Wayfinding Signage in Melbourne – Scoping a Business Case

Workshop Outcomes

City of Melbourne

July 2015

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EXECUTIVE SUMMARY

Context

A committee charged with improving signage for visitors in Melbourne was established by the CEOs of the Melbourne Tourism Partnership in 2012. The committee – the Melbourne Visitor Signage Coordinating Committee - comprises representatives of the Maribyrnong, Melbourne, Port Phillip, Stonnington, Yarra and Wyndham City Councils, Tourism Victoria, Public Transport Victoria (PTV) and VicRoads.

The CEOs of these councils and agencies charged the committee with developing 'business rules' to apply to wayfinding signage across metropolitan Melbourne. The committee's first action has been to build a shared style guide outlining agreed signing principles, guidelines and language. The draft master style guide will be completed by end of 2015, and submitted to the participating authorities for adoption and trial.

The City of Melbourne (CoM) leads and manages this collaborative project.

In April 2015, CoM – with the financial support of Public Transport Victoria (PTV), the Inner Melbourne Action Plan (IMAP) councils and Wyndham City Council – hosted a 12-day visit to Melbourne of the Programme Manager of Legible London, Transport for London's (TfL's) acclaimed wayfinding signage system.

Following TfL's visit, the committee agreed to investigate, amongst other things, development of a business case outlining expected benefits of improved wayfinding signage, and creation of a single base map for use in wayfinding signage across Melbourne,

This approach would involve collaboration by state and local governments.

As a first step in this approach, CoM contracted SGS Economics and Planning Pty Ltd. (SGS) to facilitate a 3-hour stakeholder workshop to appraise whether there is warrant for a business case to pursue an investment strategy to improve the city's wayfinding signage system. In particular, the workshop would:

- Determine the value and scope of a business case
- Decide the scope of the task and to whom the business case would be sent
- Consider the data needed for a business case, and
- Decide whether to proceed to developing a project brief.

Overview of workshop discussion

The workshop took place on 24th June 2015 at the City of Melbourne. It involved the systematic identification of wayfinding signage user groups and their current unmet needs, the benefits that might be derived from investment in an improved system, and the potential form an investment could take. The workshop was attended by a total 18 representatives from CoM, other IMAP councils, VicRoads and SGS. PTV and Tourism Victoria were apologies.

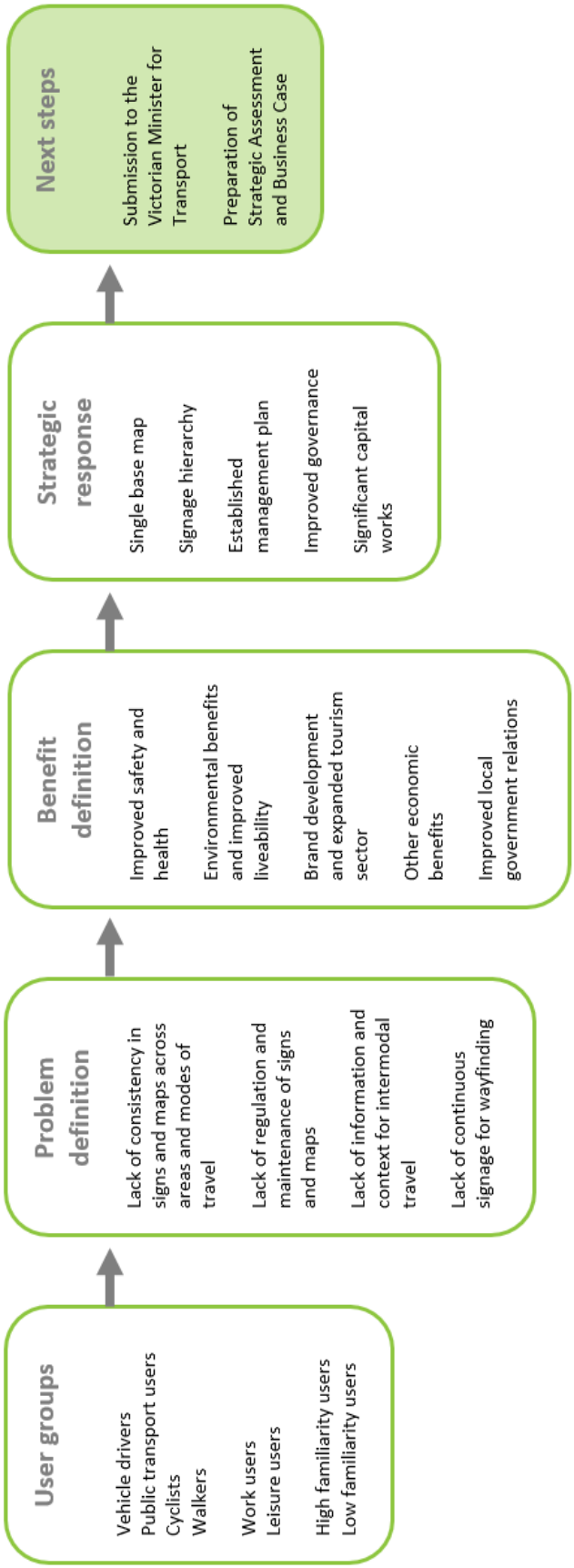
The workshop demonstrated that there are significant problems faced by Victorians as a result of shortcomings in Melbourne's current wayfinding signage. On the evidence generated, there was found to be a clear warrant to undertake formal Investment Logic Mapping (ILM) to test the need for further

