PEDESTRIAN AND CYCLIST SAFETY PROJECT CAIRNS CBD – REQUEST FROM DEPARTMENT OF TRANSPORT AND MAIN ROADS

BHG | 1/3/21 | #5770966

RECOMMENDATION:

That Council accept the request from the Department of Transport and Main Roads and participate in the project to improve safety for pedestrians and cyclists in the Cairns CBD.

EXECUTIVE SUMMARY:

The Department of Transport and Main Roads (DTMR) has approached Council requesting that CRC participate in a project to improve safety for pedestrians and cyclists in the Cairns CBD. The key focus of the project will be to show that low-cost infrastructure upgrades and an effective communication strategy can influence driver behaviour and improve pedestrian and cyclist safety.

The approach has been made as Cairns CBD has a relatively high number of crashes and injuries to pedestrians and cyclists compared to the rest of Queensland, and the nature of the CBD lends itself to improving safety by reducing speed limits to 40km/hr.

The DTMR are requesting that Council lead a working group of stakeholders to investigate and make recommendations regarding locations for new speed limits and related minor infrastructure upgrades. DTMR will provide funding and assistance to coordinate the working group, prepare communications material, respond to media and public inquiries, and implement low-cost solutions.

This report sets out the background to the project and provides details of the crash statistics for Cairns CBD for consideration by Council.

BACKGROUND:

The DTMR has approached Council with a proposal to commence a project with the focus on improving pedestrian and cyclist safety in the Cairns CBD. One of the key factors in improving pedestrian safety is lowering vehicle speed limits as this can significantly reduce the risk of serious injury or fatality. The State Government committed to investigating improving pedestrian and cyclist safety by lowering speed limits during the 2017 election campaign.

The existing speed limit in the Cairns CBD is 50 km/h, with the exception of the Esplanade which is 30 km/h from Spence Street to Upward Street, then 40km/hr to the north, and Lake Street which is 30km/hr in the central blocks and 20km/hr at the Shields St crossing.
**Crash Statistics in Cairns CBD**

DTMR research has revealed the following for the 5-year period from 2012 to 2016 in the Cairns CBD:

- There have been 155 casualties including 1 fatality and 68 serious injury crashes (see attachment 1 showing location of incidents).
- Spence Street and Abbott Street have the 2 highest instances of pedestrian and cyclist fatal and serious injury crashes of all 50km/hr street in Queensland (excluding Brisbane and Gold Coast).
- Nine of the top 20 50km/hr streets involving pedestrian and cyclist crashes are located in the Cairns CBD.
- 58.7% of all crashes occurred at intersections
- 92% of all crashes occurred in clear weather
- 32% of casualties were cyclist or pedestrian compared to the state average of 11.7%.
- Only 3.2% of crashes involved an alcohol impaired pedestrian.

Data Council has for the period 2006 to 2010 shows that there were 298 recorded vehicle crashes in the CBD during that period including 112 that resulted in hospitalisation or medical treatment, 39 involving pedestrians, and 2 fatalities.

**Vehicle Speeds in Cairns CBD**

The figure below shows the 85th percentile speed of vehicles in the CBD. The values shown indicate 85% of vehicles are travelling at or below the displayed speeds at the locations shown which are generally mid-block. The data indicates that vehicle speeds are generally lower than the existing 50 km/h speed limit with most motorists travelling between 42 km/h and 49 km/h.
The relationship between speed and injury

Various studies have measured the relationship between vehicle speed and the likelihood of a pedestrian suffering a fatal or serious injury. These studies have found that at 50km/hr a pedestrian or cyclist has an 85% chance of a fatal injury, while at 40km/hr there is only a 30% chance of a fatality.

