Current Performance

Current highway performance

Rapid development of the Surat Basin energy province, growth of region centres, such as Toowoomba, and continued increase in the national freight task are significant challenges to the safe, efficient and reliable performance of the Warrego Highway.

Safety

High traffic volumes and mixing of local and highway traffic contribute to serious and fatal crashes along the Warrego Highway. The highway between Brisbane and Toowoomba, and the regional centres of Dalby, Miles and Roma, are particular black spots for road safety improvement. West of Toowoomba, road safety is influenced by high proportions of road trains and other heavy vehicles sharing the road with local and tourist traffic.

The crossing of the Great Dividing Range escarpment and Toowoomba City have the highest crash rates on the highway. This is largely due to the steep and winding alignment of the highway as it crosses the escarpment and the busy urban traffic conditions through central Toowoomba. (See Figure 2).

Capacity and transport efficiency

The Warrego Highway is the second-highest trafficked rural national highway outside South East Queensland, after the Bruce Highway. Current traffic volumes vary from an average of more than 40,000 vehicles per day (vpd) at Ipswich, to approximately 25,000 vpd through Toowoomba, 5,000 vpd approaching Dalby to less than 1,000 vpd west of Mitchell. (See Figure 3).

Heavy vehicles comprise a significant proportion of traffic on the Warrego Highway, making up approximately a quarter of all traffic west of Toowoomba, and approaching a third of all traffic on the lower-trafficked sections west of Roma. Over 5,700 heavy vehicles per day travel on the highway on the eastern section of the highway around Ipswich and 3,000 heavy vehicles per day through Toowoomba. On the western sections of the highway, heavy vehicle volumes steadily decrease from 1,500 west of Toowoomba to around 200 at Morven, and below 100 vehicles per day approaching Charleville.

Current capacity constraints are generally limited to:

- delays from slow heavy vehicles negotiating the steep and winding crossing of the Great Dividing Range at Toowoomba
- congestion and delays through Toowoomba city due to urban travel conditions, including 60 km/h speed zone, 16 signalised intersections and an at-grade rail crossing
- delays from limited overtaking opportunities on two-lane sections between Toowoomba and Dalby.

The Toowoomba to Oakey section has traffic volumes of 11,000 vehicles per day, which is at capacity for a two-lane highway and warrants duplication.
Figure 2. Fatal and seriously injured crashes along the Warrego Highway (2005-2009)

Figure 2 illustrates the fatal and seriously injured crashes on the Warrego Highway. An increase in the number of crashes generally occurs on the higher-trafficked sections between Ipswich and Dalby.

Figure 3. Total and heavy vehicle traffic volumes (2011 and projected 2031)

Figure 3 illustrates 2011 and 2031 Average Annual Daily Traffic (AADT) for total traffic (light and heavy vehicles) and for heavy vehicles on the Warrego Highway. Traffic volumes between Ipswich and Roma are projected to more than double over the next 20 years due growth in South East Queensland, Toowoomba and Surat Basin energy province.
Flood immunity and reliability

The Warrego Highway crosses numerous floodplains and floodways, and flooding can close the highway at multiple locations for prolonged periods. This impacts on reliability, increasing travel times and costs of delays for industry and communities.

Key locations subject to flooding include:
- Crowley Vale – Laidley Creek
- Gatton – Lockyer Creek
- Toowoomba – East and West Creeks
- Oakey – Gowrie Creek
- Dalby – Doctors and Myall Creeks
- Macalister – Coranga Creek
- Chinchilla – Charlies Creek
- Miles – Dogwood Creek
- Jackson – Tchanning Creek
- Roma – Blyth Creek
- Morven – Angellala Creek

Severe flooding, which occurred in southern Queensland from mid 2010 to early 2011, resulted in lengthy highway closures of over a week in some locations. This resulted in many communities being isolated for extended periods.

Investments within this Strategy aim to improve long-term immunity along the highway, including the raising of floodways when associated with adjoining works.

In the aftermath of the floods which devastated the community of Grantham in the Lockyer Valley in 2011, the Queensland Government is re-establishing the community on a new site to the north. Development of the Grantham Reconstruction Area may support a need for a new access to the Warrego Highway. Access options for Grantham are subject to ongoing planning.

Natural Disaster Relief and Recovery Arrangements

Between mid 2010 and early 2011, southern Queensland experienced some of the worst flooding and extreme weather events in more than a century, affecting numerous communities along the Warrego Highway. This flooding caused multiple road closures and extensively damaged the existing road network and structures.

A significant portion of the Warrego Highway between Ipswich and Charleville suffered extensive damage, including closures of the Toowoomba range crossing and partial closure of the Marburg range crossing, west of Ipswich.

Recovery and restoration works funded under the Natural Disaster Relief and Recovery Arrangements (NDRRA) are currently underway.