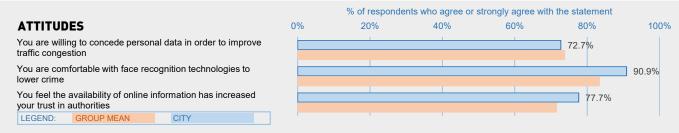
Population (UN World Cities Report)



		LEGEND:		TY GROUP N			
STRUCTURES		LEGEND.	GROUP MIN (GRO	UP MAX	
			Sco				
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.				\bigcirc			56.61
Recycling services are satisfactory.			\bigcirc				47.93
Public safety is not a problem.			(51.10
Air pollution is not a problem.							34.85
Medical services provision is satisfactory.				\bigcirc			57.16
Mobility							
Traffic congestion is not a problem.							27.41
Public transport is satisfactory.							49.86
Activities							
Activities Green spaces are satisfactory.				0			57.16
			_	0	_		57.16 61.57
Green spaces are satisfactory.				0	_		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0			
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0			61.57
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.							61.57 53.03
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.				0	0		61.57 53.03 58.82
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.				0			61.57 53.03 58.82 51.38
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.				0			61.57 53.03 58.82 51.38 73.28
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.				0			61.57 53.03 58.82 51.38 73.28
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance				0			61.57 53.03 58.82 51.38 73.28 68.60
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.				0			61.57 53.03 58.82 51.38 73.28 68.60 53.72

Medan





			CITY	GROUP ME	AN	
TECHNOLOGIES		LEGEND:			GROUP N	AX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.)		53.
A website or App allows to give away unwanted items to other city residents.			\bigcirc			50.
Free public wifi has improved access to services.				\bigcirc		59.
CCTV cameras make residents feel safer.				\bigcirc		65.
A website or App allows effective monitoring of air pollution.			\bigcirc			50.
Arranging medical appointments online has improved access.				\bigcirc		61.
Mobility						
Car-sharing Apps have reduced congestion.				\bigcirc		57.
Apps that direct you to an available parking space have reduced journey time.			C)		53.
Bicycle hiring has reduced congestion.			\bigcirc			49.
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		70.
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	d.			\bigcirc		69.
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		72.
IT skills are taught well in schools.				\bigcirc		69.
Online services provided by the city has made it easier to start a new business.				\bigcirc		69.
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			50.
Online voting has increased participation.			(\bigcirc		56.
An online platform where residents can propose ideas has improved city life.						55.
Processing Identification Documents online has reduced waiting times.				\bigcirc		64.

Medellin

SMART CITY	91 st
RANKING	Out of 102
GROUP	4
RATING	C From AAA to D
FACTOR	C CC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

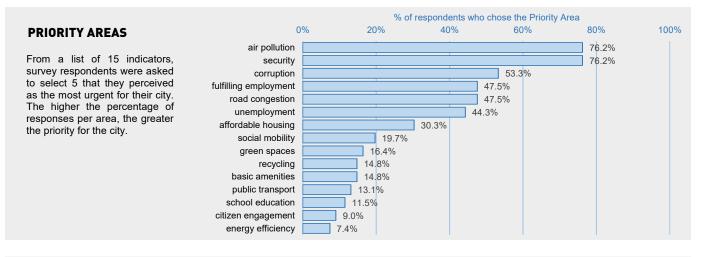
Country	2015	2016	2017
UN HDI	0.742	0.747	0.747
Life expectancy at Birth	74.2	74.4	74.6
Expected years of schooling	14.4	14.4	14.4
Mean years of schooling	8.1	8.3	8.3
GNI per capita (PPP \$)	12,772	13,050	12,938
City			

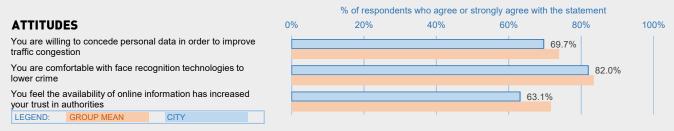
Population (UN World Cities Report)



			CITY	GROUP MEA	ANI	4
STRUCTURES		LEGEND:		GROUP MEA	GROUP MA	×
			Score			
Health & Safety	0	20	40	60	80 I	100
Basic sanitation meets the needs of the poorest areas.				0		60.52
Recycling services are satisfactory.				\bigcirc		64.21
Public safety is not a problem.		(28.14
Air pollution is not a problem.						22.81
Medical services provision is satisfactory.						48.36
Mobility						
Traffic congestion is not a problem.		0				25.55
Public transport is satisfactory.				\bigcirc		63.52
Activities						
Green spaces are satisfactory.						70.36
Cultural activities (shows, bars, and museums) are satisfactory.					0	80.33
Opportunities (Work & School)						
Employment finding services are available.						69.40
Most children have access to a good school.				0		60.11
Lifelong learning opportunities are provided by local institutions.				0		71.04
Businesses are creating new jobs.			0			46.72
Minorities feel welcome.			0			43.99
Governance						
Information on local government decisions are easily accessible.						49.32
Corruption of city officials is not an issue of concern.		(\bigcirc			29.92
Residents contribute to decision making of local government.			0			37.02
Residents provide feedback on local government projects.						48.09

Medellin





TECHNOLOGIES	[LEGEND:	GROUP MIN	GROUP N		OUP MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			(\supset			55.87
A website or App allows to give away unwanted items to other city residents.			\bigcirc				52.32
Free public wifi has improved access to services.					\bigcirc		77.32
CCTV cameras make residents feel safer.				\bigcirc			60.93
A website or App allows effective monitoring of air pollution.				\bigcirc			60.38
Arranging medical appointments online has improved access.				С)		69.54
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				50.96
Apps that direct you to an available parking space have reduced journey time.				\bigcirc			59.43
Bicycle hiring has reduced congestion.				\bigcirc			68.31
Online scheduling and ticket sales make public transport easier to use.				\bigcirc			63.52
Activities							
Online purchasing of tickets to shows and museums has made it easier to attend.	•				\bigcirc		76.64
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				\bigcirc			65.71
IT skills are taught well in schools.				\bigcirc			66.26
Online services provided by the city has made it easier to start a new business.				\bigcirc			63.66
Governance							
Online public access to city finances has reduced corruption.			0				38.66
Online voting has increased participation.			\bigcirc				40.16
An online platform where residents can propose ideas has improved city life.							52.05
Processing Identification Documents online has reduced waiting times.				\bigcirc			62.43

Melbourne

SMART CITY RANKING		4 th of 102
GROUP	,	1
RATING		B B AA to D
FACTOR RATINGS	BBB Structures	BBB Technologies

BACKGROUND INFORMATION

Country	2015	2016	2017
UN HDI	0.936	0.938	0.939
Life expectancy at Birth	82.7	82.9	83.1
Expected years of schooling	23.3	22.9	22.9
Mean years of schooling	12.8	12.9	12.9
GNI per capita (PPP \$)	43,138	43,637	43,560
0.4			

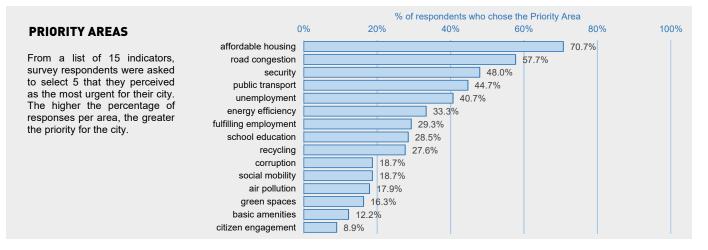
City

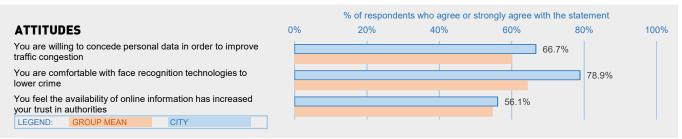
Population (UN World Cities Report)

4,203,000 Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMag

		CITY	GROUP MEAN		
STRUCTURES	LEGEND:		GROUP MEAN	GROUP MAX	
		Score			
Health & Safety 0	20	40	60 8	30 100	
Basic sanitation meets the needs of the poorest areas.			\bigcirc		75.47
Recycling services are satisfactory.		(\bigcirc		57.05
Public safety is not a problem.		\bigcirc			39.70
Air pollution is not a problem.		\bigcirc			52.30
Medical services provision is satisfactory.			\bigcirc		70.05
Mobility					
Traffic congestion is not a problem.	\bigcirc				23.71
Public transport is satisfactory.		\bigcirc			44.31
Activities					
Green spaces are satisfactory.			\bigcirc		68.70
Cultural activities (shows, bars, and museums) are satisfactory.			C)	77.37
Opportunities (Work & School)					
Employment finding services are available.					67.21
Most children have access to a good school.					73.31
Lifelong learning opportunities are provided by local institutions.			\bigcirc		66.53
Businesses are creating new jobs.					55.56
Minorities feel welcome.					55.69
Governance					
Information on local government decisions are easily accessible.		C)		53.52
Corruption of city officials is not an issue of concern.		\bigcirc			42.28
Residents contribute to decision making of local government.					48.51
Residents provide feedback on local government projects.			\bigcirc		59.62

Melbourne





			CITY GRC	UP MEAN	
TECHNOLOGIES		LEGEND:		GROUF	PMAX
			Score		
Health & Safety	0	20	40 60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		4
A website or App allows to give away unwanted items to other city residents.					5
Free public wifi has improved access to services.			\bigcirc		5
CCTV cameras make residents feel safer.					6
A website or App allows effective monitoring of air pollution.			\bigcirc		33
Arranging medical appointments online has improved access.					64
Mobility					
Car-sharing Apps have reduced congestion.			\bigcirc		43
Apps that direct you to an available parking space have reduced journey time.			\bigcirc		3
Bicycle hiring has reduced congestion.			\bigcirc		31
Online scheduling and ticket sales make public transport easier to use.			\bigcirc		5
Activities					
Online purchasing of tickets to shows and museums has made it easier to atter	nd.			\bigcirc	73
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.					7:
IT skills are taught well in schools.					5
Online services provided by the city has made it easier to start a new business.					53
Governance					
Online public access to city finances has reduced corruption.					4
Online voting has increased participation.					4
An online platform where residents can propose ideas has improved city life.					4
Processing Identification Documents online has reduced waiting times.					5

Mexico City

SMART CITY	88th				
RANKING	Out of 102				
GROUP	3				
RATING	CC				
FACTOR	C C	C C			
RATINGS	Structures	Technologies			

BACKGROUND INFORMATION

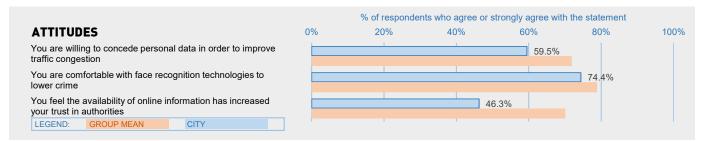
Country	2015	2016	2017
UN HDI	0.767	0.772	0.774
Life expectancy at Birth	76.9	77.1	77.3
Expected years of schooling	13.7	14.1	14.1
Mean years of schooling	8.6	8.6	8.6
GNI per capita (PPP \$)	16,569	16,623	16,944
City			



		LEGEND:		GROUP ME	
STRUCTURES		LEGEND.	GROUP MIN		GROUP MAX
Health & Safety	0	20	Score 40	60	80 10
Basic sanitation meets the needs of the poorest areas.			\bigcirc		
Recycling services are satisfactory.					
Public safety is not a problem.					
Air pollution is not a problem.					
Medical services provision is satisfactory.			\bigcirc		
Mobility					
Traffic congestion is not a problem.		\bigcirc			
Public transport is satisfactory.		C)		
Public transport is satisfactory.		C)		
Activities		C			
Activities Green spaces are satisfactory.)		
Activities Green spaces are satisfactory.)		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.)		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School))		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Public transport is satisfactory. Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.					

Mexico City

% of respondents who chose the Priority Area 20% 40% 60% 80% 100% 0% **PRIORITY AREAS** security 88.4% From a list of 15 indicators, corruption 56.2% survey respondents were asked to select 5 that they perceived air pollution 47.9% road congestion 44.6% as the most urgent for their city. school education 35.5% The higher the percentage of unemployment 34.7% responses per area, the greater basic amenities 34.7% the priority for the city. public transport 33.9% fulfilling employment 27.3% green spaces 24.0% 17.4% recycling citizen engagement 11.6% affordable housing 10.7% energy efficiency 9.1% 8.3% social mobility



				GROUP MEAN		
TECHNOLOGIES		LEGEND:			GROUP MAX	
			Score			
Health & Safety	0	20	40 6	60 80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			40.08
A website or App allows to give away unwanted items to other city residents.			\bigcirc			48.07
Free public wifi has improved access to services.			(59.64
CCTV cameras make residents feel safer.			\bigcirc			52.3
A website or App allows effective monitoring of air pollution.			\bigcirc			50.1
Arranging medical appointments online has improved access.			\bigcirc)		56.6
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			43.6
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			50.6
Bicycle hiring has reduced congestion.			\bigcirc			53.7
Online scheduling and ticket sales make public transport easier to use.			\bigcirc			46.4
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.					81.4
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		71.6
IT skills are taught well in schools.			\bigcirc			49.5
Online services provided by the city has made it easier to start a new business.			C)		57.0
Governance						
Online public access to city finances has reduced corruption.						35.5
Online voting has increased participation.			\bigcirc			42.4
An online platform where residents can propose ideas has improved city life.			\bigcirc			49.5
Processing Identification Documents online has reduced waiting times.				\bigcirc		67.9

Milan

SMART CITY	22nd				
RANKING	Out of 102				
GROUP	2	2			
RATING	BBBB				
FACTOR	B B	BB			
RATINGS	Structures	Technologies			

BACKGROUND INFORMATION

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

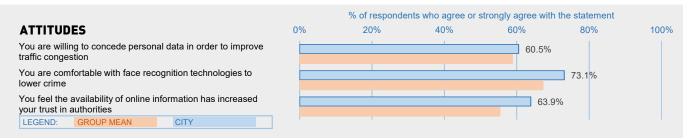
Population (UN World Cities Report)



			01				
STRUCTURES		LEGEND:		TY GROUP I		UP MAX	
			Sco	re			
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.				\bigcirc			62.32
Recycling services are satisfactory.					\bigcirc		76.33
Public safety is not a problem.			C				49.72
Air pollution is not a problem.		\bigcirc					25.63
Medical services provision is satisfactory.				\bigcirc			66.95
Mobility							
Traffic congestion is not a problem.		C)				27.73
Public transport is satisfactory.				\bigcirc			64.99
Activities							
Green spaces are satisfactory.				\bigcirc			60.92
Cultural activities (shows, bars, and museums) are satisfactory.							78.57
Opportunities (Work & School)							
Employment finding services are available.			\bigcirc				44.96
Most children have access to a good school.				\bigcirc			67.37
Lifelong learning opportunities are provided by local institutions.				\bigcirc			57.00
Businesses are creating new jobs.			\bigcirc				45.38
Minorities feel welcome.			\bigcirc				46.50
Governance							
Information on local government decisions are easily accessible.				\bigcirc			55.04
Corruption of city officials is not an issue of concern.			\bigcirc				38.38
							41.04
Residents contribute to decision making of local government.			\cup				+1.0+

Milan

% of respondents who chose the Priority Area 40% 60% 80% 100% 0% 20% **PRIORITY AREAS** air pollution 73.1% From a list of 15 indicators, 52.1% security survey respondents were asked to select 5 that they perceived affordable housing 46.2% unemployment 46.2% as the most urgent for their city. fulfilling employment 42.9% The higher the percentage of road congestion 42.9% responses per area, the greater corruption 28.6% the priority for the city. green spaces 24.4% social mobility 19.3% recycling 18.5% energy efficiency 17.6% public transport 15.1% basic amenities 14.3% citizen engagement 10.9% school education 10.9%



			CITY	GROUP ME	AN	
TECHNOLOGIES		LEGEND:			GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		57.1
A website or App allows to give away unwanted items to other city residents.			(56.4
Free public wifi has improved access to services.				\bigcirc		59.2
CCTV cameras make residents feel safer.				\bigcirc		59.3
A website or App allows effective monitoring of air pollution.			\bigcirc			51.6
Arranging medical appointments online has improved access.						72.9
Mobility						
Car-sharing Apps have reduced congestion.			\sim)		53.5
Apps that direct you to an available parking space have reduced journey time.				\bigcirc		59.5
Bicycle hiring has reduced congestion.						54.9
Online scheduling and ticket sales make public transport easier to use.				(75.3
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	nd.					82.7
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		68.0
IT skills are taught well in schools.			\bigcirc			51.9
Online services provided by the city has made it easier to start a new business.				\bigcirc		58.4
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			48.0
Online voting has increased participation.			\bigcirc			46.7
An online platform where residents can propose ideas has improved city life.						55.8
Processing Identification Documents online has reduced waiting times.				\bigcirc		65.9

Montreal

SMART CITY	16th				
RANKING	Out of 102				
GROUP	1				
RATING	A From AAA to D				
FACTOR	A	BBB			
RATINGS	Structures	Technologies			

BACKGROUND INFORMATION

Country	2015	2016	2017
UN HDI	0.920	0.922	0.926
Life expectancy at Birth	82.2	82.4	82.5
Expected years of schooling	16.3	16.4	16.4
Mean years of schooling	13.1	13.1	13.3
GNI per capita (PPP \$)	42,512	42,664	43,433
City			

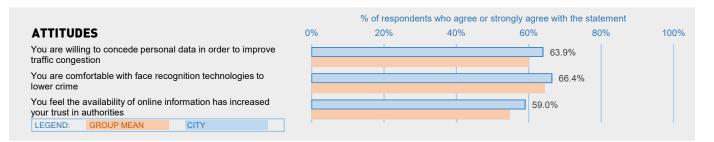
Population (UN World Cities Report)



		LEGEND:		GROUP MEA		1
STRUCTURES					GROUP MAX	1
Health & Safety	0	20	Score 40	60	80 100	
Basic sanitation meets the needs of the poorest areas.				0		62.02
Recycling services are satisfactory.				0		65.57
Public safety is not a problem.				0		60.25
Air pollution is not a problem.			0			44.67
Medical services provision is satisfactory.			\bigcirc			49.04
Mobility						
Traffic congestion is not a problem.		0				16.80
Public transport is satisfactory.)		55.60
Activities						
Green spaces are satisfactory.				0		69.67
Cultural activities (shows, bars, and museums) are satisfactory.					0	84.15
Opportunities (Work & School)						
Employment finding services are available.				0		70.49
Most children have access to a good school.				0		71.04
Lifelong learning opportunities are provided by local institutions.				0		66.80
Businesses are creating new jobs.				0		63.66
Minorities feel welcome.				0		63.80
Governance						
Information on local government decisions are easily accessible.				0		60.25
Corruption of city officials is not an issue of concern.			0			37.98
Residents contribute to decision making of local government.			0			48.22
Residents provide feedback on local government projects.						54.92

Montreal

% of respondents who chose the Priority Area 0% 60% 80% 100% 20% 40% **PRIORITY AREAS** road congestion 68.9% From a list of 15 indicators, affordable housing 64.8% survey respondents were asked to select 5 that they perceived public transport 37.7% air pollution 37.7% as the most urgent for their city. corruption 32.8% The higher the percentage of green spaces 27.1% responses per area, the greater recycling 26.2% the priority for the city. security 25.4% school education 24.6% unemployment 24.6% fulfilling employment 22.1% basic amenities 22.1% citizen engagement 18.0% energy efficiency 16.4% social mobility 15.6%



			CITY GR	OUP MEAN	
TECHNOLOGIES		LEGEND:			JP MAX
			Score		
Health & Safety	0	20	40 60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		48.50
A website or App allows to give away unwanted items to other city residents.					62.16
Free public wifi has improved access to services.)	60.79
CCTV cameras make residents feel safer.					46.45
A website or App allows effective monitoring of air pollution.			\bigcirc		40.57
Arranging medical appointments online has improved access.					53.42
Mobility					
Car-sharing Apps have reduced congestion.			\bigcirc		39.48
Apps that direct you to an available parking space have reduced journey time.			\bigcirc		43.44
Bicycle hiring has reduced congestion.					54.92
Online scheduling and ticket sales make public transport easier to use.			\bigcirc		54.92
Activities					
Online purchasing of tickets to shows and museums has made it easier to atte	end.				79.92
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.				\bigcirc	73.91
IT skills are taught well in schools.			\bigcirc		54.64
Online services provided by the city has made it easier to start a new business	5.				53.01
Governance					
Online public access to city finances has reduced corruption.					38.80
Online voting has increased participation.					43.85
An online platform where residents can propose ideas has improved city life.					44.40
Processing Identification Documents online has reduced waiting times.					51.91

Moscow

SMART CITY	72nd
RANKING	Out of 102
GROUP	3
RATING	CCC
FACTOR	CCC CCC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

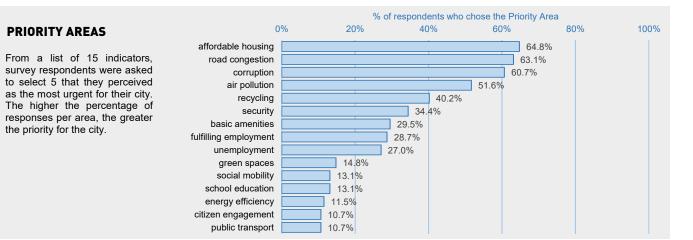
Country	2015	2016	2017
UN HDI	0.813	0.815	0.816
Life expectancy at Birth	70.9	71.1	71.2
Expected years of schooling	15.4	15.5	15.5
Mean years of schooling	12.0	12.0	12.0
GNI per capita (PPP \$)	23,909	23,843	24,233

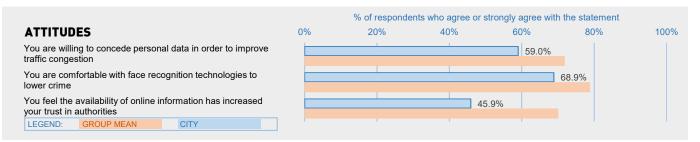
City



STRUCTURES		LEGEND:	GROUP MIN	GROUP N		UP MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.				\bigcirc		
Activities						
				0		
Green spaces are satisfactory.				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Moscow





			CITY	GROUP M	EAN		
ECHNOLOGIES		LEGEND:				P MAX	
			Score				
ealth & Safety	0	20	40	60	80	100	
nline reporting of city maintenance problems provides a speedy solution.				\bigcirc			
website or App allows to give away unwanted items to other city residents	s.			\bigcirc			
ee public wifi has improved access to services.				\bigcirc			
CTV cameras make residents feel safer.				C)		
website or App allows effective monitoring of air pollution.			\bigcirc				
ranging medical appointments online has improved access.				\bigcirc			
lobility							
ar-sharing Apps have reduced congestion.			\bigcirc				
ops that direct you to an available parking space have reduced journey tir	ne.			\bigcirc			
cycle hiring has reduced congestion.			\bigcirc				
nline scheduling and ticket sales make public transport easier to use.					\bigcirc		
ctivities							
nline purchasing of tickets to shows and museums has made it easier to	attend.				\bigcirc		
montunities (Monte & Coheel)							
pportunities (Work & School) nline access to job listings has made it easier to find work.						_	_
skills are taught well in schools. nline services provided by the city has made it easier to start a new busin	0000						
nine services provided by the city has made it easier to start a new busin	1622.						
overnance							
nline public access to city finances has reduced corruption.							
nline voting has increased participation.				\bigcirc			
nine voting has increased participation.				-			
n online platform where residents can propose ideas has improved city life	e.						

