

Global Parking Index

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Executive Summary

2022 sees the continuation of many of the parking pricing patterns highlighted in <u>Parkopedia's 2019 Global Parking Index</u>, despite the global impact of the Covid-19 pandemic and rising rates of inflation globally.

New York continues to be the most expensive city for **2-hour off-street** parking (USD and PPP*) and is now also the most expensive city for **daily off-street** parking (USD). As in 2019, the top 10 most expensive locations for **2-hour off-street** parking are all located within either the USA or Australia, except for London (and, when prices are adjusted for PPP, Moscow). Australia also continues to be the most expensive country for both **2-hour off-street** (USD and PPP) and **daily off-street** (USD) parking.

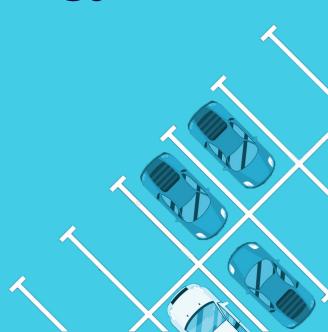
The 2022 Parking Index now includes pricing for daily on-street parking, with South Korea named as the most expensive country (USD), and Amsterdam, the most expensive city (USD). Amsterdam is one of the most expensive cities to park in the world, as the most expensive city for 2-hour on-street (USD), the second most expensive for monthly off-street parking (USD, behind London), as well as being the third most expensive for daily off-street (behind New York and Sydney). The Netherlands is also the most expensive country for monthly off-street parking (USD and PPP pricing).

Russia has experienced the greatest change in **2-hour off-street** parking costs over the last three years - rising 42.7%, and **daily off-street** parking cost - rising 42.6%, and when prices were adjusted for PPP in 2022, Russia was also found to be the most expensive country for **2-hour on-street**, **daily off-street**, and **daily on-street** parking, and its capital, Moscow, as the most expensive city for **2-hour on-street**, **daily off-street** and **daily on-street** when PPP is applied.

*Prices are stated in USD and adjusted for local currency using World Bank's Purchasing Power Parity (PPP) exchange rates detailed on page 3



Methodology



Methodology

Using Parkopedia's parking data on over 90 million parking spaces across 90 countries globally, the average parking prices were calculated¹ and adjusted for consumer purchasing power (through a 'basket of goods approach') using World Bank's Purchasing Power Parity (PPP) exchange rates, at a city/country level for both on-street and off-street parking spaces, and excluding parking spaces characterised by any special restrictions (such as accessible parking spaces, customer reserved spaces, visitors only, etc).

Prices are reported for:

- 2-hour parking: 2-hour stay on a weekday (11:00-13:00 on a Wednesday)
- Daily parking: 8 hour stay on a weekday (09:30-17:30 on a Wednesday)
- Monthly parking: Unreserved monthly rate (where a space is guaranteed but it is not a dedicated space)

Average price is calculated as:

$$\frac{\sum_{i=1}^{n} Price_{i}}{n}$$

The 2022 Parking Index report provides the difference between 2022 and 2019 at a city/country level across different parking durations. To provide a comparison of price changes, calculations were completed in local currency to remove any exchange rate changes, displayed as a percentage increase or decrease and calculated across the same locations between the three years to ensure consistency. The parking data for 2022 was collated in February 2022.

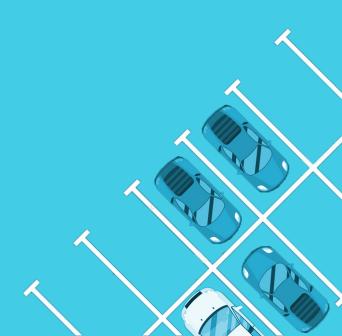
To provide a comparison of the cost of parking across the globe, prices have been adjusted based on the theory of purchasing-power-parity (PPP), using data from the 'World Bank' (private consumption PPP, accessed in May 2022)².

¹ Average parking prices calculated in dollars and using a three month average of USD exchange rates between November 2021 and February 2022

² World Bank data fluctuates continuously and accurate at the date of access is given



2-Hour Pricing



3.1.1 2-hour off-street: Most Expensive Cities (USD)

Parkopedia

Rank	Country	City	2-hr price USD	Rank	Country	City	2-hr price USD
1	US	New York	\$43.10	26	CA	Montréal	\$10.59
2	AU	Sydney	\$32.65	27	US	Jersey City	\$10.45
3	AU	Brisbane	\$23.95	28	US	Bellevue	\$10.33
4	AU	Melbourne	\$23.60	29	SE	Stockholm	\$10.28
5	US	Chicago	\$22.46	30	CA	Toronto	\$10.16
6	US	Boston	\$21.75	31	JP	Yokohama	\$10.09
7	US	Philadelphia	\$17.14	32	US	Atlanta	\$9.56
8	UK	London	\$16.64	33	US	Seattle	\$9.55
9	US	Washington DC	\$16.47	34	CA	Calgary	\$9.40
10	US	San Francisco	\$13.59	35	JP	Osaka	\$9.36
11	US	Charlotte	\$13.42	36	US	Buffalo	\$9.20
12	US	Baltimore	\$13.38	37	US	Honolulu	\$9.12
13	JP	Tokyo	\$13.27	38	US	Houston	\$8.97
14	US	Hoboken	\$13.08	39	US	Pittsburgh	\$8.94
15	US	Los Angeles	\$12.73	40	NO	Drammen	\$8.88
16	NL	Amsterdam	\$12.42	41	US	Detroit	\$8.84
17	NO	Oslo	\$12.41	42	FI	Helsinki	\$8.80
18	US	San Diego	\$12.20	43	IL	Jerusalem	\$8.79
19	US	Miami	\$11.52	44	NL	Utrecht	\$8.67
20	US	Denver	\$11.42	45	AU	Adelaide	\$8.54
21	US	Newark	\$11.41	46	US	Portland	\$8.52
22	US	Nashville	\$11.37	47	NZ	Wellington	\$8.45
23	FR	Paris	\$11.33	48	US	New Orleans	\$8.40
24	NZ	Auckland	\$11.18	49	US	San Antonio	\$8.33
25	US	Austin	\$11.02	50	US	Arlington	\$8.31

New York remains the most expensive city for 2-hour off-street parking. <u>Car ownership in the city soared by 224% in 2021</u>, and demand now heavily outstrips supply; as such, the average cost for 2-hour off-street parking has increased by \$3.00 since 2019 (across common locations).

The second and third most expensive cities are also the same as in 2019 - Sydney and Brisbane.

London is the only top 10 city situated outside the US and Australia, where average parking costs are 61% lower than in New York and 49% lower than in Sydney.

Behind London, Amsterdam is the next most expensive European city on the list and 16th overall; parking costs are 71% lower than in New York and 61% lower than in Sydney.

Two-thirds of the top 50 cities analysed are located within either the US or Australia.



3.1.2 2-hour off-street: Top 5 Cities by Region (USD)

Parkopedia



3.1.3 2-hour off-street: Most Expensive Cities (PPP) Parkopedia

Rank	Country	City	2-hr price USD	PPP impact on ranking vs USD ranking	Rank	Country	City	2-hr price USD	PPP impact on ranking vs USD ranking
1	US	New York	\$43.10	No change	26	US	Jersey City	\$10.45	+1
2	AU	Sydney	\$28.77	No change	27	US	Bellevue	\$10.33	+1
3	US	Chicago	\$22.46	+2	28	CA	Montréal	\$10.16	-2
4	US	Boston	\$21.75	+2	29	JP	Yokohama	\$10.11	+2
5	AU	Brisbane	\$21.11	-2	30	NZ	Auckland	\$10.06	-6
6	AU	Melbourne	\$20.80	-2	31	ES	Barcelona	\$9.82	Not ranked
7	RU	Moscow	\$18.37	Not ranked	32	SE	Stockholm	\$9.80	-3
8	US	Philadelphia	\$17.14	-1	33	CA	Toronto	\$9.75	-3
9	US	Washington DC	\$16.47	No change	34	KR	Seoul	\$9.57	Not ranked
10	UK	London	\$15.88	-2	35	US	Atlanta	\$9.56	-3
11	US	San Francisco	\$13.59	+1	36	US	Seattle	\$9.55	-3
12	US	Charlotte	\$13.42	+1	37	JP	Osaka	\$9.37	-2
13	US	Baltimore	\$13.38	+1	38	US	Buffalo	\$9.20	-2
14	JP	Tokyo	\$13.29	-1	39	US	Detroit	\$9.16	+2
15	US	Hoboken	\$13.08	-1	40	US	Honolulu	\$9.12	-3
16	NL	Amsterdam	\$13.02	No change	41	NL	Utrecht	\$9.08	+3
17	US	Los Angeles	\$12.73	-2	42	IT	Milan	\$9.03	Not ranked
18	US	San Diego	\$12.20	No change	43	CA	Calgary	\$9.02	-9
19	FR	Paris	\$12.16	+4	44	US	Houston	\$8.97	-6
20	US	Miami	\$11.52	-1	45	US	Pittsburgh	\$8.94	-6
21	US	Denver	\$11.42	+1	46	IT	Florence	\$8.79	Not ranked
22	US	Newark	\$11.41	No change	47	US	Portland	\$8.52	-2
23	US	Nashville	\$11.37	-1	48	ES	Madrid	\$8.49	Not ranked
24	US	Austin	\$11.02	+1	49	FI	Helsinki	\$8.42	-7
25	GR	Athens	\$10.96	Not ranked	50	US	New Orleans	\$8.40	-2

After adjusting for Purchasing Power Parity (PPP) pricing, the top two cities on the list stay the same as the USD results - with New York remaining the most expensive, and Sydney the second most expensive for 2-hour off-street parking - the same as in 2019.

