

# Integrated Rapid Transit (IRT) infrastructure on the West Coast

## In and around an IRT station

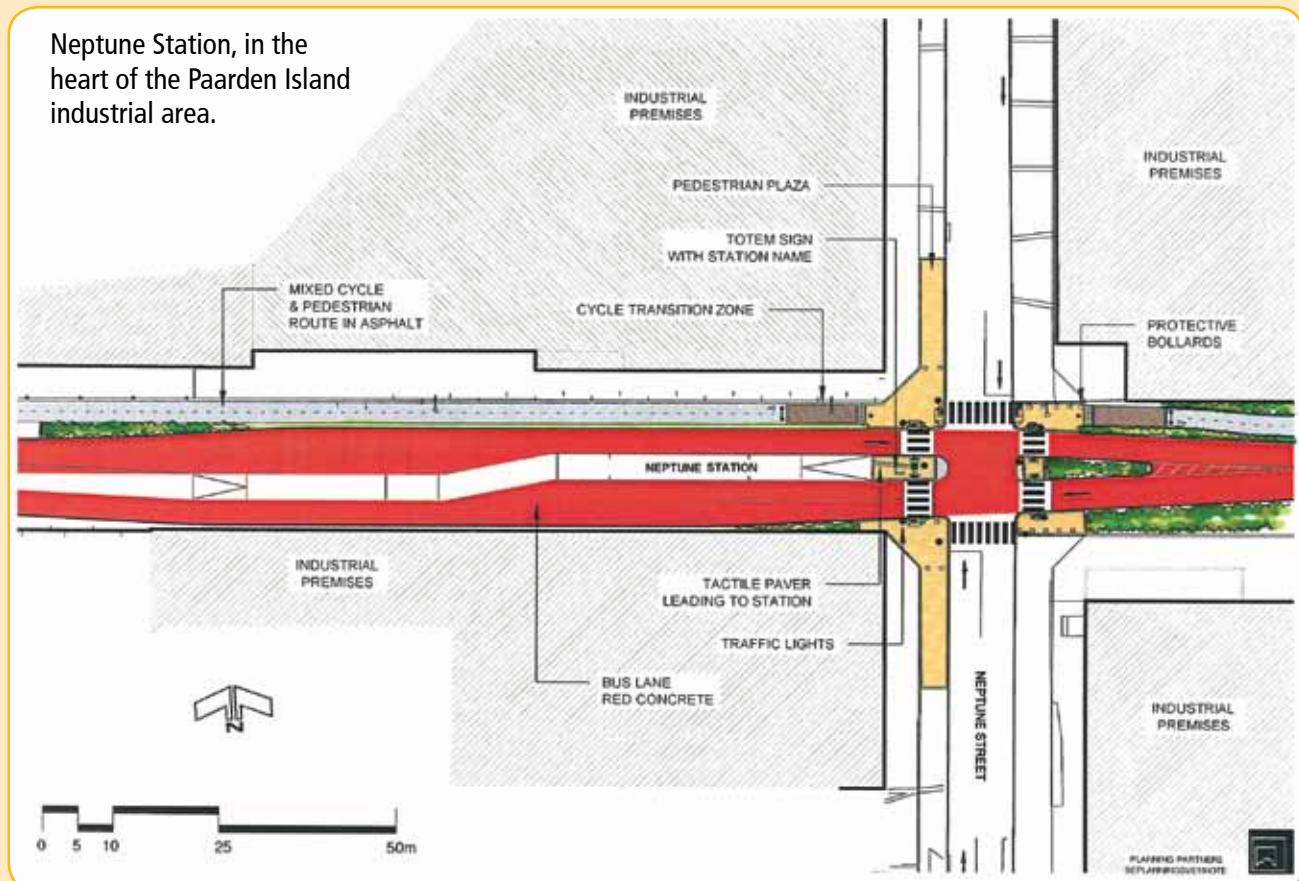
Although the most visible element of Cape Town's new Integrated Rapid Transit system will be a network of dedicated bus lanes and stations, catering to pedestrians and cyclists is a key priority for the system.

IRT stations are located at all major intersections with the trunk routes because these provide a place where users can easily cross the road to reach the stations in the middle of the roadway. This is simpler and more efficient than using subways or pedestrian bridges.

The IRT system is designed to encourage a culture of sharing public spaces, and features large open plazas around stations and intersections, together with an extensive network of cycle and pedestrian walkways. These spaces are designed to be as safe and pleasant as possible, being well lit and separated from the roadway by gardens and landscaping or heavy protective bollards where necessary. Pedestrian crossings are also particularly well marked for motorists, to help them get used to having a more people walking in the areas around intersections.

The system provides universal access for people with disabilities. High-platform stations with ramps allow wheelchairs as well as prams and bicycles to be rolled straight into buses. In the areas around stations, tactile pavers are used to guide the visually impaired to where they need to go, and when roads need to be crossed.

The first section of the West Coast IRT trunk route is an entirely new road just for buses, running along a disused railway line from the Civic Centre to just after Paarden Island where it joins the R27. The new route has a lot of space for the new pedestrian infrastructure because there is no existing road. This means that as part of the IRT, the City of Cape Town has been able to provide safe, green, accessible public spaces in these previously neglected industrial areas, as shown below.



Cape Town's IRT system will be used to provide a basic events service for the FIFA Soccer World Cup, after which a starter service will be launched on the West Coast using the completed R27 trunk route from the Civic Centre to the Bayside Station in Blaauwberg. The system will then be expanded across the city in phases over several years.

**For updated information on the system, see the website ([www.capetown.gov.za/irt](http://www.capetown.gov.za/irt))**

## Solutions for sharing the road

The trunk routes of Cape Town's new Integrated Rapid Transit (IRT) add new red dedicated bus lanes to the roadway as well as a high-quality three meter-wide cycle lane that is separated from the roadway by vegetation and landscaping. Around intersections there is even more new infrastructure, with extra lanes for turning, bus stations built between the two carriageways, increased landscaping and pedestrian plazas and walkways to provide access to the stations.

The City of Cape Town is determined that the new IRT infrastructure should interfere with existing private traffic as little as possible, so engineers have had to come up with innovative solutions and careful compromises to fit the new infrastructure into the small amounts of space that are available.

One of the solutions is to use a 'pre-signal system' as is shown below, where traffic lights are installed just before an intersection's turning lanes begin. These lights control the sharing of the turning lanes between buses and cars, and also allow buses to 'jump the queue' waiting at the intersection.

A key compromise is to allow buses to travel in mixed traffic for short sections of the road. As shown below, from Boundary Road to Broad Road there will be no dedicated lane for buses in the northbound direction, as there is only space for one new bus lane. The southbound route was prioritised as morning traffic into the city is more concentrated, and commuters are likely to be concerned about getting to work on time.

On the stretches where IRT buses travel in mixed traffic, roadworks still need to be done to strengthen the lanes so they can bear the weight of the buses. However, work is proceeding in a way that causes minimal disruption to traffic during construction.

