Supplement

Traffic and Road Use Management
Volume 1 – Guide to Traffic Management

Part 4: Network Management (2016)

July 2019

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3.6.3-1 Traffic control signs

For information on traffic control signs relating to Queensland cycle network signage requirements, refer to Austroads' *Guide to Traffic Management* Part 4 *Network Management* Section 3.6.3 *Management principles Signage and Network Information* reference to Austroads (2015e) *Bicycle Wayfinding* report.

The TC signs are a collection of non-standard traffic control (TC) signs that have been 'officially approved' (as required by the *Transport Operations (Road Use Management) Act 1995*). These signs have been designed for specialised use and designed to comply with the *Traffic and Road Use Management (TRUM)* manual and the *Manual of Uniform Traffic Control Devices (MUTCD).*

Included in this table are the MUTCD Q-series signs that relate specifically to the cycle network.

Table 3.6.3-1 – Signs for the cycle network

Number	Name	Use
D4-6bike	BIKEWAY CHEVRON ALIGNMENT MARKER	To indicate sharp or long turn / curve.
GE6-Q01	PROHIBITED ON MOTORWAY PEDESTRIANS BICYCLES ANIMALS TRACTORS MOPEDS	Used in advance of the turn into the entrance ramp of a motorway or freeway at a point from which they can conveniently take an alternative route, to advise, the named classes of traffic of the prohibition
G9-57-Q01	WATCH FOR BICYCLES	To warn motorists that bicycle traffic may come into conflict with motor traffic at a specific point due to a particular road feature or hazard.
G9-63	BICYCLES CROSS HERE WITH CARE	To designate a ramp crossing point where bicycles are permitted to use the freeway through an interchange.
G9-Q10	CROSS WITH CARE	To remind cyclists to use the left shoulder of freeways and ramps.
R3-5	PEDESTRIANS MAY CROSS DIAGONALLY	To inform pedestrians of the ability to safely cross diagonally at the intersection.
R3-Q01	WALK TO ISLAND AND WAIT FOR FURTHER SIGNAL	For use on multi-staged pedestrian crossings.
R4-4	SHARED ZONE	For use at the threshold of a shared zone.
R6-Q01_1	NO … BEYOND THIS POINT (Type 1)	Used at the beginning of an entrance ramp where the named classes of traffic are to be prohibited from entering a motorway.
R6-Q01_2	NO … BEYOND THIS POINT (Type 2)	Used at the beginning of an entrance ramp where the named classes of traffic are to be prohibited from entering a motorway.
R6-15	PEDESTRIANS PROHIBITED	For special purposes, such as severely limited lateral space, but is not recommended for general use.

Number	Name	Use
R9-3	BICYCLES EXCEPTED	For use as a supplementary plate to a regulatory sign, for example: 'NO THROUGH ROAD' or 'BUS ONLY'
T8-4	FOOTPATH CLOSED	For temporary closures of the footpath
TC1019	UNDERPASS SUBJECT TO FLOODING	For use on bicycle facilities in road underpasses or culverts subject to flooding.
TC1023	CYCLE RACING AHEAD	For use during cycle races. Includes roadside signage and signage for following and leading marshal vehicles.
TC1027	ACCESS FOR DISABLED	For use on facilities which are accessed by numbers of people using wheelchairs, particularly where road crossings are involved.
TC1029	CYCLISTS AHEAD REDUCE SPEED DRIVE SAFELY	For use during bicycle events so motorists are aware of the presence of cyclists on the road and reduce speed.
TC1037	WHEELED RECREATIONAL DEVICES AND WHEELED TOYS PROHIBITED	Used to define a location where wheeled recreational devices and wheeled toys are prohibited.
TC1050	CYCLING, WHEELED RECREATIONAL DEVICES AND WHEELED TOYS PROHIBITED	To define an area where bicycles and wheeled recreational devices are prohibited, it may be used in conjunction with a Time of Operation supplementary plate (R9-1). Refer TRUM Volume 1, Part 7, 3.8.4-1.
TC1107	CYCLE HAZARD GROOVED ROAD	Temporary warning in advance of roto-milled surfaces prior to asphalt overlay.
TC1193	CHILDREN WARNING SIGN (W6-3) WITH TARGET BOARD	Usage as per W6-3. Target board may assist sign conspicuity where background visuals distract drivers.
TC1195	PEDESTRIAN CROSSING SIGN (R3-1) WITH TARGET BOARD	Usage as per R3-1. Target board may assist sign conspicuity where background visuals distract drivers.
TC1197	RUNNERS AHEAD REDUCE SPEED; DRIVE SAFELY	For use during running events so motorists are aware of the presence of runners on the road and reduce speed.
TC1253	TAXIS, CYCLES AND PEDESTRIANS PROHIBITED ON BUSWAY	Temporary signage at busway portals.
TC1301	CYCLISTS/PEDESTRIANS WAIT HERE TO PASS	Used to denote a passing bay. Use in conjunction with TC1302.
TC1302	CYCLISTS/PEDESTRIANS USE PASSING BAYS	Used to define a highly constrained section of infrastructure where bicycles and pedestrians are required to use passing bays and give way to oncoming users. Use in conjunction with TC1301.
TC1326	ZEBRA CROSSING – MULTI-LANE ROADS	For use on multi-lane zebras to warn pedestrians of multiple threat risk posed by motorist visibility restrictions. Temporary treatment until a safer crossing with an equivalent level of access can be established.

