

AGENDA

City Infrastructure Committee Meeting

Open Portion

Wednesday, 20 November 2019

at 4:00 pm Lady Osborne Room, Town Hall

THE MISSION

Working together to make Hobart a better place for the community.

	THE VALUES			
The Council is:				
People	We value people – our community, our customers and colleagues.			
Teamwork	We collaborate both within the organisation and with external stakeholders drawing on skills and expertise for the benefit of our community.			
Focus and Direction	We have clear goals and plans to achieve sustainable social, environmental and economic outcomes for the Hobart community.			
Creativity and Innovation	We embrace new approaches and continuously improve to achieve better outcomes for our community.			
Accountability	We work to high ethical and professional standards and are accountable for delivering outcomes for our community.			

ORDER OF BUSINESS

Business listed on the agenda is to be conducted in the order in which it is set out, unless the committee by simple majority determines otherwise.

APOLOGIES AND LEAVE OF ABSENCE

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City Infrastructure Committee Meeting (Open Portion) held Wednesday, 20 November 2019 at 4:00 pm in the Lady Osborne Room, Town Hall.

COMMITTEE MEMBERS

Apologies:

Denison (Chairman) Lord Mayor Reynolds Zucco Briscoe Behrakis

Leave of Absence: Nil.

NON-MEMBERS

Deputy Lord Mayor Burnet Sexton Thomas Harvey Dutta Ewin Sherlock

1. CO-OPTION OF A COMMITTEE MEMBER IN THE EVENT OF A VACANCY

2. CONFIRMATION OF MINUTES

The minutes of the Open Portion of the City Infrastructure Committee meeting held on <u>Wednesday, 23 October 2019</u>, are submitted for confirming as an accurate record.

3. CONSIDERATION OF SUPPLEMENTARY ITEMS

Ref: Part 2, Regulation 8(6) of the Local Government (Meeting Procedures) Regulations 2015.

Recommendation

That the Committee resolve to deal with any supplementary items not appearing on the agenda, as reported by the General Manager.

4. INDICATIONS OF PECUNIARY AND CONFLICTS OF INTEREST

Ref: Part 2, Regulation 8(7) of the Local Government (Meeting Procedures) Regulations 2015.

Members of the Committee are requested to indicate where they may have any pecuniary or conflict of interest in respect to any matter appearing on the agenda, or any supplementary item to the agenda, which the Committee has resolved to deal with.

5. TRANSFER OF AGENDA ITEMS

Regulation 15 of the Local Government (Meeting Procedures) Regulations 2015.

A Committee may close a part of a meeting to the public where a matter to be discussed falls within 15(2) of the above regulations.

In the event that the Committee transfer an item to the closed portion, the reasons for doing so should be stated.

Are there any items which should be transferred from this agenda to the closed portion of the agenda, or from the closed to the open portion of the agenda?

6. **REPORTS**

6.1 Proposed Implementation of Safety Treatment on Shared Footpath on Davey Street Between Hunter Street and Evans Street File Ref: F19/144836

Report of the Acting Manager Traffic Engineering and the Director City Planning of 15 November 2019 and attachments.

Delegation: Council

REPORT TITLE: PROPOSED IMPLEMENTATION OF SAFETY TREATMENT ON SHARED FOOTPATH ON DAVEY STREET BETWEEN HUNTER STREET AND EVANS STREET

REPORT PROVIDED BY: Acting Manager Traffic Engineering Director City Planning

1. Report Purpose and Community Benefit

- 1.1. The purpose of this report is to advise the Committee of a proposal to implement low cost effective treatments aimed at addressing the conflict between pedestrians and cyclists at Davey Street between Hunter Street and Evans Street, Hobart.
- 1.2. The community benefit of the proposed treatments are that it would allow a treatment that has the potential to resolve a long standing vulnerable road user safety issue involving conflict between pedestrians and cyclists.

2. Report Summary

- 2.1. Over many years, concerns have been raised with the City of Hobart about the safety of pedestrians and cyclists on the footpath along the frontage of the 'Zero Davey' complex on Davey Street between Evans Street and Hunter Street, Hobart.
- 2.2. There have been a number of incidents of collisions between cyclists and pedestrians, with serious and minor injuries having occurred to both pedestrians and to cyclists.
- 2.3. A consultant CDM Research has provided independent advice on the treatments and options that could resolve the conflict issue. These include low cost effective measures such as transverse line marking across the footpath and bicycle activated lights. Other options that were recommended were:
 - The widening of the footpath outside Zero Davey Hotel and relocation of bus drop off zone at the head of Hunter Street.
 - The removal of the taxi zone on the northern side of Davey Street to allow for a dedicated on-road bicycle lane to be installed.

Both options above would require approval from the Department of State Growth as the works involves modification of the road carriageway on Davey Street. In addition, there is a significant cost associated with the implementation of these options and the design will need to be carefully considered.

- 2.4. A step by step approach that aims to resolve the pedestrian and cyclist conflict is proposed. The first stage focusses on increasing awareness of both cyclist and pedestrians of the likely presence of other riders and pedestrians by providing visual and vibratory signals to both users through:
 - The inclusion of coloured pavement markings at high risk conflict areas.
 - The removal of existing centreline of shared path at the conflict areas (where coloured pavement will be installed).
 - The installation of tactile ground surface indicators (TGSI's) at the approach to the main entrance to the Zero Davey hotel, the café and outside the bus stop.
 - The installation of low profile rumble strips or "Vibra" rubber strips.
 - The installation of new "Shared Path" and "Bicyclist Slow" warning signage at Evans Street and Hunter Street.
- 2.5. The second stage will be implemented initially as a trial, <u>only</u> if the conflict issues between pedestrian and cyclists on Davey Street between Hunter Street and Evans Street are not resolved. The second stage is an innovative attempt to improve the overall safety and comfort of this section of footpath for pedestrians and cyclists by the installation of a series of barriers spaced 3m apart (creating a chicane type arrangement). This treatment will enable:
 - Cyclists to slow down to pass between the barriers;
 - Pedestrians with prams, strollers or wheelchairs are able to still move through the treatment;
 - Cyclists riding recumbent bicycles, or bicycles with trailers will be able to still manoeuvre through the treatment.
- 2.6. It is hoped that this treatment, if required to be adopted, will result in cyclists routinely moving through this area at lower speeds than they do currently, and that by reducing the overall speed of cyclists the incidences of conflict between cyclists and pedestrians will be reduced in both number and severity.
- 2.7. It is proposed that the stage 2 treatment would be installed as a trial for three months, and that the treatment would be observed and the behaviour of footpath users recorded. A decision will be made based on the results if this treatment is effective in reducing speeds of the cyclist.

3. Recommendation

That the two stage approach for resolving conflict between pedestrians and cyclists on the footpath along the frontage of the 'Zero Davey' complex on Davey Street between Evans Street and Hunter Street, Hobart as outlined in section 5 of this report be endorsed.

4. Background

- 4.1. The Hobart Intercity Cycleway is a generally off-street shared pedestrian and cyclist path the runs along the railway corridor between the Hobart Waterfront and Claremont.
- 4.2. In the vicinity of the Hobart Waterfront, the Intercity Cycleway separates from the railway corridor in the vicinity of the Hobart Cenotaph, and utilises the footpath on the southern side of the Tasman Highway Davey Street corridor to access the Hobart Waterfront.
- 4.3. Currently, the formal designation of the footpath as a shared cycling / pedestrian path applies north of Hunter Street.
- 4.4. Over many years, concerns have been raised with the City of Hobart about the safety of pedestrians and cyclists on the footpath along the frontage of the 'Zero Davey' complex on Davey Street between Evans Street and Hunter Street.
- 4.5. There have been a number of incidents of collisions between cyclists and pedestrians, with injuries having occurred to both pedestrians and to cyclists.
- 4.6. The primary concern is the interaction between pedestrians entering / exiting either a vehicle (taxi's, passenger cars and buses) parked in the 5 minute parking zone along the frontage of the Zero Davey Hotel premises itself, and cyclists riding along the shared footpath in front of the subject site. This interaction, while likely to only result in a collision with injuries every 3 to 5 years, is uncomfortable and a continued source of public complaint
- 4.7. Historically, City of Hobart has made a number of changes to line marking signage, and street furniture in this area in response to past collisions to mitigate the risks associated with this issue. These include alterations to the centre line separating direction of flow and the installation of signage on footpath.
- 4.8. This conflict issue has been reviewed independently by CDM Research in 2012 and 2017.
 - 4.8.1. In the report dated 2012, CDM Research recommended the following improvements that could potentially improve the situation.

- The addition of extra transverse line marking across the footpath and bicycle activated lights. The intent of these treatments is to make cyclists and pedestrians more aware of the possible presence of each other;
- The removal of the parking lane from immediately in front of the Zero Davey Hotel, and widening of the footpath to allow cyclists to be moved further from the doorways, and an installation of a bus drop-off zone indented into the head of Hunter Street, with a short 2 vehicle parking zone left in front of the Zero Davey Café;
- The removal of the Taxi Zone on the northern side of Davey Street, to allow a dedicated on-road bicycle lane to be installed by moving the existing traffic lanes northwards into the space currently occupied by the Taxi Zone.
- 4.8.2. In the most recent report prepared by Cameron Munro, it was suggested that transverse yellow markings (using a thicker application) be installed at the point where pedestrians cross the footpath. The yellow lines are expected to present both a visual and physical signal. Another suggestion was to provide cyclist actuated warning signs or pavement lighting. This report also noted that there is no evidence that these treatments would be effective in the reduction of speeds of cyclists or improve the safety for pedestrians.
- 4.8.3. In this report, the use of chicanes was mentioned as an "aggressive infrastructure treatment" that should be considered only as a last resort. In the later report, CDM advised that the use of chicanes would impede the movement of the majority of bicycle riders and pedestrians.
- 4.8.4. Chicanes are considered a low cost effective treatment that will directly resolve the underlying issue, which is the speed in which cyclists ride on the footpath. Although speeds may not be excessively high in the area, it is considered that the speeds in which cyclist ride in this location do result in injury crashes.
- 4.8.5. The chicane treatment would, like the original installation of other traffic calming devices such as road humps and 'slow' points, would be a cause of inconvenience to the footpath users that the devices would force to slow to a more appropriate speed.

5. **Proposal and Implementation**

5.1. It is proposed that a staged approach be adopted where the first step to mitigating the issue will be tested through additional visual cues and vibratory signals. The installation of the second stage treatment will commence only if the safety issues with the interaction of cyclist and pedestrians continue following the implementation of stage 1 treatment.

5.2. Stage 1

- 5.2.1. The installation of coloured pavement markings located in the path of crossing pedestrians outside Zero Davey Hotel and café on the corner of Davey Street and Evans Street to highlight the conflict areas. An example of the coloured pavement are provided at the access to the Mures car park further south on Davey Street.
- 5.2.2. The installation of "Shared Path" and "Bicyclist Slow" advisory warning signage at the Hunter Street and Evans Street approach.
- 5.2.3. Removal of white centre line in the locations where transverse yellow line markings are located to avoid confusion for cyclists and make them aware of crossing area.
- 5.2.4. Provide low profile rumble strips prior to the entrance to Zero Davey across the full pathway to reinforce to cyclists of the hazard. Alternatively a product that may produce similar outcomes to rumble strips is "Vibra Strip" which is a rubber corrugated strip that gives a vibratory warning signal to the cyclist.
- 5.2.5. Install tactile markers at hotel and café entrance points where people step onto the shared path.







5.3. This treatment predominately aims to increase the awareness of both cyclists and pedestrians of the likely presence of other riders and pedestrians through the high risk zones.

5.4. This treatment (with the use of coloured pavement, rumble strips/vibra strip and TGSI's) is intended to send a message to cyclists that they are entering the Hobart waterfront, a high pedestrian usage zone and this area differs from the activity on the shared path north of Evans Street.

5.5. Stage 2

Stage 2 is intended to be installed (initially as a trial) if there are still issues (such as reported near misses) with cyclist and pedestrian conflict at the "Zero Davey" complex following the installation of the first stage. This treatment aims to moderate cyclist speeds by installing a series of three barriers spaced evenly apart so that (See attached plan and memo):

- Cyclists will need to slow down to pass between them;
- Pedestrians with prams, strollers or wheelchairs are able to still move through the treatment;
- Cyclists riding recumbent bicycles, or bicycles with trailers will be able to still manoeuvre through the treatment.
- 5.6. It is hoped that this treatment outlined as stage 2 will result in cyclists routinely moving through this area at lower speeds than they do currently, and that by reducing the overall speed of cyclists the incidences of conflict between cyclists and pedestrians will be reduced in both number and severity.
- 5.7. This is a similar approach to that often used on roads, where by installing treatments that reliably reduce the speed of motor vehicles (such as road humps, or roundabouts, or chicanes) we can improve the overall safety of a road for all road users including cyclists and pedestrians.
- 5.8. If the treatment proves successful in reducing vehicle speeds and improving pedestrian safety, this change would likely come at a reduced amenity for cyclists on the route.
- 5.9. It is proposed that the trial of this treatment would be installed for a period of three months and that the treatment would be observed and the behaviour of footpath users recorded. A decision would then be made about trying alternative treatments, or looking to implement the slow point as a permanent treatment.
- 5.10. Any issues observed relating to the presence of chicanes during the trial will result in the removal of this treatment.

6. Strategic Planning and Policy Considerations

6.1. Matters of road safety are supported by Strategic Objective 2.1 of the Capital City Strategic Plan 2015-2025 as follows:

"2.1 A fully accessible and connected city environment.

2.1.3 Identify and Implement infrastructure improvements to enhance road safety."

7. Financial Implications

- 7.1. Funding Source and Impact on Current Year Operating Result
 - 7.1.1. The cost coloured pavement markings and rumble strips are expected to be minimal.
 - 7.1.2. The purchase of materials for the "chicane" trial will cost in the order of \$2,100. The installation will be undertaken by the City of Hobart.
 - 7.1.3. Funds for the stage 1 and stage 2 works are available in the current financial year operating budget.

8. Legal, Risk and Legislative Considerations

- 8.1. The Transport Commission, pursuant to Section 59 of the Traffic Act 1925 has issued a direction to Tasmanian Highway Authorities (Transport Commission Direction – 2014/2) that requires those authorities to only install traffic signs and linemarking in compliance with the Australian Standard Manual of Uniform Traffic Control Devices, consider the AustRoads national guidelines, and to comply with Department of State Growth specifications and standard drawings.
- 8.2. The City of Hobart is currently responsible for managing the footpaths on the Davey Street road reserve, with the Department of State Growth being responsible for the road areas between the kerblines.
- 8.3. The interactions between cyclists and pedestrians on the Davey Street footpath between Evans Street and Hunter Street has been raised by members of the community, and the City of Hobart has received advice that the existing situation needs to be addressed.

9. Community and Stakeholder Engagement

- 9.1. The stage 1 works has been discussed with a member of Cycling South and are in support of the treatments.
- 9.2. The trial of the chicanes is supported by the frontage property.
- 9.3. The proposal of the "chicane" trial was discussed at the Hobart Active Travel Committee meeting in October 2019. The HATC had significant concerns about the proposal of the slow point put forward. The following issues were raised.
 - Concern that there will be difficulties for people with visual impairments to negotiate the chicanes;
 - Adequacy of lighting in the location proposed for the slow point;
 - Suggestion that an alternative treatment of providing planter boxes on either side of the pathway and a coloured concrete surface at the entrance to the hotel to indicate a shared space, be considered;

- Concerns that there are three barriers (creating the slow point) and wondering if this could be reduced to two in a similar way to how the treatment is provided at the Intercity cycleway;
- Suggesting that given there are expected to be only 1 injury crash per 3 to 5 years at this location, whether installing a treatment is necessary, and whether it risks causing more injuries than it could resolve.

The following comments are made in relation to these matters:

- The slow point will be an obstacle for people with visual impairments. They like other users will need to manoeuvre through and around the treatment;
- The point where the treatment would be installed is immediately underneath two pedestrian streetlights, and will be appropriately and well lit.
- Alternative treatments including surface treatments, signage, and line marking are certainly options. They are however less likely to be effective in reducing speed, and can be difficult to install and remove in a clean way that doesn't mark and discolour the surface. There would certainly be potential to try an alternative treatment of this type;
- The slow point treatment is proposed with three barriers (creating the slow point) rather than the more normal two as provided at the Intercity cycleway because when a mock treatment was installed and inspected on the Zero Davey Street footpath with two barriers, it was apparent that this was ineffective in reducing speeds. By adding a third barrier in the mock treatment at the site, it was determined that speeds were reduced reliably, while still allowing sufficient space for cyclists to manoeuvre;
- Not treating the site is a valid option. If treatments that are effective and can be implemented without causing unreasonable negative impacts on the community are not able to be found, then this is the most likely option. The current proposal is essentially to test a potential treatment that may improve the situation. This may result in the treatment being determined to not be a viable treatment option.

10. Delegation

10.1. The Manager Traffic Engineering and all positions to which that position reports have delegation to approve changes to signage and line marking on those public streets for which the City of Hobart is the Highway Authority (except for speed limits, traffic signals and parking controls on State roads with a speed limit over 70 km/h).

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Shivani Jordan ACTING MANAGER TRAFFIC ENGINEERING

Neil Noye DIRECTOR CITY PLANNING

Date:	15 November 2019
File Reference:	F19/144836

Attachment A:Memo - Zero Davey Street - Pedestrian and Cyclist Conflict -
June 2019 - 28/10/2019 ↓Attachment B:Concept Plan - Potential Treatment - Footpath - Davey Street -
27/12/2018 ↓



R0437 og:OCG (document1)

20 June, 2019

MEMORANDUM: MANAGER TRAFFIC ENGINEERING

POTENTIAL TREATMENTS - FOOTPATH - DAVEY STREET (EVANS ST TO HUNTER ST)

In early 2018, I was asked to look into the ongoing concerns about the interactions between cyclists and pedestrians on the shared footpath on the southern side of Davey Street between Evans Street and Hunter Street.

In December 2018, I presented my recommendations to the Director City Infrastructure via memo.

The view of the Director City Infrastructure was that the matter be considered by the Bicycle Advisory Committee and City Infrastructure Committee.

Due to the 2018 City of Hobart elections, the first available meeting of the Bicycle Advisory Committee was in June 2019.

This memo is essentially the December 2018 work, updated.

I have inspected the site, discussed the matter with the Manager of the Zero Davey Hotel (who is the main person raising concerns about the existing situation), and reviewed the two reports reviews prepared by the consultant Cameron Munro of CDM Research regarding the situation:

- Hobart Intercity Cycleway: Evans Street to Elizabeth Street 19 December 2012;
- Safety issues on Intercity Cycleway near Zero Davey Street Hotel 31 October 2017.

It should be noted that I do have previous history dealing with this issue, having looked at the development application for the installation of the café, and having received the early request complaints from the Manager of the Zero Davey Hotel regarding this issue before its consideration was taken over by the Transport Engineer in more recent years. Therefore I am not looking at this with what would be seen as 'fresh' eyes.

