

Tivendale
Transport
Consulting

FINAL REPORT

CBD Shared Zones

City of Melbourne

Melbourne

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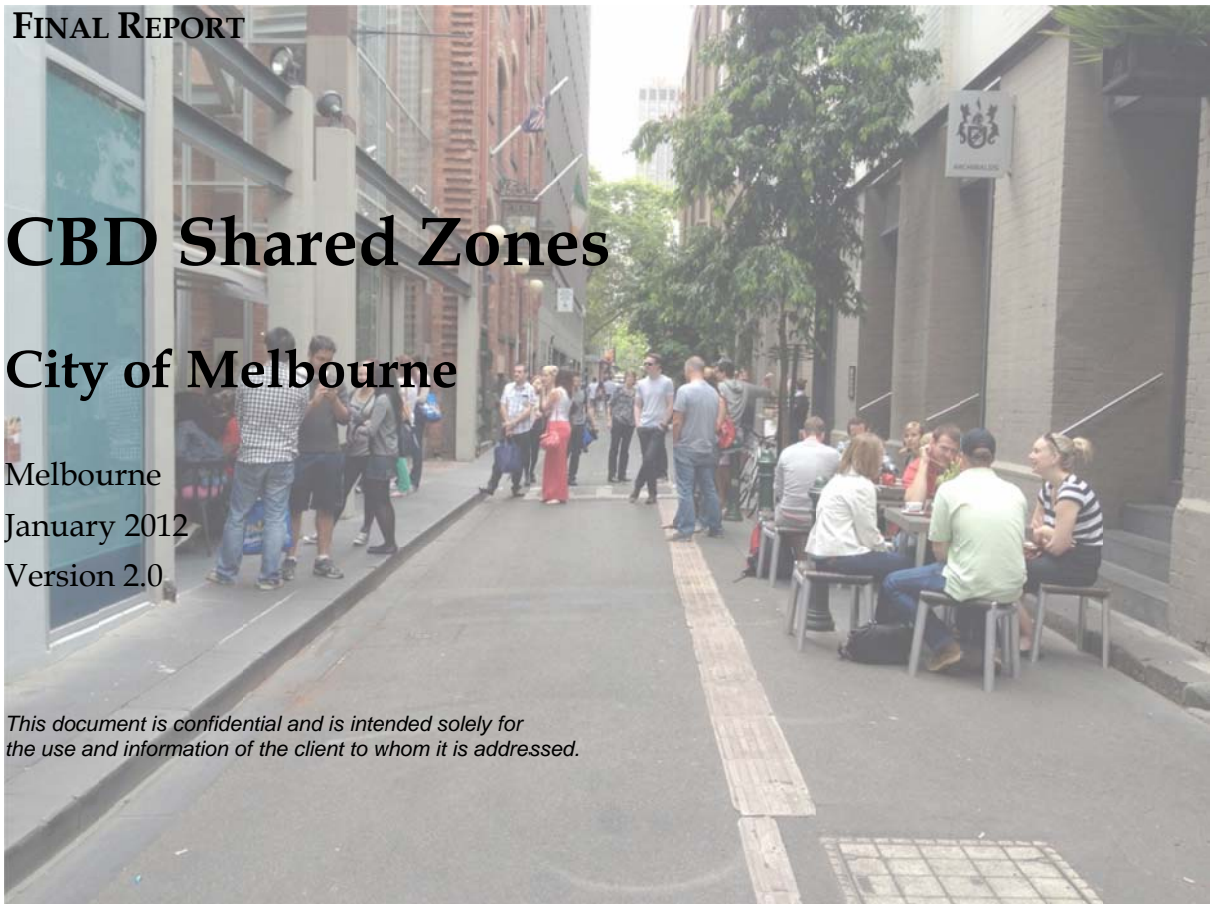


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1. Introduction

This report considers the ongoing implementation of shared zones in Melbourne's Central Business District (CBD). Tivendale Transport Consulting has prepared it on behalf of the City of Melbourne.

1.1 Background

Melbourne attracts around 800,000 people every weekday. This figure is expected to increase to 1.2 million every weekday by 2030. These people will need high quality pedestrian networks in order to maximise their contribution to the CBD economy. The City of Melbourne is a signatory to the International Charter for Walking and is committed to improving pedestrian facilities and safety.

A total of 20 laneways within the Melbourne CBD area are already shared zones and a few others in Docklands, around Queen Victoria Market and in Southbank. The technical definition of a shared zone is provided in the Road Safety Road Rules (2009) which state that all vehicles must give way to pedestrians in a shared zone. Specifically a shared zone must include:

- A "Shared Zone" sign at the start of the shared zone; and
- An "End Shared Zone" sign at the end of the zone.

However, these conditions are not always met in spaces that the public would generally consider as shared by vehicles and pedestrians. There are many laneways in the Melbourne CBD that cannot operate any other way than as shared zones (usually because they are too narrow). The City of Melbourne wants to ensure that public safety is maintained while the economic productivity and liveability of the CBD is enhanced.

In this report the term "shared zones" is used exclusively to refer to those areas of roadway that have been declared as shared zones under the Road Safety Road Rules (2009). That is spaces with appropriate regulatory signage.

Laneways in Melbourne CBD can be classified using the following typology:

- A declared "Shared Zone" designated under legislation and signposted as such;
- Narrow lanes where pedestrians are not separated from cars (i.e. there are no footpaths), yet no signage indicates that they are regulated as shared zones; and
- Laneways with footpaths. Some of these are closed to vehicles at some times of day or night.

Across much of the CBD there are many narrow laneways that get used by both pedestrians and cars. They do so safely and without incident because both the car driver and the pedestrian respect each other's right to use the space. Placing shared space signage in these lanes will help to reinforce the common sense way these spaces are used.

There are some shared zones that lack the essential characteristics required to encourage the type of cautious behavior that is desired in shared zones. Characteristics that the City of Melbourne should aim to provide in shared zones include:

- Minimal delineation between space (i.e. no kerbs or bollards that would indicate pedestrian space separate from vehicle space);

- Elements that make the space more enjoyable and interesting (such as artwork and vegetation); and
- High quality paving and finishes that reinforce messages about how the space should be used.

For at least one stage in any journey that anyone makes, each person is a pedestrian. Car drivers may have access to parking close to their place of work, but eventually they must get out of their car. There are very few drive-thru facilities in the CBD, and therefore the CBD economy is linked to the ability of pedestrians to safely reach businesses they wish to frequent.

The number of pedestrians in the City of Melbourne is expected to increase from 800,000 to 1.2 million per day (50%) in the next 20 years. Over this period of time, pedestrians will permeate laneways that currently see little activity and will start to fill the available footpath space at peak times. The City of Melbourne is considering a wide range of options to ensure that future pedestrians find the CBD a safe and enjoyable place to be.

The concept of shared zones is one of the tools that the City of Melbourne can use to improve the safe and efficient movement of goods and people around the CBD. By definition, shared zones are only necessary when the space cannot be closed to vehicles. In situations where vehicular access is no longer required the recommended action is to close the road and incorporate the space into the open space network (as a link or pocket park). This has already occurred and usually happens at the instigation of local business and property owners, who can generate additional financial return from a pedestrianized space.

Essentially shared space is more efficient because more activity can happen in a smaller space. Rather than segregate users with a kerb and channel, users (drivers and pedestrians) shared the space by travelling slowly and being careful. Shared space “works harder” for the local economy and the local community because more activity and economic product can be generated in each square metre of space.

1.2 Study Aims

This study aims to:

- Estimate the benefits that arise from shared zones based on literature, existing data and observation of current conditions;
- Understand how shared zones are currently operating in Melbourne; and
- Outline a program of options for improving and expanding the number of shared zones in Melbourne CBD.

1.3 Policy Context

The following internal documents have also been reviewed to ensure consistency between this report and relevant internal strategies and policies including:

