Report No. 6.7 Intersection Reprioritisation - Tincogan Street at Dalley Street and Stuart Street

File No: 12022/1632

5 Current situation

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Burringbar Street, which runs through the centre of Mullumbimby has been identified as a high pedestrian activity zone, as such the speed limit has been reduced to 30km/h.

Consequently, Tincogan Street has been identified by most drivers as the northern, east-west through movement corridor around the town centre of Mullumbimby. This redistribution of traffic was anticipated by the Shires Place and Planning Strategy and Infrastructure Services.

The reprioritisation of the intersections of Dalley / Tincogan Street and Stuart / Tincogan Street is part of a larger scheme to manage the impacts from the Burringbar Street place making treatments, while providing a safe movement corridor around the centre of town.

Another key factor for the reprioritisation of Tincogan Street is that Dalley Street and Stuart Street are currently the only two intersecting streets on Tincogan Street that maintain priority (Tincogan Street gives way).

See locality map in figure 1 below.



Figure 1: Locality Map

Purpose

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The purpose of this report is to obtain Local Traffic Committee endorsement for the proposed priority change to the intersections of Tincogan / Dalley Street and Tincogan / Stuart Street.

A concept for each intersection is shown below, this concept is for visualisation purposes only and will be designed to conform with all the relevant standards and guidelines should endorsement be received. Further detail can be found in attachment 1 and 2 contained within this document.



Figure 2: Concept layout Tincogan Street and Dalley Street



Figure 3: Concept layout Tincogan St and Stuart St



Figure 4: Current intersection layout

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The intersection reprioritisation concepts contained within attachment 1 and 2 of this report were modelled (Sidra intersection analysis) with a 10-year design life. Analysis has indicated that there is adequate capacity extending beyond 10 years should the change occur.

- A detailed traffic study undertaken by Stantec Consulting has also taken place which included a microsimulation model. This modelling did not include the concept scenarios contained within this report. The model only considered straight reprioritisation without any additional lanes or median storage potential for right turning drivers from the minor legs.
- This microsimulation model indicated there would be no net worsening in terms of performance following 10 years of traffic growth. This report can be found in attachment 3 (E2022/90532) of this report.

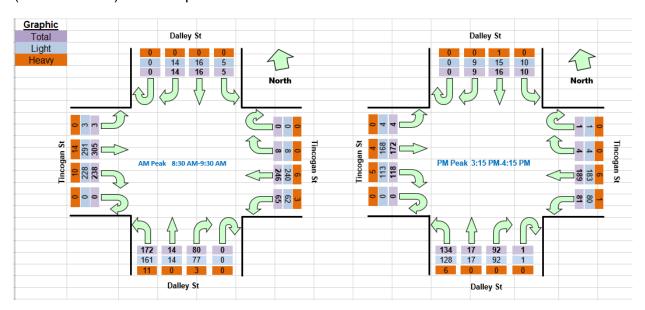
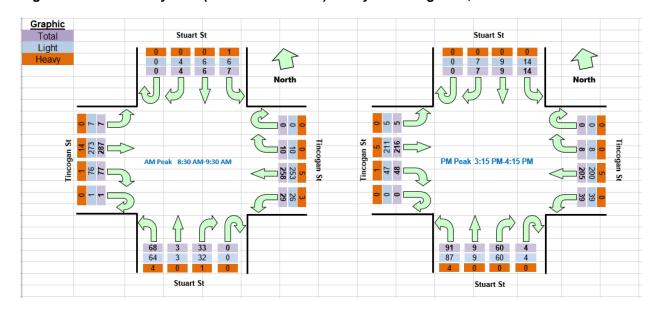


Figure 5: Traffic survey data (intersection count) Dalley St/Tincogan St, 17 June 2021



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Figure 6: Traffic survey data (intersection count) Stuart St/Tincogan St, 17 June 2021

Safety (Current situation)

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An investigation of the available crash data has indicated that there have been no reported crashes in the last 5-years at either of the subject intersections. However, there are significant perception issues at both intersections. When travelling on Tincogan Street drivers have been seen to give-way to through traffic on Tincogan Street from Dalley Street and Stuart Street.

Anecdotally, one reason for this is that the road functionality significantly changes on the northern side of Tincogan, Dalley and Stuarts Streets become residential access streets rather than minor collectors. Consequently, the intersections almost feel like "T" intersections with Dalley and Stuart Streets forming the minor approaches (south). This issue is also exacerbated by the fact that on both approaches all other intersections give way to Tincogan Street.



Figure 7: Tincogan St, westbound approach to Dalley St

Associated works

There are a number of works that will be undertaken to facilitate the reprioritisation at the intersection of Tincogan / Dalley Street, these works will include but not be limited to:

- Removal of the existing kerb ramps north-south on the westbound approach (Tincogan Street)
- Link new crossing points with footpath and kerb extensions
- Provide tactile footpath/crossing treatments
- Provide advanced warning signage (Changed traffic conditions)

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Pedestrian chanelisation (e.g., fencing, gardening, street furniture)

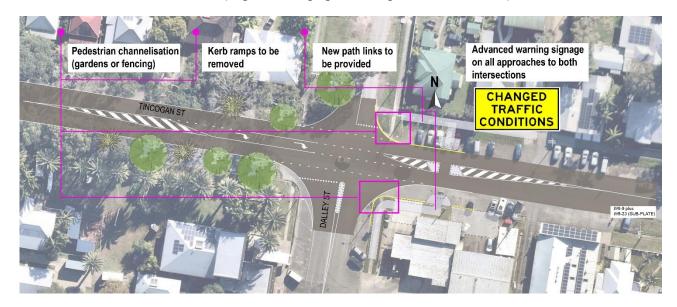


Figure 7: Associated works (Tincogan St/Dalley St intersection

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RECOMMENDATION:

That the Local Traffic Committee endorse the reprioritisation of the intersections of Stuart / Tincogan Street and Dalley / Tincogan Street based on the layout contained within attachment 1 (E2022/108371) and 2 (E2022/108372) of this report.

Attachments:

- Dalley St_Tincogan St _Concept_Sketch_(reprioritisation)_LTC_6_November_2022, E2022/108371
- 15 2 Stuart St Tincogan St Concept Sketch LTC Novemebr 2022, E2022/108372
 - 3 Mullumbimby Traffic and Transport Draft Report 15 September 2022, E2022/90532

Agenda