Number	Name	Use
TC1369	TRAIL (PEDESTRIAN/CYCLIST/ HORSE)	To warn motorists approaching a multi-use trail crossing.
TC1397	CYCLISTS AHEAD	For use on a multi-message sign to warn drivers of cyclists ahead.
TC1414	PEDESTRIANS LEFT/RIGHT	For use on a multi-message sign to direct pedestrians.
TC1434	BICYCLE ROUTE MARKER	Bicycle route marker (supplementary logo on a guide sign or directional sign).
TC1435	BICYCLE ROUTE REASSURANCE MARKER	Bicycle route marker (standalone).
TC1436	INTERSECTION & ADVANCE	Intersection and advanced direction signage for bicycle route.
TC1471	'CROSS WITH CARE' TRAFFIC SIGNAL PEDESTRIAN LABEL FOR 'PUFFIN' CROSSINGS	To aid pedestrians in the proper use of a puffin crossing.
TC1488	PEDESTRIAN CROSSING AHEAD/ON SLIP LANE	Where visibility of a pedestrian crossing is restricted, or where additional supplementary signs are necessary to improve driver awareness of the pedestrian crossing on the slip lane ahead.
TC1495	FOOTPATH/BIKEWAY CLOSED	For temporary closure of a footpath.
TC1563	PEDESTRIANS ONLY CROSS WHEN ROAD IS CLEAR	To be used temporarily only (period of six months) as part of the education process to reinforce priority, for example when a controlled crossing has been removed and replaced with a pedestrian refuge.
TC1566	LOOK RIGHT	To be used temporarily only as part of an education process due to road changes (for example, conversion of one-way road to two-way).
TC1567	PLEASE DISMOUNT ON FOOTPATH	To be used temporarily only on narrow/congested footpaths.
TC1569	CHILDREN CROSSING SAFETY	Temporary use at new crossing facilities/locations used by children who are unfamiliar with the type of crossing.
TC1592	CYCLISTS SLOW DOWN WATCH FOR VEHICLES/ PEDESTRIANS	Used on off-road paths where visibility is restricted on approaches to controlled side streets.
TC1600	WATCH FOR BICYCLES AND PEDESTRIANS	To alert motorists of cyclists and pedestrians ahead.
TC1630	OVERLAY PLATE FOR GUIDE SIGN GE6-2	Used to overlay Guide Sign GE6-2.
TC1631	OVERLAY PLATE FOR GUIDE SIGN GE6-Q01(revision B, C or D)	Used to overlay Guide Sign GE6-Q01 (revision B, C or D).
TC1633	CYCLIST TRAINING CIRCUIT	To sign cycling training circuits on rural roads.
TC1721	PEDESTRIANS WATCH YOUR STEP (+ WORKMAN SYMBOL)	Where workmen are in close proximity to pedestrians.

Number	Name	Use
TC1730	CYCLING EVENT	To notify road users of an upcoming cycling event.
TC1731	PEDESTRIAN UNDERPASS	Directing pedestrians to an underpass.
TC1769	RETROFIT BICYCLE LANE IN A LEFT TURN LANE	For retrofit only. Where project constraints do not allow an exclusive bicycle lane to be established in a left turn lane.
TC1776	SCHOOL WALK/BIKE STOP - NO LOGOS	To indicate an assembly point for school children participating in a supervised walking/cycling group travel program.
TC1838	PEDESTRIAN DIRECTION	This sign shall only be used in conjunction with TC1839. Possible application at the start of a separated path.
TC1839	PEDESTRIANS MUST USE FOOTPATH	This shall be used with TC1838.
TC1861	RAILWAY CROSSING	To indicate where rails in the road pose a potential hazard to cyclists.
TC1864	SHARE THE ROAD – SUPPLEMENTARY PLATE	Supplementary plate for TC1878.
TC1878	SHARE THE ROAD	Indicates where shared lane conditions exist. Promotes safer road user behaviours.
TC1907	BICYCLE CROSSING AHEAD	To indicate that a ramp ahead is suitable to cross.
TC1962	NARROWING CYCLE LANE LAYOUT	Signage to warn cyclists of narrow shoulders ahead and advise route alternatives.
TC2003	LANE NARROWS – CHANGE LANE TO OVERTAKE CYCLISTS	To warn road users of narrowing lane.
TC2089	SPEED RESTRICTION WHEN BICYCLES PRESENT	To reduce speed limits when bicycles are present.
TC2235	TO PEDESTRIANS AND BICYCLES	Temporary supplementary plate to GIVE WAY signs located on approach to bicycle path crossings.
TC2910	R3 WALK AND DON'T WALK SYMBOLS	Pedestrian crossing symbols for signal lanterns.
TC9457	PEDESTRIAN CROSSING AHEAD	To warn vehicles of a pedestrian crossing on side road.
TC9558	SLIPPERY PATH FOR CYCLISTS	To warn cyclists of slippery conditions.
TC9605	STEEP DESCENT FOR CYCLISTS	To warn cyclists of a steep descent.
TC9700	NO OVERTAKING BICYCLES ON BRIDGE	For use on narrow bridges to encourage safer road user behaviour.
TC9744	CHECK BRAKES	Supplementary plate for TC9605.
TC9785	COMBINED CYCLIST/PEDESTRIAN	To warn motorists to be aware of cyclists and pedestrians crossing ahead.
TC9867	PEDESTRIANS CROSS AT SIGNALS	To inform pedestrians of the need to cross at the signals. For use where a crossing point may not be apparent to path users joining a road.