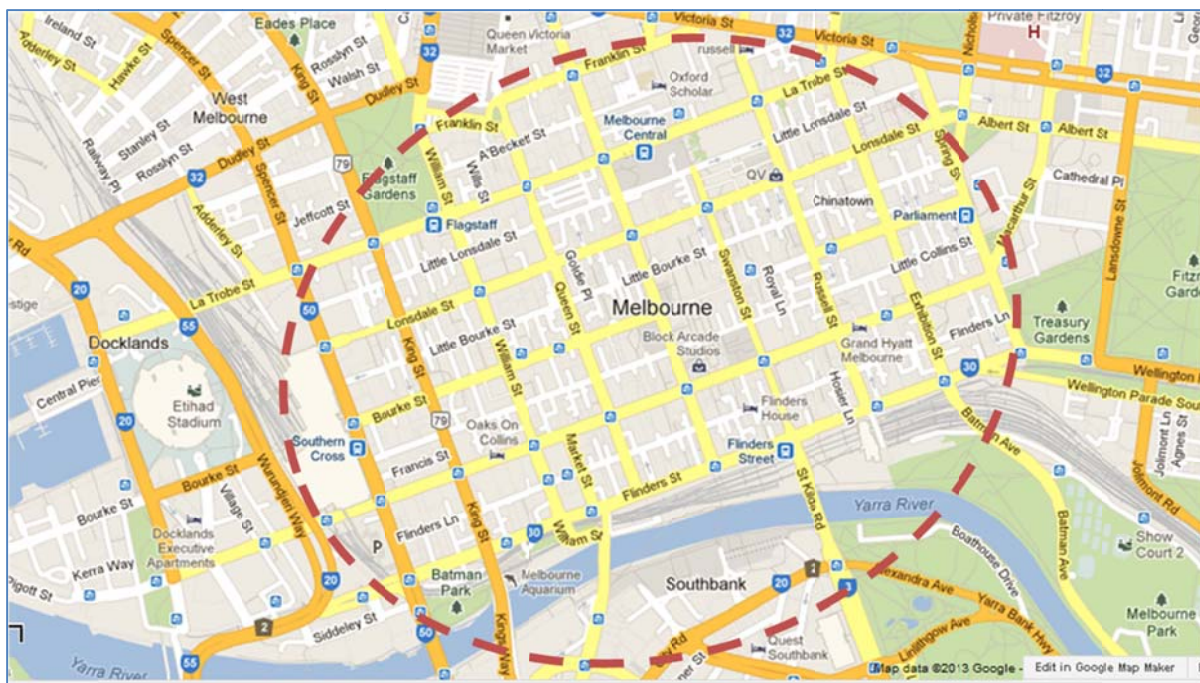
- Melbourne Transport Strategy 2012
- Melbourne Urban Forest Strategy
- The Active Melbourne Strategy – A plan for physical activity
- City of Melbourne Outdoor Café Guide

- City of Melbourne Road Encroachment Operational Guidelines
- Docklands Public Realm Plan
- Inner Melbourne Action Plan
- City of Melbourne Open Space Strategy
- Streets for People (1985 draft) – A pedestrian strategy for the Central Activities District of Melbourne

1.4 Study Area

The study area is depicted in Figure 1-1 below.

Figure 1-1 Melbourne CBD Study Area



1.5 Study Method & Structure

This study involved an assessment of every single road, little street and laneway in the study area. This comprehensive assessment is the first since the CBD Lanes Built Form Review design audit in 2005. Aspects of the design audit that are incorrect or have changed have been updated as part of the study process. The study team also visited some of the existing shared spaces in Bendigo, Dandenong, St Kilda and on the CBD fringe (Queen Victoria Market, Southbank and Docklands).

Having reviewed international literature and existing spaces in operation, this study then contrasted the laneways and streets in Melbourne with examples of successful shared spaces.

There are 233 laneways in the study area. This includes all laneways in the CBD and some additional laneways located to the north of the CBD grid. Twenty of these laneways are located in areas that are already designated as shared space. 18 of these laneways should not be considered as potential shared space as they are either closed to pedestrians or already designated as pedestrian only spaces. This breakdown of laneways in the study area is shown in Table 1-1 below.

Table 1-1: Number of Shared Zones in the Study Area

Laneways in the Study Area	Number
Existing Shared Zones	20
Under Consideration as Potential Shared Zones	195
Part of Construction Sites	7
Already Pedestrians Only	7
Private Lanes with Gates Preventing Access	4
TOTAL Laneways in Study Area	233

Note: Private lanes that are not gated are included in the other categories as some are already shared zones (with signs) and some others are operating like shared zones.

The study team has visited every laneway in Melbourne photographed its current conditions and classified the potential need for it to be designated as shared space. Through this process the behaviour and use of CBD roads has been monitored and has informed the estimation of benefits likely to occur.

The main and little streets were also considered in this study, but were not categorised in the same manner or studied in the same detail. Consideration of designating some of these streets as shared spaces is a recommendation of this report, and priorities for investigation have been identified. This report includes policy related recommendations that indicate that many of the streets are unsuitable for shared space designation.

The remainder of this report is structured as follows:

- **Section 2 – Benefits of Shared Zones** – reviews operation of existing shared zones in the CBD. It also considers existing literature from shared zones in other cities and provides draft criteria for shared zones.
- **Section 3 – Role of Shared Zones in the CBD** – Provides analysis of existing laneways and categorises them by the role they play in providing for pedestrians.
- **Section 4 – Recommendations** – Recommends where the City of Melbourne should pursue shared zones. This includes a prioritised order for shared zone development.

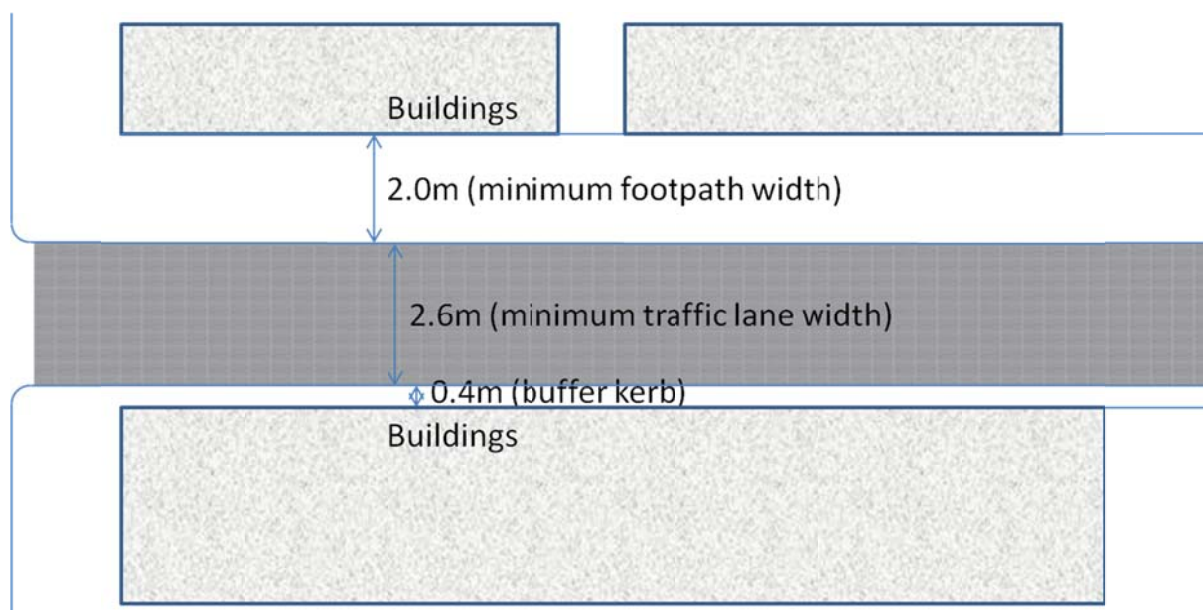
2. Benefits of Shared Zones

The average pedestrian needs at least 0.9m of width to walk past obstacles. Australian Standard 1428.1 requires 1.2m width at specific locations (such as doorways and turns) and a minimum width of 1m for accessible paths. City of Melbourne Road Encroachment Guidelines (2004) require new footpaths to be a minimum of 2m wide.

The maximum vehicle width (set by Victorian regulations) is 2.5m. Average sized cars typically need a space of 2.6m wide to clear obstacles (allowing for driver variance). In addition the maximum vehicle width doesn't include non-standard features that protrude from the vehicle such as side wing-mirrors. Laneways often have protrusions from buildings such as waste water pipes, jutting into them. To assist drivers and prevent collisions with these features many lanes include buffer kerbs (that look like a very narrow footpath). These vary in width though ideally would be a minimum of 0.4m wide.

Therefore any laneway that is less than 5.0m wide may not be wide enough to provide a footpath and buffer kerb in addition to the traffic lane. This is depicted in Figure 2-1 below.

Figure 2-1 Space Requirement to Separate Road Users



The majority of laneways are dead ends, often providing access to limited parking or loading facilities. Laneways like this typically cater for more pedestrians than vehicles, because locals use the laneway for pedestrian access and work breaks and because all delivery staff become pedestrians while they are unloading the delivery vehicles.

A significant benefit of shared zones is that pedestrians and car drivers can be accommodated in less space than would be required if the modes needed to be separated. Around twenty laneways in the CBD are regulated as shared zones. Four of these twenty are closed to traffic completely at some times of the day or week.

The benefits of formalising shared zones in the CBD are discussed in Table 2-1 below.

Table 2-1: Evidence of Shared Zone Benefits

Benefits	Evidence	Relevance
A greater awareness of pedestrians by all drivers	Awareness of shared zones will be increased as they become more commonplace	Increased awareness will increase compliance and safety for all road users
Pedestrians who are more likely to explore and activate otherwise inactive spaces.	Shared zones reduce the amount of space required to provide for both vehicles & pedestrians	This space that can then be used to activate laneways and increase economic productivity
Potential for surrounding businesses to open onto more laneways.	The financial viability of individual businesses can be improved with frontage onto active laneways	Opening existing businesses onto laneways also activates the laneway and make it a safer place for everyone
Reduced pedestrian crowding in other streets.	Laneways that connect through blocks can become a preferred short-cut to the large streets	Additional space for movement through blocks is needed to reduce pedestrian crowding in the large streets
Improved access to transport nodes (stations, tram stops and car parking garages).	Providing pedestrian priority along links to transport hubs reduces the perceived walking distance to/from these facilities	Reducing perceptions of walking distance increases the catchment of all CBD businesses
The ability to facilitate cyclist movement in both directions along one-way streets without expensive infrastructure.	This reduces capital expenditure that would otherwise be required to improve cyclist safety	Making cycling in the CBD easier will increase cycle mode share and reduce CBD traffic congestion

The existing shared zones in Melbourne CBD are generally working well. Table 2-2 below highlights good aspects and areas for improvement. The complete list of shared zones is shown in Table 2-3 below.

