

Western Roads Upgrade



Asia Pacific

Transport

The Western Roads Upgrade is the first of its kind for an arterial road network in Australia.

The \$1.8 billion public-private partnership is also the state of Victoria's largest single investment in arterial roads.

Project facts

Location

Melbourne, Victoria, Australia

Client

Victorian Government

Value (NPV)

A\$1.8 billion

Our role

Project sponsor
Financial arranger
Joint SPV manager

Contractor

WBHO Infrastructure

Service provider

Ventia

Design team

Amey, KBR and pitt&sherry

Financial close

December 2017

Completion date

March 2021

Contract terms

Design, build, finance and maintain for 23 years

Awards

- **Local Government Award, 2021 Victorian Multicultural Commission Awards for Excellence**
- Global Financial Structure of the Year, 2019
Global PPP of the Year Awards
- Best Financial Structure, 2018 PPP Awards
- Best Road/Bridge/Tunnel Project, 2018 PPP Awards
- Financial Excellence, 2018 Infrastructure Partnerships Australia National Infrastructure Awards
- Advisory Excellence, 2017 Infrastructure Partnerships Australia National Infrastructure Awards

Project website

netflowjv.com.au/western-roads-upgrade

It has delivered an unprecedented level of major road upgrades across Melbourne's west, including

- 120 kilometres of new traffic lanes
- 62 intersection upgrades
- five new and eight upgraded bridges
- 188 kilometres of road resurfaced
- more than 300 services and utilities relocated
- 60 kilometres of new walking and cycling paths

Since completion in early-2021, the project has provided safer roads and more reliable journeys for western Melbourne, reducing driving time by an average of 20 per cent.

The Netflow consortium delivered the capital works in partnership with Major Roads Projects Victoria and is now maintaining the accompanying 260-kilometre arterial road network for 20 years in partnership with the Department of Transport.



Investing in local industry

The project provided 4,000 equivalent full-time jobs during construction – 1,800 working on the project directly and another 2,200 for local businesses supplying the project.

Many of these roles were filled by people living in Melbourne’s west.

Employment initiatives created sustainable employment opportunities for underrepresented jobseekers and Netflow exceeded key participation targets

- 33.7% female participation against a target of 30% of deemed hours

- 20.9% of work was done by apprentices, trainees or cadets against a target of 10% of deemed hours
- 12% of work performed by people from a culturally diverse background against a target of 2.8% of deemed hours
- 4.2% of work performed by Aboriginal or Torres Strait Islander peoples against a target of 2.5% of deemed hours

The project used more than 96 per cent local content and subcontractors invested more than \$300 million into plant, equipment and their supply chain, increasing their capacity to work on future major infrastructure projects.

A strong emphasis on safety saw more than three million consecutive hours of work performed without a lost time injury.

The Netflow Future Skills Academy initiative provides bespoke skills training for consortium companies, subcontractors and suppliers.

Courses enable full career progression over the 23-year life of the project and includes the provision of pre-employment courses at Victoria University, Certificate II and III in Civil Construction, construction induction training and other road repair and maintenance qualifications.

Reigniting the long-term PPP bond market

An innovative finance solution included full-term bond finance, marking Australia's first greenfield bond financing for a public-private partnership since the Global Financial Crisis.

The pricing Plenary achieved enabled the project to remain cheaper than the government's public sector comparator benchmark cost as well as delivering a superior long term cost-of-maintenance outcome.

The solution was recognised as Financial Structure of the Year at the 2019 Global PPP of the Year Awards, Best Financial Structure at the 2018 PPP Awards, and for Financial Excellence at the 2018 IPA National Infrastructure Awards.

Long-term support for the community

Netflow entered into 23-year partnerships with three local non-profit organisations doing outstanding work in the project area, supporting the community health programs of Western Health, supporting the refugee and migrant support programs of Western

Bulldogs Community Foundation, and supporting the academic scholarship programs of Western Chances.

This unique partnership approach was recognised for a 2021 Victorian Multicultural Commission Multicultural Award for Excellence, highlighting excellence in the fostering of cross-cultural understanding, building social cohesion and supporting people from culturally and linguistically diverse backgrounds.

Leaving a legacy

[An iconic sculpture by local artist Jon Campbell was commissioned.](#) Situated alongside the Melbourne–Geelong freeway, it is a highly visible reminder of the significant and long-term investment being made in Melbourne’s west.

The art is part of Netflow’s broader urban design approach that has improved public amenity across the project and also included the planting of more than 500 trees and more than 750,000 shrubs.

Benefitting from a whole-of-life approach to maintenance

Netflow is transforming the way road maintenance is performed in Victoria, using real-time data on the condition of the network to employ maintenance strategies that minimise disruption and maximise whole-of-life value.

This more efficient maintenance program is resulting in an average of one road per week being resurfaced.

The core of Netflow’s whole-of-life maintenance solution is the central Network Delivery Hub.

The 24/7 hub monitors the performance of the network in real time, providing a seamless interface with the Department of Transport, local councils and other third parties to implement dynamic-scheduled works, keep communities informed, predict and prevent issues, and coordinate timely responses to incidents.

The use of vehicle-mounted street scanning technology, drones, 3D modelling and physical inspections allow Netflow to schedule preventative maintenance and reduce road closures.

This whole-of-life approach provides best-in-class maintenance of the road network at a lower cost.

The road ahead is green

A focus on sustainable road construction and maintenance has resulted in a range of environmentally friendly outcomes being achieved.

An innovative pavement design methodology reduced lifecycle materials impacts over the 23-year operations task, and other initiatives such as LED light upgrades at the maintenance depot resulted in a 20% reduction in electricity use.

Other sustainability initiatives include the use of solar-powered site sheds during construction, the application of a sustainable pavement product that incorporates recycled soft plastics, and the introduction of electric vehicles across the maintenance vehicle fleet.

The project is one of only three such projects in Australia to have [achieved a certified Infrastructure Sustainability \(IS\) Operations sustainability rating](#) from Infrastructure Sustainability Council.

It has also achieved IS Design and IS As Built ratings, making it one of the greenest road projects in Australia and highlighting the type of sustainability innovation that can be achieved through public-private partnerships.