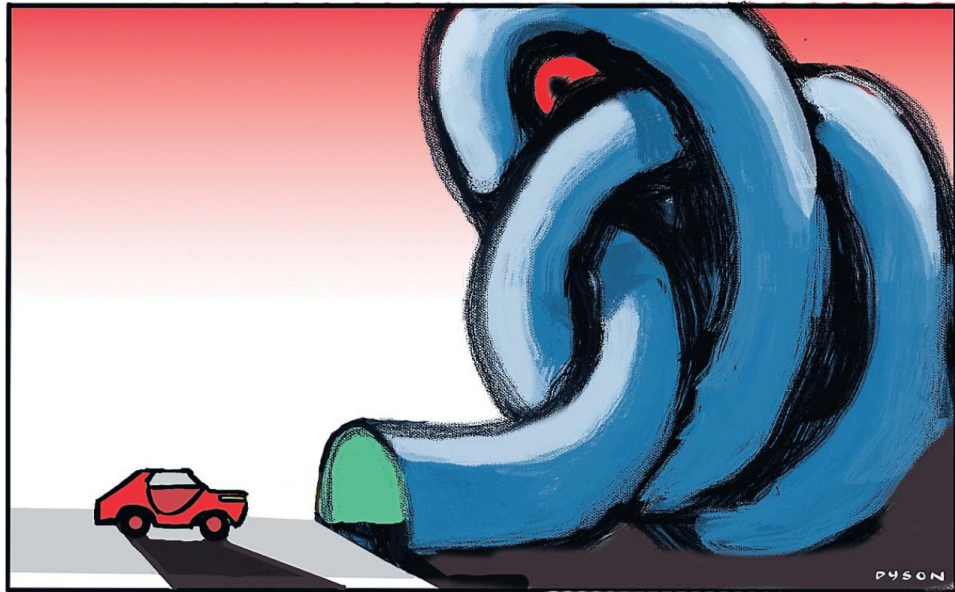




Theories and Practice of Urban Transition: Melbourne's Wicked Transport Planning Environment

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Declaration

This is to certify that:

- i) The thesis comprises only my original work towards the Master of Philosophy;
- ii) Due acknowledgement has been made in the text to all other material used;
- iii) The thesis is less than 50,000 words in length, exclusive figures, tables, maps, glossary, bibliographies and appendices.

Signed

A handwritten signature in cursive script that reads "Lawrence Seyers".

Lawrence Robert Seyers

18 November 2019

Frontispiece

Melbourne's transport planning is complex. Dyson (2017) illustrated this as a transport network tied in knots (front cover illustration). Whilst the complexity of transport planning has been a constant throughout Melbourne's history, the *process* of decision-making has changed significantly. Quoting former Secretary of the Department of Transport, this thesis suggests Melbourne needs to go 'back to the future' (Betts 2012), back to an era of metropolitan governance – a better model than the monolithic Melbourne and Metropolitan Board of Works – a model of collaborative metropolitan decision-making, where decisions are made in public, for the betterment of Melbourne and in the public interest. This model of decision-making has been adopted in London with the Greater London Authority and Transport for London and is achieving better processes and outcomes.

Acknowledgements

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Glossary

1954 Planning Scheme

Refers to the Melbourne and Metropolitan Board of Works (MMBW) planning scheme developed following the passage of the *Town and Country Planning (Metropolitan Area) Act 1949*. The final report submitted in 1954 attracted 4,000 objections and came into effect on 1 March 1955 as an Interim Development Order and formally approved on 16 December 1958.

1969 Transport Plan

Refers to the Metropolitan Transportation Commission (MTC) transport plan prepared by US traffic consultants Wilbur Smith and Associates and Melbourne consultants Len T. Frazer and Associates developed following the passage of *The Metropolitan Transportation Committee Act 1963*. The final report was submitted in 1969.

Abercrombie Plan

Refers to the Greater London Plan of 1944 developed by Sir Leslie Patrick Abercrombie.

Andrews Government

Refers to the Victorian Government led by the Labor Party's Daniel Andrews from 2014.

Baillieu Government

Refers to the Victorian Government led by the Liberal Party's Ted Baillieu from 2010 to 2013.

Bains Review

Refers to the Victorian Parliamentary inquiry led by Malcom Bains and the report 'Board of Review of the Role, Structure and Administration of Local Government in Victoria' (1979) which recommended the establishment of a new higher tier multi-purpose elected authority for the metropolitan area.

Balkanised

Refers to a previously integrated system of governance dividing into smaller, often mutually exclusive, hostile groups.

Benefit to cost ratio (BCR)

Refers to an indicator, used in cost-benefit analysis, that attempts to summarise the overall value for money of a project or proposal.

Board

Refers to a group of people who are constituted as the decision-making body of an organisation.

Board of Works

Refers to the Victorian Government agency created in 1984 following the abolition of the Melbourne and Metropolitan Board of Works responsible for the sewer and water functions. The Board of Works was abolished in 1991.

Blair Government

Refers to the United Kingdom government led by the Labour Party's Tony Blair from 1997 to 2007.

Bolte Government

Refers to the Victorian Government led by the Liberal and Country Party's Henry Bolte from 1955 to 1972.

Bracks Government

Refers to the Victorian Government led by the Labor Party's Steve Bracks from 1999 to 2007.

Brumby Government

Refers to the Victorian Government led by the Labor Party's John Brumby from 2007 to 2010.

Cain Government

Refers to the Victorian Government led by the Labor Party's John Cain (Junior) from 1982 to 1990.

Central Business District (CBD)

Refers to the main business and commercial area of Melbourne, specifically the grid bounded by Flinders Street, Spring Street, Latrobe Street and Spencer Street.

Central Intelligence Agency (CIA)

Refers to the foreign intelligence service of the United States government, tasked with gathering, processing, and analyzing national security information from around the world.

City of Melbourne

Refers to the local government of the City of Melbourne, as governed by the *City of Melbourne Act*.

CityLink

Refers to the two freeway projects of Southern Link and Western Link that provided the connection from the Monash Freeway to the West Gate Freeway and the Tullamarine Freeway to the West Gate Freeway, managed by Transurban under a Public Private Partnership entered in 1995.

Coalition

Refers to the centre-right coalition of Liberal and National political parties in the Australian and Victorian Parliament.

Congestion charging

Refers to the process of applying charges to reduce the number of vehicles and level of congestion in congested areas. In 2003 the Mayor of London introduced a congestion charge scheme within a defined area of central London.

Conservative Party

Refers to the centre-right political party in the United Kingdom Parliament.

Country Roads Board

Refers to the Victorian Government authority responsible for the construction and maintenance of main roads between 1913 and 1983.

Crossrail

Refers to the east-west, cross-central London rail link between Paddington and Whitechapel serving Heathrow Airport, Canary Wharf and Stratford.

Design, Announce, Defend (DAD)

Refers to process of decision-making described by Bishop (2015) whereby decision makers don't talk to or engage others, especially those who may be impacted by the proposal, and those in power then announce their decision, creating adversarial conditions for public participation.

East Link

Refers to the 40 kilometre toll road from Springvale Road, Nunawading to Frankston Freeway, Seaford, completed in 2008, it was previously known as the Scoresby Bypass, or Scoresby Freeway.

