

# US infrastructure bill finally signed in to law



**Above: Coronado Bridge over San Diego Bay** PHOTO: REBECCADLEV / SHUTTERSTOCK.COM

**US** – Having languished for months in the US government’s lower chamber, the US\$1.2tr bipartisan Infrastructure Investment and Jobs Act was finally passed by the House of Representatives by a narrow margin on 5 November. It was subsequently signed into law by President Joe Biden on the South Lawn of the White House in Washington, on 15 November, 2021.

Seen as a game changer for the country, the Act represents the first comprehensive infrastructure plan since Dwight D Eisenhower.

Biden said it was a “once in a generation” investment that would create millions of jobs, and represented historic levels of investments in roads, bridges and passenger rail, as well as the most significant in public transit in history.

Although the bill had previously been passed by the Senate in August, it had subsequently stalled in the House due to fraught negotiations over details – largely among the Democrats themselves.

Included in the package is US\$550bn earmarked for entirely new investments over the next decade, with the impact on new roads, rail, ports, rural broadband, water supply

and electric car charging networks expected to be felt early next year.

What it will mean for tunnelling generally is less clear. But a big winner will be the Gateway Project, which will get US\$8bn to cover various schemes, including a new tunnel under the Hudson River to connect New York with New Jersey and on which construction is expected to start in August 2023. Another beneficiary will be the existing 110-year-old Hudson Tunnel which had suffered extensive and lasting damage from Superstorm Sandy in 2012.

Overall, transportation will get US\$284bn which includes:

- Roads and bridges – \$110bn
- Railroads – \$66bn (including \$30bn for Amtrak’s Northeast Corridor stretching from Washington to Boston)
- Public transit – \$39bn
- Airports – \$25bn
- Ports – \$17bn
- Electric vehicles – \$15bn.

Utilities will receive a total of \$240bn which includes:

- Power infrastructure – \$65bn
- Broadband – \$65bn
- Water infrastructure – \$55bn. ■

## Moscow opens stretch of longest underground rail line

**RUSSIA** – Moscow is preparing to open a stretch of metro on the Big Circle Line – hailed as the world’s longest underground railway. As of early December 2021, passengers gained access to a 20km section that has nine new stations plus one opened after modernisation works.

An ambitious project globally, the Big Circle Line (BCL) will have 31 stations and is expected to be completed in 2022. With a total underground length of 70km, it is claimed it will be the longest, fully underground metro line in the world when finally completed, surpassing that of Beijing by more than 10km.

To speed up the pace of construction on the BCL, Russian engineers used solutions deemed unconventional for Moscow, explained Anna Merkulova, CEO of the Mosproekt-3 Group of companies.

“We have put stations closer to the surface to increase the amount of work done by tunnel boring machines. Coupled with the unprecedented number of TBMs engaged on the project, such a solution provided the possibility of improving the time required for constructing the new underground infrastructure.”

Up to 23 TBMs have been used simultaneously to bore the BCL tunnels, helping the line gain an entry into the Guinness Book of World Records.

## Auckland tunnel projects face ‘critical’ cost and skills challenges

**NEW ZEALAND** – Global shortages in skills and materials, and the continuing impacts from the pandemic, are causing major cost increases and delays to two of Auckland’s biggest tunnelling projects.

In an effort to offset the effects of the pandemic, governments worldwide are pumping money into infrastructure projects but this is also squeezing the availability of labour globally.

Work on Watercare’s 14.7km-long Central Interceptor sewer tunnel was due to be completed in 2025. This is now in doubt given the impact that skills shortages could have on the US\$850m project. According to the New Zealand Herald, Watercare has warned that the sourcing and retention of staff “is becoming more challenging and now presents a critical risk to the project”.

Similar challenges are faced by the US\$3.1bn City Rail Link which has needed to source overseas labour for skills not available in New Zealand..