



Global Power City Index 2017

GPCI 10th Anniversary Special Edition

Summary



October 2017



Institute for Urban Strategies
The Mori Memorial Foundation

Preface

Given the global competition between cities, the Global Power City Index (GPCI) evaluates and ranks the major cities of the world according to their “magnetism,” or their comprehensive power to attract creative people and business enterprises from around the world.

Considering that the comprehensive power sought by each city fluctuates in accordance with economic and social changes, the GPCI has continually strived to improve its findings by revising its indicators and methods of data collection. The GPCI-2017 has endeavored to obtain more reliable and highly objective data for a number of indicators, while adding new data that suitably reflect current conditions, such as the advancement of women in society, ICT infrastructure, and risks to mental health. The breadth of the GPCI has also been expanded this year to encompass 44 cities – the new cities being Dubai, the center of trade and commerce in the Middle East, and Buenos Aires, one of the major cities in South America.

The GPCI is now in its tenth year of publication following its initial release in 2008. During this decade-long period, the world has seen financial crises, large-scale natural disasters, a growing population that now exceeds seven billion, and technological advancements that have brought us the smartphone and other devices. The urban environments that envelop cities have also changed dramatically, and as if responding to such changes, cities around the world have seen their urban power affected relative to the global context. The Mori Memorial Foundation’s Institute for Urban Strategies has continued to follow this evolution of urban power over the past decade.

The research results of the past 10 years should serve as valuable data to help us understand the challenges faced by cities around the world, as well as what makes them appealing. We hope that the GPCI can assist many people in the formulation of urban policies and corporate strategies.

* More detailed results of research conducted for this ranking are scheduled to be published in January 2018 in the *Global Power City Index YEARBOOK 2017*. This report provides specific details on the methods of research used, scores for each city, ranking analyses, definitions of indicators and lists of data sources.

Features of The Global Power City Index (GPCI)

1. As opposed to limiting the ranking to particular areas of research such as “Finance” and “Livability,” the GPCI focuses on a wide variety of functions in order to assess and rank the global potential and comprehensive power of a city.
2. 44 of the world’s leading cities were selected and their global comprehensive power evaluated based on the following viewpoints: six main functions representing city strength (**Economy, Research and Development, Cultural Interaction, Livability, Environment, and Accessibility**), and five global actors who lead the urban activities in their cities (**Manager, Researcher, Artist, Visitor, and Resident**), thus providing an all-encompassing view of the cities.
3. The GPCI reveals the strengths and weaknesses of each city and at the same time uncovers problems that need to be overcome.
4. This ranking has been produced with the involvement of the late Sir Peter Hall, a global authority in urban studies, as well as other academics in this field. It has been peer reviewed by third parties, all international experts from both the public and private sectors.

In this report, the names of the GPCI functions are marked in **bold**, those of the indicators in *italics*, and those of the indicator groups and the factors are enclosed in quotation marks ("").

1. Key Findings of the GPCI-2017

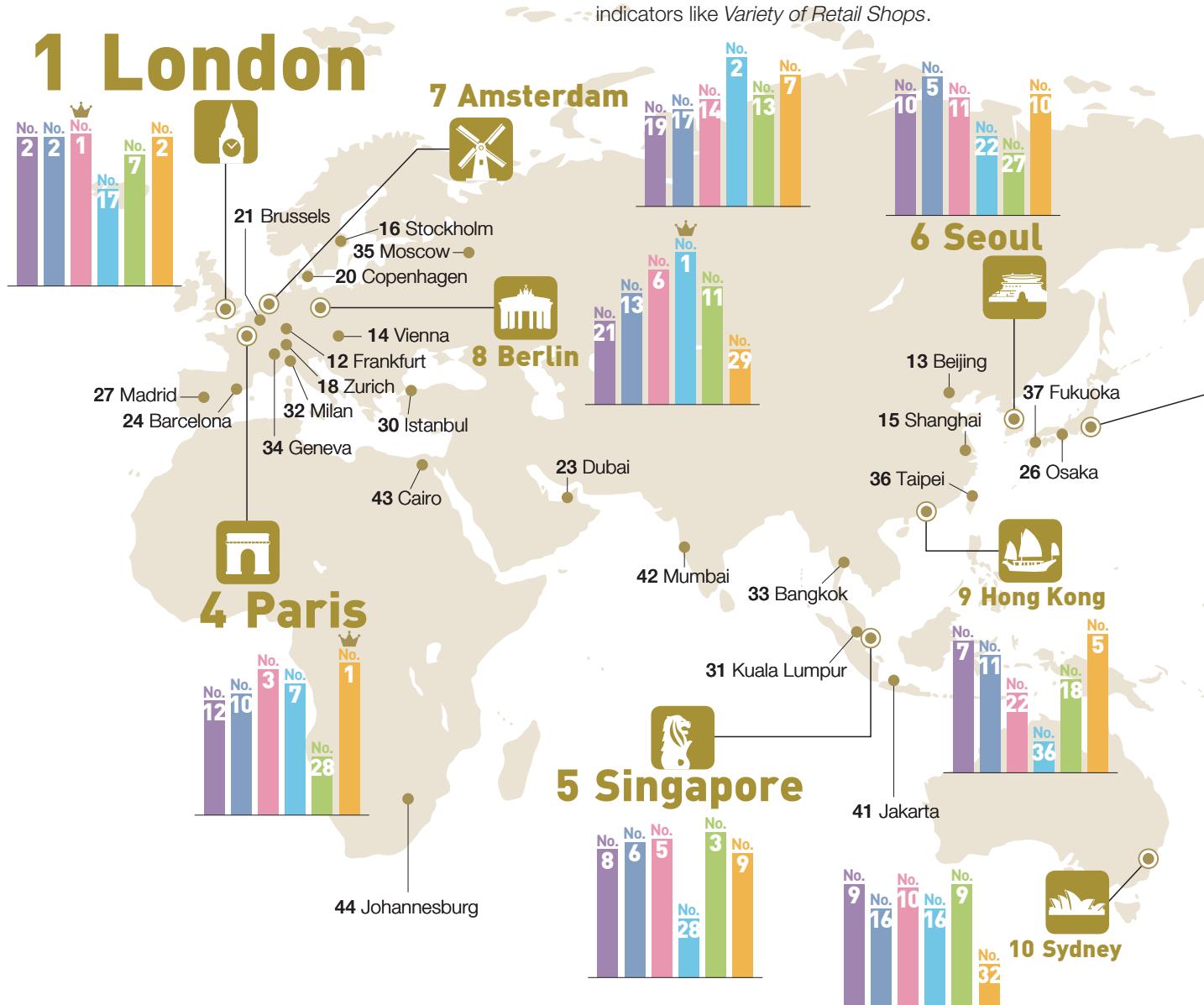
Key Findings

GPCI-2017 Characteristics

- In the GPCI-2017 comprehensive ranking, the top five cities of London (No. 1), New York (No. 2), Tokyo (No. 3), Paris (No. 4), and Singapore (No. 5) all maintain their respective positions from last year. These cities have remained in the top 5 for nine consecutive years.
- Sydney (No. 10) climbs four spots this year to edge its way into the top 10 for the first time in seven years. Cities such as Los Angeles (No. 11), Beijing (No. 13), and San Francisco (No. 17) also largely improve their rankings from last year.
- By region, the European cities on the whole score highly in **Livability** and **Environment**. The cities of Asia, which rank highly overall, earn strong scores in **Economy**.

Trends for the Top 3 Cities

- London, the No. 1 city in the comprehensive ranking for the sixth year in a row, further extends its lead over the competition by improving its scores for such indicators as *GDP Growth Rate* and *Level of Political, Economic and Business Risk* in **Economy**, and for *Attractiveness of Dining Options* and *Number of Visitors from Abroad* in **Cultural Interaction**.
- New York (No. 2) increases its scores for the **Economy** indicators of *Nominal GDP* and *GDP Growth Rate*, but fails to make any significant headway in comprehensive score, having returned weaker scores this year in **Cultural Interaction** indicators such as *Number of World-Class Cultural Events Held* and **Livability** indicators like *Variety of Retail Shops*.

