

Lloyd's City Risk Index 2015-2025

Analysing the economic exposure from 18 threats over ten years from 2015

Understand the risks: www.lloyds.com

Houston, US

Average GDP growth rate: 1.36%

Average annual GDP: \$329.17bn*

Total GDP@Risk: \$31.66bn

Share of Average annual GDP: 9.62%

GDP@Risk ranking

Global: 40 Regional: 5 National: 5

GDP@Risk by threat type

Threat	GDP@Risk	Share of Total GDP@Risk
Flood	\$7.83bn	24.74%
Market crash	\$7.65bn	24.17%
Oil price shock	\$4.79bn	15.14%
Cyber attack	\$4.29bn	13.54%
Human pandemic	\$2.54bn	8.03%
Drought	\$1.52bn	4.82%
Wind storm	\$1.20bn	3.78%
Solar storm	\$0.59bn	1.87%
Power outage	\$0.51bn	1.60%
Plant epidemic	\$0.33bn	1.04%
Sovereign default	\$0.17bn	0.53%
Heatwave	\$0.15bn	0.47%
Nuclear accident	\$0.07bn	0.21%
Terrorism	\$0.02bn	0.06%
Earthquake	\$0.00bn	0.00%
Freeze	\$0.00bn	0.00%
Tsunami	\$0.00bn	0.00%
Volcano	\$0.00bn	0.00%

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Insight

With the 5th highest GDP@Risk in the US, Houston has the classic profile of a developed-market city, with strong exposure to Market crash, Oil price shock and Cyber attack, which together account for more than half of its Total GDP@Risk. Its economic vulnerability to Cyber attack ranks 14th globally.

The amount of GDP@Risk from Oil price shock may be surprising given its position as one of the main centres for the US oil and gas industry. However, this exposure reflects the level of diversity in the Texan economy, with high value-added sectors such as healthcare, technology and R&D becoming increasingly important.

Houston's highest ranking threat is Flood, for which it has the 12th biggest exposure globally. Less than 80km from the Gulf of Mexico, it is prone to wind storms, including Tropical Storm Allison (2001) and Hurricane Ike (2008) - both of which flooded much of the city.

Like many cities susceptible to flooding, Houston is also exposed to Drought. Although its potential economic losses are much lower from this threat, it still ranks 14th globally. A 2015 study by NASA scientists warned there may be decades-long droughts in future, saying: "Our results point to a remarkably drier future that falls far outside the contemporary experience of natural and human systems in Western North America."

Sources:

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