

Victoria Walks Inc. Level 7, 225 Bourke Street Melbourne VIC 3000 P: 03 9662 3975 E: info@victoriawalks.org.au www.victoriawalks.org.au Registration No. A0052893U



Strathmore Walkability Assessment

1. Introduction

1.1 20-Minute Neighbourhood Pilot Program

Strathmore, in the City of Moonee Valley, is a part of the State Government's *20-Minute Neighbourhood Pilot Program*. The Program seeks to create a city of inclusive, vibrant and healthy neighbourhoods where residents can access most of their daily needs including local services and facilities within a 20-minute journey from home.

Neighbourhoods perform a central role in our city and represent an integral part of community life and local living. *Plan Melbourne 2017- 2050* outlines a concept of '20-minute neighbourhoods' to help create more healthy, cohesive and socially sustainable communities.

The 20-Minute Neighbourhood Pilot Program is currently being led by the Department of Environment, Land, Water and Planning (DELWP) in partnership with Victoria Walks, the Heart Foundation and select councils to test the concept of a 20-minute neighbourhood based on hallmarks established in *Plan Melbourne*. Neighbourhoods include:

- 1. South Croydon, Maroondah City Council
- 2. Glengala, City of Brimbank
- 3. Strathmore, Moonee Valley City Council.

1.2 Strathmore – description

The Strathmore centre is divided by the railway line to Craigieburn into two sub-centres of quite different character.

Woodland St

On the western side of the railway line, the shops on Woodland St have a homely, low-key feel. Shops and services available are health spa, hairdressers (3), medical centre, pharmacy, skin clinic, osteopathy, podiatrist, florist, real estate, bakery, fish and chips, café, pizza restaurant and a small bottleshop combined with general store. The amount of car parking provided is modest, with no major off-street car parks, so it does not dominate the space. Some public seating is provided on the fairly wide footpaths, along with rubbish bins.

The speed limit on Woodland Street in the centre is 40 km/h, but this is not generally reflected in the design of the roadway, which is wide and straight (the width allows four lanes on Woodland St to the west of Napier St). Woodland St provides access to Pascoe Vale Rd heading north, via

Pascoe Ave and is a Declared (Arterial) Road, with traffic volumes averaging 3,300 vehicles per day in each direction.¹

St Vincent de Paul Primary School sits on the north side of Woodland St immediately west of the centre. A staged (two leg) school crossing (operating at school times only) is the only existing pedestrian crossing in this part of the centre. West of the school, the speed limit on Woodland St is 60km/h.

Pascoe Vale Rd

On the eastern side of the railway line, a variety of businesses line Pascoe Vale Rd, which is one of the main north-south arterials of the northern suburbs, with correspondingly high traffic speed and volume (average 11,000 vehicles per day heading south and 12,000 northbound in 2017).¹ The centre pre-dates the age of auto-dependence, so some of the businesses front the street in a traditional, pedestrian friendly manner. However, over time more auto-oriented business development has occurred (including a service station neighbouring the railway station), so off-street car parking and vehicle access impact on pedestrian amenity, in addition to the traffic on the roadway itself. Businesses in this part of the centre include plumbing supplies, Thai restaurant, a hotel, gymnasium, accounting services, automotive and pet supplies.

Pascoe Vale Rd is generally two traffic lanes in both directions, but in the centre itself some people take the opportunity to park on the street, outside clearway times. This on-street parking effectively narrows the road and provides a buffer between the traffic and people walking on the footpath, substantially improving pedestrian amenity.

The only safe opportunity to cross Pascoe Vale Rd in the centre are the traffic signals at the intersection with Woodland St, next to the station. In the wider study area there is a pedestrian overpass connecting Strathmore Secondary College to Progress St; signals at Moreland Rd; and pedestrian operated signals just to the north of Raleigh St. However, the latter two sit outside the core walkable catchment of 800m.

Other features

The Strathmore Railway Station provides a unifying destination in the middle of the centre, as well as providing the primary pedestrian connection across the railway line. In addition to this, there is an underpass at Glenbervie Station to the south-west and on the northern side of the centre Pascoe Vale Rd also crosses the railway line on an overpass, with a footpath on the eastern side of the road only.

Other features and destinations likely to impact on walking in and around the catchment and potentially reduce walking to Strathmore include:

- To the south-west, Glenbervie Station is only about a 1km walk from Strathmore, on either side of the railway line. There are a small number of existing and proposed (in a newly constructed apartment development) businesses in this centre.
- Residents of some areas in the south-west of the catchment are more likely to walk to the Essendon activity centre.
- Residents in the north-west of the catchment are more likely to walk to the shops on Napier St around Lloyd St, although they may still access the station at Strathmore.
- CityLink presents a barrier to walking from the more eastern parts of the catchment.

¹ VicRoads (2018). Traffic Volume Data for Victoria, April 2018.

 On the eastern side of CityLink there is a small set of shops on Coonans Rd (south of Parkstone Ave). Residents in this area are more likely to utilise these shops, although they may still access the station at Strathmore.

The residential areas in the catchment are generally pleasant for walking, with low traffic volumes and good footpaths. Street tree coverage varies, but is generally either currently good or with existing smaller trees that appear to have the potential to grow into larger trees providing more shade in the future.

Topography is likely to be a significant factor for walking in much of the catchment. The implications of this are discussed in subsequent sections where applicable.

1.3 Assessment process

The primary routes selected for auditing were based on the following considerations:

- All of the routes with potential for more than 600 trips (yellow, orange and red on the demand map in **Figure 1**).
- Some streets within the core 800m catchment that were predicted to support between 200 and 600 potential trips Upland Rd, Downes St, Hillsyde Parade and Cameron Rd.
- Streets immediately surrounding the secondary destinations of St Vincents Primary School and Glenbervie Station.

A map of routes identified for assessment can be seen in **Figure 2**. It is notable that while the walkable catchment for Strathmore sits largely in Moonee Valley, much of the catchment extends into Moreland.