Number	Name	Use
TC9885	TYPICAL TREATMENT 'T' INTERSECTION THROUGH TREATMENT FOR BIKE	T-junction pavement marking set-out.
TC9888	TRAIL DIRECTION SIGN	To inform trail users of a trail head.
W6-1	PEDESTRIANS	Bikeway use only. To warn riders of a pedestrian usage, particularly where visibility may be limited.

3.7   Pedestrian networks

3.7-1   Pedestrian Access and Mobility Planning

1   Purpose and scope

This section adopts for use in Queensland the NSW Roads and Maritime Services (RMS)' *How to prepare a Pedestrian Access and Mobility Plan (PAMP): An easy three stage guide* and identifies other relevant good planning pedestrian guidance. The section advises on a sound methodology and process for undertaking pedestrian-focused investigations for a range of scenarios, including but not limited to strategic and local area planning, route and link planning, intersection upgrade planning and consideration in new developments.

PAMPs are used in NSW as tools to plan and coordinate investment on safe, convenient and coherent pedestrian infrastructure on key pedestrian routes. The NSW PAMP guide represents good practice and there is currently no other equivalent Australian or Queensland specific guidance on this topic.

This section supplements Austroads' *Guide to Traffic Management* and *Guide to Road Design* series and the *Manual of Uniform Traffic Control Devices* (MUTCD). It provides guidance on alignment, width and other geometric requirements for specific pedestrian facilities and crossings but does not address this specific scope.

The aim of this section is to adopt the NSW PAMP guide for use in Queensland and provide supporting materials and information relevant to the Queensland context. The application of this section is essential in transport and project planning undertaken by the Department of Transport and Main Roads and is highly desirable to be considered by others, including local governments and developers, undertaking pedestrian planning.

The inclusion of pedestrian planning is beneficial when new pedestrian facilities or changes are proposed. Undertaking this planning will help to ensure any new or changed pedestrian aspects within the project are based on clearly-considered planning grounds, while also providing a clear and transparent reason for decisions and greater consistency.

1.1   Background

Information in this section is based on the NSW PAMP guide.

1.2   What is a pedestrian access and mobility plan?

The NSW PAMP guide defines a PAMP as:

> …a comprehensive strategic and action plan to develop pedestrian policies and build pedestrian facilities. A PAMP provides a framework for developing pedestrian routes or areas. The aim of PAMP is to co-ordinate investment in safe, convenient and connected pedestrian routes.

A summary of the proposed methodology for how to prepare a PAMP follows. Refer to the document for further details: http://www.rms.nsw.gov.au/business-industry/partners-suppliers/documents/technical-manuals/mobility-plan_how-to.pdf

Figure 1.2 – How to prepare a PAMP methodology

The Diagram, How to Prepare a PAMP- Methodology shows the three broad stages involved in the process:

- Stage 1: Objectives
- Stage 2: Preparation
- Stage 3: Implementation
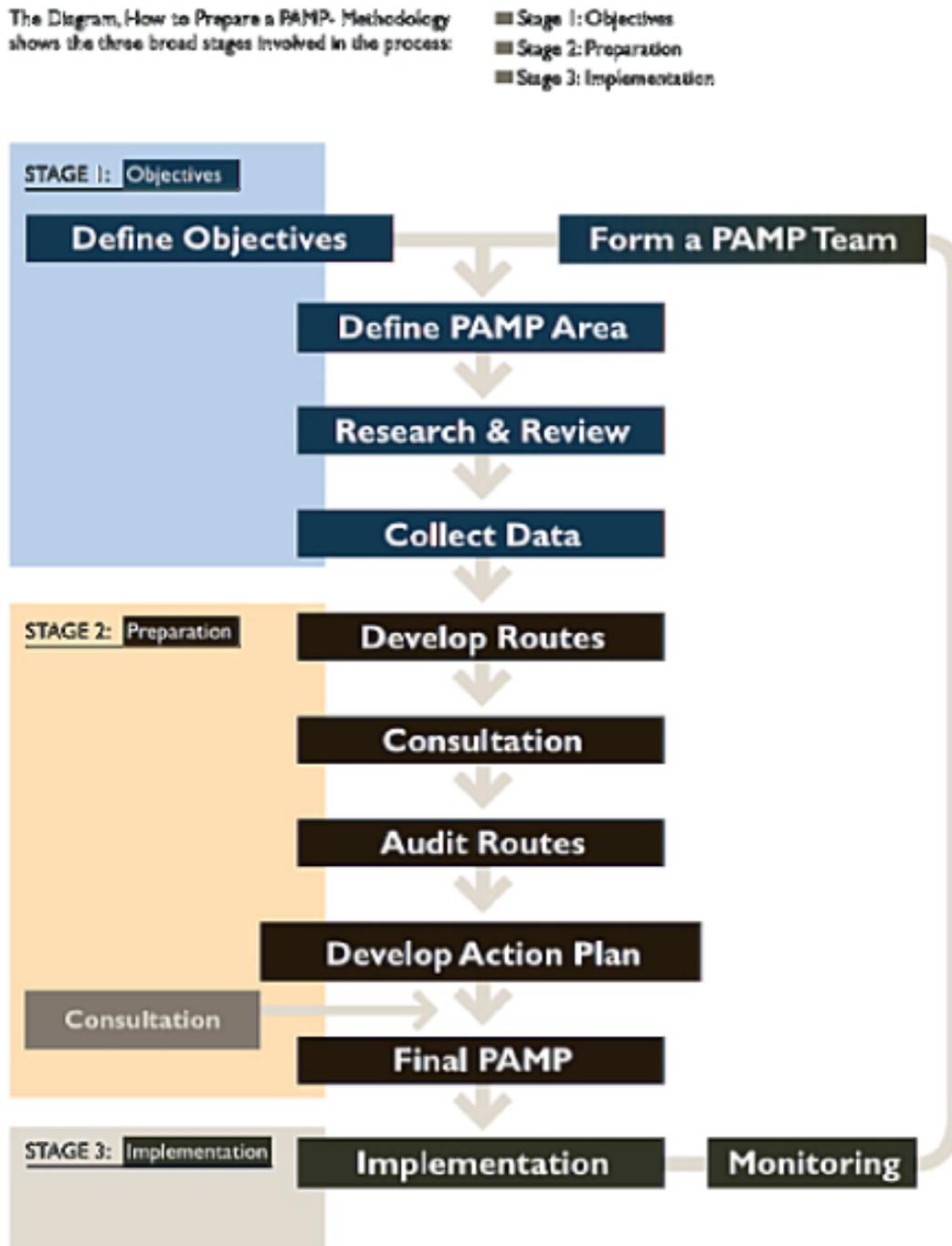
(Source: RMS How to Prepare a PAMP)