Adjustment for PPP results in a greater number of non-US cities featuring within the top 50, such as Moscow, Athens, Barcelona, Seoul and Milan.

The three cities most affected by PPP are Calgary, Helsinki and Auckland. The average parking price in Calgary has decreased by 7.7% since 2019, while prices in Helsinki and Auckland have increased by 6.14% and 0.98% respectively.

NYC & SYD

Remain the **most expensive** cities for 2-hour off-street parking



3.1.4 2-hour off-street: Most Expensive Countries (USD)

Parkopedia

Rank	Country	2-hr price USD	2022 vs 2019% price change (local currency)	Rank	Country	2-hr price USD	2022 vs 2019% price change (local currency)
1	Australia	\$19.12	2.55%	21	United Kingdom	\$4.37	3.59%
2	United States	\$9.38	4.34%	22	Germany	\$4.22	8.50%
3	Israel	\$8.79	1.72%	23	Latvia	\$4.12	-0.12%
4	New Zealand	\$8.79	5.91%	24	Belgium	\$3.61	N/A
5	Norway	\$8.70	18.3%	25	Sweden	\$3.28	13.6%
6	Netherlands	\$7.69	10.6%	26	Slovakia	\$3.27	-0.05%
7	Japan	\$7.26	11.3%	27	Romania	\$2.87	N/A
8	Canada	\$7.13	1.95%	28	United Arab Emirates	\$2.76	-13.3%
9	Greece	\$6.93	1.32%	29	Czech Republic	\$2.70	1.49%
10	Denmark	\$6.41	9.83%	30	Bulgaria	\$2.50	0.00%
11	Spain	\$6.39	4.07%	31	Hungary	\$2.26	9.29%
12	South Korea	\$6.38	4.89%	32	Lithuania	\$2.26	40.6%
13	Ireland	\$6.24	5.30%	33	Slovenia	\$2.09	N/A
14	Finland	\$6.22	8.25%	34	Poland	\$2.00	12.0%
15	Austria	\$6.09	4.71%	35	Singapore	\$1.76	0.00%
16	Russia	\$5.94	42.7%	36	Malaysia	\$1.61	-0.50%
17	France	\$5.25	3.52%	37	Croatia	\$1.49	0.95%
18	Italy	\$5.13	4.51%	38	South Africa	\$1.33	11.9%
19	Switzerland	\$4.75	-0.62%	39	North Macedonia	\$1.28	13.5%
20	Estonia	\$4.48	11.2%	40	Turkey	\$0.97	18.1%

Australia and the US are still the two most expensive countries for 2-hour off-street parking, as they were in 2019.

Australia's parking costs have risen on average 2.55% over the last three years, while costs in the US have risen 4.34%.

Overall, short term off-street parking prices are experiencing a slight, but steady rise, with the exception of Switzerland, Latvia, Slovakia, United Arab Emirates and Malaysia, where prices have fallen.

AUS & USA

Remain the **most expensive** countries for 2-hour off-street parking



3.1.5 2-hour off-street: Most Expensive Countries (PPP)

Parkopedia

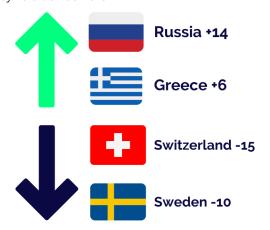
Rank	Country	2-hr price USD	PPP impact on ranking vs USD ranking	Rank	Country	2-hr price USD	PPP impact on ranking vs USD ranking
1	Australia	\$16.86	No change	21	Denmark	\$5.52	-11
2	Russia	\$16.60	+14	22	Ireland	\$5.39	-9
3	Greece	\$9.53	+6	23	Turkey	\$4.78	+17
4	United States	\$9.39	-2	24	Germany	\$4.77	-2
5	Netherlands	\$8.07	+1	25	Slovakia	\$4.37	+1
6	Spain	\$7.92	+5	26	Hungary	\$4.27	+5
7	New Zealand	\$7.91	-3	27	Malaysia	\$4.21	+9
8	South Korea	\$7.82	+4	28	Poland	\$4.18	+6
9	Japan	\$7.27	-2	29	United Kingdom	\$4.17	-8
10	Norway	\$7.23	-5	30	Czech Republic	\$4.02	-1
11	Canada	\$6.85	-3	31	Lithuania	\$3.09	+1
12	Austria	\$6.54	+3	32	Belgium	\$3.83	-6
13	Israel	\$6.40	-10	33	United Arab Emirates	\$3.82	-5
14	Romania	\$6.38	+13	34	Switzerland	\$3.31	-15
15	Latvia	\$6.37	+8	35	Sweden	\$3.13	-10
16	Estonia	\$6.36	+4	36	North Macedonia	\$3.04	+3
17	Italy	\$6.10	+1	37	South Africa	\$2.99	+1
18	Finland	\$5.95	-4	38	Slovenia	\$2.88	-5
19	France	\$5.64	-2	39	Croatia	\$2.55	-2
20	Bulgaria	\$5.53	+10	40	Singapore	\$2.38	-5

Australia remains the most expensive country for 2-hour off-street parking, even after PPP price adjustment.

The largest upward trend can be seen in Russia (+14 places) and Greece (+6 places), demonstrating the relative expense of parking in these countries, and minimising the impact of currency exchange rates.

The PPP adjustment impact on USD ranking is more significant for countries compared to cities, as the rankings differ significantly, especially for Romania (+13 places) and Turkey (+17 places).

The two countries whose price ranking dropped the most after PPP adjustment were Switzerland (-15 places) and Sweden (-10 places). However, the average parking costs have decreased by 0.62% in Switzerland, and prices in Sweden have increased by 13.6% since 2019.



3.1.6 2-hour off-street: Countries with greatest 3-year change Parkopedia

Rank	Country	2022 vs 2019 % price change (local currency)	Rank	Country	2022 vs 2019 % price change (local currency)
1	Russia	42.7%	19	Italy	4.51%
2	Lithuania	40.6%	20	United States	4.34%
3	Norway	18.3%	21	Spain	4.07%
4	Turkey	18.1%	22	United Kingdom	3.59%
5	Sweden	13.6%	23	France	3.52%
6	North Macedonia	13.5%	24	Australia	2.55%
7	Poland	12.0%	25	Canada	1.95%
8	Japan	11.3%	26	Israel	1.72%
9	Estonia	11.2%	27	Czech Republic	1.49%
10	Netherlands	10.6%	28	Greece	1.32%
11	Denmark	9.83%	29	Croatia	0.95%
12	Hungary	9.29%	30	Singapore	0.00%
13	Germany	8.50%	31	Slovakia	-0.05%
14	Finland	8.25%	32	Latvia	-0.12%
15	New Zealand	5.91%	33	Malaysia	-0.50%
16	Ireland	5.30%	34	Switzerland	-0.62%
17	South Korea	4.89%	35	United Arab Emirates	-13.33%
18	Austria	4.71%			

Russia has experienced a 42.7% increase in 2-hour off-street parking pricing since 2019 - most likely due to the 'hyperinflation' that the country is currently experiencing - this is also the case for Lithuania, where prices have increased by 40.6%.

The UAE, which saw a steep increase in parking costs from 2017 - 2019, now sees the largest downward trend over the last 3 years (-13.3%). The UAE holds one of the largest oil and natural gas reserves in the world, and roughly one third of the country's GDP is heavily linked to gas and oil exports. However, demand for oil fell sharply at the beginning of the pandemic, contributing to the UAE's shrinking economy.



3 years

3.2.1 2-hour on-street: Most Expensive Cities (USD)

Rank	Country	City	2-hr price USD	Rank	Country	City	2-hr price USD
1	NL	Amsterdam	\$13.31	26	AU	Melbourne	\$6.01
2	UK	London	\$12.44	27	DE	Mannheim	\$6.00
3	FR	Paris	\$12.20	28	US	New Orleans	\$6.00
4	NO	Oslo	\$11.75	29	AU	Perth	\$5.91
5	US	New York	\$10.75	30	DE	Düsseldorf	\$5.84
6	RU	Moscow	\$10.21	31	FI	Kuoplo	\$5.84
7	UK	Oxford	\$10.17	32	СН	Zurich	\$5.83
8	NO	Drammen	\$9.72	33	AU	Newcastle	\$5.78
9	US	Chicago	\$9.50	34	DE	Hamburg	\$5.68
10	KR	Seoul	\$9.47	35	NL	Rotterdam	\$5.63
11	NL	Utrecht	\$8.96	36	DE	Wiesbaden	\$5.46
12	NO	Trondheim	\$8.47	37	DE	Hannover	\$5.43
13	AU	Sydney	\$8.34	38	CA	Toronto	\$5.28
14	DE	Cologne	\$7.92	39	UK	Eastbourne	\$5.24
15	NO	Bergen	\$7.45	40	FI	Oulu	\$5.19
16	US	Miami Beach	\$7.42	41	UK	Liverpool	\$5.18
17	UK	Edinburgh	\$7.27	42	FI	Lahti	\$5.15
18	NO	Sarpsborg	\$7.00	43	DE	Berlin	\$5.11
19	FI	Helsinki	\$6.98	44	ES	Terrassa	\$5.08
20	DK	Århus	\$6.72	45	US	Philadelphia	\$5.00
21	UK	Manchester	\$6.55	46	AT	Vienna	\$4.99
22	NZ	Wellington	\$6.42	47	FI	Pori	\$4.98
23	ES	Barcelona	\$6.25	48	US	Hollywood, FL	\$4.91
24	US	Miami	\$6.12	49	FI	Tampere	\$4.83
25	DK	Copenhagen	\$6.11	50	US	Boston	\$4.83

The top 2 most expensive cities for 2-hour onstreet parking remain the same as in 2019, and 70% of the cities within the top 50 are located within Europe.