The primary concern is the interaction between pedestrians entering / exiting either vehicles (taxi's, passenger cars and buses) parked in the 5minP parking zone along the frontage of the Zero Davey Hotel or the Zero Davey Hotel premises itself, and cyclists riding along the shared footpath in front of the subject site.

Essentially there are both relatively high numbers of pedestrians moving across the footpath (entering and exiting buses / taxis / passenger vehicles, or entering exiting MISSION ~ TO ENSURE GOOD GOVERNANCE OF OUR CAPITAL CITY.

Created: 17/12/2012 Updated: 28/12/2018

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doorways to the Zero Davey Café, Zero Davey Hotel and adjacent real estate agent) and high numbers of cyclists riding along the footpath.

This situation is well described in the two CDM Research report / technical notes described above.

Essentially, the City of Hobart has made a number of changes to linemarking, signage, and street furniture in this area to try to mitigate the risks associated with this issue.

Realistically, further similar changes will do little to change the existing situation, which is in my view one where:

- Reasonable cyclists travelling along the shared footpath, and reasonable pedestrians entering and exiting the parking area and adjacent doorways are continually at risk of a collision and injury.
- Occasional cyclists will travel at inappropriately high speeds or occasional pedestrians will behave in an unexpected and unpredictable manner and there are risks of serious injury.
- This interaction, while likely to only result in a collision with injuries every 3 to 5 years, is uncomfortable and a continued source of public complaint.

In my opinion the situation is at a point where it is necessary to either:

- Accept the current situation, which is that this busy section of shared footpath will continue to be a source of complaint, with occasional injuries (likely to be in the order of one every 3 to 5 years).
- Make changes that will actually treat the issue.

In terms of potentially accepting the current situation, while callous, there are many locations of our road networks where injury crashes occur frequently, but these cannot be resolved due to the impact any treatment would have on the public.

In terms of making changes that could potentially improve the situation, the following are discussed / described in the CDM Research Report / Notes:

- The addition of extra transverse linemarking across the footpath and bicycle activated lights. The intent of these treatments is to make cyclists and pedestrians more aware of the possible presence of each other;
- The removal of the parking lane from immediately in front of the Zero Davey Hotel, and widening of the footpath to allow cyclists to be moved further from the doorways, and to installation of a bus drop-off zone indented into the head of Hunter Street, with a short 2 vehicle parking zone left in front of the Zero Davey Café;
- The removal of the Taxi Zone on the northern side of Davey Street, to allow a dedicated on-road bicycle lane to be installed by moving the existing traffic lanes northwards into the space currently occupied by the Taxi Zone.

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In the 2012 report, the use of chicanes was mentioned as an 'aggressive infrastructure treatment' that 'should be considered only as a last resort'. In the 2017 note, the use of chicanes was specifically not endorsed, with CDM noting that 'We would not endorse the use of physical treatments such as chicanes given that they present a hazard to riders and would impede the movement of the majority of bicycle riders and pedestrians. Such treatments are, in our view, counterproductive insofar as they reduce or eliminate one risk (i.e. riders travelling too fast) by creating another (i.e. a physical obstacle on the path). Moreover, chicanes located at Evans Street would not seem to be adequate given our previous observation that rider speeds at the Zero Davey Hotel entry appear to be unrelated to whether a rider stops at Evans Street'.

Overall, in my view there are five main options:

Option 1 - Make No Further Changes

Essentially this option is one of accepting that the current situation, with its likelihood of ongoing conflict and injury every 3 to 5 years is not realistically avoidable given the conflicting needs of the different stakeholders.

Option 2 - Add Additional Warning Signage / Make Line marking Changes

This option is basically to attempt to increase the awareness of both cyclists and pedestrians of the likely presence of other riders and pedestrians through this high risk zone.

Option 3 - Utilise Traffic Calming to Reduce Cyclist Speed

The current situation is one where cyclists using the footpath are riding at speeds at which they are unable to avoid conflict with pedestrians. While some cyclists may be riding recklessly, it is also apparent that many reasonable cyclists are riding at speeds that are not appropriate for the current situation.

This is primarily an issue in the vicinity of the door to the 'Zero Davey Hotel', where pedestrians move onto and from the footpath, where the majority of buses and taxis unload passengers and where the shared path narrows.

On roads where we have situations where reasonable drivers are travelling at speeds that are too high for the conditions, and putting at risk vulnerable road users, the response has been to install traffic calming to reduce speeds. Treatments such as road humps, or lane narrowing's, or slow points that force drivers to have to give way to vehicles travelling in the opposite direction have all been effective treatments to reduce the overall operating speed and improve safety.

Historically, these treatments were opposed by many drivers, who felt that it was unreasonable that they be forced to slow down for road humps or other traffic calming, or felt that negotiating road humps or slow points added to their risk of crashes, by distracting them from the driving task.

In this case, while this is one of the busiest pedestrian and cyclist corridors in Hobart, it is unlikely that implementing a slow point would add significant congestion or

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delays to the journey of pedestrians or cyclists using the corridor. There would of course be some increased risk to cyclists that they may strike or clip the treatment resulting in a crash or injury.

Overall, it is my view that the installation of a double 'chicane' treatment, with minimum three metres gaps between each of the three 'chicane' gates would be very effective in reducing the speed of cyclists in the vicinity of the main conflict point.

It would however be an unusual treatment, and like the original installation of other traffic calming devices such as road humps and 'slow' points, would be a cause of complaint from users that the devices would force to slow to a more appropriate speed.

A concept sketch, showing the potential location of a midblock slow point is shown in the Figure below:



This treatment, which could be simply and cheaply trialled, would allow cyclists with trailers, or riding tandem or recumbant bicycles to negotiate the treatment, whicle also slowing cyclists riding through the high risk area to more appropriate speed.

This type of treatment is described in the Austroads Guide to Road Design – Part 6a – Pedestrian and Cyclists Paths

The photograph below shows a mock up of a two gate slow point. The installation of a potential three gate slow point would need to be undertaken using a high quality material that is visible to users, and free from sharp edges to reduce the severity of and collisions. It would also require the addition of advisory signage (likely in the form of pavement messages on each approach) to ensure cyclists are aware of the need to slow down to negotiate the treatment.

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Option 4 - Eliminate Parking, or Eliminate Pedestrian Access to Doorways

Banning parking from along the frontage of Zero Davey Street Hotel and Zero Davey Café would reduce the number of pedestrians entering and exiting vehicles at this location.

This parking is however heavily used by hotel and café guests, and the Airporter Bus utilises this area as one of its drop-off and pick-up points in this area.

Forcing the closure of the entrance doors into the Zero Davey Hotel (by closing the gap in the fence, and extending the fence further towards Hunter Street) would also mitigate the risk of a collision between a pedestrian and cyclist.

Both of these potential treatments would have a significant impact on the operation of these businesses, and it is unrealistic to think that either would be supported.

For better or worse, this is an active and vibrant street frontage, and part of its function is to provide pedestrian access.

Option 5 – Reconstruct / Widen the Davey Street footpath into the Parking Lane adjacent to the Zero Davey Hotel.

The figure below is extracted from the CDM 2017 Note.

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It shows a concept to realign the footpath and widen it into the existing parking lane. This would stop the loading and unloading from vehicles at the main conflict point, and would allow cyclists to ride further from the doorways of the buildings.

This treatment would be a significant cost, and would also be difficult to plan and implement at this time given the Davey Street corridor will shortly be taken over by the Department of State Growth.

RECOMMENDATION

My recommendation is that a concept plan for the installation of traffic calming for a three gate slow point be developed, and presented to the Bicycle Committee for comment.

I recommend that a proposal for a three month trial of a three gate slow point be presented to the City Infrastructure Committee.

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(Owen Gervasoni) SENIOR ENGINEER - ROADS & TRAFFIC

Copies for Circulation: Manager Traffic Engineering

Attachments:CDM Research - Hobart Intercity Cycleway: Evans Street
to Elizabeth Street – 19 December 2012;
CDM Research - Safety issues on Intercity Cycleway
near Zero Davey Street Hotel – 31 October 2017

Prepared for Hobart City Council





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Document history and status

Revision	Date issued	Author	Revision type
1	7/12/2012	C. Munro	Draft
2	19/12/2012	C. Munro	Final

Distribution of Copies

Revision	Media	Issued to
1	PDF	O. Gervasoni
2	PDF	O. Gervasoni

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File name:	0020 Hobart Intercity Cycleway - Sullivans Cove (Draft-1).docx
Project manager:	C. Munro
Name of organisation:	Hobart City Council
Name of project:	Hobart Intercity Cycleway: Evans Street to Elizabeth Street
Project number:	0020

0020 HOBART INTERCITY CYCLEWAY - SULLIVANS COVE (FINAL-1).DOCX

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Executive Summary

This report provides a review of the Intercity Cycleway shared path between Evans Street and Elizabeth Street in Hobart. This review follows a serious injury crash involving a group of pedestrians and a bicycle rider, and more generally concerns from landholders and path users of the potential for conflict between the user groups along this busy section of path. In addition, it is recognised that this section of the Intercity Cycleway is growing in popularity, and is likely to continue to do so. As such, it is timely to consider the safety and function of this section of the cycleway.

The project involved a site visit and discussion with council officers, as well as video observations of motorist, pedestrian and cyclist behaviour at two points in the study area (outside Zero Davey Hotel and at the Mures car park entrance). These observations provided additional objective evidence on the existing behaviours of path users.

There is little objective evidence on what treatments are likely to be most effective at improving safety and amenity in mixed pedestrian and cyclist areas, in part because of a lack of objective data and in part because much concern is based on feelings of discomfort and sense of safety. However, this is not to dismiss such emotive feelings; they clearly influence the sense of comfort and enjoyment riders and pedestrians have in using shared spaces and so are important. Objectively, there is a need to balance the mobility needs of path users with the amenity and safe sharing of that space. Equally, this balance should seek to balance the needs of the different user groups in a way that seeks to mitigate unsafe behaviours (such as riders travelling too fast) while not unduly hindering the movement of all other path users.

These are complex problems of human behaviour and engineering design, for which there is no consensus and very little objective data. As such, our recommendations are classified into those we would consider first (i.e. could be implemented in the short term and have minimal negative repercussions) through to more aggressive interventions which may have foreseeable (or unforeseeable) consequences (Table EX.1).

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Table EX.1: Sequence of proposed treatments

Consider first	
Enhanced pavement awareness signs ("earthwrap")	
Coloured tactile pavement surfaces	
"Share the path" behaviour change campaign	
Additional railing on pedestrian fence outside Zero Davey Hotel	
Consider next	
Speed bumps	
Sinusoidal bumps	
On-road bicycle lane on Davey Street	
Consider last	
Chicanes	
On-street parking removal near Zero Davey Hotel	

Whatever treatments are introduced an evaluation of the effectiveness of the treatments would be advisable. This information would be useful both for council to determine what, if any, additional measures would be required, whether there are any perverse (perhaps unforeseen) consequences and to inform wider knowledge of what works and what does not.

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Agenda (Open Portion) City Infrastructure Committee Meeting - 20/11/2019



Hobart Intercity Cycleway: Evans Street to Elizabeth Street



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1 Introduction

CDM Research was commissioned by Hobart City Council (HCC) to provide an independent review of the Intercity Cycleway running between Evans Street and Elizabeth Street in Hobart (Figure 1.1). This review has been motivated by the growing importance and popularity of this section of the ICC in the walking and cycling network of Hobart, and by safety concerns around the interaction of pedestrians, cyclists and motorists along the confined corridor. These safety concerns were recently exacerbated by a collision between a cyclist and pedestrian on the cycleway which resulted in serious injuries being incurred by the rider.

■ Figure 1.1: Study area (Intercity Cycleway shown in red, study area in blue box – image from Hobart City Council)



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1.1 Background

The Intercity Cycleway provides a high quality off-road shared path between Claremont and Sullivans Cove (Hobart CBD), over a distance of around 16 km. The cycleway serves as the main off-road path in Hobart, providing both for local walking and cycling trips for recreation as well as longer sport training and commuter cycling trips.

There are no readily available pedestrian or cyclist counts on the ICC in the study area. However, an automatic bicycle counter located between the Navy Club and Tasman Bridge provides an indication of cycling volumes and speed since 2010. During the most recently available late summer period from 29 February to 23 April 2012 the typical weekday cycling volumes at this site was around 850 cyclists per weekday, and 700 on weekend days. During the weekday AM peak hour (8 - 9 am) the number of riders was around 120, and during the PM peak hour (5 - 6 pm) the number of riders on an average weekday was around 135. While a proportion of these riders would have destinations that mean they would not travel through the study area, we would reasonably expect a significant proportion would do so (and that the profile of demand would be similar). In a comparable March to April period of 2010 the 24 hour weekday cyclist volumes were around 687 on weekdays and 670 on weekends, suggesting growth of around 24% on weekdays and 21% on weekends over the two year interval. This growth, and the competing uses for the constrained space around Sullivans Cove, presents challenges for the safe and efficient management of this space.

The cycleway is likely to become increasingly popular given recent growth trends and proposed extensions to the north, through the Hobart CBD along Morrison Street and longer term around Battery Point and along Sandy Bay Road.

The Sullivans Cove precinct is a significant destination for pedestrians, serving as a destination for accommodation and restaurants as well as for sightseeing and walking for transport. As such, it serves both as a *link* for pedestrians and cyclists to make transport and recreation trips *through* the area and as a *place* where the Sullivans Cove area is a destination in itself. These competing demands for the space as a *link* and *place* mean that different users will have different expectations of their travel time and speed, and their travel paths will have varying predictability (those passing through may be expected to take a direct route, while those visiting may wander or ride an unpredictable path). These competing uses are common to inner city precincts in many Australian cities (Melbourne and Brisbane's Southbank and Sydney's Pyrmont Bridge being typical examples).

1.1.1 Recent developments

The study area has been the subject of localised development in recent years. Two of the most relevant developments have been:

- The Mawson Place redevelopment (corner of Argyle and Davey Streets) during 2011 resulted in additional wayfinding signage being installed near the cycleway.
- A café was opened at the Zero Davey Hotel near Evans Street in early 2012, which included a servery hatch for takeaway service facing onto the cycleway. This café

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improves the street level activation of this section of the waterfront, but also presents additional potential conflicts at the servery hatch and the café entrance. To mitigate the risks of conflict the cycleway line marking was adjusted outward from the property boundary to provide an additional buffer to the café.

1.1.2 Crash history

An analysis of the crash statistics recorded by police from 1 January 2007 to 7 November 2012 identified four pedestrian crashes (three at Elizabeth and Morrison Streets, one at Davey and Argyle Street) and one cyclist crash (at Evans Street) in the study area. All involved minor injuries to the pedestrian or cyclist. However, this dataset is likely to significantly underrepresent crashes involving pedestrians and cyclists. Underreporting of pedestrian and cyclist injuries in police crash statistics is high, in part because many crashes are of minor severity (and so are unlikely to have police attendance, or be reported to police) and because a significant proportion occur away from roads¹. By contrast, hospital admissions and emergency department presentations provide a more complete picture of serious injury crashes, but do not tend to recall the exact location of the crash (so are of limited usefulness to the present study).

The frequency of crashes on the cycleway itself is impossible to know with certainty. However, there is strong anecdotal evidence from businesses located alongside the cycleway of regular "near misses" (although these do not necessarily imply regular crashes) and reports of at least three crashes involving cyclists, two of which resulted in collisions with objects and a third of a cyclist riding into the water. One of the collisions into an object occurred in September 2012 when a rider travelling from Evans Street down towards Hunter Street collided with a pedestrian in front of the Zero Davey Hotel. This crash resulted in serious injuries to the cyclist, who struck the fence outside the Hotel and minor (non-hospitalised) injuries to the pedestrian. This crash, and the implications, is discussed further in Section 2.2.3.

Other incidents identified anecdotally are of a cyclist travelling towards Evans Street alongside Zero Davey Hotel striking a light pole, and of a cyclist and pedestrian near miss at the signalised crossing at Campbell Street.

In summary, there is strong concern from those who work along the cycleway that there is a high risk of injury arising from conflict between cyclists and pedestrians. It is argued, not unreasonably, that cyclist speed is a contributory factor to these risks. This is supported by the serious injury crash between a cyclist and pedestrian in September 2012, for which there is sufficient evidence to suggest the rider was travelling at a speed unsafe for the conditions. However, this crash and the reported number of other crashes and near misses, need be borne in context that in the period since January 2007 there have been four crashes between a cyclist and pedestrians on the adjacent sections of roadway and another crash between a cyclist and motorist (at Evans Street). Of these four pedestrian

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¹ Police-recorded traffic crash statistics apply only on roads and road-related areas. In this study the Intercity Cycleway would be classified as a road related area, and so any police reported crashes would be expected to be included within the dataset.



crashes in three instances a motorist error contributed to the crash as they entered the designated pedestrian crossing during a designated pedestrian walk phase.

1.2 Methodology

The study consisted of the following stages:

- Discussions with stakeholders (Hobart City Council, DIER and CyclingSouth)
- · Site visit to identify potential physical issues,
- Video observations of cyclist, pedestrian and motorist interactions at two locations:
 - \circ ~ in the vicinity of the Zero Davey Hotel entrance and servery hatch, and
 - o at the car park entrance to the wharf at Mures.
- Cyclist speed measurements in the vicinity of the Zero Davey Hotel.

1.3 Outline

For the purpose of this study the study area was divided into four sections, each of which have different contexts and their own specific issues:

- Evans Street to Hunter Street,
- Hunter Street to Mures car park,
- Mures car park entry, and
- Mures car park to Elizabeth Street.

These sections are discussed in sequence through the remainder of this report.

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2 Evans Street to Hunter Street

2.1 Context

The section from Evans Street to Hunter Street descends gradually alongside the Zero Davey Hotel which abuts the cycleway on the eastern side. A dedicated signal phase is provided at Evans Street to separate left turning motorist movements from Davey Street from through cyclist and pedestrian movements (Figure 2.1(a)). The hotel has three locations where pedestrians are likely to congregate, enter or emerge (the servery hatch and café entrance – Figure 2.1(b) and the main hotel entrance – Figure 2.1(c)). Farther down the hill a shopfront provides one additional entry point for pedestrians, and there are a large number of retail destinations and an education establishment along Hunter Street (which is permanently closed at Davey Street) which attract pedestrian movements. No pedestrian crossing is provided over Davey Street at Hunter Street; instead, the nearest crossings are at Evans Street and Campbell Street.

Figure 2.1: Zero Davey Hotel

(a) View facing southwest across Evans Street



(c) Zero Davey Hotel entrance







(d) Fence detail outside Zero Davey Hotel



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- Figure 2.1: Zero Davey Hotel
- (e) Zero Davey Café entrance
- (f) Hunter Street kerb ramp



The hotel entrance has a metal fence running directly outside the front entrance to protect path users from the step to the entrance as well as to encourage pedestrians entering and leaving the hotel to walk along the direction of the path (hence increasing the likelihood they will see, and be seen, by cyclists) rather than directly across the path (Figure 2.1(c) and (d)).