Victoria Walks conducted on-site walking assessments during May and June 2018 to report on walkability in the area. The assessment was conducted during daylight hours and did not include street lighting.

As a result of on-site consideration of topography, Amelia Ave and The Crossway were identified as additionally important routes and assessed accordingly. Given the lower walking amenity encountered on Pascoe Vale Rd, the assessment was terminated at Moreland Rd (900m from the centre) rather than continuing further south.

The assessment generally adopts an 8-80 Cities approach in considering the potential for children, older people, people with limited mobility and parents with prams to walk to the centre, in addition to able-bodied adults.

To support the on-the-ground assessment, assessors have also:

- Reviewed CrowdSpot data relevant to the area
- Reviewed <u>VicRoads Declared Roads</u> information to see that Pascoe Vale Rd and Woodland St are the only roads managed by VicRoads in the core study area.
- Considered other relevant information provided to Victoria Walks by the City of Moonee Valley.

This Walkability Assessment Report identifies the issues and provides preliminary recommendations for the Strathmore area. Victoria Walks will work with council staff to refine and develop infrastructure treatment options and recommendations following the delivery of this report. This will support councils to develop Pedestrian Infrastructure Improvements Reports.

PPN Demand Map

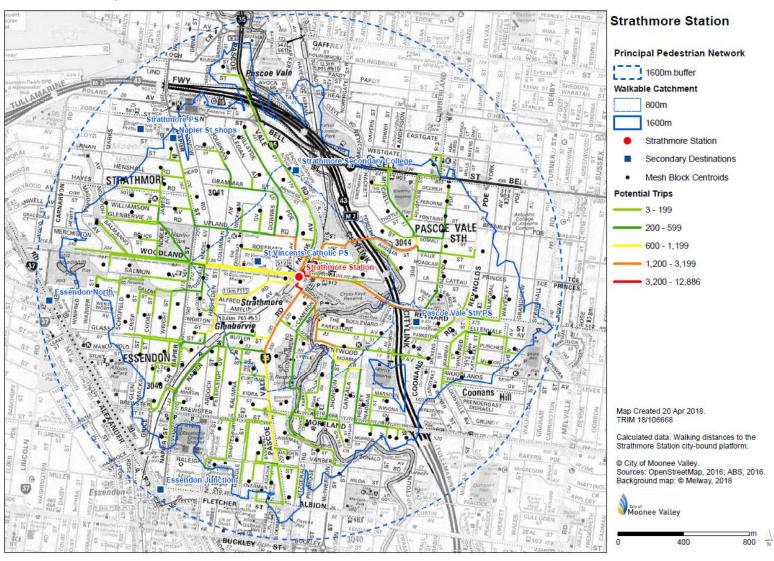


Figure 1. Estimated demand for walking routes to Strathmore centre

Routes identified for Assessment

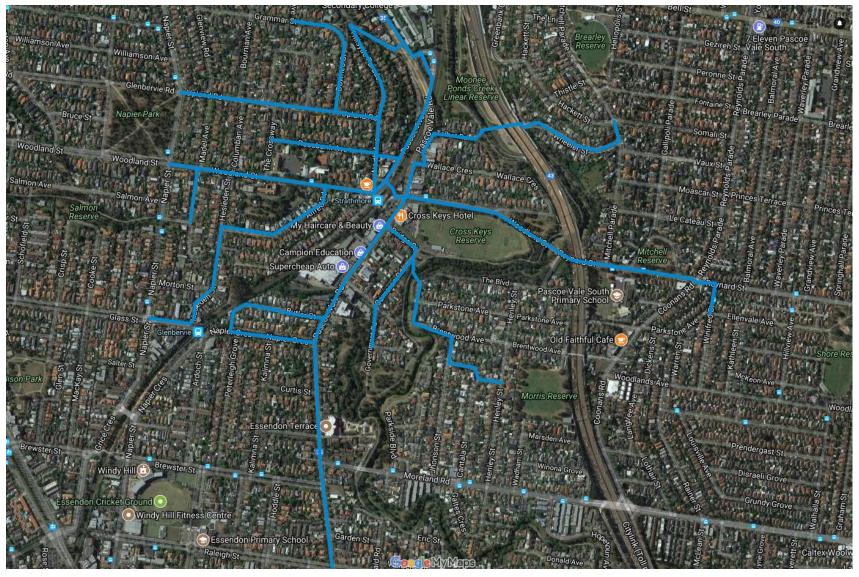


Figure 2. Key routes identified for assessment (prior to on-site evaluation)

2. Walkability Map and detailed recommendations

This report is supported by an <u>online Walkability Map</u>. The Walkability Map details the walkability assessment, shows areas for improvement and was the basis of this report.

The table in Section 5 sets out all the site-specific issues identified in the assessment and the primary recommendations in response to those issues. That section allocates a priority (high, medium, low) to each of the recommendations.

The online Walkability Map provides further detail – the exact location and photograph(s) to illustrate the issue.

In addition to this log there is a list of minor maintenance issues at **Appendix 1**.

3. Assessment overview

The issues identified in the assessment tend to be on the main roads, where traffic volumes and speeds are generally higher. Perhaps the most common issue identified in the assessment is the potential for high speed turning from main roads. Victoria Walks research <u>Safer Road Design for Older Pedestrians</u> identified right-turning and to a lesser extent left-turning vehicles (usually failing to give way) as the most common crash scenarios.

Additional work involving Council's engineering/transport staff may be needed to fully develop an approach to suit the local area, but we have provided preliminary recommendations for improvement.

This section provides an overview of the most notable issues for each area assessed. Where applicable, additional recommendations are identified to address issues not entirely captured in Section 5.