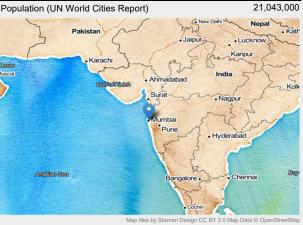
Mumbai

SMART CITY RANKING	7	9 th of 102
GROUP		4
RATING		C A A to D
FACTOR RATINGS	C C Structures	C C Technologies

BACKGROUND INFORMATION

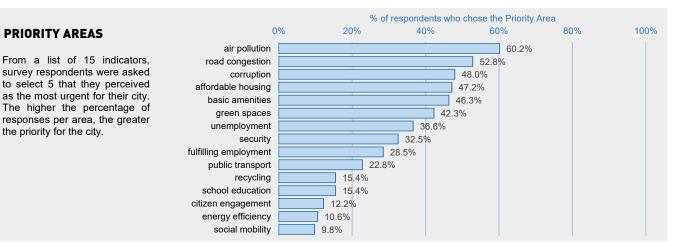
Country	2015	2016	2017
UN HDI	0.627	0.636	0.640
Life expectancy at Birth	68.3	68.6	68.8
Expected years of schooling	12.0	12.3	12.3
Mean years of schooling	6.3	6.4	6.4
GNI per capita (PPP \$)	5,691	6,026	6,353
City			

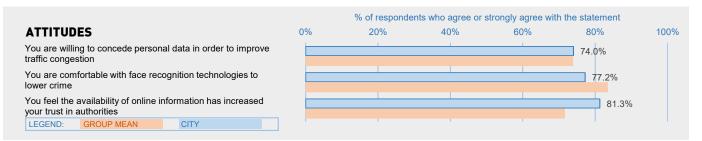
Population (UN World Cities Report)



CITY GROUP MIN GROUP MEAN LEGEND: GROUP MAX STRUCTURES Score 0 20 40 60 80 100 **Health & Safety** 63.82 Basic sanitation meets the needs of the poorest areas. \bigcirc 64.36 Recycling services are satisfactory. \bigcirc 50.00 Public safety is not a problem. \bigcirc 24.39 Air pollution is not a problem. \bigcirc Medical services provision is satisfactory. 65.31 \bigcirc Mobility 26.69 Traffic congestion is not a problem. \bigcirc Public transport is satisfactory. \bigcirc 63.96 **Activities** 53.93 Green spaces are satisfactory. \bigcirc 71.54 Cultural activities (shows, bars, and museums) are satisfactory. \bigcirc **Opportunities (Work & School)** \bigcirc 66.40 Employment finding services are available. 65.72 \bigcirc Most children have access to a good school. \bigcirc Lifelong learning opportunities are provided by local institutions. 64.63 Businesses are creating new jobs. \bigcirc 72.90 66.40 \bigcirc Minorities feel welcome. Governance \bigcirc 64.09 Information on local government decisions are easily accessible. \bigcirc 36.45 Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government. \bigcirc 57.72 Residents provide feedback on local government projects. 60.43

Mumbai





				GROUP N	MEAN	
TECHNOLOGIES		LEGEND:	GROUP MIN		GROUI	PMAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.	-					5
A website or App allows to give away unwanted items to other city residents.				$\overline{\mathbf{O}}$		5
Free public wifi has improved access to services.						6
CCTV cameras make residents feel safer.						7
A website or App allows effective monitoring of air pollution.						5
Arranging medical appointments online has improved access.						7
Mobility						
Car-sharing Apps have reduced congestion.				\bigcirc		6
Apps that direct you to an available parking space have reduced journey time.				\bigcirc		5
Bicycle hiring has reduced congestion.			\bigcirc			5
Online scheduling and ticket sales make public transport easier to use.					\bigcirc	7
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.					8
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.					\bigcirc	7
IT skills are taught well in schools.						6
Online services provided by the city has made it easier to start a new business.					\bigcirc	7
0						
Governance						5
Online public access to city finances has reduced corruption.						
Online voting has increased participation.						6
An online platform where residents can propose ideas has improved city life.				0		6
Processing Identification Documents online has reduced waiting times.						7

Nairobi

SMART CITY RANKING		0th of 102
GROUP		4
RATING	From A	A A to D
FACTOR RATINGS	D Structures	D

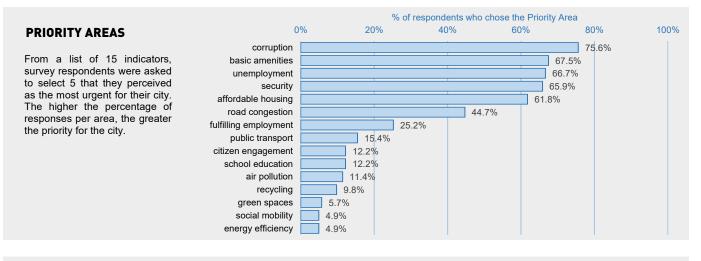
BACKGROUND INFORMATION

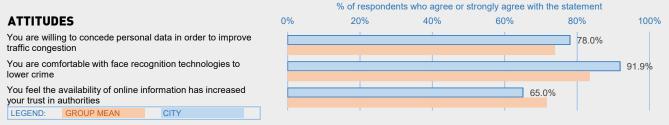
Country	2015	2016	2017
UN HDI	0.578	0.585	0.590
Life expectancy at Birth	66.7	67.0	67.3
Expected years of schooling	11.7	11.9	12.1
Mean years of schooling	6.3	6.4	6.5
GNI per capita (PPP \$)	2,806	2,898	2,961
City			



			CITY	GROUP ME	AN
STRUCTURES		LEGEND:	GROUP MIN		GROUP MAX
Health & Safety	0	20	Score 40	60	80 100
Basic sanitation meets the needs of the poorest areas.			\bigcirc		
Recycling services are satisfactory.					
Public safety is not a problem.					
Air pollution is not a problem.					
Medical services provision is satisfactory.					
······································					
Mobility					
Fraffic congestion is not a problem.					
Public transport is satisfactory.					
Activities					
Green spaces are satisfactory.			0)
Green spaces are satisfactory.			0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			0)
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Dpportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Comportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.					

Nairobi





TECHNOLOGIES		LEGEND:			JP MAX	
		L	Score			
Health & Safety	0	20	40 60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			42.14
A website or App allows to give away unwanted items to other city residents.						40.38
Free public wifi has improved access to services.			\bigcirc			45.93
CCTV cameras make residents feel safer.)		63.28
A website or App allows effective monitoring of air pollution.		\bigcirc				17.34
Arranging medical appointments online has improved access.						54.34
Mahiliby						
Mobility Car-sharing Apps have reduced congestion.						48.10
Apps that direct you to an available parking space have reduced journey time.						34.42
Bicycle hiring has reduced congestion.						19.51
Online scheduling and ticket sales make public transport easier to use.						58.94
			_			
Activities						
Online purchasing of tickets to shows and museums has made it easier to atter	nd.			\bigcirc		80.49
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		74.25
IT skills are taught well in schools.			\bigcirc			60.03
Online services provided by the city has made it easier to start a new business.						64.09
Governance			_			
Online public access to city finances has reduced corruption.						27.24
Online voting has increased participation.						26.83
An online platform where residents can propose ideas has improved city life.						40.38
Processing Identification Documents online has reduced waiting times.				\bigcirc		72.36

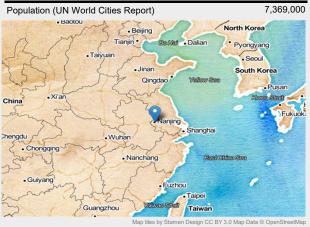
Nanjing

SMART CITY	5 .	5 th	
RANKING	Out o	of 102	
GROUP	;	3	
RATING	B From AAA to D		
FACTOR	B	BB	
RATINGS	Structures	Technologies	

BACKGROUND INFORMATION

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

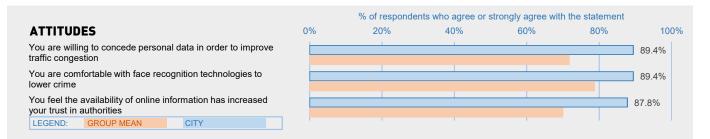
City



			CITY	GROUP MEAN		
STRUCTURES		LEGEND:			GROUP MAX	
			Score			
Health & Safety	0	20	40	60 8	80 100	
Basic sanitation meets the needs of the poorest areas.					\bigcirc	82.79
Recycling services are satisfactory.				\bigcirc		69.92
Public safety is not a problem.				\bigcirc		60.57
Air pollution is not a problem.			\bigcirc			40.51
Medical services provision is satisfactory.				\bigcirc		74.80
Mobility						
Traffic congestion is not a problem.			\bigcirc			49.32
Public transport is satisfactory.				\bigcirc		76.83
Activities						
Green spaces are satisfactory.						79.40
Cultural activities (shows, bars, and museums) are satisfactory.					\bigcirc	83.06
Opportunities (Work 9, Cohool)						
					0	84 15
Employment finding services are available.					0	84.15 76.56
Employment finding services are available. Most children have access to a good school.					0	76.56
Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs					0	76.56 70.46
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					0	76.56 70.46 74.53
Employment finding services are available. Most children have access to a good school.						76.56 70.46
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						76.56 70.46 74.53
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						76.56 70.46 74.53
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						76.56 70.46 74.53 75.20
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						76.56 70.46 74.53 75.20 76.42

Nanjing

			% of respo	ondents who ch	ose the Priority A	rea	
PRIORITY AREAS	0	%	20%	40%	60%	80%	100%
PRIORITY AREAS From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.	0 air pollution road congestion fulfilling employment basic amenities corruption public transport affordable housing security school education unemployment citizen engagement			43.9% 35.8% 35.8% 35.0% 33.3% 9%	58.5% 56.1%	80%	100%
	green spaces social mobility energy efficiency recycling		20.3% 20.3% 18.7% 17.1% 16.3%				



TECHNOLOGIES		LEGEND:	CITY GROUP MIN	GROL	JP MEAN GROUP	MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.					\bigcirc		84.2
A website or App allows to give away unwanted items to other city residents.					0		68.4
Free public wifi has improved access to services.							81.
CCTV cameras make residents feel safer.					\bigcirc		80.
A website or App allows effective monitoring of air pollution.					0		80.
Arranging medical appointments online has improved access.							87.
Mobility							
Car-sharing Apps have reduced congestion.					\bigcirc		68.
Apps that direct you to an available parking space have reduced journey time.					\bigcirc		76.
Bicycle hiring has reduced congestion.					\bigcirc		80.
Online scheduling and ticket sales make public transport easier to use.					\bigcirc		89.
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				0		90.
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					\bigcirc		88.
IT skills are taught well in schools.					\bigcirc		85.
Online services provided by the city has made it easier to start a new business.					\bigcirc		83.
Governance							
Online public access to city finances has reduced corruption.					\bigcirc		76.
Online voting has increased participation.					\bigcirc		71.
An online platform where residents can propose ideas has improved city life.					\bigcirc		80.
Processing Identification Documents online has reduced waiting times.					\bigcirc		75

New Delhi

SMART CITY	68th
RANKING	Out of 102
GROUP	4
RATING	CCC
FACTOR	CCC CC
RATINGS	Structures Technologies

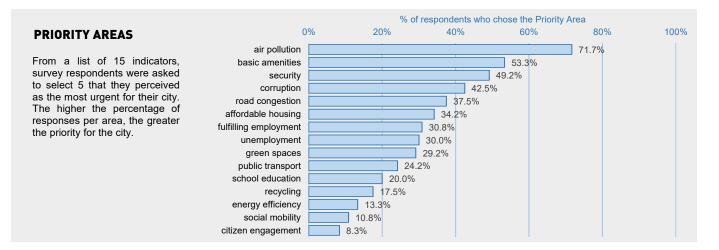
BACKGROUND INFORMATION

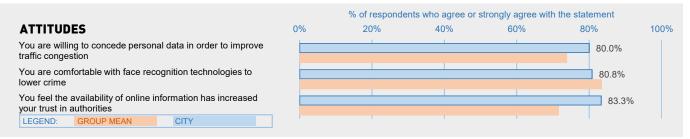
Country	2015	2016	2017
UN HDI	0.627	0.636	0.640
Life expectancy at Birth	68.3	68.6	68.8
Expected years of schooling	12.0	12.3	12.3
Mean years of schooling	6.3	6.4	6.4
GNI per capita (PPP \$)	5,691	6,026	6,353
City			



STRUCTURES		LEGEND:		GROUP ME	AN GROUP MAX
			Score		
Health & Safety	0	20	40	60	80 100
Basic sanitation meets the needs of the poorest areas.				\bigcirc	
Recycling services are satisfactory.					
Public safety is not a problem.			\bigcirc		
Air pollution is not a problem.			\bigcirc		
Medical services provision is satisfactory.				\bigcirc	
Mobility					
Traffic congestion is not a problem.					
Public transport is satisfactory.					
Green spaces are satisfactory.				0	
Green spaces are satisfactory.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	-
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.				0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.					

New Delhi





		LEGEND:	GROUP MIN	GROUP MEAN	GROUP MAX	
Health & Safety	0	20	Score 40	60	80 100	
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		60.14
A website or App allows to give away unwanted items to other city residents.				\bigcirc		61.94
Free public wifi has improved access to services.				\bigcirc		64.3
CCTV cameras make residents feel safer.				\bigcirc		71.1
A website or App allows effective monitoring of air pollution.				\bigcirc		65.1
Arranging medical appointments online has improved access.				\bigcirc		74.5
Mobility						
Car-sharing Apps have reduced congestion.				\bigcirc		67.5
Apps that direct you to an available parking space have reduced journey time.				\bigcirc		61.6
Bicycle hiring has reduced congestion.				\bigcirc		61.9
Online scheduling and ticket sales make public transport easier to use.						77.0
Activities						
Online purchasing of tickets to shows and museums has made it easier to atte	nd.				\bigcirc	84.0
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		73.0
IT skills are taught well in schools.				\bigcirc		70.5
Online services provided by the city has made it easier to start a new business				\bigcirc		75.5
Governance						
Online public access to city finances has reduced corruption.				0		69.0
Online voting has increased participation.				Ō		70.0
An online platform where residents can propose ideas has improved city life.				0		68.8
Processing Identification Documents online has reduced waiting times.						78.7

New York

SMART CITY	38 th	BACKGROUND INFORMATION Country
RANKING		Life expectancy at Birth
	Out of 102	Expected years of schooling
		Mean years of schooling
		GNI per capita (PPP \$)
GROUP	1	City
ONOOF		Population (UN World Cities Report)
		Custor:
RATING	BBB From AAA to D	MI Toronto NY TNH Derot Convetard PA CT NY OH • Celorate MD Batteropo Wateropo
		KY VA Chaseperite Bay
FACTOR RATINGS	B B A	Nashville NC Crantote Atlanto SC
	Structures Technologies	Map tiles by Stamen

CITY GROUP MEAN LEGEND: GROUP MAX **STRUCTURES** Score 0 20 40 60 80 100 **Health & Safety** 54.68 Basic sanitation meets the needs of the poorest areas. \bigcirc 59.92 Recycling services are satisfactory. \bigcirc 39.53 Public safety is not a problem. \bigcirc 27.41 Air pollution is not a problem. \bigcirc Medical services provision is satisfactory. 57.85 \bigcirc **Mobility** 22.04 \bigcirc Traffic congestion is not a problem. Public transport is satisfactory. 43.11 \bigcirc **Activities** 59.78 Green spaces are satisfactory. \bigcirc 74.38 Cultural activities (shows, bars, and museums) are satisfactory. \bigcirc **Opportunities (Work & School)** Employment finding services are available. \bigcirc 62.95 52.20 Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. \bigcirc 61.57 Businesses are creating new jobs. \bigcirc 60.06 55.65 Minorities feel welcome. Governance \bigcirc 61.02 Information on local government decisions are easily accessible. \bigcirc 29.34

 \bigcirc

 \bigcirc

2015

0.920

79.2

16.5

13.3

53,741

ME

Conformation

by Stamen Design CC BY 3.0 Map Data © OpenStr

2016

0.922

79.4

16.5

13.4

54,104

2017

0.924

79.5

16.5

13.4

54,941

18,593,000

47.80

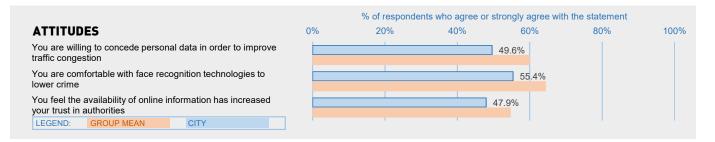
51.24

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.

New York

% of respondents who chose the Priority Area 20% 80% 100% 0% 40% 60% **PRIORITY AREAS** affordable housing 78.5% From a list of 15 indicators, 44.6% road congestion survey respondents were asked to select 5 that they perceived public transport 40.5% school education 38.8% as the most urgent for their city. fulfilling employment 38.0% The higher the percentage of unemployment 33.9% responses per area, the greater security 33.9% the priority for the city. air pollution 33.1% 23.1% corruption 20.7% recycling energy efficiency 19.0% basic amenities 14.9% 14.1% green spaces social mobility 14.1% 10.7% citizen engagement



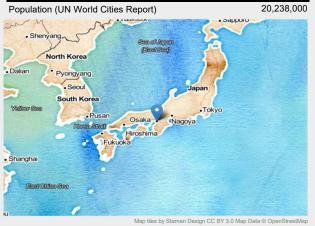
TECHNOLOGIES	LEGEND		GROUP MEAN	GROUP MAX	
Health & Safety	0 2	Score 0 40		80 100	
Online reporting of city maintenance problems provides a speedy solution.		\bigcirc			45.87
A website or App allows to give away unwanted items to other city residents.					54.13
Free public wifi has improved access to services.			\bigcirc		69.01
CCTV cameras make residents feel safer.			\bigcirc		57.16
A website or App allows effective monitoring of air pollution.		\bigcirc			39.81
Arranging medical appointments online has improved access.			\bigcirc		64.33
Mobility					
Car-sharing Apps have reduced congestion.		\bigcirc			45.59
Apps that direct you to an available parking space have reduced journey time.		\bigcirc			47.25
Bicycle hiring has reduced congestion.					49.86
Online scheduling and ticket sales make public transport easier to use.			\bigcirc		58.54
Activities					
Online purchasing of tickets to shows and museums has made it easier to attend					78.10
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.			\bigcirc		69.15
IT skills are taught well in schools.		0			48.62
Online services provided by the city has made it easier to start a new business.					49.04
0					
Governance	_				43.94
Online public access to city finances has reduced corruption.					
Online voting has increased participation.					48.07
An online platform where residents can propose ideas has improved city life.					46.83
Processing Identification Documents online has reduced waiting times.				-	53.44

Osaka

SMART CITY	63rd			
RANKING	Out of 102			
GROUP	2	2		
RATING	B From AAA to D			
FACTOR	B B	CCC		
RATINGS	Structures	Technologies		

BACKGROUND INFORMATION

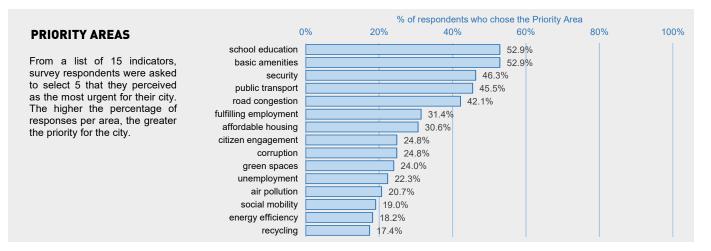
Country	2015	2016	2017
UN HDI	0.905	0.907	0.909
Life expectancy at Birth	83.6	83.8	83.9
Expected years of schooling	15.2	15.2	15.2
Mean years of schooling	12.5	12.7	12.8
GNI per capita (PPP \$)	39,322	38,267	38,986
City			



CITY GROUP MEAN LEGEND: STRUCTURES GROUP MIN GROUP MAX Score 0 20 40 60 80 100 **Health & Safety** 68.73 Basic sanitation meets the needs of the poorest areas. \bigcirc 62.81 Recycling services are satisfactory. 57.44 Public safety is not a problem. \bigcirc 46.01 Air pollution is not a problem. \bigcirc 69.28 Medical services provision is satisfactory. **Mobility** 38.02 Traffic congestion is not a problem. \bigcirc Public transport is satisfactory. \bigcirc 66.67 **Activities** 45.73 Green spaces are satisfactory. \bigcirc 58.54 Cultural activities (shows, bars, and museums) are satisfactory. \bigcirc **Opportunities (Work & School)** Employment finding services are available. \bigcirc 49.72 52.89 Most children have access to a good school. \bigcirc Lifelong learning opportunities are provided by local institutions. 55.10 Businesses are creating new jobs. 45.73 30.58 Minorities feel welcome. Governance

 \bigcirc 47.93 Information on local government decisions are easily accessible. \bigcirc 32.51 Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government. \bigcirc 44.63 Residents provide feedback on local government projects. \bigcirc 41.74

Osaka



ATTITUDES

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

You are comfortable with face recognition technologies to lower crime

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

LEGEND: GROUP MEAN CITY

	% of responde	nts who agree or	strongly agree with	n the statement	
0%	20%	40%	60%	80%	100%
	1	33.9%			
			63.6	5%	
		28.9%			

		LEGEND:		GROUP			
TECHNOLOGIES		LEGEND.	GROUP MIN		GRO	UP MAX	
Haalth 9 Cafabr	0	20	Score 40	60	80	100	
Health & Safety Online reporting of city maintenance problems provides a speedy solution.	0	20	+0	00	00	100	51.93
A website or App allows to give away unwanted items to other city residents.							60.19
Free public wifi has improved access to services.							52.75
CCTV cameras make residents feel safer.							59.78
A website or App allows effective monitoring of air pollution.							39.26
Arranging medical appointments online has improved access.							54.41
Arranging medical appointments online has improved access.							01.11
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				27.13
Apps that direct you to an available parking space have reduced journey time.			\bigcirc				37.47
Bicycle hiring has reduced congestion.			\bigcirc				31.13
Online scheduling and ticket sales make public transport easier to use.			(55.65
Activities							
Online purchasing of tickets to shows and museums has made it easier to attend	1.			\bigcirc			61.16
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				\bigcirc			64.05
IT skills are taught well in schools.							34.02
Online services provided by the city has made it easier to start a new business.							31.13
Governance							
Online public access to city finances has reduced corruption.			\bigcirc				33.75
Online voting has increased participation.			\bigcirc				30.85
An online platform where residents can propose ideas has improved city life.			\bigcirc				32.51
Processing Identification Documents online has reduced waiting times.			\bigcirc				39.53

Oslo

SMART CITY RANKING	3 Out o	of 102
GROUP	,	1
RATING		A A A to D
FACTOR RATINGS	AAA Structures	AA Technologies

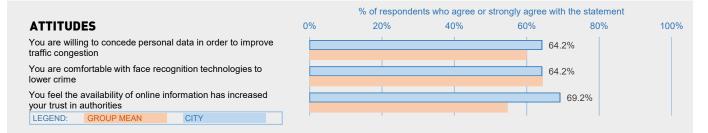
BACKGROUND INFORMATION

Country	2015	2016	2017
UN HDI	0.948	0.951	0.953
Life expectancy at Birth	82.0	82.2	82.3
Expected years of schooling	17.7	17.9	17.9
Mean years of schooling	12.5	12.6	12.6
GNI per capita (PPP \$)	67,028	67,340	68,012
City			



STRUCTURES		LEGEND:		GROUP N		UP MAX
STRUCTURES						
Health & Safety	0	20	Score 40	60	80	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc	
Recycling services are satisfactory.						
Public safety is not a problem.				(
Air pollution is not a problem.				\bigcirc		
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.			\bigcirc			
Public transport is satisfactory.				\bigcirc		
Green spaces are satisfactory.					0	
Green spaces are satisfactory.			_		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			-		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						

