Heavy Vehicle Priority System Trial



Darwin Ship Lift Facility Project



HEAVY VEHICLE PRIORITY SYSTEM TRIAL

The Northern Territory Government is delivering the ship lift to establish Darwin as a thriving maritime services industry hub.

Construction started on the Darwin Ship Lift Facility project in April 2024.

The Department of Infrastructure, Planning and Logistics is developing a Heavy Vehicle Priority System to improve safety and reduce time delays and congestion for commuters and heavy vehicles during the construction phase of the ship lift project. It is anticipated that up to 6,000 heavy vehicle trips will be used to import rock, fill and pavement materials to build the Darwin Ship Lift facility, equating to an average of approximately 12 trucks (6 in each direction) per hour on the network during the construction period.

The trial will contribute to the safe and efficient delivery of materials from extractive sites in the Greater Darwin area to East Arm as part of the Ship Lift project.



Objectives of the trial

The Heavy Vehicle Priority System trial will:

- give heavy vehicles priority at traffic signals as they travel to and from the construction site during off peak traffic times
- require a restriction on ship lift project road trains from running during peak, week day traffic periods to reduce impacts on commuter traffic in the morning (7 am – 9 am) and afternoon (4 pm – 6 pm).

The initiative is anticipated to decrease the impacts of heavy vehicles on general traffic during peak traffic periods. The trial will be in place for the 8 traffic signals from the Arnhem/Stuart Highway intersection, along the Stuart Highway and Tiger Brennan Drive, to the ship lift construction site at East Arm.

The trial began in May 2024 and will occur over approximately 12 months.

The Heavy Vehicle Priority System Trial is being managed by the department in conjunction with Transmax and heavy vehicle operators.

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How the priority system works

GPS technology will be used to enable the system to request a green traffic signal when a heavy vehicle is 2 minutes away from a traffic signal. This will increase time efficiencies and reduce impact on road surfaces from multiple stops by keeping the heavy vehicles moving where possible.

Vehicle positioning devices will be installed on each participating heavy vehicle and will send the vehicle's GPS location to the priority system via a 4G connection. As a heavy vehicle approaches the intersection, the estimated time of arrival is communicated to the intelligent transport software (STREAMS), which requests a green traffic signal if there are no other conflicting movements at each set of signals.

The trial is expected to save time for heavy vehicle operators by reducing how many times they need to slow down and stop at traffic signals when they encounter a red signal, which can add up to an average of approximately 4 minutes at each traffic signal in each direction.



Sharing our roads

In the Territory we share our roads and highways with road trains.

Here are some tips on how to share the road safely:



When driving on the road with road trains, be patient – do not cut in front of road trains, especially when they are slowing down at traffic signals or turning.

Road trains take longer to stop than cars, so be careful when braking and driving in front of road trains.



Road trains often make wide turns and sometimes require more of the road to manoeuvre – always give them space and time when they turn, and do not try to undercut them when they are turning.



When passing or overtaking a road train, remember they can be more than 50 metres long – that is 10 car lengths – so only overtake when there is enough space, visibility ahead and it is safe to do so or be patient and wait for overtaking lanes

