

Melbourne's next-gen trams designed for impact



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Collisions between cars and Melbourne's trams happen about three times a day, prompting the designers of the city's next fleet to make a model that can be easily repaired and provide a better line of sight.

A life-size prototype of the next-generation tram, known as the G-class, has been completed and will be tested by a range of groups to find any improvements that could be made before testing on the network in 2025.

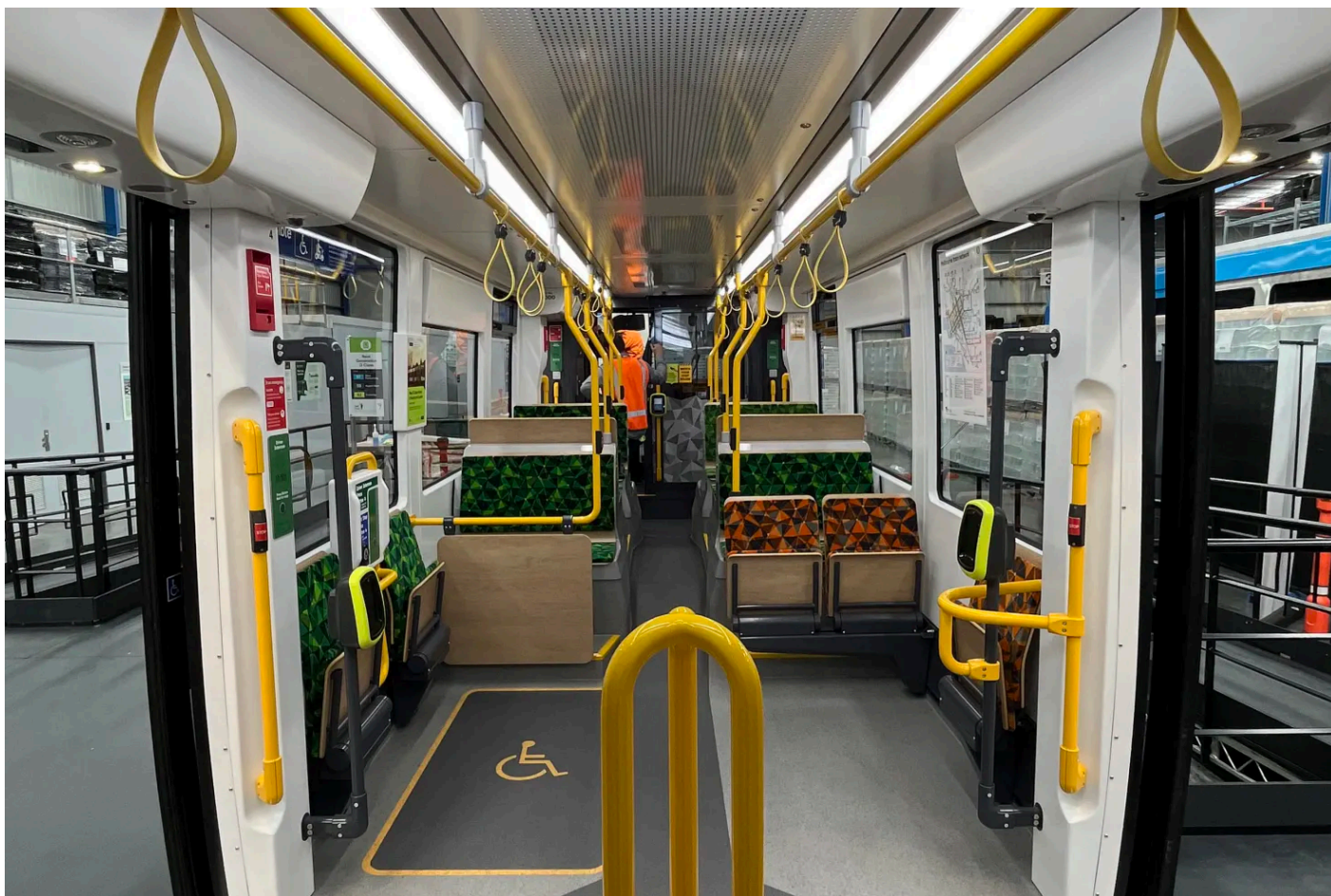
The state government has committed \$1.85 billion to building 100 of the next-gen trams, as well as a new depot in Maidstone, in the inner north-west, where the new model will be rolled out first to replace ageing trams in the area. The new trams will eventually be rolled out elsewhere in Melbourne.

New design features include a lower floor for better accessibility, real-time updates for passengers to be told about what's happening on the rest of the public transport network and new handholds to reduce the risk of slips and falls.

But one of the most significant changes is the front the tram, which has a flatter nose than the previous generation.

The Department of Transport and Planning's head of rolling stock development, Ben Phyland, said this redesign was a response to the number of crashes in Melbourne and after consultation with tram drivers.