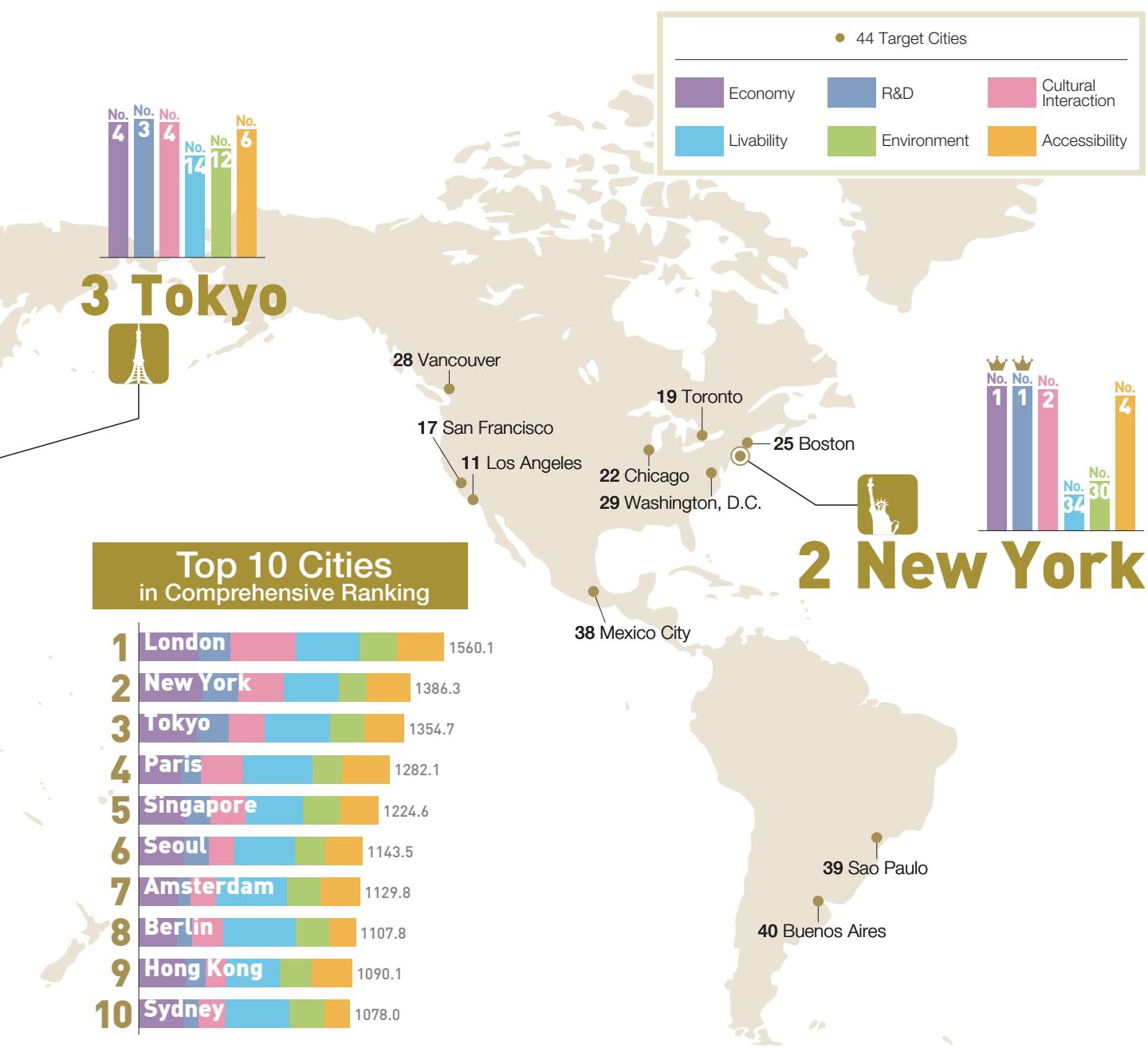


Top 10 Cities by Function-Specific Ranking

♦ Tokyo claimed the No. 3 ranking for the first time last year and closes the gap on New York (No. 2) this year. This is a result of the American city's score stalling while Tokyo continues to improve every year in the **Cultural Interaction** indicator of *Number of Visitors from Abroad*. However, Japan's capital city slips from No. 1 to No. 4 in **Economy** due to weaker scores in "Market Size" and "Market Attractiveness."

Results for New Cities in GPCI-2017

- ♦ Dubai and Buenos Aires make their first-ever appearances in the GPCI in 2017 with respective comprehensive rankings of No. 23 and No. 40.
- ♦ Dubai boasts strengths in **Cultural Interaction** (No. 9) and **Economy** (No. 11) mainly thanks to strong evaluations for *Corporate Tax Rate* in **Economy**, and *Number of Luxury Hotel Guest Rooms* in **Cultural Interaction**.



2. GPCI-2017 Methodology

2-1 Research Organization

The GPCI is created by a research body which comprises two groups of individuals: the Executive Committee and the Working Committee. The Executive Committee, chaired by Heizo Takenaka (Professor of Toyo University, Professor Emeritus of Keio University, and Chairman of The Mori Memorial Foundation's Institute for Urban Strategies), supervises the ranking creation process. It is comprised of six members, with the late Sir Peter Hall (Professor, University College London), who contributed to the original production of the GPCI, as Principal Advisor. The Working Committee,

headed by Hiroo Ichikawa (Professor and Dean of the Professional Graduate School of Governance Studies at Meiji University, Executive Director of The Mori Memorial Foundation) as Principal, performs the data collection and analysis to create the rankings for the cities. It also seeks advice from expert partners worldwide to incorporate the perspectives of global actors into the evaluation. In order to ensure the impartiality of the ranking creation process and results, two third-party Peer Reviewers validate the contents and provide suggestions for improvement.

Research Organization

Executive Committee

Supervision of
Ranking Creation

Chairman



Heizo Takenaka

Professor, Toyo University
Professor Emeritus, Keio University
Chairman, Institute for Urban Strategies,
The Mori Memorial Foundation

Principal Advisor



Sir Peter Hall

(1932-2014)
Professor,
University College London

Members



Hiroo Ichikawa

Professor and Dean,
Professional Graduate School of
Governance Studies, Meiji University
Executive Director,
The Mori Memorial Foundation



Saskia Sassen

Robert S. Lynd Professor,
Columbia University



Allen J. Scott

Distinguished Research Professor,
University of California, Los Angeles



Peter Nijkamp

Fellow, Tinbergen Institute, Amsterdam
Professor,
Adam Mickiewicz University, Poznan



Richard Bender

Professor and Dean Emeritus,
University of California, Berkeley



Michael Batty CBE

Professor, University College London

Expert Partners

Cooperation in Research



International experts

Peer Reviewers

Review of Ranking



Andrés Rodríguez-Pose

Professor, London School of Economics
Immediate Past President,
Regional Science Association International



Heng Chye Kiang

Lum Chang Chair Professor, National University of Singapore

Working Committee

- Fundamental Research and Analysis of Cities
- Creation of Draft Rankings

Principal

Hiroo Ichikawa

Members

Institute for Urban Strategies,
The Mori Memorial Foundation

Mitsubishi Research Institute, Inc.

2-2

Target Cities

44 Target Cities



Region	City
Europe	Madrid, Barcelona, London, Paris, Brussels, Amsterdam, Geneva, Frankfurt, Berlin, Zurich, Milan, Copenhagen, Vienna, Stockholm, Moscow
Africa	Cairo, Johannesburg
Middle East	Istanbul, Dubai
Asia	Mumbai, Bangkok, Kuala Lumpur, Singapore, Jakarta, Hong Kong, Beijing, Shanghai, Taipei, Seoul, Fukuoka, Osaka, Tokyo
Oceania	Sydney
North America	Vancouver, San Francisco, Los Angeles, Chicago, Toronto, Washington, D.C., New York, Boston
Latin America	Mexico City, Sao Paulo, Buenos Aires

Criteria for Selection

1. Cities found in the top ten of existing, influential city rankings, such as the Global Financial Centres Index (GFCI, Z/Yen Group), Global Cities Index (GCI, A.T. Kearney), and Cities of Opportunity (PricewaterhouseCoopers).
2. Major cities of countries that are in the top ten in terms of competition according to influential international competitiveness rankings, such as the Global Competitiveness Report (World Economic Forum) and IMD Competitiveness Ranking (Institute for Management Development).
3. Cities which do not meet the above criteria but which are deemed appropriate for inclusion by the GPCI Executive Committee or its Working Committee members.

* Some cities match one or more of the above criteria but are not evaluated in the GPCI as necessary data are not available.