		% of	respondents who	chose the Priority A	Area	
PRIORITY AREAS	0	% 20%	40%	60%	80%	100%
	affordable housing			58.3%		
From a list of 15 indicators,	public transport		40.0%			
survey respondents were asked	security		36.7%			
to select 5 that they perceived	fulfilling employment		34.2%			
as the most urgent for their city.	energy efficiency		34.2%			
The higher the percentage of responses per area, the greater	school education		33.3%			
the priority for the city.	unemployment		32.5%			
the phoney for the only.	recycling		30.0%			
	social mobility	26	6.7%			
	road congestion	25	.8%			
	air pollution	25	.8%			
	green spaces	23.3				
	basic amenities	23.3	%			
	citizen engagement	18.3%				
	corruption	14.2%				



TECHNOLOGIES LECEND: GROUP MIX Out of micro and out out of micro a				CITY	GROUP M	FAN		
Health & Safety 0 20 40 60 80 100 Online reporting of city maintenance problems provides a speedy solution. 58.06 68.11 58.06 A website or App allows to give away unwanted items to other city residents. 66.11 66.11 66.11 Free public wift has improved access to services. 0 55.66 56.14 CV cameras make residents feel safer. 50.14 53.81 A website or App allows effective monitoring of air pollution. 53.81 Arranging medical appointments online has improved access. 70.56 Mobility 70.56 Car-sharing Apps have reduced congestion. 43.06 Apps that direct you to an available parking space have reduced journey time. 66.39 Bicycle hiring has reduced congestion. 73.33 Activities 73.33 Online scheduling and ticket sales make public transport easier to use. 78.47 Opportunities (Work & School) 71.67 Online eaccess to job listings has made it easier to start a new business. 66.53 Online services provided by the city has made it easier to start a new business. 65.53 Online services to city finances has reduced corruption. 66.53 <th>TECHNOLOGIES</th> <th></th> <th>LEGEND:</th> <th></th> <th></th> <th></th> <th>P MAX</th> <th></th>	TECHNOLOGIES		LEGEND:				P MAX	
Arritic to Section 2010 50.00 50.00 Online reporting of city maintenance problems provides a speedy solution. 60.00 60.00 A website or App allows to give away unwanted items to other city residents. 60.00 60.00 Free public wift has improved access to services. 55.66 55.66 CCTV cameras make residents feel safer. 60.00 50.14 A website or App allows effective monitoring of air pollution. 53.61 56.06 Arranging medical appointments online has improved access. 70.56 70.56 Mobility 70.56 70.56 Mobility 70.56 70.56 Online service or an available parking space have reduced journey time. 66.39 Bicycle hiring has reduced congestion. 66.53 Online scheduling and ticket sales make public transport easier to use. 73.33 Activities 71.67 Online access to job listings has made it easier to find work. 71.67 I'' skills are taught well in schools. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Ourien services provided by the city has made it easier to start a new business. 50.51 Online public access to city				Score				
A website or App allows to give away unwanted items to other city residents. Free public wifi has improved access to services. CCTV cameras make residents feel safer. A website or App allows effective monitoring of air pollution. Arranging medical appointments online has improved access. Mobility Car-sharing Apps have reduced congestion. Apps that direct you to an available parking space have reduced journey time. Bicycle hiring has reduced congestion. Apps that direct you to an available parking space have reduced journey time. Bicycle hiring has reduced congestion. Online scheduling and ticket sales make public transport easier to use. Online scheduling and ticket so shows and museums has made it easier to attend. Online access to job Istings has made it easier to start a new business. Online services provided by the city has made it easier to start a new business. Online sources provided by the city has made it easier to start a new business. Online public access to othy finances has reduced corruption. Online public access to a participation. An online public acc	Health & Safety	0	20	40	60	80	100	
Arrent of type public with has improved access to services. 55.56 CCTV cameras make residents feel safer. 50.14 A website or App allows effective monitoring of air pollution. 53.61 Arranging medical appointments online has improved access. 70.56 Mobility 70.56 Car-sharing Apps have reduced congestion. 43.06 Apps that direct you to an available parking space have reduced journey time. 45.14 Bicycle hiring has reduced congestion. 66.39 Online scheduling and ticket sales make public transport easier to use. 73.33 Activities 78.47 Opportunities (Work & School) 71.67 Online access to job listings has made it easier to start a new business. 66.39 Online services provided by the city has made it easier to start a new business. 66.39 Online services provided by the city has made it easier to start a new business. 66.39 Online services provided by the city has made it easier to start a new business. 66.39 Online services provided by the city has made it easier to start a new business. 66.39 Online public access to city finances has reduced corruption. 66.39 Online public access to city finances has reduced corruption. 60.31	Online reporting of city maintenance problems provides a speedy solution.			(\bigcirc			58.06
CTV cameras make residents feel safer. CTV cameras make residents feel safer. Arranging medical appointments online has improved access. Mobility Car-sharing Apps have reduced congestion. Apps that direct you to an available parking space have reduced journey time. Bicycle hiring has reduced congestion. Activities Online scheduling and ticket sales make public transport easier to use. Copportunities (Work & School) Online purchasing of tickets to shows and museums has made it easier to attend. Online access to job listings has made it easier to find work. T skills are taught well in schools. Online services provided by the city has made it easier to start a new business. Covernance Online public access to city finances has reduced corruption. Online public access to city finances has improved city life.	A website or App allows to give away unwanted items to other city residents.							66.11
A websile or App allows effective monitoring of air pollution. Arranging medical appointments online has improved access. Mobility Car-sharing Apps have reduced congestion. Apps that direct you to an available parking space have reduced journey time. Bicycle hiring has reduced congestion. Online scheduling and ticket sales make public transport easier to use. Online scheduling of tickets to shows and museums has made it easier to attend. Opportunities (Work & School) Online access to job listings has made it easier to start a new business. Online services provided by the city has made it easier to start a new business. Online services provided by the city has made it easier to start a new business. Online public access to city finances has reduced corruption. Online public access to city finances has reduced corruption. An online platform where residents can propose ideas has improved city life.	Free public wifi has improved access to services.							55.56
Arranging medical appointments online has improved access. 70.56 Mobility 43.06 Car-sharing Apps have reduced congestion. 43.06 Apps that direct you to an available parking space have reduced journey time. 45.14 Bicycle hiring has reduced congestion. 66.39 Online scheduling and ticket sales make public transport easier to use. 73.33 Activities 78.47 Opportunities (Work & School) 71.67 Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 65.39 Online services provided by the city has made it easier to start a new business. 56.53 Covernance 50.83 Online public access to job finances has reduced corruption. 50.63 Online public access to job instring shas made it easier to start a new business. 56.53 Online public access to job instrings has reduced corruption. 50.83 Online public access to job instrings has reduced corruption. 50.83 Online public access to job instrings has reduced corruption. 50.56	CCTV cameras make residents feel safer.			\bigcirc				50.14
Mobility 43.06 Car-sharing Apps have reduced congestion. 43.06 Apps that direct you to an available parking space have reduced journey time. 45.14 Bicycle hiring has reduced congestion. 66.39 Online scheduling and ticket sales make public transport easier to use. 73.33 Activities 78.47 Opportunities (Work & School) 78.47 Online purchasing of tickets to shows and museums has made it easier to attend. 71.67 Opportunities (Work & School) 71.67 Online services provided by the city has made it easier to start a new business. 56.53 Online public access to job listings has reduced corruption. 50.83 Online public access to jot ty finances has reduced corruption. 50.83 Online public access to jot infances has reduced corruption. 50.83 Online public access to jot infances has reduced corruption. 50.83 Online public access to propose ideas has improved city life. 50.56	A website or App allows effective monitoring of air pollution.			\bigcirc				53.61
Car-sharing Apps have reduced congestion. 43.06 Apps that direct you to an available parking space have reduced journey time. 45.14 Bicycle hiring has reduced congestion. 66.39 Online scheduling and ticket sales make public transport easier to use. 73.33 Activities 71.67 Online purchasing of tickets to shows and museums has made it easier to attend. 71.67 Opportunities (Work & School) 71.67 Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 71.67 Online services provided by the city has made it easier to start a new business. 56.53 Online public access to city finances has reduced corruption. 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56	Arranging medical appointments online has improved access.				\bigcirc			70.56
Car-sharing Apps have reduced congestion. 43.06 Apps that direct you to an available parking space have reduced journey time. 45.14 Bicycle hiring has reduced congestion. 66.39 Online scheduling and ticket sales make public transport easier to use. 73.33 Activities 71.67 Online purchasing of tickets to shows and museums has made it easier to attend. 71.67 Opportunities (Work & School) 71.67 Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 71.67 Online services provided by the city has made it easier to start a new business. 56.53 Online public access to city finances has reduced corruption. 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56								
Apps that direct you to an available parking space have reduced journey time. 45.14 Bicycle hiring has reduced congestion. 66.39 Online scheduling and ticket sales make public transport easier to use. 73.33 Activities 78.47 Opportunities (Work & School) 71.67 Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Online voting has increased participation. 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56	Mobility							
Bicycle hiring has reduced congestion. 66.39 Online scheduling and ticket sales make public transport easier to use. 73.33 Activities Online purchasing of tickets to shows and museums has made it easier to attend. 78.47 Opportunities (Work & School) Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Online voting has increased participation. 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56	Car-sharing Apps have reduced congestion.			\bigcirc				43.06
Online scheduling and ticket sales make public transport easier to use. 73.33 Activities 78.47 Online purchasing of tickets to shows and museums has made it easier to attend. 78.47 Opportunities (Work & School) 71.67 Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Covernance 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56	Apps that direct you to an available parking space have reduced journey time.			\bigcirc				45.14
Activities Online purchasing of tickets to shows and museums has made it easier to attend. Opportunities (Work & School) Online access to job listings has made it easier to find work. IT skills are taught well in schools. Online services provided by the city has made it easier to start a new business. Online services provided by the city has made it easier to start a new business. Solution Covernance 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.	Bicycle hiring has reduced congestion.				\bigcirc			66.39
Online purchasing of tickets to shows and museums has made it easier to attend. 78.47 Opportunities (Work & School) 71.67 Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Governance 50.83 Online voting has increased participation. 50.63 An online platform where residents can propose ideas has improved city life. 50.56	Online scheduling and ticket sales make public transport easier to use.							73.33
Online purchasing of tickets to shows and museums has made it easier to attend. 78.47 Opportunities (Work & School) 71.67 Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Governance 50.83 Online voting has increased participation. 50.63 An online platform where residents can propose ideas has improved city life. 50.56								
Opportunities (Work & School) 71.67 Online access to job listings has made it easier to find work. 62.92 Online services provided by the city has made it easier to start a new business. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Governance 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56	Activities							
Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Governance 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56	Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc		78.47
Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Governance 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56								
Online access to job listings has made it easier to find work. 71.67 IT skills are taught well in schools. 62.92 Online services provided by the city has made it easier to start a new business. 56.53 Governance 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56								
IT skills are taught well in schools. Online services provided by the city has made it easier to start a new business. Governance Online public access to city finances has reduced corruption. Online voting has increased participation. An online platform where residents can propose ideas has improved city life. 62.92 62.92 62.92 56.53 56.53 56.53 62.92 56.53 57.72 56.53 56.55	Opportunities (Work & School)							
Online services provided by the city has made it easier to start a new business. 56.53 Governance 50.83 Online public access to city finances has reduced corruption. 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56	Online access to job listings has made it easier to find work.				C)		71.67
Governance 50.83 Online public access to city finances has reduced corruption. 50.83 Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56	IT skills are taught well in schools.				\bigcirc			62.92
Online public access to city finances has reduced corruption.50.83Online voting has increased participation.54.72An online platform where residents can propose ideas has improved city life.50.56	Online services provided by the city has made it easier to start a new business.							56.53
Online public access to city finances has reduced corruption.50.83Online voting has increased participation.54.72An online platform where residents can propose ideas has improved city life.50.56								
Online public access to city finances has reduced corruption.50.83Online voting has increased participation.54.72An online platform where residents can propose ideas has improved city life.50.56								
Online public access to city finances has reduced corruption.50.83Online voting has increased participation.54.72An online platform where residents can propose ideas has improved city life.50.56								
Online voting has increased participation. 54.72 An online platform where residents can propose ideas has improved city life. 50.56	Governance							
An online platform where residents can propose ideas has improved city life. 50.56	Online public access to city finances has reduced corruption.							50.83
	Online voting has increased participation.			C)			54.72
Processing Identification Documents online has reduced waiting times.	An online platform where residents can propose ideas has improved city life.			\bigcirc				50.56
	Processing Identification Documents online has reduced waiting times.				\bigcirc			66.11

Paris

SMART CITY	5°	st
RANKING	Out c	of 102
GROUP	2	2
RATING		B A A to D
FACTOR	BB	BB
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

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

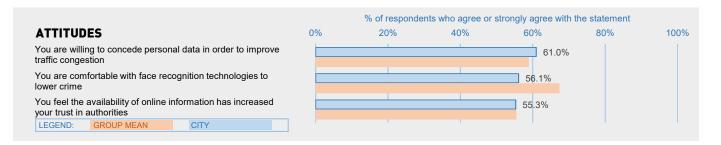
City



			CITY	GROUP ME	EAN	
STRUCTURES		LEGEND:			GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.			C			
Recycling services are satisfactory.			(
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.		\bigcirc				
Medical services provision is satisfactory.				0		
Mobility						
Traffic congestion is not a problem.		(
Public transport is satisfactory.			(
r ubic transport is satisfactory.						
Activities Green spaces are satisfactory.				0		
Activities Green spaces are satisfactory.			_	0	0	
Activities Green spaces are satisfactory.			_	0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						

Paris

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** air pollution 69.1% From a list of 15 indicators, 62.6% affordable housing survey respondents were asked to select 5 that they perceived security 52.0% road congestion 51.2% as the most urgent for their city. unemployment 39.0% The higher the percentage of public transport 31.7% responses per area, the greater green spaces 26.8% the priority for the city. 25.2% recycling fulfilling employment 20.3% school education 14.6% 13.8% corruption citizen engagement 13.0% social mobility 12.2% basic amenities 11.4% energy efficiency 10.6%



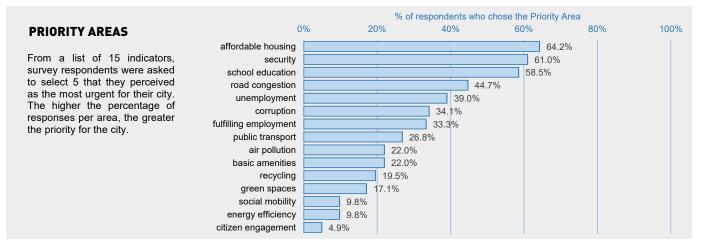
TECHNOLOGIES		LEGEND:		GROUP M		P MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc				50.54
A website or App allows to give away unwanted items to other city residents.				\bigcirc			59.08
Free public wifi has improved access to services.							54.88
CCTV cameras make residents feel safer.							52.44
A website or App allows effective monitoring of air pollution.			\bigcirc				51.63
Arranging medical appointments online has improved access.				\bigcirc			66.53
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				43.22
Apps that direct you to an available parking space have reduced journey time.			\bigcirc				51.36
Bicycle hiring has reduced congestion.			\bigcirc				52.44
Online scheduling and ticket sales make public transport easier to use.				\bigcirc			59.49
Activities							
Online purchasing of tickets to shows and museums has made it easier to attend	d.			(73.31
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				\bigcirc			57.99
IT skills are taught well in schools.				\bigcirc			57.86
Online services provided by the city has made it easier to start a new business.			\bigcirc				52.17
Governance							20.00
Online public access to city finances has reduced corruption.							38.08
Online voting has increased participation.							44.72
An online platform where residents can propose ideas has improved city life.			0				49.86
Processing Identification Documents online has reduced waiting times.			(56.91

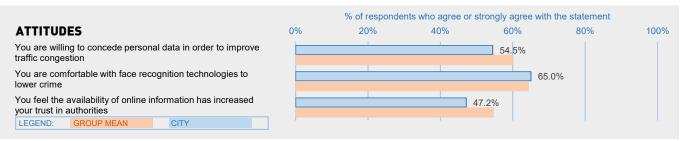
Philadelphia

SMART CITY	5	t h	BACKGROUND INFORMATION Country	2015	2016	2017
RANKING		- 10 C	UN HDI	0.920	0.922	0.924
			Life expectancy at Birth	79.2	79.4	79.5
	Out o	of 102	Expected years of schooling	16.5	16.5	16.5
			Mean years of schooling	13.3	13.4	13.4
			GNI per capita (PPP \$)	53,741	54,104	54,941
CDOUD		1	City			
GROUP			Population (UN World Cities Report)		ł	5,585,000
RATING		B A A to D	Lake Detrot NY	A Boston CT NW York kelphia	Day ciffu	NS Hailtax
FACTOR RATINGS	B B Structures	BB Technologies	Nashville NC NC Orariote AL GA Map tiles by Star	ien Design CC BY 3		•Hamilton OpenStreetMa

			OITY				
STRUCTURES		LEGEND:		GROUP N		OUP MAX	
			Score)			
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.			0				45.53
Recycling services are satisfactory.			\bigcirc				49.19
Public safety is not a problem.		С)				25.34
Air pollution is not a problem.							34.82
Medical services provision is satisfactory.				\bigcirc			56.10
Mobility							
Traffic congestion is not a problem.							22.49
Public transport is satisfactory.			0				47.97
Activities							
Activities Green spaces are satisfactory.)			52.17
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			C)	0		52.17 77.64
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			C)	0		77.64
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			C		0		62.20
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.			0		0		77.64 62.20 38.21
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.			0		0		77.64 62.20 38.21 53.66
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.			0				77.64 62.20 38.21 53.66 57.99
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.							77.64 62.20 38.21 53.66
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance							77.64 62.20 38.21 53.66 57.99 56.37
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.							77.64 62.20 38.21 53.66 57.99 56.37 55.96
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance							77.64 62.20 38.21 53.66 57.99 56.37 55.96 31.98
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.							77.64 62.20 38.21 53.66 57.99 56.37 55.96

Philadelphia





TECHNOLOGIES	LEGEND:		UP MEAN GROUP MAX	
Health & Safety	0 20	Score 0 40 60	80 100	
Online reporting of city maintenance problems provides a speedy solution.		\bigcirc		29.5
A website or App allows to give away unwanted items to other city residents.		\bigcirc		48.1
Free public wifi has improved access to services.		\bigcirc		44.9
CCTV cameras make residents feel safer.				38.8
A website or App allows effective monitoring of air pollution.		\bigcirc		27.
Arranging medical appointments online has improved access.				58.2
Mobility				
Car-sharing Apps have reduced congestion.		\bigcirc		43.
Apps that direct you to an available parking space have reduced journey time.				38.4
Bicycle hiring has reduced congestion.		\bigcirc		41.
Online scheduling and ticket sales make public transport easier to use.		\bigcirc		56.
Activities				
Online purchasing of tickets to shows and museums has made it easier to atten	d.		\bigcirc	77.:
Opportunities (Work & School)				
Online access to job listings has made it easier to find work.		(66.
IT skills are taught well in schools.		\bigcirc		36.3
Online services provided by the city has made it easier to start a new business.		\bigcirc		37.
Governance				
Online public access to city finances has reduced corruption.		\bigcirc		31.
				42.
Online voting has increased participation.				42.
				39.

Prague

SMART CITY	19th
RANKING	Out of 102
GROUP	2
RATING	BBB From AAA to D
FACTOR	BBB BBB
RATINGS	Structures Technologies

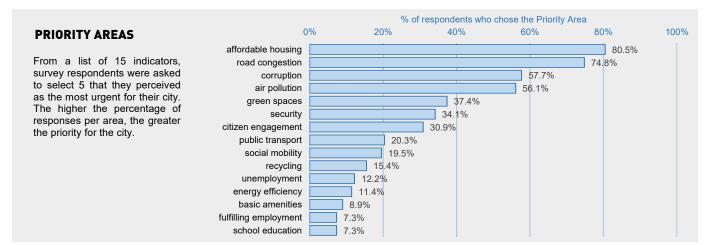
BACKGROUND INFORMATION

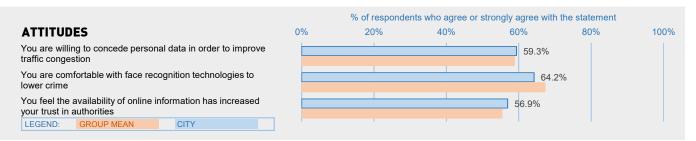
Country	2015	2016	2017
UN HDI	0.882	0.885	0.888
Life expectancy at Birth	78.6	78.7	78.9
Expected years of schooling	16.9	16.9	16.9
Mean years of schooling	12.7	12.7	12.7
GNI per capita (PPP \$)	28,567	29,400	30,588
City			



			CITY	GROUP ME	-AN	
STRUCTURES		LEGEND:				P MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.						
Public transport is satisfactory.						
Public transport is satisfactory.						
Public transport is satisfactory. Activities Green spaces are satisfactory.						
Activities					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			0		0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						

Prague





TECHNOLOGIES		GROUP MAX	
	Score		
Health & Safety 0 20	40 60	80 100	
Online reporting of city maintenance problems provides a speedy solution.	\bigcirc		50.68
A website or App allows to give away unwanted items to other city residents.	\bigcirc		63.55
Free public wifi has improved access to services.	\bigcirc		62.06
CCTV cameras make residents feel safer.	\bigcirc		64.36
A website or App allows effective monitoring of air pollution.	\bigcirc		45.93
Arranging medical appointments online has improved access.			58.94
Mobility			
Car-sharing Apps have reduced congestion.	\bigcirc		39.16
Apps that direct you to an available parking space have reduced journey time.	\bigcirc		50.41
Bicycle hiring has reduced congestion.			43.09
Online scheduling and ticket sales make public transport easier to use.		\bigcirc	78.32
Activities			
Online purchasing of tickets to shows and museums has made it easier to attend.			83.88
Opportunities (Work & School)			
Online access to job listings has made it easier to find work.			75.34
IT skills are taught well in schools.			60.70
Online services provided by the city has made it easier to start a new business.	\bigcirc		46.48
Governance			
Online public access to city finances has reduced corruption.	0		39.43
Online voting has increased participation.			54.88
An online platform where residents can propose ideas has improved city life.	\bigcirc		48.37
Processing Identification Documents online has reduced waiting times.	\bigcirc		65.85

Rabat

SMART CITY RANKING		1 st
GROUP		4
RATING		A A to D
FACTOR RATINGS	D Structures	D Technologies

BACKGROUND INFORMATION

Country	2015	2016	2017
UN HDI	0.655	0.662	0.667
Life expectancy at Birth	75.6	75.8	76.1
Expected years of schooling	12.3	12.4	12.4
Mean years of schooling	5.0	5.4	5.5
GNI per capita (PPP \$)	7,154	7,149	7,340
City			

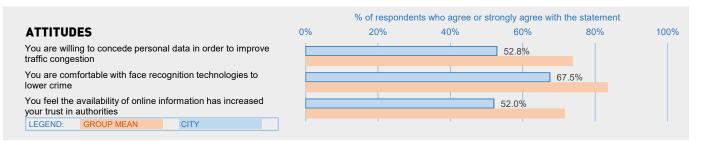
1,967,000



			CITY	GROUP ME	AN		
STRUCTURES		LEGEND:			GROU	P MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.			\bigcirc				44.85
Recycling services are satisfactory.			\bigcirc				36.86
Public safety is not a problem.			\bigcirc				44.04
Air pollution is not a problem.			\bigcirc				31.57
Medical services provision is satisfactory.			\bigcirc			:	34.01
Mobility							
Traffic congestion is not a problem.			\bigcirc				32.66
Public transport is satisfactory.			\bigcirc				30.22
Activities							
Activities Green spaces are satisfactory.				0			56.64
							56.64 64.91
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	-		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0			64.91
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0	0			64.91 39.70
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					•		64.91 39.70 39.16
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.							64.91 39.70 39.16 42.41
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.							64.91 39.70 39.16 42.41 41.33
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.							64.91 39.70 39.16 42.41
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.							64.91 39.70 39.16 42.41 41.33
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.							64.91 39.70 39.16 42.41 41.33
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance							64.91 39.70 39.16 42.41 41.33 45.39
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.							64.91 39.70 39.16 42.41 41.33 45.39 41.06

