10.1 BEAUFORT STREET PRECINCT AREA ROAD SAFETY TREATMENTS

Attachments:

- 1. Highgate Precinct Wide Traffic Analysis
- 2. Node#1 Concept Drawing Beaufort Street and Harold Street Intersection
- 3. Austroads Guideline LATM Part 8
- 4. Broome and Wright Street Community Survey Results
- 5. 18 May 2021 Council Report Mini Roundabouts
- 6. 9 September 2014 Council Report Mary Street

RECOMMENDATION:

That Council:

- 1. REQUESTS Administration to apply to Main Roads WA for approval of Harold Street becoming a formal one-way street either from Vincent Street to Beaufort Street, or from Beaufort Street to Vincent Street;
- 2. Subject to Main Roads WA approval to point 1, SUPPORTS a capital works project to convert Harold Street from a bi-directional street to a one-way street in the 2024-2025 financial year; and
- 3. SUPPORTS the development of a 6-year Road Safety Implementation Plan to design and deliver the "Beaufort Street Nodes" project and other projects identified within the precinct-wide Highgate traffic analysis report within attachment 21.

PURPOSE OF REPORT:

To consider the outcomes of community consultation on the proposed Harold Street one-way conversion from Vincent Street to Beaufort Street, Mount Lawley, and progression of a formal application to Main Roads WA for approval.

DELEGATION:

Report requested by Council resolution 22 August 2023.

BACKGROUND:

In response to a report to the Ordinary Council Meeting held 22 August 2023 addressing both parking and traffic safety issues in Harold Street, Mount Lawley, Council resolved –

"That Council,

- 1. DOES NOT SUPPORT the progression of the approved Main Roads WA funded Blackspot project at the intersection of Harold Street and Beaufort Street, Mount Lawley as per the design drawing in **Attachment 1**:
- 2. REQUEST the CEO prepare a report on options to slow vehicle speed and increase pedestrian, cyclist, and vehicle safety on Beaufort Street, including engagement with stakeholders such as the Town Team, the Beaufort Street Network Place Management and Main Roads by March 2024; and
- 3. REQUEST the CEO consult with residents, schools, and surrounding businesses on the proposal to make Harold Street west of Beaufort Street a one-way street and present a report to Council with the results of this consultation by March 2024."

DETAILS:

Administration has completed a high-level review of the precinct wide traffic analysis of the Highgate area which included reviewing a section of Beaufort Street (Walcott Street to Bulwer Street). The review highlighted areas which are known to have road safety issues including pre-approved blackspot areas determined through the Main Roads WA crash map system.

The details of this are captured within the technical report in **Attachment 1** and design drawing in **Attachment 2** summarised within the below image *Blackspot Areas – Beaufort Street Precinct*. The blue dots are pre-approved blackspot locations and blue lines pre-approved blackspot roads. The area highlighted red is the Highgate area and the area highlighted yellow shows the extent of the traffic analysis completed on Beaufort Street.



Blackspot Areas - Beaufort Street Precinct

Most roads within the Highgate precinct are pre-approved blackspot areas. High priority areas are at intersection locations as detailed below:

- Broome St and Beaufort St
- Broome Street and Wright Street
- Broome Street and Lord Street
- Harold Street and Lord Street

Other priority pre-approved blackspot areas are roads within the Highgate precinct area detailed below:

- Harold Street (Vincent Street to Lord Street)
- Mary Street (William Street to Beaufort Street)
- Broome Street (Harley Street to Lord Street)
- Lincoln Street (William Street to Smith Street)
- Stirling Street (Lincoln Street to Harold Street)
- Smith Street (Lincoln Street to Harold Street)
- Lord Street (Lincoln Street to Harold Street)

Beaufort Street from Walcott Street to Bulwer Street is a pre-approved blackspot area which also includes five intersections, intersecting at:

- Walcott Street
- Chelmsford Road
- Vincent Street
- Broome Street
- Bulwer Street
- Harold Street

Although Harold Street is not a pre-approved blackspot area, it had been previously approved by Main Roads WA as a blackspot project to be delivered within the 2023-2024 financial year and therefore added to the list.

The following intersections are not on the pre-approved blackspot list but warrant further investigation:

- Grosvenor Road
- Barlee Street
- Clarence Street
- Mary Street
- Lincoln Street

Overall, the study found that providing intervention treatments that divert traffic is not desirable because while crashes may be treated at the intersection in question, adjacent intersections are consequentially likely to be negatively impacted with an increased safety risk.