East West Link

Refers to the \$16 billion 18 kilometre urban freeway project comprising three sections:

- \$8 billion Eastern Section as a tunnel from the end of the Eastern Freeway to the Tullamarine Freeway,
- Western Section as a combination of at grade, tunnel and elevated freeway from the Western Ring Road to the Port of Melbourne, and
- Port Connector Section that involved duplication of the elevated Tullamarine Freeway and the connection between the Eastern Section and the Western Section.

Eddington Report

Refers to the Victorian Government commissioned report prepared by Sir Rod Eddington titled 'Investing in Transport' released in March 2008.

Environment Effects Statement (EES)

Refers to the process established under the *Environment Effects Act 1978* to undertake an environment assessment of the potential environmental impacts or effects of a proposed development.

Established areas

Refers to areas of Melbourne that have been urbanised for at least several decades.

Frank and fearless

Refers to the duties of public servants to give honest and objective advice to those in a position of power.

Freeway

Refers to a high speed, access controlled road environment which provides efficient and safe handling of high volumes of vehicular traffic.

Frost Royal Commission

Refers to the Royal Commission into land purchases by the Housing Commission published in 1981.

Gowans inquiry

Refers to the Board of Inquiry into land purchases by the Housing Commission published in 1978.

Greater London Authority (GLA)

Refers to the London metropolitan government created in 2000 which consists of a directly elected Mayor and 25 seat assembly.

Greater London Council (GLC)

Refers to the London metropolitan government created in 1965 as successor to the London County Council. In 1986 Greater London Council was abolished and its functions transferred to dispersed city-wide system of government.

Green wedges

Refers to the open landscapes around Melbourne's outer suburbs, originally set aside in the 1970s to conserve rural activities and significant natural features from Melbourne's outward growth. Green wedges are protected under the *Planning and Environment Act* with an Urban Growth Boundary.

Greenfield areas

Refers to the undeveloped land within the Urban Growth Boundary that has been identified for residential or industrial/commercial development, generally on the fringe of metropolitan Melbourne.

Groupthink

Refers to the work of Janis (1971) on concurrence thinking where the dominant in-group overrides the realistic appraisal of alternative courses of action.

Growth areas

Refers to locations on the fringe of metropolitan Melbourne designated in planning schemes for large-scale transformation, over many years, from rural to urban use to accommodate population growth.

Hamer Government

Refers to the Victorian Government led by the Liberal Party's Rupert Hamer from 1972 to 1981.

Head, TfV

Refers to a position created at Transport for Victoria under amendments to the *Transport Integration Act*, gazetted on 14 February 2017. Occupied by Gillian Miles, the Head, Transport for Victoria reports to the Secretary of the Department, who is then accountable to the Minister for Transport.

Hypothecated funding

Refers to the dedication of revenue from a specific tax for an expenditure purpose.

Independent

Refers to an individual, group or organisation that declares itself free from outside control.

Infill housing

Refers to the development of unused or underutilised land in existing urban areas. Most infill development sites are in inner and middle suburbs, offering the possibility of better utilising existing infrastructure to accommodate population growth.

Kennett Government

Refers to the Victorian Government led by the Liberal Party's Jeff Kennett from 1992 to 1999.

Kirner Government

Refers to the Victorian Government led by the Labor Party's Joan Kirner from 1990 to 1992.

Labor Party

Refers to the centre-left political party in the Victorian Parliament.

Labour Party

Refers to the centre-left political party in the United Kingdom Parliament.

Legislative Assembly

Refers to the Lower House of the Victorian Parliament which consists of 88 Members of Parliament elected using a preferential counting system in 88 districts for fixed four-year terms. The political party having the support of the majority of Members in the Lower House has the right to form Government.

Legislative Council

Refers to the Upper House of the Victorian Parliament which consists of 40 Members of Parliament elected using a proportional counting system in eight regions, with five Members of Parliament elected for each region for fixed four-year terms.

Liberal Party

Refers to the centre-right political party in the Victorian Parliament.

London County Council (LCC)

Refers to the London metropolitan government created in 1889 as the successor to the Metropolitan Board of Works. In 1965 the London County Council functions were transferred to the Greater London Council.

Lonie inquiry

Refers to the inquiry established in June 1979 to review all Victorian freight and passenger transport, led by Walter Lonie a BHP General Manager, with another ex-BHP General Manager appointed as a consultant and Country Roads Board Chief Engineer appointed as Secretary. The inquiry recommended the elimination of eight suburban railway lines, seven tram lines and further route rationalisations.

Low Carbon Living Collaborative Research Centre (LCLCRC)

Refers to the national research and innovation hub that seeks to engage communities in low carbon living. Two of the goals of the LCLCRC are to provide an evidence base for good planning and policy to enable a globally competitive low carbon built environment.

Major Government

Refers to the United Kingdom Government led by the Conservative Party's John Major from 1990 to 1997.

Market led proposals

Refer to Private unsolicited bid.

Melbourne 2030

Refers to the strategic plan released in 2002 which attempted to turn around post-war planning in Melbourne and move towards a carefully planned compact city with 'smart growth' plans.

Melbourne and Metropolitan Board of Works (MMBW)

Refers to the Melbourne metropolitan government created with the passage of *Melbourne and Metropolitan Board of Works Act 1890*. In 1984 the MMBW was disbanded by Premier John Cain (Junior). The sewer and water responsibilities merged into the Board of Works, which was also abolished in 1991.

Melbourne @ 5 Million

Refers to the strategic plan released in 2008 which established a significant expansion of Melbourne with 50,820 hectares of new greenfield land to accommodate future population growth, it also established the 100 kilometre long Outer Metropolitan Road reservation.

Melbourne Metro Tunnel

Refers to the north-south, cross-central Melbourne rail link between Sunbury and Dandenong-Pakenham lines, providing new stations at Arden, Parkville, CBD North, CBD South and Domain.

Melbourne Rail Link (MRL)

Refers to a project announced in May 2014 to reconfigure the Melbourne Metro Tunnel to a route via Fisherman's Bend, bypassing the CBD – but including a connection to Melbourne Airport.

MetLink

Refers to the Victorian Government branding and marketing entity created in 2003 to provide a consistent branding for Melbourne's public transport network.

Metro Vancouver

Refers to the Greater Vancouver metropolitan authority responsible for:

- Greater Vancouver Regional District Board;
- Greater Vancouver Sewerage and Drainage District;
- Greater Vancouver Water District;
- Metro Vancouver Housing Corporation; and
- South Coast British Columbia Transportation Authority (TransLink).

Metropolitan Board of Works (MBW)

Refers to the London metropolitan government created in 1855 following a Royal Commission, its primary objective was the sewerage of the metropolis. In 1899 its functions were transferred to the London County Council.

Metropolitan Town Planning Commission (MTPC)

Refers to the nine-person advisory and honorary Commission, led by the City of Melbourne, created by the Victorian Government following the passage of *Metropolitan Town Planning Commission Act 1922*. The final report submitted in 1929 is considered Melbourne's first strategic plan.

Metropolitan Transport Authority (MTA)

Refers to the Victorian Government authority created in 1983 to run Melbourne's public transport services. In 1989 its functions were transferred to the Public Transport Corporation.

Metropolitan Transportation Committee (MTC)

Refers to the Commission created by the Victorian Government to prepare a strategic plan for Melbourne. Following the passage of legislation in 1963, it oversaw the development of the 1969 Transport Plan for Melbourne.