Amsterdam's average parking price has fallen slightly (4.9%) since 2019, while average prices in London and Paris have increased (7.0% and 54.7% respectively).

Germany features most frequently (7 cities), followed by the United Kingdom (6 cities) and Norway (5 cities). In summary, on-street parking is relatively more expensive in Europe than in North America.

In most cities, off-street parking is significantly more expensive when compared to on-street, in particular, New York (+300%), Melbourne (+292%), Sydney (+291%), Philadelphia (+243%) and Chicago (+136%).

In 2019, Amsterdam was one of only 2 cities (alongside Seoul) where off-street parking was cheaper than on-street, which was the result of the city's first initiatives to limit vehicles within its centre. Now, cities such as Paris have also followed this trend and have cheaper off-street to on-street parking, as similar 'clean air' strategies have been adopted.

3.2.2. 2-hour on-street: Top 5 Cities by Region (USD) Parkopedia



3.2.3 2-hour on-street: Most Expensive Cities (PPP)

Parkopedia

Ra	nk	Country	City	2-hr price USD	PPP impact on ranking vs USD ranking	Rank	Country	City	2-hr price USD	PPP impact on ranking vs USD ranking
:	1	RU	Moscow	\$28.50	+5	26	PL	Poznań	\$6.25	Not ranked
;	2	NL	Amsterdam	\$13.94	-1	27	UK	Manchester	\$6.24	-6
;	3	FR	Paris	\$13.09	No change	28	NO	Bergen	\$6.19	-13
4	4	UK	London	\$11.87	-2	29	CZ	Prague	\$6.18	Not ranked
!	5	KR	Seoul	\$11.62	+5	30	DE	Wiesbaden	\$6.16	+6
(5	US	New York	\$10.75	-1	31	DE	Hannover	\$6.12	+6
	7	NO	Oslo	\$9.77	-3	32	US	Miami	\$6.12	-8
	3	UK	Oxford	\$9.70	-1	33	US	New Orleans	\$6.00	-5
9	9	US	Chicago	\$9.50	No change	34	NL	Rotterdam	\$5.90	+1
1	0	NL	Utrecht	\$9.39	+1	35	NO	Sarpsborg	\$5.82	-17
1	.1	DE	Cologne	\$8.94	+3	36	DK	Århus	\$5.78	-16
1	2	UA	Kiev	\$8.57	Not ranked	37	NZ	Wellington	\$5.78	-15
1	3	NO	Drammen	\$8.08	-5	38	ES	Madrid	\$5.77	Not ranked
1	4	ES	Barcelona	\$7.74	+9	39	DE	Berlin	\$5.77	+4
1	5	RU	Saint Petersburg	\$7.50	Not ranked	40	FI	Kuopio	\$5.58	-9
1	6	US	Miami Beach	\$7.42	No change	41	IT	Milan	\$5.40	Not ranked
1	.7	AU	Sydney	\$7.35	-4	42	PL	Gdańsk	\$5.39	Not ranked
1	8	NO	Trondheim	\$7.04	-6	43	AT	Vienna	\$5.36	+3
1	9	ES	Edinburgh	\$6.94	-2	44	AU	Melbourne	\$5.30	-18
2	0	DE	Mannheim	\$6.77	+7	45	DK	Copenhagen	\$5.25	-20
2	12	LV	Riga	\$6.69	Not ranked	46	AU	Perth	\$5.21	-17
2	2	FI	Helsinki	\$6.67	-3	47	DE	Karlsruhe	\$5.12	Not ranked
2	.3	DE	Düsseldorf	\$6.59	+7	48	BG	Plovdiv	\$5.12	Not ranked
2	4	DE	Hamburg	\$6.41	+10	49	DE	Frankfurt am Main	\$5.12	Not ranked
2	4	ES	Terrassa	\$6.30	+19	50	AU	Newcastle	\$5.09	-17

When adjusted for PPP, Moscow replaces Amsterdam as the most expensive city for 2-hour on-street parking. The Russian capital has experienced a 77.7% increase in average short term on-street parking costs since 2019.

Moscow was also the second most expensive city for short-term on-street parking (after Amsterdam) in 2019 - experiencing an upward impact of nine places when adjusted for PPP.

Spanish cities such as Barcelona, as well as German based Hamburg, Mannheim, Cologne, Düsseldorf, Wiesbaden, Hannover, and Berlin all experienced a significant upwards impact in pricing when adjusted for PPP, however, no German or Spanish cities (except for Madrid and Barcelona) currently feature in the top 50 most expensive for 2-hour offstreet parking (PPP). This is most likely due to the European cities' attempts to improve air quality by limiting the use of private vehicles within city centres and encouraging drivers to use off-street parking facilities or multimodal commuting via public transport.

MOSCOW HAS EXPERIENCED A 77.7% INCREASE IN AVERAGE SHORT TERM ON-STREET PARKING COSTS SINCE 2019

3.2.4 2-hour on-street: Most Expensive Countries (USD) Parkopedia

Rank	Country	2-hr price USD	Rank	Country	2-hr price USD
1	Norway	\$11.75	19	United States	\$3.47
2	Netherlands	\$9.48	20	New Zealand	\$3.47
3	South Korea	\$9.47	21	Sweden	\$3.05
4	Russia	\$8.12	22	Italy	\$3.00
5	Finland	\$6.26	23	Ukraine	\$2.58
6	Denmark	\$6.13	24	Croatia	\$2.21
7	France	\$5.99	25	Slovakia	\$2.18
8	United Kingdom	\$5.85	26	Hungary	\$2.17
9	Switzerland	\$5.83	27	Poland	\$1.94
10	Australia	\$5.13	28	Bulgaria	\$1.85
11	Germany	\$5.07	29	Brazil	\$1.79
12	Austria	\$5.00	30	Singapore	\$1.76
13	Latvia	\$4.33	31	Slovenia	\$1.39
14	Canada	\$4.25	32	Greece	\$1.13
15	Spain	\$3.86	33	United Arab Emirates	\$1.08
16	Iceland	\$3.78	34	Montenegro	\$0.90
17	Czech Republic	\$3.67	35	Serbia	\$0.79
18	Belgium	\$3.52			

6 of the top 10 cities were also featured in the 2019 report, albeit in a different order. In 2019: Finland (2nd), Norway (3rd), Russia (5th), United Kingdom (6th), France (7th), Australia (9th).

South Korea was the most expensive country for 2-hour on-street parking in 2019, however it ranks 3rd in 2022 due to larger price rises in Norway and The Netherlands. The average parking price in South Korea has still increased by 12.9% in the last three years, most likely due to the country's growing economy.

Most of the countries on this list are situated within Europe, with those highest on the list predominantly situated within Northern, Western and Eastern Europe.

NORWAY

Is the **most expensive** country for 2-hour on-street parking.
In 2019 it was ranked 3rd place.



3.2.5 2-hour on-street: Most Expensive Countries (PPP)

Parkopedia

Rank	Country	2-hr price PPP	PPP impact on ranking vs USD ranking	Rank	Country	2-hr price PPP	PPP impact on ranking vs USD ranking
1	Russia	\$22.68	+3	19	Switzerland	\$4.06	-10
2	South Korea	\$11.62	+1	20	Poland	\$4.05	+7
3	Netherlands	\$9.94	-1	21	Brazil	\$3.95	+8
4	Norway	\$9.77	-3	22	Croatia	\$3.75	+2
5	Ukraine	\$8.58	+18	23	Belgium	\$3.73	-5
6	Latvia	\$6.69	+7	24	Italy	\$3.57	-2
7	France	\$6.43	No change	25	United States	\$3.47	-6
8	Finland	\$5.98	-3	26	New Zealand	\$3.12	-6
9	Germany	\$5.72	+2	27	Iceland	\$3.05	-11
10	United Kingdom	\$5.58	-2	28	Slovakia	\$2.91	-3
11	Czech Republic	\$5.45	+6	29	Sweden	\$2.91	-8
12	Austria	\$5.36	No change	30	Singapore	\$2.37	No change
13	Denmark	\$5.27	-7	31	Slovenia	\$1.91	No change
14	Spain	\$4.79	+1	32	Montenegro	\$1.81	+2
15	Australia	\$4.52	-5	33	Serbia	\$1.62	+2
16	Hungary	\$4.11	+10	34	Greece	\$1.56	-2
17	Bulgaria	\$4.09	+11	35	United Arab Emirates	\$1.50	-2
18	Canada	\$4.08	-4				

When PPP adjustments are made, Russia is the most expensive country for 2-hour on-street parking, as it was in 2019, however, since then parking prices in the country have risen by a further 72%. Short term parking costs 95% more in Russia than in the second most expensive country, South Korea.