Rabat

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** unemployment 58.5% From a list of 15 indicators, 48.8% school education survey respondents were asked to select 5 that they perceived security 46.3% public transport 42.3% as the most urgent for their city. corruption 41.5% The higher the percentage of fulfilling employment 37.4% responses per area, the greater affordable housing 34.1% the priority for the city. air pollution 31.7% road congestion 27.6% green spaces 22.0% basic amenities 19.5% citizen engagement 16.3% recycling 15.4% social mobility 8.9% energy efficiency 8.1%



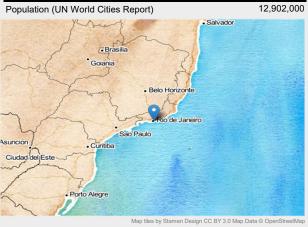
TECHNOLOGIES	LEG	BEND:		GROUP M	IEAN GROUF	P MAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			
A website or App allows to give away unwanted items to other city residents.			\bigcirc			
Free public wifi has improved access to services.			\bigcirc			
CCTV cameras make residents feel safer.			\bigcirc			
A website or App allows effective monitoring of air pollution.		(\bigcirc			:
Arranging medical appointments online has improved access.			\bigcirc			· ·
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			
Apps that direct you to an available parking space have reduced journey time.						· · ·
Bicycle hiring has reduced congestion.			\bigcirc			:
Online scheduling and ticket sales make public transport easier to use.			(\bigcirc		
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	4			\bigcirc		
	<i>.</i>					
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		
IT skills are taught well in schools.			\bigcirc			
Online services provided by the city has made it easier to start a new business.			\bigcirc			· ·
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.			\bigcirc			- I ·

Rio de Janeiro

SMART CITY RANKING	96th Out of 102			
GROUP	3			
RATING	C From AAA to D			
FACTOR RATINGS	C	C Technologies		

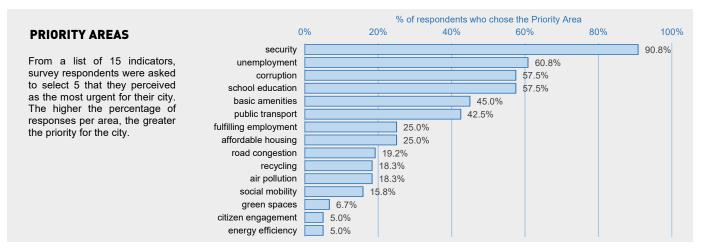
BACKGROUND INFORMATION

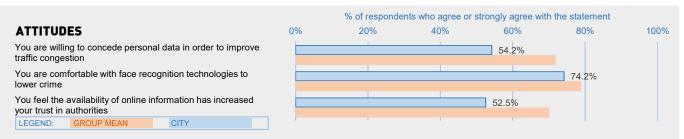
Country	2015	2016	2017
UN HDI	0.757	0.758	0.759
Life expectancy at Birth	75.3	75.5	75.7
Expected years of schooling	15.4	15.4	15.4
Mean years of schooling	7.6	7.8	7.8
GNI per capita (PPP \$)	14,350	13,730	13,755
City			



			CITY	GROUP N	JEAN	
STRUCTURES		LEGEND:				UP MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.		\bigcirc				
Recycling services are satisfactory.		(
Public safety is not a problem.		\bigcirc				
Air pollution is not a problem.		C)			
Medical services provision is satisfactory.		\bigcirc				
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.						
Activities						
Activities Green spaces are satisfactory.			0			
Activities Green spaces are satisfactory.			0	0		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			0	0		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			0	0		
Activities			0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.			0 0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0 0 0 0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.			0 0 0			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.) 			
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Rio de Janeiro





			CITY	GRO	JP MEAN	
TECHNOLOGIES		LEGEND:			GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.		\bigcirc				
A website or App allows to give away unwanted items to other city residents.			\bigcirc			
Free public wifi has improved access to services.			\bigcirc			
CCTV cameras make residents feel safer.			\bigcirc			
A website or App allows effective monitoring of air pollution.		\bigcirc				
Arranging medical appointments online has improved access.			\bigcirc			
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			
Bicycle hiring has reduced congestion.			\bigcirc			
Online scheduling and ticket sales make public transport easier to use.			\bigcirc			
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc	
One estimation (Monte O. Cale and)						
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.		C				
IT skills are taught well in schools.		C				
Online services provided by the city has made it easier to start a new business.						
Governance						
Online public access to city finances has reduced corruption.		\bigcirc				
Online voting has increased participation.			0			
An online platform where residents can propose ideas has improved city life.			\bigcirc			
Processing Identification Documents online has reduced waiting times.						

Riyadh

SMART CITY	71 st			
RANKING	Out of 102			
GROUP	3			
RATING	CCCC			
FACTOR	CCC	CCC		
RATINGS	Structures	Technologies		

BACKGROUND INFORMATION

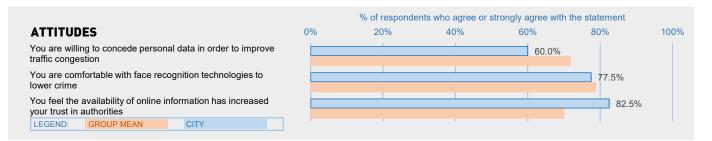
Country	2015	2016	2017
UN HDI	0.854	0.854	0.853
Life expectancy at Birth	74.4	74.6	74.7
Expected years of schooling	16.9	16.9	16.9
Mean years of schooling	9.5	9.5	9.5
GNI per capita (PPP \$)	51,885	51,329	49,680
City			

6,370,000 Population (UN World Cities Report) Lebanon • Baghdad Damascus • Esfahan Iraq Ammar Kuwai Medina United Arat leddah Saudi Arabia •Mecca Yemer Eritrea . Khartoum - Sanaa nen Design CC BY 3.0 Map Data © Op

CITY GROUP MEAN LEGEND: STRUCTURES GROUP MAX Score 0 20 40 60 80 100 **Health & Safety** 78.33 Basic sanitation meets the needs of the poorest areas. \bigcirc 65.42 Recycling services are satisfactory. \bigcirc 54.86 Public safety is not a problem. \bigcirc 33.19 Air pollution is not a problem. \bigcirc Medical services provision is satisfactory. 74.72 **Mobility** 27.22 Traffic congestion is not a problem. \bigcirc Public transport is satisfactory. \bigcirc 45.56 **Activities** 58.75 Green spaces are satisfactory. \bigcirc \bigcirc 60.97 Cultural activities (shows, bars, and museums) are satisfactory. **Opportunities (Work & School)** \bigcirc 54.17 Employment finding services are available. 71.81 Most children have access to a good school. \bigcirc Lifelong learning opportunities are provided by local institutions. 61.11 Businesses are creating new jobs. 63.47 \bigcirc 58.75 Minorities feel welcome. Governance \bigcirc 70.69 Information on local government decisions are easily accessible. 42.36 Corruption of city officials is not an issue of concern. \bigcirc \bigcirc Residents contribute to decision making of local government. 56.67 Residents provide feedback on local government projects. \bigcirc 61.39

Riyadh

		%	of respondents wh	o chose the	Priority Area		
PRIORITY AREAS	0	% 20%	40%	60%	6	80%	100%
	road congestion				61.7%		
From a list of 15 indicators,	affordable housing			50.8%			
survey respondents were asked	air pollution		40.80	%			
to select 5 that they perceived	public transport		38.3%				
as the most urgent for their city.	green spaces		33.3%				
The higher the percentage of responses per area, the greater	unemployment		32.5%				
the priority for the city.	school education		30.0%				
the phoney for the only.	basic amenities		27.5%				
	corruption		25.8%				
	recycling		25.0%				
	fulfilling employment		25.0%				
	security	22	2.5%				
	energy efficiency	15.8%					
	citizen engagement	14.2%					
	social mobility	13.3%					



TECHNOLOGIES		LEGEND:		GROI	JP MEAN GROUI	P MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.					\bigcirc		73.1
A website or App allows to give away unwanted items to other city residents.				C)		64.5
Free public wifi has improved access to services.				\bigcirc			62.2
CCTV cameras make residents feel safer.				Ŭ			73.8
A website or App allows effective monitoring of air pollution.			C)			53.7
Arranging medical appointments online has improved access.					\bigcirc		75.6
Mobility							
Car-sharing Apps have reduced congestion.				\bigcirc			61.3
Apps that direct you to an available parking space have reduced journey time.				\bigcirc			61.6
Bicycle hiring has reduced congestion.			\bigcirc			· ·	40.4
Online scheduling and ticket sales make public transport easier to use.				С)		64.0
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	d.				\bigcirc		75.5
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.							71.
IT skills are taught well in schools.							60.8
Online services provided by the city has made it easier to start a new business.				U			68.0
Online services provided by the city has made it easier to start a new business.							00.
Governance							
Online public access to city finances has reduced corruption.				\bigcirc			60.5
Online voting has increased participation.				\bigcirc			59.3
An online platform where residents can propose ideas has improved city life.				C)		64.
Processing Identification Documents online has reduced waiting times.					\bigcirc		73.3

Rome

SMART CITY	77th
RANKING	Out of 102
GROUP	2
RATING	CCCC From AAA to D
FACTOR	CCC CCC
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

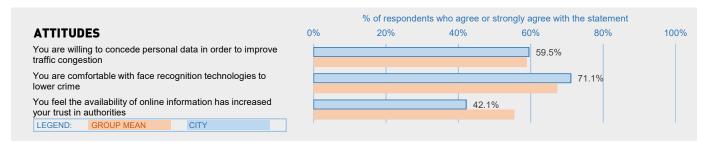
ly



		CITY	GROUP MEA	N	1
STRUCTURES	LEGENE	D: GROUP MIN	GROUP WER	GROUP MAX	
		Score			
Health & Safety	0	20 40	60	80 100	
Basic sanitation meets the needs of the poorest areas.		\bigcirc			38.29
Recycling services are satisfactory.		\bigcirc			27.00
Public safety is not a problem.		\bigcirc			30.30
Air pollution is not a problem.		\bigcirc			20.66
Medical services provision is satisfactory.		\bigcirc			40.50
Mobility					
Traffic congestion is not a problem.	\bigcirc				14.19
Public transport is satisfactory.	(19.42
ubile transport is satisfactory.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.		C			52.48 62.40
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					62.40
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.	(62.40
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.	(62.40 19.83 41.32
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.	(62.40 19.83 41.32 33.20
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.	(62.40 19.83 41.32 33.20 25.34
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.	(62.40 19.83 41.32 33.20
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.	(62.40 19.83 41.32 33.20 25.34
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.	(62.40 19.83 41.32 33.20 25.34
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance	(62.40 19.83 41.32 33.20 25.34 27.00
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.	(62.40 19.83 41.32 33.20 25.34 27.00 33.61

Rome

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** 62.0% public transport From a list of 15 indicators, 56.2% recycling survey respondents were asked to select 5 that they perceived security 51.2% air pollution 49.6% as the most urgent for their city. basic amenities 47.1% The higher the percentage of road congestion 46.3% responses per area, the greater corruption 40.5% the priority for the city. unemployment 33.9% fulfilling employment 24.8% affordable housing 17.4% 16.5% green spaces social mobility 13.2<mark>%</mark> energy efficiency 6.6% school education 5.0% 4.1% citizen engagement



TECHNOLOGIES		LEGEND:	CITY GROUP MIN	GROUP ME	AN GROUP M	IAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			36.36
A website or App allows to give away unwanted items to other city residents.			\bigcirc			42.01
Free public wifi has improved access to services.			\bigcirc			42.15
CCTV cameras make residents feel safer.						45.45
A website or App allows effective monitoring of air pollution.						35.40
Arranging medical appointments online has improved access.			C)		53.31
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			36.50
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			34.57
Bicycle hiring has reduced congestion.			\bigcirc			32.09
Online scheduling and ticket sales make public transport easier to use.			\bigcirc			48.21
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc	77.55
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.			\bigcirc			42.15
IT skills are taught well in schools.			\bigcirc			34.71
Online services provided by the city has made it easier to start a new business.			\bigcirc			35.40
Governance						
Online public access to city finances has reduced corruption.			0			29.34
Online voting has increased participation.			\bigcirc			30.85
An online platform where residents can propose ideas has improved city life.			\bigcirc			32.51
Processing Identification Documents online has reduced waiting times.			\bigcirc			45.45

Rotterdam

SMART CITY	36th
RANKING	Out of 102
GROUP	1
RATING	BBB From AAA to D
FACTOR	BBB BBB
RATINGS	Structures Technologies

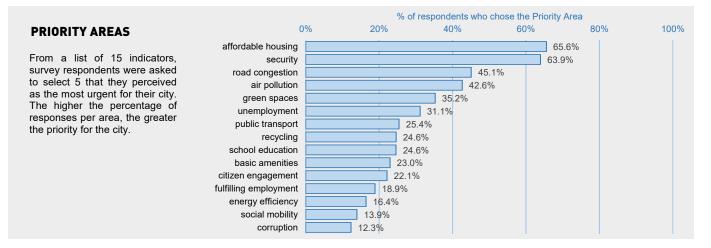
BACKGROUND INFORMATION

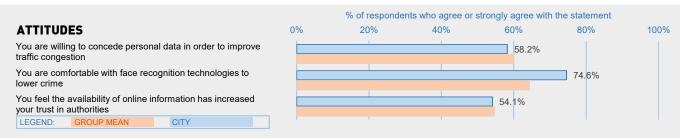
Country	2015	2016	2017
UN HDI	0.926	0.928	0.931
Life expectancy at Birth	81.7	81.9	82.0
Expected years of schooling	18.1	18.0	18.0
Mean years of schooling	12.1	12.1	12.2
GNI per capita (PPP \$)	46,239	46,711	47,900
City			



STRUCTURES		LEGEND:	CITY GROUP MIN	GROUP MEAN	GROUP MAX
			Score		
Health & Safety	0	20	40	60	80 100
Basic sanitation meets the needs of the poorest areas.				0	
Recycling services are satisfactory.				\bigcirc	
Public safety is not a problem.					
Air pollution is not a problem.			\bigcirc		
Medical services provision is satisfactory.				\bigcirc	
Mobility					
Traffic congestion is not a problem.			\bigcirc		
Public transport is satisfactory.				\bigcirc	
Activities					
Green spaces are satisfactory.					
Cultural activities (shows, bars, and museums) are satisfactory.					
Cultural activities (Shows, bars, and museums) are satisfactory.					
Opportunities (Work & School)					
Employment finding services are available.				\bigcirc	
Most children have access to a good school.				\bigcirc	
Lifelong learning opportunities are provided by local institutions.			(
Businesses are creating new jobs.			C)	
Minorities feel welcome.)	
Covernonce					
Governance			(<u> </u>	
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.					

Rotterdam





				GROUP MEAN		
TECHNOLOGIES		LEGEND:		GI	ROUP MAX	
Health & Cafabr	0	20	Score 40 6	60 80	100	
Health & Safety Online reporting of city maintenance problems provides a speedy solution.	0	20	40	50 00	100	50.9
A website or App allows to give away unwanted items to other city residents.						55.7
Free public wifi has improved access to services.						56.8
CCTV cameras make residents feel safer.						58.2
A website or App allows effective monitoring of air pollution.						38.6
Arranging medical appointments online has improved access.						56.6
Analiging medical appointments on the has improved decess.						0010
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			34.5
Apps that direct you to an available parking space have reduced journey time.						42.4
Bicycle hiring has reduced congestion.			\bigcirc			44.6
Online scheduling and ticket sales make public transport easier to use.						57.9
Activities						
Online purchasing of tickets to shows and museums has made it easier to atter	nd.			\bigcirc		70.2
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.						68.5
IT skills are taught well in schools.						53.9
Online services provided by the city has made it easier to start a new business.						44.4
Shine services provided by the only has made it casion to start a new business.						
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			39.7
Online voting has increased participation.			\bigcirc			41.6
An online platform where residents can propose ideas has improved city life.						49.4
Processing Identification Documents online has reduced waiting times.						52.0

San Francisco

SMART CITY RANKING	12 Out of			
GROUP	1			
RATING	From AAA to D			
FACTOR RATINGS	A Structures	A Technologies		

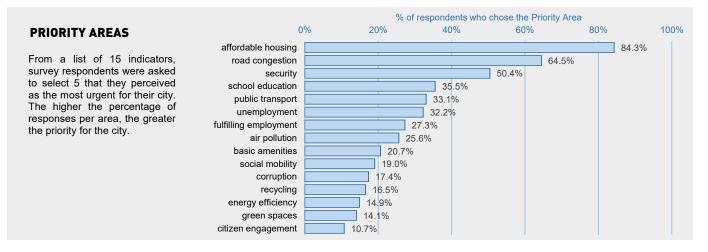
BACKGROUND INFORMATION

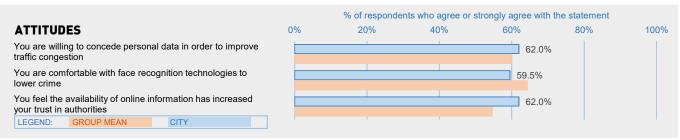
Country	2015	2016	2017
UN HDI	0.920	0.922	0.924
Life expectancy at Birth	79.2	79.4	79.5
Expected years of schooling	16.5	16.5	16.5
Mean years of schooling	13.3	13.4	13.4
GNI per capita (PPP \$)	53,741	54,104	54,941
City			



			CITY	GROUP ME	AN	
STRUCTURES		LEGEND:	GROUP MIN		GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.			\bigcirc			
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.		(\bigcirc			
Public transport is satisfactory.						
Activities						
Green spaces are satisfactory.)	
Cultural activities (shows, bars, and museums) are satisfactory.						
Opportunities (Work & School)						
Employment finding services are available.						
Most children have access to a good school.						
Lifelong learning opportunities are provided by local institutions.				\bigcirc		
Businesses are creating new jobs.				\bigcirc		
/linorities feel welcome.				\bigcirc		
Information on local government decisions are easily accessible.				\bigcirc		
Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.			0			
Information on local government decisions are easily accessible.						

San Francisco





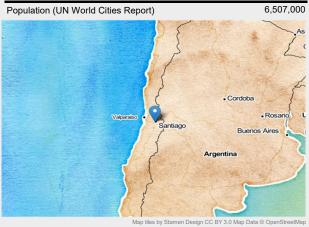
TECHNOLOGIES	LEGEND:		P MEAN GROUP MAX	
Health & Safety	0 20	Score 40 60	80 100	
Online reporting of city maintenance problems provides a speedy solution.		\bigcirc		43.53
A website or App allows to give away unwanted items to other city residents.		\bigcirc		62.95
Free public wifi has improved access to services.		\bigcirc		55.10
CCTV cameras make residents feel safer.				48.48
A website or App allows effective monitoring of air pollution.		\bigcirc		52.48
Arranging medical appointments online has improved access.				64.05
Mobility				
Car-sharing Apps have reduced congestion.		\bigcirc		45.45
Apps that direct you to an available parking space have reduced journey time.				50.14
Bicycle hiring has reduced congestion.				54.41
Online scheduling and ticket sales make public transport easier to use.)	65.29
Activities				
Online purchasing of tickets to shows and museums has made it easier to attend			\bigcirc	73.28
Opportunities (Work & School)				72.18
Online access to job listings has made it easier to find work. IT skills are taught well in schools.				53.17
				55.65
Online services provided by the city has made it easier to start a new business.				55.05
Governance				
Online public access to city finances has reduced corruption.				46.14
Online voting has increased participation.				56.20
An online platform where residents can propose ideas has improved city life.				50.69
Processing Identification Documents online has reduced waiting times.				56.75

Santiago

SMART CITY	B	5 th
RANKING	Out o	of 102
GROUP	;	3
RATING		C A A to D
FACTOR	C C	C C
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

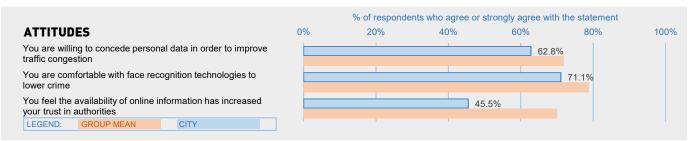
Country	2015	2016	2017
UN HDI	0.840	0.842	0.843
Life expectancy at Birth	79.3	79.5	79.7
Expected years of schooling	16.3	16.4	16.4
Mean years of schooling	10.3	10.3	10.3
GNI per capita (PPP \$)	21,854	21,768	21,910
City			



STRUCTURES		LEGEND:		GROUP MEAN	GROUP MAX
SIRUCIORES					
Health & Safety	0	20	Score 40	60	80 100
Basic sanitation meets the needs of the poorest areas.			\bigcirc		
Recycling services are satisfactory.			\bigcirc		
Public safety is not a problem.			\bigcirc		
Air pollution is not a problem.		\bigcirc			
Medical services provision is satisfactory.			\bigcirc		
Mobility					
Traffic congestion is not a problem.		\bigcirc			
Public transport is satisfactory.			\bigcirc		
Activities					
Activities Green spaces are satisfactory.				0	
Green spaces are satisfactory.				0	-
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.			0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Winorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Dpportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					

Santiago

% of respondents who chose the Priority Area 20% 40% 60% 80% 100% 0% **PRIORITY AREAS** security 66.9% From a list of 15 indicators, air pollution 60.3% survey respondents were asked to select 5 that they perceived road congestion 48.8% corruption 43.0% as the most urgent for their city. fulfilling employment 39.7% The higher the percentage of recycling 36.4% responses per area, the greater affordable housing 34.7% the priority for the city. public transport 33.9% unemployment 33.1% school education 25.6% 24.0% green spaces social mobility 14.1% citizen engagement 9.9% basic amenities 9.9% energy efficiency 74%



TECHNOLOGIES		LEGEND:	CITY GROUP MIN	GROUP		UP MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc				47.5
A website or App allows to give away unwanted items to other city residents.			\bigcirc				43.3
Free public wifi has improved access to services.				\bigcirc			63.7
CCTV cameras make residents feel safer.				\bigcirc			60.0
A website or App allows effective monitoring of air pollution.			\bigcirc				39.9
Arranging medical appointments online has improved access.				C)		68.8
Mobility							
Car-sharing Apps have reduced congestion.			\bigcirc				41.4
Apps that direct you to an available parking space have reduced journey time.			\bigcirc				43.9
Bicycle hiring has reduced congestion.						_	53.9
Online scheduling and ticket sales make public transport easier to use.							54.9
Activities							
Online purchasing of tickets to shows and museums has made it easier to attend	d.				\bigcirc		82.0
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.)		68.1
IT skills are taught well in schools.					,		46.2
Online services provided by the city has made it easier to start a new business.							60.1
Governance							
Online public access to city finances has reduced corruption.			\bigcirc				27.2
Online voting has increased participation.		(25.0
An online platform where residents can propose ideas has improved city life.			\bigcirc				39.5
Processing Identification Documents online has reduced waiting times.				\bigcirc			65.9