Following the construction of the café in early 2012 the council moved the path centreline further away from the building line and installed an edge line outside the servery entrance to encourage path users to track farther away from the building (Figure 2.1(b)). Anecdotal evidence suggests this has helped to reduce the level of conflict between cyclists and pedestrians.

2.2 Issues and mitigations

Several issues were noted and observed in this section of the Intercity Cycleway:

- · high level of red light non-compliance by riders at Evans Street,
- potential and actual conflicts between pedestrian movements and cyclists within the constrained width in this section,
- comparatively high cyclist speeds (particularly when travelling downhill),
- street furniture and pathside hazards (street poles, trees, advertising hoarding, building edges and the pedestrian guardrail), and
- an uneven surface transitioning to Hunter Street (Figure 2.1(f)).

These issues are now discussed in more detail.

2.2.1 Red light non-compliance at Evans Street

A large proportion of riders, quite probably a significant majority, travelling in both directions across Evans Street (but particularly to the southwest) appear to travel across during a

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bicycle red light phase (but during a green phase for Davey Street traffic)². The signal phasing provides a shortened pedestrian/cyclist phase at the start of the Davey Street green phase in order to separate out left turning motorist movements from Davey Street conflicting with through pedestrian and cyclist movements³. The result is that for a significant proportion of time during which traffic on Davey Street have a green signal pedestrians and cyclists must wait. In practice, turning motorist volumes are sufficiently low and wait times long that cyclists tend to cross on the red signal (but with a green traffic signal on Davey Street). Cyclists travelling away from the city are facing traffic with good sightlines so can presumably do so with minimal risk of conflict with turning motorists (and in any case will generally be riding slower as this is the uphill direction). Those travelling in the city direction tend to slow and look over their right shoulder to check for turning motorists before proceeding across – suggesting a familiarity with traffic conditions at this location.

The police crash database reveals one crash occurring between a motorist and cyclist at this intersection between January 2007 and October 2012. This crash involved a citybound cyclist colliding with a left turning motorist (Davey Street into Evans Street). Minor injuries were incurred by the cyclist, and it was dark (6.20 am) at the time. The crash report noted that the cyclist had looked over their right shoulder before proceeding onto the roadway. While not stating the signal condition at the time, it would appear likely that the bicycle symbol was red.

The high level of non-compliance is a problem in a legal sense (these cyclists are disobeying a road rule) and will increase the risks of conflict (most likely between left turning motorists and citybound cyclists – as per the single recorded crash event). However, the volume and speed of left turning motorists, the absence of a significant crash history and the high level of awareness by cyclists (demonstrated by their distinct head turning to check for motorists) suggest such risks are relatively low. However, they are clearly non-zero (as demonstrated by the recorded crash event).

Mitigations

It is not altogether clear what measures could be taken to enforce the current legal requirement imposed by the signal phasing; cyclists are clearly conscious of the comparatively poor level of service provided, and the limited motorist turning volumes, and responding accordingly. Punitive measures such as enforcement (police ticketing riders) may be effective in the short term, but would require regular reinforcement to be effective. Physical measures such as bollards and barriers approaching Evans Street would most certainly reduce cyclist speed, and may reduce the rate of red light running (at least in the citybound direction) but would present a significant hindrance to riders as well as present a crash hazard in themselves.

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² It is possible, but was not observed, that pedestrians also regularly cross against the red signal given the comparatively long cycle times and low traffic volumes on Evans Street.

³ Left turning motorists from Davey into Evans Street are presented with a red turn signal at the start of the through green phase when a pedestrian or motorist has triggered the signal. This is then extinguished once the shortened pedestrian/cyclist phase ends.


Another option would be to provide more green signal time to pedestrian and cyclist movements in the signal phase. In other words, council may accept that this behaviour is occurring and seek to legitimise it in a manner consistent with council policy to encourage riding (but to do so safely). There are several signal design options available:

- Increase the duration of the pedestrian/cyclist phase within the Davey Street green phase by holding turning motorists for a longer period within each phase.
- 'Rest on red' for the left turning motorist movement unless a vehicle triggers the signal from the slip lane.
- Advanced signal detection loops on the cycleway, which would have the impact during appropriate times in the signal phase of triggering a green bicycle phase. This would also avoid the need for a cyclist to manually trigger the phase at the push button. This approach has been used on signalised path crossings elsewhere⁴.

In the medium term the redevelopment of the freight terminal presents an opportunity on one hand to improve the level of service, while on the other hand potentially exacerbates the problem if motorist turning demand increases after the redevelopment.

2.2.2 Conflict between pedestrians and cyclists

There is strong anecdotal evidence to suggest there are regular near misses between pedestrians and riders in this section of the cycleway, particularly when riders are travelling downhill. To provide further insight into this conflict video observations were taken on a typical weekday facing uphill from Hunter Street. These observations counted 343 cyclists and 393 pedestrians during the peak periods (8-9:30 AM, 4-7 PM), of which the majority (75%) were walking along the path. A small minority entered or left the hotel or entered the café (either the servery hatch or café entrance).

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⁴ An example is Winton Road (Ashburton, Melbourne) where a push button signal is provided for pedestrians and advanced detection is provided for riders (using inductive loops embedded in the path).





Figure 2.2: Path user count near Zero Davey Hotel (Monday 5 November: 8-9.30 AM, 4-7 PM)

During the observation period a total of 239 interactions were observed, where an 'interaction' was defined as an event where a pedestrian and a rider, or two riders, passed one another on the path. These interactions were given a subjective score from 1 to 5, where 1 refers to an interaction where no user had to adjust their movement through to 5 for a physical collision (Table 2.1). In the vast majority of these interactions a rider passed a pedestrian travelling in the same or opposite direction with a minimum of adjustment required (and, presumably, little to no stress on the part of either path user). This is shown in Figure 2.3 for the two groups of interactions (pedestrians and cyclist, two cyclists). In only one instance was a major adjustment required, as a pedestrian in a group quickly stepped to the left to make room for an oncoming rider, but the pedestrian behind was distracted and did not observe the rider until the last minute (Figure 2.4). This scenario is similar to that which resulted in serious injury (see next section), aside from the much slower speed of the rider.

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Table 2.1: Interaction severity scale

Score	Title	Description
1	No incident	Cyclist/pedestrian does not need to alter course or speed. Motorist yields and allows cyclist/pedestrian to pass without incident or apparent stress on behalf of either party.
2	Minor adjustment required	Cyclist may need to alter course slightly to allow for a comfortable passing distance, or gently brake or alter pedalling rhythm. The situation is unlikely to be perceived by the cyclist as unsafe, but may be perceived as inconvenient. Similarly, a motorist may need brake or alter course gently in order to avoid the cyclist. There is unlikely to be any sense of surprise or fright on behalf of either party.
3	Major adjustment required	Cyclist/pedestrian and/or motorist may need to significantly alter course or adjust speed to avoid a collision. There is a heightened level of stress from one or both parties, and possibly surprise or fright. However, this adjustment by either party readily avoids a collision.
4	Near collision	A rapid change of course or speed is required by the cyclist, pedestrian, motorist or both parties to avoid imminent collision. A significant degree of fear and fright is likely. The parties may gesture to one another.
5	Collision	There is physical contact between the parties.

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■ Figure 2.3: Interaction severity score by interaction modes

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- Pedestrian checking phone

 DESILGE
 TALESE

 Vicisit slows

 Pedestrian steps to right after seeing cyclist

 DESILGE
 TALESE
- Figure 2.4: Interaction requiring 'major adjustment' on the part of pedestrians and a rider

Mitigations

One approach to reducing the perceived level of conflict would be measures to reduce excessive cyclist speed, as discussed in the next section. Other options are limited, as pedestrians and riders will invariably need to interact in what is a very confined area and with conflicting⁵ pedestrian flows towards the on-street parking, café, hotel and other businesses. Two options are considered here, but both would have wider implications.

On-road bicycle lanes

Davey Street varies from 3 to 4 lanes in the study area, and at various points includes onstreet parking on one side or both sides of the street. The kerb-to-kerb widths vary from around 13.3 m to 16.7 m. Travel lane widths are at least 3.3 m and vary up to around 3.7 m. There is little evidence that lane widths this wide are safer than widths of around 3.0 m,

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⁵ By this we mean pedestrian demand which tends to operate at right angles to the predominant cyclist flow direction.



even on a road with the traffic volumes and composition of Davey Street⁶. It is likely there would be sufficient road width to install a kerbside bicycle lane of at least 1.2 m (if not 1.5 m) on Davey Street if the traffic lane width was marginally reduced. One option would be to provide the option to riders travelling downhill across Evans Street to continue along the cycleway (as now) or to divert to the right behind the kerb buildout and onto an on-road bicycle lane. This transition onto the road would be comparatively safe given the protection of the buildout and the presence of a buffer between the parking bay and traffic lane that already exists outside the Zero Davey Hotel.

The objective of this option would be to provide an alternative to faster, confident road riders heading southwest. We would not expect all riders to use the road; indeed, we would expect that the majority of riders would continue to use the path. However, by removing the fastest riders (and travelling in the faster, downhill direction) we would anticipate some safety and amenity benefit for path users. The notion of offering both an on- and off-road option along the same road is common in other locations (for example, St Kilda Road and Royal Parade in inner Melbourne) and is simply a recognition of the very different needs of different types of cyclists (and cycling trips).

On-street parking removal near the Zero Davey Hotel

The parking bays adjacent to the Zero Davey Hotel serve visitors and guests to the hotel, café and adjoining businesses. A tourist bus stop is also provided in a single marked bay of around 33 m in length (not including flaring at either end). Observations suggest the parking is rarely fully occupied, although it is clearly used for short term drop-offs and pick-ups at the hotel. The removal of this parking and reallocation of the kerb would provide sufficient width to run a dedicated cyclist-only path alongside the roadway through this section. This would significantly benefit riders and pedestrians, including those accessing the hotel. However, the infrastructure costs of realigning the kerb (and associated services) would be significant. Furthermore, there would be a need to provide alternative pickup/dropoff parking to service the hotel. This may be possible near the closure to Hunter Street, where there is more room to facilitate all user demands.

2.2.3 Cyclist speed

Speed is a major contributory factor to road crashes, and increases the likelihood of crashes resulting in serious injuries. This is particularly true for cyclists and pedestrians, both of whom are largely unprotected in a collision with a motor vehicle, one another or pathside objects. The kinetic energy obtained by a rider travelling at 25 to 30 km/h is substantial, and the difference in kinetic energy between a rider and pedestrian at this speed is similar to that between a car and cyclist in an on-road environment.

The evidence on the frequency and severity of crashes between pedestrians and cyclists is largely anecdotal (and often based on near misses rather than actual collisions). The limited objective data available is as follows:

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⁶ There are many arterial and collector roads with lane widths of 3 m or less which are generally deemed to operate satisfactorily. Many of these other roads have speed limits of 60 km/h or more, compared with 50 km/h on Davey Street.



- An analysis of Australian coronial records identified four pedestrian deaths attributable to collisions with cyclists between 2001 and 2006, of which one occurred in Tasmania (Grzebieta *et al* 2011). Over the same period 57 pedestrian fatalities were recorded which did not identify another vehicle at all, suggesting the injury burden from trips and falls (particularly while intoxicated) is more than an order of magnitude greater than the burden from collisions with cyclists.
- The objective risk of conflict on shared paths appears to be low, even on paths with high volumes of cyclists and pedestrians. A large-scale study in NSW observed 10 shared paths for a total of 672 hours (observing more than 50,000 pedestrian and 12,000 cyclist movements) and identified only five 'near misses' and no actual collisions (Taverner Research 2011).
- Similarly, an analysis of hospital admission records in Melbourne found the incidence of pedestrian injuries from collisions with cyclists on footpaths to be very low (Drummond 1989).

Irrespective, the prospect of severe injury to either a cyclist or pedestrian in a collision is real. Furthermore, the discomfort reported by pedestrians is of itself sufficient reason to seek to address excessive speeds. Anecdotal evidence would suggest that cyclist speed, particularly downhill from Evans Street towards Hunter Street, is a source of discomfort to pedestrians and has undoubtedly contributed to at least one serious injury crash. In this particular crash a rider travelling downhill at speed collided with one of a group of three pedestrians who were leaving a parked vehicle. The cyclist landed on top of the pedestrian fencing in front of the Zero Davey Hotel, incurring serious injuries to themselves and cuts and bruises to the pedestrian.

Crashes are invariably due to a combination of factors, each of which in themselves would not have caused a crash. Instead, a sequence of events all occurring at the same or similar time is required for a crash to occur. The 'swiss cheese' model is widely used in road safety (and other areas of system failure) to describe this sequence of events. For this particular incident this sequence is illustrated in Figure 2.5, and serves to illustrate that the crash was conditional on a number of events occurring all within a short time period:

- the rider travelling at an inappropriate speed, and
- the presence of pedestrians on the path, and
- a cyclist coming in another direction (which distracted the pedestrian who may otherwise have seen the oncoming cyclist), and
- insufficient path width to allow all users to pass one another with safe clearance, and
- the presence of a hazardous object (the fencing) which resulted in serious injury to the cyclist.

One or more of these conditions are present much of the time along the cycleway; it is only the rare <u>combination</u> of these events all occurring at once that led to this particular crash. If any one condition had not been met we could reasonably expect the crash not to have occurred, or in the case of the presence of the fencing, for the severity to be minor. This is reflected in the relatively infrequent occurrence of such events; all of the pre-conditions for

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this crash have been present for a number of years, but it is only recently that such a crash occurred. The implications for road safety are twofold:

- identify in advance those individual conditions, and combination of conditions, which contribute to a crash such that a crash can be avoided, and
- minimise the risk and severity of injury should a crash occur.

While avoiding all conditions which may contribute to a crash is a worthy ambition, it is unachievable in practice. There will always be a risk of injury, even if very small, when humans are moving. Furthermore, the combination of events leading to a crash often cannot be forecast in advance (although they may seem "obvious" with hindsight). It is reasonable to assume that there will always be some highly unlikely sequence of events which cannot be predicted which will result in a crash. The challenge then is to ensure the environment is sufficiently forgiving to minimise the risk of serious injury. This is a fundamental principle of the safe system approach to road safety that is adopted in Tasmanian and national road safety strategies (namely, that humans invariably make errors – and these errors should not result in fatal or serious injury). In this particular crash the presence of the unforgiving pedestrian fencing (Figure 2.1(d)) most likely contributed to more severe injury outcomes (for the cyclist) than may otherwise have occurred. In other words, had a hazardous pathside obstacle not been present the injury severity *may* have been minor.

Figure 2.5: Sequence of events leading to a cyclist-pedestrian crash on the Intercity Cycleway



Having noted the above, it is clear that speed was a primary contributory factor to this crash, and contributes strongly to perceptions of unsafe situations among pedestrians and cyclists. In order to provide some objective evidence of the speeds of cyclists during a typical AM peak period the speed profiles of 44 riders were obtained on Thursday 1

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November 2012. These profiles measured the cyclist speed from a point about 5 m downstream of the servery hatch to adjacent to the Zero Davey Hotel entrance, a distance of around 30 m (Figure 2.6). As would be expected given the topography, average rider speeds were somewhat lower near the servery hatch (average around 20 km/h) than at the hotel entrance (around 25 km/h)⁷. These speeds differed widely between riders and whether there were pedestrians present on the path, as would be expected. However, they did not seem to be influenced by whether the rider had stopped at Evans Street. In other words, by the time they have reached the servery hatch when heading towards the city most cyclists who had stopped at Evans Street had reached their desired speed. This has implications for the design of any physical calming measures.

Figure 2.6: Speed measurement location



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⁷ These speeds are similar to what is observed elsewhere on cycleways and shared paths. For example, the ICC permanent counter near the Derwent Bridge suggests an average cyclist speed of 24.7 km/h with a 96th percentile of 34.9 km/h.





Figure 2.7: Cyclist speed measurements in city bound direction near Zero Davey Hotel

Mitigations

Controlling cyclist speed is challenging for a number of reasons:

- The very high speeds which disproportionately present the greatest risk are often by riders who are difficult to effectively reach through marketing or education (this is similar to other areas of road safety, such as recidivist speeding, drunk drivers or young adult males).
- Physical measures which seek to control speed can present a hazard to cyclists and may, in some instances, lead to more crashes than they eliminate through reduced speeds.
- There is no legal basis on which speed limits on shared paths can be enforced in Australia.
- Physical measures may present an undue hindrance to the vast majority of path users (pedestrians and most cyclists) who are travelling at an appropriate speed. Hindering walking and cycling would be contrary to local and state government policy to encourage these modes.

However, there are a number of options that can be considered. These are listed in Table 2.2.

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Table 2.2: Speed control options

Option	Advantages	Disadvantages		
Physical interventions				
Signage	Low cost	Unlikely to be effective		
		Visual clutter		
		Additional obstacle (if installed on new poles)		
Pavement markings	Low cost	Unknown effectiveness		
	More in line of sight to riders than signs (riders tend to be looking downward)	Visual clutter		
Tactile coloured surfaces	Low cost	Unknown effectiveness ¹		
	Minimal to no hazard to path users			
	Does not affect path user amenity			
Vertical deflections	Potential to be effective at reducing	Potential hazard to riders		
	speed	Trip hazard to pedestrians		
		Cost		
Chicanes	Most effective at reducing rider speeds	May not have much effect on speed >20 m downstream of the chicane		
		Potential hazard		
		May distract riders from task of observing traffic		
		Deters riders and pedestrians, particularly riders with trailers		
Marketing & Communications	5			
Behaviour change campaign	Relatively low cost	Unknown effectiveness		
	May form part of a wider community engagement activity	May be least effective on those presenting the greatest risk		
	Highly visible (to those who participate) – 'feel good'factor			
Regulation, Legislative & Enfo	rcement			
Speed limits	Low cost	Legally unenforceable		
	Consistent with user understanding of the road environment	Difficulty of establishing a limit which is acceptable to pedestrians and cyclists		
1 .				

¹ There is some evidence to suggest transverse lines of varying widths has the effect of reducing motorist speeds on highways; see for example Manser and Hancock (2007) and Godley *et al.* (1999).

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Each of these measures is now discussed in more detail.

Risk distributions

In all areas of road safety the majority of road users behave responsibly the majority of the time. It is the few who significantly exceed the limits of safe behaviour who represent the greatest risk of contributing to a crash. This is illustrated in the figure to the right by the blue line showing a typical speed distribution, with a small minority travelling significantly faster than average. The risk of being involved in a



crash rapidly increases with speed, as shown by the red line. However, those at the tail of the distribution (i.e. the few that travel very fast) are few and far between, and so represent a significant but smaller part of the overall risk compared to those who travel over the safe speed but not excessively so. This principle applies, for example, to road safety campaigns such as *Wipe Off 5* that target marginal speeders rather than excessive speeders.

The difficulty in shared path safety is to identify what speed is "safe"; it may not be the current average speed (it may be lower, or higher). There is no objective evidence on where such a limit (if there even is one) would be.