Russia's capital, Moscow is also the most expensive city for 2-hour on-street parking when PPP is applied, after overtaking Amsterdam, which was the most expensive in 2019.

Ukraine has experienced the largest upwards impact since 2019, as parking prices in the country have risen by 284% within the last three years.

Overall, 2-hour on-street parking prices have risen in most countries.

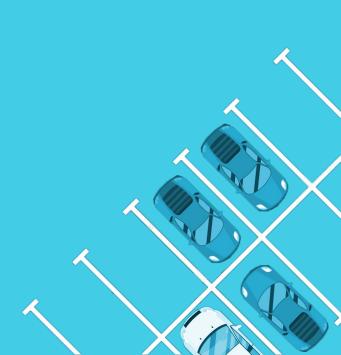
RUS & KOR

Russia is the **most expensive country** for 2-hour on-street parking followed by South Korea.









Parkopedia

4.1.1: Daily off-street: Most Expensive Cities (USD)

Rank	Country	City	2-hr price USD	Rank	Country	City	2-hr price USD
1	US	New York	\$52.65	26	JP	Tokyo	\$25.38
2	AU	Sydney	\$51.15	27	KR	Seoul	\$25.34
3	NL	Amsterdam	\$47.22	28	FR	Toulouse	\$24.04
4	UK	London	\$46.03	29	IT	Milan	\$24.51
5	AU	Melbourne	\$39.70	30	RU	Moscow	\$24.28
6	FR	Paris	\$39.20	31	US	Austin	\$24.16
7	AU	Brisbane	\$38.73	32	DK	Aarhus	\$24.04
8	NO	Oslo	\$37.99	33	NO	Tromsø	\$23.92
9	US	Boston	\$34.27	34	IT	Florence	\$23.45
10	US	Honolulu	\$32.61	35	DE	Munich	\$23.41
11	US	Chicago	\$31.58	36	AT	Vienna	\$22.99
12	FI	Helsinki	\$29.94	37	US	Seattle	\$22.91
13	ES	Barcelona	\$29.09	38	US	Nashville	\$22.90
14	SE	Stockholm	\$28.98	39	US	Hoboken	\$22.72
15	NL	Utrecht	\$28.63	40	NL	Rotterdam	\$22.69
16	СН	Zurich	\$28.13	41	NO	Fredrikstad	\$22.68
17	DK	Copenhagen	\$28.06	42	FR	Lille	\$22.44
18	NL	The Hague	\$27.98	43	IE	Dublin	\$22.40
19	FR	Lyon	\$27.43	44	DE	Frankfurt am Main	\$22.33
20	NO	Trondheim	\$27.34	45	FR	Nice	\$22.09
21	NO	Drammen	\$20.05	46	FR	Nantes	\$21.91
22	US	Miami	\$26.81	47	DE	Hamburg	\$21.85
23	ES	Madrid	\$26.72	48	NZ	Wellington	\$21.83
24	US	San Francisco	\$26.62	49	US	Washington DC	\$21.81
25	US	Philadelphia	\$25.97	50	NO	Stavanger	\$21.79

The most expensive cities for 8-hour/daily off-street parking are the same as in 2019. New York and Sydney still feature as first and second, however, London has been replaced by Amsterdam as the third most expensive. The price increase since 2019 is +4.25% for New York and +1.79% for Sydney, however, further countries on the list have also experienced a consistent rise in pricing over the last three years.

Whilst US cities Chicago, Philadelphia, Washington DC and San Francisco all feature within the top 10 for 2-hour off-street parking, all charge significantly less for daily off-street parking. US cities dominate the results for most expensive 2-hour off-street pricing, however when it comes to the most expensive cities for daily off-street parking, most are within Europe (64.2%), followed by the US (24.8%), and some Asia-Pacific countries (12.1%) including Australia (Sydney, Melbourne, Brisbane), Japan (Tokyo), South Korea (Seoul) and New Zealand (Wellington). This is due to parking operators in large US cities charging the majority of the daily parking rate upfront (typically the first 2 hours) with this practice less common in other countries.



4.1.2: Daily off-street: Top 5 Cities by Region (USD)



Parkopedia

4.1.3 Daily off-street: Most Expensive Cities (PPP)

Rank	Country	City	Daily price PPP	PPP impact on ranking vs USD ranking	Rank	Country	City	Daily price PPP	PPP impact on ranking vs USD ranking
1	RU	Moscow	\$67.77	+29	26	DE	Munich	\$26.42	+9
2	US	New York	\$52.65	-1	27	SK	Bratislava	\$26.31	Not ranked
3	NL	Amsterdam	\$49.47	No change	28	US	Philadelphia	\$25.97	-3
4	AU	Sydney	\$45.08	-2	29	IT	Naples	\$25.82	Not ranked
5	UK	London	\$43.91	-1	30	ES	Gerona	\$25.56	Not ranked
6	FR	Paris	\$42.07	No change	31	JP	Tokyo	\$25.42	-5
7	ES	Barcelona	\$36.06	+6	32	DE	Frankfurt am Main	\$25.20	+12
8	AU	Melbourne	\$34.99	-3	33	ES	Valencia	\$25.13	Not ranked
9	US	Boston	\$34.27	No change	34	AT	Vienna	\$24.67	+2
10	AU	Brisbane	\$34.13	-3	35	DE	Hamburg	\$24.65	+12
11	ES	Madrid	\$33.12	+12	36	US	Austin	\$24.16	-5
12	US	Honolulu	\$32.61	-2	37	DK	Copenhagen	\$24.13	-20
13	NO	Oslo	\$31.59	-5	38	FR	Lille	\$24.08	+4
14	US	Chicago	\$31.58	-3	39	ES	Murcia	\$23.97	Not ranked
15	KR	Seoul	\$31.07	+12	40	NL	Rotterdam	\$23.76	No change
16	NL	Utrecht	\$30.00	-1	41	FR	Nice	\$23.71	+4
17	FR	Lyon	\$29.44	+2	42	RO	Bucharest	\$23.71	Not ranked
18	NL	The Hague	\$29.32	No change	43	FR	Nantes	\$23.51	+3
19	IT	Milan	\$29.15	+10	44	RO	Graz	\$23.34	Not ranked
20	FI	Helsinki	\$28.64	-8	45	FR	Seattle	\$22.91	-8
21	IT	Florence	\$27.89	+13	46	AT	Nashville	\$22.90	-8
22	SE	Stockholm	\$27.61	-8	47	US	Trondheim	\$22.73	-27
23	FR	Toulouse	\$26.87	+5	48	US	Hoboken	\$22.72	-9
24	US	Miami	\$26.81	-2	49	NO	Drammen	\$22.49	-28
25	US	San Francisco	\$26.62	-1	50	FR	Marseille	\$22.33	Not ranked

PPP adjustment causes significant changes to the ranking of most cities for daily off-street parking. Moscow experiences a large upward impact (+29 places), replacing New York as the most expensive (USD).

Madrid, Seoul and Florence also experience large upwards trends (+12 places, +12 places and +13 places respectively).

Norwegian cities Drammen and Trondheim experience the largest downwards impact (-28 places and -27 places respectively), however, most other cities within the top 50 remain consistent with the USD pricing order.



MOSCOW REPLACES
NEW YORK AS THE MOST
EXPENSIVE CITY FOR
DAILY OFF-STREET
PARKING ACCORDING TO
PPP

4.1.4 Daily off-street: Most Expensive Countries (USD) Parkopedia

Rank	Country	Daily price USD	2022 VS 2019 % price change (local currency)	Rank	Country	Daily price USD	2022 VS 2019 % price change (local currency)
1	Australia	\$34.42	1.74%	21	Sweden	\$12.46	16.0%
2	Norway	\$27.99	14.2%	22	Slovakia	\$12.39	3.12%
3	Netherlands	\$27.27	9.71%	23	Belgium	\$12.15	8.33%
4	Switzerland	\$24.59	-6.17%	24	United Arab Emirates	\$11.16	-12.0%
5	Spain	\$24.28	2.22%	25	Czech Republic	\$10.84	4.09%
6	Denmark	\$23.92	9.51%	26	Romania	\$10.68	N/A
7	France	\$23.79	7.35%	27	Lithuania	\$9.33	35.0%
8	Austria	\$21.63	2.59%	28	Latvia	\$9.27	-3.55%
9	Russia	\$21.05	42.6%	29	Estonia	\$9.18	3.92%
10	Finland	\$20.68	-0.87%	30	Bulgaria	\$8.83	7.83%
11	South Korea	\$20.64	3.97%	31	Hungary	\$8.70	15.0%
12	Ireland	\$19.47	3.51%	32	Slovenia	\$8.47	N/A
13	New Zealand	\$19.37	9.65%	33	Poland	\$7.35	10.8%
14	United States	\$18.39	5.22%	34	Singapore	\$7.07	0.00%
15	Italy	\$18.87	3.67%	35	Croatia	\$6.91	8.84%
16	Germany	\$14.40	9.03%	36	Malaysia	\$5.25	-2.58%
17	Greece	\$13.49	3.90%	37	South Africa	\$4.61	7.59%
18	United Kingdom	\$13.35	4.12%	38	North Macedonia	\$4.56	5.89%
19	Japan	\$13.34	3.35%	39	Turkey	\$1.59	15.7%
20	Canada	\$12.83	-0.21%				

Australia continues to be the most expensive country in the world for daily off-street parking since the first Parking Index report, released in 2017.

