

INFRASTRUCTURE WARS

The big infrastructure plan unveiled by President Joe Biden last week is meant to do more than revive America's decaying infrastructure and create jobs. The United States would like to prove that democracies can do big projects and challenge Beijing's all-but-official stance that the West is in a long-term decline. Other countries around the world are also looking to ramp up spending to steal a march on their competitors. The Straits Times takes a look at competitive infrastructure plays around the world and the political and economic calculus driving them.

HOW THEY COMPARE

Country	Length of railroad network (route-km)	Length of road network (km)	Broadband subscriptions per 100 individuals	Mobile subscriptions per 100 individuals	Broadband speed (average download speed in mbps)	Electricity production (gigawatt hours)
US	150,462.92	6,733,023	34.72	122.01	180.84	4,401,300
China	68,141	5,162,100	31.33	104.58	163.83	7,503,400
India	67,956	6,215,797	1.40	87.28	55.34	1,558,700
Japan	19,122	1,281,072	33.50	133	141	1,036,300
Indonesia	8,357	544,917	3.80	174	24.72	279,100
Thailand	4,092	701,847	14.51	176.03	217.7	186,500
South Korea	4,111.20	111,314	42.76	134.48	176.95	954,400
Vietnam	2,481	594,898	15.34	125.62	58.21	227,400
Malaysia	2,783	256,494	9.27	133.88	93.07	171,000
Singapore	240.10	3,520	25.91	148.24	238.59	54,142
Philippines	509	33,018	5.47	159.4	38.46	103,300

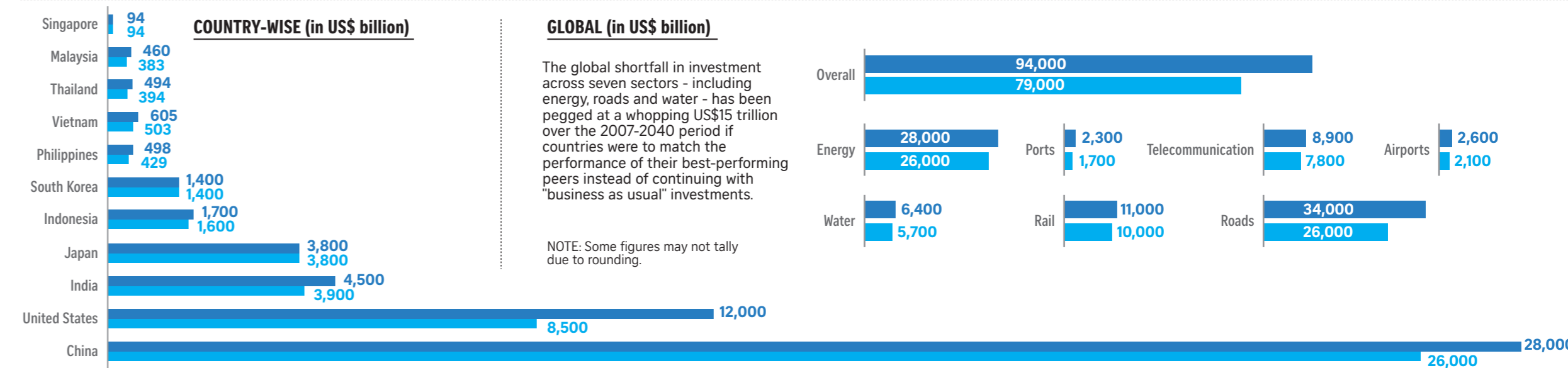
NOTE: Multi-year data based on latest available records.

KEEPING IT COMPETITIVE

The World Economic Forum's Global Competitiveness Report for 2019 ranked 141 countries, with infrastructure considered as one of the pillars determining how competitive a country is. The report ranked the transport infrastructure in a country - such as road connectivity, railroad density and airport connectivity - as well as its utility infrastructure like electricity access and reliability of water supply.

Country	Transport infrastructure	Utility infrastructure	Overall
Singapore	1	5	1
Japan	4	11	5
South Korea	5	22	6
United States	12	23	13
Malaysia	29	51	35
China	24	65	36
India	28	103	70
Thailand	53	90	71
Indonesia	55	89	72
Vietnam	66	87	77
Philippines	102	96	96

INVESTMENT GAP



THE AMERICAN JOBS PLAN

President Joe Biden wants a roughly US\$2 trillion (\$2.7 trillion) injection of government funds over eight years to address crumbling infrastructure and trigger a fundamental shift to a cleaner energy economy. To finance this, he has proposed a corporate tax hike from 21 to 28 per cent, setting up a battle in Congress. Among the key features of the President's American Jobs Plan are:

US\$400b

to expand access to home- or community-based care for the elderly and people with disabilities

US\$300b

for manufacturing and business, including US\$50 billion for semiconductor research and manufacturing, US\$30 billion for pandemic preparedness and US\$52 billion for domestic manufacturers.

US\$174b

investment in electric vehicles

US\$115b

for bridges and roads

US\$85b

for existing public transit

US\$80b

for railways

US\$25b

for airports

US\$17b

for waterways and ports of entry

US\$45b

to remove lead pipes, and US\$56 billion to modernise water systems

US\$100b

for extension of high-speed broadband

US\$100b

for the electrical grid and clean energy

US\$213b

for affordable housing, US\$112 billion for schools and for community colleges

US\$25b

for childcare facilities

US\$180b

for research and development, including US\$50 billion for the National Science Foundation and US\$35 billion "to achieve technology breakthroughs that address the climate crisis"

SPENDING TRENDS (estimated investment between 2007 and 2040 based on current trends, in US\$ billion)

Energy Telecommunication Air transport Ports Rail Road Water

CHINA

7,900 849 570 596 5,400 10,000 1,100

THAILAND

230 39 3 0.88 7.4 71 43

UNITED STATES

3,200 601 642 182 353 3,400 197

INDIA

2,200 529 18 5 385 510 256

MALAYSIA

179 27 2.4 4.9 28 104 39

SOUTH KOREA

351 227 13 66 188 337 185

VIETNAM

256 99 3.8 0.41 15 79 50

SINGAPORE

36 3.4 5.3 3 3.7 22 20

JAPAN

890 734 55 98 266 1,400 295

PHILIPPINES

187 82 3.4 5.5 5.6 105 40

INDONESIA

607 96 23 11 9.1 752 144



Construction of the Sixth Street Viaduct in Los Angeles, California, on April 6, even as President Joe Biden unveils his infrastructure initiative.

A section of elevated track under construction for the China State Railway Group high-speed rail network in April 2019.