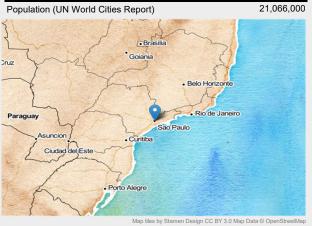
Sao Paulo

SMART CITY RANKING	9 Out c	Dth of 102
GROUP	:	3
RATING		C A A to D
FACTOR RATINGS	C	C C Technologies

BACKGROUND INFORMATION

Country	2015	2016	2017
UN HDI	0.757	0.758	0.759
Life expectancy at Birth	75.3	75.5	75.7
Expected years of schooling	15.4	15.4	15.4
Mean years of schooling	7.6	7.8	7.8
GNI per capita (PPP \$)	14,350	13,730	13,755
City			

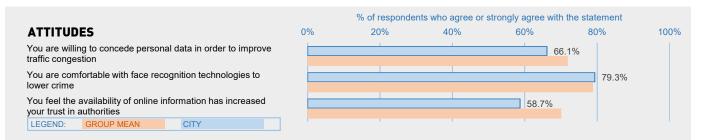
Population (UN World Cities Report)



CITY GROUP MEAN LEGEND: GROUP MIN GROUP MAX **STRUCTURES** Score 0 20 40 60 80 100 **Health & Safety** 40.91 Basic sanitation meets the needs of the poorest areas. \bigcirc 49.04 Recycling services are satisfactory. \bigcirc 25.34 Public safety is not a problem. \bigcirc 21.76 Air pollution is not a problem. \bigcirc Medical services provision is satisfactory. 34.30 **Mobility** 22.73 \bigcirc Traffic congestion is not a problem. Public transport is satisfactory. \bigcirc 29.34 **Activities** 52.89 Green spaces are satisfactory. \bigcirc 66.67 Cultural activities (shows, bars, and museums) are satisfactory. **Opportunities (Work & School)** 40.91 Employment finding services are available. \bigcirc 31.13 Most children have access to a good school. \bigcirc Lifelong learning opportunities are provided by local institutions. \bigcirc 38.29 Businesses are creating new jobs. 47.66 \bigcirc 33.06 Minorities feel welcome. Governance \bigcirc 39.53 Information on local government decisions are easily accessible. 23.00 Corruption of city officials is not an issue of concern. \bigcirc Residents contribute to decision making of local government. \bigcirc 30.03 Residents provide feedback on local government projects. \bigcirc 37.47

Sao Paulo

% of respondents who chose the Priority Area 0% 40% 60% 80% 100% 20% **PRIORITY AREAS** security 86.8% From a list of 15 indicators, unemployment 57.9% survey respondents were asked to select 5 that they perceived school education 44.6% corruption 43.8% as the most urgent for their city. air pollution 38.0% The higher the percentage of public transport 36.4% responses per area, the greater basic amenities 35.5% the priority for the city. fulfilling employment 26.4% affordable housing 24.0% recycling 19.0% road congestion 19.0% green spaces 16.5% social mobility 12.4% citizen engagement 8.3% energy efficiency 3.3%



TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP MEA	N GROUP MAX	<
Health & Safety	0	20	Score 40	60	80 10	00
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			39.67
A website or App allows to give away unwanted items to other city residents.						45.5
Free public wifi has improved access to services.						54.6
CCTV cameras make residents feel safer.			\bigcirc			46.0
A website or App allows effective monitoring of air pollution.			\bigcirc			40.2
Arranging medical appointments online has improved access.			C)		53.3
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			44.6
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			49.7
Bicycle hiring has reduced congestion.			(\bigcirc		56.8
Online scheduling and ticket sales make public transport easier to use.			\bigcirc			49.4
Activities						
Online purchasing of tickets to shows and museums has made it easier to atter	nd.			\bigcirc		73.6
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.						54.6
IT skills are taught well in schools.			\bigcirc			40.5
Online services provided by the city has made it easier to start a new business.			\bigcirc			52.6
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			33.6
Online voting has increased participation.			0			53.1
An online platform where residents can propose ideas has improved city life.			\bigcirc			50.6
Processing Identification Documents online has reduced waiting times.				\bigcirc		61.9

Seattle

SMART CITY	34th
RANKING	Out of 102
GROUP	1
RATING	BBB From AAA to D
FACTOR	BBB BBB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

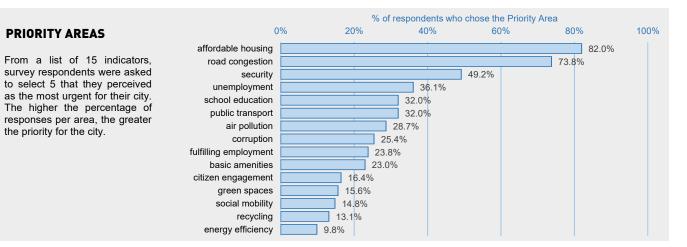
Country	2015	2016	2017
UN HDI	0.920	0.922	0.924
Life expectancy at Birth	79.2	79.4	79.5
Expected years of schooling	16.5	16.5	16.5
Mean years of schooling	13.3	13.4	13.4
GNI per capita (PPP \$)	53,741	54,104	54,941
City			

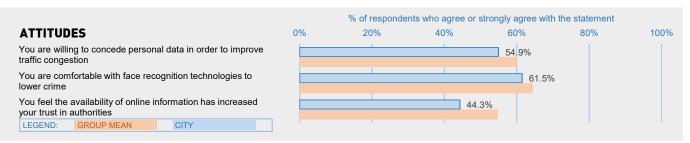
Population (UN World Cities Report)



CITY GROUP MEAN LEGEND: GROUP MAX STRUCTURES Score 0 20 40 60 80 100 **Health & Safety** 45.08 Basic sanitation meets the needs of the poorest areas. \bigcirc 68.31 Recycling services are satisfactory. \bigcirc 29.23 Public safety is not a problem. \bigcirc 38.39 Air pollution is not a problem. Medical services provision is satisfactory. 63.11 Mobility 13.39 Traffic congestion is not a problem. \bigcirc Public transport is satisfactory. 50.27 **Activities** 66.26 Green spaces are satisfactory. \bigcirc \bigcirc 82.38 Cultural activities (shows, bars, and museums) are satisfactory. **Opportunities (Work & School)** \bigcirc 69.95 Employment finding services are available. 0 60.66 Most children have access to a good school. \bigcirc Lifelong learning opportunities are provided by local institutions. 63.52 Businesses are creating new jobs. 69.13 64.62 Minorities feel welcome. Governance \bigcirc 58.61 Information on local government decisions are easily accessible. 37.02 Corruption of city officials is not an issue of concern. \bigcirc Residents contribute to decision making of local government. 50.14 Residents provide feedback on local government projects. 66.39

Seattle





TECHNOLOGIES		LEGEND:	CITY GROUP MIN	GROUP ME	AN GROUP	MAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			44
A website or App allows to give away unwanted items to other city residents.				\bigcirc		68
Free public wifi has improved access to services.			\bigcirc			53
CCTV cameras make residents feel safer.			\bigcirc			41
A website or App allows effective monitoring of air pollution.			\bigcirc			36
Arranging medical appointments online has improved access.				\bigcirc		67
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			42
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			36
Bicycle hiring has reduced congestion.			\bigcirc			39
Online scheduling and ticket sales make public transport easier to use.			\bigcirc)		54
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.			(76
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		72
IT skills are taught well in schools.			\bigcirc			50
Online services provided by the city has made it easier to start a new business.						47
0						
Governance						
Online public access to city finances has reduced corruption.						33
Online voting has increased participation.						51
An online platform where residents can propose ideas has improved city life.						45
Processing Identification Documents online has reduced waiting times.						54

Seoul

SMART CITY	47th
RANKING	Out of 102
GROUP	2
RATING	BB From AAA to D
FACTOR	BB BBB
RATINGS	Structures Technologies

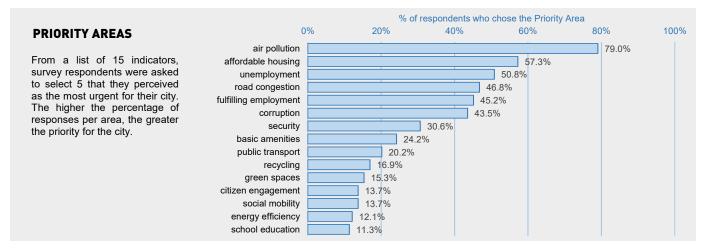
BACKGROUND INFORMATION

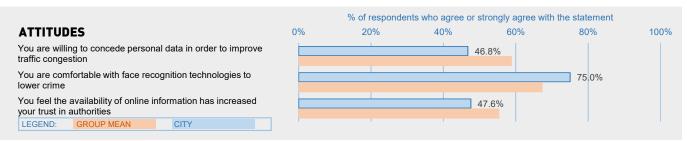
Country	2015	2016	2017
UN HDI	0.898	0.900	0.903
Life expectancy at Birth	81.9	82.2	82.4
Expected years of schooling	16.5	16.5	16.5
Mean years of schooling	12.1	12.1	12.1
GNI per capita (PPP \$)	34,276	35,122	35,945
City			



				GROUP ME	ΞΔΝ		
STRUCTURES		LEGEND:		GROOP ME		JP MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.							70.97
Recycling services are satisfactory.				\bigcirc			66.67
Public safety is not a problem.			0				51.34
Air pollution is not a problem.		\bigcirc					8.06
Medical services provision is satisfactory.				0			70.30
Mobility							
Traffic congestion is not a problem.		0					21.77
Public transport is satisfactory.							68.55
Activities							
Green spaces are satisfactory.							46.51
Cultural activities (shows, bars, and museums) are satisfactory.							70.16
							10.10
Opportunities (Work & School)							
Opportunities (Work & School) Employment finding services are available.			C)			52.02
			C)			52.02 52.82
Employment finding services are available.							
Employment finding services are available. Most children have access to a good school.							52.82
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.							52.82 58.74
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance							52.82 58.74 37.10 27.28
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.							52.82 58.74 37.10 27.28 56.18
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance							52.82 58.74 37.10 27.28 56.18 21.37
Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.							52.82 58.74 37.10 27.28 56.18

Seoul





		LEGEND:		GROUP ME		
TECHNOLOGIES			GROUP MIN		GROUP	VIAX
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.						64
A website or App allows to give away unwanted items to other city residents.				Õ		68
Free public wifi has improved access to services.						73
CCTV cameras make residents feel safer.)	72
A website or App allows effective monitoring of air pollution.				\bigcirc		66
Arranging medical appointments online has improved access.				0		60
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			42
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			47
Bicycle hiring has reduced congestion.			\bigcirc			49
Online scheduling and ticket sales make public transport easier to use.				(75
Activities						
Online purchasing of tickets to shows and museums has made it easier to attend	d.				\bigcirc	84
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				0		69
IT skills are taught well in schools.				0		62
Online services provided by the city has made it easier to start a new business.						55
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			39
Online voting has increased participation.			1.	\bigcirc		57
An online platform where residents can propose ideas has improved city life.			\bigcirc			50
Processing Identification Documents online has reduced waiting times.						74

Shanghai

SMART CITY RANKING		9 th of 102
GROUP	;	3
RATING		B A A to D
FACTOR RATINGS	B	BB Technologies

BACKGROUND INFORMATION

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

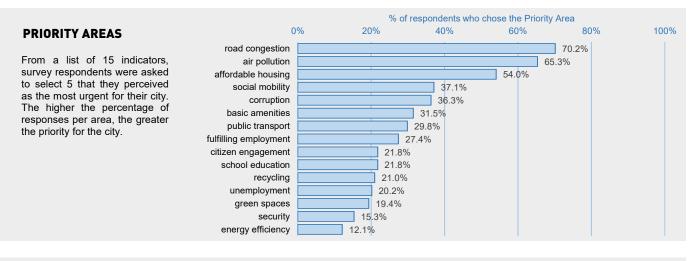
Population (UN World Cities Report)

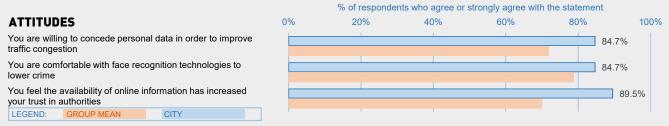
23,741,000



CTDUCTUDEC		LEGEND:	CITY GROUP MIN	GROUP MEAN	GROUP MAX
STRUCTURES					Oncon into
Health & Safety	0	20	Score 40	60	80 100
Basic sanitation meets the needs of the poorest areas.					0
Recycling services are satisfactory.				0	
Public safety is not a problem.				0	
Air pollution is not a problem.			\bigcirc		
Medical services provision is satisfactory.				0	
Mobility					
Traffic congestion is not a problem.			\bigcirc		
Public transport is satisfactory.					
Activities					
Green spaces are satisfactory.					
Green spaces are satisfactory.					0
Green spaces are satisfactory.					0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0
Employment finding services are available.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					

Shanghai





TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP ME	GROUP MAX	
Health & Safety	0	20	Score 40	60	80 100	
Online reporting of city maintenance problems provides a speedy solution.					\bigcirc	84
A website or App allows to give away unwanted items to other city residents.				C)	71
Free public wifi has improved access to services.					\bigcirc	82
CCTV cameras make residents feel safer.					\bigcirc	81
A website or App allows effective monitoring of air pollution.					\bigcirc	79
Arranging medical appointments online has improved access.					\bigcirc	84
Mobility						
Car-sharing Apps have reduced congestion.				\bigcirc		61
Apps that direct you to an available parking space have reduced journey time.						81
Bicycle hiring has reduced congestion.						73
Online scheduling and ticket sales make public transport easier to use.					\bigcirc	91
Activities						
Online purchasing of tickets to shows and museums has made it easier to atter	nd.					95
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.						87
IT skills are taught well in schools.					\bigcirc	85
Online services provided by the city has made it easier to start a new business.					\bigcirc	84
Governance						
Online public access to city finances has reduced corruption.				(74
Online voting has increased participation.				\bigcirc		71
An online platform where residents can propose ideas has improved city life.					0	81
Processing Identification Documents online has reduced waiting times.						82

Shenzhen

SMART CITY RANKING	43 rd Out of 102 3			
GROUP	;	3		
RATING		B AA to D		
FACTOR RATINGS	B	BB Technologies		

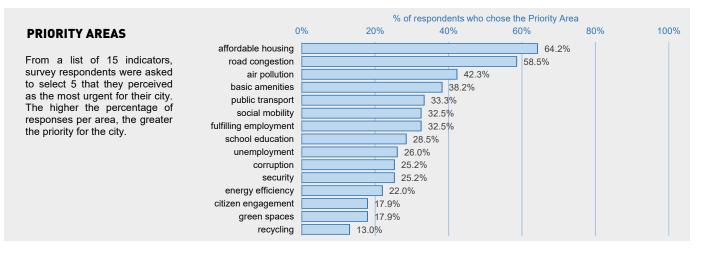
BACKGROUND INFORMATION

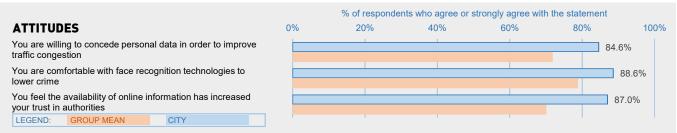
Country	2015	2016	2017
UN HDI	0.743	0.748	0.752
Life expectancy at Birth	76.1	76.3	76.4
Expected years of schooling	13.8	13.8	13.8
Mean years of schooling	7.7	7.8	7.8
GNI per capita (PPP \$)	13,519	14,354	15,270
City			



			CITY	GROUP N		
STRUCTURES		LEGEND:			GROUP	P MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc	
Recycling services are satisfactory.					\bigcirc	
Public safety is not a problem.						
Air pollution is not a problem.				\bigcirc		
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.			\bigcirc			
Public transport is satisfactory.				\bigcirc		
Public transport is satisfactory.						
Public transport is satisfactory.						
Public transport is satisfactory.						
Activities					0	
Activities Green spaces are satisfactory.		_			0	
Activities Green spaces are satisfactory.		_			0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.		_			0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Public transport is satisfactory. Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.						

Shenzhen





TECHNOLOGIES Score Score Score Score Health & Safety 0 20 40 60 80 100 Online reporting of city maintenance problems provides a speedy solution. 88.35 76.96 79.90 A website or App allows to give away unwanted items to other city residents. 9 9 79.00 CCUV camera make residents feel safer. 9 86.18 77.10 A website or App allows effective monitoring of air pollution. 77.10 77.10 Arranging medical appointments online has improved access. 91.46 76.96 MobiLity 0 65.18 76.96 Car-sharing Apps have reduced congestion. 74.53 74.53 Online scheduling and ticket sales make public transport easier to use. 91.87 74.53 Online scheduling and tickets to shows and museums has made it easier to attend. 93.83 91.06 Opportunities (Work & School) 91.06 84.16 84.16 Online services provided by the city has made it easier to start a new business. 91.06 84.16 Online services provided by the city has made it easier to start a new business. 91.06 73.88 Online public acc			LEGEND:		GROUF		
Health & Safety 0 20 40 60 80 100 Online reporting of city maintenance problems provides a speedy solution. 88.35 88.35 88.35 A website or App allows to give away unwanted items to other city residents. 9 90 90 Free public wift has improved access to services. 9 91 91 CCIV cameras make residents feel safer. 86.18 86.18 86.18 A website or App allows effective monitoring of air pollution. 77.10 77.10 Arranging medical appointments online has improved access. 91.46 Mobility 74.33 Car-sharing Apps have reduced congestion. 65.18 Apps that direct you to an available parking space have reduced journey time. 74.33 Bicycle hiring has reduced congestion. 74.33 Online scheduling and ticket sales make public transport easier to use. 91.87 Online purchasing of tickets to shows and museums has made it easier to attend. 93.63 Opportunities (Work & School) 84.15 Online caccess to job listings has made it easier to start a new business. 91.06 Maine services provided by the city has made it easier to start a new business. 91.06	TECHNOLOGIES		LEGEND.	GROUP MIN		GROUP MAX	
Online reporting of city maintenance problems provides a speedy solution. 88.35 A website or App allows to give away unwanted items to other city residents. 76.96 Free public wifi has improved access to services. 79.00 CCTV cameras make residents feel safer. 86.18 A website or App allows effective monitoring of air pollution. 77.10 Arranging medical appointments online has improved access. 91.46 Mobility 91.46 Car-sharing Apps have reduced congestion. 65.18 Apps that direct you to an available parking space have reduced journey time. 65.96 Bicycle hiring has reduced congestion. 74.53 Online purchasing of tickets to shows and museums has made it easier to use. 91.87 Orline access to job listings has made it easier to start a new business. 91.06 Online services provided by the city has made it easier to start a new business. 91.06 Online public access to city finances has reduced corruption. 73.88 Online public access to city finances has reduced corruption. 73.88 Online public access to city finances has reduced corruption. 73.88 Online public access to city finances has reduced corruption. 73.88 Online public access to city finances has reduced corruption.	Health & Cafaby	0	20		60	80 100	
A vebsite or App allows to give away unwanted items to other city residents. Free public wift has improved access to services. CCTV cameras make residents feel safer. A vebsite or App allows effective monitoring of air pollution. Arranging medical appointments online has improved access. Mobility Car-sharing Apps have reduced congestion. Apps that direct you to an available parking space have reduced journey time. Bicycle hiring has reduced congestion. Online scheduling and ticket sales make public transport easier to use. Online scheduling and ticket sales make public transport easier to use. Online scheduling of tickets to shows and museums has made it easier to attend. Opportunities (Work & School) Online access to job listings has made it easier to start a new business. Online services provided by the city has made it easier to start a new business. Online public access to jot finances has reduced corruption. Online public access to city finances has reduced corruption. Online public meased participation. An online platform where residents can propose ideas has improved city life. Online voltig has increased participation.		0	20	40	00		88 35
Pree public will has improved access to services. 79.00 CCTV cameras make residents feel safer. 86.18 A website or App allows effective monitoring of air pollution. 77.10 Arranging medical appointments online has improved access. 91.46 Mobility 91.46 Car-sharing Apps have reduced congestion. 65.18 Apps that direct you to an available parking space have reduced journey time. 74.53 Bicycle hiring has reduced congestion. 74.53 Online scheduling and ticket sales make public transport easier to use. 91.87 Activities 93.63 Opportunities (Work & School) 91.06 Online access to job listings has made it easier to start a new business. 91.06 Governance 91.06 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access							
CCTV cameras make residents feel safer. 86.18 A website or App allows effective monitoring of air pollution. 77.10 Arranging medical appointments online has improved access. 91.46 Mobility 65.18 Car-sharing Apps have reduced congestion. 65.18 Apps that direct you to an available parking space have reduced journey time. 76.96 Bicycle hiring has reduced congestion. 74.53 Online scheduling and ticket sales make public transport easier to use. 91.87 Activities 93.63 Online purchasing of tickets to shows and museums has made it easier to attend. 93.63 Opportunities (Work & School) 91.06 Online access to job listings has made it easier to start a new business. 91.06 Bit are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 91.06 Online public access to foly finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption.							
A websile or App allows effective monitoring of air pollution. Arranging medical appointments online has improved access. Mobility Car-sharing Apps have reduced congestion. Apps that direct you to an available parking space have reduced journey time. Bicycle hiring has reduced congestion. Online scheduling and ticket sales make public transport easier to use. Activities Online purchasing of tickets to shows and museums has made it easier to attend. Opportunities (Work & School) Online access to job listings has made it easier to find work. IT skills are taught well in schools. Online services provided by the city has made it easier to start a new business. Covernance Online putch as increased participation. An online platform where residents can propose ideas has improved city life. An online platform where residents can propose ideas has improved city life. T skills							
Arranging medical appointments online has improved access. 91.46 Mobility Car-sharing Apps have reduced congestion. 65.18 Apps that direct you to an available parking space have reduced journey time. 76.96 Bicycle hiring has reduced congestion. 74.53 Online scheduling and ticket sales make public transport easier to use. 91.87 Activities 93.63 Opportunities (Work & School) 91.06 Online purchasing of tickets to shows and museums has made it easier to attend. 91.06 Mile access to job listings has made it easier to find work. 91.06 T skills are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 91.06 Covernance 91.06 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 An online platform where residents can propose ideas has improved city life. 79.27							
Mobility 65.18 Car-sharing Apps have reduced congestion. 65.18 Apps that direct you to an available parking space have reduced journey time. 76.96 Bicycle hiring has reduced congestion. 74.53 Online scheduling and ticket sales make public transport easier to use. 91.87 Activities 93.63 Online purchasing of tickets to shows and museums has made it easier to attend. 93.63 Opportunities (Work & School) 91.06 Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 97.26 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27							
Car-sharing Apps have reduced congestion. 65.18 Apps that direct you to an available parking space have reduced journey time. 76.96 Bicycle hiring has reduced congestion. 74.53 Online scheduling and ticket sales make public transport easier to use. 91.87 Activities 93.63 Online purchasing of tickets to shows and museums has made it easier to attend. 93.63 Opportunities (Work & School) 91.06 Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 87.26 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27							00
Car-sharing Apps have reduced congestion. 65.18 Apps that direct you to an available parking space have reduced journey time. 76.96 Bicycle hiring has reduced congestion. 74.53 Online scheduling and ticket sales make public transport easier to use. 91.87 Activities 93.63 Online purchasing of tickets to shows and museums has made it easier to attend. 93.63 Opportunities (Work & School) 91.06 Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 97.26 Online public access to city finances has reduced corruption. 73.98 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27	Mobility						
Bicycle hiring has reduced congestion. 74.53 Online scheduling and ticket sales make public transport easier to use. 91.87 Activities 93.63 Opportunities (Work & School) 93.63 Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 87.26 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 73.92					0		65.18
Online scheduling and ticket sales make public transport easier to use. 91.87 Activities 93.63 Online purchasing of tickets to shows and museums has made it easier to attend. 93.63 Opportunities (Work & School) 91.06 Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 87.26 Covernance 73.98 Online voting has increased participation. 73.98 An online platform where residents can propose ideas has improved city life. 73.97	Apps that direct you to an available parking space have reduced journey time.					\bigcirc	76.96
Activities 93.63 Online purchasing of tickets to shows and museums has made it easier to attend. 93.63 Opportunities (Work & School) 91.06 Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 97.26 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27	Bicycle hiring has reduced congestion.					\bigcirc	74.53
Online purchasing of tickets to shows and museums has made it easier to attend. 93.63 Opportunities (Work & School) 91.06 Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 97.26 Covernance 93.63 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27	Online scheduling and ticket sales make public transport easier to use.					\bigcirc	91.87
Online purchasing of tickets to shows and museums has made it easier to attend. 93.63 Opportunities (Work & School) 91.06 Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 91.06 Online services provided by the city has made it easier to start a new business. 97.26 Covernance 91.06 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27							
Opportunities (Work & School) 91.06 Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 0 Online services provided by the city has made it easier to start a new business. 84.15 Browernance 87.26 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27							
Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 84.15 Online services provided by the city has made it easier to start a new business. 87.26 Governance 73.98 Online voting has increased participation. 73.98 An online platform where residents can propose ideas has improved city life. 79.27	Online purchasing of tickets to shows and museums has made it easier to attend	d.				\bigcirc	93.63
Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 84.15 Online services provided by the city has made it easier to start a new business. 87.26 Governance 73.98 Online voting has increased participation. 73.98 An online platform where residents can propose ideas has improved city life. 79.27							
Online access to job listings has made it easier to find work. 91.06 IT skills are taught well in schools. 84.15 Online services provided by the city has made it easier to start a new business. 87.26 Governance 73.98 Online voting has increased participation. 73.98 An online platform where residents can propose ideas has improved city life. 79.27	Opportunities (Work & School)						
IT skills are taught well in schools. 84.15 Online services provided by the city has made it easier to start a new business. 87.26 Governance 73.98 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27							91.06
Online services provided by the city has made it easier to start a new business. 87.26 Governance 73.98 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27						0	
Governance 73.98 Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27							87.26
Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27						Ŭ	
Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27							
Online public access to city finances has reduced corruption. 73.98 Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27							
Online voting has increased participation. 72.36 An online platform where residents can propose ideas has improved city life. 79.27	Governance						
An online platform where residents can propose ideas has improved city life.	Online public access to city finances has reduced corruption.					\bigcirc	73.98
	Online voting has increased participation.					\bigcirc	72.36
Processing Identification Documents online has reduced waiting times. 87.67	An online platform where residents can propose ideas has improved city life.					\bigcirc	79.27
	Processing Identification Documents online has reduced waiting times.					\bigcirc	87.67