Most of the European countries that featured in the 2019 Parking Index for daily off-street parking are still present within the top 10 for 2022.

AUSTRALIA

Continues to be the most expensive country in the world for daily off-street parking



Top 10 European countries for daily off-street parking



4.1.5 Daily off-street: Most Expensive Countries (PPP)

Rank	Country	Daily price PPP	PPP impact on ranking vs USD ranking	Rank	Country	Daily price PPP	PPP impact on ranking vs USD ranking
1	Russia	\$58.76	+8	21	Germany	\$16.25	-5
2	Australia	\$30.13	-1	22	Lithuania	\$16.11	+5
3	Spain	\$30.09	+2	23	Czech Republic	\$16.09	+2
4	Netherlands	\$28.57	-1	24	United Arab Emirates	\$15.41	No change
5	France	\$25.53	+2	25	Poland	\$15.36	+8
6	South Korea	\$25.31	+5	26	Latvia	\$14.32	+2
7	Romania	\$23.71	+19	27	Malaysia	\$13.68	+9
8	Norway	\$23.27	-6	28	Japan	\$13.36	-9
9	Austria	\$23.21	-1	29	Estonia	\$13.08	No change
10	Denmark	\$20.57	-4	30	Belgium	\$12.89	-7
11	Italy	\$20.07	+4	31	United Kingdom	\$12.73	-13
12	Finland	\$19.78	-2	32	Canada	\$12.31	-12
13	Bulgaria	\$19.50	+17	33	Sweden	\$11.88	-12
14	Greece	\$18.55	+3	34	Croatia	\$11.75	+1
15	United States	\$18.40	-1	35	Slovenia	\$11.65	-3
16	New Zealand	\$17.42	-3	36	North Macedonia	\$10.79	+2
17	Switzerland	\$17.15	-13	37	South Africa	\$10.34	No change
18	Ireland	\$16.79	-6	38	Singapore	\$9.50	-4
19	Slovakia	\$16.52	+3	39	Turkey	\$7.86	No change
20	Hungary	\$16.44	+11				

Russia is the most expensive country for daily offstreet parking when PPP adjustments are made.

As seen with USD pricing, most of the countries that feature within the top 10 Most Expensive for daily off-street parking prices are based within Europe.

The Eastern European countries of Romania, Bulgaria and Hungary have had the largest upwards impact (+19 places, +17 places and +11 places respectively), with significant changes in pricing when compared to USD - Romania +122%, Bulgaria +120% and Hungary +90%.

RUSSIA

Is the **most expensive** country for daily off-street parking when PPP adjustments are made.



4.1.6 Daily off-street: Countries with greatest 3-year change Parkopedia

Rank	Country	2022 VS 2019 % price change (local currency)	Rank	Country	2022 VS 2019 % price change (local currency)
1	Russia	42.6%	19	South Korea	3.97%
2	Lithuania	35.0%	20	Estonia	3.92%
3	Sweden	16.0%	21	Greece	3.90%
4	Turkey	15.7%	22	Italy	3.67%
5	Hungary	15.0%	23	Ireland	3.50%
6	Norway	14.2%	24	Japan	3.35%
7	Poland	10.8%	25	Slovakia	3.12%
8	Netherlands	9.71%	26	Austria	2.59%
9	New Zealand	9.64%	27	Spain	2.21%
10	Denmark	9.50%	28	Australia	1.74%
11	Germany	9.02%	29	Singapore	0.00%
12	Croatia	8.83%	30	Canada	-0.21%
13	Bulgaria	7.82%	31	Finland	-0.86%
14	France	7.35%	32	Malaysia	-2.57%
15	North Macedonia	5.89%	33	Latvia	-3.55%
16	United States	5.21%	34	Switzerland	-6.16%
17	United Kingdom	4.12%	35	United Arab Emirates	-12.0%
18	Czech Republic	4.09%			

Russia and Lithuania have experienced the most significant price changes over the last three years for 2-hour off-street parking (and for daily off-street parking also).

Other countries such as <u>Sweden</u>, <u>Turkey</u>, <u>Hungary</u>, <u>Norway</u> and <u>Poland</u> have also seen significant increases in parking prices due to rising inflation in these countries.

RUS & LTU

have experienced the biggest price change over the last 3 years for 2-hour off-street parking and daily off-street parking



Parkopedia

4.2.1 Daily on-street: Most Expensive Cities (USD)

Rank	Country	City	Daily price USD	Rank	Country	City	Daily price USD
1	NL	Amsterdam	\$53.23	26	US	Hollywood FL	\$19.74
2	RU	Moscow	\$40.83	27	FI	Pori	\$19.20
3	KR	Seoul	\$37.75	28	UK	Nottingham	\$18.95
4	FR	Lens	\$32.84	29	DE	Frankfurt am Main	\$18.18
5	US	Miami Beach	\$32.00	30	NL	The Hague	\$18.18
6	FR	Lyon	\$31.82	31	IT	Milan	\$18.18
7	NL	Utrecht	\$30.18	32	FI	Turku	\$18.12
8	US	New Brunswick	\$30.00	33	ES	Bilbao	\$18.07
9	NO	Oslo	\$29.50	34	LV	Riga	\$17.32
10	US	Austin	\$29.00	35	UK	Sheffield	\$17.22
11	FI	Helsinki	\$27.74	36	IT	Genoa	\$17.04
12	NO	Trondheim	\$27.12	37	US	Pittsburgh	\$16.91
13	NO	Sarpsborg	\$27.01	38	US	Ann Arbor	\$16.80
14	US	Sacramento	\$25.64	39	SE	Göteborg	\$16.51
15	NZ	Auckland	\$25.06	40	SE	Örebro	\$16.02
16	NZ	Hamilton	\$24.70	41	US	San Jose	\$16.00
17	DK	Copenhagen	\$24.32	42	US	St. Louis	\$16.00
18	FI	Lahti	\$23.86	43	US	St Paul	\$16.00
19	DK	Århus	\$23.60	44	NL	Eindhoven	\$15.72
20	FI	Kuopio	\$23.35	45	BE	Brussels	\$15.33
21	NL	Rotterdam	\$22.53	46	US	Philadelphia	\$14.71
22	US	New Orleans	\$21.90	47	IS	Reykjavik	\$14.39
23	FI	Oulu	\$20.76	48	UK	Perth	\$14.38
24	DE	Berlin	\$20.48	49	FI	Jyväskylä	\$14.25
25	IT	Livorno	\$19.64	50	US	Kalamazoo	\$14.00

The majority of cities do not allow all day onstreet parking to help ensure sufficient availability of spaces. However, Amsterdam, where maximum stay restrictions were recently abolished, is now the most expensive city for daily on-street parking, 30.3% (\$12.40) more expensive than the second most expensive city, Moscow. The high price for parking in Amsterdam can be linked to the city's green infrastructure vision for the future. Amsterdam bucks the global trend for cheaper on-street parking as the city's daily off-street price is 12% less expensive than the equivalent for on-street (\$47.22).

The top 50 Most Expensive Cities for daily onstreet parking is strongly dominated by cities within Europe (68%), followed by cities within the US (26%) and cities from the Asia-Pacific region (6%).



4.2.2 Daily on-street: Top 5 Cities by Region (USD)



4.2.3 Daily on-street: Most Expensive Cities (PPP)

Rank	Country	City	Daily price PPP	PPP impact on ranking vs USD ranking	Rank	Country	City	Daily price PPP	PPP impact on ranking vs USD ranking
1	RU	Moscow	\$113.98	+1	26	NZ	Hamilton	\$22.22	-10
2	NL	Amsterdam	\$55.77	-1	27	US	New Orleans	\$21.90	-5
3	KR	Seoul	\$46.29	No change	28	IT	Milan	\$21.62	+3
4	FR	Lens	\$35.24	No change	29	HU	Budapest	\$21.47	Not ranked
5	UA	Kiev	\$34.31	Not ranked	30	DK	Copenhagen	\$20.91	-3
6	FR	Lyon	\$34.14	No change	31	BG	Plovdiv	\$20.51	Not ranked
7	US	Miami Beach	\$32.00	-2	32	DE	Frankfurt am Main	\$20.51	-3
8	NL	Utrecht	\$31.61	-1	33	DK	Århus	\$20.30	-14
9	US	New Brunswick	\$30.00	-1	34	PL	Gdańsk	\$20.29	Not ranked
10	RU	Saint Petersburg	\$29.99	Not ranked	35	IT	Genoa	\$20.27	+1
11	US	Austin	\$29.00	-1	36	FI	Oulu	\$19.85	-13
12	LV	Riga	\$26.74	+22	37	US	Hollywood, FL	\$19.64	-11
13	FI	Helsinki	\$26.54	-2	38	NL	The Hague	\$19.04	-8
14	US	Sacramento	\$25.64	No change	39	FI	Pori	\$18.36	-12
15	NO	Oslo	\$24.53	-6	40	PL	Gdynia	\$18.24	Not ranked
16	PL	Poznań	\$24.10	Not ranked	41	CZ	Brno	\$18.24	Not ranked
17	NL	Rotterdam	\$23.60	+4	42	UK	Nottingham	\$18.07	-14
18	IT	Livorno	\$23.36	+7	43	CZ	Prague	\$17.36	Not ranked
19	DE	Berlin	\$23.11	+5	44	FI	Turku	\$17.32	-12
20	FI	Lahti	\$22.82	-2	45	PL	Warsaw	\$17.26	Not ranked
21	NO	Trondheim	\$22.55	-9	46	PL	Krakow	\$17.01	Not ranked
22	NZ	Auckland	\$22.55	-7	47	US	Pittsburgh	\$16.91	-10
23	NO	Sarpsborg	\$22.46	-10	48	US	Ann Arbor	\$16.80	-10
24	ES	Bilbao	\$22.39	+9	49	NL	Eindhoven	\$16.47	-5
25	FI	Kuopio	\$22.33	-5	50	UK	Sheffield	\$16.43	-15

After adjustments for PPP, Moscow overtakes Amsterdam as the most expensive city for daily on-street parking, at more than double the daily price (104% higher). Parking prices in Seoul also experienced significant increases by more than 20%. The largest upwards impact is seen in Riga (+22 places) and, to a lesser extent, Bilbao (+9 places), where the relative cost of parking in these cities is hugely impacted by currency exchange rates.