development of Melbourne's wayfinding signage. It was proposed that the Minister for Transport act as the sponsor for this process.

Figure 1 overleaf provides an overview of the workshop discussion.

A full list of attendees and a copy of the workshop agenda can be found in the Appendix to this report.

FIGURE 1. OVERVIEW OF WORKSHOP DISCUSSION



1 INTRODUCTION

1.1 Wayfinding

In his book, *The Image of the City* (1960) Kevin Lynch defined 'wayfinding' as 'a consistent use and organisation of the definite sensory cues from the external environment'. Wayfinding describes the orientating and route decision-making process involved in reaching a destination. It encompasses indoor and outdoor navigating across all types of modes of travel and can be supported by a range of interventions including urban design and built form, landmark recognition, internal structures, landscaping, and tactile paving.

The focus of SGS' workshop was on the **signage and mapping aspects** of Melbourne's wayfinding system.

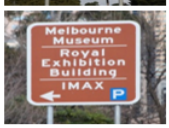
1.2 Existing wayfinding signage

People who are unfamiliar with an area – including visitors - rely on many different sign types. Four of the signage systems they're likely to use at some stage of their journeys across Melbourne are: road direction signs, public transport signs, pedestrian signs and cyclist signs. These are illustrated in the diagrams below.

FIGURE 2. ROAD DIRECTION SIGNS

Large direction signs
– for freeways and arterial roads – blade signs mounted on a single pole

Small direction signs
- for municipal roads



Tourist signs
- on a brown background

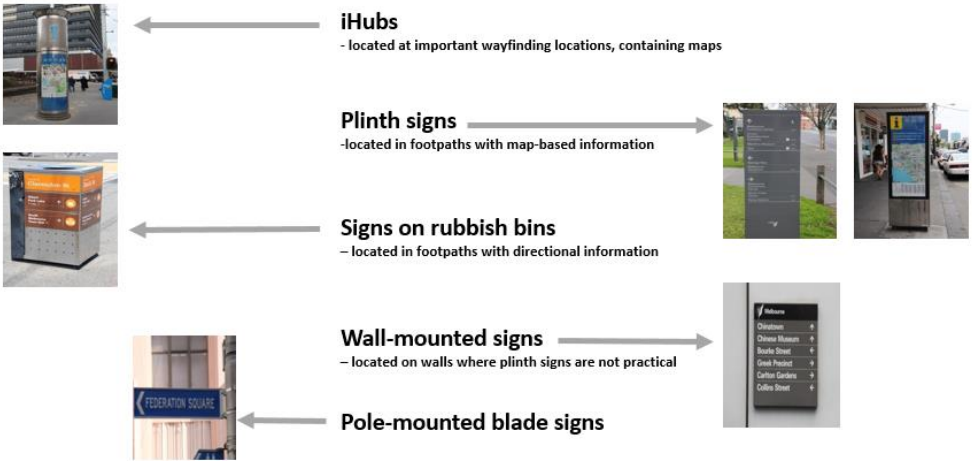
Services signs
- on a blue background, for motorist services, accommodation, sporting venues, religious venues, education institutions, shopping centres, hospitals, parking, etc