PAMPs can be undertaken for a wide variety of routes or areas, including:

- a whole Local Government Area
- a Central Business District(s)
- a selection of centres / townships, and/or
- a specific area within centres / townships.

In addition, they can also be considered for route and link planning, intersection upgrade planning as well as for consideration in new developments.

2 Related documents

This supplement should be read in conjunction with the following.

Document	Part	Section
Austroads, *Guide to Traffic Management*	Part 3 *Traffic Studies and Analysis*	• Section 2.5.5 *Pedestrian and Bicycle Surveys* • Section 3.3.5 *Pedestrians and Cyclists* • Section 3.5 *Austroads Pedestrian Facility Selection Tool*
	Appendix E Pedestrian and Bicycle Surveys	
	Part 4 *Network Management*	• Section 2 *Movement and Place* • Section 3.7 *Pedestrian Networks*
	Part 5 *Road Management*	• Section 3.6 *Road Space Requirements for Pedestrians* (for general traffic use) • Section 4.5 *Road Space Requirements for Pedestrians* (between road users) • Section 6.6.4 *Supporting Active Travel, Shared Spaces and Activity Centres through Speed Limits* • Section 6.7.3 *Use of Electronic Speed Limit Signs in School Zones and High Pedestrian Activity Areas*
	Part 6 *Intersections, Interchanges and Crossings*	• Section 2.4.1 *Pedestrians* (road user considerations) • Section 3.4.4 *Pedestrians* (road space allocation and lane management at roundabouts) • Section 6.4.4 *Pedestrians and Cyclists* (road space allocation and lane management at road interchanges) • Section 7.4.1 *Path Crossings – Pedestrians* (of railways) • Section 8 *Pedestrian and Cyclists Crossings*
	Part 7 *Traffic Management in Activity Centres*	• Section 3.8 *Providing for Pedestrians and Cyclists* • Section 4.5 *Pedestrians Streets and Transit Malls* • Appendix C *Road Hierarchy and Pedestrians* • Appendix D *Information Gathering* D.6 *Pedestrian Movements* • Appendix G *Design Considerations for Pedestrians with Special Needs*
	Part 8 *Local Area Traffic Management*	• Section 8.12 *Catering for Cyclists and Pedestrians*
Transport and Main Roads Supplement to Austroads *Guide to Traffic Management*	• *Traffic and Road Use Management* manual Volume 1, Part 6, *Intersection, Interchanges and Crossings*	

Document	Part	Section
Austroads, *Guide to Road Design*	Part 2 *Design Considerations*	• Section 1.9 *Provision for Pedestrians and Cyclists*
	Part 3 *Geometric Design*	
	Part 4 *Intersections and Crossings – General*	• Section 3.1 *Road Users* • Section 8 *Pedestrian Crossings* • Section 10.6 *Pedestrian and Cyclists* (at rail crossings)
	Part 4A *Unsignalised and Signalised Crossings*	• Section 3.3 *Pedestrian Sight Distance Requirements*
	Part 4B Roundabouts	• Section 5 *Pedestrian and Cyclist Treatments*
	Part 4C: Interchanges	• Section 4.4 *Pedestrian / Cyclist Grade Separations*
	Part 6A *Paths for Walking and Cycling*	
Transport and Main Roads Supplement to Austroads *Guide to Road Design*	*Road Planning and Design Manual* Part 6A *Pedestrian and Cyclists Paths*	
Australian Standards	AS/NZS 1158 Series *Lighting for Roads and Public Spaces*	
	AS/NZS 1428 Series *Design for Access and Mobility*	
	AS1742 Series *Manual of Uniform Traffic Control Devices*	
Transport and Main Roads, *Manual of Uniform Traffic Control Devices*	Part 10 *Pedestrian control and protection*	
Transport for Victoria *Guidelines for developing Principal Pedestrian Networks* https://transport.vic.gov.au/ways-to-travel/walking-and-cycling/		
New Zealand Transport Agency *Pedestrian planning and design guide* https://www.nzta.govt.nz/assets/resources/pedestrian-planning-guide/docs/pedestrian-planning-guide.pdf		
Easy Steps: a toolkit for planning, designing and promoting safe walking, Transport and Main Roads https://www.tmr.qld.gov.au/Travel-and-transport/Pedestrians-and-walking/Easy-Steps.aspx		
Pedestrian planning to / from a public transport facility – TransLink's *Public Transport Infrastructure Manual* (see reference to Fruin level of service) https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Public-transport-infrastructure-manuals.aspx		
Pedestrian planning within urban developments – Queensland Government *Transit Oriented Development Guide*, Residential 30 Guidelines https://www.cabinet.qld.gov.au/documents/2009/dec/tod%20publications/Attachments/tod-guide[1].pdf		

