

### The Global Liveability Index 2021 How the Covid-19 pandemic affected liveability worldwide

A report by The Economist Intelligence Unit



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# How the Covid-19 pandemic affected liveability worldwide

Data for this survey was collected from February 22nd to March 21st 2021. Key findings include the following:

- The overall global average liveability score has fallen by seven points, as compared with the average pre-pandemic score. The extent to which cities were sheltered by strong border closures, their ability to handle the health crisis and the pace at which they rolled out vaccination campaigns drove significant changes in the rankings.
- Auckland, in New Zealand, is at the top of The Economist Intelligence Unit's Liveability rankings, owing to the city's ability to contain the coronavirus (Covid-19) pandemic faster and thus lift restrictions earlier, unlike others around the world.
- Six of the top ten cities in the March 2021 survey are in New Zealand or Australia, where tight border controls have allowed residents to live relatively normal lives.
- Many European and Canadian cities have fallen down the rankings, having battled a second Covid-19
  wave by restricting cultural and sporting events, and closing schools and restaurants.
- The lower end of the rankings has seen less change, with the Syrian capital, Damascus, still the least liveable city in the world.
- Healthcare scores fell after the onset of the pandemic in most cities across the world, with the least-affected cities concentrated in western Europe and the Asia-Pacific region.

#### Lockdowns affect the most liveable cities

The pandemic has caused huge volatility in our bi-annual Liveability index, which ranks 140 cities across five areas: stability, healthcare, education, culture and environment, and infrastructure. (For a full methodology, see page 6.) Data for this survey were gathered between February 22nd and March 21st 2021, when cities were at different stages of their battle with the pandemic.

The new leader is Auckland. Owing to border closures and a consequently low Covid-19 case count, New Zealand has been able to keep its theatres, restaurants and other cultural attractions open. Students have been able to continue going to school, giving Auckland a 100% score for education. This has allowed the city to move up from sixth place in our autumn 2020 survey to first position in our March 2021 rankings. The New Zealand capital, Wellington, has also gained from this relative freedom, moving from 15th to joint fourth place in our current rankings.

Japanese cities of Osaka and Tokyo ranked second and fourth, respectively, owing to continued high stability scores. In third place is Adelaide in Australia, which also imposed a ban on international travel. Three more Australian cities—Perth, Melbourne and Brisbane—appear in the top ten, with Sydney in 11th place. The Swiss cities of Zurich and Geneva also maintained their places in the top ten, despite some social restrictions still being in place.

#### Ten of the most liveable cities in the world

City	Location	Rank	Index	Stability	Healthcare	Culture & Environment	Education	Infrastructure
Auckland	New Zealand	1	96.0	95	95.8	97.9	100.0	92.9
Osaka	Japan	2	94.2	100	100.0	83.1	91.7	96.4
Adelaide	Australia	3	94.0	95	100.0	83.8	100.0	96.4
Wellington	New Zealand	4	93.7	95	91.7	95.1	100.0	89.3
Tokyo	Japan	4	93.7	100	100.0	84.0	91.7	92.9
Perth	Australia	6	93.3	95	100.0	78.2	100.0	100.0
Zurich	Switzerland	7	92.8	95	100.0	85.9	83.3	96.4
Geneva	Switzerland	8	92.5	95	100.0	84.5	83.3	96.4
Melbourne	Australia	8	92.5	95	83.3	88.2	100.0	100.0
Brisbane	Australia	10	92.4	95	100.0	85.9	100.0	85.7

Source: The Economist Intelligence Unit

#### **European cities slump as US cities rise**

Further down the rankings, the picture is grimmer, particularly in Europe. Vienna, capital of Austria, occupied the top spot throughout 2018-20 but has slipped down to 12th place for the current survey, following the second Covid-19 wave. In Germany, Frankfurt, Hamburg and Dusseldorf have seen the biggest falls in ranking of all our 140 cities. Canadian cities such as Montreal, Vancouver, Calgary and Toronto, which have previously scored highly, have also slipped. The downward movement in rankings for the European and Canadian cities can be attributed to the heightened stress on healthcare resources during the second wave of the pandemic.

However, several US cities, including Honolulu and Houston, the biggest gainers in the latest survey, have bounced up the rankings over the past six months as social restrictions have lifted.