Street name signs
- blades mounted on a single pole, to the standard design for the municipality

Local community facility name signs
- usually for schools, religious venues, sporting fields, community houses, etc; usually on a blue background; may serve motorists, cyclists and pedestrians, depending on their location.

Source: SGS Economics and Planning

FIGURE 3. PEDESTRIAN SIGNS



Source: SGS Economics and Planning

FIGURE 4. PUBLIC TRANSPORT SIGNS

Source: SGS Economics and Planning

FIGURE 5. CYCLIST SIGNS

Source: SGS Economics and Planning

2 WORKSHOP FINDINGS

2.1 Problem definition

Key user groups

Discussions on the issues and problems concerning wayfinding signage at present were opened with the identification of user markets and their varying needs.

Four overarching user groups based on mode of travel were identified in the initial workshop discussions: 'drivers', 'public transport users', 'cyclists' and 'walkers'. Scale and type of signage were determined to vary across travel modes, with large road signs generally used exclusively by drivers, while single-pole blade street signs act as the backbone of the wayfinding system, used at all levels of travel.

These were divided by purpose of travel into two broad types: 'work' and 'leisure'. These types were defined with reference to Transport for London's *Legible London* wayfinding strategy, in which the two most common wayfinding user types are represented as 'Striders' and 'Strollers'. While the "impatient" Strider's method of arriving at a destination is as direct as possible, the "curious" Stroller is content to head towards a general area and discover what might be there. Work users in this context were thus defined as those keen to pursue the most direct route possible, while leisure users are happy to be shown the most pleasant route, or the range of options available to them.

The distinct needs of these user groups were also anticipated to be influenced by a spectrum of familiarity or confidence. Workers, visitors or tourists, those in the freight and logistics industry and Culturally and Linguistically Diverse (CALD) groups, for example, are likely to have significantly varying needs, understandings and overall user experiences when wayfinding.

A matrix was developed to discuss the size, significance and needs of various groups (see Table 1 below).

TABLE 1. USER GROUP MATRIX

Mode of travel	Purpose of travel	Familiarity/confidence	
		High	Low
Vehicle drivers	Work		
	Leisure		
PT users	Work		
	Leisure		
Cyclists	Work		
	Leisure		
Walkers	Work		
	Leisure		

It was further acknowledged that the identified groups were not discrete and in many cases could overlap, such as those users who make multi-modal trips.

Issues faced by user groups

Gaps and issues in the existing signage infrastructure which constrain the wayfinding capacity of the various user groups were identified (see Table 2 below).

TABLE 2. GAPS AND ISSUES IN THE EXISTING WAYFINDING SYSTEM

Mode of travel	Gaps and issues
Vehicle drivers	– Info overload as result of single issue signs; clutter – Lack of maintenance/lost signs – Poor articulation of transition between arterial and local roads
Public transport users	– Exclusive focus on route maps (need context) – Lack of exit or interface maps for wayfinding – Routes named by destination can cause problems eg. when lines are extended and names change – Unclear information in regards to lines and destinations eg. limited express trains
Cyclists	– Lack of information regarding danger – Lack of information regarding pedestrian conflicts – Difficulties in making a route choice – Lack of signage continuity; incomplete/disjointed signage – Relationship to rest of road system/key destinations unclear – Poor cross-street orientation
Walkers	– Outdated information – Lack of confidence in signage continuity – Confusing information regarding distance/walk times – Potential to identify gradients – Information overload/clutter/choice paradox
All modes	– Inconsistent maps – Inconsistent design, style and content across modes and areas; poor integration of all modes into the one system – Poor interface/intermodal information

For **vehicle drivers** the key issues identified were the proliferation of signs and the lack of a scheme managing the maintenance of signs. The uncoordinated installation of single issue signs was found to cause both unnecessary clutter and 'information overload' for road users, and in many cases missing or damaged signs go unreported and unaddressed.