There is a much larger percentage of Eastern European cities (Kiev, Saint Petersburg, Poznań, Budapest, Plovdiv, Gdańsk, Gdynia, Brno, Prague, Warsaw, Krakow) that now feature within the top 50 for the most expensive cities for daily on-street parking, post PPP adjustment.

AFTER ADJUSTMENTS
FOR PPP, MOSCOW
OVERTAKES AMSTERDAM
AS THE MOST EXPENSIVE
CITY FOR DAILY
ON-STREET PARKING, AT
MORE THAN DOUBLE THE
DAILY PRICE
(104% HIGHER)

4.2.4 Daily on-street: Most Expensive Countries (USD)

Rank	Country	Daily price (USD)	Rank	Country	Daily price (USD)
1	South Korea	\$37.75	17	Ukraine	\$10.32
2	Netherlands	\$37.40	18	Austria	\$10.22
3	Russia	\$32.27	19	Czech Republic	\$10.17
4	France	\$31.82	20	United Kingdom	\$10.13
5	Norway	\$29.50	21	Canada	\$9.67
6	Finland	\$25.27	22	Bulgaria	\$9.29
7	Denmark	\$24.27	23	Australia	\$8.31
8	New Zealand	\$21.39	24	Hungary	\$7.60
9	Spain	\$18.07	25	Poland	\$7.55
10	Latvia	\$17.32	26	Singapore	\$6.94
11	United States	\$15.92	27	Slovakia	\$6.40
12	Iceland	\$14.39	28	Slovenia	\$4.84
13	Belgium	\$13.69	29	Greece	\$4.54
14	Sweden	\$12.04	30	United Arab Emirates	\$4.08
15	Germany	\$11.13	31	Croatia	\$3.74
16	Italy	\$10.81			

South Korea is the most expensive country for on-street daily parking.

Parkopedia

Only 22.5% of the countries featured (South Korea, New Zealand, United States, Canada, Australia, Singapore, United Arab Emirates) are located outside of Europe.

However, there are huge disparities in pricing across Europe, as daily on-street parking in the Netherlands is x10 times more expensive than in Croatia.

SOUTH KOREA

Is the **most expensive** country for on-street daily parking (\$33.75). However, there are huge disparities in pricing across Europe, as daily on-street parking in the Netherlands is **x10 times more expensive**

than in Croatia.



Netherlands (\$37.40)

Croatia (\$3.74)

4.2.5 Daily on-street: Most Expensive Countries (PPP)

Parkopedia

Rank	Country	Daily price (PPP)	PPP impact on ranking vs USD ranking	Rank	Country	Daily price (USD)	PPP impact on ranking vs USD ranking
1	Russia	\$90.07	+2	17	Hungary	\$14.36	+7
2	South Korea	\$46.29	-1	18	Italy	\$12.85	-2
3	Netherlands	\$39.18	-1	19	Germany	\$12.55	-4
4	Ukraine	\$34.31	+13	20	Iceland	\$11.63	-8
5	France	\$34.14	-5	21	Sweden	\$11.47	-7
6	Latvia	\$26.74	+4	22	Austria	\$10.97	-4
7	Norway	\$24.53	-2	23	United Kingdom	\$9.66	-3
8	Finland	\$24.17	-2	24	Singapore	\$9.32	+2
9	Spain	\$22.39	No change	25	Canada	\$9.28	-4
10	Denmark	\$20.87	-3	26	Slovakia	\$8.53	+1
11	Bulgaria	\$20.51	+11	27	Australia	\$7.32	-4
12	New Zealand	\$19.24	-4	28	Slovenia	\$6.65	No change
13	United States	\$15.92	-2	29	Croatia	\$6.36	+2
14	Poland	\$15.78	+11	30	Greece	\$6.25	-1
15	Czech Republic	\$15.09	+4	31	United Arab Emirates	\$5.64	-1
16	Belgium	14.51	-3				

Once adjusted for PPP, Russia overtakes South Korea as the most expensive country for onstreet daily parking, with a 94.5% price difference between the two top countries.

Russia's PPP pricing is significantly higher than USD pricing (179% increase). In comparison, the difference between South Korea's pricing (USD to PPP) is only 22.6%.

Parking in Russia currently costs more than x15 times the equivalent parking session in the UAE.

The remaining countries in this list reflect USD pricing, as there are no new entries in the top 31 when PPP is applied.

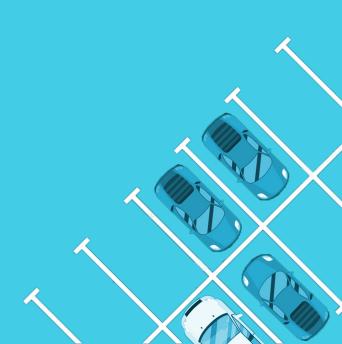
RUSSIA

Overtakes South Korea as the **most expensive country** for on-street daily parking, with a **94.5%** price difference between the top two countries. Parking in Russia currently costs **more than x15 times** the equivalent parking session in the UAE





Monthly Pricing



5.1.1 Monthly off-street: Most Expensive Cities (PPP)

Rank	Country	City	Monthly price USD	Rank	Country	City	Monthly price USD
1	UK	London	\$698.97	26	AT	Vienna	\$172.97
2	NL	Amsterdam	\$641.77	27	IT	Florence	\$170.44
3	US	New York	\$604.66	28	US	Newark	\$169.73
4	US	Boston	\$388.47	29	ES	Barcelona	\$168.18
5	US	San Francisco	\$323.61	30	FR	Nice	\$168.08
6	US	Philadelphia	\$287.44	31	IT	Rome	\$161.95
7	FR	Paris	\$259.95	32	NO	Drammen	\$160.49
8	DE	Hamburg	\$258.40	33	US	Baltimore	\$159.51
9	DE	Frankfurt am Main	\$257.75	34	DE	Düsseldorf	\$159.43
10	US	Washington DC	\$247.08	35	US	Denver	\$154.47
11	US	Pittsburgh	\$231.73	36	US	Los Angeles	\$154.17
12	US	Seattle	\$228.77	37	US	Minneapolis	\$153.66
13	US	Providence	\$225.00	38	KR	Seoul	\$149.83
14	SE	Stockholm	\$224.49	39	CA	Ottawa	\$147.31
15	DE	Munich	\$214.69	40	CA	Edmonton	\$143.86
16	DE	Stuttgart	\$207.40	41	US	Wilmington	\$137.33
17	SE	Solna	\$206.65	42	US	Nashville	\$132.90
18	DK	Odense	\$200.36	43	US	Arlington	\$130.90
19	US	Portland	\$199.27	44	CA	Vancouver	\$128.38
20	US	San Diego	\$197.39	45	US	Charlotte	\$125.34
21	IT	Milan	\$194.39	46	US	Cleveland	\$123.75
22	ES	Madrid	\$187.90	47	FR	Bordeaux	\$123.01
23	CA	Montreal	\$184.63	48	US	Columbus	\$121.47
24	FR	Marseille	\$178.65	49	US	Anchorage	\$120.37
25	FR	Lyon	\$173.99	50	GR	Thessaloniki	\$120.14

London is currently the most expensive city for monthly off-street parking - as well as being the 4th most expensive for daily off-street parking behind New York, Sydney and Amsterdam, and 8th for 2-hour off-street parking, behind New York, Sydney, Brisbane, Melbourne, Chicago, Boston and Philadelphia.

Amsterdam is the 2nd most expensive city for monthly off-street parking. The high prices in the capital of The Netherlands are most likely due the lack of long term (monthly) on-street parking options, and the <u>removal of on-street parking spaces</u> driving demand for long term off-street parking.

The average mean price for monthly off-street parking globally is \$213.62.

Out of the 50 cities included in the report, 46% are in Europe, 44% are in the US, 8% are in Canada and 2% are in South Korea.