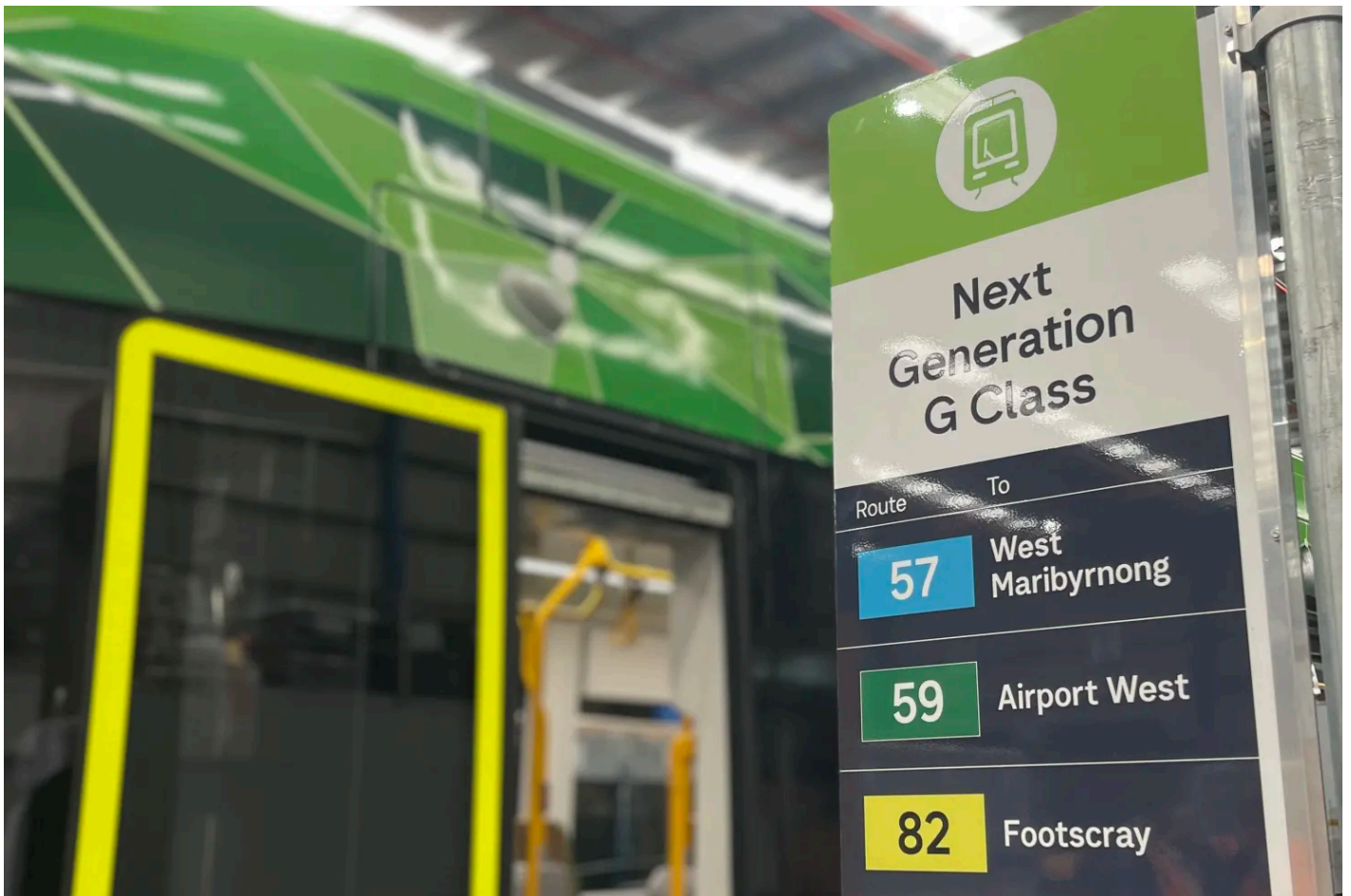
The new tram will have room for 150 people. DEPARTMENT OF TRANSPORT AND PLANNING.

“We do, unfortunately, have a lot of incidents with people driving in front of trams,” he said.

“We tried to put a lot of effort into making sure the tram is easy to repair, [and] as much visibility as we can for the drivers to see pedestrians to make it as safe as we possibly can.”

In 2022, there were 960 collisions involving trams and cars, including 166 considered serious – an average of three crashes each day and a 60 per cent increase on 2021.

Modern trams consume more electricity than earlier models because they provide temperature control across a larger group of passengers and have extra features.