Singapore

SMART CITY	1	st
RANKING	Out o	f 102
GROUP		I.
RATING	From A.	A to D
FACTOR	AAA	AAA
RATINGS	Structures	Technologies

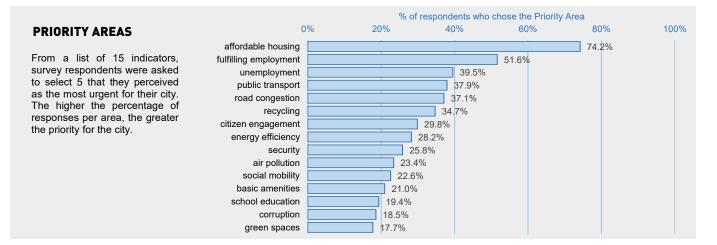
BACKGROUND INFORMATION

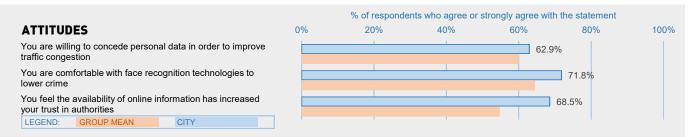
Country	2015	2016	2017
UN HDI	0.929	0.930	0.932
Life expectancy at Birth	82.8	83.0	83.2
Expected years of schooling	16.1	16.1	16.2
Mean years of schooling	11.5	11.5	11.5
GNI per capita (PPP \$)	78,742	78,427	82,503
City			



			CITY	GROUP N	MEAN		
STRUCTURES		LEGEND:				JP MAX	
			Score				
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.					\bigcirc		87.23
Recycling services are satisfactory.				\bigcirc			61.69
Public safety is not a problem.					\bigcirc		74.60
Air pollution is not a problem.				0			63.04
Medical services provision is satisfactory.					\bigcirc		79.44
Mobility							
Traffic congestion is not a problem.			\bigcirc				44.49
Public transport is satisfactory.				\bigcirc			66.53
Activities							
Green spaces are satisfactory.					0		76.88
Cultural activities (shows, bars, and museums) are satisfactory.					\bigcirc		76.61
Opportunities (Work & Cohool)							
Opportunities (Work & School)	_						75.67
Employment finding services are available. Most children have access to a good school.							78.23
Lifelong learning opportunities are provided by local institutions.							80.51
Businesses are creating new jobs.							62.23
Minorities feel welcome.							69.35
Minorities leel welcome.							09.00
Governance							
Information on local government decisions are easily accessible.					\bigcirc		76.08
Corruption of city officials is not an issue of concern.				C			69.62
Residents contribute to decision making of local government.							56.05
Residents provide feedback on local government projects.				\bigcirc			65.59

Singapore





TECHNOLOGIES		LEGEND:	CITY G	ROUP MEAN	GROUP MAX	
Health & Safety	0	20	Score 40 6	0 8	0 100	
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		69.
A website or App allows to give away unwanted items to other city residents.						61.
Free public wifi has improved access to services.				\bigcirc		72.
CCTV cameras make residents feel safer.						80.
A website or App allows effective monitoring of air pollution.				\bigcirc		67
Arranging medical appointments online has improved access.				C)	78
Mobility						
Car-sharing Apps have reduced congestion.						55
Apps that direct you to an available parking space have reduced journey time.						56
Bicycle hiring has reduced congestion.			\bigcirc			45
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		65
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	d.				\bigcirc	85
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.					\bigcirc	82
IT skills are taught well in schools.						68
Online services provided by the city has made it easier to start a new business.						66
Online services provided by the city has made it easier to start a new business.						00
Governance						
Online public access to city finances has reduced corruption.						54
Online voting has increased participation.						52
An online platform where residents can propose ideas has improved city life.						60
All online plation where residents can propose lideas has improved only me.						

Sofia

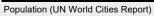
SMART CITY RANKING	Out c	9 th of 102
GROUP	;	3
RATING		C A A to D
FACTOR RATINGS	C C Structures	C C Technologies

BACKGROUND INFORMATION

Country	2015	2016	2017
UN HDI	0.807	0.810	0.813
Life expectancy at Birth	74.6	74.7	74.9
Expected years of schooling	15.1	14.8	14.8
Mean years of schooling	11.8	11.8	11.8
GNI per capita (PPP \$)	16,663	17,759	18,740

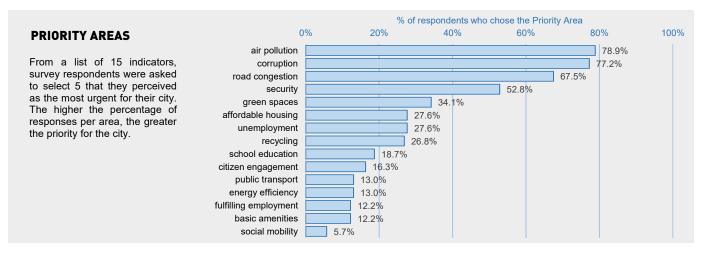
1,226,000

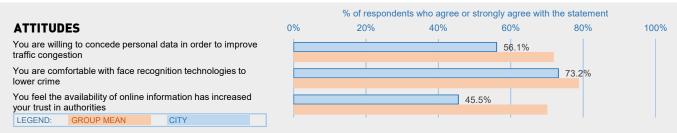
City





	E C		CITY			_
STRUCTURES		LEGEND:		GROUP ME	EAN GROUP	P MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.			0			
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.						
Air pollution is not a problem.		\bigcirc				
Medical services provision is satisfactory.			0			
Mobility						
Traffic congestion is not a problem.		\bigcirc				
			6			
Public transport is satisfactory. Activities			(
			0		0	
Activities Green spaces are satisfactory.			0		0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			0		0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						





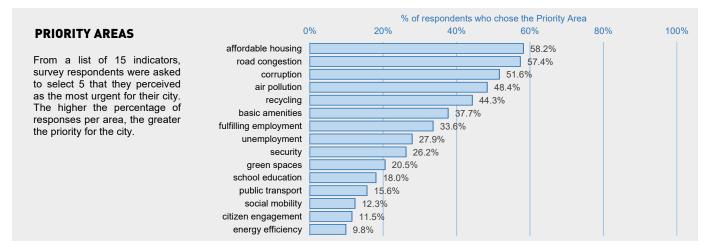
			CITY G	ROUP MEAN		
TECHNOLOGIES		LEGEND:			OUP MAX	
			Score			
Health & Safety	0	20	40 6	80 80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			37
A website or App allows to give away unwanted items to other city residents.			\bigcirc			51
Free public wifi has improved access to services.						59
CCTV cameras make residents feel safer.			\bigcirc			53
A website or App allows effective monitoring of air pollution.			\bigcirc			57
Arranging medical appointments online has improved access.			\bigcirc			44
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			32
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			38
Bicycle hiring has reduced congestion.			\bigcirc			35
Online scheduling and ticket sales make public transport easier to use.						54
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.			\bigcirc		78
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		77
IT skills are taught well in schools.			\bigcirc			57
Online services provided by the city has made it easier to start a new business.			\bigcirc			49
Governance						C (
Online public access to city finances has reduced corruption.						24
Online voting has increased participation.						31
An online platform where residents can propose ideas has improved city life.						36
Processing Identification Documents online has reduced waiting times.						51.

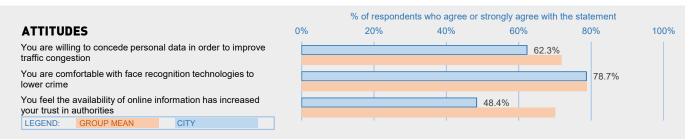
St. Petersburg

SMART CITY RANKING	73rd Out of 102	BACKGROUND INFORMATIONCountry201UN HDI0.81Life expectancy at Birth70.5Expected years of schooling15.4	0.815 0.816 71.1 71.2
	0	Mean years of schooling12.0GNI per capita (PPP \$)23,90City23,90	
GROUP	3	Population (UN World Cities Report)	4,993,0
RATING	CCC	eddlad/Bathado Finland Helanid Stockholm Estonia	And a
FACTOR RATINGS	CCC CC Structures Technologies	n Lithuania Map tiles by Stamen Design CC	Those of the second sec

					455 4 4 1	
STRUCTURES	I	EGEND:		TY GROUP N	IEAN GROUI	P MAX
	_		Scol	re		
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.			\bigcirc			
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				0		
NA - 1.112						
Mobility Traffic congestion is not a problem.						
I ramic congestion is not a problem.		(\bigcirc			
Public transport is satisfactory.				\bigcirc		
Activities Green spaces are satisfactory.)	
Activities						
Activities Green spaces are satisfactory.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

St. Petersburg





TECHNOLOGIES		LEGEND:		GROUP ME	EAN GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		(
A website or App allows to give away unwanted items to other city residents.				\bigcirc		6
Free public wifi has improved access to services.						ŧ
CCTV cameras make residents feel safer.				\bigcirc		6
A website or App allows effective monitoring of air pollution.			\bigcirc			4
Arranging medical appointments online has improved access.				\bigcirc		(
Mobility						
Car-sharing Apps have reduced congestion.						4
Apps that direct you to an available parking space have reduced journey time.				\bigcirc		(
Bicycle hiring has reduced congestion.			\bigcirc			4
Online scheduling and ticket sales make public transport easier to use.				C)	1
Activities						
Online purchasing of tickets to shows and museums has made it easier to atter	nd.				\bigcirc	8
Our enter the Alteria Colored						
Opportunities (Work & School)					\bigcirc	
Online access to job listings has made it easier to find work.						ļ
IT skills are taught well in schools.						
Online services provided by the city has made it easier to start a new business.						ł
Governance						
Online public access to city finances has reduced corruption.						
Online voting has increased participation.						į
An online platform where residents can propose ideas has improved city life.						į
Processing Identification Documents online has reduced waiting times.				C		-
rocessing remaindation bootiments online has reduced walking times.						

Stockholm

SMART CITY	25th
RANKING	Out of 102
GROUP	1
RATING	BBB From AAA to D
FACTOR	A BBB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

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

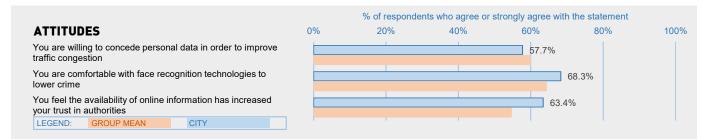
City



STRUCTURES		LEGEND:		GROUP ME	EAN GROUP	P MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.				\bigcirc		
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.						
Mobility			~			
Traffic congestion is not a problem.		(
Public transport is satisfactory.						
Activities						
Green spaces are satisfactory.)	
				C		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				С	0	
Green spaces are satisfactory.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0 0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Stockholm

% of respondents who chose the Priority Area 20% 40% 80% 100% 0% 60% **PRIORITY AREAS** affordable housing 67.5% From a list of 15 indicators, 56.9% security survey respondents were asked to select 5 that they perceived unemployment 41.5% 40.7% school education as the most urgent for their city. public transport 38.2% The higher the percentage of road congestion 36.6% responses per area, the greater social mobility 26.8% the priority for the city. recycling 23.6% fulfilling employment 23.6% air pollution 21.1% green spaces 19.5% basic amenities 17.9% energy efficiency 17.1% citizen engagement 15.4% corruption 14.6%



TECHNOLOGIES		LEGEND:		GROUP MEA	GROUP MAX	
Health & Safety	0	20	Score 40	60	80 100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			49
A website or App allows to give away unwanted items to other city residents.			Ĭ			70
Free public wifi has improved access to services.				\bigcirc		58
CCTV cameras make residents feel safer.				Ŭ		48
A website or App allows effective monitoring of air pollution.						35
Arranging medical appointments online has improved access.				\bigcirc		62
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			27
Apps that direct you to an available parking space have reduced journey time.						40
Bicycle hiring has reduced congestion.						41
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		66
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	d.			C)	74
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		64
IT skills are taught well in schools.				\bigcirc		58
Online services provided by the city has made it easier to start a new business.						45
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			41
Online voting has increased participation.			\bigcirc			37
An online platform where residents can propose ideas has improved city life.						43
Processing Identification Documents online has reduced waiting times.			\bigcirc			51

Sydney

SMART CITY	14th
RANKING	Out of 102
GROUP	1
RATING	From AAA to D
FACTOR	BBB A
RATINGS	Structures Technologies

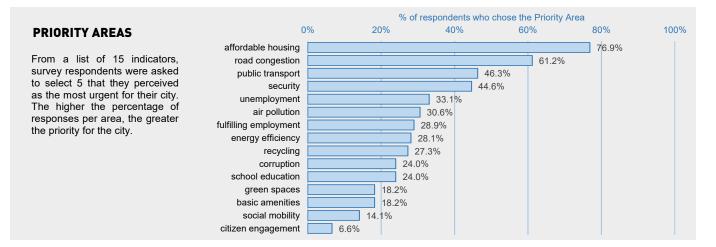
BACKGROUND INFORMATION

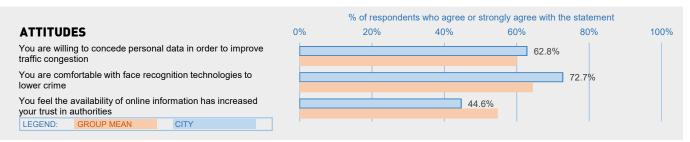
Country	2015	2016	2017
UN HDI	0.936	0.938	0.939
Life expectancy at Birth	82.7	82.9	83.1
Expected years of schooling	23.3	22.9	22.9
Mean years of schooling	12.8	12.9	12.9
GNI per capita (PPP \$)	43,138	43,637	43,560
City			



			01714		1	
STRUCTURES		LEGEND:		GROUP MEAN	GROUP MAX	
			Score			
Health & Safety	0	20	40	60	80 100	
Basic sanitation meets the needs of the poorest areas.				\bigcirc		66.67
Recycling services are satisfactory.				\bigcirc		65.98
Public safety is not a problem.						47.66
Air pollution is not a problem.			\bigcirc			43.94
Medical services provision is satisfactory.				\bigcirc		64.46
Mobility						
Traffic congestion is not a problem.		\bigcirc				17.91
Public transport is satisfactory.			C)		53.86
Activities						
Activities						61 71
Green spaces are satisfactory.			_	0		61.71
				0		61.71 74.66
Green spaces are satisfactory.			-	0	-	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			-		-	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						74.66
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						74.66 69.56
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						74.66 69.56 71.49
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						74.66 69.56 71.49 67.08
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						74.66 69.56 71.49 67.08 64.88
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Winorities feel welcome.						74.66 69.56 71.49 67.08 64.88
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						74.66 69.56 71.49 67.08 64.88 56.06
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						74.66 69.56 71.49 67.08 64.88 56.06 59.50

Sydney





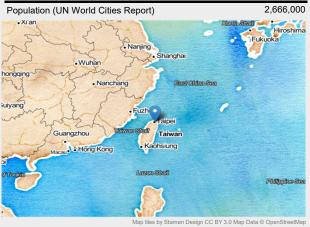
TECHNOLOGIES		LEGEND:		GROUP ME	EAN GROUP	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc)		53
A website or App allows to give away unwanted items to other city residents.				\bigcirc		70
Free public wifi has improved access to services.				\bigcirc		58
CCTV cameras make residents feel safer.				\bigcirc		61
A website or App allows effective monitoring of air pollution.			\bigcirc			40
Arranging medical appointments online has improved access.				\bigcirc		62
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			44
Apps that direct you to an available parking space have reduced journey time.						44
Bicycle hiring has reduced congestion.			\bigcirc			35
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		68
Activities						
Online purchasing of tickets to shows and museums has made it easier to atte	end.				\bigcirc	77
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.						75
IT skills are taught well in schools.						53
Online services provided by the city has made it easier to start a new business						49
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			39
Online voting has increased participation.			(\bigcirc		56
An online platform where residents can propose ideas has improved city life.			\bigcirc	-		47
Processing Identification Documents online has reduced waiting times.						60

Taipei City

SMART CITY	7	th	
RANKING	Out d	of 102	
GROUP	2		
RATING	From AAA to D		
FACTOR	BBB	A	
RATINGS	Structures	Technologies	

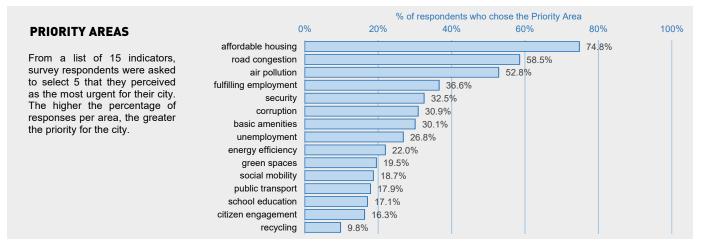
BACKGROUND INFORMATION

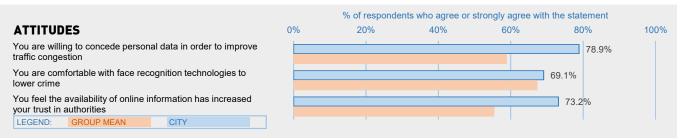
Calculation based on UN Methodology	2015	2016	2017
HDI	0.885	0.903	0.907
Life expectancy at Birth	80.2	80.0	80.4
Expected years of schooling	16.6	16.6	16.6
Mean years of schooling	11.9	12.0	12.1
GNI per capita (PPP \$)	45,547	46,054	47,144
City			



CTDUCTUDEC		LEGEND:		GROUP	MEAN	
STRUCTURES					GROUP	IVI/4/
Health & Safety	0	20	Score 40	60	80	100
Basic sanitation meets the needs of the poorest areas.					0	
Recycling services are satisfactory.					0	
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.				\bigcirc		
, ,						
Activities						
Activities Green spaces are satisfactory.				0		
Activities Green spaces are satisfactory.				0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.		_		0	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.		-			0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern. Residents contribute to decision making of local government.						

