



# Restoration Basics

## The basics of tram repurposing/restoration:

Here's what you need to know before embarking on a tram repurposing/restoration project ...

### Asbestos removal

All heritage trams will need a suitable qualified asbestos inspection to determine if asbestos removal is required. If the recipient of the tram plans to re-purpose the tram, it will be incumbent on them to conduct their own "Division 6 - Demolition & refurbishment where asbestos is present" asbestos audit report.

Any works undertaken on trams at Bendigo Tramways Workshop can incorporate the required processes to ensure safe asbestos removal.

### Roof condition

Many heritage tram rooves were originally sealed using a canvas coating; some of these rooves may have started to deteriorate and need resealing.

There are a number of options for re-sealing the roof; some of these include original canvas coverings with relevant navy dressing paints. Or more modern techniques such as fibreglass can be used to cover the tram roof, however this is a specialist task to ensure the weather proofing is achieved.

Bendigo Tramways has the capabilities to carry out the works required for tram roof sealing.

### Body and interior condition

As has been indicated on the VicTrack website, the condition of the trams on offer can vary significantly. In some cases, the bodies have been damaged and in others, the interiors are incomplete due to seats and other fixtures having been removed in the past for various reasons.

Repairs to the body/interior and the sourcing or manufacture of new fixtures can be quoted on and carried out by Bendigo Tramways. (Please see FAQ Costs/Quotes)

### Condition of the bogies/trucks

Again, there is no guarantee that a VicTrack tram will have a complete set of trucks. In order to make the trucks look complete or operational, there may be a need to source or manufacture missing parts. Bendigo Tramways can facilitate these works.

### Installation of non-tram specific fixtures

If you are looking to repurpose a tram into a food kiosk/bar or similar concept, provision should be made to install electrical GPO's and/or plumbing in order to accommodate fridges, ovens and other appliances.

Bendigo Tramways can include these works as part of costs/quotes provided.

### Transport and positioning costs

Trams are heavy and difficult to move. There are tram transport specialists you should look to engage with crane operators who are experienced in moving trams. Lifting a tram incorrectly can twist and severely damage the tram structure; we can assist in recommending companies for these works. Depending on your requirements, costs for transport can vary significantly.

### Tram design and concepts

Before undertaking your tram project, we can assist with electronic 2D (elevated and top view) design of your concept based on your detailed brief. Any design works will need to be agreed to and signed off before Bendigo Tramways will begin works.

### Shelter

Heritage trams not maintained and used in regular service (E.g. trams for repurposing or similar) are best preserved by being placed under a suitable shelter. This should be kept in mind when planning any projects with the use of a tram.

### Costs/quotes

Bendigo Tramways can provide indicative costs for a wide range of projects involving the use of trams. However, until we can inspect the tram and gain an understanding of the work required, these costs should only be used as a guide.

Costs for restoration and or repurposing of trams can range from \$20,000 - \$650,000 + depending on intended use.

For the VicTrack Expression Of Interest process you will not be guaranteed which tram you will be offered. Once a tram has been allocated to you Bendigo Tramways can come and inspect the unit and provide a report on its condition and firm up estimates for your project. There is a fee for this service.

### Timing/Waiting lists

Depending on the particular job required, refurbishing and repurposing trams can take anywhere from two months up to a year to complete. Once a project quote has been agreed to, we will need to fit the work into our production schedule taking into consideration workloads at the time an order is taken.

It should be noted that when assessing our production schedule there is a possibility for some works/projects to be put onto waiting lists as our workshop is regularly at capacity.