3.1 Woodland Street

The City of Moonee Valley has existing plans to substantially upgrade the key stretch of Woodland St between Napier St and Strathmore Station including:

- Substantial new central medians
- Kerb extensions at a number of intersections
- Raised platforms for the school crossing to St Vincent de Paul PS and a raised platform for the crossing of Alfred Rd.
- Kerb extensions, median treatments and three zebra crossings at the intersection of Woodland St and Pascoe, Amelia and North Avenues, next to the Station.

These works will dramatically improve pedestrian safety and amenity, addressing most of the key issues raised in our audit of this area. We have made a number of other relatively minor recommendations for further improvements (Points 20, 23, 26 and 28). Our most significant recommendation is to provide public toilets and drinking fountain, as there are no facilities like this in the centre. Discussion with café staff suggested that demand for toilets is an issue and that toilets were previously provided at the Station, but this is no longer the case.

There is a need for a pedestrian crossing of Woodland St at the western end of the shops, to ensure that people walking to the centre from the west are able to conveniently and safely access shops on the opposite side of the road. This is particularly important for vulnerable pedestrians – children, older

people and those with limited mobility. It would also define the western edge of the centre and encourage drivers to slow as they move from a 60 to 40km/h speed limit.

This crossing would ideally be provided on the eastern side of Alfred Rd to cater to people using that street. However, given the existing school crossing and the need to provide access to the school, it is perhaps more logical to adapt that crossing to serve both purposes. The current MVCC plan is to provide raised platforms for the existing crossing. This should become a raised zebra to meet the needs of all users, at all times. From a pedestrian perspective the existing configuration of a two-leg, staged crossing is highly undesirable as (depending on the direction they are walking) it may require people to double-back on themselves. This would stop many people from using it and a direct crossing is therefore preferable.



Figure 3 Existing school crossing of Woodland Street, at Saint Vincent de Paul PS

Additional recommendation

1. Adapt existing plans to replace the existing school crossing with a raised zebra crossing extending directly across Woodland St (priority high).

3.2 North-west of the centre

The residential areas in the north-west of Strathmore are generally very pleasant for walking with nice houses and gardens, street trees, good footpaths and limited traffic. This area is however higher than the centre and the hilly topography is likely to impact on walking patterns and deter walking generally for some people.

From the centre, Woodland St slopes fairly steeply up to The Crossway, before sloping down again to Napier Street. This is likely to deter walking to the centre along Woodland St from the west. For residents around Glenbervie Rd, for example, they would probably be more likely to walk to the centre via Upland Rd and The Crossway rather than Napier Park and Woodland St.

It is notable that there is no pedestrian crossing of Napier Street between Woodland St and Lloyd St, a distance of approximately 800m. Considering the factors above, we have recommended a pedestrian crossing of Napier Street at Upland Rd.

Our audit found what appears to be an entrance to St Vincent de Paul PS on The Crossway and comments in the CrowdSpot engagement seem to confirm this, also raising it as a safety concern.

There are school crossings on Woodland St and Rosebank Ave, but no pedestrian facilities serving The Crossway. This tends to confirm the need for a crossing of Upland Rd at The Crossway, to serve both school children and general pedestrian movement to the centre.

Also notable in this area is the absence of footpaths on either side of Wickham Grove, which is likely to force anyone with a wheeled device to travel on the roadway. A footpath should be provided on one side or alternatively the street should be managed as shared space.

3.3 Pascoe Ave and Strathmore Secondary College

The assessment raises a number of concerns around access to the Secondary College. There is an existing overpass across Pascoe Vale Rd but discussion with a small number of students suggest many do not use it because it is quicker to cross the road at grade. A 40km/h limit applies during school times (otherwise 60km/h) but the design of the road does not reflect this at all, in fact the railway overpass gives it an expressway character.

Pascoe Ave between the school and the Strathmore centre is permanently 40 km/h but the design does not seem to reflect that.

We have made a number of detailed recommendations in this area, but consultation with the school is required before confirming solutions.

Separate to issues related to the school, the PPN analysis suggests a strong demand to cross Pascoe Ave on the northern side of the station. This can be addressed with a kerb extension and median treatment, given existing and planned crossings nearby.

We have also recommended closing the northern link between Pascoe Ave and North Ave and adding this to the public space in the centre.



Figure 4. Pascoe Vale Rd from ped overpass at Strathmore SC, illustrating left turn into Pascoe Ave



Figure 5. Pascoe Ave (existing crossing)

3.4 Pascoe Vale Rd

The centre on Pascoe Vale Rd presents a significant challenge and illustrates tensions between current planning and transport objectives. The large apartment buildings that have recently been developed reflect Strathmore as a destination itself and with excellent access to other destinations via public transport. In practice, however, Pascoe Vale Rd is currently managed for its traffic movement function, not to get people to the centre but to get them through it as fast as possible.

Despite the fact that it is not very pedestrian friendly, we observed a range of people walking along Pascoe Vale Rd in the centre and further south, tending to confirm the PPN analysis suggesting it is a key pedestrian route to the centre. This included school children as young as about 10 years old, walking independently.

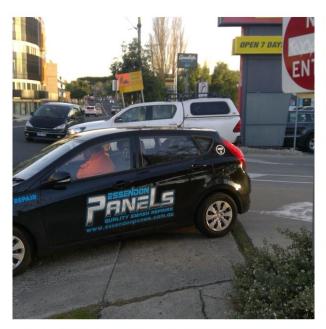








Figure 6. Views of Pascoe Vale Rd in the Strathmore Centre

We have made a range of detailed recommendations in Section 5 that would improve the pedestrian experience, particularly crossing side streets and commercial accessways. These recommendations would not substantially alter the character of Pascoe Vale Rd or compromise its through-traffic function.

However, if this is to operate as a genuine pedestrian-oriented centre more transformative change is required, creating a sense of destination.

The current speed limit through the centre is 60km/h. The potential to reduce this limit should be considered, in conjunction with suggestions below.