MyKi

Refers to the public transport ticketing system introduced in Melbourne during the period 2008-2015.

Napthine Government

Refers to the Victorian Government led by the Liberal Party's Denis Napthine from 2013 to 2014.

National Party

Refers to the centre-right political party that represents regional and rural consistencies in the Victorian Parliament, often in a Coalition with the Liberal Party.

New Labour

Refers to the centre-left political party in the United Kingdom Parliament, particularly the political philosophy that culminated in the 1997 election of Tony Blair.

New Public Management

Refers to government administration that resembles and/or draws on private-sector management and business techniques.

No stopping rule

Refers to part of Rittel and Webber's (1973) wicked problem theory and the intractable nature of wicked problems; an acknowledgement that management is ongoing, that there is no end point.

North East Link

Refers to the \$16.5 billion 11 kilometre urban freeway project between the Greensborough Highway at the Western Ring Road and the Eastern Freeway near Bulleen Road.

Northern Central City Corridor Study

Refers to the study established to examine a range of alternative proposals to an underground tunnel from the Eastern Freeway to the Tullamarine Freeway.

Opposition

Refers to the major political party opposed to the party in Government which seeks to replace it.

Peninsula Link

Refers to the 27 kilometre Public Private Partnership funded toll road from EastLink, Seaford to Mornington Peninsula Freeway, Mount Martha, completed in 2013.

Private unsolicited bid

Refers to the process whereby the private sector can submit novel ideas for infrastructure projects for Victorian Government consideration. Initially launched in February 2014 by the Napthine Government, it was re-endorsed by the Andrews Government in November 2015 as Market led proposals.

Project 10,000

Refers to the Labor Party policy released in 2013 whereby fifty of the most congested and dangerous level crossings spread throughout Melbourne would be removed, creating 10,000 jobs.

Public Private Partnership (PPP)

Refers to any mechanism using the private sector to deliver outcomes for the public sector, usually based on a long-term funding agreement.

Public Transport Corporation (PTC)

Refers to the Victorian Government authority created in 1989 which became successor to the Metropolitan Transport Authority. In 1999 the Public Transport Corporation functions were transferred to the private train, tram and bus operators under franchising agreements and the Office of the Director of Public Transport was created as a statutory office within the Department of Transport.

Public Transport Users Association (PTUA)

Refers to the Melbourne based consumer organisation representing public transport passengers. They operate as a non-profit, voluntary organisation, with no political affiliations.

Public Transport Victoria (PTV)

Refers to the Victorian Government public transport authority created in 2012 with the passage of the *Public Transport Development Authority Act*. PTV sought to create an integrated 'one-stop-shop' for public transport information and planning in Victoria.

Quango

Refers to a Quasi-Autonomous Non-Government Organisation, typically an organisation to which a government has devolved power, but which still is partly controlled or financed by government.

Railways Commissioners

Refers to the Victorian Government Railway Commissioners which managed the Victorian Railways from 1883 to 1973.

Regional Fast Rail project (RFR)

Refers to the 1999 Labor Party election commitment to provide faster rail links between Melbourne and the regional centres of Ballarat, Bendigo, Geelong and the Latrobe Valley.

Road Construction Authority (RCA)

Refers to the Victorian Government authority created in 1983 to undertake major road construction activities. The Road Construction Authority was merged with the Road Traffic Authority in 1989 to create VicRoads.

Road lobby

Refers to the industries (such as oil, chemical and vehicle manufacturers), consumer associations (such as the Royal Automobile Club of Victoria), companies (such as traffic modelling consultants) and individuals who are proponents of urban freeway construction, often as beneficiaries of the road construction program.

Road Traffic Authority (RTA)

Refers to the Victorian Government authority created in 1983 to manage the operation of major arterial roads in Victoria. In 1989 it was merged with the Road Construction Authority to create VicRoads.

SkyRail

Refers to the removal of level crossings using an elevated structure. Specifically, the nine Dandenong line level crossings announced on 7 February 2016 and completed in 2018.

Southern Link

Refers to the freeway connection from the Monash Freeway to the West Gate Freeway, managed by Transurban under a Public Private Partnership entered in 1995.

State Transport Authority (STA)

Refers to the Victorian Government authority created in 1983 to run country public transport services operating under the trading name V/Line. In 1989 the State Transport Authority merged with the Metropolitan Transit Authority to form the Public Transport Corporation.

Thatcher Government

Refers to the United Kingdom government led by the Conservative Party's Margaret Thatcher from 1979 to 1990.

Town and Country Planning Board

Refers to the Victorian Government authority constituted under the *Town and Country Planning Act 1944*. The Board provided advice to the Minister on municipal planning schemes. The Board was abolished in 1980 when the *Town & Country Planning (Amalgamation) Act 1980* transferred the functions to the Ministry for Planning.

Tramways Board

Refers to the Victorian Government authority, the Melbourne and Metropolitan Tramways Board, created in 1919 following the passage of legislation to merge a number of smaller tramway trusts and companies. In 1983 the Tramways Board was wound into Metropolitan Transport Authority.

Transport for London (TfL)

Refers to one of the GLA organisations, accountable to the Mayor of London, with responsibility for delivering integrated and sustainable transport in London.

Transport for Victoria (TfV)

Refers to the Victorian Government authority created in 2016 to coordinate Victoria's transport system and plan for its future. The *Transport Integration Amendment (Head, Transport for Victoria and Other Governance Reforms) Act 2017* received Royal Assent on 14 February 2017.

Transport Referendum

Refers to a description by then Australian Prime Minister Tony Abbott of the November 2014 Victorian election as a 'Transport Referendum' between the East West Link project and Melbourne Metro project.

Transport Restructuring Order (TRO)

Refers to the powers granted on 14 February 2017 contained in the *Transport Integration Act* to allow 'Head, TfV' to undertake changes to transport sector agency functions, such as VicRoads or Public Transport Victoria, through a Governor-In-Council process.

Transurban

Refers to the Australian stock exchange listed company that manages the City Link Concession Deed. Transurban is among the top ten Australian listed companies having commenced trading in February 1996 at \$1.19 per share (\$1.7 billion market capitalisation) and has since grown to \$11.84 per share at May 2018 (\$26 billion market capitalisation).

United Kingdom (UK)

Refers to the country comprised of England, Scotland, Wales and Northern Ireland.

Urban Growth Boundary

Refers to the geographic limit for the urban area of Melbourne, introduced in 2002, it was modified in 2003, 2005, 2006, 2010, 2012 and 2014, further changes require the approval of both Houses of Victorian Parliament.

VicRail

Refers to the Victorian Government authority created in 1973 when the *Railways (Amendment) Act* passed the management of the Railways from the Victorian Railways Commissioners to a Victorian Railways Board. In 1983 VicRail was divided into two—State Transport Authority responsible for country rail and road, passenger and freight services, and Metropolitan Transit Authority responsible for suburban passenger transport.

VicRoads

Refers to the Victorian Government authority created in 1989 to manage and construct Victorian roads, created from the merger of the Road Traffic Authority with the Road Construction Authority.

Victorian Railways

Refers to the Victorian Government authority created in 1859 to build and manage Victoria's rail network, governed by Railways Commissioners from 1883 to 1973, in 1973 management passed to VicRail and a Board.

Western Distributor

Refer to West Gate Tunnel.