The key issues faced by **public transport users** were determined to be a lack of integration between route maps and their context and a lack of information and maps available at exit points. The information available to users regarding orientation and wayfinding beyond any single stretch of travel (for example, upon disembarking at a train station) is generally quite poor.

The key wayfinding concerns for **cyclists** were a lack of signage continuity, the difficulties in making safe route choices and navigational issues resulting from removal from the wider road network. Given the disjointed nature of various sections of the city's bicycle network, cyclists are heavily dependent on signage. In cases where the bicycle network is separated from the wider road network, there can be issues in choosing appropriate cross streets to reach key destinations.

For **walkers** the key issues found were a lack of signage continuity and the associated diminished confidence of pedestrians in following signs to reach their destination. Poor indication of distance and walk times were determined to further limit the scope of destination choices for visitors on foot, or prompt the unnecessary use of alternate transport modes for short distances.

Inconsistencies in base mapping and a lack of information for intermodal travel and wayfinding were identified as significant issues across all modes. The deficiencies in Melbourne's existing wayfinding infrastructure were concluded to cause avoidable delays, frustration and stress. Concerns regarding the use of mobile phones in wayfinding and the potential related issues of distraction were also raised.

In summary, the prioritised issues and opportunities identified during the Problem Definition phase of the workshop were:

1. **Lack of consistency between signs and maps across all areas and modes of travel in terms of design, style and content**
2. **Lack of regulation, maintenance and avoidance of proliferation of signage and maps across all areas and modes of travel**
3. **Lack of information and wayfinding context for travel between modes, and**
4. **Lack of continuous signage for wayfinding; incomplete or disjointed signage**

2.2 Benefit definition

The potential benefits of investment in a strategy to improve wayfinding signage for central Melbourne fell into five broad categories: safety and health, environment and liveability, brand reputation and tourism, other economic benefits, and government relations. These are described below.

1. Safety and health

With improved signage on roads there would likely be a reduction in accidents, trauma and costs to human life. Appropriate signage can also increase levels of walking and cycling, reducing the incidence of health issues relating to insufficient levels of physical activity. Further health benefits could also be gained with potential reduced levels of stress and angst.

2. Environment and liveability

With the promotion of active travel, public transport use, and the potential associated decline in car use and emissions, investment in a signage strategy can have wide environmental benefits and result in an improved public realm. This, along with the direct user benefits of more effective signage, can contribute to a more positive user experience.

3. Brand reputation and tourism

The wayfinding experience is a factor that can influence Melbourne's 'brand'. An effective signage system has the potential to strengthen the city's reputation and visitor economy, attracting more return visits, creating an expanded tourism sector and drawing more business investment.

4. Other economic benefits and cost savings

Improvements to wayfinding infrastructure can also effect travel time savings and reduced congestion, resulting in wider savings across the Melbourne economy. Moreover, a consistent wayfinding scheme across the metropolitan area could more effectively regulate the establishment of signage infrastructure, promoting cost savings through coordination of procurement and delivery, and reducing the number of signs needed.

5. Government relations

An indirect benefit of a coordinated wayfinding signage strategy across central Melbourne could also be improvements to government and institutional capacity through ongoing inter-government leadership at the local council level.

2.3 Strategic response

Potential strategic interventions

Potential strategic interventions to solve the defined problems and achieve the projected benefits were conceptualised in the next phase of the workshop. These were discussed in a 'Utopian' scenario with no limits to funds or operations. The five ideal interventions were:

1. **Single base map**
A single base map is developed, with a sole custodian to ensure consistent design across all modes and geographical areas and at all scales.

2. **Signage hierarchy**
A hierarchical 'family' of signs with detailed design specifications is established for use across different modes and geographical areas.