There is a need to provide opportunities to cross Pascoe Vale Rd to provide easy access to businesses. With the current high speed, high traffic environment the most practical method may be to provide a pedestrian crossing at the southern edge of the centre, enabling people walking to it from the south to cross the road to access businesses on the other side. At the current speed limit this would need to be a pedestrian operated signal (POS), but a raised zebra would be preferable and could be applied if the speed limit was reduced to 50km/h or less. Note that we have separately recommended providing a crossing at Napier Cres (about 200m further south), which would reduce but not necessarily negate the need for a crossing at the southern edge of the centre

While not always exercised, there is some opportunity for people to park cars on the side of Pascoe Vale Rd. This helps provide a sense of destination, can reduce the effective width of the road, and provides a buffer between walkers and traffic. However clearways currently apply, meaning provision for four lanes of traffic is retained. If clearways were removed, a range of pedestrian and amenity improvements could be applied including kerb extensions, median treatments and streets trees or other landscaping. This would dramatically improve the centre and reduce the need for an additional formal crossing. While less preferable, if removing clearways is not possible other options like gateway treatments, landscaping and signage should be explored to try to create a sense of arrival at either end of the centre.

It would also be useful to work with key landowners to facilitate redevelopment of sites in a more pedestrian friendly way.

At the time of assessment the eastern side of Strathmore Station was being redeveloped, apparently to provide improved and additional car parking. Victoria Walks does not have access to the plans for the redevelopment, but it seems unlikely to significantly improve the pedestrian amenity of the station.

Additional recommendations

- 2. Undertake a holistic urban design exercise, in collaboration with VicRoads, to explore additional opportunities to create a sense of destination, improve the amenity of the centre and facilitate crossing of Pascoe Vale Rd in the centre, as discussed above (priority high).
- 3. Maintain provision for on-street car parking on Pascoe Vale Rd (priority medium).

3.5 South-west and Glenbervie Station

Once again, the residential streets in the south-west of the catchment are generally pleasant for walking, with the notable exception of Napier Cres, which is a traffic link over the railway line. Speed humps on this street only seem to slow the traffic to a limited degree. Unfortunately, Napier Cres is also the key street for pedestrian access to the Station from the east.

There is no formal provision to cross Napier Cres to access the station from the east. There is a zebra crossing at the western end of the station, but it is not on a key desire line and on-site observation suggests most people do not use it. We have recommended a range of improvements in Section 5.

There is no crossing of Pascoe Vale Rd between Moreland Road and Woodland St, a distance of about 900 metres. We have recommended signalising the intersection of Pascoe Vale Rd and Napier Cres to provide a crossing opportunity, particularly for people wanting to access Glenbervie Station via Napier Cres, and to address our concerns about pedestrian safety at that intersection, including the potential to cross Napier Cres.

On the western side of the railway line there are fewer issues of concern, with generally less traffic, but topography is an issue. In particular, Hesleden St slopes down from Woodland St to Amelia Ave, before sloping back up to Glenbervie Station. This means that residents in the vicinity of Morton St may be

more likely to walk to the Strathmore centre via Amelia Ave rather than Alfred Rd, so this street was also assessed.

3.6 East of Strathmore

Streets to the east of Strathmore are mostly flat in the vicinity of Moonee Ponds Creek and generally pleasant for walking once you get off Pascoe Vale Rd. The exception is Reynard St (which becomes Woodland St) as this is a significant traffic route. CityLink is not necessarily a physical barrier to walking from the east, but it is likely to be a psychological one. Traffic noise and the lack of shelter from the weather makes walking along Reynard St over the Freeway unpleasant. Notwithstanding this, we did witness a small number of people walking over the Freeway.



Figure 7. Deeply flooded pedestrian underpass beneath CityLink to access Wheeler St

Talbot Rd and Wheeler St was identified as a key potential route in PPN analysis, but we found that the underpass beneath CityLink was so heavily flooded that it was impossible to use. Discussions with a person on-site suggested this is usually the case. The apparent neglect of this issue would seem to reflect the typically low priority afforded to walking.

In addition, Wheeler St is very steep and in the absence of clear alternative routes, people may simply be discouraged from walking to the Strathmore centre, from points further east.

Areas east of Moonee Ponds Creek are in the City of Moreland, rather than Moonee Valley.

4. General Issues

This section outlines a number of general issues and observations that apply to the broader area rather than specific locations.

4.1 Increasing housing density

Increasing density in the walkable catchment of the activity centre would increase the population within walking distance of Strathmore and surrounds. People are more likely to walk if they see others walking and there is a safety in numbers effect that means increasing population is likely to increase walking.

Notwithstanding this, it is important to ensure that residential development does not 'crowd out' existing business or commercial development that might improve the range of services available in the centre. For example, a supermarket would be a much more valuable addition to the centre than another apartment building.

4.2 Speed limit reduction

Pedestrians are at greatest risk of excessive or inappropriate vehicle speed. This is discussed in the Curtin-Monash Accident Research Centre's fact sheet Improving Pedestrian Safety. The risk of pedestrian death rises exponentially with collision speeds beyond 30 km/h. It is estimated that less than 10% of pedestrians would die when struck by a vehicle travelling at 30 km/h, compared with fatality rates of 26% at 40 km/h and over 80% at 50 km/h.

A reduction in speed limits on local roads is predicted to have only a minor impact on average travel time (<u>Social Cities</u> p.38). Longer driving trips will largely take place on arterial roads.

A general speed limit reduction may be particularly useful in encouraging walking to St Vincent de Paul PS.

Additional recommendation

4. Consider a general speed limit reduction for local streets in the study area (priority medium).

4.3 Wayfinding signage and marketing

Residents living within easy walking distance of the centre may not be conscious of that fact. This is likely to be particularly true of people living on the eastern side of Moonee Ponds Creek (in Moreland). People walking through the area along the Moonee Ponds Creek may also be unaware of how close Strathmore is. The limited amount of existing wayfinding signage is either alerting people to other destinations or targeted at cyclists.