#### Conditions have not improved in the least liveable cities

While the top end of the liveability rankings is volatile, there are few changes at the bottom. As in previous surveys, living conditions remain worst in Damascus. Also scraping along the bottom are Lagos in Nigeria; Port Moresby, the capital of Papua New Guinea; and Dhaka, the capital of Bangladesh.

#### Biggest movers up the ranking in the past six months

City	Location	Index	Rank	Rank move	Index move
Honolulu	US	90.6	14	46	14.2
Houston	US	84.0	31	31	7.8
Madrid	Spain	86.8	19	25	5.5
Miami	US	84.3	28	24	5.6
Barcelona	Spain	88.3	16	22	5.5
Pittsburgh	US	85.3	25	22	5.4
Chicago	US	84.3	28	21	5.1
Minneapolis	US	83.4	36	19	5.6
Boston	US	83.8	34	18	5.1
Melbourne	Australia	92.5	8	16	5.0

Source: The Economist Intelligence Unit

#### Biggest movers down the ranking in the past six months

City	Location	Index	Rank	Rank move	Index move
Hamburg	Germany	81.9	47	-34	-8.5
Frankfurt	Germany	82.8	39	-29	-8.5
Dusseldorf	Germany	80.2	50	-28	-8.3
Prague	Czech Rep	71.2	72	-27	-9.6
Dublin	Ireland	80.1	51	-22	-6.4
Rome	Italy	77.3	57	-21	-6.5
Nouméa	New Caledonia	73.0	67	-20	-6.9
Bratislava	Slovakia	69.3	77	-20	-8.0
Athens	Greece	62.9	92	-20	-9.1
Montreal	Canada	82.7	40	-19	-6.0

Source: The Economist Intelligence Unit

These continue to score poorly across the five categories. A consistently low stability score, owing to ongoing civil unrest and military conflicts, is the reason behind most of these cities featuring in the bottom ten. However, conditions have deteriorated even further as a result of Covid-19—particularly for healthcare.

#### Healthcare scores have fallen sharply

Unsurprisingly, the healthcare scores in our rankings were affected badly by the pandemic. Compared with six months ago, the average city score for healthcare has dropped by nearly five points. Healthcare conditions have worsened markedly in Prague (Czech Republic), Athens (Greece) and Jakarta (Indonesia), where the Covid-19 case count was rising at the time of the survey. This added stress on the healthcare sector, making it more difficult to get a hospital bed and access to quality healthcare services.

#### Ten of the least liveable cities in the world

City	Location	Rank	Index	Stability	Healthcare	Culture & Environment	Education	Infrastructure
Caracas	Venezuela	131	41.7	35	25.0	45.6	58.3	53.6
Douala	Cameroon	132	38.6	60	12.5	40.3	25.0	42.9
Harare	Zimbabwe	133	36.6	40	12.5	44.4	58.3	35.7
Karachi	Pakistan	134	36.2	20	33.3	33.3	58.3	51.8
Tripoli	Libya	135	34.2	30	29.2	33.8	41.7	41.1
Algiers	Algeria	136	34.1	35	29.2	37.3	41.7	30.4
Dhaka	Bangladesh	137	33.5	55	16.7	30.8	33.3	26.8
Port Moresby	PNG	138	32.5	30	16.7	36.1	33.3	46.4
Lagos	Nigeria	139	31.2	20	20.8	41.0	25.0	46.4
Damascus	Syria	140	26.5	20	16.7	36.8	25.0	32.1

Source: The Economist Intelligence Unit

By contrast, the US city of Honolulu witnessed a rise in its healthcare score of 33 points compared with the previous survey. Over half of Hawaii's residents have now received at least one dose of a vaccine. Positivity rates have also reduced, thereby imposing a much lower stress on the city's healthcare infrastructure. The Spanish cities of Barcelona and Madrid (capital) gained nearly 25 points for healthcare, as they coped better in terms of the stress on their healthcare systems compared with the previous wave of Covid-19.

In the latest survey, we introduce new metrics scoring cities on their responses to Covid-19, as well as access to healthcare and the quality of care received. The subscription version of the liveability rankings also contains some additional scores on Covid-19 vaccination rates, case rates and death rates.

#### Culture and environment have been affected

Since the pandemic started, curbs on public gatherings have also had a major impact on scores under the culture and environment category. The average score for this category fell by 14 points compared with the autumn 2019 survey.