Physical measures

Signs and markings

Advisory signs are unlikely to be effective at controlling cyclist behaviour, particularly of the minority who travel at very unsafe speeds. In part, this is because signs are outside the typical viewing area of riders (who tend to be looking downwards at the pavement ahead). Pavement markings are generally regarded as more effective, and shared path symbols are already used on this section of the Intercity Cycleway. Two more innovative options are also available:

- Vibrant awareness pavement markings such as earthwrap prints (Figure 2.8). These non-slip labels are printed from a digital image onto an aluminium foil and then attached to the pavement. They are increasingly used on paths in a number of locations in Melbourne to provide more visible and ornate awareness messages than could be provided with traditional paint and stencil methods.
- Engaging pavement murals, with large images or labels (Figure 2.8(c) and (d)).

The effectiveness of these options is unknown, although they are increasingly used on shared paths in a number of Australian cities.

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- Figure 2.8: Examples of physical speed control options
- (a) Path warning marking (earthwrap)





(c) Path murals (Bicentennial Bikeway, Brisbane)

(d) Path murals (Bicentennial Bikeway, Brisbane)



Tactile coloured surfaces and rumble strips

Tactile coloured surfaces are used on a number of shared paths and Copenhagen-style bicycle lanes in Melbourne (Figure 2.9). The purpose of these treatments is to warn riders of the elevated risk of interaction with pedestrians or motorists through the visual cues and reinforce this message with tactile feedback (the treatment is often raised by 3-4 mm to create a small bump). The tactile feedback is minimal so as to avoid presenting a hazard that may lead to a rider losing stability. The treatment shown in Figure 2.9(a) in Melbourne varies the spacing between the transverse bars as it approaches the hazard (an entrance to a tennis clubhouse).

An additional consideration, not yet tested on cycleways to our knowledge, is to vary the width of transverse bars to create a perceptual 'trick' that a rider maintaining a constant speed is actually travelling faster (this is often called *perceptual speed regulation* in the research literature). There is good evidence to suggest these treatments can reduce the

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speed of motorists on highways (i.e. 80 - 100 km/h roads) by 10 - 15 km/h (e.g. Manser and Hancock (2007), Godley *et al.* (1999)). Whether such visual tricks work at lower speeds, and for riders, has not been tested.

Another simpler option is transverse strips of thermoplastic paint to create a 'rumble' effect. These are used in isolated locations on Copenhagen-style lanes in Melbourne (Albert Street, East Melbourne and Swanston Street, Carlton). As with the other treatments described here there has been no evaluation to determine what, if any, effect this has had on rider speeds.

Figure 2.9: Tactile coloured surfaces

(a) Tactile coloured surface treatment (Anniversary Trail, Melbourne)



(b) Transverse rumble strips (Albert St, Melbourne)





Vertical deflections

Vertical deflections such as speed bumps and tables are known to be among the most effective speed countermeasures for motorists, but are infrequently used on bicycle paths due to the risk a rider may crash while crossing the bump. Where they are used the profiles are generally docile (e.g. along the Bicentennial Bikeway in Brisbane - Figure 2.10(a)). An

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alternative that is widely used in the Netherlands is a sinusoidal hump. These humps tend not to present a hazard to riders travelling under around 25 km/h, but deter moped riders travelling at speeds of 30 km/h or higher⁸. However, they have not been used in Australia to date.

Our view is that the cost and risk associated with vertical deflections is that they ought be reserved for consideration only should simpler alternatives prove inadequate. However, our view is that a carefully designed hump could reduce rider speeds while not presenting an undue hazard *and* not present an obstacle to the majority of riders who are travelling at a safe speed.

Figure 2.10: Vertical deflections

(a) Speed hump (Bicentennial Bikeway, Brisbane)



(b) Sinusoidal humps (Houten, The Netherlands)



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⁸ Mopeds are allowed on Dutch shared paths and cycleways.



Chicanes

The most aggressive infrastructure treatment is the use of chicanes, as are used on roadway approaches on parts of the Intercity Cycleway⁹. These chicanes are highly likely to slow riders down (at least in the vicinity of the treatment) but present an obstacle which riders may collide with and hinder the movement of all riders (irrespective of their speed). In particular, riders with tagalongs, trailers, recumbents or tandems are significantly impeded by chicanes. The relevant Austroads (2009) guidance advises against the use of chicanes unless absolutely necessary, due to the additional hazard presented by the chicane, potential distraction for riders from concentrating on the surrounding traffic and the inconvenience to all riders and pedestrians. Where such treatments are considered to be unavoidable the guidance (Austroads GRD Part 6A, p62) recommends that:

- the device is no more restrictive than is necessary,
- the fencing is light in colour to increase its conspicuity at night,
- street lighting is adequate, and
- the fencing has no sharp protrusions.

The guide does not recommend the use of chicanes at mid-block locations where speeds are likely to exceed 20 km/h (which would the case, for example, near the entrance to the Zero Davey Hotel).

The main issues that arise in considering these treatments is (a) whether the increased risk of riders colliding with the chicanes is greater or less than the decreased risk of collision with pedestrians (due to slower rider speeds), and (b) whether the inconvenience presented to the majority of riders (who would in any case be travelling at a safe speed) is worth the benefits in terms of reducing the speed of the minority who are travelling too fast. Our view is that this type of treatment should be considered only as a last resort, primarily because it acts as an impediment to the movement of the majority of riders (who are travelling at a safe speed) and pedestrians. Furthermore, should such a treatment be considered along this section it is likely several would be required given that riders appear to be reaching their desired speeds fairly quickly in the downhill direction¹⁰.

Marketing and communications

Behaviour change campaign

Behaviour change campaigns may take several forms, but at their simplest could be events along the path during busy times that seek to engage positively with path users. Importantly, the key to these activities is to encourage positive behaviours through dialog rather than to seek to punish or lecture against negative behaviours. One of the key benefits of this type of activity is the potential to establish a positive dialog with those already 'doing the right thing' to reward such behaviour and establish stronger social norms

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⁹ It is not known whether the motivation for their use in these locations is to prevent motor vehicle access to the path, slow riders and raise their awareness of the path or both.

¹⁰ For example, one may be required near the servery hatch and another near Hunter Street to ensure riders do not pass through and then rapidly build up speed again.



for what is acceptable. What is not known is how effective these campaigns are at changing behaviours (and for how long any effect lasts), particularly from those who travel at the highest speeds (who are likely to be least receptive to intervention). Nonetheless, there are ancillary benefits such as encouraging cycling and walking that may make such a campaign worthwhile.

Behaviour Change Program in the City of Sydney

The City of Sydney has committed \$76m over four years to a multi-faceted strategy to encourage cycling through segregated cycleways, education and behaviour change programs (GHD, 2011). The behaviour change program had four objectives:

- 1. More people cycling more often.
- 2. Considerate, safe driving.
- 3. Considerate, legal cycling.
- 4. Considerate pedestrian behaviour.

The program adopted six design principles:

- 1. Delightful
- 2. Noticeable
- 3. Inclusive
- 4. Sociable
- 5. Participatory
- 6. Collaborative.

The program was intentionally positive, aiming to encourage and reinforce positive behaviours rather than simply suppress negative behaviours. Among



the activities was a program to encourage shared path users to be more aware of one another as well as complementary measures such as ride to school programs, bicycle skills training and maintenance courses.

Regulatory, legislative and enforcement

Speed limits

Speed limits are legally enforceable only on roadways in Australia; they cannot be legally enforced away from roads or on road-related areas (such as the Intercity Cycleway). However, they may serve as a useful deterrent and indicator to riders of an appropriate speed. Their use is generally constrained in Australia to locations with very high numbers of pedestrians, such as Melbourne's Southbank and Brisbane's Goodwill Bridge and Kurilpa Bridge. In these locations a speed limit of 10 km/h is posted, although there is good evidence to suggest this speed limit is widely exceeded. This is an issue for speed limit

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setting in all locations (including roadways), where it is generally considered that the speed limit should be consistent with the visual and physical cues. A speed of 10 km/h for riders is very slow, and close to the point at which riders become unstable. Indeed, no rider observed travelling downhill at Zero Davey Hotel was travelling at less than 17 km/h. As such, such a low speed is unlikely to be widely accepted by riders.

It is our view that speed limits are not practical, and that options which create the right visual and physical cues to reduce speeds are likely to be far more effective. However, in so far is there is merit in being "seen to be doing something" then speed limits may have some merit.

Figure 2.11: Chicanes

(a) Intercity Cycleway



(b) Bayswater to Belgrave path (Melbourne – note, poor design)



2.2.4 Pathside obstacles

Austroads (2009) recommends a minimum distance of at least 1.0 m (0.5 m absolute minimum) between the edge of a path and an obstacle which if struck may result in cyclists losing control or being injured. In practice, there are many shared paths which do not meet this requirement. Many parts of the Intercity Cycleway would have obstacles that do not comply with this guideline, and for which correcting would be prohibitively expensive if not impossible. Moving the property boundary, or moving the cycleway farther from the property boundary, would be clearly impractical between Evans and Hunter Street. Instead, it would be prudent to:

- · remove obstacles where they are unnecessary,
- · ensure those that are retained are highly visible in all light conditions, and
- minimise the risk of injury by ensuring any obstacles are as compliant as practicable should a rider or pedestrian strike the object¹¹.

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¹¹ These actions are consistent with wider road safety practice, such as the prevention of run-off-road crashes through the use of crash barriers and road shoulders without obstacles such as trees in rural areas. While



With specific reference to the pedestrian fencing outside the Zero Davey Hotel, our view is that its retention is useful in so far as it prevents pedestrians from walking out directly onto the cycleway and shields the cycleway from the step in front of the entrance. However, it would be prudent to consider measures that reduce the severity of any impact that may occur, perhaps by installing a solid handrail along the top of the fence.

Legal risks of pathside obstacles: Bay Trail, Melbourne

The Bay Trail in Melbourne is a shared path which, in part, runs alongside a collector road behind an Armco crash barrier. In 2005 a rider struck his pedal against raised bluestone edging on the path which resulted in him losing control and colliding with the exposed stanchions behind the Armco barrier. The rider incurred serious injuries as a result of this crash and sued the council. The rider was awarded damages by the court primarily





due to the presence of the raised bluestone which, it was argued, could reasonably be expected to present an elevated risk of crashing. The exposed stanchions did not directly contribute to the crash, but did contribute to the injury severity. This is similar to the situation on the Intercity Cycleway; the pedestrian fence clearly did not contribute to the crash, but did contribute to the severity of injuries. Both directly and indirectly

as a result of this crash councils in Melbourne have been careful to ensure exposed stanchions are not present adjacent to shared paths by installing hoardings to shield the stanchions.

measures are taken to encourage driver alertness (such as behaviour change campaigns and audio-tactile edge lines) there is a recognition that such events do occur, and so efforts are warranted to reduce their severity (rather than simply "blame" the motorist).

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3 Hunter Street to Mures Car Park

3.1 Context

This section is from Hunter Street (which is permanently closed to traffic at Davey Street) along the Sullivans Cove foreshore to the Mures car park entry. Motor vehicles associated with the fishing and port operation are permitted to park along the foreshore, but must travel one-way towards the northeast. There are no line markings or signs to indicate that this area is a shared zone, aside from a 'Bicycles exempted' sign at the 'No Entry' sign at Hunter Street.

- Figure 3.1: Hunter Street to Mures Car Park
- (a) View facing southwest from Hunter Street







3.2 Issues and mitigations

The main issues apparent in this section are at the Campbell Street pedestrian crossing, where large numbers of pedestrians can mingle waiting to cross (creating a potential conflict point with riders) and a general lack of formalisation of the shared path.

3.2.1 Campbell Street pedestrian crossing

The Campbell Street pedestrian crossing attracts significant numbers of pedestrians; most will invariably be looking towards the roadway rather than the path while waiting to cross (Figure 3.1(b)). There have been reported near misses between pedestrians and riders at this location, most involving riders travelling downhill (so having higher speeds).

Mitigations

The constrained width between the roadway and port, along with the presence of parked vehicles, limits what can be achieved in this location. While measures that reduce the speed of riders travelling downhill will likely help (Section 2.2.3) there is little obvious that can be achieved specifically at this location. Awareness symbols (perhaps using earthwrap labels) may be useful in this location. Depending on what, if anything is done about

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formalising this section of the cycleway (see below) it may be practicable to provide line marking or pavement signs to remind riders to watch for pedestrians.

3.2.2 Formalisation of the path

By 'formalisation' we refer here to the traditional traffic engineering practice of designating specific parts of a roadway (or path in this instance) to a particular user group (that is, the formal segregation of riders and pedestrians). Along the study area there are wide variations in the level of formalisation:

- between Evans Street and Hunter Street there is a formally designated shared path with centreline marking and pavement symbols and arrows,
- between Hunter Street and across Mures car park there is no visual or physical cue at all,
- from Mures car park to Argyle Street cyclists and pedestrians are formally segregated by a line marking and bicycle symbols, and
- between Argyle Street and Morrison Street the modes are informally segregated by the presence of a lighter coloured concrete surface along what would be the desire line for cyclists (and pedestrians travelling through the area).

We do not see this lack of "consistency" as an unsafe situation; rather, it reflects (in part) the different demand and usage along the cycleway. No single design treatment is likely to be optimal along the full length, and so some variation is inevitable. The lack of any markings or visual cues along the section from Hunter Street to Mures car park is consistent with the notion of shared space, where users are expected to negotiate for priority. Furthermore, this section is unique within the study area by formally allowing motor vehicles to also share this space.

Mitigations

We see three options for this section:

- retain the status quo of an informal shared space (but perhaps with added awareness markings, at least near Campbell Street),
- use line marking and pavement symbols to create a formal shared path similar to between Evans Street and Hunter Street (but continue to allow motor vehicle movements), and
- provide a segregated cycleway and footpath.

The shared path option would provide for a 4 m shared path adjacent to parking and up to 6 m away from parking. However, the effective width would be somewhat narrower given the presence of the kerb and fence along Davey Street and parked vehicles on the foreshore. Furthermore, the crossfall of the path is such that most riders and pedestrians will tend to drift towards the centre (near the drainage).

The segregated cycleway option would provide a line marked, and possibly colour delineated, cycleway of around 2.5 m next to a 1.5 m footpath. While this option would, in theory, have the advantage of segregating the modes it would be difficult to design

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satisfactorily for both modes. For example, it is likely the pedestrians would prefer to walk along the foreshore rather than adjacent to Davey Street, and many will tend to walk in groups (for which 1.5 m would be inadequate). The natural preference for walking along the foreshore would present issues with providing a connection across to the Campbell Street pedestrian crossing. There is also the potential perverse consequence that a dedicated cycleway would encourage some riders to travel faster, increasing the risk and severity of injury to themselves and pedestrians.

As this section appears to operate reasonably satisfactorily in its current condition, our feeling is to retain the current shared space design but with additional awareness markings near the Campbell Street pedestrian crossing. Should other works be conducted along this section in the future the replacement of the longitudinal grates over the drains with more rider-tolerant alternatives would be advisable. The segregated option in particular does not seem warranted at the present time, and would present additional complications.

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4 Mures Car Park Entry

4.1 Context

The Mures car park entry was upgraded in 2011 to incorporate a short left-turn slip lane for motorists turning left off Davey Street and associated improvements of the crossing itself including bollards and chain fence and tactile surface treatments (Figure 4.1).

- Figure 4.1: Mures car park
- (a) View from cycleway facing northeast



(c) Bollards and tactile threshold treatments





(b) View from car park towards Davey Street

(d) Uneven surface detail to northeast of car park



The crossing is heavily used by pedestrians and cyclists, and was observed to have around 160 motorist entries and 70 motorist exits during the peak hour (5 - 6 PM). Motorist, pedestrian and cyclist counts across the peak periods (8 - 9.30 AM, 4 - 7 PM) of two weekdays observed 1,323 motorist entries and exits, 1,066 pedestrian movements and 496 cyclist movements across the entrance (Figure 4.2 and Table 4.1).

The design intent of the crossing appears to be to create an ambiguous crossing environment such that motorists, pedestrians and cyclists must negotiate for priority across

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the entry. The only physical or visual cue to guide path users is the presence of the tactile ground surface indicators (TGSI) at the crossing threshold to meet DDA requirements.





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	Time period	Motorists		Pedestrians		Cyclists	
		In	Out	To SW	To NE	To SE	To NW
Mon 5/11	8 - 9 am	90	9	67	21	93	7
	9 – 9.30 am	39	11	53	21	16	8
	4 – 5 pm	122	64	31	65	23	31
	5 – 6 pm	133	50	40	105	24	75
	6 – 7 pm	84	71	81	67	9	16
	Subtotal	468	205	272	279	165	137
Tue 6/11	8 – 9 am	91	11	86	14	57	6
	9 - 9.30 am	44	18	53	12	11	2
	4 – 5 pm	106	50	49	91	4	23
	5 – 6 pm	164	33	45	84	18	52
	6 – 7 pm	77	56	320 *	46	6	15
	Subtotal	482	168	268	247	96	98
TOTAL		950	373	540	526	261	235

Table 4.1: Mures car park counts by mode, direction and time period

* 285 pedestrians appeared to be conference attendees – these are excluded from the totals..

A total of 308 interactions were observed in the video data between motorists entering or leaving the car park and pedestrians or cyclists on the Intercity Cycleway. In 59% of interactions the motorist was observed to 'take' priority (or be 'given' priority by the pedestrian or cyclist). This proportion was somewhat higher when a cyclist was involved (66%) than a pedestrian (58%). This result would appear to suggest two behaviours:

- Motorists, pedestrians and cyclists are not allocating priority in a consistent manner (i.e. motorists do not always take priority, nor do pedestrians or cyclists always take priority). Rather, there seems to be some negotiation of priority based on nuances in position and speed and, likely, nuanced physical gestures and cues between users. This result is consistent with the design intent, which encourages users to negotiate priority.
- The legal position is not relevant to users in considering the allocation of priority; 59% of observed interactions are "illegal" in the sense that the motorist (incorrectly) takes priority over the path user.

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Hobart Intercity Cycleway – Evans Street to Elizabeth Street



Figure 4.3: Observed priority at Mures car park entry

Each interaction between a motorist, cyclist and pedestrian was assigned a score to reflect how "severe" the interaction was. This scoring system, described in Table 2.1, assigned a score from 1 (no incident) to 5 (collision). The resulting interaction severity proportions are shown in Figure 4.4 for situations where the pedestrian or cyclist had priority and for situations where the motorist had priority. Although the proportion of interactions that were classified as requiring major adjustment or near collision was higher for motorist priority interactions (9% of interactions) than for pedestrian/cyclist priority (4% of interactions) the difference was not statistically significant (df=307, p=0.099). As such, we conclude that we could not measure a significant difference in the likelihood of a more severe interaction depending on which mode took priority.

Qualitatively, a number of interactions were observed where a pedestrian broke into a run to clear the entry when they saw a motorist and where multiple vehicles queued across the exit cyclists and pedestrians tended to move around the back of the stationary vehicles. Both of these observed behaviours are suggestive of a comparative loss of amenity to path users.