3. Function-Specific Ranking

3-1 Ranking Method

Flow of Function-Specific Ranking

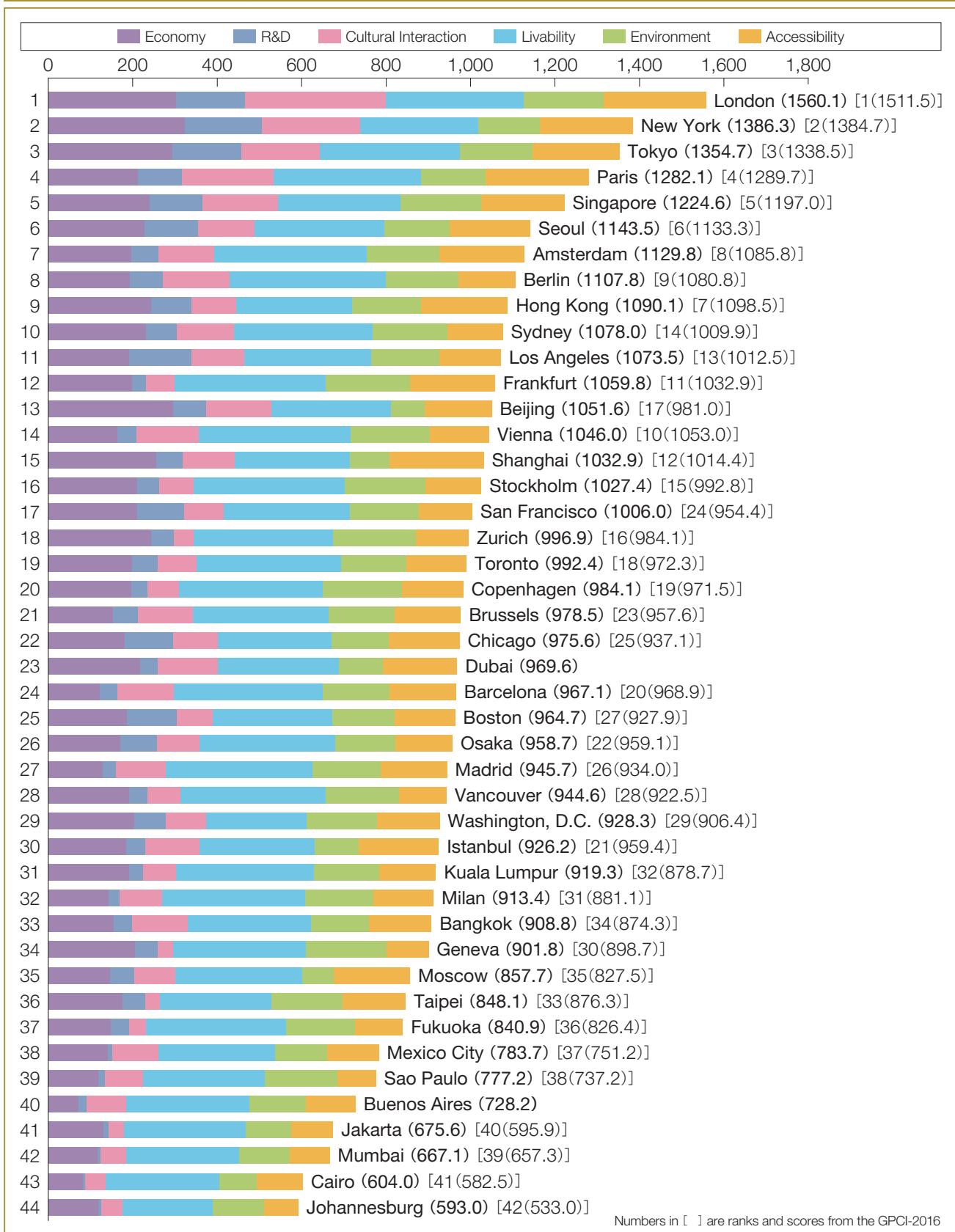


The GPCI evaluates its target cities in six urban functions: **Economy, Research and Development, Cultural Interaction, Livability, Environment, and Accessibility**. Each of the functions comprises multiple indicator groups, which in turn consists of several indicators. A total of 70 indicators are used in the GPCI. The average indicator scores of the indicator groups are combined to create the function-specific rankings. The comprehensive ranking is created by the total scores of the function-specific rankings.

Functions	Indicator Groups	No.	Indicators
Livability	Working Environment Cost of Living Security and Safety Well-Being Ease of Living	38 39 40 41 42 43 44 45 46 47 48 49 50 51	Total Unemployment Rate Total Working Hours Level of Satisfaction of Employees with Their Lives Average Housing Rent Price Level Number of Murders per Million People Economic Risk of Natural Disaster Life Expectancy Degree of Social Freedom, Fairness, and Equality Risk to Mental Health Number of Medical Doctors per Million People ICT Readiness Variety of Retail Shops Variety of Restaurants
Environment	Ecology Air Quality Natural Environment	52 53 54 55 56 57 58 59 60	Number of Companies with ISO 14001 Certification Percentage of Renewable Energy Used Percentage of Waste Recycled CO ₂ Emissions Density of Suspended Particulate Matter (SPM) Density of Sulfur Dioxide (SO ₂), Density of Nitrogen Dioxide (NO ₂) Water Quality of Rivers Level of Green Coverage Comfort Level of Temperature
Accessibility	International Transportation Network Transportation Infrastructure Inner-City Transportation Services Traffic Convenience	61 62 63 64 65 66 67 68 69 70	Number of Cities with Direct International Flights International Freight Flows Number of Arriving / Departing Passengers on Domestic and International Flights Number of Runways Density of Railway Stations Punctuality and Coverage of Public Transportation Travel Time between Inner-City Areas and International Airports Commuting Convenience Transportation Fatalities per Million People Taxi Fare

3-2 Comprehensive Ranking

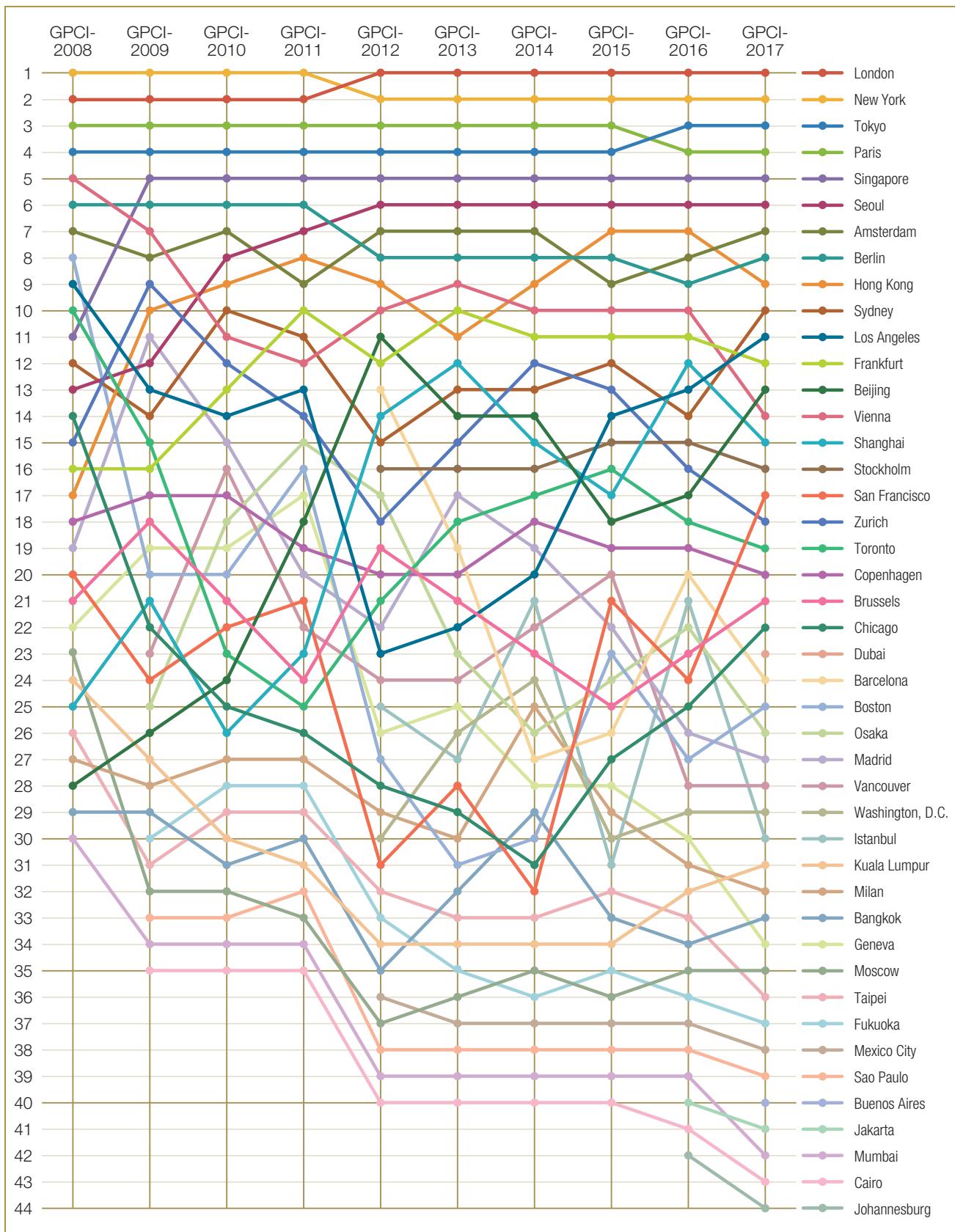
Comprehensive Ranking



3-3

Fluctuation in Comprehensive Ranking

Fluctuation in Comprehensive Ranking (GPCI 2008-2017)