Some of the social and cultural restrictions have been lifted since September 2020 in some parts of the world. New Zealand and Australian cities have benefited the most from this trend, as have cities in the US and China. When, in March 2021, Texas became one of the first US states to lift restrictions on public spaces, Houston became the only US city to enter our top ten for culture and environment conditions. European cities such as Copenhagen, Zurich and Geneva also feature among the top ten, having eased restrictions on outdoor gatherings.

#### Little change in other categories

Stability, education and infrastructure have seen little change in their overall scores from six months ago; education is still lagging behind its pre-pandemic scores. Australia and New Zealand now

Healthcare average fell sharply; infrastructure remained flat (change in average over the past six months)

2

1

0

-1

-2

-3

-4

Overall cydnight cydnig

dominate the top of the education rankings. Elsewhere, however, there are still intermittent school closures in many cities, forcing pupils to rely on online learning. Infrastructure, including transport, has been protected in many geographies by public funding.

Stability scores, meanwhile, have deteriorated in some Middle-Eastern locations since before the pandemic, but generally remain stable. Across the world, there have been protests over issues such as civil liberties, racism, legislation and living standards over the past six months. In many cities, increased government subsidies and restrictions on public gatherings have reduced visible social unrest.

Source: The Economist Intelligence Unit.

#### Covid-19 will continue to affect city liveability

Vaccination campaigns are now under way, at varying levels of efficiency, across the world. So, what changes should we expect in our next survey? Conditions in the poorest cities are likely to deteriorate further, should cities fail to get the vaccines they need to prevent the spread of new Covid-19 variants. Weak healthcare systems could come under greater strain, as they have in India. A slower inoculation drive would result in a more strict lockdown, thereby affecting the expected recovery in economic growth. This, in turn, could affect other categories, including stability.

The pace of recovery of liveability in most regions will be determined by how effectively the health risks of the pandemic can be controlled, through a combination of vaccination, testing, tracing and quarantine measures. Barring huge setbacks, such as the emergence of vaccine-resistant variants, scores for culture and environment should improve. Schools should begin to return to normality. However, healthcare systems will remain under pressure as they attempt to catch up with a backlog of non-Covid care cases. Moreover, what residents value in their cities may also have changed, with green spaces becoming more popular and public transport less so than before the pandemic.

# About The Economist Intelligence Unit's liveability survey

#### How the rating works

The concept of liveability is simple: it assesses which locations around the world provide the best and worst living conditions. Assessing liveability has a broad range of uses, from benchmarking perceptions of development levels to assigning a hardship allowance as part of expatriate relocation packages. City officials and urban policymakers can use the rankings to benchmark target cities against the top-ranked cities. The ratings can help them to understand the gap between target cities and the best-ranked cities across different categories. This in turn should help to frame policies and target investors. The Economist Intelligence Unit's liveability rating quantifies the challenges that might be presented to an individual's lifestyle in any given location and allows for direct comparison between locations.

Every city is assigned a rating for relative comfort for over 30 qualitative and quantitative factors across five broad categories: stability, healthcare, culture and environment, education and infrastructure. Each factor in a city is rated as *acceptable*, *tolerable*, *uncomfortable*, *undesirable* or *intolerable*. For qualitative indicators, a rating is awarded based on the judgment of our team of expert analysts and in-city contributors. For quantitative indicators, a rating is calculated based on the relative performance of a number of external data points.

The Covid-19 pandemic has affected living conditions in many cities, owing to its impact on the healthcare infrastructure, and restrictions and lockdown measures imposed by governments, which have put the healthcare, culture and environment, and education categories under stress. The impact of the pandemic has been incorporated into our overall liveability score, with the introduction of new indicators to assess these stress and restriction levels for each city.

- Stress on healthcare resources
- Restrictions on local sporting events
- Restrictions on theatre
- Restrictions on classic and modern music concerts
- Restrictions on restaurants, bars, coffee shops and nightclubs
- Restrictions on educational institutes

The scores for these new indicators and its effect are incorporated in our existing healthcare, culture and environment and education ratings.

The scores are then compiled and weighted to provide a score in the range 1-100, where 1 is considered *intolerable* and 100 is considered *ideal*. The liveability rating is provided both as an overall score and as a score for each category. To provide points of reference, the score is also given for each category relative to a control city (New York) and an overall position in the ranking of 140 cities is provided.