Western Distributor Authority

Refers to an Administrative Office within the Department of Economic Development, Jobs, Transport and Resources (DEDJTR) established in August 2016 to manage the Western Distributor project.

Western Link / Western Bypass

Refers to the elevated motorway that provided the connection from the Tullamarine Freeway to the West Gate Freeway, managed by Transurban under a Public Private Partnership entered in 1995.

West Gate Distributor

Refers to a Labor Party election commitment announced in 2013 for a modest investment of \$400-500 million to construct new ramps at Hyde Street in Yarraville and an upgrade to Shepherd Bridge. See also West Gate Tunnel.

West Gate Tunnel

Refers to a private unsolicited bid prepared by Transurban, and supported by the Victorian Government, for a \$5.5 billion urban freeway that involves six new traffic lanes from the Western Ring Road, underground tunnels through Yarraville, a new bridge crossing the Maribyrnong River and a new elevated road along Footscray Road, terminating in a three-way interchange with Western Link (Tullamarine Tollway), Dynon Road/King Street and Footscray Road/Wurundjeri Way. Initially called Western Distributor, it was rebranded in April 2017.

West Link

Refers to the Brumby Government's 2010 plan for an urban freeway from the Port of Melbourne to the Western Ring Road via a tunnel from the Port of Melbourne to West Footscray where the freeway would emerge at-grade and pass through West Sunshine before connecting to the Western Ring Road. This alignment is also the Western Section of East West Link.

Whitlam Government

Refers to the Australian government led by the Labor Party's Gough Whitlam from 1972 to 1975.

Wicked problems

Complex and intractable problems which display the following characteristics: malignant (in contrast to benign); vicious (like a circle); tricky (like a leprechaun); and aggressive (like a lion, in contrast to the docility of lamb) (Rittel and Webber 1973).

Zurcher Verkehrsverbund (ZVV)

Refers to Swiss transport agency in the canton of Zurich responsible for the integration of rail, bus, tram, trolleybus, lake boat, cable car and other public transport services.

Abstract

Against a backdrop of balkanised transport and land use planning, a fragmented and disjointed transport planning environment has evolved in Victoria – culminating in the 2014 Victorian Election which saw East West Link juxtaposed against Melbourne Metro Tunnel/Project 10,000 in what the then Prime Minister declared a 'Transport Referendum'. This pattern has continued with the 2015 commitment to West Gate Tunnel, the 2016 commitment to North East Link and the November 2018 election announcement for a Suburban Rail Loop. Through an exploration of the Melbourne and London case studies, this thesis focuses on transport planning governance to answer the question of how should transport planning decisions be made in a highly complex (wicked) environment to achieve better processes and outcomes? This research explores the Melbourne case study (up to and including East West Link) through an interpretation of political, social, economic and environmental motivators. It then provides a comparative analysis of transport planning governance in London through interviews with political leaders, professionals and academics. A document review, combined with interviews, was carried out to provide an overall account of London and Melbourne's decision-making process for transport planning. The comparison of transport governance suggests the learnings from London can be applied to Melbourne and other cities to better manage the transport planning complexity and achieve better transport governance.

This research is significant as Melbourne's rapid population growth has outpaced the established political and administrative structures and our existing infrastructure. Since 2000, Melbourne has grown by over 1.3 million new residents – almost 40 percent (Australian Bureau of Statistics 2017). By 2030, Melbourne is likely to grow to become Australia's largest city, and by 2051, 8 million residents are predicted. The current transport planning decision-making framework in Melbourne was created for a different kind of city. No Australian city has added so many residents so quickly and there is a compelling need for this research.

1. Introduction

This Master of Philosophy thesis is concerned with strategic transport decision-making in Melbourne, a city that is experiencing an urban transformation: significant population growth, changing demographic trends, growing inequality, structural changes such as new technology and a long period of economic prosperity. There is palpable evidence that Melbourne has serious problems with its transport planning – few jurisdictions spend \$1 billion to *not* do something (East West Link) and then commit to projects (West Gate Tunnel and North East Link) which induce the project they just cancelled. Despite this transport confusion, Melbourne has a bi-partisan land use policy that envisages population growth towards a city of 8 million residents by 2051. This suggests failures of *integrated* transport and land use planning and the associated decision-making structures.

The thesis has undertaken an extensive document and literature review for the Melbourne and London case studies. The two case studies were selected from a longer list that included other western cities such as Vancouver and Zurich. Vancouver shares many similarities to Melbourne and is consistently rated as one of the ‘most liveable’ cities. Vancouver also has multiple levels of government (local, state and federal), however it also has a long history of “new regionalism” (Friesen 2014) with Metro Vancouver Regional District Board, with Directors representing the region’s various municipalities and constituent entities, overseeing a range of functional arrangements at a regional scale including:

- Greater Vancouver Regional District Board, with Directors representing the cities various municipalities;
- Greater Vancouver Sewerage and Drainage District;
- Greater Vancouver Water District;
- Metro Vancouver Housing Corporation; and

- South Coast British Columbia Transportation Authority (TransLink), an independent statutory authority responsible for planning, managing, operating and maintaining the public transport system and major road network in Vancouver.

However Vancouver has a very different urban form to Melbourne, surrounded by water and mountains, and with only 2.4 million residents in Greater Vancouver (Statistics Canada 2016), it is much smaller than Melbourne's 4.7 million residents (Department of Environment, Land, Water and Planning 2016).

Zurich is also highlighted as leader in transport governance, particularly from Mees (2000) where he identified the Zürcher Verkehrsverbund (ZVV) as an exemplar integrated transport planning agency that should be adopted for Melbourne's public transport system (Mees et al 2006). This Zurich *public* transport entity – in contrast to all modes of transport – is not comparable to Vancouver's monolith metropolitan governance system which includes strategic urban planning, water, sewer, housing and both *public* and *private* transport, nor is it comparable to London which has similar attributes to Vancouver's model, but which has a democratically elected Assembly and Mayor. The essential element of this comparison is there is no one model for every city – so it is better to choose one and do thoroughly. Other cities such as Malmö, a relatively small city with a population of about 320,000, and Freiburg, with a population of only 220,000, are leading the way in sustainable urban planning outcomes informed by strategic planning (Stanley et al. 2017, p.32) and Freiburg in particular is highlighted for its citizen involvement in the development of the Freiburg 2020 land use plan (Stanley et al. 2017, p.36). For this thesis, London and Melbourne have been selected as they both have a long history of metropolitan governance through their respective Boards of Works and took divergent governance directions in the 1980s through to the 2000s. London is also a city of 8 million people, a similar population expected for Melbourne by 2050 (Department of Environment, Land, Water and Planning 2016). There is no 'one size fits all' model and "the process of reforming government structures is as important as the outcome itself" (Slack 2007, p.3).

At Candidature, I accepted the recommendation of the Advisory Committee that the Master of Philosophy to London and Melbourne. London was chosen as it shares a similar governance history to Melbourne and there are suggestions that better transport outcomes are being delivered with mode share shifts to sustainable transport, more voices being expressed in decision making, investment decisions based on publicly available information and reduced conflict in decision making.