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Figure 4.4: Interaction severity score at Mures car park by priority mode

4.2 Issues and mitigations

The issues identified at this crossing are as follows:

- A lack of clear priority signals to govern expectations of cyclists, pedestrians and motorists.
- Chain fence lacks conspicuity, even where painted yellow (Figure 4.1(c)), and is located along the desire line for a rider or pedestrian directly across the crossing. This presents the risk a rider would travel directly into the chain.
- Uneven surface along the cyclist desire line (Figure 4.1(d)).

These issues are discussed in the following sections.

4.2.1 Priority

The Tasmanian Road Rules (2009) are explicit that road users entering or leaving a road must give way to cyclists or pedestrians in the road-related area (i.e. the path):

Rule 74: Giving way when entering a road from a road-related area or adjacent land

- (1) A driver entering a road from a road-related area, or adjacent land, without traffic lights or a stop sign, stop line, give way sign or give way line must give way –
 - Any vehicle travelling on the road or turning into the road (except a vehicle turning right into the road from a road-related area or adjacent lane); and
 - b. Any person on the road; and

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- c. Any vehicle or pedestrian on any road-related area that the driver crosses to enter the road; and
- d. For a driver entering the road from a road-related area
 - i. Any pedestrian on the road-related area; and
 - ii. Any other vehicle ahead of the driver's vehicle or approaching from the left or right.

Rule 75: Giving way when entering a road-related area or adjacent land from a road

- (1) A driver entering a road-related area of adjacent land from a place on a road without traffic lights or a stop sign, stop line, give way sign or give way line must give way to –
 - a. Any pedestrian on the road; and
 - Any vehicle or pedestrian on any road-related area that the driver crosses or enters; and
 - c. If the driver is turning right from the road any oncoming vehicle on the road that is going straight ahead or turning left; and
 - d. If the road the driver is leaving ends at a T-intersection opposite the road-related area or adjacent land and the driver is crossing the continuing road any vehicle on the continuing road.

This rule governs the legal obligation of motorists entering or leaving the Mures car park at Davey Street. How well such a rule is understood by the wider community is unclear; actual road user behaviours will be influenced by the design of any crossing and by negotiation between the parties with the legal position having a secondary role in governing these behaviours. In practice the majority of interactions (59%) between motorists and cyclists or pedestrians were "illegal" in so far as the motorist failed to give way to the path user.

That a significant number of interactions run contrary to the legal position is not of primary concern here¹², rather what is concerning is the potential for confusion about priority which may contribute to an injury crash. In particular, aside from the TGSIs there is no obvious cue to the path user that they are leaving a relatively protected area (the path) and entering an area with potential right angled motorist movements. Our view is that it is, in general, preferable to provide clear visual and physical cues to road and path users as to their respective obligations¹³.

Mitigations

We concern ourselves here with options regarding priority control at the car park entry. There are three priority options, the advantages and disadvantages of each are considered in Table 4.2.

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¹² There are any number of road rules which are widely disobeyed by road users, almost always unintentionally. The problems occur when an incident occurs and the matter ends up in the courts, or where the rules are so widely disobeyed that they lose their deterrence function.

¹³ The few exceptions are typically areas that serve primarily as destinations with a secondary link function (such as shopping malls).



Table 4.2: Priority options

Option	Advantages	Disadvantages
Shared space (intentionally ambiguous) – <i>status quo</i>	Encourages slower speeds and more cautious behaviour by all users	Lack of clarity may lead to confusion and potential conflict (e.g. if two users both feel they have priority)
Motorist priority	Consistent with "motorised culture" where motorists are seen to take precedence.	Inconsistent with the legal position. Inconsistent with council policy of encouraging walking and cycling.
Path user priority	Consistent with the legal position Improves level of service for cyclists and pedestrians and may reduce their stress Consistent with strategies of encouraging walking and cycling	May present an elevated risk of conflict if path users assert their priority over a motorist who fails to yield. May reduce path user awareness and observation of motorists.

Our view is that the preferred option would be to formally define priority in a manner consistent with the legal position and with the policy objective of encouraging walking and cycling by assigning formal priority to cyclists and pedestrians. There are precedents for this type of treatment, as shown in Figure 4.5. These examples are as follows:

- Figure 4.5(a) shows a mid-block path priority treatment on a local residential street where the path is at road grade but marked with a yellow pavement marking. The priority is supported by give way signs to motorists and speed cushions on the approach and departures to create a low speed environment.
- Figure 4.5 (b) shows a driveway crossing of a shared path running alongside a
 residential street. The crossing is distinctively coloured, and the driveway serves a
 group of flats which would have traffic volumes similar to those of the Mures car
 park.
- Figure 4.5 (c) and (d) shows a raised table crossing of a park entry. The park would have motor vehicle volumes similar or greater than Mures car park (certainly on weekends). The cream concrete is continued across the crossing, all of which is suggestive of path user priority. However, this priority is not formalised with signs to motorists and a 'Shared path ends' sign is installed on the path to suggest path users do not have priority. In our view this is an inconsistent situation, where the visual and physical cues are not reflected by the signs.

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- Figure 4.5(e) and (f) shows a raised table crossing where priority is clearly assigned to path users by the raised table, continues path material and colour and supporting signs.
- Figure 4.5(g) and (h) show a public car park entry along Beach Road in Melbourne with the Bay Trail shared path crossing at road grade but with a coloured surface and speed bump for motorists.

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Figure 4.5: Shared path crossings

(a) Mid-block shared path crossing (Anniversary Trail, Melbourne)



(b) Driveway crossing coloured treatment (Markham Avenue, Melbourne)



(c) Raised table crossing (Main Yarra Trail, Melbourne) (d) Raised table crossing (Main Yarra Trail, Melbourne)



(e) Raised table priority crossing (Capital City Trail, Melbourne)





(f) Raised table priority crossing (Capital City Trail, Melbourne)



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Figure 4.5: Shared path crossings

(g) Coloured priority crossing (Bay Trail, Melbourne)





These designs as shared paths are not explicitly described in the Austroads guides, although options with cyclist-only paths are described for both bent-out (Figure4.6(a)) and straight (Figure4.6(b)) priority crossings. In both cases the guidelines refer to the applicability of this type of treatment in locations where motorist volumes are low. This condition is met in the case of Mures car park, with the addition that motorist speeds are generally low.

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Figure 4.6: Shared path crossing guidance

(a) Bent-out priority treatment (Austroads (2009) Figure 7.9)



(b) Straight crossing priority treatment (Austroads (2009) Figure 7.10)



In our view there would be benefits to all road users in formalising the priority of the crossing, and to do such that path users have priority. These benefits include:

- consistency with the legal position (so reducing the likelihood of legal complications should an incident occur),
- improved amenity for pedestrians and riders in a manner consistent with council policy to encourage these modes,

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- improve walking conditions for visitors, many of whom will visit Sullivans Cove and wander along the wharf,
- reduced confusion between modes when negotiating priority (which may reduce the crash risk), and
- an enhanced 'gateway' effect to clearly distinguish the car park from Davey Street as a low speed environment.

A concept of the type of treatment proposed is shown in Figure 4.7. This concept would provide line marking on the path approaches to the crossing, a coloured crossing at the entry and be supported by appropriate regulatory and advisory signs and physical speed calming for motorists (shown here as speed cushions).



Figure 4.7: Concept plan for Mures car park entry

4.2.2 Chain fence

The chain fence is positioned alongside a kerb lip to direct riders and pedestrians to the crossing point setback from the desire line. The chain has been coloured yellow to increase its conspicuity (Figure 4.1(a) and (c)). However, in bright light in particular the chain remains difficult to discern from the concrete background. The risk is that a rider unfamiliar with the area will see the bollards and aim to ride directly through the fence (as this represents the shortest path).

Mitigations

If the fence is to be retained (and there may be a reasonable case for doing so given the presence of the kerb) it would be desirable to increase the conspicuity, perhaps through additional bollards or panels.

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4.2.3 Uneven surface

The pavement approaching the crossing from the northeast is uneven in places and has slabs that are not flush with the surface (Figure 4.1(d)). There are also grates with longitudinal gaps, although the spacing is probably sufficiently narrow that riders will not catch tyres in the grates. The Austroads (2009) guidance recommends step heights of less than 10 mm parallel to the direction of travel (Table 4.1) which is exceeded in places. The pavement also presents a trip hazard to pedestrians.

Mitigations

Resurfacing, grinding or filling sections of the path that present a hazard should be undertaken to reduce the risk of cyclist crashes, pedestrian falls and improve the amenity for path users.

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5 Mures Car Park to Elizabeth Street

5.1 Context

The section between Mures car park and Argyle Street has a narrow (around 2 m) designated cycleway between Davey Street and the tree planters (Figure 5.1(a)). Steps run along the length of this section near the water. Further west the path turns southeast alongside Argyle Street near recently installed wayfiding signage (Figure 5.1(c)). From this section through to Elizabeth Street the path is distinguished from the surrounding wharf by a cream coloured concrete (this being the old tramway easement) (Figure 5.1(d)).

Figure 5.1: Mures car park to Elizabeth Street



(c) Corner at Argyle Street







(d) View facing south along Morrison Street



5.2 Issues and mitigations

The most significant issues in this area are:

 the constrained pavement between the car park and Argyle Street, and the presence of a number of obstacles (fencing along Davey Street, trees and steps),

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- wayfinding signs and concrete blocks at the corner of Argyle Street (Figure 5.1(c)), and
- pedestrian-cyclist conflict near the entrance to the Marine Board Building (Figure 5.1(d)).

Each of these issues is now discussed.

5.2.1 Constrained pavement between Mures car park and Argyle Street

This section is the only segregated section of the path in the study area; riders are designated an area between the road and the trees while pedestrians are allocated the area along the foreshore. This segregation appears to be reasonably well adhered to, at least during peak periods. The width of the cycleway section, and the presence of pathside obstacles along both sides (bollards and kerbs along the street and trees towards the water), tend to constrain rider movements to single file, although two riders can pass one another travelling in opposite directions.

Council have reduced the risk presented by the tree planters by installing a permeable rubber material over the planter, which is flush with the pavement. By painting the top of the steps the likelihood a rider will see, and be able to avoid, the steps is increased. We conclude that all reasonable steps have been taken to reduce the risks of these obstacles in this confined area.

The width and presence of these obstacles, as well as the flat topography appears to restrict rider speeds in this section. Our view is that this section appears to perform satisfactorily for both pedestrians and cyclists.

Mitigations

As cyclist demand continues to increase it may be desirable to reinforce the segregated path through the use of a continuous green pavement treatment. This would remind pedestrians of the presence of the cycleway and encourage riders to remain within their designated area. However, such a treatment would need be considered within the wider context of the design of the cycleway elsewhere in the study area. There appears to be no compelling reason to undertake this treatment currently.

5.2.2 Wayfinding signs

The wayfinding signs and associated concrete blocks present a significant hazard to riders, as they are fairly inconspicuous (their colour tends to blend with the background) and are located along the inside of the rider desire line on the corner.

Mitigations

While the need for the wayfinding signage to be in a location convenient to visitors is selfevident, the location chosen presents an unnecessary hazard. Using the light concrete as a guide to the likely tracking of riders it would be best to locate the wayfinding around 1 m behind the path. In addition, or as a lesser alternative, the totems should be shifted to the *outside* of the concrete blocks make them more conspicuous. Finally, line marking and

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conspicuous paint on the edge of the obstacles is an option should they be unable to be moved. However, we would note a preference to always eliminate the risk entirely wherever possible (rather than simply mitigate it).

Figure 5.2: Wayfinding signs at Argyle Street



5.2.3 Conflict near the Marine Board Building

The Marine Board Building has a significant office workforce, many of whom would cross the cycleway several times a day. This movement is likely to occur at right angles to those on the cycleway, as pedestrians enter and leave the building and walk up Elizabeth Street (Figure 5.3). There is however several metres of setback from the building entrance to the cycleway, which is further 'protected' by the presence of trees.

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(b) View facing north from Morrison Street

Figure 5.3: Marine Board Building entrance

(a) View facing south



Mitigations

Two mitigations are proposed for consideration to mitigate the risk of conflict in this area:

- Pavement markings (such as earthwrap) to remind riders of the presence of pedestrians
- · Line markings to warn pedestrians to watch for riders.

Distinctive pavement markings were discussed previously in this report (Section 2.2.3). Conspicuous line markings have been trialled in the City of Sydney at a number of locations where dedicated cycleways (in green) merge with pedestrian paths in shared areas (Figure 5.4). These markings use a distinctive colour (blue) from dedicated cycleways and lack the traffic engineering markings typically used on shared paths (e.g. centreline markings and direction arrows). The paint used is highly conspicuous. In the case of the Marine Board Building it is suggested a line marking and associated "Shared Path" word and symbols could be used along the edge of the area defined by the coloured concrete, at least facing towards the building entrance and again at the pedestrian crossing at Elizabeth Street.

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Figure 5.4: Sydney shared path markings

(a) General logotype



秋志 SHARED PATH 志妹

(b) Typical use in cycleway transition to shared path



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То

TECHNICAL NOTE

Date 31 October 2017

From Cameron Munro

City of Hobart

Project No. 0122

Subject Safety issues on Intercity Cycleway near Zero Davey Hotel

1. Introduction

- 1.1 The present note was commissioned by the City of Hobart to provide an independent view on reported safety issues between pedestrians and bicycle riders along the Intercity Cycleway between Evans Street and Hunter Street.
- 1.2 This note follows a previous investigation in late 2012, which followed a serious injury crash involving a bicycle rider travelling downhill colliding with a pedestrian (among a group of pedestrians) and subsequently striking the metal fence outside the Zero Davey Hotel entry on Davey Street. The bicycle rider suffered serious injuries requiring hospitalisation while the pedestrian suffered minor (non-hospitalisation) injuries.
- 1.3 In response to this crash the council installed a railing across the top of the metal fence to, hopefully, reduce the severity of any future crash that may involve a bicycle rider striking the fence. The council has also installed pavement markings reminding riders to travel at a safe speed through the area (Figure 1.1).



 Figure 1.1: Line marking and pavement signage on the downhill approach to the hotel

- 1.4 Since that earlier note there have been ongoing reports of near-misses and collisions along the path. These have included a collision where a bicycle rider heading downhill and a child leaving a bus parked in the parking day alongside the hotel collided. It is understood the child was sent to hospital and the bicycle rider suffered minor (non-hospitalisation) injuries. Notably, in both of these crashes it does not appear the bicycle rider was travelling at manifestly excessive speeds, although one could argue their speed was clearly too high to avoid the collision.
- 1.5 There is widespread agreement that pedestrian demand is increasing in the area given developments around Sullivans Cove and in the Hobart CBD more broadly. In particular, future developments around Macquarie Point would be expected to very significantly increase pedestrian demand. Moreover, the Intercity Cycleway continues to serve as the preeminent cyclist connection to the city from the northern suburbs.
- 1.6 Given the demonstrated crash history at this location and the ongoing pressures from increasing pedestrian and cyclist demand, in our view it is appropriate that the council consider more extensive countermeasures than were proposed in our 2012 review.
- 1.7 The present review is based on a site visit, discussions with council staff and the manager of the Zero Davey Hotel, and on our experience working with similar issues at other locations in Australia.

2. Speed management

- 2.1 There can be no dispute that speed is a critical factor in crash likelihood and severity; this applies both on-road (where the critical issue is containing motorist speeds to survivable levels for vehicle occupants and other road users) and off-road, where bicycle riders travelling at excessive speeds present a risk both to themselves, to other riders and to pedestrians.
- 2.2 The question then arises as to what is an "excessive" speed, or conversely, what is a "safe speed" for the conditions. We consider a safe speed for bicycle riders to be one which ensures they will have sufficient time to react to a pedestrian who is otherwise oblivious to the riders' presence¹ and thereby avoid a collision.
- 2.3 Reaction times vary markedly across individuals and their level of alertness. It is generally assumed that human reaction times are between 0.7 and 1.5 seconds. This is the time required to process the stimuli and <u>begin</u> to physically react; there will be additional time required for brakes to be applied and/or to turn the bicycle away from the conflict. Most traffic engineering guidance recommends using a more conservative assumption of 2.5 seconds.
- 2.4 The previous 2012 study used a radar speed gun to measure a sample of cyclist speeds travelling downhill from Evans Street to the hotel entry. That study suggested median

¹ The road rules require that bicycle riders give way to pedestrians on shared paths. In practice we would suggest that pedestrians generally try to stay out of the way of bicycle riders, just as bicycle riders try to stay well clear of pedestrians. However, clearly there will be instances where at least one user is unaware of the presence of the other. It is the extreme scenario – where neither user is aware of the presence of the other – that appears most likely to lead to conflict.



rider speeds at the hotel entry of 25 km/h with a 5th percentile speed of 18 km/h and 95th percentile speed of 32 km/h. The earlier study suggested the presence of pedestrians reduced rider speeds but were <u>not</u> related to whether the rider had to stop at Evans Street.² These speeds seem consistent with the path environment and topography; average rider speeds on flat shared paths are fairly consistent at around 23 km/h.

2.5 Table 2.1 shows the distance over which a rider will travel at differing reaction times and speeds before they <u>begin</u> to respond by either braking or swerving.

Table 2.1: Distances travelled (metres) for given reaction times and rider	speeds
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	Reaction time (s)		
Speed (km/h)	0.7 s	1.5 s	2.5 s
15	2.9	6.3	10.4
20	3.9	8.3	13.9
25	4.9	10.4	17.4
30	5.8	12.5	20.8

- 2.6 At the median speed of 25 km/h and assuming a reaction time of 1.5 seconds a rider will travel around 8.3 m before even beginning to react. There will then be some additional distance they will traverse while they brake and/or swerve to avoid conflict.
- 2.7 Clearly, higher speeds and slower reaction times will be associated with an increased likelihood a rider will not be able to react to a pedestrian suddenly appearing ahead of them. <u>However</u>, we would suggest that even an alert rider travelling at modest rider speeds would be unable to eliminate the risk of conflict in the situation that exists at this location. In other words, low cyclist speed is of itself insufficient to avoid conflicts.
- 2.8 We suggest that the critical case is where bicycle riders are travelling downhill and pedestrians are travelling perpendicularly across the path. This may occur where a pedestrian, for example, emerges from the hotel entry or from a vehicle in the kerbside parking bay (Figure 2.1). Particularly when the pedestrian is emerging from a vehicle they are unlikely to be alert to the potential presence of riders and, if they are in a bus, may not even physically be able to see the bicycle rider until they emerge onto the path. Equally, the bicycle rider will not see the pedestrian until they have at least partially emerged from the bus.

² There was some effect near the servery hatch whereby riders who stopped at Evans Street were marginally slower than those who did not, but by the time riders had reached the hotel entry the differences were indistinguishable.

City of Hobart Safety issues on Intercity Cycleway near Zero Davey Hotel 31 October 2017



Figure 2.1: Critical conflict case

- 2.9 The two crashes of which we are aware involved, unsurprisingly, bicycle riders travelling downhill colliding with pedestrians moving (unintentionally) across their desire line (that is, the intended rider trajectory). Neither crash appeared to involve the rider travelling at manifestly excessive speed. That is, while in hindsight the riders were clearly riding too fast to be able to sufficiently react to the situation they did not appear to be riding recklessly. In our view this insight reinforces our observation that the situation on this section of the cycleway is such that even a rider travelling at a prudent, defensive speed cannot entirely mitigate the risks of collision.
- 2.10 We conclude this section by reiterating that (a) faster riding speeds clearly elevate the risk of conflict (and the severity when conflict does occur), but that (b) reducing rider speed (by whatever means) cannot of itself eliminate the risk of conflict. The physical characteristics of the location, and combination of cyclist and pedestrian movements, lock in an intrinsically unsafe situation.