The focus is then to consider intervention treatments that improve road safety and allow free-flowing traffic to physically slow vehicles and/or reduce traffic volumes around problem areas. This approach was applied to the following areas:

- 1. Harold Street (Vincent Street to Beaufort Street)
- 2. Beaufort Street and Harold Street Intersection
- 3. Broome and Wight Street intersection

Harold Street (Vincent Street to Beaufort Street) was analysed, and the concept of the one-way treatment modelled. It was evident that traffic volumes would likely decrease, slower speeds would be expected, and crashes likely reduced. There were no signs of negative impacts on other intersections or adjacent roads as traffic was free flowing, travelling West to East down Harold Street.

Beaufort Street and Harold Street Intersection was analysed, factoring in the concept of the one-way treatment on Harold Street, which supported the concept of a raised plateau node. Raised plateau nodes have benefits regarding slower speeds, reduces the likelihood of crashes, and allows pedestrians and cyclists to cross at locations which considers accessibility needs and streetscape improvements. It is likely that the node concept would also work at the other pre-approved blackspot intersections with similar benefits expected.

The Broome and Wright Street roundabout project (approved for delivery 2023-2024 and works initiated) was factored into the above analysis and there were no negative impacts from the proposed Harold Street oneway and node treatment within the area. Community consultation for this project is detailed within **Attachment 4.**

Other factors considered were the reduced speed limits from 50km/h to 40km/h now approved by Main Roads WA on all Local Roads, the new Bike network plan 2023-2028 as well as input from our internal Town Teams.

In addressing other problematic areas, the precinct wide traffic analysis suggests other free flowing traffic calming and road safety treatments as identified in the following diagram. These treatments are Local Area Traffic Management treatments used by other Local Governments, recommended within the *Austroads Guidelines to Traffic Management Part 8, Local Area Traffic Management* (see Attachment 3).

Figure 7.1: LATM devices commonly used by local governments



Source: Damen and Ralston (2015)

The Guidelines note that there are few treatments which recommend closing roads and diverting traffic, and these are not commonly used. Community consultation within the City of Vincent over the last five years, suggests that treatments such as raised plateaus and speed humps are generally well received. Diagonal diversions or other road closures which could divert traffic to other streets are not very well received by the community.

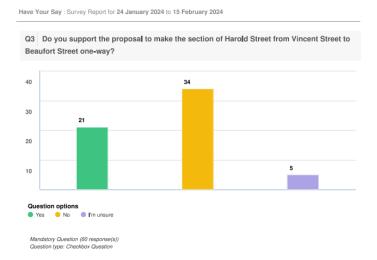
The precinct traffic analysis and treatments proposed have been discussed informally with Main Roads WA, Perth Transport Authority, and the Department of Transport with no negative feedback. It is expected that further formal discussions with these external stakeholders will be held over the next 12 months and approvals will be required.

The technical report in **Attachment 1** and design drawing in **Attachment 2** provides additional details on the proposed treatments for Harold Street (Vincent Street to Beaufort Street) and Beaufort Street and Harold Street intersection. The report also considers treatments such as mini roundabouts on Chatsworth Road intersections as well as Lincoln Street Intersections. Mini roundabout treatments have been rolled out within North Perth, 18 May 2021 Council report in **attachments 5** has further details on this.

CONSULTATION/ADVERTISING:

Community Consultation for Harold Street to be converted to one-way commenced from 24 January 2024 and closed on 15 February 2024.

There was a total of 60 survey participants, 35% of which supported, 57% did not support and 8% were unsure.



The table below shows that Harold Street residents supported the one-way proposal, however school users, and other City of Vincent residents (inc. Highgate) were not supportive.