Given Strathmore is a centre of 'two halves,' it is likely that many residents are conscious of the shops on 'their side' of the station, but not the businesses on the other side of the railway line.

Providing wayfinding signage with simple messages like "Strathmore, 10 minutes walk" is likely to help people in the 400-1200 metre range reconceptualise the potential to walk to the centre. Highlighting businesses on the 'other side' of the station might require a marketing campaign or similar.

Additional recommendation

5. Install wayfinding signage on key routes to the centre and consider opportunities to promote businesses on 'the other side' of the centre (priority high).

4.4 Public art

This assessment has identified a number of locations where blank walls create unattractive public spaces in key locations for walking. We have recommended exploring the potential to create murals on blank walls to beautify the space on Talbot Rd (point 7), the railway station underpass (point 64) and the Pascoe Ave underpass beneath Pascoe Vale Rd (point 69). All of these locations are within easy walking distance of Strathmore Secondary College and might be excellent projects for senior school art students.

4.4 Supermarket

While there are a range of goods and services available in Strathmore, there is no supermarket or equivalent (eg butcher and greengrocer) to meet residents' daily needs.

A supermarket would be a transformative addition to the centre. There may be an opportunity to redevelop a site or combination of sites on Pascoe Vale Rd to provide a supermarket. It would be important to develop the supermarket in a pedestrian-friendly way, without the extensive car parking normally required by the Victoria Planning Provisions.

Additional recommendation

6. Work with supermarket developers to explore the potential to construct a supermarket in the Strathmore centre with pedestrian-oriented design and Planning Scheme car parking requirements waived or substantially reduced (priority high).

5. Strathmore Walkability Assessment – specific issues

This section provides a list of notable issues taken from the <u>online Walkability Assessment Map</u>, the reference numbers relate to those in the map. To find the location of any of the points in the table below, simply click on it in the list on the online map and it will be highlighted.

In addition to this log there is a list of minor maintenance issues found at Appendix 1.

Most of the recommendations in the table would need to be implemented by transport or traffic engineering functions. Any issues likely to require implementation by other council functions are noted in the 'non-transport' column.

Note: Points in italics in the table below are located in the City of Moreland, not Moonee Valley.

H = High priority M = Medium priority L = Lower priority N = Not a priority SFI = Subject to further investigation

NA = No action needed

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 1. Narrow footpath		Narrow footpath makes walking side by side or in groups (which is likely for school access) difficult. Slope to the south makes expansion on that side difficult, but plenty of road width available	Consult Pascoe Vale South PS. Widen footpath by narrowing road	SFI	
Point 2. Wide street	Reynard St	Geometry allows turning at speed, which is a concern given proximity to school entrance. No central pedestrian refuge	Consult Pascoe Vale South PS. Kerb extension(s) to narrow crossing and reduce turning speed; and/or construct pedestrian refuge	SFI	
Point 3. Wide street	Reynard St	Geometry allows turning at speed, which is a concern given proximity to school entrance. Narrow pedestrian refuge	Consult Pascoe Vale South PS. Kerb extension(s) to narrow crossing and reduce turning speed	SFI	
Point 4. Unpleasant, poor ramps	Reynard St	This is a generally unpleasant area to walk, with the footpath immediately adjacent to traffic. At this intersection the ramps are steep and not aligned to cross Turnbull Drive directly.	Reconfigure ramps	L	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 5. Open intersection	Woodland St (east)	The wide expanses of asphalt give the feeling that vehicles could come from anywhere	Consider options including creating raised medians in areas currently line-marked; and realigning path and crossing to encourage walking directly across Wallace Cres	L	
Point 6. Poor visibility	Wallace Cres	Poor visibility when crossing Wallace Cres from the north due to vegetation. Potential for vehicles to enter at speed from Pascoe Vale Rd.	Raised threshold across Wallace Cres. Trim vegetation	Н	
Point 7. Narrow footpath, blank wall	Talbot Rd	Footpath on Talbot Rd is very narrow. Street feels dark and enclosed - large blank wall an opportunity for mural or similar.	 Widen footpath on west side of Talbot Rd). Commission mural on blank wall. 	M	Transport and Community development
Point 8. Pleasant street	Talbot Rd	This section of Talbot Rd is quite pleasant for walking	No action required	NA	
Point 9. Nice street	Albert Rd	Good walking conditions, street trees on Albert Rd	No action required	NA	
Point 10. Steep slope	Hesleden St	Hesleden St slopes significantly down to Amelia Ave	No action required	NA	
Point 11. Missing crossing	Glass St	no crossing of Glass St, even though crossings of Napier St on both legs	Install zebra crossing	М	
Point 12. Wide Street	Glass St	Glass St is too wide at this point for a small centre with shops, railway station	Install pedestrian refuges or median treatments, ideally including street trees	M	
Point 13. Key desire line	Glass St	This is a key desire line to cross to the station, but visibility for peds is poor both directions	Install raised zebra crossing	М	
Point 14. No footpath	Amelia Ave	No footpath on north side of Amelia until #1	Install footpath	L	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 15. No pram ramp	Amelia Ave	No kerb ramp on one side. Given absence of footpath around the corner, this is a desirable crossing location	Install kerb ramp	М	
Point 16. Footpath ends	Amelia Ave	No footpath on railway side of Amelia. No kerb ramp immediately opposite, and slope in nature strip, although driveway approx 4m offset	Ideally construct footpath on south-east side of Amelia Ave	N	
Point 17. Unpleasant	Amelia Ave	Bins, high and poorly maintained fence, poorly maintained nature strip, creates generally unpleasant feel	Discuss management of bins, nature strip etc with relevant land owners/managers. Consider long term redevelopment potential	L	Economic development
Point 18. Poor exit	Amelia Ave	Access to station, but no clear path of travel to reach footpath on other side (no footpath on station side)	Install raised zebra crossing or, if works at Woodland St intersection make this redundant, install kerb ramp opposite station access	Н	
Point 19. Intersection issues	Woodland St	Wide intersection allowing fast and unpredictable vehicle movement, with complicated line marking. Sight lines can be obscured by vehicles. No formal crossings to access station	Install zebra crossings, kerb extension and median treatments, as proposed by MVCC	Н	
Point 20. Steps	Woodland St	Steps down to road a potential fall hazard?	Install fence at top of steps to stop accidental movement onto the steps from footpath, with regular gaps to allow access	L	
Point 21. Facilities	Woodland St	Seats and bins provided. Growth of street trees restricted by location. No public toilets or drinking fountains	Provide public toilets and drinking fountain	Н	Community facilities
Point 22. Turning concern	Woodland St	Sweeping curve allows higher speed left turn into Albert Road	Install kerb extensions and raised threshold/crossing as proposed by MVCC	М	
Point 23. Long high fence	Woodland St	Obscures city views, no interaction with the street	Work with landowners to provide a lower or transparent fence	L	Landowner engagement