Table 2-2: Existing Shared Zones – Elements Working Well or Need Improvement

Successful Elements	Example
Significantly more pedestrian activity and improved business mix	Hardware Street
Pedestrians feel safer in narrow laneways (see photo 1, in figure 2-2 below)	Crossley Street, Davisons Place, Liverpool Street
Shared spaces enable more diverse use of the space enabling trees and outdoor dining on the entire footpath in areas that otherwise would not have enough space (photo 3)	Bank Place, Hardware Street
Vehicles still able to use the street as necessary to deliver goods or access parking (photo 2)	McKillop Street, Degrares Street
Alternative through links for pedestrians become better used as activity occupies the ground level space in the shared zone (photo 4)	Ridgway Place, Howey Place

Figure 2-2 Existing Shared Zones - Successful Elements



(1) Davison Place



(2) Degrares Street



(3) Bank Place



(4) Ridgway Place

Issues	Example
Compliance with speed limits in lanes that connect between streets (rat-running)	Exploration Lane
Shared zones have reduced impact if the street is bidirectional (see photo 1, in Figure 2-3 below)	Exploration Lane
Some lanes look and feel like shared zones but are not signed as such. Messaging to road users is diluted by inconsistent application of shared zones across the CBD.	Highlander Lane
Entering and exiting shared zones is not always as clear as it could be (photo 2)	Heffernan Lane, Ridgway Place, Pink Alley
In many cases signage is poorly located and is ambiguous about which street it refers to (photo 3)	Ridgway Place (Lt Collins St), Queen St (Vic Market), Goldie Place (Lt Bourke St), Liverpool Street (Bourke St)

Figure 2-3 Existing Shared Zones - Issues



(1) Exploration Lane



(2) Heffernan Lane



(3) Ridgeway Place

The shared zones currently in operation vary in use from some which are closed to all vehicles for much of the day and become very active with pedestrians to those that seem to have more vehicles using them (than pedestrians), but have pedestrian movements which need to be protected (such as into and out of apartments and collecting mail from letter boxes while standing on the road pavement).

Some shared spaces provide a thoroughfare (perhaps only for pedestrians) that can ease congestion on other pedestrian links. For example Degrares Street provides a link to Flinders Street Station that can be an alternative to Elizabeth Street or Swanston Street. This link serves to ease congestion on the alternative corridor links and improve pedestrian permeability, access, travel speed and amenity in the CBD generally.

However, shared spaces can become popular with business owners who seek to benefit from the high volume of pedestrian traffic. These retailing opportunities help to activate the spaces but also place other demands on the space in terms of reducing capacity and crowding the space with other uses. For example Degrares Street has the potential to provide a significant capacity increase to ease congestion on Swanston Street or Elizabeth Street, but for much of the day it is crowded with café patrons to such an extent that the speed of pedestrian movement is hindered (even if amenity remains high).

The table below ranks the existing shared spaces with regard to several attributes, not only on their effectiveness as shared zones, but also with regards to pedestrian amenity or role within the transport network.

Table 2-3: Ranking Operation of Existing Shared Zones

NAME	Pedestrian Experience	Increased Vehicle Travel times	Improves access to PT	Value as Network Link	Safety (CPTED & Vehicle)	Potential to alleviate crowding	Land Use Impacts	Effectiveness at achieving appropriate driver behaviour
Bank Place	High	Low	Low	High	Medium	Medium	Excellent	High
Davisons Place	Medium	Low	Low	Low	High	Low	High	High
Hardware Lane (South)	High	High	Medium	High	High	High	Excellent	High
Hardware Lane (North)	High	High	High	Medium	High	High	Excellent	High
Howey Place	High	Medium	High	High	Excellent	High	Excellent	High
McKillop Street	High	Medium	Low	High	Excellent	Medium	Excellent	High
Degraves Street	High	Medium	High	High	High	High	Excellent	High
Brabham Lane	Low	Low	Low	Low	Medium	Low	Low	Medium
Crossley Street	Low	Medium	Low	Medium	Medium	Medium	High	Medium
Hardware Street	Medium	Medium	High	High	High	High	High	Medium
Heffernan Lane	Low	Low	Low	Medium	Medium	High	Medium	Medium
Liverpool Street	High	Medium	High	Medium	High	Medium	High	Medium
McGraths Lane	Medium	Low	Low	Low	Low	Low	Medium	Medium
Regent Place	High	Medium	Low	Medium	High	Low	Medium	Medium
Ridgway Place	Medium	Low	Low	High	High	High	High	Medium
Degraves Place	Low	Low	Low	Low	Low	Low	Low	Low
Exploration Lane	Low	Medium	Low	High	Low	High	Medium	Low
Goldie Place	Low	Medium	Low	Medium	Low	Medium	Medium	Low
Pink Alley	Low	Low	Low	Low	Low	Low	Low	Low
Presgrave Place	Low	Low	Low	Low	High	Low	Medium	Low
Roeszler Lane	Low	Low	Low	Low	Medium	Low	Low	Low

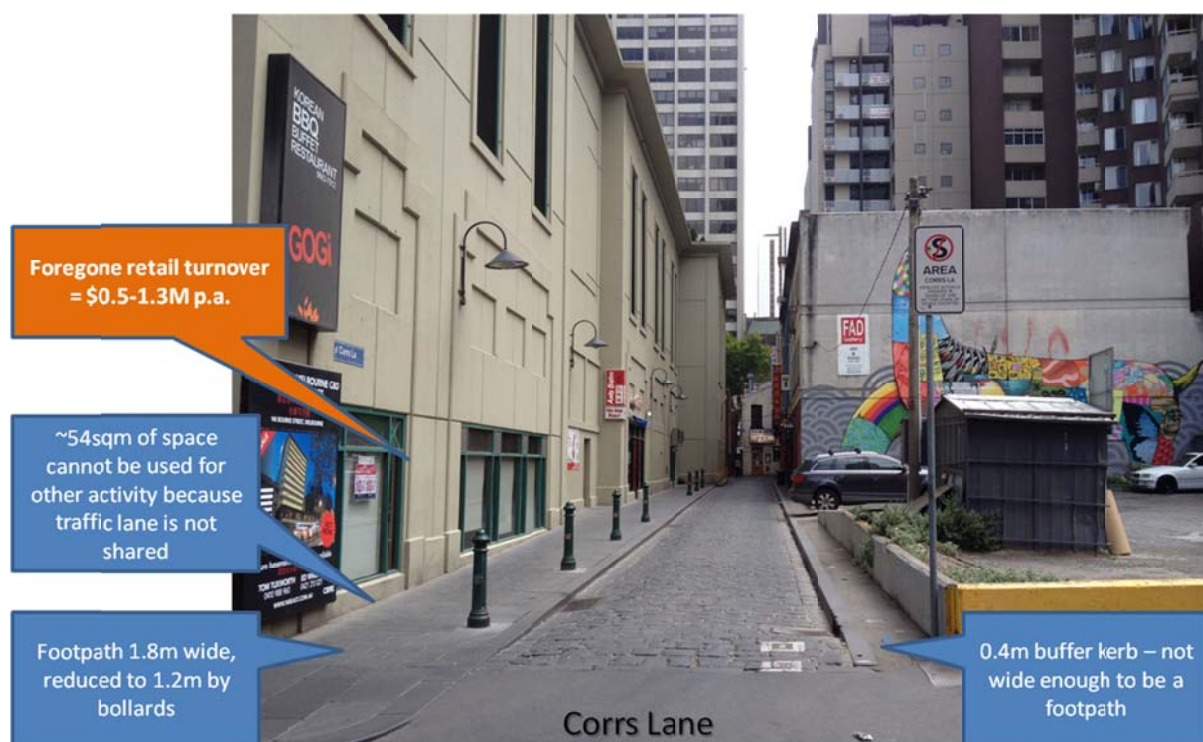
Application of shared space zones enables joint use of one traffic lane for cars and pedestrians. Council and local businesses can then use the remaining space for more productive uses such as outdoor dining, growing trees and public artwork. A good example of this exists in Hardware Street. It is always open to traffic, and pedestrians can barely fit on the footpath because it is so narrow. Council narrowed the traffic lane, providing space for some trees to be planted, and the footpath to be widened. The wider footpath has been dedicated for outdoor dining use – as the pedestrians can occupy the traffic lane of the shared zone.