1.1 The Melbourne problem defined

Melbourne is anticipated to become Australia's largest city by 2030 and accommodate 8 million residents by 2051 (Department of Environment 2016). Victoria is increasingly becoming a city-state with an increasing proportion residing in Melbourne – from 74 percent in 2011 to 78 percent in 2051 (Department of Environment 2017b, p.128). These population changes are largely driven by net overseas migration which accounted for 60,000 new Victorians in 2016 (Department of Environment 2016). The land use framework radically changed following the *Melbourne @ 5 Million* (Brumby and Madden 2008) plan. The decision to significantly expand the Urban Growth Boundary (and several smaller subsequent variations), accommodates up to 1.19 million new residents in Melbourne's outer suburbs (Growth Areas Authority 2012, p.8). The land use framework was subsequently reaffirmed and became bipartisan in the Plan Melbourne 2017-2050 Strategy (Department of Environment, Land, Water and Planning, 2017b). The question that arises from this established and bipartisan land use framework is *how should* transport planning decisions be made to plan for this anticipated growth?

Institutional reform to attempt integrated transport planning in Victoria is a constant throughout history as far back to the creation of the Victorian Railways in 1859, the Railways Commissioners in 1883, the establishment of the Melbourne and Metropolitan Board of Works in 1891 and the

Tramways Board in 1919. Modern attempts have included the creation of VicRail in 1973, the creation of the Road Construction Authority, Road Traffic Authority and State Transport Authority in 1983, the creation of the Public Transport Corporation and VicRoads in 1989, the creation of MetLink in 2003, the passage of the *Transport Integration Act* in 2010, the creation of Public Transport Victoria in 2012, and most recently the announcement of a new department, Transport for Victoria in 2016. Each of these attempts at transport integration reflects an acceptance from government that transport decision making needs to change, to create 'a single, central, strategic body that coordinates our transport network and plans for its future' (Allan, 2016c).

The November 2014 Victorian election was declared by the then Australian Prime Minister as a 'Transport Referendum' (Abbott 2014) and resulted in the cancellation of the largest contract in Australian history by an incoming government – the \$8 billion East West Link, an urban freeway in Melbourne from the Eastern Freeway to the Tullamarine Freeway – and the public release of East West Link Cabinet documents immediately following the election (Andrews 2014). Such a dramatic reversal of Melbourne transport planning presented a window of opportunity to transform how transport decisions are made. Despite the message from the 2014 Victorian transport election (and arguably every election since 1999), transport planning has continued – and dramatically escalated – the 'business as usual' approach of the Victorian Government. This is represented by the 2015 acceptance of a private unsolicited bid, or market led proposal, to build an inner western suburbs freeway – the \$5.5 billion West Gate Tunnel, an urban freeway from the Western Ring Road to the Tullamarine Freeway – and the 2016 commitment towards North East Link – another urban freeway project costed at \$7.1 billion by Infrastructure Victoria in September 2016 (Infrastructure Victoria 2016a, p.69) and most recently estimated at \$16.5 billion (Andrews 2017). In just four years, Victoria experienced the Napthine Coalition Government defeat at the 2014 'Transport Referendum', only to be replaced by the Andrews Labor Government and a post-election commitment to West Gate Tunnel and North East Link – the single biggest transport infrastructure investment in Victorian

history and double the cost of East West Link – which at the time was the largest infrastructure project in Victorian history. These transport projects are shown in Figure 1.

1.2 Aim

This research explores transport decision-making processes. In Victoria, it would appear that decision-making exists behind closed doors (literally Cabinet in-confidence), undertakes token consultations after decisions have been made – a *Design, Announce, Defend* approach (Bishop 2015) and excludes the public from meaningful engagement (Legacy 2015). This research explores the historical context to Melbourne's transport planning environment and the governance structures that have evolved. The research seeks an alternative approach through an examination of London, which adopted a Greater London Authority model in 2000 and appears to be delivering significant improvements to transport planning. The research explores a decision-making framework for transport in Melbourne that recognises the wickedness (complexity) of transport planning, and seeks to tame this 'wickedness' (Rittel and Webber 1973) for a future Melbourne of 8 million residents.

1.3 Research Question

The research question that drives this study is:

How should transport planning decisions be made in a highly complex (wicked) environment to achieve 'better' processes and outcomes?

The definition of 'better' is subjective, and the following section of this chapter provides a definition of a 'better' process. This research posits that in a better decision-making framework, the decisions reached will be more consultative, more engaging, more accountable, more transparent and have greater legitimacy (and may neutralise politicisation witnessed in recent decades).



Figure 1 Melbourne's Mega-Transport Priorities Map
(Melway base map)

1.4 What is better?

Much effort is wasted attempting to control the uncontrollable. This effort perpetuates an illusion that problems can be 'solved' and constant failures under this illusion undermines the political process, breeds cynicism and repeats past mistakes. The literature review has shown that under a wicked planning paradigm, there is no attempt to 'solve' problems, rather 'better' results are sought. The interpretation of a better result will depend on your perspective – it is a subjective term. For *this* research, the definition of better, as derived from the literature review, is comprised of six elements:

1. An acceptance of the intractable nature of the problem; an acknowledgement that we have a problem – that there is a 'no stopping rule' – that transport is unable to be 'fixed';
2. Institutionalised transport decision-making that collaborates with the community;
3. Integrated transport and land use planning and delivery;
4. A strongly authorised transport decision-making body that provides genuine citizen participation in decisions – and land use and transport integration;
5. Improved transparency of decision-making; a coherent and publicly accessible decision-making process that provides opportunities for scrutiny; and
6. Independent funding; hypothecated funding for transport investment decisions separated from the discretionary budgetary environment (refer Mees 2009b).

This definition of a better *process* is motivated by the Victorian *Transport Integration Act* vision statement to achieve the following *outcome*:

'The Parliament recognises the aspirations of Victorians for an integrated and sustainable transport system that contributes to an inclusive, prosperous and environmentally responsible State' (Victorian Parliament 2010, Clause 6)

Without the better *process* identified by this research, the *outcome* – an integrated and sustainable transport system – is unlikely to be achieved in the business as usual approach to transport planning decision-making in Victoria. This research suggests a new way of thinking, and doing, is required.

1.5 Structure of thesis

The research investigates transport planning decision making through an examination of the literature, which is provided in Chapter 2. The literature review is structured into several themes, examining the breadth of strategic planning decision-making. The literature review leads to the identification of the research gap and problem statement. The methodology is introduced in Chapter 3, identifying the qualitative assessment of London and Melbourne case studies through a descriptive exploration of interviews and primary and secondary data sources. Chapters 4 and 5 present the results of the qualitative data exploration and are separated into two separate case study chapters:

- The Melbourne case study presented in Chapter 4 provides detailed exploration of the historical context, the decision making structures, processes, decisions and outcomes; and
- The London case study presented in Chapter 5 provides detailed exploration of the transport planning decision making history including the creation, abolition, re-establishment and achievements and outcomes of metropolitan governance in London.

Chapter 6 builds on the theory from the earlier literature review and the qualitative data presented in the previous London and Melbourne case study chapters to provide a discussion on some of the constraints to transport planning decision making. Chapter 7 concludes the thesis and identifies key findings to manage the complex transport planning environment in Melbourne. The thesis is also supported by several appendices and a detailed glossary.

2. Literature Review

2.1 Introduction

This literature review forms the theoretical framework for the research and assists in posing the research question. The themes identified in this literature review include the role and nature of strategic planning, the complexity of the decision-making framework, including how decisions are made from the perspective of the community and decision makers, the erosion of 'frank and fearless' advice from the public service, the nature of groupthink, the decline of trust in government institutions and the loss of authority and power of decision makers (both political leadership and the public service). Finally, the literature review explores the concept of wicked problems. Through consideration of key literature, the concepts are defined and the literature review provides a broader context to the Melbourne and London case studies later in this thesis.