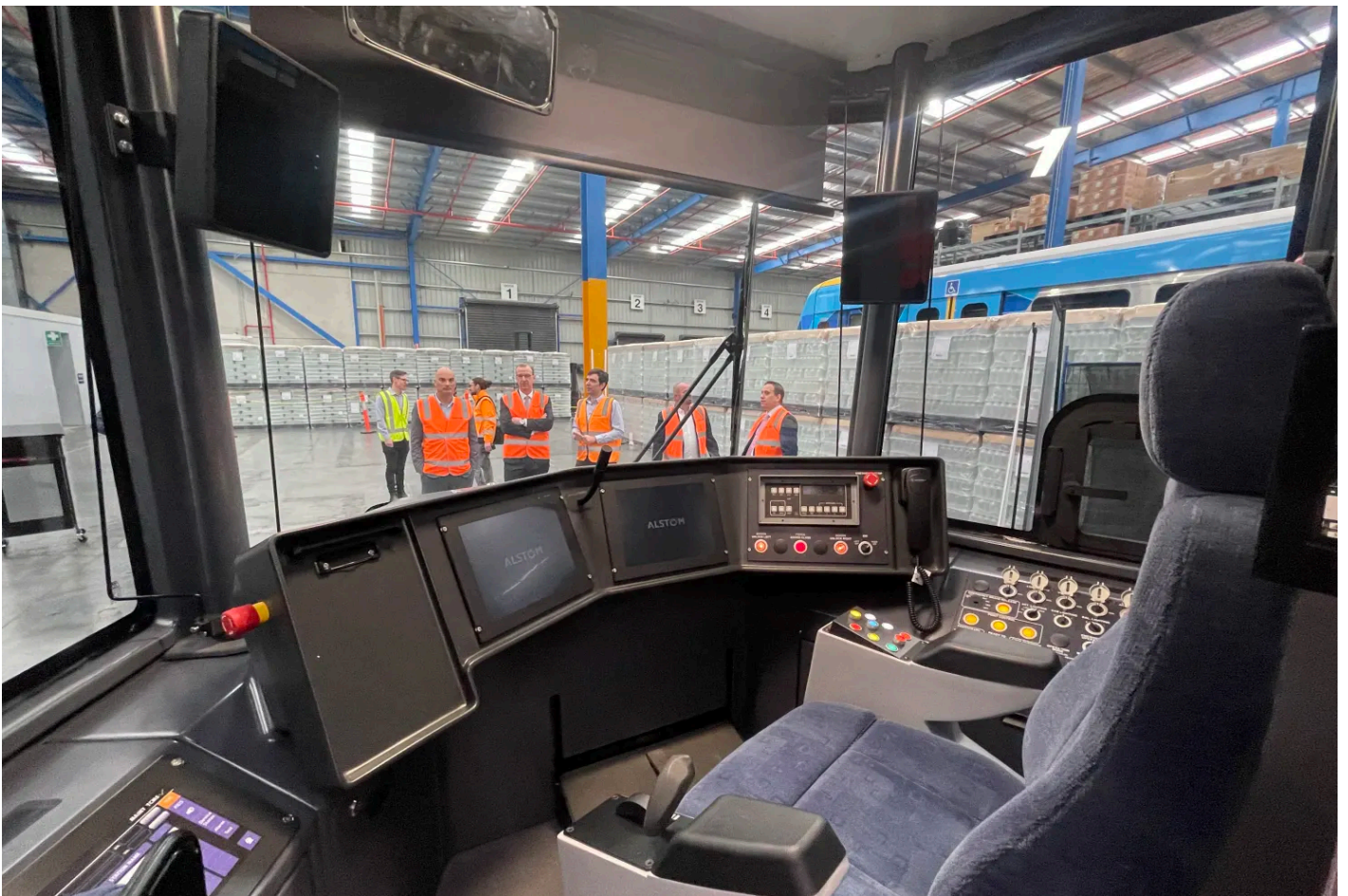
The new fleet will roll out in Melbourne's inner west first. DEPARTMENT OF TRANSPORT AND PLANNING

To offset this, Phyland said the G-class would have an in-built battery that would be used when travelling through the CBD and could recharge when travelling through the suburbs. It is estimated this would save on electricity by about 20 per cent.

The new models will carry about 150 passengers, twice as much as the trams they are replacing in the west, and will be about 25 metres in length. They have also been designed so that they can be extended with extra sections to accommodate passenger growth.

Public Transport Minister Gabrielle Williams said the G-class models would replace some of Victoria's oldest trams that were still in use.

"It [the G-class] is a key part of our position here nationally and globally as being an iconic tram network and, of course, the largest in the world," she said.



Inside the driver's seat of the G-class tram. DEPARTMENT OF TRANSPORT AND PLANNING.

“With every iteration, there’s always an effort made into not only what can be fixed, but what the next new offering is.

“What I found really exciting in the new mock-up is that there’s also some great passenger information on screens provided, which also allow passengers to see where there might be disruptions to the network, which might impact the next part of their journey.”

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