Document	Part	Section
Next Generation Planning – *A handbook for planners, designers and developers in south-east Queensland* http://www.dilgp.qld.gov.au/resources/guideline/ngp-handbook.pdf		
Pedestrian Safety: A Road Safety Manual for Decision-Makers and Practitioners, World Health Organisation 2013 http://apps.who.int/iris/bitstream/handle/10665/79753/9789241505352_eng.pdf		
Disability access and mobility requirements in Queensland https://www.tmr.qld.gov.au/Travel-and-transport/Disability-access-and-mobility		
Stage 2, Step 8 of the NSW PAMP guide proposes to investigate appropriate pedestrian facility types including crossings. This investigation should consider the Austroads pedestrian facility workbook http://www.austroads.com.au/road-operations/network-operations/pedestrian-facility-selection-tool		

3   Additional information

The NSW PAMP guide is focused on planning for improved pedestrian safety and convenience in an area and is recommended for adoption in Queensland; however, there are some additional considerations relevant for pedestrian planning including the process for planning pedestrian networks, data collection, personal safety, place-making and behaviour change programs. Following is additional information on these aspects.

3.1   Planning methodology

The Transport for Victoria *Guidelines for developing Principal Pedestrian Networks* (May 2015) provides a detailed approach to undertaking best practice pedestrian planning. The process outlined in the guidelines can be applied at both a strategic and local scale and should be considered as a best practice approach to developing a pedestrian network.

The methodology for planning and providing for pedestrians, as documented in the Victorian guideline follows (refer to the document for further details).

Table 3.1 – Methodology for planning and providing for pedestrians

Stage	Step
Stage 1 – Delineate the pedestrian network	• Step 1: Collate background data • Step 2: Determine the primary destination (s) • Step 3: Map the pedestrian network and walking constraints • Step 4: Map the walkable catchment • Step 5: Map existing residential populations • Step 6: Map second destinations and likely populations • Step 7: Map shortest distance routes between primary and secondary destination (s) • Step 8: Assess the intensity of pedestrian routes • Step 9: Delineate the draft pedestrian network

Stage	Step
Stage 2 – Validate the pedestrian network	• Step 1: Test the pedestrian network with local knowledge • Step 2: Undertake a site audit • Step 3: Pedestrian counts • Step 4: Consult with key stakeholders • Step 5: Plan for future population and infrastructure changes • Step 6: Finalise the pedestrian network
Stage 3 – Implement the pedestrian network	• Step 1: Pedestrian environment assessment • Step 2: Implementation plan • Step 3: Monitoring and review

Source: Transport for Victoria *Guidelines for developing Principal Pedestrian Networks* (May 2015)

Project brief

Appendix 1 of the NSW PAMP guide includes a comprehensive project brief for a suburb, town or Local Government area which is a useful starting point. To expand the PAMP and address some of the aspects raised in this document, the following amendments could be made to the project brief:

- Amend Section 4 *Statements of Direction* to include – 'identify pedestrian desire lines to inform the network plan or location of pedestrian facility'.
- Amend Section 7 *Study Tasks* to consider the Victorian *Guidelines* for developing Principal Pedestrian Networks: specifically, the Study Tasks could be expanded to include detailed planning methodology outlined here in Section 3.1.
- Amend Section 7.1 *Data Collection* to note that, as well as surveys and interviews to help identify future pedestrian needs and desire lines, site visits / audits should be considered to understand desire lines based on a review of pedestrian generators, existing and surrounding pedestrian networks, pedestrian deficiencies and opportunities that should be incorporated into this task.
- Amend Section 7.2 *Prepare Draft PAMP* to include supporting facilities such as wayfinding signage and provision of shade, water and seating in items that the plan should address.
- Amend Section 9 *Resources* – update based on the information provided in sections 3 and 5 of this document.
- The project brief is scalable to the size of the initiative (as is the planning methodology outlined in section 3.1); however, for smaller-scale projects, it is appropriate to remove and amend content, as needed, from the brief – see following for suggested changes to the project brief for a smaller-scale project such as a pedestrian bridge, intersection design or pedestrian crossing facility.
- Amend Section 3 *Study Area* to reflect project scope.
- Amend Section 6 *Project Deliverables* to reflect project scope; that is, agree location and form of proposed pedestrian facility, deliver concept / schematic / detailed design for the proposed pedestrian facility.
- Amend Section 7.2 *Prepare a Draft PAMP* to reflect project scope. This may involve the removal of ranking routes but consider noting deficiencies in surrounding networks as relevant to the project (but out-of-scope) for further investigation.