	Support	Not support	Unsure	Total
Harold St resident	7	4	2	13
Highgate resident	11	17	2	30
CoV resident	2	5	1	8
School users	2	7	0	9
Total	22	33	5	60

Comments received were mixed with general themes being:

Community Comment	Percentage	Administrations Response
Treatment disrupting drivers commute.	16%	Drivers will need to travel through Harold Street as per the direction of the one-way flow. It will disrupt drivers commute who normally drive against the one-way flow.
One-way needs to be designed to run the other way, from Beaufort Street to Vincent Street.	11%	Administration has reviewed flow running from Vincent Street to Beaufort Street, and from Beaufort Street to Vincent Street. There is no added technical benefit or negative impacts regarding how the flow of the one-way system runs, this will be determined during the detailed design phase and will be decided/approved by Main Roads WA.
Moves the problem of the black spot area at the Intersection of Harold Street and Beaufort Street to other streets/laneways.	31%	There is no negative effects of the on-way on adjoining streets as free-flowing traffic is still allowed to travel through Harold Street and access maintained at both the Vincent Street and Beaufort Street ends for the school and laneway.
Will cause issues to residents at Challis apartments.	5%	Access to Challis apartments from Beaufort Street will be maintained however residents will need to follow the one way system when travelling down Harold Street as it will no longer be bidirectional.
There are no accidents/road safety issues on Harold Street.	4%	Main Roads WA crash map has recorded accidents at the Intersection of Harold Street and Beaufort Street, and on Harold Street between Vincent Street and Beaufort Street. Harold Street is a pre-approved blackspot area relating to severity and number of accidents.
This will improve traffic and road safety issues.	31%	The one-way conversation is expected to treat accidents on Harold Street and at the intersection of Harold Street and Beaufort Street.
Doesn't solve the parking issue.	2%	The one-way conversation is likely to treat crashes associated with parking manoeuvres however will not increase the number of parking bays or solve parking issues.

There has not been any other consultation on proposed treatments within the Highgate area or on Beaufort Street (Walcott Street to Bulwer Street).

LEGAL/POLICY:

Road Traffic Act 1974

RISK MANAGEMENT IMPLICATIONS

Low: It is low risk for Council to implement Blackspot projects and Local Area Traffic Management projects which warrant intervention due to road safety concerns.

STRATEGIC IMPLICATIONS:

This is in keeping with the City's Strategic Community Plan 2022-2032:

Accessible City

We have better integrated all modes of transport and increased services through the City.

Thriving Places

Our town centres and gathering spaces are safe, easy to use and attractive places where pedestrians have priority.

Sensitive Design

Our built form is attractive and diverse, in line with our growing and changing community.

Innovative and Accountable

Our decision-making process is consistent and transparent, and decisions are aligned to our strategic direction.

SUSTAINABILITY IMPLICATIONS:

This does not contribute to any environmental sustainability outcomes. This action/activity is environmentally neutral, it relates to road safety.

PUBLIC HEALTH IMPLICATIONS:

This is in keeping with the following priority health outcomes of the City's Public Health Plan 2020-2025:

Reduced injuries and a safer community

FINANCIAL/BUDGET IMPLICATIONS:

Traffic analysis and engineering design tasks will be completed in-house using existing resources. No external resources or additional funding will be required for the application to Main Roads WA for the conversion of Harold Street from bi-directional to a one-way street.

The construction cost for the conversion of the bi-directional street to a one-way street is estimated to be between \$50K - \$75K.

The Beaufort Street Nodes concept is expected to cost up to \$500,000 per node which includes design costs. Should six nodes be delivered within the pre-approved blackspot locations, a budget of \$3 million over a 6-year period will be required.

External funding sources from MRWA, DoT, RAC and the Perth Parking Fund will be explored with cost saving efficiencies from programming annual road renewal and drainage improvement works to be delivered concurrently.

COMMENTS:

Administration has completed the first precinct wide traffic analysis which has holistically looked at treatments within the Highgate area and Beaufort Street (Walcott Street to Bulwer Street). It is evident that past Main Roads WA approved ad hoc treatments focused on individual intersections resulting in traffic diversion is not sustainable.

Administration has demonstrated that road safety improvements can be made by allowing free-flowing traffic, with minimal on-flow impacts to adjoining streets. There is also added benefits for sustainable modes of transport such as cycling and walking while improving accessibility issues and improving the Street Scape appearance.

Although majority of the community do not support the one-way conversion of Harold Street (Vincent to Beaufort), Administration recognises that 13 of the 17 residents living on Harold Street from Vincent Street to Beaufort Street are largely in support. responded, with the majority of respondents in support. Attachment 6 refers to the details of the Mary Street Piazza Council report dated 9 September 2014 which has a one-way system leading into Beaufort Street from Mereny Lane. This project is similar to the Harold Street one-way conversation and is located adjacent to Harold Street. Administration considers that once the community experience these benefits, there will be an increased support for future proposed projects.