3. Geometry

- 3.1 The Intercity Cycleway is at its narrowest of around 4.0 m from the kerb face to property boundary at the hotel entry. This coincides with the most common location for buses to park. The indented parking bay is 40 m long (32 m of marked bays with additional space for vehicles to manoeuvre into and out of the bay).
- 3.2 Davey Street is around 13.1 m from kerb-to-kerb at this location, consisting of three traffic lanes and on-street parking on both sides of the street (indented parking on the southeast).

4. Car parking

- 4.1 It is understood that the indented parking services customers of the Zero Davey Hotel and café, as well as the other retail and accommodation along Hunter Street. It has been suggested by the hotel manager that much of the bus movements are not associated with the hotel directly, but rather are for the retail and accommodation in Hunter Street.
- 4.2 The main entry to the Zero Davey Hotel is located on Hunter Street. It is understood from the hotel manager that the majority of drive-in customers access the hotel via Evans Street and Hunter Street rather than use the indented parking.
- 4.3 The indented parking is seen as most valuable to the hotel manager as a convenient means for customers using the café, usually "drive-through" customers using the servery hatch.

5. Land use planning

- 5.1 The Intercity Cycleway predates much of the current development along Sullivan's Cove. It seems reasonable to argue that an increase in pedestrian traffic could reasonably have been foreseen as part of the planning approvals process. Moreover, it seems reasonable to expect that this may lead to potential conflict between bicycle riders and pedestrians. This potential for conflict has been exacerbated by planning decisions such as having an entry to the Zero Davey Hotel at the narrowest point along this part of the cycleway, locating the parking bay directly across from this entry (further narrowing the cycleway) and the servery hatch near Evans Street.
- 5.2 With the benefit of hindsight, and we would argue, reasonably foreseeable at the planning stage, the combination of the land use planning, user demand and topography have conspired to present a significant safety issue as well as public amenity issue for which rectification is now far more difficult than could otherwise have been the case.
- 5.3 We suggest there is a salutary lesson here for planning authorities to carefully consider the impact of planning approvals on existing transport assets, including cycleways, to ensure these types of conflicts are – as a best as possible – ameliorated in the design stage.
- 5.4 There is a long history of actual and perceived conflict between pedestrians and bicycle riders on shared use paths, both in Hobart and in other Australian cities. While there is limited data to suggest this conflict represents a significant injury burden there is no

dispute that sharing between bicycle riders and pedestrians in high volume locations is problematic. While at some locations these problems *may* be more perceived than real this is clearly not the case at this site – where the crash history is self-evident.

6. Mitigations

- 6.1 We offered a range of possible mitigations in our 2012 note, of which the hotel and council have implemented the lowest cost and least problematic (i.e. pavement warning markings and fence top rail). The review of treatments suggested in 2012 continue to be relevant in our view; rather than repeat all options the reader is referred to the previous report. What has changed is that the problems have clearly <u>not</u> gone away. As such, it is appropriate to consider more substantial mitigations.
- 6.2 Our view is that further efforts at mitigating cyclist speeds are warranted as part of a wider strategy (recognising that speed mitigation of itself is not sufficient). The challenge is to do this in a way that (a) does not present a hazard to riders or pedestrians, and (b) does not unduly inconvenience riders who are travelling at speeds appropriate for the conditions.
- 6.3 It is suggested that transverse markings that present both a visual and physical signal (using a thicker than conventional application) be part of this response. However, we would recognise that there is no evidence from where this has been applied elsewhere to suggest it would be effective³, particularly on those riders who are travelling at manifestly excessive speeds for the conditions.



Figure 6.1: Transverse markings

³ Nor is there evidence to suggest such a treatment is ineffective. Instead, the treatment has never been subject to rigorous evaluation as far as we are aware.

6.4 There may also be benefits from using cyclist-actuated warning signs or pavement lighting. A warning sign activated by a cyclist speed sensor would be one option. This would presumably best be positioned uphill from Evans Street; the presence of Davey Street traffic nearby may dictate the use of in-pavement speed sensors rather than radar detection. Whether such a sign would be effective, particularly given that many riders will be regular path users and the risks are self-evident, is debatable. However, at worst it would be ineffective rather than counterproductive. Another option would be flush inpavement lighting that illuminates either (a) as a rider approaches the conflict area, or (b) when a vehicle is detected in the indented parking bay. An example of this form of lighting from Christchurch is shown in Figure 6.2. In this example the lighting warns of an entry to a major bus station and is triggered on every red bicycle signal phase. Connecting such a setup to a cyclist or motor vehicle detector would presumably not be difficult. Of the two options we would err towards the in-pavement lighting given that riders gaze tends to be below the horizon such that this is likely to be the more effective option.



Figure 6.2: In-pavement warning lights

- 6.5 We would not endorse the use of physical treatments such as chicanes given that they present a hazard to riders and would impede the movement of the majority of bicycle riders and pedestrians. Such treatments are, in our view, counterproductive insofar as they reduce or eliminate one risk (i.e. riders travelling too fast) by creating another (i.e. a physical obstacle on the path). Moreover, chicanes located at Evans Street would not seem to be adequate given our previous observation that rider speeds at the Zero Davey Hotel entry appear to be unrelated to whether a rider stops at Evans Street.
- 6.6 In our view the only really compelling solutions involve more substantive changes to the way in which parking is managed in the area. Given a majority of large vehicle users of the indented parking are heading for Hunter Street we suggest it is worth exploring providing an indented bay for buses at the intersection with Hunter Street itself. The cycleway could be "bent-out" from Davey Street to provide a protected area of perhaps a metre or so behind the kerb. The challenge would be fitting this with the water at the southwestern end and the probable need to remove 2-3 parking bays at Hunter Street. It would also be necessary to relocate some light posts, drainage and historical information signs. Some of the existing indented parking could be retained near the servery hatch to service the café, as it appears conflict is less acute here (given the wider path width and somewhat lower rider speeds) and this adequately serves the café. While costly, we suggest the demonstrated crash history and lack of viable options dictate that such an alternative warrants consideration.

Item No. 6.1

Agenda (Open Portion) City Infrastructure Committee Meeting - 20/11/2019

City of Hobart Safety issues on Intercity Cycleway near Zero Davey Hotel 31 October 2017



Figure 7.1: Concept for alternative bus parking at Hunter St

- 7.1 An alternative of providing parking on Evans Street for these functions appears impractical given that Hunter Street is the destination for many visitors.
- 7.2 A far more radical solution, but one that could offer a more comprehensive solution, would be to remove kerbside parking on the northwestern side of Davey Street, realign the traffic lanes towards the northwest and install a dedicated cycleway (i.e. bicycle only) within the current roadway along the waterfront. This could run from near the servery hatch to around the Mures car park entry. Such a solution would have the advantage of effectively eliminating all pedestrian-rider conflict. Moreover, it would narrow the roadway to support pedestrian crossing and provide an additional 4.5 m or so of width alongside the waterfront to support both the cycleway and public realm improvements. This design would however introduce a conflict between vehicles entering the indented parking (assuming it were retained), and potentially also motorists opening their driver-side doors.

8. Conclusions

- 8.1 The crash history at this location is sufficient to warrant further mitigations to reduce the injury risks, and improve the level of service for both pedestrians and bicycle riders.
- 8.2 Bicycle rider speed mitigations are warranted, but should not present additional hazards. We suggest transverse lines and cyclist-actuated LED lighting as possible approaches to manage rider speeds.
- 8.3 Irrespective of what is done to manage rider speed, and no matter how effective such measures may be, the design and use of this location means that the risk of conflict will always be present. The only truly Safe System mitigation will be to realign kerbs and remove or adjust parking or traffic lanes to provide more space for bicycle riders and pedestrians to co-exist.
- 8.4 Our preferred option would be to shorten the existing indented parking to provide two parking bays for the café and have a bus parking bay installed at Hunter Street.
- 8.5 Longer term we would suggest removing parking on the northwest side of Davey Street could provide much greater opportunities for improving the function and form of the waterfront in this area.





7. MOTIONS OF WHICH NOTICE HAS BEEN GIVEN

7.1 Montpelier Retreat Footpath Widening File Ref: F19/147046; 13-1-9

Lord Mayor Councillor Anna Reynolds

Motion

"That a report be prepared on the feasibility and cost of developing a wider footpath on Montpelier Retreat to support the Council's aim of improving accessibility of the city."

Rationale:

"Montpelier Retreat is a popular pedestrian route and major access point for both locals and tourists. It is used as a thoroughfare to the Salamanca precinct daily and sees a significant volume of foot traffic each Saturday for Salamanca Market. The current width of the footpath on Montpelier Retreat is narrow making access for wheelchairs and prams very difficult and pedestrians need to walk in single file along the route and give way to people walking in the opposite direction.

Widening the footpath would significantly improve the amenity and accessibility of this area and complement the works underway on the Salamanca Place Precinct Upgrade to provide a high-quality, safe and accessible space for everyone."

The General Manager reports:

"In line with the Council's policy in relation to Notices of Motion, I advise that the matter is considered to be within the jurisdiction of the Hobart City Council as the matter relates to a function of the Council."

8. COMMITTEE ACTION STATUS REPORT

8.1 Committee Actions - Status Report

A report indicating the status of current decisions is attached for the information of Elected Members.

RECOMMENDATION

That the information be received and noted.

Delegation: Committee

Attachment A: Committee Action Status Report

CITY INFRASTRUCTURE COMMITTEE – STATUS REPORT OPEN PORTION OF THE MEETING November 2014 to October 2019				
Ref	Title	Report / Action	Action Officer	Comments
1	221A LENAH VALLEY ROAD, 2-16 CREEK ROAD, LENAH VALLEY – SUBDIVISION (86 RESIDENTIAL LOTS, 8 ROAD LOTS, 7 PUBLIC OPEN SPACE LOTS) – PLN-14-00584-01 Council 22/9/2014, item 9.2	That the Council undertake an urgent review of the Lenah Valley Traffic Management Plan with particular reference to the management of traffic in Augusta, Creek, Alwyn and Chaucer Roads and Monash Ave.	Director City Planning	The draft Transport Strategy addressed this matter and was presented to 9 July 2018 Council meeting. The Draft Transport Strategy was subject to community engagement in July/August 2018 and a report detailing the results of the community engagement was presented to 8 October 2018 Council meeting. At this meeting the Council adopted the 9 themes and position statements in the draft strategy. The Council also resolved that the actions contained in the draft strategy be reviewed in light of the feedback received and a further report be provided. A report is scheduled to be provided in late 2019.
2	IMPROVEMENTS TO PEDESTRIAN CROSSINGS Council 13/4/2015, item 10	A report be prepared looking at other opportunities for improvements to pedestrian crossings on key pedestrian routes in the City, including consideration of zebra crossings.	Director City Planning	Consideration has been given to pedestrian crossings in the Local Retail Precincts Plan, the Salamanca upgrade and in the development of the Transport Strategy.

Ref	Title	Report / Action	Action Officer	Comments
				The draft Transport Strategy addressed this matter and was presented to 9 July 2018 Council meeting.
				A key action of the strategy is the development of a walking (pedestrian) plan for the City of Hobart.
				The Draft Transport Strategy was subject to community engagement in July/August 2018 and a report detailing the results of the community engagement was presented to 8 October 2018 Council meeting.
				At this meeting the Council adopted the 9 themes and position statements in the draft strategy.
				The Council also resolved that the actions contained in the draft strategy be reviewed in light of the feedback received and a further report be provided.
				A report is scheduled to be provided in late 2019.

Ref	Title	Report / Action	Action Officer	Comments
3	SANDY BAY RETAIL PRECINCT – STREETSCAPE REVITALISATION Council 7/9/2015, item 10	 The amended conceptual streetscape design for the Sandy Bay Retail Precinct be approved with work to be scheduled for completion in 2016/2017, acknowledging that some works may commence earlier in 2016. The traffic issues raised during the community engagement process that relate to the intersection of King Street and Sandy Bay Road, Sandy Bay, be considered in consultation with representatives from the Department of State Growth. The speed limit on Sandy Bay Road between Osborne Street and Ashfield Street, Sandy Bay, be reviewed following completion of the works and the Lord Mayor be requested to write to the Minister for State Growth regarding any planned speed limit changes for the main retail precinct on Sandy Bay Road. Opportunities for increased bike parking be investigated as part of the detailed design for the Sandy Bay Retail Precinct streetscape 	Director City Planning	 Complete. Correspondence from the Department of State Growth has been received indicating that they would consider reducing speed limits if the streetscape works moderated the speed of vehicles. Officers obtained vehicle speed data prior to the completion of construction and will obtain further speed data prior to progressing this matter. Complete.

Ref	Title	Report / Action	Action Officer	Comments
4	ICAP - HOBART CENTRAL BUS INTERCHANGE1. A further report be provided on the issues and design implications of pursuing an alternative option for the 	Director City Planning	Director City Planning	The State Government Transport Vision includes investigation and review of current public transport operations in the City. Design works for the GPO (eastern) side of the Elizabeth Street Bus Mall are complete
	WITH METRO TASMANIA AND ONE-WAY BUS MALL Council 12/10/2015, item 12	 The Council give in principle support to the further development of a one- way Elizabeth Street Bus Mall, with displaced bus stops relocated to Collins Street (Option 3). 		and physical works commenced 8 July 2019.
	ICAP – HOBART CENTRAL BUS INTERCHANGE PLANNING PROJECT – ELIZABETH STREET BUS MALL IMPROVEMENT PROJECT – ALTERNATIVE OPTION TO CURRENT ARRANGEMENT Council 21/12/2015, item 16	3. The General Manager be authorised to undertake community engagement for Option 3 once the substantial concerns of Metro Tasmania and the Department of State Growth have been appropriately addressed, with the results of the engagement to be the subject of a further report prior to any final decision on the improvement project.		Detail planning for the other (western) side of the Elizabeth Street Bus Mall is currently being finalised.
	HOBART CENTRAL BUS INTERCHANGE PLANNING PROJECT - ELIZABETH STREET BUS MALL IMPROVEMENT PROJECT Council 9/4/2018, item 13	 A detailed design, cost estimate with identified funding sources be developed for the relocation of the Campbell Street bus stop (opposite City Hall) into Macquarie Street, which would be the subject of a future report. A further report be provided on the implications, operation, cost and funding possibilities for an intrastate bus departure facility incorporating the 		

Ref	Title	Report / Action	Action Officer	Comments
	ELIZABETH STREET BUS INTERCHANGE SHELTER	underutilised area within the Franklin Square amenities building.		
	UPGRADE Council 3/12/2018, item 14	6. That the Council and State Government undertake discussions at the conclusion of the hotel construction in relation to the permanent configuration of the bus mall.		
		7. That the upgrading of the bus passenger waiting facilities on the GPO side of the Elizabeth Street Bus Mall as detailed in the concept plans marked as Attachment F to item 6.5 of the Open City Infrastructure Committee agenda of 21 November 2018 be approved for construction, subject to the necessary statutory approvals being obtained.		
5	PEDESTRIAN ACCESS AND SAFETY ON HOBART STREETS Council 12/10/2015, item 14	 Following the development and implementation of a suitable engagement strategy, the current Highways By-law (3 of 2008) be enforced with particular emphasis on the Elizabeth Mall, Wellington Court and Salamanca Square (including Woobys Lane and Kennedy Lane). The General Manager be authorised to modify the management of commercial furniture and infrastructure on public footpaths towards a best practice model approach, where such 	Director City Planning	Work to implement the Council's resolution with regard to the reconstructed sections of Liverpool Street, Morrison Street, Salamanca Place and Sandy Bay shopping centre is complete. Planning is underway for implementing the other elements. A further report addressing clause 3 will be presented to an upcoming Committee meeting.

Ref	Title	Report / Action	Action Officer	Comments
		furniture and signage is only permitted if it does not interfere with the safe and equitable movement of pedestrians along that public footpath.		
		3. A further report be prepared that identifies how the Council may achieve a clear building line with minimum footpath widths in the future, in order to best satisfy the provision of an accessible path as required by the Disability Discrimination Act 1992.		
		4. During the review and renewal of the current Highways By-law, appropriate amendments be made to ensure that signboards are prohibited from being placed immediately adjacent to buildings.		
		5. As part of the review of signage, alternative options to sandwich boards, such as sign posts be investigated.		
		6. Officer hold discussions with relevant stakeholders in relation to the hazards potentially created through application of the Disability Discrimination Act 1992 with regard to the setbacks required from building frontages.		

Ref	Title	Report / Action	Action Officer	Comments
6	CYCLING LINK – MARIEVILLE ESPLANADE CIC 9/12/2015, item 14	The options for a cycling link on Marieville Esplanade be reviewed when the future of the Battery Point foreshore walk is determined.	Director City Planning	The options will be reviewed when the future of the Battery Point foreshore walk is determined.
7	WEST HOBART LOCAL AREA TRAFFIC INVESTIGATION Council 7/3/2016, item 13	 The recommendations of the consultant report titled West Hobart Local Area Traffic Investigation – Final Report, be supported in-principle and the following actions be undertaken: A workshop be convened with stakeholders in relation to the West Hobart pedestrian environment. The Department of State Growth be requested to establish Statewide warrants for the installation of pedestrian crossings within Tasmania. The Council write to the Department of State Growth requesting that consideration be given to the installation of an unsupervised children's crossing in Hill Street in the 40km/h zone near Caldew Park. Median lanes and median islands be installed in Hill Street between Allison Street and Patrick Street and between Hamilton Street and Warwick 	Director City Planning	 Work to progress the Council's resolution is underway. (i) Complete. (ii) Complete. (iv) Complete. (v) Median island installed and a review will occur in 2019. (vi) Complete. 3. The Council endorsed the recommendation on 2 October 2017, that traffic signals not be installed at this location at this time. 4. Black Spot funding application was unsuccessful.

Ref	Title	Report / Action	Action Officer	Comments
		Street, in 2016/2017 following the development of concept designs and community engagement.		
		 (v) A review be undertaken following the installation of the median islands and pedestrian crossings in Hill Street. 		
		 (vi) Concept design development and consultation be undertaken with directly affected residents in 2016/2017 to provide more generous pedestrian crossings in Hill Street where refuge islands are already provided. 		
		2. A temporary treatment to the median islands and pedestrian crossings be considered, in an effort to gauge their impact.		
		3. The Council approach the State Government regarding the installation of traffic signals at the intersection of Arthur and Hill Streets.		
		 Consideration be given to the submission of an application for the 2016 round of Blackspot Program Funding, to support the installation of signals at this location. 		