3-4

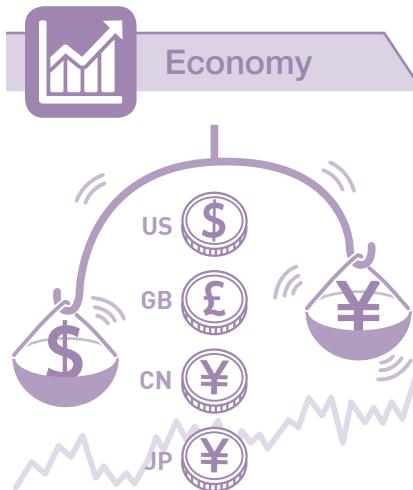
Function-Specific Ranking

Function-Specific Ranking

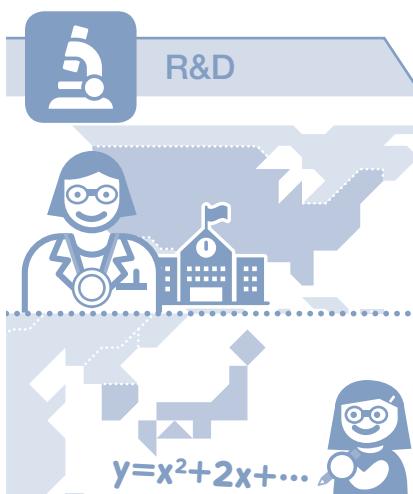
Rank	 Economy	 R&D	 Cultural Interaction	 Livability	 Environment	 Accessibility						
1	New York	323.2	New York	183.7	London	333.1	Berlin	369.3	Frankfurt	200.1	Paris	245.3
2	London	301.6	London	165.1	New York	233.1	Amsterdam	363.7	Zurich	197.5	London	244.0
3	Beijing	295.6	Tokyo	162.9	Paris	217.3	Stockholm	359.2	Singapore	191.4	Shanghai	224.0
4	Tokyo	294.3	Los Angeles	148.9	Tokyo	186.3	Vienna	358.6	Geneva	191.3	New York	221.1
5	Shanghai	256.0	Seoul	126.5	Singapore	180.9	Frankfurt	358.4	Stockholm	190.5	Hong Kong	206.7
6	Zurich	243.7	Singapore	125.4	Berlin	158.1	Barcelona	352.6	Vienna	189.6	Tokyo	206.1
7	Hong Kong	242.7	Boston	119.5	Beijing	155.0	Paris	350.5	London	188.0	Amsterdam	201.6
8	Singapore	239.3	Chicago	113.6	Vienna	148.9	Madrid	348.3	Copenhagen	187.7	Frankfurt	201.2
9	Sydney	231.5	San Francisco	112.1	Dubai	141.9	Vancouver	344.7	Sydney	177.4	Singapore	197.5
10	Seoul	227.9	Paris	104.4	Sydney	135.2	Copenhagen	342.0	Vancouver	174.3	Seoul	192.8
11	Dubai	216.5	Hong Kong	96.4	Seoul	134.0	Toronto	342.0	Berlin	172.8	Istanbul	191.1
12	Paris	211.9	Osaka	87.2	Barcelona	133.9	Milan	338.9	Tokyo	172.4	Moscow	181.5
13	San Francisco	210.4	Berlin	79.7	Bangkok	132.1	Fukuoka	334.0	Amsterdam	172.2	Dubai	177.0
14	Stockholm	209.8	Beijing	77.9	Amsterdam	131.7	Tokyo	332.8	Sao Paulo	172.0	Chicago	168.0
15	Geneva	204.8	Washington, D.C.	75.5	Brussels	131.5	Zurich	329.2	Taipei	167.9	Beijing	158.9
16	Washington, D.C.	202.8	Sydney	73.2	Istanbul	127.7	Sydney	329.1	Washington, D.C.	166.6	Barcelona	158.4
17	Frankfurt	198.8	Amsterdam	65.2	Shanghai	124.0	London	328.3	San Francisco	164.4	Madrid	156.8
18	Toronto	198.5	Shanghai	61.7	Los Angeles	123.6	Kuala Lumpur	327.5	Hong Kong	162.8	Brussels	156.6
19	Amsterdam	195.5	Toronto	60.4	Madrid	117.8	Osaka	321.7	Madrid	162.4	Taipei	150.8
20	Copenhagen	195.4	Brussels	59.3	Mexico City	109.1	Brussels	320.7	Milan	162.4	Bangkok	148.5
21	Berlin	192.3	Moscow	57.8	Chicago	107.4	Geneva	316.0	Fukuoka	162.4	Washington, D.C.	148.4
22	Kuala Lumpur	190.9	Geneva	54.5	Hong Kong	105.9	Seoul	308.7	Los Angeles	161.3	Los Angeles	146.5
23	Los Angeles	190.7	Taipei	54.1	Milan	101.7	Los Angeles	302.5	Barcelona	158.5	Copenhagen	145.3
24	Vancouver	190.2	Stockholm	53.6	Osaka	101.3	Moscow	299.7	Brussels	157.9	Toronto	144.2
25	Boston	185.1	Zurich	52.9	Moscow	98.3	San Francisco	298.1	Kuala Lumpur	154.7	Boston	143.6
26	Istanbul	183.8	Istanbul	46.4	Washington, D.C.	95.2	Buenos Aires	293.4	Toronto	153.9	Milan	142.3
27	Chicago	181.0	Vienna	45.0	Buenos Aires	93.6	Bangkok	292.2	Seoul	153.6	Vienna	140.6
28	Taipei	174.8	Bangkok	44.5	San Francisco	93.5	Singapore	290.1	Paris	152.7	Osaka	136.1
29	Osaka	169.5	Fukuoka	44.0	Toronto	93.3	Sao Paulo	289.8	Boston	148.7	Berlin	135.7
30	Vienna	163.2	Vancouver	43.6	Sao Paulo	89.4	Jakarta	289.4	New York	145.2	Kuala Lumpur	134.7
31	Bangkok	154.2	Dubai	43.2	Boston	84.0	Dubai	287.4	Osaka	142.9	Stockholm	133.7
32	Brussels	152.4	Barcelona	41.8	Stockholm	80.6	Beijing	284.8	Bangkok	137.3	Sydney	131.6
33	Fukuoka	147.7	Copenhagen	39.6	Vancouver	79.3	Boston	283.9	Chicago	136.7	San Francisco	127.3
34	Moscow	145.4	Kuala Lumpur	33.1	Kuala Lumpur	78.4	New York	280.0	Buenos Aires	134.0	Zurich	125.1
35	Milan	141.7	Frankfurt	32.0	Copenhagen	74.1	Mexico City	277.4	Johannesburg	122.8	Mexico City	123.6
36	Mexico City	139.8	Madrid	31.4	Frankfurt	69.4	Hong Kong	275.6	Mexico City	122.3	Buenos Aires	116.9
37	Jakarta	130.0	Milan	26.4	Mumbai	59.8	Istanbul	273.7	Mumbai	121.2	Fukuoka	114.0
38	Madrid	128.9	Buenos Aires	19.7	Cairo	49.8	Shanghai	273.6	Jakarta	107.4	Vancouver	112.6
39	Barcelona	121.9	Sao Paulo	15.7	Johannesburg	49.2	Cairo	269.1	Dubai	103.7	Cairo	110.4
40	Sao Paulo	118.5	Jakarta	12.4	Zurich	48.6	Chicago	268.9	Istanbul	103.5	Jakarta	99.9
41	Johannesburg	118.0	Mexico City	11.5	Fukuoka	38.8	Mumbai	268.3	Shanghai	93.6	Geneva	99.3
42	Mumbai	115.4	Mumbai	8.1	Jakarta	36.6	Taipei	264.7	Cairo	88.5	Mumbai	94.4
43	Cairo	80.6	Johannesburg	7.5	Geneva	35.9	Washington, D.C.	239.8	Beijing	79.4	Sao Paulo	91.8
44	Buenos Aires	70.8	Cairo	5.5	Taipei	35.7	Johannesburg	214.6	Moscow	75.1	Johannesburg	80.9

3-5

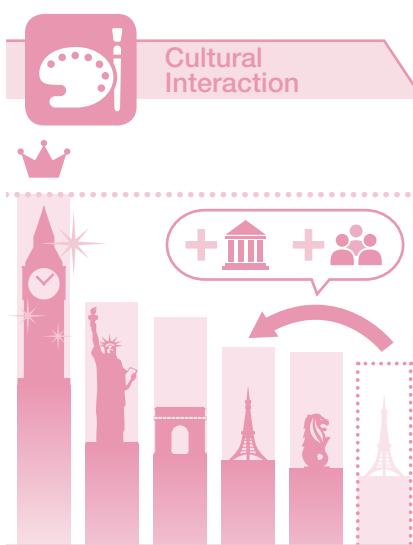
Function-Specific Ranking Key Findings



- The top five ranked cities in **Economy** are New York (No. 1), London (No. 2), Beijing (No. 3), Tokyo (No. 4), and Shanghai (No. 5). Three of those cities are in Asia.
- Tokyo, the leading city last year, fails to improve its scores across all indicators in **Economy** partly due to the impact of a weaker yen and therefore falls to No.4.
- Meanwhile, New York, which was No. 3 last year, claims top spot in this function having returned higher scores for *Nominal GDP* and *GDP Growth Rate*.
- Among Asian cities, Hong Kong (No. 7) and Singapore (No. 8) both slip two places from last year. This mainly owes to a decline in *GDP Growth Rate*.
- Newly added to the GPCI in 2017, Dubai debuts at No. 11 thanks to high scores for *GDP Growth Rate* and *Corporate Tax Rate*.