Increasing availability of outdoor dining generates increased economic expenditure. This flows into increased business viability and increased job creation. The economic activity is estimated to range between \$14,000 and \$25,000 per square metre per annum. This is the revenue range that can be generated by a typical café. This figure doesn't include the multiplier effect of additional employment.

Trees and vegetation make the laneways more enjoyable places to be in and contribute to the Council's urban forest strategy. The benefits of this vegetation depend significantly on what is planted where and how much is planted. The first tree makes a big difference, and there are diminishing returns for each subsequent plant. If there is no vegetation or canopy trees in the laneway then the economic return for the first few trees can be expected to be greater than (at least equal to) the maximum rate per square metre for outdoor dining. This assumption is reasonable due to the benefits outlined in the Urban Forest Strategy.

The opportunity-cost of not sharing space between pedestrians and cars, is that the footpaths in the laneway must be kept clear for pedestrians to use and cannot be used for more productive activity. The value of this potential opportunity depends on many factors, most significantly the type of businesses that could use the space if pedestrians could use the traffic lane. This is illustrated in Figure 2-4 below which contrasts two similar lanes in the CBD (Corrs Lane and Hardware Street).

Figure 2-4 Opportunity cost of not Sharing Space





Safety benefits are significant in terms of reducing the potential severity of impact of crashes (between cars and pedestrians) but less significant in terms of the actual number of crashes that currently occur in Melbourne's laneways, because laneways experience low traffic volumes and low crash rates.

There is some expectation that shared zones will be implemented only where pedestrians already outnumber vehicles. This logic has merit, in that shared zone regulations are easily (typically) flouted if there are no pedestrians around. However, the more pedestrians outnumber vehicles, the greater extent to which vehicle drivers slow down and share the road space anyway. It is therefore in the laneways where there are few pedestrians that the regulatory protection of shared spaces can be most needed.

In most laneways within the CBD the number of pedestrians far exceeds the number of vehicles. Exceptions to this are those laneways that have no pedestrian access points (doorways) but do have parking garage entrances. In all other laneways, any vehicle making a delivery results in an equal (if not higher) number of pedestrian movements once the vehicle is stopped and people need to make (or receive) the delivery. Many laneways also provide for staff entrances and exits used on arrival during breaks and at the end of shifts.

Many laneways also have doors and infrastructure such as letterboxes right on the boundary of the laneway, Figure 2-5 shows an example of this on Collins Way, which is not a shared zone. In these instances people accessing the facilities (including owners, tenants, visitors and postal workers) must be able to use the vehicle carriageway safely. This includes standing in the carriageway to complete their task (such as deliver the mail, find keys to open the door or call the person they are visiting). In addition many laneways are the first public space that people enter when exiting buildings in an emergency. The objective of shared spaces is to improve safety, reduce risk and remove any ambiguity about fault if crashes do occur. To do this effectively the meaning of shared zone needs to be well

understood (amongst drivers and pedestrians). The shared zones also need to be applied consistently across the CBD. This consistency of messaging is key to ensuring that all road users build up a consistent understanding when a shared zone is likely to be applied and what it means.

2.1 Literature and Data Review

There are a large number of documents that discuss shared spaces, including some that provide before and after analysis of the benefits derived from shared space implementation.

There is a lack of analysis at a local (micro-economic) level available in international literature. There is also a lack of before and after implementation analysis from projects in Melbourne, Bendigo or St Kilda. Detailed empirical analysis of projects before or after implementation would significantly assist the formulation of economic business cases, yet few such examples relating directly to shared spaces could be found.

The evidence that does exist regarding benefits of shared zones is based on behavioural science focusing on the environmental and visual cues that affect driver and pedestrian behaviour. The core concepts in behavioural science related to shared zones involve designing the space for the mode at most risk (pedestrians), creating ambiguity (some refer to confusion) about what users are allowed to do and providing narrow traffic lanes (effectively reducing the design speed of the road to 20km/h). These design elements cause all users to slow down and take more care avoiding accidents.

International research describes how the design features of a shared space encourage pedestrian activity and slow vehicles down. The increase in pedestrian activity and improved amenity encourages new businesses to open onto the area particularly those that further increase activity in the space (such as outdoor cafes).

The research shows that local business owners benefit and local economic activity increases after shared zones are implemented in appropriate locations. The most appropriate locations are those with:

- A large resident and employee population nearby (or a large number of pedestrians already using the space);
- Simple traffic movements currently on narrow traffic lanes; and
- Pleasant prevailing weather conditions (not exposed to strong winds every day).

The benefits likely to accrue from implementation of shared zones include:

- More considerate sharing of space, vehicles don't threaten pedestrians and pedestrians don't delay cars;
- Increased pedestrian safety and perceptions of safety;
- Increased footfall improving viability of local shops;



Figure 2-5 Letterboxes on Collins Way

- Improved amenity of the space;
- People staying longer in the space;
- Increased use of the space resulting in increased economic activity;
- Increased property values leading to new and diverse uses being attracted to underutilised spaces.

The City of Greater Bendigo implemented some shared zones as part of the *Bendigo Walks* program of works. The experience with the main shared zone has been positive in terms of Bendigo's external image, however local perceptions have been galvanised due to political campaigns around the broader *Bendigo Walks* brand.

The Bendigo Walks programme became politicised with many people then becoming disenchanted with almost any aspect of the programme. This was possible because most voters in the City of Greater Bendigo rely on cars for their daily travel needs, and very few live in the CBD core.

Given that so many spaces in the City of Melbourne are already used like shared spaces, a programme to increase recognition of these spaces in the City of Melbourne should take a site specific approach (working with local businesses and users) rather than be part of a larger overarching programme. This will enable local issues to be "ironed out" while keeping them local rather than grouping them all together in a program that can become a political focus.

Design elements are important to the success of shared zones. However, they can be simple and poor design outcomes do not prevent people from using spaces in a shared manner. This study found many spaces that are not designated as "shared" but are designed like they should be shared. In these spaces drivers and people all behaved as if the space is a shared space. In other cases there were some lanes signposted as shared zones which did not look or feel like shared zones. Poor design of the space can also undermine the message of shared space signage, as driver behaviour is more responsive to design treatments than regulatory signage.

The two behavioural factors (how design affects pedestrian attraction to the space and affects driver behaviour) make some elements of design more important than others. From the experience laneways in Melbourne it seems that vegetation (canopy trees in particular) has the most significant impact on pedestrian and driver behaviour. This is because canopy trees have a significant impact on how pleasant the space is for pedestrians, and they occupy some of the space, causing drivers to slow down. As a result, installation of canopy trees should be a high priority for laneways that are wider than 2.5 metres (the width required for a traffic lane).

Broad lessons from the literature review are highlighted in Table 2-4 below.

Table 2-4: Lessons Learned from Literature Review

Lesson	Discussion
Areas with large populations (residents & employees) nearby will be more successful	<p>Having pedestrians who will use the shared zone is critical to the shared zone being a success. A shared zone is unlikely to attract people in its own right. Shared zones facilitate easy access to some specific facility (entertainment, recreation, residential or work related).</p> <p>Without pedestrians in the space the shared zone can seem like a much wider roadway, which results in higher traffic speeds and unsafe behaviour as drivers start to assume that there are never any pedestrians in the shared zone.</p>
Implementation should be site specific rather than an all encompassing program that attracts wider attention (positive and negative)	<p>Site-specific treatments will be better received as they can be discussed and modified to meet local business, resident, trader and user needs. Local trader engagement is also necessary in order to develop appropriate operational protocols (such as keeping the space clear of rubbish and bins).</p>
Design should be high quality, meet disability access standards and cope with heavy vehicles	<p>As a trafficable area the whole shared zone should be constructed of materials that are highly durable and high quality. All access points to the shared zone should comply with disability access standards with kerbs and vertical rises or lips eliminated wherever possible.</p> <p>Many laneways will become shared zones in future (within the 30 year design life of footpath infrastructure). Therefore any footpath or kerb renewal works should minimise unnecessary changes in level and be designed to work as shared zones in the future.</p>
There is a lack of empirical data that proves the anecdotal evidence about benefits	<p>It is clear that improving pedestrian conditions in areas with large pedestrian catchments will have a positive impact on the local economy, pedestrian safety and property values in the area.</p> <p>While there is data to prove the benefits of shared spaces, there is a lack of Melbourne specific data and empirical evidence to quantify the total economic value of improvements.</p> <p>There is a positive relationship between pedestrian amenity and city liveability. Melbourne's liveability is used as a key factor to attract future business to the city. It is important to better quantify the aspects of shared space that provide the most benefit in terms of amenity and economic improvement.</p>

2.2 Recommended Criteria and Policies

The following criteria were used to identify lanes that were suitable for conversion to shared zones. These criteria resulted from findings from the literature and data review and include lanes which cannot be closed to vehicles and have pedestrian numbers that outweigh vehicle use which also meet one or more of the following criteria:

- Lanes that are less than 3.8m wide;
- Lanes over 3.8m that have potential to support outdoor cafes;
- Strategic pedestrian links that connect through CBD blocks;
- Lanes that would benefit from improved amenity if space is made available for vegetation;

Recommended policies related to Shared Zones in Melbourne's CBD are discussed in

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Table 2-5 below.