Ref	Title	Report / Action	Action Officer	Comments
8	ESTABLISHMENT OF AN ADVISORY COMMITTEE FOR THE IMPLEMENTATION OF A SULLIVANS COVE WATERFRONT PRECINCT PLAN Council 6/6/2016, item 13	 A Waterfront Precinct Plan be developed as part of the Hobart Transport Strategy and an Advisory Committee be established to assist in the development of the plan. The Sullivans Cove Tripartite Steering Committee and the Waterfront Business Community to consider increasing their membership in order to increase communication. 	Director City Planning	The draft Transport Strategy addressed this matter and was presented to 9 July 2018 Council meeting. The Draft Transport Strategy was subject to community engagement in July/August 2018 and a report detailing the results of the community engagement was presented to 8 October 2018 Council meeting. At this meeting the Council adopted the 9 themes and position statements in the draft strategy. The Council also resolved that the actions contained in the draft strategy be reviewed in light of the feedback received and a further report be provided. This report will be provided in late 2019. The Sullivans Cove Tripartite Steering Committee invited representatives of the Waterfront Business Community to attend future meetings.
9	TRANSPORT STRATEGY Council 8/8/2016, item 14 Council 8/10/2018, item 14	 A Transport Strategy be developed. Further Aldermanic Workshops be held prior to the commencement of community engagement for each of the Transport Strategy consultation modules. The Transport Strategy community consultation and stakeholder Engagement commence in 	Director City Planning	 The draft Transport Strategy was presented to 9 July 2018 Council meeting. A report detailing the results of the community engagement on the Draft Transport Strategy was presented to the Committee on 19 September 2018 and endorsed by the Council on 8 October 2018.

Ref	Title	Report / Action	Action Officer	Comments
		 August/September 2016, with the first consultation module to address Freight, Port and Air. 4. The General Manager write to major stakeholders and neighbouring councils, advising of the Council's intention to commence the development of a Transport Strategy for the City of Hobart. 5. The Council adopt the 9 themes and position statements in the draft strategy. 6. The actions contained in the draft strategy be reviewed in light of the feedback received and a further report be provided. 		 Complete - Aldermanic Workshops undertaken. Complete - the Draft Transport Strategy was subject to community engagement in July/August 2018. Complete. Actions within the draft strategy are being reviewed prior to final sign off of the Transport Strategy by the Council in late 2019.
10	AP14 SALAMANCA PEDESTRIAN WORKS – UPDATED CONCEPT DESIGN Council 10/10/2016, item 11 Council 9/4/2018, item 11 Council 9/7/2018, item 15	 Subject to detailed design and planning approval, the next stage of the Salamanca Pedestrian Works, generally as shown on the figure 'Concept Plan – Final (7/6/2018)' in Attachment C and the figure 'Concept Plan – Materials (7/6/2018)' in Attachment D to item 6.3 of the Open City Infrastructure Committee agenda of 20 June 2018, be constructed at an estimated cost of \$3.5M, with \$1M to be allocated in the 2018 / 2019 Capital Works Program and the remaining \$2.5M funded over the 2019 / 2020 and 2020 / 2021 financial years. 	Director City Planning	Construction works are underway.

Ref	Title	Report / Action	Action Officer	Comments
		2. The General Manager ensure that Aldermen are updated on any significant changes to the concept design that may occur through the detailed design and construction process.		
11	ICAP AP14 - SALAMANCA PLACE BETWEEN KENNEDY LANE AND WOOBYS LANE - FOOTPATH REVIEW Council 3/4/2017, item 26	 Consideration of the future management of the section of the Salamanca Place southern footpath between Kennedy Lane and Woobys Lane, occur once the 'Stage 1' footpath widening works have been completed and in operation for a minimum of six months. 	Director City Planning	 The consultation necessary to report to the Committee has been held back so as not to complicate the consultation occurring for the wider Salamanca Pedestrian works that occurred in 2018. It is expected that consultation will occur in August/September 2019 with reporting to Committee to follow.
		2. The General Manager develop and implement a suitable guide for the style and placement of outdoor dining		2. A Style Guide for outdoor dining barriers and umbrellas is being developed. Funding currently being sought.
		barriers and umbrellas to be utilised on Salamanca Place and Hunter Street.		3. The provision of a footpath using temporary materials has been undertaken successfully during the
	3.	3. A concept design addressing the pedestrian issue occurring on the northern side of Salamanca Place during periods when the footpaths on Castray Esplanade are inaccessible due to special events be developed and included for consideration in future budget preparations.		Taste and Dark Mofo events. A detailed design will now be prepared.

Ref	Title	Report / Action	Action Officer	Comments
12	NOM - PARKLET POLICY Council 24/10/2016, item 10 Council 5/6/2007, item 13 Committee 21/6/2017, item 6.4	That the matter be deferred to a subsequent City Infrastructure Committee meeting to enable further public consultation.	Director City Planning	A report addressing this matter is being finalised and will be presented to an upcoming Committee meeting.
13	GREENHOUSE GAS EMISSIONS AND ENERGY USE - 2017-2018 ANNUAL REPORT Committee 26/10/2016, item 6.5 Council 2/10/2017, item 17 Committee 19/9/2018, item 6.2	 A further report be provided in 12 months on the City's corporate greenhouse gas emissions and energy use. Opportunities for positive media about the City's achievements in regard to greenhouse gas emissions and energy use be sought. 	Director City Innovation	A report will be provided in December 2019. Media opportunities will be sought.
14	SANDY BAY ROAD WALKING AND CYCLING PROJECT - REQUEST TO MODIFY DESIGN TO REMOVE PEDESTRIAN CROSSING Council 3/4/2017, item 29 Committee 21/11/2018, item 6.4	That the matter be deferred to a subsequent City Infrastructure Committee meeting for the purpose of attaining costings for the survey to be undertaken of the local community in relation to the installation of a pedestrian facility.	Director City Planning	Officers are progressing the matter.
15	HILL STREET PEDESTRIAN IMPROVEMENT PROJECT Council 2/10/2017, item 20	 The revised concept design for pedestrian crossing points, median lane and bicycle lanes be implemented. The Transport Commissioner be requested to consider a 40 km/h speed limit for Hill Street (between Molle Street and Arthur Street) 	Director City Planning	 Complete. Surveys being undertaken in August 2019. A request to the Transport Commissioner will be made following completion of the surveys. 3(i). The wombat crossing trial is now complete.

Ref	Title	Report / Action	Action Officer	Comments
		 following the implementation of this project. 3. The findings of the Midson Traffic Report (marked as Attachment C to item 6.6 of the Open City Infrastructure Committee agenda of 20 September 2017) be endorsed and the following recommendations be adopted: (i) A trial implementation of a wombat crossing across Hill Street (on the northern side of the Pine Street roundabout) be undertaken, subject to further consultation with directly impacted property owners, residents and businesses and all statutory advertising and approvals. (ii) Results of the trial, including recommendations on the installation of two additional wombat crossing in Hill Street (at both Warwick Street and Patrick Street), be the subject of a further report. (iii) Further surveys of pedestrians and pedestrian types over a longer period (i.e. one school week) be done at the Patrick Street roundabout and the 		 3(ii). A report on the results of the wombat crossing trial will be presented to an upcoming Committee meeting. 3(iii). Complete. 3(iv). Complete. 4. To be placed in future budgets. 5. Complete. 6. Complete. 7. A media release will be issued when appropriate.
		results forwarded to the		

Ref	Title	Report / Action	Action Officer	Comments
		Transport Commissioner for consideration of a children's crossing and adult crossing guard.		
		 (iv) Traffic signals not be implemented at the Arthur Street / Hill Street or Patrick Street / Lansdowne Crescent / Hill Street intersections at this time. 		
		4. The required funding for the installation of wombat crossings at Warwick Street and Patrick Street (if not trialled) be listed for consideration in the 2018-19 Annual Plan, with installation contingent on a successful trial and future resolution of Council.		
		5. The Transport Commissioner be requested to provide assistance as may be required with the implementation of an awareness and education campaign regarding the use of wombat crossings.		
		6. Midson Traffic be requested to provide a briefing to the community on the outcomes of its report.		
		7. A media release be issued by the Lord Mayor and the Chairman of the City Infrastructure Committee.		

Ref	Title	Report / Action	Action Officer	Comments
16	INSTALLATION OF FORMAL PEDESTRIAN-PRIORITY CROSSINGS Council 5/6/2017, item 11	TALLATION OF FORMAL DESTRIAN-PRIORITY OSSINGS ncil 5/6/2017, item 11 The Council requests a report to identify the city-wide opportunities for the installation of formal pedestrian-priority crossings, to improve both the safety and walkability' of our streets, drawing the most recent Austroads Best Practice Guides for pedestrian infrastructure, Australian Road Research Board research and advice from pedestrian organisations.	Director City Planning	The draft Transport Strategy addressed this matter and was presented to 9 July 2018 Council meeting.
				The Draft Transport Strategy was subject to community engagement in July/August 2018 and a report detailing the results of the community engagement was presented to 8 October 2018 Council meeting.
				At this meeting the Council adopted the 9 themes and position statements in the draft strategy.
				The Council also resolved that the actions contained in the draft strategy be reviewed in light of the feedback received and a further report be provided.
				Investigation into pedestrian improvements on the Elizabeth Street and New Town corridor was undertaken in early 2018.
17	COLLINS COURT REDEVELOPMENT - STAGE TWO Council 3/7/2017, item 17	 The Council endorse the design shown on Attachment A to item 6.1 of the Open City Infrastructure Committee agenda of the 21 June 2017 for the purpose of stakeholder and wider public engagement. 	Director City Planning	The final design for Stage 2 is nearing completion for consideration by the Council and implementation in 2019.
		2. The outcomes of the stakeholder and wider public engagement in 1 above be the subject of a further report to the Council.		

Ref	Title	Report / Action	Action Officer	Comments
18	CITY TO COVE CONNECTIONS Council 3/7/2017, item 18	 That widening the footpaths in Elizabeth Street, from Collins Street, to Franklin Wharf be considered as an integral component of the Elizabeth Street Bus Mall Improvement project. That community engagement be conducted on the proposed Brooke Street to Franklin Square link. The outcomes of the community consultation in 2 above be the subject of a further report to the Council. 	Director City Planning	This project needs to be considered in light of the recent State Government announcement concerning the major upgrade of the bus mall and the Council's recent resolution concerning the consideration of a master plan for the blocks bordered by Murray, Macquarie, Campbell and Davey Streets. City officers and the State Government have met to discuss its planning of its vision for the Elizabeth Street Transit Centre. The State Government has appointed a consultant to investigate the feasibility of an underground Elizabeth Street Transit Centre. CoH officers have met with the consultant and provided a range of information to assist with their report.
19	LORD MAYOR (HICKEY)- TRANSFERRING THE CONTROL AND OWNERSHIP OF DAVEY AND MACQUARIE STREETS TO THE STATE GOVERNMENT Committee 21/6/2017, item 7.2 Council 3/7/2017, item 15 NOM – ALDERMAN THOMAS SHARED OWNERSHIP AND CONTROL OF DAVEY AND	 The Council authorise the General Manager to make any necessary minor amendments and to affix the common seal of the Hobart City Council to the Deed of Transfer – Davey Macquarie Streets Hobart. The General Manager to consider appropriate ways to communicate the following concerns of the Council to the Department of State Growth, with the purpose of seeking clarification as to whether any of these matters will be addressed in the final Deed: 	Director City Amenity	Davey and Macquarie Streets were proclaimed as State managed highways as published in the Tasmanian Government Gazette on Wednesday 26 December 2018 Letter sent to the Minister on 5 December 2018. Further letter sent to Commissioner of Transport in December 2018. Transfer of roads asset data to Department of State Growth completed.

Ref	Title	Report / Action	Action Officer	Comments
	MACQUARIE STREET Committee 25/7/2018, item 7.1 MACQUARIE STREET AND DAVEY STREET, HOBART - TRANSFERRING CONTROL AND OWNERSHIP TO THE STATE GOVERNMENT Council 7/5/2018, item 14 Committee 20/5/2018, Supp item 11 Committee 21/11/2018, item 6.3 Council 3/12/2018, item 13	 (i) General traffic and pedestrian movements on Davey and Macquarie Streets including requesting the State Government communicate with and seek the views of all land owners and business operators affected by any changes in vehicle and pedestrian movements in the two streets and take appropriate notice thereof. 		Transfer of street lighting in progress. Meetings are occurring between officers of both organisations to progress these matters.
		 (ii) Due to the proposed clearways, whether the current pedestrian bulbing infrastructure installed by the Council will remain; 		
		 (iii) Clarification on whether the current bus stops installed along Davey and Macquarie Streets will remain or will passengers be required to use the Elizabeth Street Bus Mall when using the South Hobart, Tolmans Hill, Kingston etc Metro services; and 		
		 (iv) The ingress and regress of traffic movements along both Davey and Macquarie Streets. 		
20	PETITION - SANDY BAY SHOPPING PRECINCT FOOTPATHS - OPPOSING CHANGE TO OUTDOOR DINING AREAS AND BUS	 The General Manager proceed with the implementation of the Council resolution of 12 October 2015, by progressing the relocation of occupation licence areas and 	Director City Planning	 Complete – change occurred from 1 November 2017. Officers are progressing the matter.
Ref	Title	Report / Action	Action Officer	Comments
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	STOP LOCATIONS Council 7/8/2017, item 10 Council 4/9/2017, item 14	 signboards away from the building line in the Sandy Bay Shopping Precinct. 2. The Council develop a new formal policy, building on the Council resolution of 12 October 2015, which provides guidance on the placement of outdoor dining in Hobart streets, taking into consideration the width of footpaths and traffic speed suitable for outdoor dining. (i) Further options such as parklets, be explored for outdoor dining in narrow footpath areas. 		2(i) A report addressing this matter will be provided in 2019.
21	PETITION - UPGRADE OF THE SCHOOL CROSSING IN FORSTER STREET, NEW TOWN Council 21/8/2017, item 6 Council 18/12/2017, item 6.2	 The following recommendations to further improve the safety of the children's crossing in Forster Street at New Town Primary School be endorsed: (a) The Department of State Growth be requested to ensure that the renewal of the line marking in Forster Street, New Town be prioritised to be completed prior to the commencement of the 2018 school year; (b) Work with the Department of State Growth to review and revise the operating times of the variable 40 km/h school zone signage to ensure that it is 	Director City Planning	 1(a) Complete 1(b)(c) Officers are progressing the other matters in liaison with the Department of State Growth. 2. Offer extended to New Town Primary School by Bicycle Network to participate in an Active Routes to School workshop. 3. Complete.

Ref	Title	Report / Action	Action Officer	Comments
		consistent with the start and finish times of the school; and		
		(c) Continue to work with the Department of State Growth's Road Safety Branch to improve the conspicuousness of the children's crossing through either improved signage or the trialling the use of flashing lights as an alternative to the flags.		
		2. An offer be made to New Town Primary School giving them the option of participating in an Active Routes to School workshop.		
		3. The organiser of the petition be advised of the Council's decision.		
22	NEW TOWN RETAIL PRECINCT - PROPOSED STREETSCAPE CONCEPT Council 18/12/2017, item 6.1 Council 4/6/2018, item 11	1. The streetscape upgrade be implemented, based on the concept design proposal, with detailed design to be undertaken in 2018 and construction to commence in early 2019.	Director City Planning	Works are underway.
		2. In the event the consultation process results in an increase in costs, the details be advised to the Council.		
23	PETITION - PEDESTRIAN (ZEBRA) CROSSING ON CREEK ROAD, LENAH	1. The following recommendations to further improve the safety of the pedestrian (zebra crossing) on Creek Road, Lenah Valley be endorsed:	Director City Planning	 1(a) Funding for this project has been provided through the 2019-20 Vulnerable Road User grant program. Design work is underway.

Ref	Title	Report / Action	Action Officer	Comments
	VALLEY Council 7/5/2018, item 11	 (a) Investigate and if feasible, list for consideration in the Capital Works Program the provision of a "continuous footpath" across the Wellwood Street intersection at Creek Road to improve pedestrian access to Lenah Valley Primary School; 		 Being progressing in conjunction with Bicycle Network. Awaiting results of the Hill Street wombat crossing trial. Complete. Complete.
		 (b) Officers continue to progress the City of Hobart Active Travel Report and Active Routes to School programs in the greater Hobart area (as per the Council resolution of 2 October 2017); and; (c) A wombat crossing be considered 		
		(c) A wombat crossing be considered for Creek Road, after the Hill Street trial has been assessed.		
		2. The Council write to the Road Safety Branch of the Department of State Growth requesting that consideration be given to the allocation of a second School Crossing Patrol Officer to be in attendance and assist with pedestrians using the zebra crossing during peak times.		
		3. The organiser of the petition be advised of the Council's decision.		

Ref	Title	Report / Action	Action Officer	Comments
24	CITY OF HOBART TRANSPORT STRATEGY – ENGAGEMENT REPORT CIC 9/12/2015 Council 9/7/2018 item 14 Council 8/10/2018, item 14	 The report of the Manager Traffic Engineering and the Director City Infrastructure titled <i>Draft Transport</i> <i>Strategy - Engagement Report</i> marked as item 6.1 of the Open City Infrastructure Committee agenda of 19 September 2018 be received and noted. The Council adopt the 9 themes and position statements in the draft strategy. The actions contained in the draft strategy be reviewed in light of the feedback received and a further report be provided. 	Director City Planning	At this meeting the Council adopted the 9 themes and position statements in the draft strategy. The Council also resolved that the actions contained in the draft strategy be reviewed in light of the feedback received and a further report be provided. Report being prepared for late 2019.
25	TAP WATER REFILL PROGRAM Council 6/8/2018, item Council 6/5/2019, item 12	 That the 'Public Drinking Water Facility Upgrade' Program be implemented over a 3 year timeframe, at an estimated cost of \$30,000 per year to be funded from the Solid Waste Strategy and Project Budget Function. (i) The City continue to negotiate with TasWater to enter into a partnership arrangement in respect to the installation costs. Initiatives to reduce the use of single use plastics within the Council's operations continue to be identified and implemented, and the Council 	Director City Amenity	A draft proposal to TasWater has been prepared. Salamanca Market has formally removed single use plastic bags from circulation at the event, which commenced June 2019. The City is progressing in prioritising playgrounds and sportsgrounds for drinking water facilities.