2.2 Strategic Planning

Good decision-making relies on effective strategic planning. When undertaking a strategic planning exercise, questions arise over priorities and the need to anticipate future disruptions. Dator (1997) contends that strategic planning is an ability to anticipate an oncoming tsunami, arguing tsunamis are symbolic, because they signify the extremeness, the magnitude and power of the anticipated future impact. Rodin (2014) argues strategic planning is not a glamorous activity, it can be tedious, expensive and does not involve colourful action but it is essential because it allows decision makers to take effective action. Rodin (2014) suggests a well managed process of collaborative strategic planning should include a lot of diversity – of opinions, people and thinking styles – and such a process can elicit community members to become aware of and acknowledge their strengths and weaknesses, garner greater understanding of respective interests and consider diverse alternatives and disparate ideas.

There is a role for central government in responding to market failure in city and transport planning, such as facilitation of visioning exercises to shape the future of a city, however in the Melbourne context, Mees (2009b) observed a lack of a productive debate between government transport planners and the community with regard to strategic planning and argued that planners lack the confidence of their own expertise to defend themselves in public. 'Power makes you stupid' according to Nietzsche (quoted in Flyvbjerg 1998), but democracy and public participation in strategic planning can have the opposite effect argued (Mees 2009b). Stanley (2017, p.19) identifies government's vision statements for a number of cities such as Portland and Freiburg and suggests that these have helped to elevate them to become "high achievers in strategic land use and transport planning" and successful 21st-century cities as a consequence. Freiburg in particular is identified for the citizen involvement in development of the Freiburg 2020 land use plan (Stanley et al. 2017). These cities have progressed beyond simply predicting or reacting to external forces to instead shape and direct urban outcomes towards the desired end state. Stanley (2017, p.248-249) identify seven generic sustainability goals for strategic land use transport plans that are evident, for example, in Vancouver and Portland:

1. Increase economic productivity;
2. Reduce the environmental footprint;
3. Increase social inclusion and reduce inequality;
4. Improve health and safety outcomes;
5. Promote intergenerational equity;
6. Engage communities widely; and
7. Implement integrated land use transport plans.

Mintzberg (1994) suggests strategic planning, as practiced, is about strategic programming; the articulation and elaboration of strategies, or visions, that already exist. In contrast, strategic planners should question conventional wisdom – to challenge business as usual and conventional

assumptions to anticipate emerging threats or opportunities (Mintzberg 1994). A further distinction is identified between strategic planning and strategic thinking: 'Strategic planning has always been about analysis—breaking down a goal or set of intentions into steps, formalising those steps so that they can be implemented, and articulating the anticipated consequences or results of each step' (Mintzberg 1994, p.108), in contrast, strategic thinking 'is about synthesis, intuition and creativity' (Mintzberg 1994, p.108) to formulate an integrated perspective or vision.

Voros developed a foresight framework (Figure 2) designed to support and stimulate the emergence of new ideas after he concluded 'very few people had any real understanding of what foresight work is all about' (2003, p.4), Voros's expertise was grounded in the government leadership domain, particularly a public sector university and he saw a distinct difference between anticipation and foresight. Voros (2003, p.5) described the conventional strategic planning process as an 'episodic' occurrence which shines forth briefly and then vanishes without trace, merely a process to *anticipate* the short term. Voros (2003) identifies foresight as strategic thinking and the exploration (based on limited and patchy information) of options, not with the steps needed for the implementation of actions, which is the realm of strategic planning. Voros (2003) identifies a linear, step-by-step approach to the foresight framework, a cascade of activities that combine to develop a deep and meaningful strategy as the output, in contrast to what he describes as a 'shallow' foresight process (see Figure 3) or a purely reactive process. Voros (2003) identifies examples of 'shallow' foresight as superficial 'visioning' exercises where no attempt is made to address the question of what is *really* happening. This is contrasted by overseas case studies such as Vancouver, where a long history of community engagement has delivered a succession of transport and land use planning visions that have demonstrated best practice in community engagement (Stanley 2017, p.21).

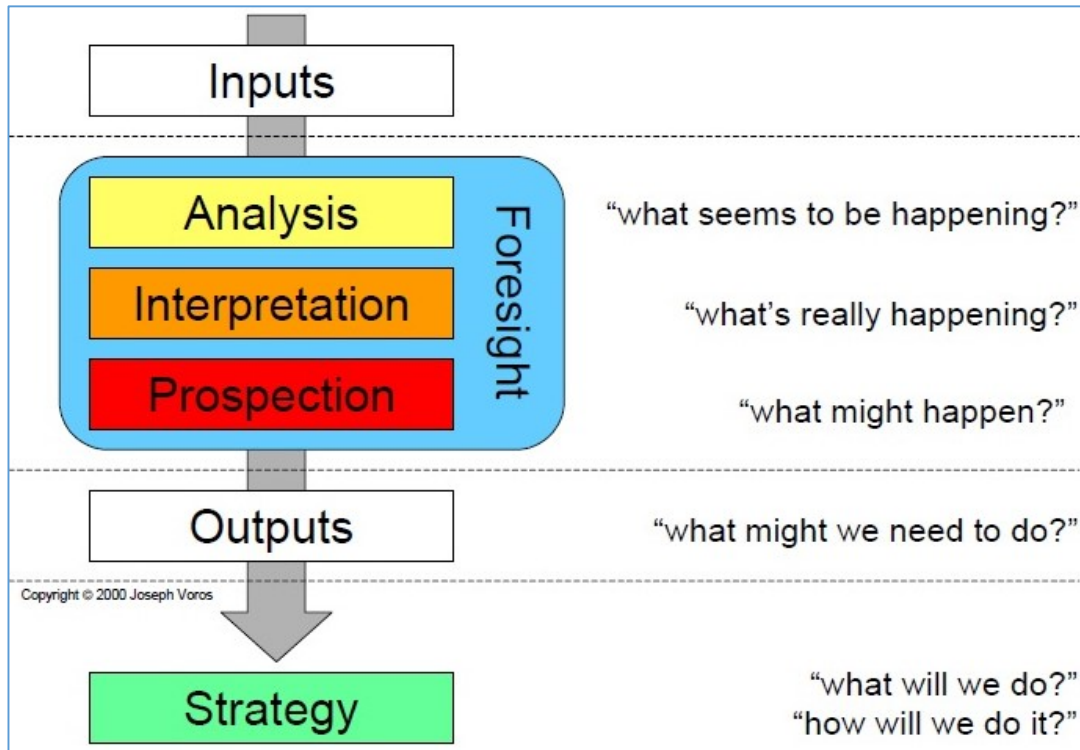


Figure 2 The foresight framework
(Voros 2003, p.9)