Table 2-5: Key Policy Recommendations

Policy	Reasoning
<p>Lanes that are less than 5m wide <u>should</u> be shared spaces (as Council's desired footpath width cannot be achieved).</p> <p>Lanes that are less than 3.8m wide <u>must</u> be shared spaces unless access is not required for vehicles or pedestrians (as there is not enough space for pedestrians as required by the Australian Standards).</p>	<p>A width of less than 5m is not sufficient to provide for vehicles and meet Council's design guidelines relating to minimum footpath width. There are many instances where this desired footpath width is not achieved. The decision to classify such a lane as shared may depend on other factors such as traffic and pedestrian volumes.</p> <p>A width of less than 3.8m is not sufficient to enable safe passing of pedestrians and vehicles in a manner that is compliant with the Disability Access Standards. Narrow laneways may be used exclusively by cars or pedestrians, however in any instance where the two users are expected to share the space, it should be declared as a "shared zone". These spaces cannot physically provide for cars and pedestrians unless they are shared.</p>
<p>If doors open directly from a building into the roadway (or onto a footpath less than 1000mm wide) the space should be shared.</p>	<p>Pedestrians often use laneways to access (or exit) buildings. Some for everyday purposes and some only in an emergency. All users (everyday and emergency) need to be safe as they exit the building. In some instances doors open directly onto the traffic lane, without any warning. In some lanes mail-boxes are accessible only while standing in the traffic lane. In each of these situations pedestrians should be protected through use of a shared zone if they cannot be physically separated due to the width of the lane.</p>
<p>Providing vegetation in laneways should be the first priority for utilisation of any spare space (in laneways over 2.8 metres wide).</p>	<p>Trees in planter boxes provide pedestrian refuge areas (next to the planter box) and set expectations for how drivers should use the space. Vegetation also makes pedestrians feel more comfortable using and exploring the space.</p>
<p>Priority for design upgrades should be given to links that contribute to mid-block connections that traverse many blocks of the CBD grid.</p>	<p>Some links can provide relief to congestion that occurs on the 'main' streets. These links typically traverse many blocks of the CBD grid. These should be the priority for design upgrades and implementation of shared space philosophies.</p>

Policy	Reasoning
Shared Spaces should not be installed within 15 metres of traffic signals or zebra crossings. Any signalised intersection that is to be shared space must have the traffic signals removed or turned to yellow flash.	<p>Shared spaces provide specific priority to pedestrians and allow them to walk in the middle of the street. Traffic signals provide equally specific restrictions on pedestrians (not to cross against a red man). These attributes are not compatible and would lead to significant confusion if used in the same space.</p> <p>Zebra crossings can be included within the shared space (particularly at major pedestrian intersections) but should be monitored to ensure they do not detract from the messaging and expectations of the broader shared zone.</p> <p>In some cases provision of a pedestrian crossing may be a better option than regulation as a shared zone.</p>
Shared spaces should be designed to look like a pedestrian plaza	<p>Shared spaces should have no kerbs.</p> <p>The use of bitumen as a paving material should be minimised, and if used should be supplemented with colour differentiated tactile paving compliant with Disability Access Standards.</p> <p>Design treatments should include public art, vegetation and other features to break up the space and provide pedestrian refuges.</p>
In shared spaces that provide for bi-directional traffic flow, pinch points should be installed to force lower traffic speeds	Bi-directional traffic flow discourages pedestrian use of the roadway as pedestrians cannot easily make eye-contact with drivers travelling in each direction. Installation of pinch points using vegetation, paving features, bollards or public art can reduce traffic speeds and reinforce the desired behaviour.
Tram corridors are generally not suitable as shared spaces	Multiple tram routes operating at high frequency require traffic signals in order to provide safe movement and give priority to trams. In locations with complex tram movements (crossing other tram routes or turning) the benefits of a shared zone are likely to be outweighed by rail safety issues. The need for public transport priority makes it difficult to justify shared zones unless the only other option is closure of the street due to overcrowded pedestrians (such as during a political rally).

3. The Role of Shared Zones in the CBD

Currently shared zones (and speed limits) are applied inconsistently across the CBD. By virtue of the new 40km/h speed limit on the main and little streets, there is now an inconsistency with the default speed limit of 50km/h on all other streets unless otherwise signed. This would not occur if the CBD was declared a “40km/h area”. The result is that drivers can travel along some laneways faster than on the main streets (for example vehicles can travel on Church Street and Church Lane at 50km/h but only at 40km/h on King Street, shown in Figure 3-1 (Church Lane is closed to vehicles at lunchtimes, but is not a shared zone). Similarly a motorbike can travel at 50km/h down Brien Lane but only at 40km/h down Russell Street). Of course in most lanes it would not be physically possible to reach such high speeds, but the point is about consistent messaging.

Figure 3-1 Church Lane (L) and Church Street (R)



There are twenty laneways in Melbourne that are regulated as shared zones. In two instances (Hayward Lane and Kirks Lane) signage listed in Council's database does not exist. In two other instances (Ridgway Place and Liverpool Street) the signage is ambiguous as to which street it applies, potentially applying to Little Collins Street and Bourke Street respectively. Finally some signage was found to be inconsistent with current standards (Hardware Lane North).

Another 70 laneways in the CBD are too narrow to provide adequate separation of pedestrians from cars (they are less than 3.8 metres in width). In addition there are another 70 laneways that are wide enough to separate pedestrians from vehicles, but they have no footpaths. In both instances, these lanes operate much like a shared zone with car drivers slowing down and making room for any pedestrians using the roadway. However from a regulatory perspective there are many things that are unclear about these laneways, such as the speed limit, and rights and responsibilities of pedestrians in the laneways.

There is no consistent design or expectation for shared spaces, either in terms of pavement width or construction materials or auxiliary uses (trees or outdoor dining).

In four cases shared space laneways are closed to vehicles completely for some part of the day. There are many other laneways across the CBD that are closed for specific times of day without being shared zones. These laneways (such as Block Place and Church Lane) flip between being pedestrian only spaces to vehicle spaces, without ever being shared spaces.

There are many laneways that do not provide a usable footpath (at least 1000mm wide). These cannot operate as anything but shared space, unless there is absolutely no need for pedestrians to be in the space (which is the case in very few situations).

There are some laneways that have been designed and are currently used as if they are shared spaces, but they are not shared spaces in a regulatory sense (Market Lane, Manchester Lane & Highlander Lane). These laneways should be signed as shared space as soon as possible.

The design features that seem to matter most to the use of shared spaces are paving (in terms of both materials and no kerbs) and vegetation. These elements have the most significant impact on driver behaviour and perceptions of pedestrian safety. A range of design features are discussed in Table 3-1 below.

Table 3-1: Discussion of Design Features

Design Feature	Discussion
Honed (flat) Bluestone Paving (with or without granite cobble patterns)	This paving makes the laneway feel more like a Melbourne footpath and highlights the priority due to pedestrians in the space. Texture using cobbles can be used to signify important boundaries (such as slow points or car parking spaces) and narrow the roadway.
Kerbs and gutters (whether high or low profile)	<p>Kerbs were originally used to ensure that people could step over putrid mess (such as horse manure) that collected in busy streets. Kerbs have become an 'artificial' boundary delineating pedestrian space from vehicular space. Kerbs also make it difficult to use space in flexible ways (such as for wheelchair access, outdoor dining and large vehicles).</p> <p>The only useful purpose a kerb has in a shared space is to channel stormwater. This purpose can be better achieved with a gradient change (rather than a kerb) that forms a channel (most commonly close to the centreline of the space).</p>
Vegetation (any but preferably shade trees)	<p>Vegetation and landscaping is an important feature of pedestrian spaces. Users of the space (both drivers and pedestrians) will have different expectations of how the space should be used based on the amount and type of vegetation in the space. For example Highlander Lane is used by drivers and pedestrians like a shared zone because large planter boxes and trees obstruct the footpath.</p> <p>A lack of vegetation makes the space less pleasant for pedestrians and sends a visual cue to drivers that they are less likely to encounter pedestrians in the space. Even small amounts of vegetation highlight to drivers that pedestrians are more likely to be present (as the vegetation is put there by pedestrians for pedestrians).</p>

Design Feature	Discussion
Heritage bluestone paving (large cobble stones)	<p>This type of paving is uneven due to rounded edges of each cobble and the spacing between cobbles. In many cases it is retained for its heritage value.</p> <p>This treatment adds to the amenity and heritage aesthetic of spaces. It can also work in slowing vehicle speeds.</p> <p>The paving type needs careful application and sometimes slight modification to provide access for some people with a disability.</p> <p>The paving type is less appropriate in locations where trolleys are used or for people wearing high heel shoes.</p> <p>Providing two strips of honed (smooth) bluestone 900mm apart in the centre of these spaces will meet a wider range of pedestrian needs.</p>

4. Recommendations

The 20 shared zones (which are laneways) in Melbourne CBD exhibit a wide range of quality and effectiveness. In addition there are 26 laneways that look, feel and are used like shared zones (by both pedestrians and drivers) yet they are not designated as shared zones with appropriate signage. This report has four key recommendations:

1. There are 26 laneways that should be investigated for designation as shared zones (and only require signage changes);
2. Some narrow laneways should be designated as shared zones in consultation with surrounding land owners and businesses;
3. Some streets should be investigated further in preparation for them to become shared spaces in the medium term future; and
4. Council should implement a design checklist to ensure that all future capital works (including minor works such as driveway or kerb replacement) comply with disability access principles and make it easy to convert any space into a shared space.