3. **Established management plan**
A plan is developed to set out how the signage system will be designed, developed and managed. A maintenance regime, along with a framework for research, record-keeping, monitoring and evaluation is developed.

4. **Improved governance**
A collaborative governance model is established to ensure coordinated leadership in the development, delivery and management of wayfinding signage. This will include an integrated approach to signage design and placement, with established 'business rules' governing signage principles and content. The wayfinding system is ideally able to be rolled out across metropolitan Melbourne.

5. **Significant capital works**
Significant capital works are undertaken to rationalise, fill gaps and enhance wayfinding signage infrastructure across Melbourne.

Solution definition

Given that in a real world investment scenario there is likely to be a range of limitations on the scope of a new strategy, these interventions were refined to establish a 'best value' solution. Elements of interventions 1-4 were chosen for this purpose.

At a core level, a single, scalable base map for wayfinding must be developed to integrate all areas across transport modes, delivered according to an established signage hierarchy convention.

In order to ensure effective delivery, record-keeping and maintenance of the system, a management plan must further be established, to be delivered through a coordinated governance approach.

The integrated signage system will be trialled in IMAP councils and the City of Wyndham, with an aim to progressively adopt the system across all of Melbourne.

2.4 Conclusion: Is there warrant for a business case?

Given the various problems associated with wayfinding signage infrastructure in central Melbourne at present, and the wide range of health, environmental, economic and organisational benefits that could be derived from an improved wayfinding strategy, the workshop found that there was clear warrant for a business case for investment in this area.

A business case would build upon the ILM and preliminary assessments made at the workshop, revisiting and validating the established problems and benefits. A solution options analysis would also be

conducted to select the best-performing solution from a range of feasible options against value-for-money criteria. An implementation plan for the project, including costing, would then be produced as a final part of the business case, along with an indication of how the project will deliver on its intent.

Stakeholders in this investment include the City of Melbourne, Public Transport Victoria, VicRoads, other IMAP councils, City of Wyndham, and Tourism Victoria. Given the wide scope of the initiative and the extent of its projected benefits, it is proposed that the Victorian Minister for Transport be approached to act as a sponsor for the project.

3 CONCLUSION

With the purpose of establishing whether there is a case to pursue investment in an improved wayfinding signage strategy for central Melbourne, the workshop undertook a series of steps to identify key wayfinding user groups, gaps and issues in the existing system, the potential benefits of investment in an enhanced system, and a best value solution to achieve the intended results.

The gaps and issues identified in the existing system were:
1. Lack of consistency between signs and maps across all areas and modes of travel in terms of design, style and content
2. Lack of regulation, maintenance and avoidance of proliferation of signage and maps across all areas and modes of travel
3. Lack of information and wayfinding context for travel between modes, and
4. Lack of continuous signage for wayfinding; incomplete or disjointed signage.

The projected benefits associated with investing in an improved strategy were:
1. Improved safety and health
2. Environmental benefits and improved liveability
3. Brand development and expanded tourism sector
4. Other economic benefits and cost savings, and
5. Improved local government relations.

The ideal strategic interventions that could be implemented were:
1. Development of a single base map
2. Development of a signage hierarchy
3. Development of an established management plan
4. Improved governance, and
5. Significant capital works.

3.1 SGS recommendation

The workshop demonstrated that there are significant problems faced by Victorians and visitors as a result of shortcomings in Melbourne's current wayfinding signage. These relate to safety, foregone take up of sustainable and active transport modes and depreciation of Melbourne's tourism brand. The workshop also found that these problems were amenable to mitigation through a wide range of solutions. These vary in scope and likely investment requirements but all appear to have strong potential for sound economic returns.

On the evidence generated by the workshop, there is a clear warrant to undertake formal Investment Logic Mapping (ILM) to test the need for further development of Melbourne's wayfinding signage. The ILM would define the presenting problems more precisely and scope solutions that might be worthy of further Government consideration.