#### The suggested liveability scale

Companies pay a premium (usually a percentage of a salary) to employees who move to cities where living conditions are particularly difficult, such as excessive physical hardship or a notably unhealthy environment.

The Economist Intelligence Unit has given a suggested allowance to correspond with the rating. However, the actual level of the allowance is often a matter of company policy. It is not uncommon, for example, for companies to pay higher allowances—perhaps up to double The Economist Intelligence Unit's suggested level.

#### **Rating description**

Suggested allowance (%)

80-100 There are few, if any, challenges to living standards o

70-80 Day-to-day living is fine, in general, but some aspects of life may entail problems 5

60-70 Negative factors have an impact on day-to-day living 10

50-60 Liveability is substantially constrained 15

50 or less Most aspects of living are severely restricted 20

#### How the rating is calculated

The liveability score is reached through category weights, which are divided equally into relevant subcategories to ensure that the score covers as many indicators as possible. Indicators are scored as *acceptable, tolerable, uncomfortable, undesirable* or *intolerable*. These are then weighted to produce a rating, where 100 indicates that liveability in a city is ideal and 1 means that it is intolerable.

For qualitative variables, an "EIU rating" is awarded based on the judgment of in-house expert geography analysts and a field correspondent based in each city. For quantitative variables, a rating is calculated based on the relative performance of a location using external data.

#### Category 1: Stability (weight: 25% of total)

Indicator	Source
Prevalence of petty crime	EIU rating
Prevalence of violent crime	EIU rating
Threat of terror	EIU rating
Threat of military conflict	EIU rating
Threat of civil unrest/conflict	EIU rating

#### Category 2: Healthcare (weight: 20% of total)

Indicator	Source
Availability of private healthcare	EIU rating
Quality of private healthcare	EIU rating
Availability of public healthcare	EIU rating
Quality of public healthcare	EIU rating
Availability of over-the-counter drugs	EIU rating
General healthcare indicators	Adapted from World Bank



#### Category 3: Culture & Environment (weight: 25% of total)

Indicator	Source
Humidity/temperature rating	Adapted from average weather conditions
Discomfort of climate for travellers	EIU rating
Level of corruption	Adapted from Transparency International
Social or religious restrictions	EIU rating
Level of censorship	EIU rating
Sporting availability	EIU field rating of 3 sport indicators
Cultural availability	EIU field rating of 4 cultural indicators
Food and drink	EIU field rating of 4 cultural indicators
Consumer goods and services	EIU rating of product availability



#### Category 4: Education (weight: 10% of total)

Indicator	Source
Availability of private education	EIU rating
Quality of private education	EIU rating
Public education indicators	Adapted from World Bank



#### Category 5: Infrastructure (weight: 20% of total)

Indicator	Source
Quality of road network	EIU rating
Quality of public transport	EIU rating
Quality of international links	EIU rating
Availability of good-quality housing	EIU rating
Quality of energy provision	EIU rating
Quality of water provision	EIU rating
Quality of telecommunications	EIU rating

### **Global Liveability Products**

#### **Liveability Ranking and Overview**

A complete overview of the challenges to an individual's lifestyle in 140 cities worldwide. View liveability rankings and average scores for all cities across five broad categories: stability, healthcare, culture and environment, education and infrastructure.

What's included?

- The EIU's liveability rankings for 140 cities.
- Overall liveability average scores for all cities in 5 categories: stability, healthcare, culture and environment, education and infrastructure.
- A summary of findings and a description of the methodology used.

Find out more at the **EIU Store**.

#### **Global Liveability survey**

The liveability survey appraises 140 cities through their individual city profiles to review regional trends, and quantify the challenges to an individual's lifestyle there.

What's included?

- The EIU's liveability rankings for 140 cities.
- Overall liveability average scores for all cities in 5 categories: stability, healthcare, culture and environment, education and infrastructure.
- Individual city profiles for each city within the survey.

Find out more at the EIU Store.

#### **Global Liveability matrix**

Build your own models with this dataset ranking the challenges to an individual's lifestyle in 140 cities worldwide, and evaluate key trends that might affect the development of cities in the future.

What's included?

- The EIU's liveability rankings for 140 cities.
- Overall liveability average scores for all cities in 5 categories: stability, healthcare, culture and environment, education and infrastructure.
- Interactive dataset that ranks cities in over 30 qualitative and quantitative factors.

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