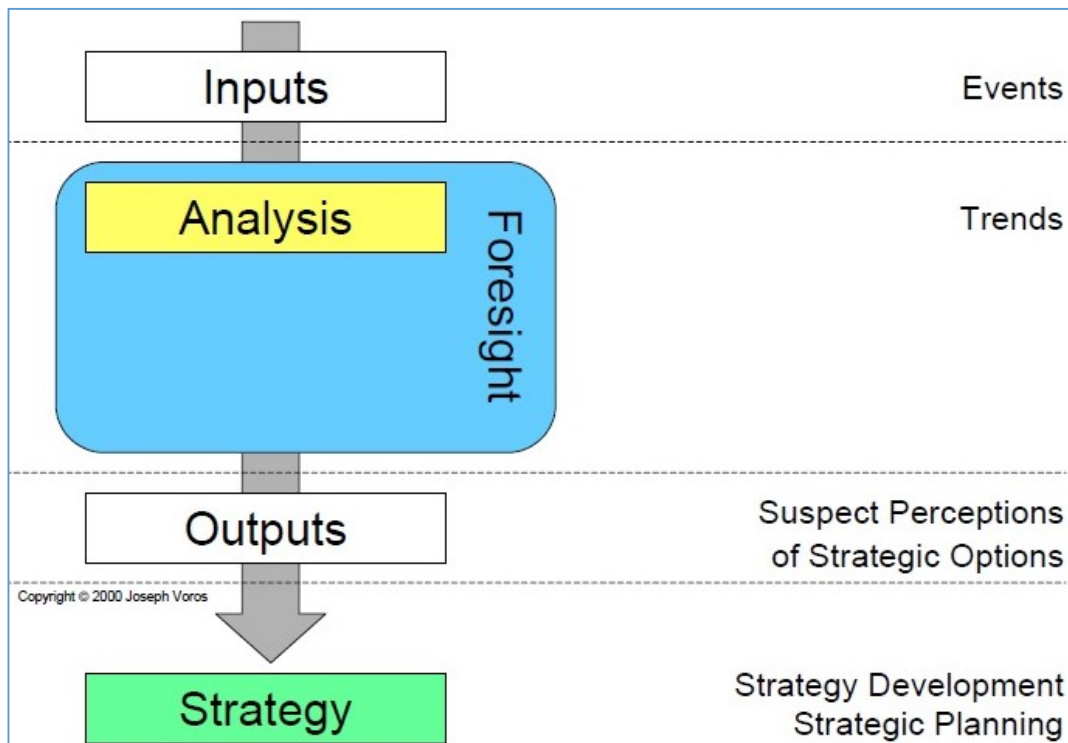


Figure 3 A 'shallow' approach to strategy
(Voros 2003, p.17)

Based on an adaption of the work of others, particularly Hancock and Bezold (1994), Voros (2003)

distinguishes five types of alternative futures illustrated within a 'futures cone' (Figure 4) containing:

- Potential futures: contains all the futures which lie ahead, including those which we cannot even begin to imagine. This is by far the largest segment.
- Possible futures: includes all the kinds of futures we can possibly imagine—those which *might* happen—no matter how far-fetched.
- Plausible futures: encompasses those futures which *could* happen.
- Probable futures: contains those which are considered *likely* to happen, and stem, in part, from the continuance of current trends.
- Preferable futures: contains cognitive knowledge, what we *want* to happen; these futures derive from value judgements, and are more overtly subjective than the previous classes.

Because values differ so markedly between people, this class of futures is quite varied. What is preferred depends a very great deal on who is doing the preferring.

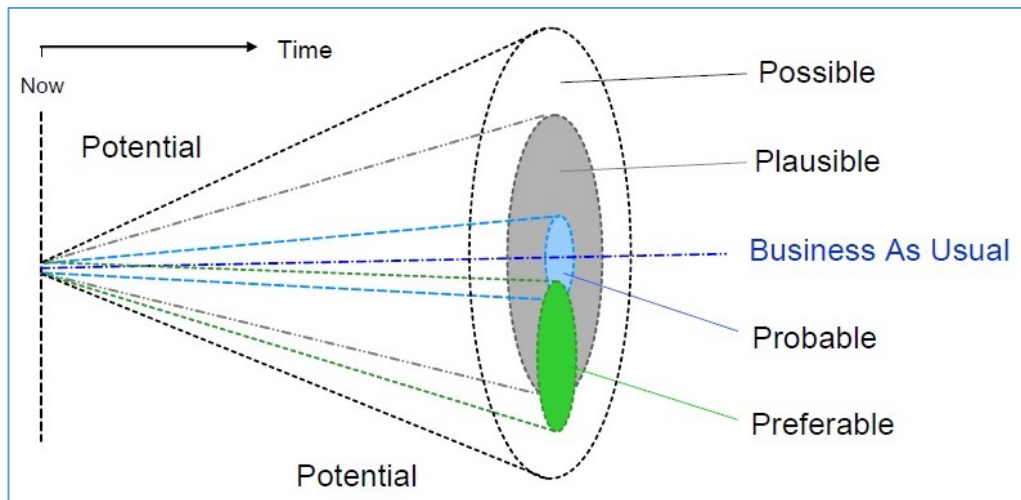


Figure 4 The futures cone
(Voros 2003, p.13, adapted from Hancock and Bezold 1994)

Wildcards are an addition to the Voros (2003) 'futures cone' – low-probability events have the potential to have high impact. They are aspects that may span all the elements of the 'futures cone' and may be at the edge of what people consider impossible. A strategic thinking process that identifies future scenarios, such as those identified in the Voros (2003) 'futures cone' allows decision

makers to have structured conversations about uncertainty, and to factor in this uncertainty into future decisions. Former US Secretary of Defence Donald Rumsfeld described future scenarios foresight as 'there are things we know that we know. There are known unknowns. That is to say there are things that we now know we don't know. But there are also unknown unknowns. There are things we don't know we don't know' (Rumsfeld 2002). The discipline of scenario planning assumes that it is not possible to accurately predict the future, but informed imagination can consider a range of possibilities. The Australian Academy of Science (2015) identifies four future possibilities similar to the Voros (2003) 'futures cone' to describe alternative futures:

- Growth as a continuation and growth of current trends – business as usual.
- Restraint which typically involves exercising discipline to address undesirable outcomes – living within our means.
- Collapse which relates to the loss of many valued aspects of society – a deterioration of present levels and critical systems can fail.
- Transformation which occurs due to radical changes to the core features of today's world. A conflict creates a catalyst for change. Changes are considered transformational if they are for the better, otherwise it is considered as part of a collapse.

Van de Velde (1999) identifies a three step model of strategic, tactical and operational planning as a preferred strategic planning decision-making hierarchy for transport planning (Figure 5). The strategic level identifies system objectives such as levels of accessibility, mode-share targets, and cost-recovery levels – 'what do we want to achieve?', the tactical level translates the strategic objectives into system-wide service plans, such as design of networks, choice of technologies and co-ordinating timetables – 'what service (or product) can help us to achieve the aims?' and the operational level translates tactical planning into day-to-day operations such as workforce management and maintenance – 'how do we produce that product?'.

Decision level	General description	Decisions	
		"Software"	"Hardware"
Strategic	What do we want to achieve?	General Aims Transport policy Market share Profitability General service characteristics Areas Target groups Intermodality	
Tactical	Which services can help to achieve these aims?	Detailed service characteristics Fares Image Additional services Vehicles Routes Timetable	
Operational	How to produce these services?	Sales Selling activities Information to the public	Production Infrastructure management Vehicle rostering and maint. Personnell rostering and mnngt.

Figure 5 Levels of planning and control in public transport
(adapted from Van de Velde 1999, p.149)

Legacy (2010) identifies the motivations supporting strategic plan making as:

1. To establish ownership;
2. To create institutional change;
3. To legitimise a political mandate;
4. To plan with and for the public; and
5. To build consensus.

