



## 20-year Masterplan

### Vision

The Queensland Government's 20-year vision is to increase the standard of the Warrego Highway to a more efficient, safer and reliable highway. Strategic priorities include:

- improving capacity, safety and heavy vehicle efficiency
  - strengthening and rehabilitating ageing pavements and structures
  - improving route reliability and connectivity by addressing high-risk flood prone sections
  - improving safety and efficiency on the rural two-lane sections of the highway by widening pavements and providing overtaking lanes
  - managing local and through traffic conflicts, and provision of heavy vehicle bypasses, where warranted.
- Strategic priorities will be accomplished by staged upgrading of the highway towards the following 20-year vision standard:
- Ipswich (Dinmore to Blacksoil) – six-lane motorway
  - Ipswich to Toowoomba (Blacksoil to Toowoomba) – four-lane motorway, including a new second crossing of the Toowoomba Range
  - Toowoomba to Dalby – long-term upgrade to four-lane divided highway, with upgrades west of Oakey initially focusing on widening pavements to 11 metres and increasing overtaking opportunities
  - Dalby to Miles – rural two-lane highway (11-metre width) with overtaking lanes at approximately 5-10 km intervals (dependent upon traffic volumes)
  - Miles to Roma – rural two-lane highway (10-metre width) with overtaking lanes at approximately 10 to 20 km intervals (dependent upon traffic volumes)
- Roma to Morven – rural two-lane highway (10-metre width)
  - Morven to Charleville – rural two-lane highway (8-metre width)
  - maximum time of closure in a severe flood event not exceeding 12 hours
  - undertaking selected safety treatments to reduce severity and frequency of road crashes
  - planning and preservation of corridors for future heavy vehicle bypasses at Charlton, Dalby, Chinchilla and Roma.

## Improving safety

High traffic volumes, local and through-traffic conflicts in urban areas, narrow and failing pavements and limited overtaking opportunities contribute to accidents along the highway.

Proposed investments outlined in this Strategy aim to improve overall safety through highway duplication, intersection upgrades, pavement and shoulder widening, speed control, ongoing maintenance and other measures (such as rest areas) to counter driver fatigue. The progressive upgrading of the highway to motorway standard between Ipswich and Toowoomba will significantly improve safety by removing cross-traffic turning movements and improving highway access.

In addition, the Queensland Government is focussed on delivering the targeted fatal and serious injury crash reductions outlined in the *National Road Safety Strategy*. This will be achieved by providing tried, tested and innovative infrastructure safety features and, therefore, reduce the risk of more severe crashes from occurring. This approach will be adopted on the Warrego Highway.

## Motorway through South East Queensland

An important element of the vision is the upgrading of the highway between Ipswich and Toowoomba to motorway standard, when warranted. The highway is currently a four-lane highway, with some grade-separated interchanges between Ipswich and Toowoomba.

The 13 kilometre section between Dinmore (junction of the Ipswich Motorway) and the Ipswich-Warrego Highway Connection Road carries the greatest volume of traffic and is already a declared motorway (M<sub>2</sub>). The remainder of the highway to Toowoomba will be progressively upgraded to achieve motorway standard.

This planned transformation to motorway standard will include the closure of all median openings, removal of direct access to property, and connection to all other roads only at interchanges.



Creation of interim at-grade connections or access to the future motorway needs to be consistent with the planning for its ultimate design, as relocation or removal is usually problematic considering the resultant land-use and traffic patterns previously established.

Upgrading to motorway standard will significantly improve road safety by reducing the current number of crashes by up to two-thirds, as well as improving traffic capacity and freight efficiency.

## Increasing capacity and transport efficiency

Continued strong growth in South East Queensland and Toowoomba and development of the Surat Basin energy province, are predicted to generate significant growth in traffic over the next 20 years.

Based on predicted annual growth rates, over the next 20 years, estimated daily traffic volumes are expected to double between Ipswich and Toowoomba, and nearly treble on sections between Toowoomba and Miles. West of Miles, traffic is predicted to increase by one third. Over this 20-year period, heavy vehicle traffic is also expected to double from Ipswich to Roma, with the section between Dalby and Miles nearly trebling as a result of Surat Basin development.

By 2031, significant congestion and delays will be experienced on the highway between Ipswich and Miles and through Roma. The increase in traffic volumes, particularly heavy vehicles, will also have a significant impact on social and environmental amenity in Toowoomba and the towns it passes through, including Dalby, Chinchilla, Miles, Roma and Mitchell.

## Boosting flood immunity and reliability

Given the number and length of floodways and locations subject to flooding on the Warrego Highway, it is not realistic or practical to entirely flood-proof the highway. However, incremental improvements to flood immunity at key locations will be undertaken, in conjunction with general improvements to the highway. The aim is to increase reliability and resilience of the corridor over the long-term to achieve closures not exceeding 12 hours in a severe flood event.

In some urban and built-up areas, such as in Toowoomba, Dalby, Chinchilla and Miles, opportunities to improve flood immunity on the existing highway alignment will be extremely limited, if at all available, due to potential consequences of increased afflux impacting adjoining properties.

## Developing bypasses

In addition to the Toowoomba Second Range Crossing, this Strategy identifies three potential heavy vehicle bypasses on the highway. These are located at Dalby, Chinchilla and Roma. These projects require detailed investigation to determine where and when these facilities would be required, if they are deemed appropriate by the community.

Bypasses at these locations would:

- provide improved travel time for through highway traffic
- improve safety for road users and the local community by reducing conflicts between local and through traffic and between heavy vehicles, cars, cyclists and pedestrians
- improve highway reliability as a new highway alignment would offer the opportunity to improve flood immunity
- improve social and environmental amenity for local residents.

The benefit of identifying these investments now will become increasingly apparent as Queensland's regional population and economy grows. Preserving essential corridors now will provide greater certainty for industry and communities alike. Extensive community consultation on preferred bypasses will occur prior to any decision to proceed.

## Toowoomba Second Range Crossing

A critical priority project on the Warrego Highway is the Toowoomba Second Range Crossing. Toowoomba and the crossing of the Great Dividing Range are the main choke points for freight travelling to/from the Port of Brisbane to the Surat Basin energy province, Melbourne and Darwin.

Most of the existing range crossing has a 10 per cent grade and tight horizontal curves. This results in high levels of congestion and a very poor crash record.

Coupled with the section of the highway running through Toowoomba City, the existing route falls short of specified national highway levels of service.

In addition to development of the Surat Basin energy province, the proposal to construct an inland rail link between Melbourne and Brisbane via Toowoomba has the potential to significantly increase heavy vehicles travelling in, around and through Toowoomba, including the Warrego Highway.

The Second Range Crossing will remove through traffic from Toowoomba and Withcott, providing an opportunity to refocus the function of the existing highway to better serve local and regional needs and residents living along the route.

Acknowledging the significance of Toowoomba as the gateway to the Surat Basin energy province, the confluence of two major national freight corridors and its future as a major inland inter-modal freight hub, the Toowoomba Second Range Crossing is of national significance.

In recognition of its importance, the Queensland Government is progressing planning of a revised business case so as to be in a position to progress the project to construction at the earliest opportunity.

## Priority investments

To turn the vision into a reality, the Queensland Government has identified 41 priorities which address safety, capacity, transport efficiency, reliability and improved flood immunity.

These projects will be supported by an ongoing program of general maintenance and minor upgrades to improve the performance and safety along the entire length of the highway.

These priorities are outlined on page 17.



*Warrego Highway at the Toowoomba Range crossing – Approximately 3,000 heavy vehicles cross the Toowoomba Range every day*