- The top five ranked cities in **Research and Development** are New York (No. 1), London (No. 2), Tokyo (No. 3), Los Angeles (No. 4), and Seoul (No. 5). Excluding London, all cities are located in either the US or Asia.
- The US cities boast strong scores for *Number of Winners of Highly-Reputed Prizes (Science and Technology-related Fields)* and *World's Top 200 Universities*, while the cities of Asia are distinguished by high ratings for *Academic Performance in Mathematics and Science*.
- Tokyo retains its lead in *Number of Researchers* and *Number of Registered Industrial Property Rights (Patents)*, but the weaker yen has harmed its score for *Research and Development Expenditure* and thus the Japanese capital slips down one place in this function from No. 2 last year.



- The top five ranked cities in **Cultural Interaction** are London (No. 1), New York (No. 2), Paris (No. 3), Tokyo (No. 4), and Singapore (No. 5). In terms of score, London maintains a notable lead over the other cities.
- Tokyo jumps up to No. 4 from No. 5 last year. This movement owes to steady score improvements in "Facilities for Visitors," namely for *Number of Museums*, as well as in "International Interaction" for *Number of Visitors from Abroad*.
- Cities that make large gains this year include Seoul (No. 11) and Bangkok (No. 13). The former climbs five places from No. 16 last year on the back of a higher score for *Number of International Conferences Held*. The latter surges five spots in this function thanks to increases in *Number of International Conferences Held*, *Number of Museums*, and *Number of Visitors from Abroad*.
- Newly listed Dubai tops the list for *Number of Luxury Hotel Guest Rooms* and *Number of Foreign Residents* and combined with a strong score for *Number of Visitors from Abroad*, enters the ranking for this function at No. 9.



- ◆ The top five ranked cities in **Livability** are Berlin (No. 1), Amsterdam (No. 2), Stockholm (No. 3), Vienna (No. 4), and Frankfurt (No. 5).
- ◆ Berlin moves up to No. 1 from No. 2 last year. Despite showing a somewhat weak score for "Ease of Living," the German capital city is evaluated highly across almost all indicators.
- ◆ Paris, ranked No. 1 last year, tumbles to No. 7. The number of victims in the 2015 Paris terrorist attacks has significantly impacted the city's score for *Number of Murders per Million People*.
- ◆ Amsterdam and Stockholm were respectively ranked No. 11 and No. 10 last year but increase their standings considerably in 2017 thanks to high ratings for *ICT Readiness*, a new indicator introduced this year.
- ◆ Fukuoka (No. 13), Tokyo (No. 14), and Osaka (No. 19) all ranked inside the top 10 last year but slide down the list in 2017 due to weak scores for *Degree of Social Freedom, Fairness, and Equality*.



- ◆ The top five ranked cities in **Environment** are Frankfurt (No. 1), Zurich (No. 2), Singapore (No. 3), Geneva (No. 4), and Stockholm (No. 5).
- ◆ The top-ranked European cities share high scores in *Level of Green Coverage*, *CO₂ Emissions*, and *Percentage of Renewable Energy Used*.
- ◆ Singapore's strength lies in its low *Density of Suspended Particulate Matter (SPM)* and high *Percentage of Waste Recycled*.
- ◆ Despite earning a strong score in **Economy**, Dubai is ranked No. 39 in **Environment**. This low ranking chiefly owes to the city's low score in *Percentage of Renewable Energy Used*, the lowest of all the 44 cities.



- ◆ The top five ranked cities in **Accessibility** are Paris (No. 1), London (No. 2), Shanghai (No. 3), New York (No. 4), and Hong Kong (No. 5).
- ◆ In the GPCI-2017, *Number of Arriving/Departing Passengers on International Flights* has been adjusted to also include domestic flights in order to assess the total amount of passengers arriving and departing at target airports, and is now *Number of Arriving/Departing Passengers on Domestic and International Flights*. As a result, cities with high levels of passenger traffic volume between other domestic centers see their scores increase in 2017 — notably, cities in the U.S. and China, as well as Tokyo.
- ◆ Shanghai moves up to No. 3 this year after steadily progressing from No. 7 in 2015 and No. 4 in 2016. The city is evaluated highly in "International Transportation Network" and "Transportation Infrastructure."
- ◆ Tokyo rises to No. 6 from No. 11 last year. While the revision to the aforementioned indicator had an impact, Tokyo also increases its scores this year for *Number of Cities with Direct International Flights* in "International Transportation Network," and *Commuting Convenience* in "Traffic Convenience."

4. Actor-Specific Ranking

4-1

Ranking Method

The Actor-Specific Ranking is analyzed from the viewpoints of five specific actors: a Manager, a Researcher, an Artist, a Visitor, and a Resident. After determining the key "needs" of each actor, indicators corresponding to that actor's needs are extracted from the 70 indicators used in the Function-Specific Ranking to calculate the city-score for each actor.

Flow of Actor-Specific Ranking

Actor	Needs	Functions						Manager Score
		Economy	R&D	Cultural Interaction	Livability	Environment	Accessibility	
Manager	1. Accumulation of Enterprises & Business Deals	○	—	○	—	—	—	51 indicators
	2. Potential of Business Growth	○	—	—	—	—	—	
	3. Ease of Doing Business	○	—	—	○	—	—	
	4. Business Environment	○	—	—	—	○	○	
	5. Richness of Human Resources	○	○	○	—	—	—	
	6. Accumulation of Industry to Support Business	○	—	○	—	—	—	
	7. Favorable Environment for Employees & Their Families	—	—	○	○	○	○	
	8. Political & Economic Risk, & Disaster Vulnerability	○	—	—	○	—	—	
Researcher	1. Qualities of Research Institutions, Researchers & Directors	—	○	—	—	—	—	36 indicators
	2. Accumulation of Research Institutions & Researchers	—	○	—	—	—	—	
	3. Opportunities That Stimulate Researchers to Conduct Academic Activities	—	○	○	—	—	—	
	4. Readiness for Accepting Researchers (Research Funding, Support with Living Expenses etc.)	—	○	○	—	—	—	
	5. Career Opportunities for Researchers	○	—	—	○	—	—	
	6. Daily Life Environment (Ease of Living)	—	—	○	○	○	○	
Artist	1. Cultural Stimulation	—	—	○	—	—	—	26 indicators
	2. Accumulation of Artists	—	—	○	—	—	—	
	3. Accumulation of Art Markets	○	—	○	—	—	—	
	4. Environment for Creative Activities (Studio Rent & Spaces)	—	—	—	○	—	—	
	5. Daily Life Environment (Ease of Living)	—	—	○	○	○	○	
Visitor	1. Cultural Attractiveness & Opportunities for Interaction	—	—	○	—	○	—	26 indicators
	2. Public Safety	—	—	—	○	○	○	
	3. Richness of Tourist Attractions	—	—	○	—	—	—	
	4. High-Class Accommodations	—	—	○	—	—	—	
	5. Dining (Variety of Cuisines, Prices etc.)	—	—	○	○	—	—	
	6. Shopping (Environment, Prices, Attractiveness etc.)	—	—	○	○	—	—	
	7. Mobility (Travel Time & Fares to Destinations)	—	—	—	—	—	○	
Resident	1. Environment to Purchase Goods (Prices & Access to Products)	○	—	—	○	—	○	40 indicators
	2. Daily Life Environment (Ease of Living)	—	—	○	○	○	○	
	3. Work Environment (Income & Employment Opportunities)	○	—	—	○	—	—	
	4. Educational Environment	—	○	—	—	—	—	
	5. Leisure Activities	—	—	○	○	○	—	
	6. Public Safety	—	—	—	○	—	○	
	7. Quality of Medical Treatment	—	—	—	○	—	—	

