



# Our light rail is fast approaching. Are you Rail Ready?

We are reaching an exciting stage of the light rail project, with the installation of poles, overhead wire and testing of electrical systems and vehicles.

## Overhead Wire

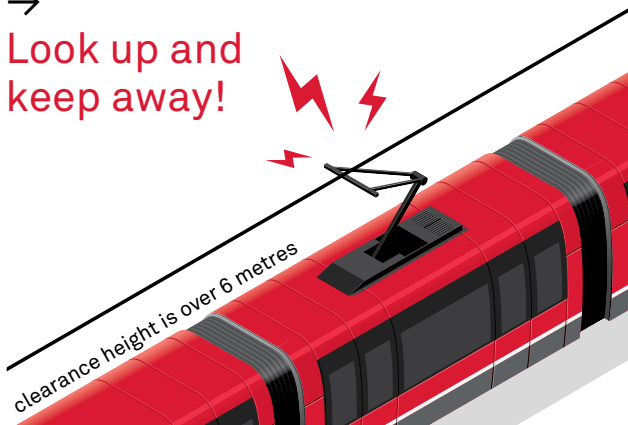
Light Rail Vehicles (LRV's) run on electricity that is transmitted through an overhead wire.

Poles are erected along the light rail corridor and the wire is connected from pole to pole.

## Stay Safe



Look up and  
keep away!



- The overhead wire is LIVE and carries 750 volts of power. It will cause fatal injuries if touched. Always keep a safe distance from the overhead wire and never come into contact with it.
- Make sure that your vehicle/load does not come into close contact with the overhead wire. If you are unsure, plan your journey ahead and avoid travelling near the light rail route.
- In the event of an emergency, dial 000.

## Light Rail Vehicle (LRV) Testing

Each LRV undergoes comprehensive testing to ensure its safe operation. Testing will start at night, with the LRVs operating at low speed.

Over time, testing speeds will increase and take place during the day.

## Stay Safe



Look up and  
keep away!



- LRV's can move quickly and quietly so always check your environment at intersections and crossings.
- Pedestrians should only cross roads at designated intersection crossings.
- Keep off the tracks—only authorised vehicles may travel on the tracks.
- Remember to follow all road rules when driving or cycling near light rail.

# Light Rail → Facts

## Overhead Wire (OHW)

The OHW will be strung in lengths of about a kilometre long.

The height of the OHW is around 6.1m along the route and 6.65m at intersections, and is well above the Australian standard of 5.64m.

## Signals

The LRV transmits a GPS signal and emits a radio signal that is picked up by an in-track transponder and transmitted to the control centre.

Receivers on the track pick up this signal to manipulate intersection signals and stations. Staffers at the control centre monitor the LRV's position based on the GPS and rail-system transmissions.

## Lights & Sounds

Audible warnings, horn and bell, and high intensity headlights are among the LRV's safety features.