The reduction in risk is related to increasing the time that the driver of a vehicle and the pedestrian or cyclist has to react to a hazard or potential accident, and also to reducing the stopping distance of the vehicle. At 50km/hr a vehicle generally takes about 35m to come to a complete stop as opposed to 26m travelling at 40km/hr. These distances would obviously increase if the road conditions were wet.
DTMR Proposal

DTMR wishes to partner with CRC to investigate opportunities to reduce speed limits in the Cairns CBD. The support requested from Council is to lead a working group of relevant interested stakeholders to investigate and make recommendations regarding locations for new speed limits and related minor infrastructure upgrades. DTMR will provide funding and support for the following:

- A consultant to develop a community consultation plan
- Conducting stakeholder workshops
- Implementing low cost options such as signage, lanemarking
- The delivery and implementation of communication materials
- Responding to public and media enquiries
- Provide secretarial support to the working group.

COMMENT:

The last time Council considered changing CBD speed limits was in 2013. Following consultation and feedback from stakeholders Council at the time chose to not proceed with the proposed trial.

It is clear from the crash data and statistics from 2006 to 2016 that Cairns CBD has a high rate of pedestrian and cyclists injuries compared to the rest of Queensland excluding Brisbane and the Gold Coast.

The DTMR MUTCD suggests a 40 km/h speed limit on streets in CBD areas which generate significant pedestrian activity and where vehicle speeds are typically less than 49 km/h. The Cairns CBD has a high level of pedestrian activity and based on historical traffic speed surveys, the 85th percentile speed in the main streets in the CBD is between 42 and 49 km/hr.
There is a commonly held misconception that reducing speeds in urban area will adversely impact on travel time and increase congestion. In the Cairns CBD, traffic speed and flow is generally governed by the 23 sets of traffic lights in the CBD.

Other CBD activities such as centre and kerbside parking, pedestrian movements, Rusty’s Markets, construction activity also reduce the speeds vehicles travel. This is supported by the 85th percentile speeds of vehicles shown in the figure above.

Travel time over the 2 CBD blocks heading north or south is anticipated to be reduced only by a matter of seconds if at all due to the other factors influencing travel time.

There are multiple other cities and towns in Australia that have introduced 40km/hr speed limits in their CBD areas. These include Brisbane in 2009, Melbourne in 2012, Sydney in 2013, Unley, Charles Sturt and Port Adelaide, Perth, Bendigo (later in 2018).

Based on the available crash and injury data, it is suggested that Council should consider participating in the project to improve pedestrian and cyclist safety. However, it is acknowledged that community support for the project is critical to the success of any measures introduced to improve pedestrian and cyclist safety.

**OPTIONS:**

Council has three distinct options in dealing with this request as follows:

Option 1 – decline the request and not participate in the project
Option 2 – accept the request and participate in the project
Option 3 – request further information on the project from DTMR.

**CONSIDERATIONS:**

Risk Management:

The crash and injury data provided by DTMR indicates that there are a surprisingly high number of incidents involving pedestrians and cyclist in the Cairns CBD. The proposed discussion with the community on reducing speed limits is one method of managing this risk.

Council Finance and the Local Economy:

The project is not likely to require significant financial contribution from Council given the proposed support from DTMR.
Community and Cultural Heritage:

The reduction of speeds limits to 40km/hr in the Cairns CBD will reduce the risk of injury from incidents, reduce traffic noise, improve fuel consumption, and lower greenhouse gas emissions.

Statutory

The Australian Transport Council’s ‘National Road Safety Strategy 2011-2020’ is the overarching document which provides the national framework for road safety, and is committed to by all State and Territory Governments.

The Strategy support speed limits complementing the road environment to manage crash impact forces to within human tolerance. Specific actions in the Strategy include reducing speed limits at intersections and more speed limits of 40 km/h or lower in pedestrian and cycling areas such as Cairns CBD.

Corporate and Operational Plans:

This project relates to the Liveability Corporate Goal - A safe and secure city that is easy to live in and connected to the world.

CONSULTATION:

Should Council decide to participate in the project, a detailed communications strategy would be developed with the assistance of DTMR.
ATTACHMENTS:
Attachment 1 – location of casualty crashes in Cairns CBD 2012-16.

Bruce Gardiner
General Manager Infrastructure Services
Attachment 1 – location of casualty crashes in Cairns CBD 2012-16