4-2 Actor-Specific Ranking

Actor-Specific Ranking

Rank		Manager		Researcher		Artist		Visitor		Resident
1	London	62.0	New York	59.3	Paris	49.8	London	58.2	Paris	64.0
2	Singapore	54.8	London	55.6	Berlin	48.5	New York	51.4	London	61.5
3	New York	53.3	Tokyo	52.7	London	48.0	Paris	49.8	Zurich	58.4
4	Beijing	51.3	Los Angeles	46.5	Vienna	47.6	Tokyo	48.3	Frankfurt	56.9
5	Tokyo	50.0	San Francisco	43.9	New York	47.0	Istanbul	47.7	Berlin	55.9
6	Dubai	49.8	Paris	42.8	Tokyo	46.4	Bangkok	45.6	Tokyo	55.4
7	Shanghai	49.4	Boston	40.6	Barcelona	46.2	Singapore	45.2	Stockholm	55.0
8	Paris	48.8	Chicago	38.5	Beijing	44.5	Dubai	44.9	Vienna	54.8
9	Hong Kong	48.7	Singapore	38.1	Amsterdam	44.1	Barcelona	44.6	Amsterdam	54.7
10	Kuala Lumpur	46.7	Seoul	37.5	Toronto	43.1	Shanghai	44.6	New York	54.6
11	Sydney	46.7	Beijing	33.0	Los Angeles	42.1	Beijing	42.5	Geneva	52.3
12	Seoul	46.7	Sydney	32.5	Madrid	40.1	Berlin	41.8	Copenhagen	52.2
13	Istanbul	44.7	Berlin	32.3	Buenos Aires	40.0	Sydney	41.6	Boston	51.9
14	Amsterdam	43.7	Washington, D.C.	32.3	Vancouver	39.9	Madrid	40.7	Brussels	51.4
15	Stockholm	42.5	Hong Kong	31.2	Stockholm	39.5	Vienna	40.5	San Francisco	51.2
16	Berlin	42.3	Osaka	30.8	Sao Paulo	38.7	Hong Kong	40.2	Sydney	50.6
17	San Francisco	41.6	Amsterdam	28.4	Milan	38.4	Amsterdam	40.2	Singapore	50.6
18	Los Angeles	41.4	Toronto	26.7	Istanbul	38.3	Los Angeles	38.8	Hong Kong	50.3
19	Toronto	41.1	Zurich	25.7	Osaka	38.2	Kuala Lumpur	38.6	Beijing	50.3
20	Zurich	40.2	Geneva	25.5	Mexico City	38.2	San Francisco	38.4	Los Angeles	49.9
21	Frankfurt	40.2	Stockholm	25.4	Shanghai	37.9	Mexico City	38.3	Barcelona	49.6
22	Boston	39.6	Vienna	25.3	Kuala Lumpur	37.9	Buenos Aires	37.2	Madrid	49.4
23	Vancouver	39.5	Vancouver	25.2	Frankfurt	37.3	Sao Paulo	37.0	Toronto	49.4
24	Copenhagen	39.2	Brussels	24.9	Seoul	37.2	Seoul	37.0	Washington, D.C.	49.2
25	Chicago	38.8	Moscow	23.8	Moscow	36.8	Osaka	36.1	Milan	49.1
26	Bangkok	38.8	Copenhagen	23.2	Fukuoka	36.6	Brussels	36.1	Vancouver	48.8
27	Vienna	37.6	Dubai	23.0	Bangkok	36.6	Frankfurt	35.1	Seoul	48.6
28	Geneva	37.3	Shanghai	22.8	Brussels	36.5	Moscow	34.9	Osaka	48.3
29	Washington, D.C.	36.6	Barcelona	21.1	Chicago	35.2	Chicago	34.5	Fukuoka	47.6
30	Brussels	35.8	Fukuoka	20.6	Mumbai	34.9	Milan	34.3	Buenos Aires	46.1
31	Osaka	35.3	Frankfurt	20.5	Copenhagen	34.7	Boston	34.0	Chicago	45.9
32	Fukuoka	33.9	Bangkok	20.1	Cairo	32.4	Washington, D.C.	33.1	Moscow	45.5
33	Taipei	33.7	Milan	19.9	Washington, D.C.	31.6	Toronto	32.9	Shanghai	44.9
34	Mumbai	33.0	Taipei	19.5	San Francisco	31.4	Mumbai	32.8	Taipei	42.0
35	Milan	33.0	Madrid	19.5	Jakarta	30.5	Vancouver	32.8	Mexico City	41.4
36	Barcelona	32.7	Kuala Lumpur	19.1	Sydney	29.2	Taipei	31.7	Sao Paulo	39.9
37	Madrid	32.5	Istanbul	18.4	Zurich	29.0	Copenhagen	31.5	Bangkok	37.2
38	Moscow	32.1	Sao Paulo	17.8	Boston	27.8	Cairo	31.0	Istanbul	37.0
39	Jakarta	31.8	Mexico City	17.2	Johannesburg	26.8	Fukuoka	30.4	Kuala Lumpur	36.2
40	Mexico City	29.6	Buenos Aires	15.9	Geneva	25.4	Stockholm	30.0	Dubai	35.3
41	Sao Paulo	27.9	Mumbai	14.3	Singapore	25.1	Jakarta	29.2	Mumbai	34.5
42	Johannesburg	26.3	Jakarta	11.9	Taipei	23.0	Zurich	28.1	Cairo	31.6
43	Buenos Aires	25.9	Cairo	10.3	Dubai	21.4	Johannesburg	26.2	Jakarta	30.9
44	Cairo	24.0	Johannesburg	8.6	Hong Kong	21.0	Geneva	25.8	Johannesburg	24.7

4-3

Actor-Specific Ranking Key Findings

Manager

- ◆ In **Manager**, London (No. 1), Singapore (No. 2), and New York (No. 3) are evaluated highly.
- ◆ London earns an extremely high score for "Richness of Human Resources," while Singapore also returns a strong score for "Ease of Doing Business."
- ◆ A higher score in "Potential of Business Growth" lifts New York to No. 3 from No. 8 last year, while Tokyo jumps up to No. 5 from No. 7 on a stronger score for "Political and Economic Risk, and Disaster Vulnerability."
- ◆ Dubai, one of the new additions to GPCI-2017, is rated poorly in "Favorable Environment for Employees and Their Families," but is still ranked at No. 6 in this actor group, comparable to Hong Kong and Singapore with high scores in "Ease of Doing Business."

Researcher

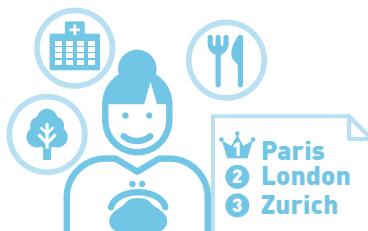
- ◆ The top three ranked cities in **Researcher** are New York (No. 1), London (No. 2), and Tokyo (No. 3).
- ◆ As in most years, New York is rated highly in **Researcher** for "Accumulation of Research Institutions and Researchers" and "Qualities of Research Institutions, Researchers, and Directors." As a result, it retains its No. 1 position for the tenth consecutive year.
- ◆ Of the other US cities in the GPCI-2017, Los Angeles (No. 4), San Francisco (No. 5), Boston (No. 7), and Chicago (No. 8), also rank highly as attractive urban centers for **Researcher**.

Artist

- ◆ Paris (No. 1), Berlin (No. 2), and London (No. 3) are the top three ranked cities in **Artist**.
- ◆ Paris earns an overwhelmingly high score for "Cultural Stimulation" and maintains the No. 1 spot for the eighth consecutive year since GPCI-2010.
- ◆ Berlin satisfies many of the factors sought after by **Artist** and climbs to No. 2 from No. 4 last year thanks to a higher score for "Cultural Stimulation."
- ◆ Meanwhile, New York, ranked No. 2 last year, slips three places down to No. 5 on a weaker score for "Accumulation of Art Markets."

Visitor

- ◆ In **Visitor**, London (No. 1), New York (No. 2), and Paris (No. 3) head the list.
- ◆ London is regarded highly by **Visitor** for its "Richness of Tourist Attractions" and "Mobility (Travel Time and Fares to Destinations)."
- ◆ Bangkok (No. 6) and Singapore (No. 7) both move up the list from No. 12 and No. 11 last year. Their respective gains owe to sharp score improvements in "Cultural Attractiveness and Opportunities for Interaction" and "Public Safety."
- ◆ Along with high ratings for "Dining (Variety of Cuisines, Prices, etc.)" and "Shopping (Environment, Prices, Attractiveness, etc.)," a stronger score for "Cultural Attractiveness and Opportunities for Interaction" bumps Tokyo up to No. 4 from No. 5 last year.

Resident

- ◆ In **Resident**, the top cities are dominated by those found in Europe, namely Paris (No. 1), London (No. 2), Zurich (No. 3), Frankfurt (No. 4), and Berlin (No. 5).
- ◆ The cities of Asia tend to be lower down the list but Tokyo boasts a high score for "Work Environment (Income and Employment Opportunities)" and thus trails the leading European cities at No. 6.
- ◆ Paris scores well in all factors, a sure sign that the city is viewed as an appealing place to live by **Resident**.
- ◆ London is the standout city in terms of "Leisure Activities," while Zurich earns an exceptionally high score for "Quality of Medical Treatment."

