

(/)

[Back to Our transport future](#)

Next Generation Trams

The Victorian Government is investing \$1.85 billion in 100 Next Generation Trams and a proposed new tram maintenance and stabling facility in Melbourne's west.



Artist impression - indicative only and subject to change

The Next Generation Trams will be the largest investment in locally made trams in Australia's history, setting the standard for modern public transport by delivering a more comfortable, accessible and energy-efficient journey for passengers.

The project will include a minimum of 65 per cent local content, supporting up to 1,900 local jobs including in the wider economy.

After a competitive tender process, the Victorian Government has signed a contract

with Bombardier Transportation Australia (recently acquired by Alstom) to design, build, and maintain the new trams.

On this page:

- [Passenger benefits](#)
- [Design requirements](#)
- [Key features](#)
- [Accessibility](#)
- [Local jobs](#)
- [Manufacturing](#)
- [Network access](#)
- [Class name](#)
- [Tram maintenance facility](#)

Passenger benefits



Passengers will benefit from a range of new features, including:

- space for more passengers than Melbourne's high-floor trams
- the latest accessibility features to make it easier for everyone to travel
- on-board energy storage to reduce power use and network costs.

The new trams will enable the retirement of some of our longest-serving high-floor trams from the Z and A classes, helping to make our public transport network more accessible for all Victorians.

Designed with Melburnians, for Melburnians



Experience and insights gained in earlier tram and train projects – such as the High Capacity Metro Trains and E Class tram projects – were used to inform the design requirements of the new trams.

In response to the Victorian Government's competitive design and tender process,

the selected bid presented a three-section vehicle based on the proven Flexity 2 design, customised for the unique needs of Melbourne – home of the world’s largest tram network.

All aspects of the approach to tram design prioritise safety for passengers and drivers.

These include:

- a design that meets the latest crashworthiness standards for driver and passenger safety, and limits impact damage from other trams and vehicles
- an optimised cab/front design that enhances driver sightlines, delivers superior protection in the event of a collision, and prevents pedestrians from passing under the tram.

The tram design is expected to be finalised in 2023, following engagement with technical, accessibility, passenger, and driver representatives to refine the proposed design where required, ensuring it meets Melbourne’s needs.

Key features



Artist impression - indicative only and subject to change

- Improved capacity over existing high-floor trams with space for up to 150 passengers (double the A and Z Class high floor trams and slightly more than the B Class high floor trams).
- Better accessibility making it easier for people with disabilities or mobility aids, as well as those travelling with prams to use public transport.
- Onboard energy storage to limit current draw at peak times and reduce power use. This will reduce the need for expensive infrastructure upgrades, such as new or upgraded substations, and reduce network costs. The new trams will use 30–40 per cent less energy per passenger compared to an E Class tram, by using onboard energy storage technology and regenerative braking.
- Modern cooling and heating to improve passenger comfort and suited to Melbourne's unique weather.

A vision for universal access



The new trams will feature the latest accessibility technology to make it easier for people with disabilities to use public transport.

This technology, coupled with the low floor design and additional doors, will improve accessibility on the network.

Accessibility improvements will be further refined during the final design process in consultation with accessibility groups.

Supporting local jobs

At peak, the project will support up to 1,900 Victorian jobs through direct manufacturing and across Victoria's strong rolling stock supply chain.

This will contribute to exceeding Victoria's minimum 50 per cent local content policy for new rolling stock orders.

The new fleet will support future network service changes and other improvements to public transport, including service upgrades, which will also support jobs in tram operations.

Manufacturing

The Victorian Government's rolling stock program is building a world-class rolling stock industry right here in Victoria.

The Next Generation Trams will be made in Victoria with a minimum of 65 per cent local content, exceeding the Government's minimum 50 per cent local content requirement.

Pre-construction activities at Dandenong to establish the production line will begin imminently, with construction on the first tram due to start from late 2023. The first vehicles are anticipated to be in service from 2025.

Melbourne all over

The new trams will be able to operate across the network. Their design elements – like onboard energy storage and layout – will ensure they can run on our existing lines without major changes to tracks or the tram power system.

As a part of this project, a new tram maintenance and stabling facility is being developed in Melbourne's west. This is planned for part of the vacant former student accommodation site in Maidstone.

While a significant share of the Next Generation Tram fleet will be based at Maidstone, the detailed allocation of these trams to other depots and routes is in development. This is in coordination with other tram planning initiatives also underway.

A class of its own



Artistic impression - indicative only and subject to change

In keeping with Melbourne tramway practice, these new vehicles will be the 7th

generation of trams for our network and have been assigned the letter class 'G' – the 7th letter of the alphabet. G Class trams will also receive individual vehicle numbers starting from 7001.

The use of 'G Class' for these vehicles continues Melbourne's proud tram classification tradition, while celebrating our next generation of trams.

Tram maintenance facility



A proposed new state-of-the-art tram maintenance and stabling facility will be built in Melbourne's west to maintain and stable our new Next Generation Trams.