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 24. 60km limit	Woodland St	The speed limit changes from 40 to 60, with little apparent change in conditions.	Install median treatments as recommended by MVCC	М	
Point 25. No footpath	Woodvale Grove	No footpath on south side of Woodvale Grove	Construct footpath	L	
Point 26. Signals	Woodland/Napier St	Ramps poorly aligned. No ground or audio tactiles. No auto-on or late intro. No limitations on right turns – divers must judge oncoming traffic while turning at the same time pedestrians are crossing	Undertake works proposed by MVCC. Provide auto-on or late introduction. Control right turns or provide head start for pedestrians	M	
Point 27. Woodland St	Woodland St	Woodland St is wide, (4 lanes west of Napier St). Encourages high vehicle speeds and makes crossing difficult	Install median treatments as recommended by MVCC	М	
Point 28. Crossovers	Woodland St	Parking arrangements require vehicles to cross the footpath, including reversing. Few car parks provided compared to parking on the street	Work with landowners to replace off-street car parking and crossover with landscaping and pedestrian access only, allowing additional on-street car parking	М	Landowner engagement
Point 29. Intersection and access	Woodland St	Church access complicates intersection. Potential for high speed turning off Woodland (60km/h limit to west)	Install kerb extensions as proposed by MVCC. Work with church to close access or limit to exit only.	М	
Point 30. School access?	The Crossway	There appears to be a school access point, but no crossing or kerb ramp opposite	Consult with St Vincent de Paul PS to consider potential solutions	SFI	
Point 31. Wide intersection	Napier Cres	Wide, splayed intersection allows for fast turning.	Construct raised threshold across Kalimna St and/or install kerb extensions to limit turning speed	М	
Point 32. No refuge	Pascoe Vale Rd	Whilst this intersection is not too bad, Pascoe Vale Rd is 70km and a pedestrian refuge would make crossing Curtis St a lot easier	Install a pedestrian refuge on Curtis St	L	
Point 33. No refuge	Pascoe Vale Rd	Same issue as Curtis at Kiora St	Install a pedestrian refuge on Kiora St	L	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 34. Moreland Rd intersection	Pascoe Vale Rd	No crossing on southern leg. No auto-on or late intro, but people crossing Pascoe Vale get head start. Wait times long, but crossing times good	Install crossing on southern leg of intersection and adjust signal phasing accordingly. Install auto-on or late introduction	M	
Point 35. Cameron Rd intersection		While this intersection is not too bad, given proximity to centre and traffic volume and speed, a raised threshold is highly desirable	Install raised threshold across Cameron Rd	М	
Point 36. Pascoe Vale Rd at centre	Pascoe Vale Rd	Pascoe Vale Rd generally high traffic speed and volume. Mixture of new, large apartment buildings and commercial development, some auto-oriented. Narrow footpath close to road on east side	Undertake comprehensive urban design process for Pascoe Vale Rd	Н	Urban design
Point 37. Bridge St intersection	Pascoe Vale Rd	Same as Cameron Rd, but probably higher traffic potential given access to car parks	Install raised threshold across Bridge St	Н	
Point 38. Signals	Pascoe Vale Rd	Fairly long wait times. TGSI wrecked. Station car park (under construction) complicates intersection. WalkSpot suggests drainage a concern	Review signal phasing on completion of station car park to provide pedestrian priority, including auto-on or late introduction on all crossing legs. Review drainage.	Н	Traffic and drainage
Point 39. Service station	Pascoe Vale Rd	Undesirable land use - unattractive, large crossovers to traverse	Work with landowners to encourage redevelopment, waive car parking requirements to avoid crossovers. If consultation indicates no intention to change use, then explore design options to more clearly define and constrain crossovers and improve aesthetics eg street trees	H	Multiple
Point 40. Melfort Ave intersection	Pascoe Vale Rd	Melfort Ave is very short, but provides access to extensive car parking, generating a lot of turning movement off Pascoe Vale Rd and traffic across key pedestrian route	Install raised threshold	Н	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 41. Footpath	Pascoe Vale Rd	Narrow footpath on south side of Melfort Ave with substantial drop to car park of approx 30cm. Potential fall hazard.	Consider opportunities to widen footpath, reduce height discrepancy and/or highlight hazard	L	
Point 42. Crossovers	Pascoe Vale Rd	A range of commercial access points in this area generate potential conflict with vehicles, but this access is particularly wide	Explore design options to more clearly define and constrain crossovers, including median treatment between right and left turning exits. Use paint or materials to highlight the footpath crossing the access	M	
Point 43. Car park	Pascoe Vale Rd	A number of people were observed walking into this car park, which has no ped facilities but is not posted as shared space	Sign as shared space (give way to pedestrians)	L	
Point 44. Wide access	Pascoe Vale Rd	Another wide access to this car park (entry only), with capacity for high speed turning from Pascoe Vale Rd	Reduce crossover width. Use paint or materials to highlight the footpath crossing the access	Н	
Point 45. Poor intersection	Pascoe Vale Rd and Napier Cres	This is an intersection with high volumes of often fast moving traffic on both Napier Cres and Pascoe Vale Rd. The configuration allows fast turning in and out of Napier. No opportunity to cross Pascoe Vale Rd, despite clear destination of Glenbervie Station	Signalise this intersection, with pedestrian crossings on all legs. Include pedestrian priority (auto-on or late intro) and controlled right turns or pedestrian head start in signal phasing. Alter geometry to limit turning speed.		
Point 46. No footpath	Butler St	No footpath on northern and western side of street at this end of Butler	Construct footpath	L	
Point 47. Wide intersection	Napier Cres	Design allows for fast turning. Condition of nature strip suggests people are crossing Butler slightly to the north of the intersection	Construct raised threshold across Butler St and/or install kerb extensions to limit turning speed	Н	
Point 48. Ardoch St intersection	Napier Cres	Configuration facilitates fast left turn into Ardoch from Napier	Construct raised zebra crossing across Ardoch St	M	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 49. Glenbervie station	Napier Cres	Crossing not on a pedestrian desire line. People observed crossing on desire line (particularly at eastern end of station) rather than using zebra crossing. Direct access point to main station entry dominated by vehicle access. Inappropriate parking observed on grass areas.	 Construct a raised zebra crossing over Napier Cres, linking the eastern footpath of Ardoch St with the main entrance to the station. Associated with the change above, close the vehicle access to the station and continue the crossing through the parking area. Replace the existing crossing with a raised zebra crossing further south- west to align with the entrance to the pedestrian underpass. 	H	
Point 50. Peterleigh intersection	Napier Cres	Design facilitates fast turning	Construct raised threshold across Peterleigh Grove and/or install kerb extensions to limit turning speed	Н	
Point 51. Missing link	Cochrane Court	No path connecting Cochrane Court and Cameron Rd to Moonee Ponds Creek Trail	Construct a connecting path	L	
Point 52. Path and bridge intersection	Cameron Rd	Path and bridge intersection with hill slopes enabling fast cycling and vegetation affecting sight lines. WalkSpot comment suggests problems in interaction between walkers and cyclists	Paint zebra crossing over the Moonee Ponds Creek Trail to access the bridge and install give way to pedestrians signs.	M	
Point 53. No path	Brentwood Ave	No formal path on this side of the creek, despite clear desire line. Access from Jhonson St involves steps, so difficult for those with prams or limited mobility	Install connecting path	L	
Point 54. No ramps	Brentwood/ Jhonson	No ramps to facilitate crossing of Brentwood Ave from Jhonson	Install ramps	L	
Point 55. Missing ramps	Henley St	No ramps to cross Henley St to access Moama Cres	Install ramps	М	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 56. Access to Morris Reserve	Henley St	No formal path to access reserve, but clear desire line. Slope and drainage issues mean it is currently difficult and muddy when wet	Construct path to access reserve	М	Open space