10 YEARS OF GLOBAL GPCI

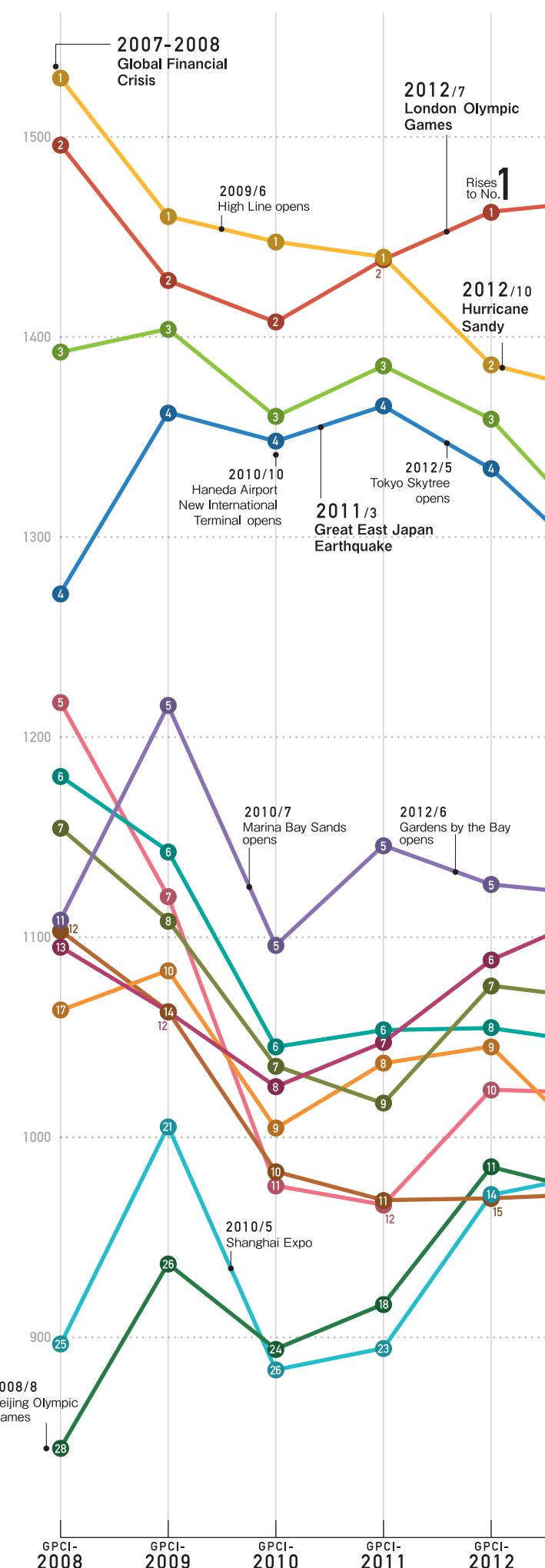
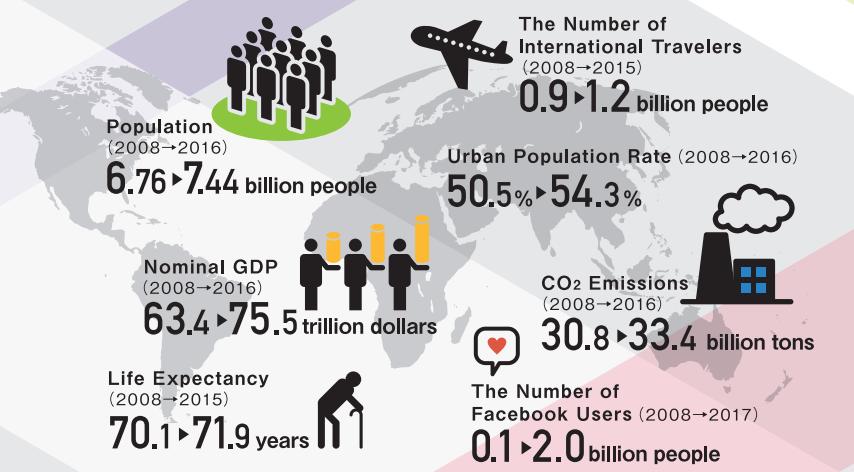
10th 2008 → 2017

Ten years have passed since the Mori Memorial Foundation's Institute for Urban Strategies first published the Global Power City Index (GPCI) in 2008.

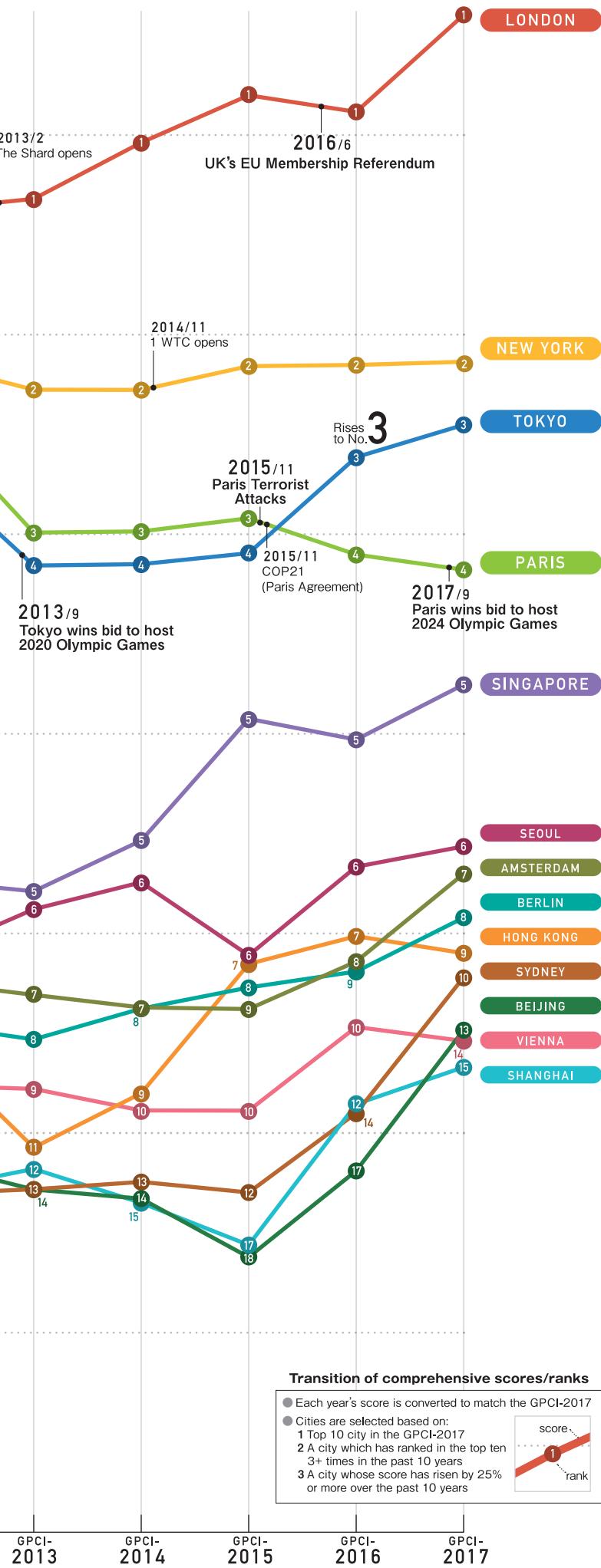
During this time, London replaced New York at the top of the list in 2012, while Tokyo jumped ahead of Paris to claim the No. 3 spot in 2016. In Asia, Singapore and the cities of China have enhanced their overall strength.

This chart displays major events of the past 10 years and looks back on the changes in comprehensive power of the top-ranked cities, as well as those cities that have achieved remarkable growth.

WORLD IN 10 YEARS



POWER CITY INDEX

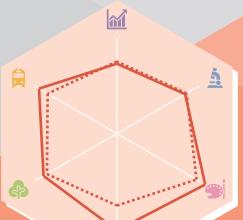


GPCI-2009 ▶ GPCI-2017 TOP 5 CITIES

Economy R&D Cultural Interaction
Livability Environment Accessibility

..... GPCI-2009 — GPCI-2017

LONDON



Number of Foreign Residents
1.4-1.97 million



Number of Visitors from Abroad
15.34-19.06 million

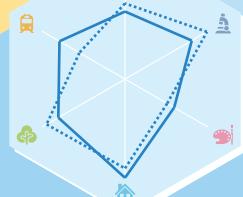


..... GPCI-2009 — GPCI-2017



NEW YORK

Compared with the GPCI-2009, the city's scores for **Economy**, **Research and Development**, and **Cultural Interaction** have fallen; however, in the GPCI-2017 each function still ranks highly at No.1, No.1, and No.2, respectively. Additionally, an increase in the score of Number of Arriving/Departing Passengers on Domestic and International Flights allows the city to have an additional strength in **Accessibility**.



Number of Cities with Direct International Flights
76-102 cities



Number of Visitors from Abroad
5.33-13.10 million



TOKYO

Compared with the top 2 cities, Tokyo's weaker "Transportation Infrastructure" has gradually strengthened due to higher scores in Number of Arriving/Departing Passengers on Domestic and International Flights*. Moreover, **Cultural Interaction** has stronger scores predominantly thanks to Number of Visitors from Abroad. Although the No.1 position that Tokyo maintained in **Economy** dropped to No.4 in GPCI-2017, all other functions earn high scores and the city is becoming increasingly balanced.