Ref	Title	Report / Action	Action Officer	Comments
		endorse a Waste Reduction Statement of Commitment marked as Attachment C to item 6.3 of the Open City Infrastructure Committee agenda of 17 April 2019.		
		4. The City's playgrounds and sportsgrounds that would benefit with the installation of public drinking water facilities be identified and prioritised as part of the 'Public Drinking Water Facility Upgrade' program.		
		 (i) Investigations also be undertaken to implement currently available technology that can be affixed to existing public drinking water facilities to monitor water usage. 		
26	99 STEPS, WEST HOBART Council 8/10/2018, item 12 Council 6/5/2019, item 14	1. Works be undertaken to improve the amenity and safety of the small set of steps at the top of 99 Steps, West Hobart including the installation of a seat and fence, along with a ramp and new steps on the opposite side of Liverpool Street at an estimated cost of \$25,000 in 2019-2020 to be funded from the City Laneways Access and Lighting Upgrades budget allocation.	Director City Amenity	Design currently underway for the laneway with a planned construction in the 19/20 program Stormwater design to commence in 19/20 with the aim of starting the construction works in 20/21
		 Stormwater works including extension of a stormwater main along Liverpool Street and installation of drainage pits be constructed in 2020-2021 as part of 		

Ref	Title	Report / Action	Action Officer	Comments
		a road and stormwater upgrad project to address flooding iss subject to funding approval in 2020-2021 budget.	e ues, the	
		 Works to fully upgrade the 99 walkway to full compliance wit engineering standards and ins of bicycle channel be consider the development of a City Lan Strategy and Action Plan. 	Steps n tallation ed in eways	
27	SINGLE-USE PLASTICS BY- LAW AND REGULATORY IMPACT STATEMENT	 The Council resolve (by absolution majority) of its intention to make Single-use Plastics By-law. 	ute Director te the City Planning	The Council decision is being actioned.
	Council 4/3/2019, item 12	 The Council delegate authority General Manager to present the Single-use Plastics By-law and Regulatory Impact Statement Director of Local Government certificate of approval, pursuar section 156A of the Local Gov Act 1993. 	r to the he d to the for a ht to ernment	
		3. Subject to a certificate of approfrom the Director of Local Government, the Council deleration authority to the General Managive notice of the proposed by order to advertise a formal public consultation process, whereby law and associated regulatory statement are made available public for inspection and comm	oval gate ger to -law in olic the by- impact to the nent.	

Ref	Title	Report / Action	Action Officer	Comments
		 Following the commencement of the by-law, penalties not be enforced until December 2020. 		
29	PROPOSAL FOR A TRAM DISPLAY AND WORKSHOP FACILITY - HOBART REGATTA GROUNDS	That the concept plans for a proposed tram display and workshop facility, located at the Hobart Regatta Grounds, be endorsed.	Director City Amenity	The remainder of the Council resolution is being actioned.
	Open Council 3/6/2019, item 12	Hobart Tram Restoration and Museum Society Inc be authorised to seek funding opportunities to allow the project to proceed.		
		 (i) Should funding be obtained for the project, the General Manager be authorised to progress any necessary arrangements to allow a development application to be submitted, and to commence lease negotiations over the land that would be the subject of a future report to the Council. 		
30	71 LETITIA STREET, NORTH HOBART - PARTIAL DEMOLITION, SUBDIVISION (ONE ADDITIONAL LOT) AND ALTERATIONS TO CAR PARKING Open Council 17/6/2019, item	The City Infrastructure Committee be requested to address on-street parking in the area of the development.	Director City Planning	The Council decision is being actioned.

Ref	Title	Report / Action	Action Officer	Comments
31	ELIZABETH STREET PRECINCT UPGRADE Open Council 8/7/2019, item 12	 That a draft concept design for the Elizabeth Street Precinct upgrade be developed with consideration of the Project Action Team's principles, desired outcomes and recommendations, as outlined in Attachment A to item 6.1 of the Open City Infrastructure Committee agenda of 19 June 2019. The draft concept design for the Elizabeth Street Precinct upgrade be communicated to Elected Members by way of a briefing, prior to further targeted consultation with key stakeholders, landlords and property owners. A further report be provided to the 	Director City Planning	Concept design work has commenced.
		 Council following key stakeholder engagement and prior to broader community consultation on the draft concept design. 4. A detailed report addressing the potential loss of car parking within the Elizabeth Street Precinct be referred to the Finance and Governance 		
		Committee at the appropriate time.		
32	PROPOSAL FOR A COOPERATIVE RESEARCH CENTRE - WASTE AND PLASTIC POLLUTION	That the City continue to liaise with the University of Tasmania to progress an application for a Waste and Plastic Pollution Cooperative Research Centre (CRC) under the CRC-P Project Grant	Director City Amenity	Local Government Association of Tasmania (LGAT) has been briefed to formalise the request for them to take a lead role.

Ref	Title	Report / Action	Action Officer	Comments
	Open Council 8/7/2019, item 13	Program, funded by the Federal Department of Industry, Innovation and Science, and negotiate with the Local Government of Tasmania to take a lead role with this initiative.		A meeting has been scheduled with UTAS to progress discussions.
33	RESPONSE TO A PETITION - PURA MILK FACTORY, LENAH VALLEY - HEAVY VEHICLES Open Council 8/7/2019, item 14 CIC 24/7/2019, item 6.5	 The Council decline the following requests of the petitioners, on the grounds outlined in the officer's report, listed as item 6.4 of the City Infrastructure Committee agenda of 19 June 2019: 	Director City Amenity	The Council decision is being actioned. Meeting with Pura Milk and Council is being organised. Petitioner has been advised of the outcome of the Council resolution.
		 (i) The immediate cessation of Pura truck movement between the hours of 7pm and 7am in the Augusta Road/Giblin Street corridor. 		
		 (ii) The immediate introduction of a 5-tonne heavy vehicle weight limit in the Augusta Road/Giblin Street corridor. 		
		 (iii) The immediate resurfacing of Augusta Road with noise abating bitumen between Edge Avenue and Giblin Street. 		
		2. The City continue to work with Pura Milk in respect to mitigating the effects of noise from heavy vehicle movements within the Augusta Road/Giblin Street corridor, with a		

Ref	Title	Report / Action	Action Officer	Comments
		further report to be provided to the Council.		
		The Council note the comments of the petitioner in its dealings with Pura Milk in respect to mitigating the effects of noise from heavy vehicle movements within the Augusta Road/Giblin Street corridor.		
		Council officers expedite its discussions with Pura Milk in respect to mitigating the effects of noise from heavy vehicle movements within the Augusta Road/Giblin Street corridor.		
		3. The Council write to the Federal Member for Clark, Mr Andrew Wilkie, to lobby the Federal Government on behalf of the City to seek funding to resurface Augusta Road with noise abating bitumen between Edge Avenue and Giblin Street.		
		4. The petitioners be advised of the Council decision.		
		 (i) The correspondence to include the Council's intent to write to the Federal Member for Clark seeking funding to resurface Augusta Road with noise abating bitumen between Edge Avenue and Giblin Street. 		

Ref	Title	Report / Action	Action Officer	Comments
34	REQUEST FOR SPEED LIMIT REDUCTION IN DEGRAVES STREET AND APSLEY STREET, SOUTH HOBART Open Council 5/8/2019, item 11	 That the Council write to the Transport Commissioner requesting a change to the speed limit on Degraves Street and Apsley Street, South Hobart from the current default urban speed limit of 50 km/h to 40 km/h. 	Director City Planning	Officers are progressing the matter.
		 (i) The submission to include a report detailing the characteristics of the road (as per the requirements of the Transport Commissioner). 		
		2. Consideration of wider area speed limit reductions in residential areas be included as an action in the City of Hobart Transport Strategy Action Plan.		
		3. The management and staff of Child's Play Early Learning Centre communicate to all parents and carers who are responsible for the drop-off and pick-up of children attending the Centre, that dedicated parking spaces for this purpose are available and accessible via Syme Street, South Hobart.		
35	24 ANCANTHE AVENUE LENAH VALLEY - CONSENT TO PARTIALLY BUILD OVER SERVICE EASEMENTS -	 That the Council grant consent, under Section 74 of the <i>Building Act 2016</i>, to the owner of 24 Ancanthe Avenue, Lenah Valley to partially build over the 2.0m wide retaining wall maintenance easement and 3.0m wide & variable 	Director City Amenity	Complete

Ref	Title	Report / Action	Action Officer	Comments
	SECTION 74 BUILDING ACT 2016 Open Council 5/8/2019, item 13	width drainage, pipeline and services easement, as shown on Folio C.T.172457/1, marked at Attachment A to item 6.4 of the Open City Infrastructure Committee agenda of 24 July 2019.		
		 (i) The consent be limited to the proposed works shown on the approved plans under Planning Permit PLN-18-864, marked as Attachment B to item 6.4 of the Open City Infrastructure Committee agenda of 24 July 2019. 		
		 (ii) The Council reserve all rights associated with the Retaining Wall Maintenance Easement, and Drainage, Pipeline and Services Easement, including the right to access the easement to maintain, install, replace, repair or remove any drainage infrastructure. 		
		(iii) The owner of 24 Ancanthe Avenue, Lenah Valley to remain responsible for any reasonable costs incurred by the City in exercising its lawful rights under the easement, including but not limited to the demolition or removal of any obstruction, including any building or		

Ref	Title	Report / Action	Action Officer	Comments
		 structure located over or within the easement. (iv) The owner indemnify the City against any costs or claims arising from building over the easements. 2. Pursuant to Section 22 of the <i>Local Government Act 1993</i>, the Council delegate to the General Manager, the power to consent to building work over or within a service easement in favour of the City, in accordance with Section 74 of the <i>Building Act 2016</i>. 		
36	CAMPBELL STREET (BETWEEN LIVERPOOL STREET AND COLLINS STREET) - TRIAL TRAFFIC MANAGEMENT ARRANGEMENTS FOR ROYAL HOBART HOSPITAL K-BLOCK Council 9/9/19, item 15	That a trial of the traffic and parking arrangements for Campbell Street between Liverpool Street and Collins Street be approved for an initial period of at least 12 months from the opening of the Royal Hobart Hospital K Block. A report on the operation of the traffic management and parking arrangement be provided following the 12 month trial to enable Council to consider a more permanent arrangement in Campbell Street. The Council authorise the General Manager to negotiate with the Royal Hobart Hospital administration for a contribution towards upgrading the reinstated footpath (in Campbell Street	Director City Planning	The Council decision is being actioned.

Ref	Title	Report / Action	Action Officer	Comments
		adjacent to the Royal Hobart Hospital) from asphalt to unit paver materials.		
37	STATE GOVERNMENT DRAFT WASTE ACTION PLAN - RELEASE FOR COMMENT Council 9/9/2019, item 16	 That the Council endorse the Draft Waste Action Plan Actions Assessment to form the basis of the City's submission to and its discussions with the Local Government Association of Tasmania (LGAT) to inform LGAT's submission on the Draft State Government Waste Action Plan on behalf of all Councils. (i) A copy of the final submission lodged by the Local Government Association of Tasmania be provided to the Elected Members. The General Manager be authorised to 	Director City Amenity	A copy of the final submission lodged by the Local Government Association of Tasmania has been provided to the Elected Members
		the State Government Waste Action Plan into the Greater Hobart Act 2019 'Work Program'.		
38	INSTALLATION OF TRAFFIC SIGNALS - INTERSECTION OF COLLINS STREET AND MOLLE STREET	That the installation of traffic signals at the intersection of Molle Street and Collins Street to improve the safety and amenity of pedestrians and cyclists be supported.	Director City Planning	The Council decision is being actioned.
	Council 9/9/2019, item 17	 (i) Subject to the proposed bulbing in Molle Street being reduced in length to accommodate a further two car parking spaces. 		
		The General Manager be authorised to negotiate with the landowner of 40 50		

Ref	Title	Report / Action	Action Officer	Comments
		Molle Street for the incorporation of the existing driveway and associated 'right of way' utilised by pedestrians and cyclists into the proposed traffic signals, including the transfer of any land necessary to facilitate that installation.		
		A further report be provided on the possible use of different surface treatments to highlight the pedestrian crossings.		
39	LIVERPOOL STREET, HOBART - EMBANKMENT REMEDIATION Open Council 7/10/2019, item 11	Remediation works of the flood damaged section of 367-377 Liverpool Street, Hobart retaining the existing Liverpool Street road geometry, addressing drainage issues and rehabilitating the road pavement, at an estimated cost of \$370,000, be approved.	Director City Amenity	Development of Detailed Designs in accordance with the Council decision is underway
		Funding of \$92,000 be allocated from the City's Roads Strategy and Projects Budget Function in the 2019-20 Annual Plan to augment the funds to be provided by the Federal Government Natural Disaster Relief arrangement.		
40	WATER BOTTLE REFILL PROGRAMS - A REVIEW OF THE CHOOSE TAP PROGRAM Open Council 7/10/2019, item 12	The Council adopt the 'Tap' App program to encourage the refilling of water bottles, as a means to reduce the level of use of plastic water bottles and subsequent risk of single-use water bottles becoming litter.	Director City Amenity	The Council decision is being actioned.

Ref	Title	Report / Action	Action Officer	Comments
		 (i) The initiative be promoted to the City's relevant retailers and City residents and visitors. 		
		 (ii) The location of the City's water drinking fountains be loaded into the App. 		
		The cost of the program, estimated at \$1,100 per annum (noting \$0 cost of the App, an estimated cost of \$300 for the printing of promotional stickers with the balance being anticipate staff costs to support the program), be funded within the City's Cleansing and Solid Waste Budget Function in the 2019-20 Annual Plan.		
	454-462 CHURCHILL AVENUE, SANDY BAY - SHARED ACCESS Open Council 4/11/2019, item 11	 That: 1. The report titled '454-462 Churchill Avenue, Sandy Bay - Shared Access' be received and noted. 2. The following works be implemented on the shared 	Director City Amenity	The Council decision is being actioned
		access servicing 454 to 462 Churchill Avenue, Sandy Bay:		
		 (i) Installation of a skid/slip resistant surface on the shared access; 		
		 (ii) Construction of a small (~16m²) area of concrete hardstand within the road reservation opposite the 		

Ref	Title	Report / Action	Action Officer	Comments
		driveways to 454 and 456 Churchill Avenue to provide extra turning/manoeuvring area for vehicles at the top of the shared access;		
		 (iii) Removal of steps leading into 456 Churchill Avenue located within the highway reservation; 		
		 (iv) Installation of traffic markers (flexible bollards) near the driveway entrance to 454 Churchill Avenue to assist drivers when manoeuvring in and out of this driveway; and 		
		 (v) Installation of a small 200mm high retaining structure at the edge of driveway and minor regrading of the driveway entrance to 454 Churchill Avenue to provide some improvement to the cross fall of the driveway. 		
		 Further detailed design to be carried out for construction documentation. 		
		 The General Manager be delegated authority to negotiate an occupation licence to allow 		

Ref	Title	Report / Action	Action Officer	Comments
		for a fence and gate at the ream of 462 Churchill Avenue, in a location that does not impact o the turning manoeuvring of vehicles in the road reservation		
		5. The General Manager be delegated authority to negotiate the relocation of the rear driveway of 462 Churchill Avenue, subject to the provisio of a suitable area adjacent to the driveway entrance of 462 Churchill Avenue for placemen of wheelie bins for 454, 456, and 458 – 460 Churchill Avenue.		
		 The costs associated with the proposal, estimated at \$90,000 be funded from the City's Road Strategy and Projects Budget Function within the 2019-20 Annual Plan. 		
		 The owners of 454, 456, 458- 460, and 462 Churchill Avenue Sandy Bay to be notified of Council resolution. 		

9. **RESPONSES TO QUESTIONS WITHOUT NOTICE**

Regulation 29(3) *Local Government (Meeting Procedures) Regulations 2015.* File Ref: 13-1-10

The General Manager reports:-

"In accordance with the procedures approved in respect to Questions Without Notice, the following responses to questions taken on notice are provided to the Committee for information.

The Committee is reminded that in accordance with Regulation 29(3) of the *Local Government (Meeting Procedures) Regulations 2015*, the Chairman is not to allow discussion or debate on either the question or the response."

9.1 McKellar Street, South Hobart - Shared Use of Walkway File Ref: F19/129348; 13-1-10

Memorandum of the Director City Amenity and the Director City Planning of 15 November 2019.

Delegation: Committee

That the information be received and noted.



City of HOBART

Memorandum: Lord Mayor Deputy Lord Mayor Elected Members

Response to Question Without Notice

MCKELLAR STREET, SOUTH HOBART - SHARED USE OF WALKWAY

Meeting: City Infrastructure Committee

Meeting date: 25 September 2019

Raised by: Alderman Briscoe

Question:

Could the Director please advise if there are plans currently being considered by the City in relation to sealing, installing markings and declaring the pathway as 'shared use' for bicycles on the pathway diverting from the Rivulet into McKellar Street, South Hobart as it is prohibited for bike riders to continue on the Rivulet pathway beyond this point?

Response:

The suggestion of marking the roadway as 'shared-use' has been discussed and considered by the City's Traffic Engineering unit that as the roadway carries very low traffic volumes and is a dead end street, it is considered unnecessary to install any additional signage.

In respect to the adjoining gravel footpath along the side of the street, it is not considered viable to seal the path as significant structural works to support and retain the structure along the graded incline it is currently positioned beside would require significant investment.

As signatory to this report, I certify that, pursuant to Section 55(1) of the Local Government Act 1993, I hold no interest, as referred to in Section 49 of the Local Government Act 1993, in matters contained in this report.

Neil Noye DIRECTOR CITY PLANNING

Glenn Doyle
DIRECTOR CITY AMENITY

Date: File Reference: 14 November 2019 F19/129348; 13-1-10

10. QUESTIONS WITHOUT NOTICE

Section 29 of the *Local Government (Meeting Procedures) Regulations 2015.* File Ref: 13-1-10

An Elected Member may ask a question without notice of the Chairman, another Elected Member, the General Manager or the General Manager's representative, in line with the following procedures:

- 1. The Chairman will refuse to accept a question without notice if it does not relate to the Terms of Reference of the Council committee at which it is asked.
- 2. In putting a question without notice, an Elected Member must not:
 - (i) offer an argument or opinion; or
 - draw any inferences or make any imputations except so far as may be necessary to explain the question.
- 3. The Chairman must not permit any debate of a question without notice or its answer.
- 4. The Chairman, Elected Members, General Manager or General Manager's representative who is asked a question may decline to answer the question, if in the opinion of the respondent it is considered inappropriate due to its being unclear, insulting or improper.
- 5. The Chairman may require a question to be put in writing.
- 6. Where a question without notice is asked and answered at a meeting, both the question and the response will be recorded in the minutes of that meeting.
- 7. Where a response is not able to be provided at the meeting, the question will be taken on notice and
 - (i) the minutes of the meeting at which the question is asked will record the question and the fact that it has been taken on notice.
 - (ii) a written response will be provided to all Elected Members, at the appropriate time.
 - (iii) upon the answer to the question being circulated to Elected Members, both the question and the answer will be listed on the agenda for the next available ordinary meeting of the committee at which it was asked, where it will be listed for noting purposes only.

11. CLOSED PORTION OF THE MEETING

RECOMMENDATION

That the Committee resolve by majority that the meeting be closed to the public pursuant to regulation 15(1) of the *Local Government (Meeting Procedures) Regulations 2015* because the items included on the closed agenda contain the following matters:

- Information that was provided to the Council on the basis that it be kept confidential;
- Contract for the supply of services; and
- Interest in land.

The following items are listed for discussion:-

Item No. 1	Minutes of the last meeting of the Closed Portion of the Committee Meeting
Item No. 2	Consideration of supplementary items to the agenda
Item No. 3	Indications of pecuniary and conflicts of interest
Item No. 4	Committee Action Status Report
Item No. 4.1	Committee Actions - Status Report LG(MP)R 15(2)(g)
Item No. 5	Questions Without Notice