Point 57. Missing ramp	Cameron Rd	No connection across Cameron Rd. Very close to blind corner	Ideally, install a raised zebra crossing. Otherwise install kerb ramp	Н	
Point 58. Little shade	Cameron Rd	Few street trees on Cameron Rd generally	Undertake street tree planting	L	Street trees
Point 59. Potential shortcut	Cameron Rd	There appears to be a pedestrian desire line to access the car park and this would seem to provide an opportunity to provide a slightly shorter and potentially more pleasant connection to the station	Explore opportunity to create a footpath on the eastern edge of the carpark, through to Woodland St	L	
Point 60. Citylink underpass	Wheeler St	The underpass beneath Citylink was entirely flooded at the time of audit (which was a fine day) making it completely impassable. Discussion with a passerby suggests the underpass is usually flooded, even in summer.	Undertake drainage works to ensure pedestrian underpass can be used	Н	Drainage
Point 61. Creek underpass	Wheeler St	Pedestrians are able to pass beneath CityLink adjacent to the creek, however it is not particularly pleasant	No action required	NA	
Point 62. Steep street	Wheeler St	Wheeler Street is a steep slope and split into two levels. This is likely to be a general deterrent to walking and also means some crossovers are more difficult to negotiate due to differences in levels.	No solutions evident	NA	
Point 63. Very wide intersection	Wheeler St	Most of Wheeler St has a central median, but not where it meets Mitchell Parade. This leaves it very wide and open to high speed turning	Construct kerb extensions and a median treatment to narrow crossing distance, allow staged crossing and reduce vehicle turning speeds.	М	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 64. Station underpass	Strathmore Station	The underpass at Strathmore Station is not very pleasant and there are no sightlines in or out, raising personal safety concerns. Signs indicate it is susceptible to flooding, which is a strong concern given its critical importance as a pedestrian link	Work with relevant railway management entities to: If necessary, undertake drainage works to ensure pedestrian underpass can be used. Explore potential to beautify the station environment eg murals on blank walls	Н	Community Development
Point 65. Redundant link to North Ave	Pascoe Ave	The additional road link to North Ave is not necessary from a vehicle perspective and creates additional crossing points for pedestrians on both North Ave and Pascoe Vale Ave. It limits the usefulness of the resulting island of green space	Close this part of the road and reclaim it for public space	M	Open space and transport
Point 66. Desire line	Pascoe Ave	There is an important desire line to cross Pascoe Ave at this point to access the station, for people walking from the north-west. However sightlines to the south are not good, especially from the west side of the street	Assuming that a pedestrian crossing is constructed further south at North Ave as proposed by MVCC, a full crossing is not required here. Instead, construct a kerb extension on the west side of the street and a pedestrian refuge	Н	
Point 67. Fast turn	Pascoe Ave	Pascoe Ave splits at this point, with a traffic connection through to Pascoe Vale Rd heading north. The configuration allows very fast turning across the pedestrian desire line. There is no crossing or even a path on the pedestrian desire line	Develop a treatment option that protects pedestrians crossing at this point as part of review of pedestrian road safety and convenience around Strathmore SC	Н	
Point 68. Poorly maintained crossing	Pascoe Ave	The raised crossing at this point is an important connection between the Station and Secondary College and is well located, as the footpath on the eastern side of Pascoe Ave does not extend north of this point, so students are required to cross here. However, the platform is not high enough to generate significant vertical deflection and the line marking is in poor condition.	Reconstruct crossing with a higher platform and new line marking	H	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 69. Underpass	Pascoe Ave	The underpass beneath Pascoe Vale Rd has generally low amenity. The footpath is narrow for a place that is likely to have groups/pairs of children walking before and after school. This is exacerbated by the placement of safety barriers on the footpath. These barriers may also present risks of pedestrians walking into, or falling over them	 Explore potential to widen the footpath. Explore options for different barriers. Explore potential to beautify the underpass eg murals on blank walls 	М	Community development
Point 70. Secondary College	Pascoe Ave	The interface between the College and Pascoe Ave is a concern. Despite the 40km/h speed limit, the road design involves sweeping turns that allow reasonably fast turning in and out of Pascoe Vale Rd, and sightlines are limited. There is a school crossing on the desire line through the car park to travel to the Strathmore centre along Pascoe Ave. However this crossing is offset from Pascoe Vale Rd, so there is limited provision for crossing on the direct desire line to walk south along Pacoe Vale Rd (photo attached). At the time of auditing children were observed playing or congregating close to the road.	Undertake a review of pedestrian road safety and convenience on streets immediately adjoining Strathmore SC, in consultation with the school.	Н	
Point 71. Pascoe Vale Rd	Pascoe Ave	While there is a 40km/h speed limit on Pascoe Vale Rd at school times, this wide arterial is generally designed for fast moving traffic. There is an overpass to Progress Street, but this is a longer route and discussion with students suggest that many opt to take the more direct route and cross at-grade. The footpath is narrow for a place that is likely to have groups/pairs of children walking before and after school. This is exacerbated by the placement of safety barriers on the footpath. These barriers may also present risks of pedestrians walking into, or falling over them	Undertake a review of pedestrian road safety and convenience on streets immediately adjoining Strathmore SC, in consultation with the school.	Н	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 72. Progress and Hillsyde	Progress St	Intersection configuration allows very fast left turn from Hillsyde Parade into Progress St	Construct kerb extension and median treatment as delineated by current line marking	М	
Point 73. Hillsyde Reserve	Progress St	This reserve is an important connection between the College (via Progress St) and Grammar/Downes Streets and surrounding areas. The paths through the reserve generally allow for access by wheelchair/pram/mobility scooter, but this access terminates at steps adjacent to Hillsyde Parade, creating a barrier for those with limited mobility	Explore opportunities to provide access by wheelchair/pram/mobility scooter	M	
Point 74. Upland/Napier	Upland Rd	The configuration of this intersection allows fast turning into Upland Rd. The pram ramp on the north-east side is not on the pedestrian desire line but rather around the corner, which potentially limits visibility for vehicles turning left from Napier St. There is no provision for crossing Napier. Raised as a concern in consultation	Consider options including raised zebra crossing of Napier St on north side of the intersection. Alter geometry to reduce turning speed into Upland Rd	Н	
Point 75. No pram ramp	Upland Rd	No pram ramp to cross Upland Rd	Install ramp	L	
Point 76. Inadequate shade	Upland Rd	Few streets trees. Upland Rd is generally straight with few obstacles - some traffic observed travelling fast	Street tree planting. Construct a raised crossing over Upland Rd on eastern side of The Crossway (point 78)	L M	Street trees
Point 77. No footpath	Wickham Grove	There is no footpath on either side of Wickham Grove	Construct footpath on one side of Wickham Grove. Alternatively, or as an interim measure, convert Wickham Grove into a shared zone (signage and traffic calming)	Н	
Point 78. Crossing needed	Upland Rd	Key desire line to centre and St Vincent de Paul PS. Raised as a concern in consultation	Construct a raised crossing over Upland Rd on eastern side of The Crossway	М	