London is currently the most expensive city
for monthly off-street parking as well as being the 4th most expensive for
daily off-street parking behind New York,
Sydney and Amsterdam



5.1.3 Monthly off-street: Most Expensive Cities (PPP)

Rank	Country	City	Monthly price PPP	PPP impact on ranking vs USD ranking	Rank	Country	City	Monthly price PPP	PPP impact on ranking vs USD ranking
1	NL	Amsterdam	\$672.36	No change	26	FR	Marseille	\$191.73	-2
2	UK	London	\$666.78	-1	27	FR	Lyon	\$186.73	-2
3	US	New York	\$604.66	No change	28	PL	Warsaw	\$186.40	Not ranked
4	US	Boston	\$388.47	No change	29	AT	Vienna	\$185.63	-3
5	US	San Francisco	\$323.61	No change	30	KR	Seoul	\$183.71	+8
6	DE	Hamburg	\$291.54	+2	31	FR	Nice	\$180.39	-1
7	US	Jersey City	\$278.00	-2	32	DE	Düsseldorf	\$179.88	+2
8	US	Chicago	\$273.26	-2	33	CA	Montreal	\$177.13	-10
9	US	Washington DC	\$247.08	+1	34	DK	Odense	\$172.34	-16
10	DE	Munich	\$242.23	+5	35	US	Newark	\$169.73	-7
11	DE	Stuttgart	\$234.00	+5	36	GR	Thessaloniki	\$165.21	+14
12	NO	Oslo	\$233.20	Not ranked	37	LV	Riga	\$160.84	Not ranked
13	ES	Madrid	\$232.91	+9	38	US	Baltimore	\$159.51	-5
14	US	Pittsburgh	\$231.73	-3	39	LT	Kaunas	\$156.86	Not ranked
15	IT	Milan	\$231.17	+6	40	US	Denver	\$154.47	-5
16	US	Seattle	\$228.77	-4	41	US	Los Angeles	\$154.17	-5
17	US	Providence	\$225.00	-4	42	GR	Athens	\$153.71	Not ranked
18	SE	Stockholm	\$213.87	-4	43	US	Minneapolis	\$153.66	-6
19	ES	Barcelona	\$208.45	+10	44	HU	Budapest	\$153.21	Not ranked
20	IT	Florence	\$202.70	+7	45	ES	Valencia	\$144.60	Not ranked
21	US	Portland	\$199.27	-2	46	ES	Seville	\$143.99	Not ranked
22	US	San Diego	\$197.39	-2	47	ES	Murcia	\$142.56	Not ranked
23	SE	Solna	\$196.88	-6	48	IT	Turin	\$142.49	Not ranked
24	RS	Belgrade	\$194.54	Not ranked	49	CA	Ottawa	\$141.33	-10
25	IT	Rome	\$192.60	+6	50	CA	Edmonton	\$138.02	-10

Adjustments for PPP have had little impact for the top 50 most expensive cities for monthly off-street parking, as 7 out of the top 10 feature as they did in USD pricing, albeit in a slightly different order. In USD pricing: London (1st), Amsterdam (2nd), New York (3rd), Boston (4th), San Francisco (5th), Hamburg (8th) and Washington DC (10th). With PPP adjustment, Amsterdam replaces London as the most expensive city.

Cities in Europe represent 40% of the top 10 (Amsterdam, London, Hamburg, Munich). The other 60% are represented by cities in the US (New York, Boston, San Francisco, Jersey City, Chicago, Washington DC). When comparing the top 50, PPP adjustments result in more European cities (60%) featuring compared to US cities (32%), which is explained by greater inflation rates across Europe compared to the US. In the first four months of the year, inflation rose at a 12% annualised rate in Europe compared with a 9% rise in the U.S.



Rank	Country	Monthly price (USD)	2022 vs 2019 % price change (local currency)
1	Netherlands	\$344.29	13.2%
2	Switzerland	\$328.58	N/A
3	Norway	\$241.23	8.95%
4	Japan	\$233.19	N/A
5	Denmark	\$213.22	19.1%
6	United Kingdom	\$200.38	3.90%
7	Finland	\$198.03	N/A
8	France	\$173.96	0.88%
9	Austria	\$159.56	5.68%
10	Sweden	\$158.64	9.78%
11	United States	\$150.80	1.83%
12	Spain	\$147.19	3.73%
13	Italy	\$141.72	0.82%
14	Germany	\$138.34	7.53%
15	South Korea	\$132.07	2.42%
16	Canada	\$128.62	4.71%
17	Greece	\$113.86	-0.09%
18	Latvia	\$104.18	14.9%
19	Serbia	\$94.62	0.64
20	Estonia	\$88.02	3.37%
21	Singapore	\$74.58	N/A
22	Hungry	\$74.46	13.2%
23	Lithuania	\$62.72	N/A
24	Poland	57.61	6.76%
25	Czech Republic	\$55.80	8.66%
26	Croatia	\$54.41	0.00%
27	North Macedonia	\$35.40	0.41%
28	Turkey	\$26.56	41.3%

The Netherlands is now the most expensive country for monthly off-street parking, being previously the second most expensive in 2019. Monthly off-street parking prices in the country have increased by 13% over the last three years.

Turkey has experienced the largest individual pricing increase over the last three years, where parking costs have risen by 41%, however, monthly off-street parking in Turkey costs 88% less than in The Netherlands.

NETHERLANDS

Is now the **most expensive country** for monthly off-street parking, being previously the **second most expensive in 2019**



TURKEY

has experienced the largest individual pricing increase over the last **3 years** where parking costs have **risen by 41%**



5.1.5 Monthly off-street: Most Expensive Countries (PPP)

Parkopedia

Rank	Country	Monthly price (PPP)	PPP impact on ranking vs USD ranking
1	Netherlands	\$360.70	No change
2	Japan	\$233.55	+2
3	Switzerland	\$229.17	-1
4	Norway	\$200.58	-1
5	Serbia	\$194.54	+14
6	United Kingdom	\$191.15	No change
7	Finland	\$189.43	No change
8	France	\$186.70	No change
9	Denmark	\$183.41	-4
10	Spain	\$182.44	+2
11	Austria	\$171.25	-2
12	Italy	\$168.55	+1
13	South Korea	\$161.92	+2
14	Latvia	\$160.84	+4
15	Greece	\$156.56	+2
16	Germany	\$156.09	-2
17	Sweden	\$151.14	-7
18	United States	\$150.88	-7
19	Hungary	\$140.63	+3
20	Turkey	\$130.76	+8
21	Estonia	\$124.94	-1
22	Canada	\$123.40	-6
23	Poland	\$120.29	+1
24	Lithuania	\$108.23	-1
25	Singapore	\$100.16	-4
26	Croatia	\$92.54	No change
27	North Macedonia	\$83.68	No change
28	Czech Republic	\$82.80	-3

After adjustments for PPP, The Netherlands remains the most expensive country for monthly off-street parking, costing 54% more than second most expensive country, Japan.

Serbia has experienced significant upward impact (+14 places) due to PPP adjustments, however the majority of the top 28 countries have not significantly changed in order from the equivalent USD pricing.

NETHERLANDS

After adjustments to PPP, The Netherlands remains the **most expensive country** for monthly off-street parking, **costing 54% more** than second most expensive country, **Japan**





has experienced significant upward impact (+14 places) due to PPP adjustments



Rank	Country	2022 vs 2019 % price change (local currency)
1	Turkey	41.3%
2	Denmark	19.1%
3	Netherlands	13.2%
4	Sweden	9.78%
5	Norway	8.95%
6	Germany	7.52%
7	Poland	6.75%
8	Austria	5.68%
9	Canada	4.70%
10	United Kingdom	3.89%
11	Spain	3.73%
12	Estonia	3.36%
13	South Korea	2.41%
14	United States	1.82%
15	France	0.88%
15	Italy	0.81%
16	Serbia	0.64%
17	North Macedonia	0.41%
18	Croatia	0.00%
19	Greece	-0.09%

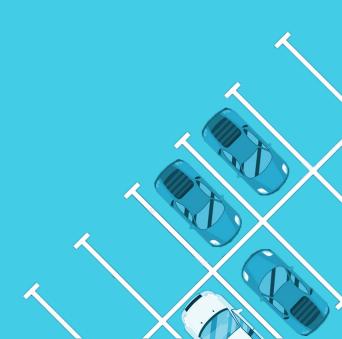
Turkey has experienced the greatest increase in average monthly off-street parking costs - with costs rising more than double those in second place, Denmark - possibly due to a combination of factors - the country's political instability, rising cost of goods, and the continued depreciation of the Turkish Lira.

TURKEY

has experienced the greatest increase in average monthly off-street parking costs - 3 year price change (41.3%)







The 2022 report identified three key trends currently affecting parking prices worldwide:

- 1. Supply and Demand
- 2. Green Initiatives
- 3. Rising Inflation

1. Supply and Demand

The number of vehicles on the road has been growing globally (+1.3%) since 2019. However, decreasing parking inventory, and greater restrictions on the spaces that remain - such as significantly reduced maximum stay times and intensified enforcement - has resulted in increased demand for parking worldwide, leading to subsequent price increases.

For example, <u>Seoul</u>, which is currently the 10th largest economy in the world, has more than 10 million vehicles moving in and out of the city every day, however, parking is limited to just 4.2 million spaces. As a solution, cities such as New York, Seattle and San Francisco, which are also experiencing a deficit in available parking, use dynamic pricing - where the demand for parking during a period is balanced against the proximity of a space to a congested area - in an attempt to manage traffic flow.