Taking into account the preliminary definition of wayfinding issues in the workshop, SGS would recommend that the Minister for Transport act as the sponsor for the initial ILM process. It is proposed that a delegation of CEOs from the various stakeholders in this investment (including City of Melbourne, PTV, VicRoads, Tourism Victoria, IMAP councils and City of Wyndham) make the approach to the Minister.

4 APPENDIX

4.1 Workshop attendees

TABLE 3. WORKSHOP ATTENDEES

Organisation	Participants
City of Melbourne	Helen Hardwick, Program Manager Tourism Policy and Wayfinding
	Barry McGuren, Manager Business and Tourism Melbourne branch
	Damon Rao, Senior Transport Planner
	Richard Smithers, Team Leader Transport Planning
	Sixto Tantiongco Jr, GIS 3D Designer
	Steven Weir, Neighbourhood Development Officer
	Marty Whittle, Industrial Designer (contractor)
Other Inner Melbourne Action Plan (IMAP) Councils	Leigh Abernethy, Senior Urban Designer, City of Port Phillip
	Malcolm McDonald, Coordinator Transport, City of Maribyrnong
	Elissa McElroy, IMAP Executive Officer
	David Morison, Urban Designer, City of Yarra
	Melissa Rathje, Economic Development Coordinator, City of Stonnington
City of Wyndham	Sofia Anapliotis, Place Officer
VicRoads	Alan King, Statutory Planning Officer
Consultancy	David Nash, Traffic Engineer
Organisation	**Facilitators**
SGS Economics and Planning	Marcus Spiller, Principal and Partner
	Geetha Pathan, Consultant
Organisation	**Apologies**
PTV	Marc Saville, Manager Brand Operations & Innovation
Tourism Victoria	Richard Price, Group Manager Brand Services

4.2 Workshop agenda

The workshop was held on 24 June 2015 at the City of Melbourne offices at the Melbourne Town Hall. The agenda is attached overleaf.

Agenda

Workshop question: Is there a need for significant investment in better wayfinding for Melbourne and, if so, what should a business cover?

1 Welcome and introductions

Barry McGuren, Manager, Business and Tourism Melbourne, City of Melbourne

2 Background to the workshop

Helen Hardwick, Program Manager, Tourism Policy and Wayfinding, City of Melbourne

- The work of the 'nine authorities' committee to date
- Transport for London's Legible London system: what we've learnt
- Purpose of the workshop: to understand the purpose, value and scope of a business case for improved wayfinding signage in Melbourne
- At the end of this workshop we'll have covered the following:
    - Expected benefits of improved wayfinding signage
    - Who we believe will benefit from improved wayfinding signage
    - What's the evidence that there's a problem?
    - Intended scope for improvement: all of metro Melbourne or a few regions within Melbourne only?
    - What should the business case cover (journey times, improvements to public realm, perceptions of safety and economic value of these etc)?
    - Who is the business case aimed at: state government?
    - Who should champion it?
    - Next steps …

3 What makes up the wayfinding system?

Marcus Spiller

- Confirm the assets in the wayfinding system
- Which markets does each class of wayfinding asset serve?
- Who owns/manages these assets?

4 What do the wayfinding markets need?

Marcus Spiller

- Distill the main market groups for wayfinding
- What are their priority needs?

5 Problem definition

Marcus Spiller

- What are the issues requiring solutions?
- Where are the opportunities to add significant value?

6 Prioritising issues and opportunities

Marcus Spiller

- What is the scale of value likely to be created if problems/opportunities are successfully addressed?

7 Benefit definition

Marcus Spiller

- What specific benefits would be delivered by an improved wayfinding system?
- How would these benefits be measured?

8 Potential solutions

Marcus Spiller

- What options are there to address each priority problem/opportunity in turn
  (1) immediately at low cost
  (2) ideally, assuming the required resources are available?
- What can be expected in the timing and scale of benefits from these options?

9 Warrant for a business case

Marcus Spiller

- Should a business case be prepared?
- Who will be the recipient of the business case and what are the procedural implications?
- Which solutions should be its focus?
- Who should auspice the business case?
- What are the next steps?

10 Sum up and close

Marcus Spiller

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