A breakdown of the laneways in the study area is shown in Table 4-1 below.

Table 4-1: Breakdown of Recommendations (laneways)

Laneways in the Study Area	Number
Existing Shared Zones	20
Should be investigated for conversion to Shared Zones through changed road signs	26
Under Consideration as Potential Shared Zones These include laneways that are <ul style="list-style-type: none">• recommended for conversion with consultation with surrounding land owners and businesses,• that have potential for conversion,• that are difficult to convert, and• are not recommended for conversion	165
Laneways excluded from analysis (Construction Sites, Gated, Private or Pedestrian Only)	22
TOTAL Laneways in Study Area	233

The recommendations in Table 4-1 were based on an assessment of laneways against the criteria shown in Table 4-2 below.

Table 4-2: Criteria for assessing laneways as shared zones

	Criteria
Recommended for conversion to shared zone (listed in Table 4-4 and appendix A)	<ul style="list-style-type: none"> • Lanes that are less than 3.8m wide • Currently used as like a shared zone • Pedestrian volume > car volume
Under consideration as potential shared zones (listed in appendix A)	<ul style="list-style-type: none"> • Lanes that would benefit from improved amenity if space is made available for vegetation • Lanes over 3.8m that have potential to support outdoor cafes • Strategic pedestrian links that connect through CBD blocks or to public transport • Lanes that are closed to cars for some part of the day • One-way lanes through which bi-directional bicycle flow would provide a strategic bicycle connection
Not appropriate for conversion to shared zone (listed in appendix A)	<ul style="list-style-type: none"> • Private lanes (though they could be discussed with owner) • Lanes that could be closed to traffic permanently • Lanes that have appropriate footpaths with adequate capacity for current pedestrian demand • Lanes with very few pedestrians

Other non-laneway locations that are recommended for investigation for conversion to shared zones are shown in Table 4-3 below.

Table 4-3: Breakdown of Recommendations (other locations)

Non-laneway locations recommended for investigation as shared zones	Number
Main & Little Streets Recommended for Investigation	8
Intersections Recommended for Investigation	2
TOTAL Other Locations Recommended for Detailed Investigation	10

The lanes listed in Table 4-4 and shown in Figure 4-1 are currently used as shared zones. They should be investigated with the aim of formally designating and signing them as shared zones.

Table 4-4: Recommended New Shared Zones

	Name	Reasoning
1	Alfred Place (Collins St – Lt Collins St)	Currently used like a shared zone. Closed to vehicles from 11am-11pm. Ability to physically separate pedestrians from vehicles is limited due to width of the road reserve. Already paved with hewn bluestone. Footpath width doesn't provide for the density of pedestrians.
2	Bell Place (from La Trobe St)	Currently used like a shared zone. No footpath - 18 letterboxes can only be accessed while standing in the traffic lane. Ability to physically separate pedestrians from vehicles is limited due to width of the road reserve. Already paved with rough bluestone. Part of longer mid-block route
3	Benson Lane (from Exhibition St)	Currently used like a shared zone. Already paved with special pavers. No kerbs or separation of vehicles from pedestrian space.
4	Bligh Place (from Flinders La)	Currently used like a shared zone. Closed to vehicles from 7am-Midnight. No footpath or ability to physically separate pedestrians from vehicles. Already paved with hewn bluestone.
5	Brien Lane (from Bourke St – Lt Bourke St)	Currently used like a shared zone. No footpath or ability to physically separate pedestrians from vehicles. Laneway is almost too narrow for cars, main vehicles using it are motorbikes. Already paved with some hewn bluestone.
6	Brights Place (from Lt Lonsdale St – La Trobe St)	Currently used like a shared zone. Lane is partly pedestrianized (at the La Trobe St end). No entry sign to the cul-de-sac is confusing. Already paved with hewn bluestone and rough bluestone. Currently used by legal staff with trolleys who cannot use the footpath and find the rough bluestone very difficult.

	Name	Reasoning
7	Celestial Place (from Lt Bourke St)	Currently used like a shared zone. Already paved with rough bluestone. Ability to physically separate pedestrians from vehicles is limited due to width of the road reserve.
8	Centre Place (from Flinders La)	Key pedestrian north-south link. Currently used like a shared zone. Closed to vehicles from 8am-7pm. Ability to physically separate pedestrians from vehicles is limited due to width of the road reserve.
9	Cohen Place (from Lt Bourke St – Lonsdale St)	Currently used like a shared zone. Already paved with hewn bluestone. No footpath or physical separation of pedestrians from vehicles.
10	Collins Way (from Lt Collins St)	Currently used like a shared zone. Already paved with some hewn bluestone. No footpath or physical separation of pedestrians from vehicles. 28 letterboxes can only be access while standing in the traffic lane.
11	Drewery Alley (from Drewery La)	Currently used like a shared zone. Already paved with rough bluestone. No footpath or physical separation of pedestrians from vehicles.
12	Drewery Lane (from Lonsdale St – Lt Lonsdale St)	Currently used like a shared zone. Already paved with rough bluestone. No footpath or physical separation of pedestrians from vehicles.
13	Drewery Place (from Drewery La)	Currently used like a shared zone. Already paved with rough bluestone.
14	Equitable Place (from Collins St – Lt Collins St)	Currently used like a shared zone. Closed to vehicles from 7am-5pm. Ability to physically separate pedestrians from vehicles is limited. Already paved with hewn bluestone.

	Name	Reasoning
15	Gills Alley (from Lt Collins St)	Currently used like a shared zone. Already paved with some hewn bluestone. No footpath or physical separation of pedestrians from vehicles. Doors to licenced premises open directly onto traffic lane.
16	Highlander Lane (Flinders St – Flinders La)	Currently used like a shared zone. No ability to physically separate pedestrians from vehicles. Already paved with hewn bluestone
17	Hosier Lane (Flinders St – Flinders La)	Currently used like a shared zone. No ability to physically separate pedestrians from vehicles. Already paved with rough bluestone.
18	Knox Lane (Lt Lonsdale St)	Currently used like a shared zone. No ability to physically separate pedestrians from vehicles. Already paved with rough bluestone. Could be an important north-south link to Melbourne Central Station.
19	Manchester Lane (Flinders La – Collins St)	Currently used like a shared zone. No ability to physically separate pedestrians from vehicles. Already paved with hewn bluestone. Level pavement across width of lane.
20	Market Lane (Bourke St – Lt Bourke St)	Currently used like a shared zone. Limited ability to physically separate pedestrians from vehicles. Already paved with hewn bluestone and bricks. Buffer kerb not appropriate as footpath given the density of pedestrians.
21	Niagra Lane (from Lt Bourke St – Lonsdale St)	Currently used like a shared zone. Already paved with rough bluestone. No footpath or physical separation of pedestrians from vehicles.
22	Oliver Lane (from Flinders St – Flinders La)	Currently used like a shared zone. Already paved with rough bluestone. No footpath or physical separation of pedestrians from vehicles.

	Name	Reasoning
23	Punch Lane (from Lt Bourke St – Lonsdale St)	Currently used like a shared zone. Already paved with hewn bluestone. Ability to provide physical separation of pedestrians from vehicles and parking is limited.
24	Scott Alley (from Flinders La)	Currently used like a shared zone. Closed to vehicles from 10am-Midnight. No footpath or ability to physically separate pedestrians from vehicles. Already paved with hewn bluestone.
25	Tattersalls Lane (Lt Bourke St – Lonsdale St)	Currently used like a shared zone. No ability to physically separate pedestrians from vehicles. Already paved with some hewn bluestone.
26	The Causeway (from Lt Collins St – Bourke St)	Currently used like a shared zone. Closed to vehicles from 8am-midnight. Ability to physically separate pedestrians from vehicles is limited. Already paved with hewn bluestone.

Figure 4-1 Existing and recommended shared zones (lanes)



There are over 120 narrow laneways that should be designated as shared zones in consultation with surrounding land owners and businesses. A full list of these is provided in Appendix A.

The main reasons for considering these laneways as shared zones is the feature of narrow lane width and the inability to separate pedestrians from vehicles. It would be reasonable to designate all such laneways as shared zones. However lessons from Bendigo would suggest a better approach would address each laneway individually in consultation with local stakeholders.

The streets that should be investigated further in preparation for them to become shared spaces in the medium term future are described in

Table 4-5 below and shown in Figure 4-2.