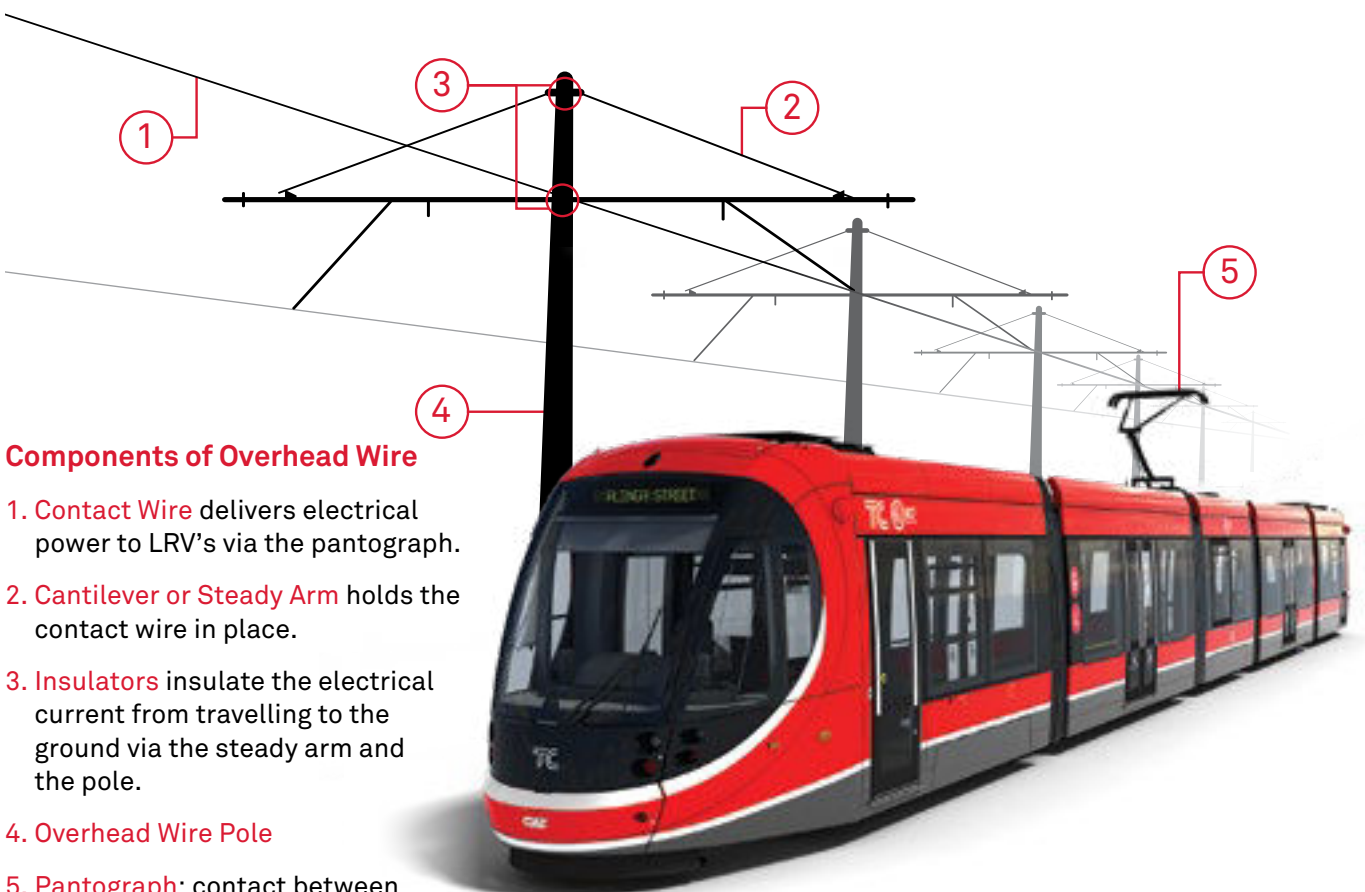
The LRV design is focused on passenger comfort and safety.

The LRV's are very quiet and smooth. Even at 60kmh the noise levels are lower compared to a bus.

## LRV Design

The LRV design features low floors, bidirectional operation, and is fully climate-controlled with capacity for more than 200 passengers.

There are two dedicated areas for the storage of bicycles and wheelchairs. Passengers will have free access to the high speed on board Wi-Fi system. Real time CCTV (internal and external) and Emergency Help Points (Intercom) ensure maximum security for passengers and drivers.



## Components of Overhead Wire

1. **Contact Wire** delivers electrical power to LRV's via the pantograph.
2. **Cantilever or Steady Arm** holds the contact wire in place.
3. **Insulators** insulate the electrical current from travelling to the ground via the steady arm and the pole.
4. **Overhead Wire Pole**
5. **Pantograph**; contact between the pantograph and OHW keeps electricity flowing continuously to the LRV's motors.