Map ref	Location	Issue description	Recommendation	Priority	Non transport
Point 79. Missing ramps	Upland Rd	No ramps crossing Upland Rd	Install ramps	L	
Point 80. Shortcut		This laneway provides an important connection to Pascoe Ave and the station, but may not be used by people with limited mobility as it is quite steep. No footpaths, but not marked as shared zone	Sign as shared zone	M	

Appendix 1: Strathmore Walkability Assessment Log – Maintenance

The following table indicates the sites requiring maintenance work. The nature and location of these issues including photographs are set out in the <u>online</u> <u>assessment map</u>.

Point 1m.Overgrown roses	
Point 2m. broken footpath	Footpath partly destroyed and nature strip impacted by construction at 3 Albert Rd
Point 3m. Overgrown vegetation	Reduces effective width of footpath
Point 4m. Poor footpath	Footpath not properly reinstated. Broken, uneven asphalt
Point 5m. Overgrown	Overgrown shrubs forcing people off path. Very close to station
Point 6m. Poor construction management	Security gates blocking footpath and materials/vehicles blocking and damaging nature strip. No alternative footpath on other side of the road
Point 7m. Overgrown plant	Making it difficult to walk on path outside #11a
Point 8m. Not maintained	Shrub blocking path, nature strip overgrown
Point 9m. Overgrown tree	
Point 10m. Parking on nature strip	
Point 11m. Overgrown ivy	On the Butler St frontage of 291 Pascoe Vale Rd
Point 12m. Overgrown path	Butler St frontage of 289 Pascoe Vale Rd
Point 13m. Damaged footpath	Outside 21 Cameron Rd
Point 14m. Overgrown vegetation	17 Wheeler Street