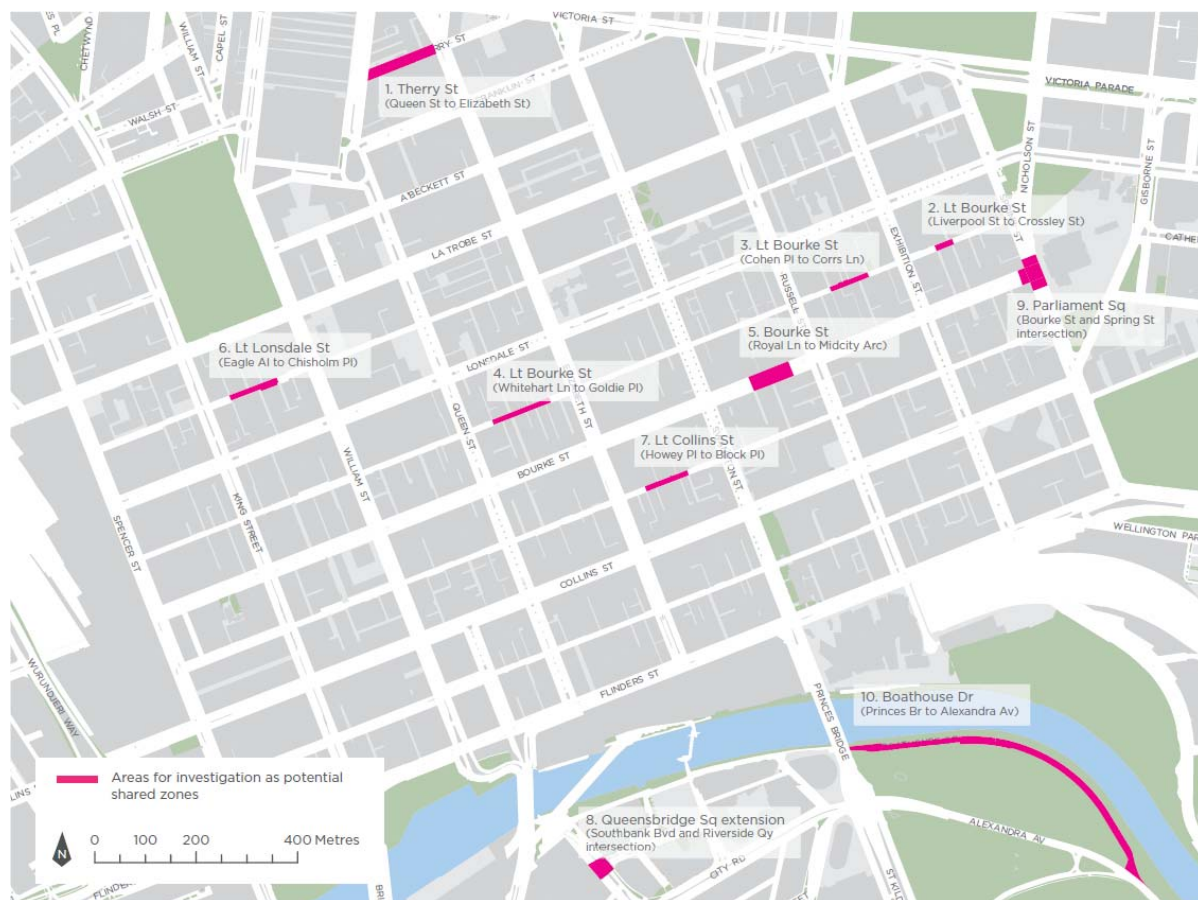
Table 4-5: Potential non-laneway Shared Zones

	Name	Reasoning
1	Therry Street (Queen Street to Elizabeth Street)	<ul style="list-style-type: none"> Relatively busy on market days (Queen Victoria Market). Other shared zones in nearby areas (Queen Street, laneways around market).
2	Little Bourke Street (Liverpool Street – Crossley Street)	<ul style="list-style-type: none"> Relatively busy at any time of day. Currently operates like a shared zone in lunch peak with low traffic speeds and pedestrians overflowing the footpaths. Bounded by Liverpool and Crossley Streets which are both shared zones. Some design elements (raised roadway and elsewhere kerb outstands) help to reinforce behaviour expectations.
3	Little Bourke Street (Cohen Place – Corrs Lane) “Chinatown”	<ul style="list-style-type: none"> The busiest section of Little Bourke Street in terms of pedestrians (at any time of day). Currently operates like a shared zone in business hours with low traffic speeds and pedestrians overflowing the footpaths. Signs could be installed and future design changes will reinforce behaviour expectations.

	Name	Reasoning
4	Little Bourke Street (Whitehart Lane – Goldie Place)	<ul style="list-style-type: none"> • The second busiest section of Little Bourke Street in terms of pedestrians (at any time of day). • Currently operates like a shared zone in lunch peak with low traffic speeds and pedestrians overflowing the footpaths. • Some design elements (raised roadway and elsewhere kerb outstands) help to reinforce behaviour expectations.
5	Bourke Street (Royal Lane – Midcity Arcade)	<ul style="list-style-type: none"> • A cul-de-sac formed by Bourke Street Mall and Swanston Walk. • Provides for deliveries and egress from Royal Lane. • Some pedestrians use the space like a shared space. • Design treatment may be a better option than regulatory designation as tram operator may object to 10km/h speed limit.
6	Little Lonsdale Street (Eagle Alley – Chisholm Place)	<ul style="list-style-type: none"> • One of the busiest sections of Little Lonsdale Street in terms of pedestrians (due to the hub of cafes). • Part of a key north-south, mid-block link from Flinders Street to Flagstaff Gardens. • Narrow footpaths lead to pedestrians overflowing the footpaths for much of the business day. Investigate widening footpaths on the southern side of Little Lonsdale Street. • Signs could be installed and future design changes will reinforce behaviour expectations.
7	Little Collins Street (Howey Place – Block Place)	<ul style="list-style-type: none"> • The busiest section of Little Collins Street in terms of pedestrians (at any time of day). • Currently operates like a shared zone in business hours with low traffic speeds and pedestrians overflowing the footpaths. • Signs could be installed and future design changes will reinforce behaviour expectations.

	Name	Reasoning
8	Queensbridge Square extension (Southbank Boulevard and Riverside Quay intersection)	<ul style="list-style-type: none"> Currently a signalised cross-road intersection catering for car park access and egress. It is relatively unique in that two legs of the intersection only provide access to car parking. Pedestrians currently treat this intersection as shared space crossing (even on angles) when there is no traffic, mainly due to signal timing and low vehicle volumes. This is potentially less safe than a shared zone as traffic is able to travel at 50km/h through this intersection. The western leg of the intersection is signed as shared space (with an 8km/h speed limit). This area is also partly fenced to prevent pedestrian access at some locations. Higher volumes of traffic enter or exit car parking facilities in the peak and are the main vehicle users of the space. Removing traffic signals will reduce waiting times (for drivers and pedestrians) and may outweigh the impact of reduced speeds on network performance.
9	Parliament Square (Bourke Street and Spring Street intersection)	<ul style="list-style-type: none"> Currently a "T-intersection" catering for tram movements pedestrians and vehicle movements. Relatively unique in that the steps of Parliament are often used for political rallies. A temporary shared zone (using variable messaging signage) could be an appropriate way to make medium size gatherings of people safer. During large gatherings the intersection would still need to be closed. Shared space signage would give protective service officers greater flexibility in how they manage public safety of medium size events and reduce the impact of medium size events on vehicles and trams.
10	Boathouse Drive (Princes Bridge to Alexandra Avenue)	<ul style="list-style-type: none"> Currently used like a shared zone. Closed to vehicles from 11am-11pm. Ability to physically separate pedestrians from vehicles is limited due to use of rowing sheds. Footpath width doesn't provide for the density of pedestrians.

Figure 4-2 Potential shared zones (non-laneways)



5. Conclusions

The future increases in pedestrian activity in Melbourne CBD will require more space for pedestrians. As pedestrian areas get more crowded, the appeal of the CBD (or parts of it) will diminish. Some pedestrians will start using the traffic lanes (whether or not it is safe to do so) to avoid the congestion. Some streets in Melbourne already experience this level of congestion at specific times of day (morning, afternoon and lunchtime peaks).

The City of Melbourne seeks to provide a safe pedestrian environment that supports growth in economic activity. Pedestrian activity in the CBD is forecast to grow by 50% (an additional 400,000 visitors per day across the City of Melbourne) in the next 20 years. This growth cannot be accommodated safely (or without significant congestion) in the existing pedestrian environment. The City of Melbourne needs to identify and designate new spaces for pedestrians to use.

One of the ways the City of Melbourne can increase pedestrian space is to facilitate shared use spaces. In these spaces pedestrians have priority yet vehicles can continue to use the space at low speed. These spaces are inherently safer (than pedestrians spilling onto a carriageway of faster moving traffic) because the probability and severity of crashes is reduced as traffic speeds reduce.

This report has identified that the City of Melbourne has an inconsistent approach to application of shared zones. There are already 20 shared zones in the CBD with a wide range of quality and effectiveness. In addition there are some streets that look, feel and are used like shared zones (by both pedestrians and drivers) yet they are not designated as shared zones with appropriate signage. Lack of signage in these spaces weakens the consistency of the messaging related to shared zones.