Taipei City





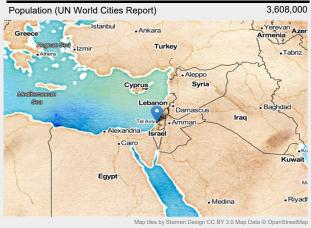
TECHNOLOGIES		LEGEND:		GROUP ME	AN GROUP M/	X
Health & Safety	0	20	Score 40	60	80	00
Online reporting of city maintenance problems provides a speedy solution.				(\bigcirc	76.2
A website or App allows to give away unwanted items to other city residents.						74.8
Free public wifi has improved access to services.					\bigcirc	87.2
CCTV cameras make residents feel safer.				C)	73.0
A website or App allows effective monitoring of air pollution.				\bigcirc		67.4
Arranging medical appointments online has improved access.					\bigcirc	80.4
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			54.6
Apps that direct you to an available parking space have reduced journey time.				\bigcirc		65.4
Bicycle hiring has reduced congestion.				\bigcirc	_	64.5
Online scheduling and ticket sales make public transport easier to use.					\bigcirc	81.7
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.					87.5
Opportunities (Mark & Cohool)						
Opportunities (Work & School) Online access to job listings has made it easier to find work.						70.7
IT skills are taught well in schools.						65.8
Online services provided by the city has made it easier to start a new business.						70.0
Online services provided by the city has made it easier to start a new business.				\bigcirc		70.0
Governance						
Online public access to city finances has reduced corruption.				\bigcirc		70.3
Online voting has increased participation.				C		74.1
An online platform where residents can propose ideas has improved city life.					\bigcirc	77.2
Processing Identification Documents online has reduced waiting times.				C)	73.5

Tel Aviv

SMART CITY	46th			
RANKING	Out of 102			
GROUP	2			
RATING		B AA to D		
FACTOR	BBB	BB		
RATINGS	Structures	Technologies		

BACKGROUND INFORMATION

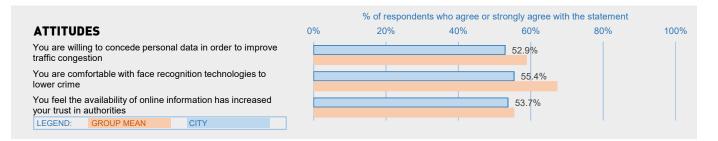
Country	2015	2016	2017
UN HDI	0.901	0.902	0.903
Life expectancy at Birth	82.3	82.5	82.7
Expected years of schooling	16.0	15.9	15.9
Mean years of schooling	13.0	13.0	13.0
GNI per capita (PPP \$)	31,734	32,273	32,711
City			



						_
STRUCTURES		LEGEND:	GROUP MIN	GROUP MEA	N GROUP N	MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.			\bigcirc			
Recycling services are satisfactory.			(\bigcirc		
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.						
Activities						
Activities Green spaces are satisfactory.			0			
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			0		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						

Tel Aviv

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** road congestion 71.9% From a list of 15 indicators, affordable housing 55.4% survey respondents were asked to select 5 that they perceived public transport 44.6% air pollution 43.0% as the most urgent for their city. security 40.5% The higher the percentage of recycling 31.4% responses per area, the greater green spaces 30.6% the priority for the city. corruption 24.8% school education 24.8% fulfilling employment 21.5% basic amenities 21.5% unemployment 20.7% social mobility 15.7% citizen engagement 11.6% energy efficiency 11.6%



TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP MEA	N GROUP MAX]
Health & Safety	0	20	Score 40	60	80 100	
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		59.92
A website or App allows to give away unwanted items to other city residents.				\bigcirc		59.23
Free public wifi has improved access to services.				\bigcirc		58.13
CCTV cameras make residents feel safer.						48.62
A website or App allows effective monitoring of air pollution.			\bigcirc			31.27
Arranging medical appointments online has improved access.				\bigcirc		72.45
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			38.71
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			50.83
Bicycle hiring has reduced congestion.			(56.20
Online scheduling and ticket sales make public transport easier to use.			(56.34
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.			C		74.66
				_		
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		71.21
IT skills are taught well in schools.				\bigcirc		69.28
Online services provided by the city has made it easier to start a new business.			\bigcirc			51.10
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			47.25
Online voting has increased participation.						45.45
An online platform where residents can propose ideas has improved city life.			\bigcirc	-		50.55
Processing Identification Documents online has reduced waiting times.				\bigcirc		59.23

The Hague

SMART CITY RANKING	29 th		BACKGROUN Country UN HDI Life expectancy at
	Out	of 102	Expected years of
			Mean years of sch
			GNI per capita (PI
GROUP		1	City
oncor		•	Population (Euros
RATING		B B AA to D	Dublin Lunited Inteland Extested Chemoral
FACTOR RATINGS	A	BB Technologies	Expredificition

BACKGROUND INFORMATION

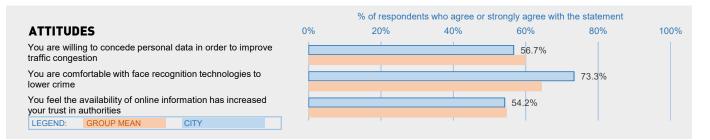
Country	2015	2016	2017
UN HDI	0.926	0.928	0.931
Life expectancy at Birth	81.7	81.9	82.0
Expected years of schooling	18.1	18.0	18.0
Mean years of schooling	12.1	12.1	12.2
GNI per capita (PPP \$)	46,239	46,711	47,900



			CIT	Y GROUP N	IFAN	
STRUCTURES		LEGEND:				JP MAX
			Score	Э		
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.)	
Recycling services are satisfactory.				C)	
Public safety is not a problem.				\bigcirc		
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				(\bigcirc	
Mobility						
Traffic congestion is not a problem.			\bigcirc			
Public transport is satisfactory.				\bigcirc		
			_	0		
Green spaces are satisfactory.			-	0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.				0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					•	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

The Hague

			% of resp	ondents who	chose the Priority	Area	
PRIORITY AREAS	0	% 2	0%	40%	60%	80%	100%
	affordable housing				64.2	2%	
From a list of 15 indicators,	security				61.7%)	
survey respondents were asked	road congestion			36.7%			
to select 5 that they perceived	public transport			35.8%			
as the most urgent for their city.	green spaces			35.0%			
The higher the percentage of	citizen engagement		30	.8%			
responses per area, the greater the priority for the city.	air pollution		29.2	2%			
the phonty for the city.	basic amenities		28.3	%			
	unemployment		27.5%	6			
	energy efficiency		27.5%	6			
	school education		25.0%				
	recycling		18.3%				
	social mobility		17.5%				
	fulfilling employment	· ·	16.7%				
	corruption	15	5.0%				



			CITY	GROUP ME	AN	_
TECHNOLOGIES		LEGEND:	GROUP MIN		GROUP	MAX
	0	20	Score 40	60	80	100
Health & Safety	0	20	40	00	00	55.
Online reporting of city maintenance problems provides a speedy solution.						55.
A website or App allows to give away unwanted items to other city residents.				0		56. 46.
Free public wifi has improved access to services.			0			40. 55.
CCTV cameras make residents feel safer.						
A website or App allows effective monitoring of air pollution.						30. 65.
Arranging medical appointments online has improved access.				\bigcirc		00.
Mobility						
Car-sharing Apps have reduced congestion.						32.
Apps that direct you to an available parking space have reduced journey time.						35.
Bicycle hiring has reduced congestion.						40.
Online scheduling and ticket sales make public transport easier to use.						52.
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.			\bigcirc		71.
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.				\bigcirc		61.
IT skills are taught well in schools.						47.
Online services provided by the city has made it easier to start a new business.						46.
Governance						
Online public access to city finances has reduced corruption.						35.
Online voting has increased participation.						40.
An online platform where residents can propose ideas has improved city life.						45.
Processing Identification Documents online has reduced waiting times.						52.

Tianjin

SMART CITY	4	st
RANKING	Out c	of 102
GROUP		3
RATING		B A A to D
FACTOR	B	BB
RATINGS	Structures	Technologies

BACKGROUND INFORMATION

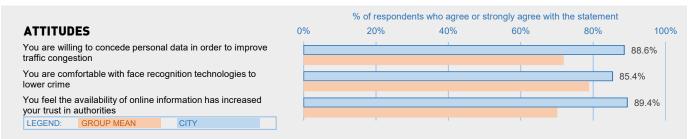
Country	2015	2016	2017
UN HDI	0.743	0.748	0.752
Life expectancy at Birth	76.1	76.3	76.4
Expected years of schooling	13.8	13.8	13.8
Mean years of schooling	7.7	7.8	7.8
GNI per capita (PPP \$)	13,519	14,354	15,270
City			



			CI	TY GROUP	MEAN	
STRUCTURES		LEGEND:	GROUP MIN			IP MAX
			Sco	ore		
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc	
Recycling services are satisfactory.					\bigcirc	
Public safety is not a problem.						
Air pollution is not a problem.				\bigcirc		
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.				\bigcirc		
Public transport is satisfactory.						
Public transport is satisfactory.						
Activities						
Activities Green spaces are satisfactory.					0	
Activities Green spaces are satisfactory.		_		_	0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						

Tianjin

% of respondents who chose the Priority Area 40% 80% 100% 0% 20% 60% **PRIORITY AREAS** air pollution 61.8% From a list of 15 indicators, 52.8<mark>%</mark> road congestion survey respondents were asked to select 5 that they perceived basic amenities 42.3% security 39.0% as the most urgent for their city. fulfilling employment 37.4% The higher the percentage of affordable housing 36.6% responses per area, the greater green spaces 32.5% the priority for the city. public transport 29.3% social mobility 25.2% corruption 24.4% 17.9% recycling energy efficiency 16.3% school education 12.2% unemployment 12.2% citizen engagement 8.9%



Health & Safety 0 20 40 60 80 100 Online reporting of city maintenance problems provides a speedy solution. 88.48 73.31 78 73.31 78 73.31 78 78.31 78 78.30 73.31 78 78.31 78 78.31 78 78.30 78.36 78.31 78.36 78.31 78.31 78.31 78.31 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.33 78.3	TECHNOLOGIES		LEGEND:	GROUP MIN	GRO	JP MEAN GROUP M	IAX	
Online reporting of city maintenance problems provides a speedy solution. 88.48 A website or App allows to give away unwanted items to other city residents. 73.31 Free public wifi has improved access to services. 85.09 CCTV camers make residents feel safer. 85.64 A website or App allows effective monitoring of air pollution. 78.86 Arranging medical appointments online has improved access. 86.99 Mobility 78.73 Car-sharing Apps have reduced congestion. 78.73 Apps that direct you to an available parking space have reduced journey time. 78.18 Bicycle hiring has reduced congestion. 89.43 Online scheduling and ticket sales make public transport easier to use. 89.43 Online scheduling of tickets to shows and museums has made it easier to attend. 89.70 Online access to job listings has made it easier to find work. 89.70 T skills are taught well in schools. 83.88 Online services provided by the city has made it easier to start a new business. 83.83 Ouline public access to job listings has made it easier to start a new business. 83.82 Online public access to oly finances has reduced corruption. 0.62 Online public access to oly finances has reduced corruption.	Health & Safety	0	20		60	80	100	
Free public with has improved access to services. 85.09 CCTV cameras make residents feel safer. 85.64 A website or App allows effective monitoring of air pollution. 78.86 Arranging medical appointments online has improved access. 86.99 Mobility 78.73 Car-sharing Apps have reduced congestion. 78.73 Apps that direct you to an available parking space have reduced journey time. 78.18 Bicycle hiring has reduced congestion. 86.94 Online scheduling and ticket sales make public transport easier to use. 89.43 Activities 89.57 Opportunities (Work & School) 89.70 Online access to job listings has made it easier to start a new business. 89.70 Online services provided by the city has made it easier to start a new business. 89.70 Online services provided by the city has made it easier to start a new business. 89.70 Online public access to city finances has reduced corruption. 80.62 Online public access to city finances has reduced corruption. 80.62 Online public access to city finances has reduced corruption. 80.62 Online public access to city finances has reduced corruption. 80.62 Online voting has increased participation.						\bigcirc	88	3.48
CCTV cameras make residents feel safer. A website or App allows effective monitoring of air pollution. Arranging medical appointments online has improved access. Mobility Car-sharing Apps have reduced congestion. Apps that direct you to an available parking space have reduced journey time. Bicycle hiring has reduced congestion. Online scheduling and ticket sales make public transport easier to use. Activities Online scheduling of tickets to shows and museums has made it easier to attend. Te skills are taught well in schools. Online services provided by the city has made it easier to start a new business. Bicycle hiring has increased participation. Covernance Online public access to city finances has reduced corruption. Online public access to city finances has reduced corruption. An online platform where residents can propose ideas has improved city life. Bicycle hiring has increased participation. An online platform where residents can propose ideas has improved city life. Bicycle hiring has increased participation. An online platform where residents can propose ideas has improved city life. Bicycle hiring has increased participation. An online platform where residents can propose ideas has improved city life. Bicycle hiring has increased participation. An online platform where residents can propose ideas has improved city life. Bicycle hiring has increased participation. An online platform where residents can propose ideas has improved city life. Bicycle hiring has increased participation. An online platform where residents can propose ideas has improved city life. Bicycle hiring has increased participation. An online platform where residents can propose ideas has improved city life. Bicycle hiring has increased participation. Bicycle hiring has increased p	A website or App allows to give away unwanted items to other city residents.					0	73	3.31
A website or App allows effective monitoring of air pollution. Arranging medical appointments online has improved access. Mobility Car-sharing Apps have reduced congestion. Apps that direct you to an available parking space have reduced journey time. Bicycle hiring has reduced congestion. Online scheduling and ticket sales make public transport easier to use. Activities Online scheduling of tickets to shows and museums has made it easier to attend. Opportunities (Work & School) Online access to job listings has made it easier to find work. IT skills are taught well in schools. Online services provided by the city has made it easier to start a new business. Based of the easier to start a new business. Covernance Online public access to city finances has reduced corruption. An online public access to city finances has reduced corruption. An online public access to city finances has reduced corruption. An online public access to city finances has reduced corruption. An online public access to city finances has reduced corruption. An online public access to city finances has reduced corruption. An online public access to city finances has reduced corruption. An online public access to city finances has reduced corruption. An online public access to city finances has reduced corruption. An online public access to city finances has improved city life. Based access to city finances has improved city life. Based access to city finances has reduced corruption. An online public access to city finances has improved city life. Based access finances has improved city life. Based access finances has the finances has improved city life. Based access finances has the financ	Free public wifi has improved access to services.						85	5.09
Arranging medical appointments online has improved access. 86.99 Mobility 78.73 Car-sharing Apps have reduced congestion. 78.73 Apps that direct you to an available parking space have reduced journey time. 78.73 Bicycle hiring has reduced congestion. 86.04 Online scheduling and ticket sales make public transport easier to use. 89.43 Activities 89.43 Online purchasing of tickets to shows and museums has made it easier to attend. 89.57 Opportunities (Work & School) 89.70 Online access to job listings has made it easier to find work. 89.70 I' skills are taught well in schools. 83.88 Online services provided by the city has made it easier to start a new business. 83.88 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	CCTV cameras make residents feel safer.						85	5.64
Mobility 78.73 Car-sharing Apps have reduced congestion. 78.73 Apps that direct you to an available parking space have reduced journey time. 78.18 Bicycle hiring has reduced congestion. 86.04 Online scheduling and ticket sales make public transport easier to use. 89.43 Activities 89.57 Opportunities (Work & School) 89.57 Online purchasing of tickets to shows and museums has made it easier to attend. 89.57 Opportunities (Work & School) 89.70 Online access to job listings has made it easier to find work. 89.70 I'r skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Online public access to city finances has reduced corruption. 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	A website or App allows effective monitoring of air pollution.						78	3.86
Car-sharing Apps have reduced congestion. 78.73 Apps that direct you to an available parking space have reduced journey time. 78.18 Bicycle hiring has reduced congestion. 86.04 Online scheduling and ticket sales make public transport easier to use. 89.43 Activities 89.57 Online purchasing of tickets to shows and museums has made it easier to attend. 89.57 Opportunities (Work & School) 89.70 Online access to job listings has made it easier to find work. 89.70 IT skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online public access to city finances has reduced corruption. 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Arranging medical appointments online has improved access.					\bigcirc	86	3.99
Apps that direct you to an available parking space have reduced journey time. 78.18 Bicycle hiring has reduced congestion. 86.04 Online scheduling and ticket sales make public transport easier to use. 89.43 Activities 89.57 Opportunities (Work & School) 89.57 Online access to job listings has made it easier to find work. 89.70 IT skills are taught well in schools. 83.88 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online public access to oity finances has reduced corruption. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Mobility							
Bicycle hiring has reduced congestion. 86.04 Online scheduling and ticket sales make public transport easier to use. 89.43 Activities 89.57 Opportunities (Work & School) 89.57 Online access to job listings has made it easier to find work. 89.70 IT skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online public access to city finances has reduced corruption. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Car-sharing Apps have reduced congestion.					\bigcirc	78	3.73
Online scheduling and ticket sales make public transport easier to use. 89.43 Activities 89.57 Online purchasing of tickets to shows and museums has made it easier to attend. 89.57 Opportunities (Work & School) 89.70 Online access to job listings has made it easier to find work. 89.70 IT skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Apps that direct you to an available parking space have reduced journey time.					\bigcirc	78	3.18
Activities 89.57 Online purchasing of tickets to shows and museums has made it easier to attend. 89.57 Opportunities (Work & School) 89.70 Online access to job listings has made it easier to find work. 89.70 IT skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Bicycle hiring has reduced congestion.					\bigcirc	86	3.04
Online purchasing of tickets to shows and museums has made it easier to attend. 89.57 Opportunities (Work & School) 89.70 Online access to job listings has made it easier to find work. 89.70 IT skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online public access to city finances has reduced corruption. 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Online scheduling and ticket sales make public transport easier to use.					\bigcirc	89	9.43
Online purchasing of tickets to shows and museums has made it easier to attend. 89.57 Opportunities (Work & School) 89.70 Online access to job listings has made it easier to find work. 89.70 IT skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Activities							
Online access to job listings has made it easier to find work. 89.70 IT skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20						\bigcirc	89	9.57
Online access to job listings has made it easier to find work. 89.70 IT skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20								
IT skills are taught well in schools. 83.47 Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online public access to city finances has reduced corruption. 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Opportunities (Work & School)							
Online services provided by the city has made it easier to start a new business. 83.88 Governance 80.62 Online public access to city finances has reduced corruption. 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20						\bigcirc		
Governance 80.62 Online public access to city finances has reduced corruption. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	IT skills are taught well in schools.					\bigcirc	83	3.47
Online public access to city finances has reduced corruption. 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Online services provided by the city has made it easier to start a new business.						83	3.88
Online public access to city finances has reduced corruption. 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20								
Online public access to city finances has reduced corruption. 80.62 Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20								
Online voting has increased participation. 72.76 An online platform where residents can propose ideas has improved city life. 83.20	Governance							
An online platform where residents can propose ideas has improved city life. 83.20	Online public access to city finances has reduced corruption.					\bigcirc	80).62
	Online voting has increased participation.					\bigcirc	72	2.76
Processing Identification Documents online has reduced waiting times.	An online platform where residents can propose ideas has improved city life.					\bigcirc	83	3.20
	Processing Identification Documents online has reduced waiting times.						83	3.74

Tokyo

SMART CITY RANKING		2nd of 102	
GROUP	2	2	
RATING	B From AAA to D		
FACTOR RATINGS	BB Structures	B Technologies	

BACKGROUND INFORMATION

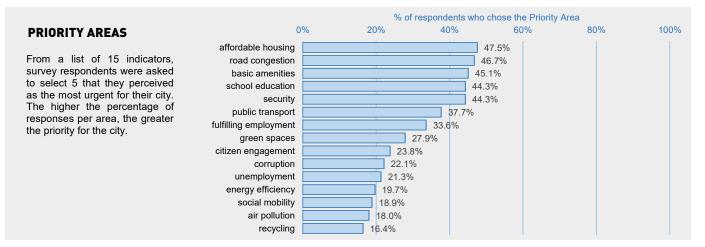
Country	2015	2016	2017
UN HDI	0.905	0.907	0.909
Life expectancy at Birth	83.6	83.8	83.9
Expected years of schooling	15.2	15.2	15.2
Mean years of schooling	12.5	12.7	12.8
GNI per capita (PPP \$)	39,322	38,267	38,986
City			

ity



CITY GROUP MEAN LEGEND: GROUP MIN GROUP MAX STRUCTURES Score 0 20 40 60 80 100 **Health & Safety** 69.67 Basic sanitation meets the needs of the poorest areas. \bigcirc 68.17 Recycling services are satisfactory. \bigcirc Public safety is not a problem. \bigcirc 57.65 45.49 Air pollution is not a problem. \bigcirc Medical services provision is satisfactory. 67.49 **Mobility** 28.14 Traffic congestion is not a problem. \bigcirc Public transport is satisfactory. \bigcirc 62.02 **Activities** 34.97 Green spaces are satisfactory. \bigcirc 60.79 Cultural activities (shows, bars, and museums) are satisfactory. \bigcirc **Opportunities (Work & School)** Employment finding services are available. \bigcirc 53.01 43.03 Most children have access to a good school. \bigcirc Lifelong learning opportunities are provided by local institutions. 52.19 Businesses are creating new jobs. 44.13 34.70 Minorities feel welcome. Governance \bigcirc 38.52 Information on local government decisions are easily accessible. 31.56 Corruption of city officials is not an issue of concern. \bigcirc \bigcirc Residents contribute to decision making of local government. 35.25 Residents provide feedback on local government projects. \bigcirc 35.52

Tokyo



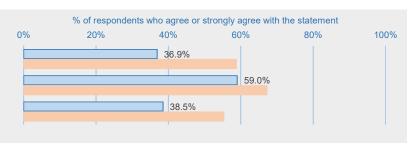


You are willing to concede personal data in order to improve traffic congestion

You are comfortable with face recognition technologies to lower crime

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

LEGEND: GROUP MEAN CITY



TECHNOLOGIES	LEGEND:	GROUP MIN	GROUP MEA	AN GROUP MAX	
Health & Safety	0 20	Score 40	60	80 100	
Online reporting of city maintenance problems provides a speedy solution.			0		56.8
A website or App allows to give away unwanted items to other city residents.			\bigcirc		68.5
Free public wifi has improved access to services.		C)		53.1
CCTV cameras make residents feel safer.			\bigcirc		62.5
A website or App allows effective monitoring of air pollution.					37.9
Arranging medical appointments online has improved access.			\bigcirc		62.8
Mobility					
Car-sharing Apps have reduced congestion.	(23.2
Apps that direct you to an available parking space have reduced journey time.					42.4
Bicycle hiring has reduced congestion.		\bigcirc			27.1
Online scheduling and ticket sales make public transport easier to use.			\bigcirc		65.4
Activities					
Online purchasing of tickets to shows and museums has made it easier to attend	l.		\bigcirc		68.0
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.			\bigcirc		70.6
IT skills are taught well in schools.		\bigcirc			31.5
Online services provided by the city has made it easier to start a new business.					41.9
Governance					
Online public access to city finances has reduced corruption.		\bigcirc			30.1
Online voting has increased participation.		\bigcirc			37.1
An online platform where residents can propose ideas has improved city life.		\bigcirc			37.1
Processing Identification Documents online has reduced waiting times.		\bigcirc			45.7

Toronto

SMART CITY RANKING	15th Out of 102				
GROUP	1				
RATING	A From AAA to D				
FACTOR RATINGS	A Structures Tec	A hnologies			

BACKGROUND INFORMATION

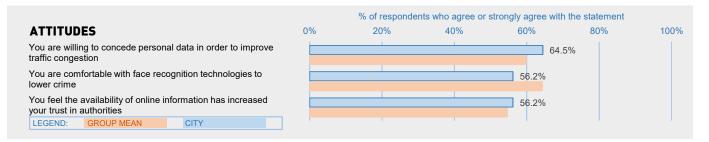
Country	2015	2016	2017
UN HDI	0.920	0.922	0.926
Life expectancy at Birth	82.2	82.4	82.5
Expected years of schooling	16.3	16.4	16.4
Mean years of schooling	13.1	13.1	13.3
GNI per capita (PPP \$)	42,512	42,664	43,433
City			



			CITY	GROUP ME	EAN	
STRUCTURES		LEGEND:	GROUP MIN			JP MAX
	0	20	Score	10		100
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				\bigcirc		
Recycling services are satisfactory.				(
Public safety is not a problem.			\bigcirc			
Air pollution is not a problem.			\bigcirc			
Medical services provision is satisfactory.				\bigcirc		
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.			\bigcirc			
Green spaces are satisfactory.			_	0		
Green spaces are satisfactory.			_	0	0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			-	0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)			-	0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			-	0		
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Toronto

% of respondents who chose the Priority Area 20% 40% 60% 80% 100% 0% **PRIORITY AREAS** affordable housing 80.2% From a list of 15 indicators, road congestion 62.8% survey respondents were asked to select 5 that they perceived public transport 41.3% unemployment 38.8% as the most urgent for their city. fulfilling employment 34.7% The higher the percentage of school education 34.7% responses per area, the greater air pollution 33.1% the priority for the city. security 28.1% corruption 26.4% energy efficiency 20.7% 18.2% green spaces basic amenities 16.5% social mobility 12.4% recycling 10.7% citizen engagement 9.9%



TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP M	EAN GROUP	MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc			50.6	9
A website or App allows to give away unwanted items to other city residents.				\bigcirc		60.3	3
Free public wifi has improved access to services.				\bigcirc		65.0)1
CCTV cameras make residents feel safer.						54.6	8
A website or App allows effective monitoring of air pollution.			\bigcirc			42.7	0
Arranging medical appointments online has improved access.			(55.9	2
Mobility							
Car-sharing Apps have reduced congestion.						48.4	8
Apps that direct you to an available parking space have reduced journey time.						50.6	9
Bicycle hiring has reduced congestion.						42.0)1
Online scheduling and ticket sales make public transport easier to use.				\bigcirc		61.8	5
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	nd.			(\bigcirc	73.9)7
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				\bigcirc		67.3	6
IT skills are taught well in schools.			\bigcirc			52.2	20
Online services provided by the city has made it easier to start a new business.						55.3	37
Governance							
Online public access to city finances has reduced corruption.			\bigcirc			37.1	9
Online voting has increased participation.			\bigcirc			48.7	6
An online platform where residents can propose ideas has improved city life.			\bigcirc			46.0)1
Processing Identification Documents online has reduced waiting times.						55.5	51

Vancouver

SMART CITY RANKING	1				
GROUP	1				
RATING	A From AAA to D				
FACTOR RATINGS	A Structures	BBB Technologies			