The Covid-19 pandemic has had a significant impact on parking demand within the last three years, as private vehicle usage increased and commuters shunned public transport due to contagion fears. According to McKinsey's Global 2021 COVID-19 Automotive Consumer Survey, only 7% of respondents felt that public transport was safe, with 81% preferring to travel via private vehicle. Local traffic data from New York and Sydney also showed an increase in private vehicle usage during this time.

Covid-19 <u>initiatives</u> implemented by municipalities to support the hospitality trade during the pandemic also increased demand for parking. Lifting applicable taxes, and allowing the expansion of outdoor areas by bars and restaurants, allowed many to remain open while adhering to social distancing laws, however, the removal of on-street parking spaces was necessary to create this further space for patrons. <u>10,000 spaces</u> were removed in New York and <u>3,000 spaces</u> removed in Milan for this purpose.

It is likely that Covid-19 will continue to stall greener mobility commuter solutions, and therefore parking demand. In a recent survey by <u>Flowbird</u>, the majority of respondents stated that their driving level would remain the same as it was pre-pandemic, while just a small proportion expected their use of public transport and shared mobility services to increase.

Data from the Department for Transport (DFT) from April 2022, also showed that weekday commutes via private vehicle had already returned to 90% of pre-pandemic levels, despite an increase in working from home and flexible working options.

Many municipalities are continuing with their pre-pandemic 'greener mobility' plans, further reducing available parking space at a time where drivers are most hesitant to change their preferred mode of transport.



2. Green Initiatives

The global reduction of on-street parking in densely populated urban areas aims to reduce congestion and its resulting emissions - improving the quality of life for inhabitants, which according to the United Nations, currently accounts for over 55% of the population, rising to two-thirds by 2050.

Amsterdam was the first to remove parking spaces to implement green mobility initiatives, with its <u>Green Infrastructure Vision 2050 plan</u> which includes more car-free green spaces, as well as additional cycling and walking routes. <u>Paris</u> also recently removed 70,000 on-street parking spaces - half of the city's previous 140,000 total - to allow for an "ecological transformation of the city". <u>Milan</u> and <u>London</u> are also following suit by converting on-street parking within their most densely populated areas into bike and pedestrian lanes, as well as introducing pick-up and drop-off zones, where drivers can be encouraged to use multi modal forms of transport, such as in Germany, where a recently <u>introduced €9 unlimited monthly public transit pass</u> for summer 2022 has encouraged more drivers to switch to public transport, for at least part of their journey.

Further green initiatives have seen on-street parking spaces fitted with EV vehicle chargers and reserved for charging vehicles only. <u>Amsterdam</u> and <u>Germany</u> are currently installing chargers as part of their aim to achieve 'emission-free transport' by 2030, however, critics suggest the scheme will face significant financial challenges in providing the volume of chargers necessary, without substantial government grants, as on-street charging is not currently commercially viable.

As the result of its aggressive pricing structure, designed to encourage motorists into public transport, Amsterdam is currently the most expensive city in the world for both on-street and off-street (when PPP is applied) parking, and since 2019, the city has bucked the global trend, by charging drivers more to park on-street than off-street.

This year, Paris has introduced a similar pricing strategy, as well as an overall increase in all parking prices by up to 50%. An apparent pathfinder for parking initiatives, Amsterdam's green initiatives of high parking pricing, charger installations, and recent move to abolish maximum stay restrictions - a tactic usually used to ensure high turnover per space - is likely to be seen in many other cities within the near future.



3. Rising Inflation

Parkopedia uses purchasing-power-parity (PPP) to equalise the exchange and inflation rates of different currencies - eliminating the differences in pricing to enable a fair comparison of parking costs globally, as well as giving a cost for parking as a proportion of the local cost of living, and showcasing the countries which have been hardest hit by rising inflation.

Russia, for example, has seen a significant price increase in daily onstreet and 2-hour on-street in PPP pricing compared to USD pricing. Countries in Eastern Europe which have experienced the highest levels of inflation, such as Latvia, Lithuania, the Czech Republic and Hungary, have also experienced large upward impacts when PPP is applied.

The <u>Global inflation rate</u> directly impacts parking pricing. Since Parkopedia's Parking Index reports began in 2017, global inflation has risen steadily from 1.6% in 2016 to 2.2% in 2017, then again to 2.4% the following year, to then fall slightly to 2.2% in 2019.

According to World Bank Data, 2021 saw the global inflation rate increase to 3.4%, as economies struggled to recover funds spent during the pandemic, however inflation of parking prices in major cities across the developed world increased at a much higher rate. The parking data was collected in February 2022, prior to various global events such as the war in Ukraine, which have had a further impact on pricing and inflation that are not reflected in the results. This will most likely lead to even greater price increases in the future, and will potentially be reflected in the next parking index report. The average per country inflation for 2-hour off-street parking was 6.2%, while the average for 2-hour on-street parking was 21.8%

Earlier this year, 37 of the 44 nations of the <u>Organisation for Economic Cooperation and Development (OECD)</u>, saw their average annual

inflation rate rise to more than double that of early 2020, when COVID-19 was first beginning to spread. 16 of these countries have seen inflation rates double again, to more than four times the level seen two years ago, while Turkey's rate of inflation has continued to grow to an astounding 54.8%.

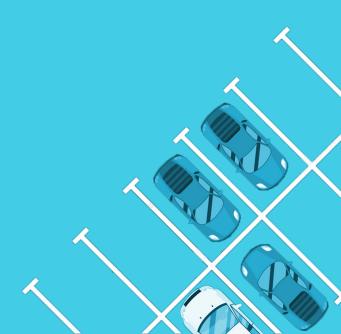
The data collected by Parkopedia this year, compared to previous parking index reports, suggests that parking costs are likely to continue to increase, at least until inflation rates start to fall again.



The Global inflation rate directly impacts parking pricing. Since Parkopedia's Parking Index reports began in 2017, global inflation has risen as economies struggled to recover funds spent during the pandemic.

The average per country inflation for 2-hour off-street parking was 6.2%, while the average for 2-hour on-street parking was 21.8%.

About Parkopedia



About Parkopedia

Parkopedia was founded in 2007, and today helps drivers find and pay for parking, EV charging, fuelling and tolls in 15,000 cities across 89 countries. We are the leading connected car services provider - used by millions of drivers and organisations such as Audi, Apple, BMW, Ford, Garmin, GM, Hyundai Kia, Jaguar Land Rover, Mercedes-Benz, Peugeot, Sygic, TomTom, Toyota, Volkswagen, and many others.

Our aim is to provide car manufacturers with the most convenient and seamless in-car services for their drivers. Currently more than half of all new vehicles built in Europe have one of Parkopedia's multi-award winning services installed and we were also recently named as 'Mobility Service Provider of the Year' at the 2022 Informa Tech Automotive Awards amongst various wider industry awards for our products and services.

Already the global leader in <u>digital parking services</u>, our parking database contains more than 90 million spaces. Our static and dynamic data, gives drivers both the ability to book and prepay an online reservation, as well as facilitating in-vehicle payments en-route, via embedded services, such as automakers dedicated apps, directly through the Parkopedia website, or via full head-unit integration in connected vehicles.

Our <u>Payment Platform</u> is a unique and innovative solution that provides a neutral in-car platform for transaction providers. A first for the industry, it enables drivers to find and pay for parking payments on-demand and activate 'pay-at-the-pump' fuelling, while also allowing for automated tolling payments, and accurately locating, activating and paying for public EV charging. By aggregating multiple suppliers and payment providers into one API, we allow automakers to avoid the time-consuming and costly process of aggregating various merchants and the ongoing operational and maintenance efforts necessary to keep the platform running. Our unique single-sign functionality across all domains, and the utilisation of onboard vehicle sensors, delivers a frictionless and intuitive in-car experience to drivers.

Our <u>Park and Charge</u> product solves one of the biggest challenges facing EV drivers today - finding and paying for charging. The public charging infrastructure is currently highly fragmented and a major barrier for full EV adoption. Up to one-third of potential EV owners are not able to charge their vehicles at home, and will be solely reliant on the public charging network when they transition to EVs. Our database of charger location data, matched with our market-leading parking data, helps EV drivers accurately find charging points globally, while our combined Payment Platform also addresses the fragmented market for EV charging transactions, by offering simple and secure integrated payments for automakers and their drivers.

We are also developing highly detailed parking maps and corresponding algorithms to help drivers and self-driving vehicles navigate within indoor or underground facilities, where GPS is unavailable. Our Indoor Mapping service is an alternative method of vehicle localisation achieved by using advanced robotics techniques, sensors that are already available on most connected vehicles and landmarks that are already present in all car parks. An Indoor Navigation service will guide drivers to the most likely available parking space that minimises the overall journey time, by optimising a multi-modal route consisting of driving and walking directions, or enable navigation to 'hidden' EV charging stations as well as Mobility as a Service (MaaS) services and driver convenience services of the future, such as Autonomous Valet Parking (AVP), likely to be the first SAE Level 4 automation product made publicly available to drivers. When used in conjunction with Parkopedia's dynamic, predictive availability data, drivers will know if there is a space or EV charger available at their destination at their estimated time of arrival, if not, it can offer alternative suggestions, helping drivers to complete frictionless journeys, and helping manage facility demand and occupancy.

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