This report has four key recommendations:

1. Some streets should be designated as shared zones immediately;
2. Some narrow laneways should be designated as shared zones in consultation with surrounding land owners and businesses; and
3. Some streets should be investigated further in preparation for them to become shared spaces in the medium term future; and
4. Council should implement a design checklist to ensure that all future capital works (including minor works such as driveway or kerb replacement) comply with disability access principles and make it easy to convert any space into a shared space.

The streets that should be declared shared zones immediately all have design features, paving, width and usage that is very similar to the best of the existing designated shared zones. It is anticipated that most users would barely notice the difference of the signage, but it would build a more consistent messaging across the CBD and remove any ambiguity about priority and which users have right of way.

The narrow laneways would need to be approached on a case-by-case basis. Priority would be given to those laneways that already have existing pedestrian generating activities in them. Where necessary, Council should initiate discussions with surrounding land owners and businesses to highlight the need for pedestrian safety, the role of shared zones in

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encouraging diverse economic activity and the impact on vehicular traffic (which in most laneways is minimal as most vehicles are already travelling slowly).

Council should work across departments to design how shared spaces might function in the busiest sections of each of the “little streets” and some specific intersections. This would involve some preliminary thinking and design of optimal designs so that future capital works (such as drainage replacement) can incorporate the longer-term outcomes desired for each space.

The design checklist is required because recent capital works have included features that are not compliant with disability access principles and increase the cost of conversion to shared space. These features can seem quite trivial (such as small lips or bull-noses at the end and edge of vehicle crossovers) but have a significant impact on user behaviour and the ability of some people to use the space easily.

Melbourne CBD is a highly liveable place in part due to the adoption of shared space principles and behaviours. Strengthening the messages around shared spaces and extending their operation in logical places will increase local economic activity and further enhance Melbourne’s liveability.

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Appendix A: Audit of lanes in the Hoddle Grid in terms of their appropriateness as shared zones

1. Existing shared zones

- | | |
|---------------------|----------------------|
| 1. Bank Place | 11. Heffernan Lane |
| 2. Bradham Lane | 12. Howey Place |
| 3. Crossley Street | 13. Liverpool Street |
| 4. Davisons Place | 14. McGraths Lane |
| 5. Degraives Place | 15. McKillop Street |
| 6. Degraives Street | 16. Pink Alley |
| 7. Exploration Lane | 17. Presgrave Place |
| 8. Goldie Place | 18. Regent Place |
| 9. Hardware Lane | 19. Ridgway Place |
| 10. Hardware Street | 20. Roeszler Lane |

2. Lanes recommended for conversion to shared zones

- | | | |
|----------------------|-----------------------|----------------------|
| 1. Alfred Place | 11. Centre Place | 21. Hosier Lane |
| 2. Banana Alley | 12. Cohen Place | 22. Knox Lane |
| 3. Bell Place | 13. Collins Way | 23. Manchester Lane |
| 4. Benson Lane | 14. Custom House Lane | 24. Market Lane |
| 5. Bligh Place | 15. Drewery Alley | 25. Niagara Lane |
| 6. Block Place | 16. Drewery Lane | 26. Oliver Lane |
| 7. Bowen Street | 17. Drewery Place | 27. Punch Lane |
| 8. Brien Lane | 18. Equitable Place | 28. Scott Alley |
| 9. Brights Place | 19. Gills Alley | 29. Tattersalls Lane |
| 10. Celestial Avenue | 20. Highlander Lane | 30. The Causeway |

3. Lanes that should be considered for conversion to shared zones

- | | | |
|------------------------|--------------------------|------------------------|
| 1. ACDC Lane | 44. Golden Fleece Alley | 87. Monaghan Place |
| 2. Albion Alley | 45. Gordon Place | 88. Mornane Place |
| 3. Alsop Lane | 46. Gough Alley | 89. Moylans Lane |
| 4. Altson Lane | 47. Grant Lane | 90. Park Street |
| 5. Austral Lane | 48. Grice Alley | 91. Paynes Place |
| 6. Balcombe Place | 49. Guests Lane | 92. Pender Alley |
| 7. Baptist Place | 50. Guildford Lane | 93. Pender Place |
| 8. Barry Lane | 51. Gurners Lane | 94. Penfold Place |
| 9. Belman Place | 52. Harper Lane | 95. Portland Lane |
| 10. Benjamin Lane | 53. Harwood Place | 96. Racing Club Lane |
| 11. Bennetts Lane | 54. Hay Place | 97. Rainbow Alley |
| 12. Brown Alley | 55. Hayward Lane (north) | 98. Rankins Lane |
| 13. Bullens Lane | 56. Hayward Lane (south) | 99. Rothsay Lane |
| 14. Caledonian Lane | 57. Healeys Lane | 100. Royston Place |
| 15. Carson Place | 58. Heape Court | 101. Russell Place |
| 16. Chapter House Lane | 59. Henty Lane | 102. Rutledge Lane |
| 17. Chester Lane | 60. Higson Lane | 103. Samuel Lane |
| 18. Chisholm Place | 61. Howitt Lane | 104. Smythe Lane |
| 19. Church Lane | 62. Hughs Alley | 105. Sniders Lane |
| 20. Cocker Alley | 63. Jones Lane | 106. Somerset Place |
| 21. Commerce Way | 64. Kirks Lane | 107. St James Lane |
| 22. Coromandel Place | 65. Kitz Lane | 108. St Patricks Alley |
| 23. Corrs Lane | 66. La Trobe Place | 109. Star Alley |
| 24. Cosgrave Lane | 67. Lacey Place | 110. Staughton Alley |

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25. Coverlid Place	68. Langs Lane	111. Stevenson Lane
26. Croft Alley	69. Lingham Lane	112. Strachan Lane
27. Crown Place	70. Little Bourke Place	113. Sutherland Street
28. Dame Edna Place	71. Little William Street	114. Tavistock Place
29. Dean Alley	72. Lonsdale Lane	115. Temple Court Place
30. Donaldson Lane	73. Loudon Place	116. Thomson Street
31. Duckboard Place	74. Malthouse Lane	117. Timothy Lane
32. Eagle Alley	75. Manton Lane	118. Turnbull Alley
33. Electric Place	76. Masons Lane	119. Turners Alley
34. Evans Lane	77. McCrackens Lane	120. Uniacke Court
35. Finlay Alley	78. McIlwraith Place	121. Union Lane
36. Flanigan Lane	79. McIntyre Alley	122. Waratah Place
37. Fleming Place	80. McLean Alley	123. Warburton Alley
38. Flinders Court	81. Melbourne Place	124. Warburton Lane
39. Fulham Place	82. Mercantile Place	125. Warner Lane
40. Gallaghers Place	83. Merlin Alley	126. Watson Place
41. Geddes Lane	84. Meyers Place	127. White Hart Lane
42. George Parade	85. Michael Lane	128. Wicklow Lane
43. Globe Alley	86. Mitchell Lane	129. Zevenboom Lane

4. Lanes with potential for conversion to shared zones

1. Anthony Street	12. Nicholson Place
2. Crombie Lane	13. Ramsay Lane
3. Driver Lane	14. Royal Lane
4. Godfrey Street	15. Ryrie Lane
5. Grange Place	16. Singers Lane
6. Gresham Street	17. Spark Lane
7. Griffin Lane	18. Staughton Place
8. Lees Place	19. Sugden Place
9. Little Queen Street	20. Westwood Place
10. Merriman Lane	21. Windsor Place
11. Merritts Place	

5. Lanes not recommended for conversion to shared zones

1. Bond Street
2. Church Street
3. Club Lane
4. Downie Street
5. Francis Street
6. Katherine Place

6. Lanes not suitable for conversion to shared zones

1. Angel Lane	11. Foxton Lane	21. Rose Alley
2. Arcade Lane	12. Goldsbrough Lane	22. Sampson Lane
3. Athenaeum Place	13. Gorman Alley	23. St Johns Lane
4. Beaney Lane	14. Knox Place	24. St Johns Lane
5. Briscoe Lane	15. Little La Trobe Street	25. Stewart Street
6. Buckley Place	16. Lush Lane	26. Throssell Lane
7. Casselden Place	17. Lynch Place	27. Ulster Lane
8. Cleve Lane	18. Mill Place	28. Wills Street
9. Coates Lane	19. Mitre Lane	
10. Elliott Lane	20. Platypus Alley	

Appendix B: Streets and intersections in the Hoddle Grid that have potential for conversion to shared zones

1. Little Bourke Street (Liverpool Street – Crossley Street) “Chinatown”
2. Little Bourke Street (Cohen Place – Corrs Lane) “Chinatown”
3. Little Bourke Street (Whitehart Lane – Goldie Place)
4. Bourke Street (Royal Lane – Midcity Arcade)
5. Little Lonsdale Street (Eagle Alley – Chisholm Place)
6. Little Collins Street (Howey Place – Block Place)
7. Queensbridge Square extension (Southbank Boulevard and Riverside Quay intersection)
8. Parliament Square (Bourke Street and Spring Street intersection)