3.2   Data collection

Stage 2, Step 3 in the NSW PAMP guide discusses the useful types of data that could be collected for the PAMP, including inventories and audits, counts, crash data and origin destination surveys.

Stage 3, Step 4 of the NSW PAMP guide also discusses monitoring the PAMP. Additional information on data collection and monitoring for pedestrians, to complement that detailed in the PAMP, is listed in Table 3.2.

Table 3.2 – Additional information – Data collection

| Data collection reference	Summary
Measuring Walking – A Guide for Councils, Victoria Walks, 2013	Provides rigorous analysis of different techniques for measuring walking and recommends best methodologies for common scenarios ranging in scale from area based to a specific location such as a street or intersection. Some examples of pedestrian surveys are also provided in the Victoria Walks website.
http://www.victoriawalks.org.au/Assets/Files/FINAL_Guide_to_measuring_walking_WEBv1.0%20Dated.pdf	
The International Walking Data Standard, Walk21	This summary document sets out the case for an internationally-recognised standard for the collection of data on walking and promotes a detailed set of requirements for walking data that are consistent and comparable. Complementary to the standard is *Making Walking Count* benchmarking tool.
http://files.designer.hoststar.ch/hoststar10546/file/1-internat_walking_data_standard_summary.pdf	
OECD *Linking People and Places: New ways of understanding spatial access in cities*, OECD/International Transport Forum, 2017	This study presents the results of several projects on accessibility measurement carried out by the International Transport Forum. They illustrate how new data sources can be used to refine accessibility analyses and ultimately transport planning. Building upon these experiments, general lessons on how to increase the relevance of accessibility studies are drawn. The study also documents how assessing accessibility data can be used to assist planning and as a benchmarking tool and is relevant at local government or activity centre scale
https://www.oecd-ilibrary.org/transport/linking-people-and-places_996cc49e-en	
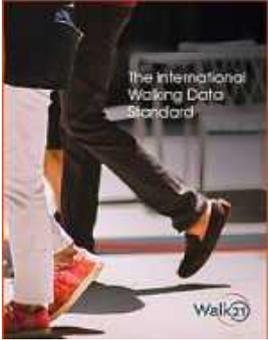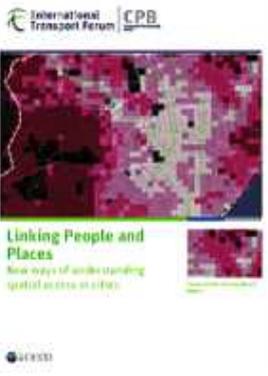
Data collection reference	Summary
Global Street Design Guide, National Association of City Transportation Officials (NACTO), 2016	This resource includes guidance on measuring the success of streets, covering three main categories of metrics: • physical and operational changes • shifts in use and function, and • resulting impacts.

3.3 Personal safety

Personal safety is relevant when planning and designing for pedestrians. Addressing the barrier of how safe users feel walking in different environments (fear of crime) can be important to getting more people walking. Following are some additional sources to assist consideration of personal safety when undertaking a PAMP.

Table 3.3 – Additional information – Personal Safety

Personal safety reference	Summary
Crime Prevention Through Environmental Design: Guidelines for Queensland (CPTED), Queensland Government, 2007	A guideline that covers principles and includes an implementation guide to incorporate CPTED principles into practice
https://www.police.qld.gov.au/programs/cscp/safetyPublic/Documents/CPTEDPartA.pdf https://www.police.qld.gov.au/programs/cscp/safetyPublic/Documents/CPTEDPartB.pdf	
Queensland Police Service Safety Audit Program	A framework for members of the community to undertake a safety audit of a public place
https://www.police.qld.gov.au/programs/cscp/safetyPublic/audit.htm	
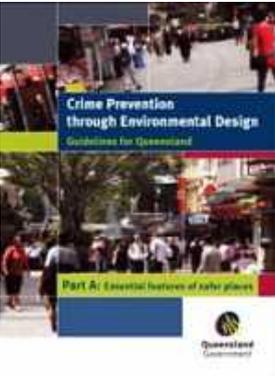
3.4 Place-making

Place-making is relevant when planning and designing for pedestrians. Considering place-making and high-quality street design improves the environment and encourages people to walk. Following are some additional sources to assist consideration of place-making and street design when undertaking a PAMP.