BACKGROUND INFORMATION

Country	2015	2016	2017
UN HDI	0.920	0.922	0.926
Life expectancy at Birth	82.2	82.4	82.5
Expected years of schooling	16.3	16.4	16.4
Mean years of schooling	13.1	13.1	13.3
GNI per capita (PPP \$)	42,512	42,664	43,433
0.4			

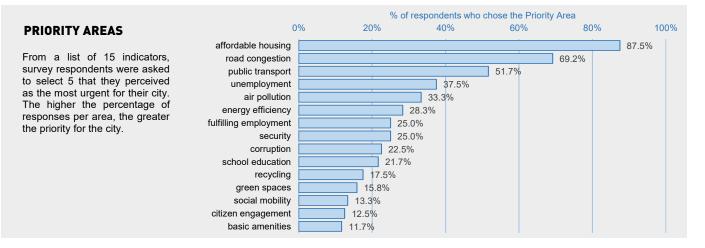
City Population (UN World Cities Report)

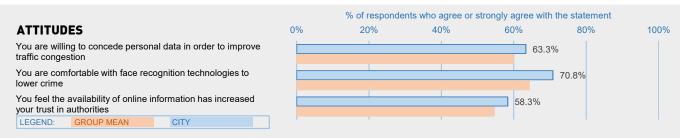
2,485,000



			CITY	GROUP MEA	N	_
STRUCTURES		LEGEND:			GROUP	P MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.				0		
Recycling services are satisfactory.				0)	
Public safety is not a problem.						
Air pollution is not a problem.						
Medical services provision is satisfactory.				0		
Mobility						
Traffic congestion is not a problem.		\bigcirc				
Public transport is satisfactory.			\bigcirc			
Activities						
Green spaces are satisfactory.			_			
Green spaces are satisfactory.			_	0		
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)				0	8	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Vancouver





		LEGEND:			
TECHNOLOGIES		ELOLIND.	GROUP MIN	GROU	P MAX
Health & Safety	0	20	Score 40 60	0 80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		53
A website or App allows to give away unwanted items to other city residents.				\bigcirc	64
Free public wifi has improved access to services.			\bigcirc		58
CCTV cameras make residents feel safer.					50
A website or App allows effective monitoring of air pollution.			\bigcirc		38
Arranging medical appointments online has improved access.					60
Mobility					
Car-sharing Apps have reduced congestion.			\bigcirc		35
Apps that direct you to an available parking space have reduced journey time.			\bigcirc		35
Bicycle hiring has reduced congestion.			\bigcirc		49
Online scheduling and ticket sales make public transport easier to use.			\bigcirc		58
Activities					
Online purchasing of tickets to shows and museums has made it easier to attend	d.				73
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.				\bigcirc	79
IT skills are taught well in schools.			\bigcirc		55
Online services provided by the city has made it easier to start a new business.			\bigcirc		50
Governance					
Online public access to city finances has reduced corruption.					41
Online voting has increased participation.					48
An online platform where residents can propose ideas has improved city life.					47
Processing Identification Documents online has reduced waiting times.					53

Vienna

SMART CITY RANKING		7th of 102
GROUP		2
RATING		B B A A to D
FACTOR RATINGS	A	BB Technologies

BACKGROUND INFORMATION

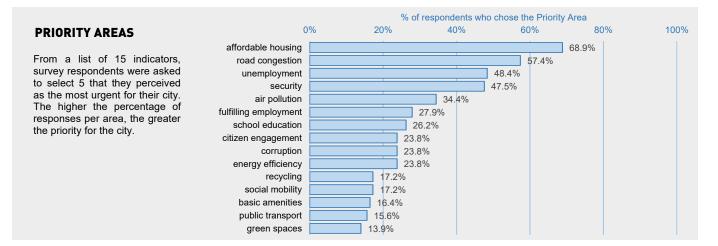
Country	2015	2016	2017
UN HDI	0.903	0.906	0.908
Life expectancy at Birth	81.4	81.6	81.8
Expected years of schooling	15.9	16.1	16.1
Mean years of schooling	12.1	12.1	12.1
GNI per capita (PPP \$)	43,984	44,443	45,415

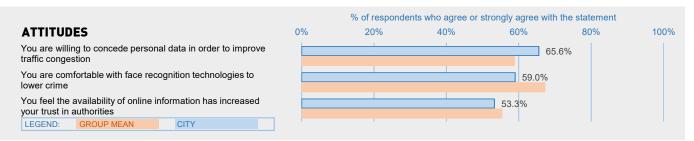
City



			CITY	GROUP MEAN		
STRUCTURES		LEGEND:		GROUP MEAN	GROUP MAX	
			Score			
Health & Safety	0	20	40	60	80 100	
Basic sanitation meets the needs of the poorest areas.					\bigcirc	80.87
Recycling services are satisfactory.					\bigcirc	83.33
Public safety is not a problem.				\bigcirc		67.90
Air pollution is not a problem.						55.46
Medical services provision is satisfactory.				\bigcirc		75.14
Mobility						
Traffic congestion is not a problem.			\bigcirc			41.12
Public transport is satisfactory.				C)	76.91
Activities						
Green spaces are satisfactory.				\bigcirc		73.91
Cultural activities (shows, bars, and museums) are satisfactory.					\bigcirc	82.24
Opportunities (Work & School)						
Employment finding services are available.						
, ,				\bigcirc		68.99
						68.99 72.27
Most children have access to a good school.						
Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						72.27
Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						72.27 73.22
Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						72.27 73.22 66.67 55.33
Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						72.27 73.22 66.67 55.33 53.01
Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						72.27 73.22 66.67 55.33 53.01 48.91
Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						72.27 73.22 66.67 55.33 53.01

Vienna





			CITY GRO	UP MEAN	
TECHNOLOGIES		LEGEND:		GROUP M	AX
Health & Cafaby	0	20	Score 40 60	80	100
Health & Safety Online reporting of city maintenance problems provides a speedy solution.	0	20	40 00	00	50.9
A website or App allows to give away unwanted items to other city residents.					55.7
Free public wifi has improved access to services.					54.5
CCTV cameras make residents feel safer.					51.2
A website or App allows effective monitoring of air pollution.					43.7
					57.1
Arranging medical appointments online has improved access.					57.1
Mobility					
Car-sharing Apps have reduced congestion.			\bigcirc		43.4
Apps that direct you to an available parking space have reduced journey time.					39.4
Bicycle hiring has reduced congestion.					46.4
Online scheduling and ticket sales make public transport easier to use.			Ŭ		71.5
Activities					
Online purchasing of tickets to shows and museums has made it easier to attend	d.			\bigcirc	78.5
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.					74.4
IT skills are taught well in schools.			\bigcirc		57.9
Online services provided by the city has made it easier to start a new business.			\bigcirc		47.4
Governance					
Online public access to city finances has reduced corruption.			\bigcirc		41.2
Online voting has increased participation.			\bigcirc		52.3
An online platform where residents can propose ideas has improved city life.					46.4
Processing Identification Documents online has reduced waiting times.			\bigcirc		61.2

Warsaw

SMART CITY RANKING	6 Out c	st			
GROUP	3				
RATING	B From AAA to D				
FACTOR RATINGS	B	B			

BACKGROUND INFORMATION

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

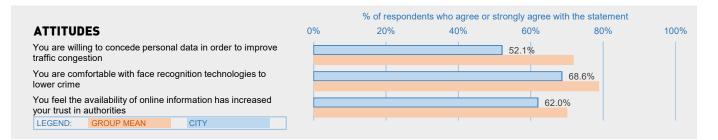
City



STRUCTURES		LEGEND:		GROUP MEA	N GROUP MAX
			Score		
Health & Safety	0	20	40	60	80 100
Basic sanitation meets the needs of the poorest areas.				C)
Recycling services are satisfactory.				\bigcirc	
Public safety is not a problem.				\bigcirc	
Air pollution is not a problem.			\bigcirc		
Medical services provision is satisfactory.			\bigcirc		
Mobility					
Traffic congestion is not a problem.			\bigcirc		
Public transport is satisfactory.				\bigcirc	
Green spaces are satisfactory.				0	~
Green spaces are satisfactory.					0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.					
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.					
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.					

Warsaw

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** road congestion 54.5% From a list of 15 indicators, air pollution 54.5% survey respondents were asked to select 5 that they perceived affordable housing 52.9<mark>%</mark> security 51.2% as the most urgent for their city. The higher the percentage of fulfilling employment 45.5% public transport 38.0% responses per area, the greater green spaces 37.2% the priority for the city. recycling 24.0% basic amenities 22.3% corruption 21.5% energy efficiency 16.5% citizen engagement 12.4% school education 12.4% social mobility 11.6% unemployment 11.6%



TECHNOLOGIES		LEGEND:		GRC	UP MEAN GROUP MA	K
Health & Safety	0	20	Score 40	60	80 10	00
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		57
A website or App allows to give away unwanted items to other city residents.					\bigcirc	66
Free public wifi has improved access to services.						71
CCTV cameras make residents feel safer.						71
A website or App allows effective monitoring of air pollution.					\bigcirc	73
Arranging medical appointments online has improved access.					\bigcirc	69
Mobility						
Car-sharing Apps have reduced congestion.			(55
Apps that direct you to an available parking space have reduced journey time.				\bigcirc		59
Bicycle hiring has reduced congestion.				(64
Online scheduling and ticket sales make public transport easier to use.					\bigcirc	77
Activities						
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				\bigcirc	84
Opportunities (Work & Cohool)						
Opportunities (Work & School)						83
Online access to job listings has made it easier to find work.						66
IT skills are taught well in schools. Online services provided by the city has made it easier to start a new business.						68
Online services provided by the city has made it easier to start a new business.						00
Governance						
Online public access to city finances has reduced corruption.			\bigcirc			46
Online voting has increased participation.)		54
An online platform where residents can propose ideas has improved city life.					\bigcirc	68
Processing Identification Documents online has reduced waiting times.					\bigcirc	75

Washington D.C.

SMART CITY	31 st
RANKING	Out of 102
GROUP	1
RATING	BBB From AAA to D
FACTOR	BBB BBB
RATINGS	Structures Technologies

BACKGROUND INFORMATION

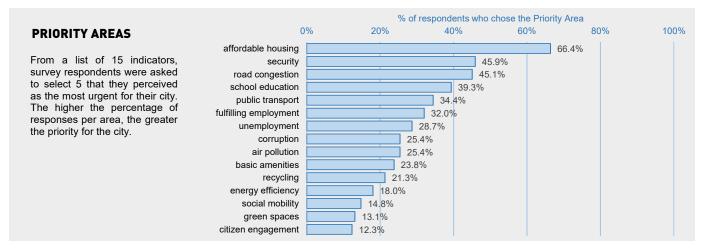
Country	2015	2016	2017	
UN HDI	0.920	0.922	0.924	
Life expectancy at Birth	79.2	79.4	79.5	
Expected years of schooling	16.5	16.5	16.5	
Mean years of schooling	13.3	13.4	13.4	
GNI per capita (PPP \$)	53,741	54,104	54,941	

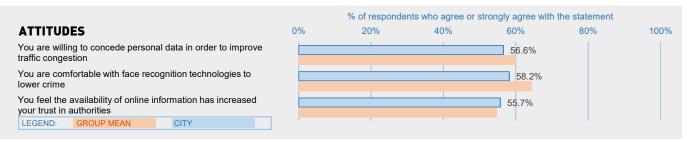
City



			CITY	GROUP MEAN	1	
STRUCTURES		LEGEND:			GROUP MAX	
			Score			
Health & Safety	0	20	40	60	80 100	
Basic sanitation meets the needs of the poorest areas.				\bigcirc		58.61
Recycling services are satisfactory.				\bigcirc		65.98
Public safety is not a problem.			\bigcirc			35.79
Air pollution is not a problem.			\bigcirc			38.80
Medical services provision is satisfactory.				\bigcirc		62.02
Mobility						
Traffic congestion is not a problem.						25.41
Public transport is satisfactory.						49.18
Activities						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	0	58.61 79.64
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.				0	0	
Green spaces are satisfactory.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)					0	79.64
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						79.64 68.17
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.						79.64 68.17 50.96
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						68.17 50.96 61.34
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						79.64 68.17 50.96 61.34 67.76 57.24
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						68.17 50.96 61.34 67.76 57.24 65.03
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						79.64 68.17 50.96 61.34 67.76 57.24 65.03 34.02
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						68.17 50.96 61.34 67.76 57.24 65.03

Washington D.C.





TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP N		JP MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc				43.17
A website or App allows to give away unwanted items to other city residents.							55.46
Free public wifi has improved access to services.				\bigcirc			60.52
CCTV cameras make residents feel safer.			\bigcirc				52.87
A website or App allows effective monitoring of air pollution.			\bigcirc				37.16
Arranging medical appointments online has improved access.				\bigcirc			58.74
Mobility							
Car-sharing Apps have reduced congestion.							49.04
Apps that direct you to an available parking space have reduced journey time.							49.86
Bicycle hiring has reduced congestion.			\bigcirc				49.45
Online scheduling and ticket sales make public transport easier to use.							54.78
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	d.			(71.99
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.				\bigcirc			65.30
IT skills are taught well in schools.			\bigcirc				49.45
Online services provided by the city has made it easier to start a new business.							48.77
Governance							
Online public access to city finances has reduced corruption.			\bigcirc				34.56
Online voting has increased participation.							54.23
An online platform where residents can propose ideas has improved city life.							49.04
Processing Identification Documents online has reduced waiting times.							55.19

Zaragoza

SMART CITY RANKING	49th Out of 102			
GROUP	2			
RATING	BB From AAA to D			
FACTOR RATINGS	BBB Structures	B		

BACKGROUND INFORMATION

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

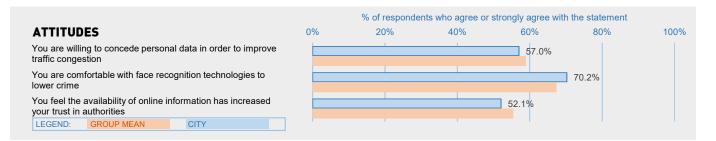
City Population (Eurostat)



STRUCTURES		LEGEND:		TY GROUP N	IEAN GROUP	MAX	
			Sco	re			
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.				\bigcirc		66	.67
Recycling services are satisfactory.				\bigcirc		57.	.71
Public safety is not a problem.				\bigcirc		63.	.22
Air pollution is not a problem.				\bigcirc		54.	.27
Medical services provision is satisfactory.				\bigcirc		58.	.95
Mobility							
Traffic congestion is not a problem.						56	.06
Public transport is satisfactory.						67.	.49
Activities							
Activities Green spaces are satisfactory.					0	75.	.34
							.34 .39
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.							
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						70.	.39
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.						69.	.39 .15
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.		_	_			69. 71.	.39 .15 .63
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						69. 71. 65.	.39 .15 .63 .84
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						69. 71. 65. 43.	.15 .63 .84 .39
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.			0			69. 71. 65. 43.	.39 .15 .63 .84
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						69. 71. 65. 43.	.15 .63 .84 .39
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.						69. 71. 65. 43. 53.	.15 .63 .84 .39
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						70. 69. 71. 65. 43. 53.	.39 .15 .63 .84 .39 .58
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						70. 69. 71. 65. 43. 53. 48. 48. 42.	.15 .63 .84 .39 .58

Zaragoza

% of respondents who chose the Priority Area 0% 40% 60% 80% 100% 20% **PRIORITY AREAS** fulfilling employment 68.6% From a list of 15 indicators, affordable housing 64.5% survey respondents were asked to select 5 that they perceived unemployment 61.2% school education 35.5% as the most urgent for their city. The higher the percentage of security 30.6% corruption 29.8% responses per area, the greater citizen engagement 25.6% the priority for the city. recycling 24.8% public transport 24.0% energy efficiency 22.3% 21.5% basic amenities social mobility 20.7% green spaces 19.8% air pollution 16.5% road congestion 12.4%



			CITY GR	OUP MEAN	
TECHNOLOGIES		LEGEND:		GROUP	MAX
			Score		
Health & Safety	0	20	40 60	80	100
Online reporting of city maintenance problems provides a speedy solution.			\bigcirc		50.69
A website or App allows to give away unwanted items to other city residents.			\bigcirc		54.68
Free public wifi has improved access to services.			\bigcirc		44.77
CCTV cameras make residents feel safer.			\bigcirc		38.57
A website or App allows effective monitoring of air pollution.					43.80
Arranging medical appointments online has improved access.					75.76
Mobility					
Car-sharing Apps have reduced congestion.			\bigcirc		37.88
Apps that direct you to an available parking space have reduced journey time.					40.22
Bicycle hiring has reduced congestion.			\bigcirc		54.96
Online scheduling and ticket sales make public transport easier to use.					61.85
Activities					
Online purchasing of tickets to shows and museums has made it easier to atten	d.				83.88
Opportunities (Work & School)					
Online access to job listings has made it easier to find work.			(64.05
IT skills are taught well in schools.			\bigcirc		50.69
Online services provided by the city has made it easier to start a new business.			\bigcirc		45.32
Governance					04.51
Online public access to city finances has reduced corruption.					31.54
Online voting has increased participation.					38.57
An online platform where residents can propose ideas has improved city life.					42.70
Processing Identification Documents online has reduced waiting times.					56.06

Zhuhai

SMART CITY	40th			
RANKING	Out of 102			
GROUP	3			
RATING	BB From AAA to D			
FACTOR	B B	BB		
RATINGS	Structures	Technologies		

BACKGROUND INFORMATION

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

1,542,000

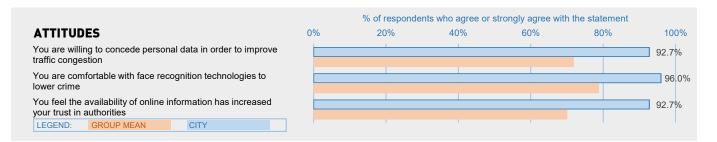
City



			CITY GROUP MEAN				
STRUCTURES				GROUF	P MAX		
			Score				
Health & Safety	0	20	40	60	80	100	
Basic sanitation meets the needs of the poorest areas.					\bigcirc		
Recycling services are satisfactory.					\bigcirc		
Public safety is not a problem.					\bigcirc		
Air pollution is not a problem.					\bigcirc		
Medical services provision is satisfactory.					\bigcirc		
Mobility							
Traffic congestion is not a problem.					\bigcirc		
Public transport is satisfactory.					\bigcirc		
					0		
Green spaces are satisfactory.					0		
Green spaces are satisfactory.				_			
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.							
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)							
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.							
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.							
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.							
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.							
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.							
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.							
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance							
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.							

Zhuhai

% of respondents who chose the Priority Area 0% 20% 40% 60% 80% 100% **PRIORITY AREAS** road congestion 51.6% From a list of 15 indicators, 45.2% public transport survey respondents were asked to select 5 that they perceived fulfilling employment 44.4% air pollution 43.5% as the most urgent for their city. social mobility 41.9% The higher the percentage of basic amenities 39.5% responses per area, the greater security 35.5% the priority for the city. green spaces 34.7% affordable housing 33.1% energy efficiency 33.1% 21.8% recycling unemployment 20.2% corruption 18.5% school education 10.5% citizen engagement 8.1%



TECHNOLOGIES		LEGEND:	GROUP MIN	GROUP	MEAN GROUI	^P MAX	
Health & Safety	0	20	Score 40	60	80	100	
Online reporting of city maintenance problems provides a speedy solution.							91
A website or App allows to give away unwanted items to other city residents.							81
Free public wifi has improved access to services.							80
CCTV cameras make residents feel safer.					\bigcirc		85
A website or App allows effective monitoring of air pollution.					\bigcirc		82
Arranging medical appointments online has improved access.					\bigcirc		87
Mobility							
Car-sharing Apps have reduced congestion.					0		88
Apps that direct you to an available parking space have reduced journey time.					\bigcirc		86
Bicycle hiring has reduced congestion.					\bigcirc		86
Online scheduling and ticket sales make public transport easier to use.					\bigcirc		86
Activities							
Online purchasing of tickets to shows and museums has made it easier to atten	ıd.				(92
Opportunities (Work & School)							
Online access to job listings has made it easier to find work.					C		90
IT skills are taught well in schools.					\bigcirc		86
Online services provided by the city has made it easier to start a new business.					\bigcirc		90
Governance							
Online public access to city finances has reduced corruption.					(92
Online voting has increased participation.					\bigcirc		82
An online platform where residents can propose ideas has improved city life.					0		88
Processing Identification Documents online has reduced waiting times.					\bigcirc		85

Zurich

SMART CITY RANKING		o nd of 102
GROUP	,	1
RATING		A to D
FACTOR RATINGS	AAA Structures	A Technologies

BACKGROUND INFORMATION

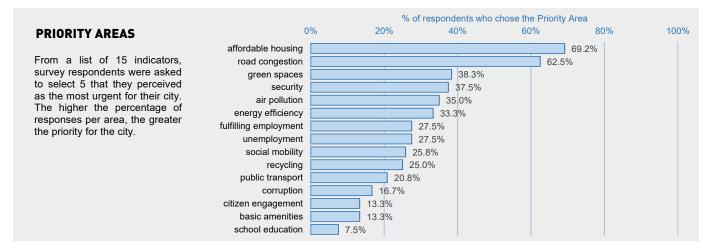
Country	2015	2016	2017
UN HDI	0.942	0.943	0.944
Life expectancy at Birth	83.1	83.3	83.5
Expected years of schooling	16.2	16.2	16.2
Mean years of schooling	13.4	13.4	13.4
GNI per capita (PPP \$)	58,280	57,636	57,625

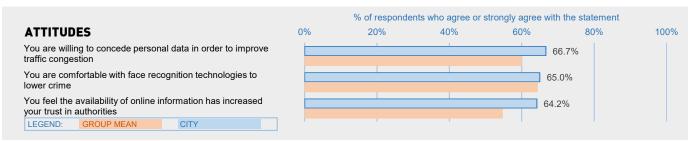
City



STRUCTURES		LEGEND:		GROUF		UP MAX
			Score			
Health & Safety	0	20	40	60	80	100
Basic sanitation meets the needs of the poorest areas.					\bigcirc	
Recycling services are satisfactory.					\bigcirc	
Public safety is not a problem.					\bigcirc	
Air pollution is not a problem.				\bigcirc		
Medical services provision is satisfactory.					\bigcirc	
Mobility						
Traffic congestion is not a problem.						
Public transport is satisfactory.					\bigcirc	
Green spaces are satisfactory.			_)	
Green spaces are satisfactory.			_			
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.			-			
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School)						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available.			-		0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school.					0	
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance						
Activities Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible. Corruption of city officials is not an issue of concern.						
Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory. Opportunities (Work & School) Employment finding services are available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. Governance Information on local government decisions are easily accessible.						

Zurich





TECHNOLOGIES		LEGEND:	GROUP MIN		GROUF	MAX
					011001	
Health & Safety	0	20	Score 40	60	80	100
Online reporting of city maintenance problems provides a speedy solution.				\bigcirc		
A website or App allows to give away unwanted items to other city residents.			(
Free public wifi has improved access to services.			\bigcirc			
CCTV cameras make residents feel safer.						
A website or App allows effective monitoring of air pollution.			\bigcirc			
Arranging medical appointments online has improved access.			\bigcirc			
Mobility						
Car-sharing Apps have reduced congestion.			\bigcirc			
Apps that direct you to an available parking space have reduced journey time.			\bigcirc			
Bicycle hiring has reduced congestion.			\bigcirc	l.		
Online scheduling and ticket sales make public transport easier to use.					\bigcirc	
Activities						
Activities Online purchasing of tickets to shows and museums has made it easier to atte	nd					
	enu.					
Opportunities (Work & School)						
Online access to job listings has made it easier to find work.					\bigcirc	
IT skills are taught well in schools.				\bigcirc		
Online services provided by the city has made it easier to start a new business	6.					
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.						