Number of Arriving/Departing Passengers on International Flights
35.22-56.45 million



Price Level
114%-73% (N.Y.)



Number of Medical Doctors per Population
6,976-8,368 per million people



Number of International Conferences Held
465-844



Compared with GPCI-2009, scores for Percentage of Waste Recycled and Level of Green Coverage in **Environment** have decreased. In **Accessibility**, however, Density of Railway Stations maintains the No.1 spot for the tenth consecutive year, while Number of Cities with Direct International Flights maintains its No.2 position. Paris also retains a high score for Total Working Hours in **Livability**, showing that it is still a city with strong comprehensive power.



*Number of Arriving/Departing Passengers on International Flights (until GPCI-2016)

The city was evaluated highly for Number of International Conferences Held, and Number of Foreign Residents in **Cultural Interaction**. In **Economy**, Singapore maintained its No.1 spot for Level of Political, Economic and Business Risk, and its No.2 rank for Level of Economic Freedom. Recent years have seen higher scores for Punctuality and Coverage of Public Transportation in **Accessibility**. As a result, the city's comprehensive power has become more balanced since the results of GPCI-2009.

SINGAPORE

THE FUTURE

Over the past 10 years, the GPCI has analyzed the fluctuations in urban power as well as the strengths and weaknesses of global cities, providing a better understanding of what makes them appealing.

The GPCI asks global city leaders to depict their visions of the future as they look ahead to the next 10 years.

LONDON Sadiq Khan

TOKYO Yuriko Koike

SEOUL Park Won-Soo

AMSTERDAM Eberhard van der Laan

VIENNA Michael Häupl

LONDON



Mayor of London
Sadiq Khan

“London is the best place in the world to do business”

“With its unrivalled talent pool, the presence of a huge number of global businesses across all sectors, and access to regulators, business support services and vital European markets, London is the best place in the world to do business. What's more, the capital's cultural attractions, food scene and sporting calendar are world-leading – just a few of the reasons London is such an attractive place to live and work.”



TOKYO



Governor of Tokyo
Yuriko Koike

“Three cities in one: a Safe City, a Diverse City, and a Smart City”

“Tokyo, host of the 2020 Olympic and Paralympic Games in three years, is a charming city where tradition and innovation come together – where “Old Meets New” and nature blends with a modern landscape. It is a vibrant city brought alive by exceptional human resources, information, technology and culture that coexist and interact. We have clean air and water, public safety, transportation networks and hospitality that are renowned around the world.

As we refine our city, we face challenges posed by a declining birthrate, an aging and shrinking population, natural disasters and climate change. In response, we are proceeding with a grand reform of Tokyo to create three cities in one: a Safe City where people feel more secure and at ease; a Diversity – or Diverse City – where everyone can actively participate; and a Smart City open to the world and an environmental and financial leader.

Looking beyond the Tokyo 2020 Games, we plan to create a New Tokyo capable of widespread sustainable growth.”



OF GLOBAL CITIES

SEOUL



Mayor of Seoul
Park Won-Soon

“Global and people-oriented city, where people can walk, work, and live comfortably”

“Seoul has three landmarks: people, history, and nature. Seoul is blessed with talented people, 2,000-year-long history, and beautiful nature. One of Seoul’s strengths is advanced information technology and rich cultural contents. Another one of Seoul’s competitive edges is ability to adapt to changes and drive innovation. It was this dynamism that enabled Seoul to grow to become the city it is today, with economic prosperity and quality of life. Over the past decade, Seoul has seen GRDP per capita grow by 1.5 times and number of employees increase by 1.2 million. In 2016, Seoul was ranked first in the ‘people’ sub-index on the Sustainable Cities Index.

Nevertheless, Seoul will not remain complacent. Seoul aspires to become a global and people-oriented city, where people can walk, work, and live comfortably. People will be proud to be citizens of Seoul, and more tourists will want to visit Seoul. But there are several challenges that Seoul needs to address. Seoul will carry out policies to create jobs for the youth and seniors, develop an R&D cluster, promote tourism, MICE, and entertainment industries, establish green transportation, and pursue balanced growth through urban renewal.”

AMSTERDAM



Mayor of Amsterdam
Eberhard van der Laan

“We will remain a global, liveable hub that is attractive to all”

“Today’s global economy revolves around urban areas. These global hubs, including Amsterdam, are a magnet for international events, talent and fast-growing multinational companies. In addition, they’re a breeding ground for innovation, knowledge and startups.

What sets Amsterdam apart from other cities is that it’s more than just a cosmopolitan and international city – it’s also compact, liveable and full of village-like charm. It’s crucial to maintain and further develop these conditions to help the city’s residents and companies continue to flourish. Therefore, Amsterdam – and its surrounding region – has implemented ambitious plans to further invest in infrastructure, international schools and the office and housing market. We will remain a global, liveable hub that is attractive to all.”



VIENNA



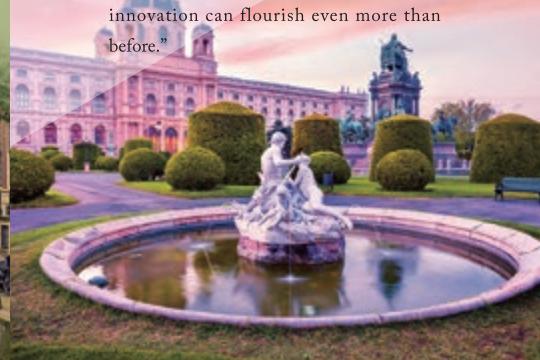
Mayor of Vienna
Michael Häupl

“Make Vienna a place where innovation can flourish even more than before”

“Vienna’s main strength is the city’s holistic and interdisciplinary approach that unites actors from different municipal areas and organizations. Vienna combines sustainable, innovative and – most of all – social aspects to guarantee and maintain Vienna’s high quality of life.

The city works towards this aim in many projects. One concrete example of such an initiative are the Citizens’ Solar Power Plants run by the city-owned energy provider Wien Energie. Another example is the project “asperrn Vienna’s Urban Lakeside”, where in the future, 8,500 housing units will accommodate 20,000 people. With a 240-hectare project area, it is one of Europe’s largest urban developments—a city within the city.

For the future, Vienna wants to significantly reduce the consumption of resources in the city. At the same time, the city will continue offering the highest quality of life and social cohesion for all citizens. We will meet these challenges if we take a proactive approach to change and make Vienna a place where innovation can flourish even more than before.”



October 2017

Edited and Published by
**Institute for Urban Strategies,
The Mori Memorial Foundation**

Norio Yamato, Yuko Hamada, Mariko Matsuda, Peter Dustan, Noriko Taki

Translated by Alex Yeoman
Designed and Produced by Nikkei Printing, Inc.
Special Feature Designed by Niimura Printing Co., Ltd.

Cover Photos © rcfotostock, Cla78, somchaij, Givaga, martinhosmat083 – Fotolia
Sources of Data for Special Feature The World Bank Group, data.worldbank.org
BP p.l.c., tools.bp.com
Statista Inc., statista.com

For more information on this report
info@mori-m-foundation.or.jp

Institute for Urban Strategies, The Mori Memorial Foundation

Toranomon 37 Mori Building, 5-1, Toranomon 3-chome,
Minato-ku, Tokyo 105-0001 JAPAN
TEL: +81-3-6406-6800
www.mori-m-foundation.or.jp/english/

© 2017 The Mori Memorial Foundation
This content is for general information purposes only.
Unauthorized reproduction of this document is forbidden.

Global Power City Index 2017

- 1 London**
- 2 New York**
- 3 Tokyo**
- 4 Paris**
- 5 Singapore**
- 6 Seoul**
- 7 Amsterdam**
- 8 Berlin**
- 9 Hong Kong**
- 10 Sydney**
- 11 Los Angeles**
- 12 Frankfurt**
- 13 Beijing**
- 14 Vienna**
- 15 Shanghai**
- 16 Stockholm**
- 17 San Francisco**
- 18 Zurich**
- 19 Toronto**
- 20 Copenhagen**
- 21 Brussels**
- 22 Chicago**
- 23 Dubai**
- 24 Barcelona**
- 25 Boston**
- 26 Osaka**
- 27 Madrid**
- 28 Vancouver**
- 29 Washington D.C.**
- 30 Istanbul**
- 31 Kuala Lumpur**
- 32 Milan**
- 33 Bangkok**
- 34 Geneva**
- 35 Moscow**
- 36 Taipei**
- 37 Fukuoka**
- 38 Mexico City**
- 39 Sao Paulo**
- 40 Buenos Aires**
- 41 Jakarta**
- 42 Mumbai**
- 43 Cairo**
- 44 Johannesburg**