The Department of Transport has purchased a vacant site in Maidstone at the corner of Hampstead and Williamson Roads and will lead its development on behalf of the Victorian Government.

The site will be developed into the proposed new tram maintenance and stabling facility and several other essential service projects to support community needs.

The Maidstone community will benefit from:

- an enhanced local area
- a more reliable, accessible and modern tram fleet
- 280 jobs in construction, ongoing maintenance and the supply chain.

Current works

We've started preliminary site activities and investigations. These activities support the planning and design for the tram maintenance and stabling facility, which is in

the early phase of development.

Current works include:

- environmental, cultural heritage and engineering investigations to better understand the site's conditions
- site office establishment
- removal of waste material.

Early works on the tram maintenance facility are expected to start in 2023, subject to planning and heritage approvals.

Have your say

The initial community survey for the Maidstone site has now ended. Thank you to everyone who provided feedback.

The responses will help us to understand what you value about the site, your concerns, and how this new development can make a positive difference to your community.

We value your feedback and contributions, and there will be further opportunities in the future for you to have your say.

Supplier opportunities

To register your interest as a supplier on the Next Generation Trams project, [please visit the Industry Capability Network \(ICN\) website \(https://gateway.icn.org.au/project/4417/next-generation-trams\)](https://gateway.icn.org.au/project/4417/next-generation-trams).

Contact us

Email nextgen.trams@transport.vic.gov.au (<mailto:nextgen.trams@transport.vic.gov.au>) and a member of the project team will be in touch.

[Our transport future \(/our-transport-future\)](#)

[Our projects \(/our-transport-future/our-projects\)](#)

[Transport precincts \(/our-transport-future/our-projects/transport-precincts\)](#)

[Accessibility \(/our-transport-future/our-projects/accessibility\)](#)

[Suburban Rail Loop \(/our-transport-future/our-projects/suburban-rail-loop\)](#)

[Melbourne Airport Rail \(/our-transport-future/our-projects/melbourne-airport-rail\)](#)

[Western Rail Plan \(/our-transport-future/our-projects/western-rail-plan\)](#)

[High Capacity Metro Trains \(/our-transport-future/our-projects/high-capacity-metro-trains\)](#)

[New and upgraded trains, trams \(/our-transport-future/our-projects/new-and-upgraded-trains-and-trams\)](#)

[New train and tram orders \(/our-transport-future/our-projects/new-and-upgraded-trains-and-trams/new-train-and-tram-orders\)](#)

[Next Generation Trams \(/our-transport-future/our-projects/new-and-upgraded-trains-and-trams/next-generation-trams\)](#)

[Upgrading the Victorian fleet \(/our-transport-future/our-projects/new-and-upgraded-trains-and-trams/upgrading-the-victorian-fleet\)](#)

[Victorian rolling stock strategy \(/our-transport-future/our-projects/new-and-upgraded-trains-and-trams/victorian-rolling-stock-strategy\)](#)

[Building our rolling stock industry \(/our-transport-future/our-projects/new-and-upgraded-trains-and-trams/building-our-rolling-stock-industry\)](#)

[Upgrading Melbournes tram network \(/our-transport-future/our-projects/upgrading-melbournes-tram-network\)](#)

[St Kilda Pier \(/our-transport-future/our-projects/st-kilda-pier\)](/our-transport-future/our-projects/st-kilda-pier)

[Regional Victoria \(/our-transport-future/our-projects/regional-victoria\)](/our-transport-future/our-projects/regional-victoria)

[Port Rail Shuttle \(/our-transport-future/our-projects/port-rail-shuttle\)](/our-transport-future/our-projects/port-rail-shuttle)

[Climate change \(/our-transport-future/climate-change\)](/our-transport-future/climate-change)

[Future directions for transport \(/our-transport-future/future-directions-for-transport\)](/our-transport-future/future-directions-for-transport)

[BACK TO TOP](#)

[Our transport future \(/our-transport-future\)](/our-transport-future)

[Getting around \(/getting-around\)](/getting-around)

[Ports and freight \(/ports-and-freight\)](/ports-and-freight)

[About \(/about\)](/about)

[Fishing and boating \(/fishing-and-boating\)](/fishing-and-boating)

[Contact us \(/contact-us\)](/contact-us)

Connect with us

<https://twitter.com/VicGovDoT>

<https://www.linkedin.com/company/department-of-transport-/>

https://www.youtube.com/channel/UCNEbq_4TbpVpzdc9PorISWg

[\(http://www.vic.gov.au/\)](http://www.vic.gov.au/)

© 2022 Department of Transport

[Terms & conditions \(/terms-and-conditions\)](/terms-and-conditions) | [Accessibility \(/accessibility\)](/accessibility) | [Privacy \(/privacy\)](/privacy)
| [Sitemap \(/sitemap\)](/sitemap) | Page updated 20/04/2022