Table 3.4 – Additional information – Place-making and street design

Place-making reference	Summary
Creating Places for People: An Urban Design Protocol for Australian Cities, 2011	The *Urban Design Protocol* is founded on five pillars: productivity, sustainability, liveability, leadership and design excellence. These are underpinned by 12 basic principles: 1. **enhancing**: enhances the local economy, environment, and community 2. **connected**: connects physically and socially 3. **diverse**: diversity of options and experiences 4. **enduring**: sustainable, enduring and resilient 5. **comfortable**: comfortable and welcoming 6. **vibrant**: vibrant, with people around 7. **safe**: feels safe 8. **walkable**: enjoyable and easy to walk and bicycle around 9. **context**: works within the planning, physical and social context 10. **engagement**: engages with relevant stakeholders 11. **excellence**: fosters excellence, innovation and leadership, and 12. **custodians**: considers custodianship and maintenance over time
https://urbandesign.org.au/content/uploads/2015/08/INFRA1219_MCU_R_SQUARE_URBAN_PROTOCOLS_1111_WEB_FA2.pdf	
The Healthy Spaces and Places Manual, Heart Foundation, PIA and ALGA, 2009	*Healthy Spaces and Places* identifies the following key design principles to encourage built environments that provide opportunities for physical activity, including walking and other health related activities: • active transport • aesthetics • connectivity • environment for all people • mixed density • mixed land use • parks and open space • safety and surveillance • social inclusion, and • supporting infrastructure *Healthy Spaces and Places* also shows how the healthy design principles can be applied to a range of development types in different locations.
http://www.healthyplaces.org.au/userfiles/file/HS&P%20An%20overview.pdf	

| Place-making reference	Summary
Liveable Neighbourhoods, WA Department of Planning and WA Planning Commission, 2015	*Liveable Neighbourhoods* is a performance-based policy that sets high-level objectives, design principles and requirements to address both strategic and operational aspects of structure planning and subdivision. The document is a compilation of six interrelated design elements as follows: Element 1: Community design Element 2: Movement design Element 3: Activity centres Element 4: Lot design Element 5: Public open space Element 6: Education The document also includes: • site and context analysis guide • the walkable catchment technique, and • movement network tables of technical specifications.
https://www.planning.wa.gov.au/dop_pub_pdf/LiveableNeighbourhoods_2015.pdf	
Complete Streets: Guidelines for Urban Street Design, 2010	A guide for designers and design assessors on how to develop sustainable communities and provides more diverse solutions where current street designs might not be appropriate. The objectives of *Complete Streets* are to allow and encourage streets which support active and interactive communities, through: • improving safety and security • increasing vitality and interaction • reducing private motor vehicle dependence • improving development efficiency • providing valuable community space, and • retaining economic activity in communities. To achieve the objectives, the following key strategies are employed: • focusing design on maximising opportunities for a street to be a place, not a thoroughfare • connecting streets and places through permeable networks without any corresponding increase in vehicle speeds or 'rat-runs' • describing a user hierarchy that places people and active modes at the top, and • classifying streets by the type of place they form part of, not their traffic function.
http://ipweaq.intersearch.com.au/ipweaqjspui/handle/1/2946	
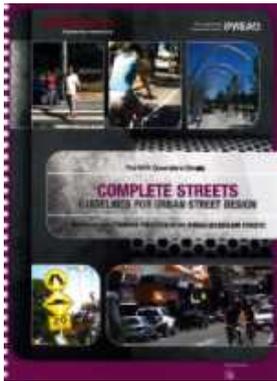
| Place-making reference	Summary
Global Street Design Guide, National Association of City Transportation Officials (NACTO), 2016	The *Global Street Design Guide* is supporting practitioners to redefine the role of streets in cities around the world. The *Guide* offers technical details to inform street design that prioritises pedestrians, cyclists, and transit riders. The document provides specific guidance for designing streets for people with detailed information for different types of streets, geometry and design guidance. It also provides details of street typologies, and many practical and detailed examples of street transformations for each typology.
https://globaldesigningcities.org/publication/global-street-design-guide/	
Transit Orientated Development (TOD) Standard, Institute for Transportation and Development Policy, New York, 2017	The TOD Standard details eight core principles for urban design and land use, supported by performance objectives and metrics to score new urban developments. Walking forms a key component of the principles and measurables for a high-quality transit-orientated development but can be considered for activity centres and other land uses.
https://www.itdp.org/tod-standard/	
Subtropical Design in South East Queensland: A Handbook for Planners, Developers and Decision-Makers, Centre for Subtropical Design, QUT, Queensland Government and Brisbane City Council, 2010	The handbook identifies the following subtropical design principles: 1. recognise sub-regions 2. respect topography 3. diversify the built environment 4. consider the local character and design 5. integrated with nature 6. acknowledge informality 7. use vegetation 8. ensure open space diversity 9. incorporate access to open space 10. design for water 11. develop outdoor centres, and 12. develop outdoor meeting places. Although not specific to walking, it identifies key design principles to suit the Queensland weather and character which should be considered for users of the public realm.
https://eprints.qut.edu.au/40934/1/2011003087_Kennedy_ePrints.pdf	
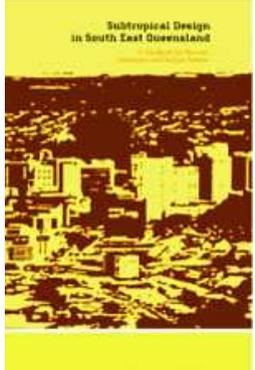
Place-making reference	Summary
Cities Safer by Design, World Resources Institute, Washington, 2015	A resource '…addressing issues such as enhancing urban design to increase walkability, reducing vehicles speeds that threaten all road uses, providing high-quality space for pedestrians and bicyclists, and improving access to mass transport…' In addition to descriptions of good urban design principles there is also chapters on traffic calming and pedestrian spaces and access to public space.
https://www.wri.org/sites/default/files/CitiesSaferByDesign_final.pdf	
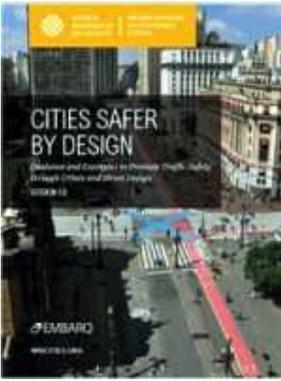
3.5   Travel behaviour change

Stage 2, Step 9 of the NSW PAMP guide discusses promoting the PAMP; however, encouraging people to walk more for a variety of purposes is also a complementary tool for a PAMP. The following are some additional sources to assist with travel behaviour change which may be considered in addition to a PAMP.

Table 3.5 – Additional information – Travel Behaviour change

Travel behaviour change reference	Summary
Australian Government, TravelSmart	An archived site with toolkits and resources as well as information for government, employers and schools looking to implement travel behaviour change programs
http://www.travelsmart.gov.au/	
Victoria Walks	An independent health promotion charity implementing '…"nudge" strategies to prompt increases in walking for shorter trips…' Their website provides different campaigns, research and case studies that could be useful.
http://www.victoriawalks.org.au/	
Walk21	An international charity dedicated to supporting and promoting more walking. The first step to encouraging change could be for an organisation to sign a commitment to the International Charter for Walking. Annual conferences also present best practice approaches to improving walking.
https://www.walk21.com/	

Travel behaviour change reference	Summary
Easy Steps, Queensland Government, 2005	Part C4 *Promoting Walking* and Part C5 *Positively Influencing Travel Choices* cover program development, program implementation and program monitoring and evaluation for promoting walking
https://www.tmr.qld.gov.au/Travel-and-transport/Pedestrians-and-walking/Easy-Steps.aspx	
The Switch Campaign Guide and Toolbox, SWITCH Consortium, Cologne, 2016	Provides practical advice for campaigns to promote a switch from car-based travel to active modes of travel
http://www.rupprecht-consult.eu/uploads/tx_rupprecht/Switch_Campaign_Guide_Fin_Web.pdf	
Soft Measures – Hard Facts, Department of Health South West, UK, 2011	Discusses various travel demand management programs and documents evidence on their success
http://www.sthc.co.uk/Documents/DoH_Soft_Measures_Hard_Facts.pdf	
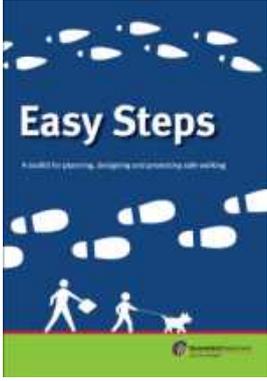
4   Queensland specific information

The NSW PAMP guide was prepared for the NSW context in 2002. The following provides the Queensland equivalent to the references in the NSW PAMP guide as well as funding sources.

4.1   Queensland equivalent references

The table following details the Queensland equivalent for NSW-specific references contained in the NSW PAMP guide.

Table 4.1 – Queensland equivalent references

NSW PAMP guide	Queensland equivalent reference
Roads and Traffic Authority	Department of Transport and Main Roads
Local Environmental Plans (LEPs)	Local Area or Neighbourhood Plans
Development Control Plans (DCP's)	Local Area or Neighbourhood Plans
Environmental Planning and Assessment Act 1979	Planning Act 2016
Department of Planning	Queensland Department of State Development, Manufacturing, Infrastructure and Planning

Stage 2, Step 6 of the NSW PAMP guide discusses relevant community groups to consult with. In Queensland, further suggestions include:

- Heart Foundation
- Queensland Walks, and
- PedBikeTrans.

Stage 3, Step 8 of the NSW PAMP guide discusses building alliances and partnerships; in Queensland, these could include, but are not limited to:

- Queensland Department of State Development, Manufacturing, Infrastructure and Planning

- Queensland Department of Transport and Main Roads

- Queensland Rail

- Queensland Department of National Parks, Sport and Racing

- Queensland Health, and

- local government.

Further information on the Queensland Government departments can be found here:
https://www.qld.gov.au/about/how-government-works/government-structure

4.2   Relevant funding sources

The NSW PAMP guide discusses funding sources for implementation (Stage 3, Step 2). While the department does not have a specific funding program to assist local governments with PAMPs, there are a number of potential funding sources to assist with implementation, including:

- Cycle Network Local Government Grants Program – grants to cover 50% of the design and/or construction of cycling infrastructure that contributes to the delivery of high-priority routes on the Principal Cycle Network; however, there is the potential to fund shared paths for use by pedestrians as well on these networks

- Transport Infrastructure Development Scheme – grants are provided for upgrade to local government-controlled roads
- Community Road Safety Grants – grants to community groups for projects and program that address road safety issues in support of the *Queensland Road Safety Strategy 2015–2021* strategic objective and associated action plan
- Federal Black Spot – this program provides improvements for sites with identified safety concerns, funded under the Australian Government Black Spot program
- Targeted Road Safety Program – delivers safety intervention to infrastructure by monitoring trends in crash data and working in close collaboration with stakeholders, and
- Community Benefits Funding Programs – this program supports community organisations and groups to provide services, leisure activities and opportunities for Queenslanders in their local communities

The Local Government Association Queensland (LGAQ) website has a list of grants and funding that is applicable to local governments in Queensland – https://lgaq.asn.au/grants.

5   *Further information*

For further information on this supplement, please contact:

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