Legacy (2010) argues when political legitimacy is centralised rather than diffused, the sustainability of the legitimacy and implementation of the strategic plan is compromised. Thus, the governance structures to support decision-making are of critical importance to longevity of strategic planning.

This section of the literature review has identified the lack of a productive debate between government and the community regarding strategic planning – with government often engaging in a shallow and superficial process that makes no attempt to address the question of what is really happening. The literature has identified the need to ask the question of ‘what do we want to achieve?’ or ‘what sort of city do we want?’ in order to undertake strategic planning able to

anticipate future risks, the tsunamis or wildcards, which threaten the business as usual.

2.3 Decision-making

Stopher and Stanley (2014) identify that a major error of transport planners is a failure to understand how political decisions are made. They suggest that it is critical to recognise that technical experts do not make decisions; rather they provide recommendations to decision makers and answer questions about the consequences of different decisions. There are a number of models of political decision-making that are identified by Stopher and Stanley (2014) and any one decision-making process is likely to involve various elements of these decision-making models:

- The rational actor approach which is driven by the enunciation of basic values, from which a set of goals are determined, objectives defined which are measurable and achievable expressions of the goals and finally criteria are identified which constitute the measurement of the outcomes from the objectives.
- The satisficing approach which retains many features of the rational actor approach but focuses on a limited set of goals and objectives, in the knowledge that it is not possible or feasible to seek an optimal solution.
- The incrementalist approach which is reactive, starting with a problem and then proceeding to seek out alternatives to solve the problem, drawing on the work of Lindblom (1959). It may result in a never-ending cycle of 'muddling through' the latest incremental solution.
- The organisational process approach is based on the recognition that decision-making is influenced by the institutions to which decision makers belong or for which they have responsibility. This reflects a reality that government action is the output of organisations.
- The political bargaining approach recognises that decision-making is multi-faceted, there are many points of view, values, goals and interests that needed to be considered. This approach is based on conflict resolution and consensus building that rarely achieves an

'optimal' solution, rather achieves a compromise that satisfies the largest number of stakeholders. Under the political bargaining approach, power is shared amongst many competing stakeholders, a process where the competing actors are involved in the decision-making process, not excluded. It is a process that is fluid, able to respond to changing circumstances, and that operates with the highest levels of transparency and accountability.

- The mixed scanning approach draws on the work of Etzioni (1967) and combines a broad scan across issues or options at a high level, to identify matters that seem critical to a particular problem, with detailed investigation of those elements. This approach recognises there are usually a small number of critical factors that need to be understood in detail to make good decisions.

Cumes (1988) suggests decision making is a reactionary approach to day-to-day concerns, rarely considering policy development over the medium to long term, a cycle that is 'corrosive to good public policy development' (Cumes, 1988, p.43). This is also evident in the public service which has a 'total incapacity to anticipate' and rarely see problems on the horizon, 'until being beaten over the head with them' (Cumes 1988, p.60). The result is poor public service decision-making 'mostly off the cuff or little better, unprofessional and sloppy' (Cumes 1988, p.67). Cumes (1988) suggests the appeal to precedent is endemic in the public service, and most public servants are born to a safe haven and conditioned that way. Cumes (1988, p.62) suggests 'the most successful public servants have been those able to train Ministers to be wary, resulting in Australian governments doing nothing superbly well'. Many public servants, Cumes (1988) suggests, hold the public in contempt or, at best, in less than high regard, they are wary and suspicious of the media, journalists and commentators. Scholars tend to be 'highly regarded, but only in abstract – and provided they don't get too close' (Cumes 1988, p.127). In the modern public service it 'can be much more important to be a snooker buddy than to produce a stream of imaginative policy recommendations' (Cumes 1988,

p.146), to know how to keep out of trouble and to be counted amongst 'the survivalists, anxious to rock no boats and create no waves' (Rosenbloom 1978, p.36).

Kelly and Donegan (2015) argue that many of today's politicians fail to grasp today's challenges, they remember a time when our cities were smaller, roads were less congested and local manufacturing employment was much stronger. Politicians are more likely to support easy answers to achieve a short term payoff in the media and at the next election, but they fail to have enduring benefits (Kelly and Donegan 2015). Trying to address the question 'why our cities stay broken?' Kelly and Donegan (2015) suggest it is because the underlying causes are extremely hard to address. Kelly and Donegan (2015) identify the first cause as decision-making. The fragmented decision-making in our cities is a reflection of a three-tiered local, state and federal government framework, however more significantly it is a lack of a single institution that decides for the city as a whole (Kelly and Donegan 2015). The second challenge identified by Kelly and Donegan (2015) is of how to deal with change, and the third is that our political leaders are simply not addressing the important challenges. A recent example is Infrastructure Victoria's *Report on Infrastructure Priorities* (2016b), in which the top two priorities were dismissed by the Premier within hours of it being released (Tomazin 2016). Such volatility is not new, Mees (2007a) argued for greater democracy and deliberation in strategic plan-making rather than ad hoc decision-making and he looked at Vancouver for inspiration, where he believed public consultation was meaningful, provided rigorous evaluation of alternatives and ensured longevity. The Freiburg approach to participatory planning enabled local reconciliation between triple bottom line outcome goals in an effective way (Stanley et al. 2017). Features of the Vancouver deliberative democracy approach include the exchange of ideas, negotiation, evidence-based decision-making and transparency. Without such an environment, the premise of decision-making will go unchallenged and there will be a perpetuation of the same urban problems and secret decision making with a lack of accountability (Mees 2007a).

In Melbourne, Stone (2010) argues government decisions since public transport privatisation in 1999 have sought to depoliticise the business of governing, so much so that it is hard to determine who is in control. In this way politicians can move to an indirect relationship and/or persuade the public that they are no longer responsible – an appearance of distance. Stone (2010) suggests the desire to shield the Minister from accountability was part of the government's decision in 2009 to rebrand the public transport system. Former Yarra Trams chief Denis Cliche echoed this perspective suggesting 'the Department of Transport mantra for years was 'get the trains out of trouble and keep the trams off the front page'' (quoted in Stone 2010, p.11). This risk aversion is a long-term trend; former Secretary of the Victorian Ministry of Planning and Environment (1982-1987) David Yencken recalled 'governments can change so quickly and government attitudes can change so quickly too. [In 1982] I started off with a search for people who had ideas and could bring them into being. By the time I left [in 1987] it was a search for people who were good at damage control' (Meyer 2017, p.10).

The trend in Melbourne decision making has been towards what Bishop (2015) describes as a *Decide-Announce-Defend* (DAD) approach, shown in Figure 6 with the horizontal line showing time elapsed. In the DAD approach, those in power control draw up the proposal themselves, design the process and importantly they don't talk to or engage others, especially those who may be impacted by the proposal. Under the DAD approach, those in power know who is likely to object to their proposal and the community response is so predictable that they could even write the letters of objections for them (Bishop 2015, p.22). DAD is an exercise in futility; once the proposal is announced, often with beautifully presented and expensive documents, the decision maker moves into a protracted defend stage. This stage can go on and on, from informal responses to statutory processes, planning appeals through the courts. All at significant expense and frustration to the community and the decision maker. Bishop (2015) suggests that, because the process is so badly handled, the plans may never proceed.

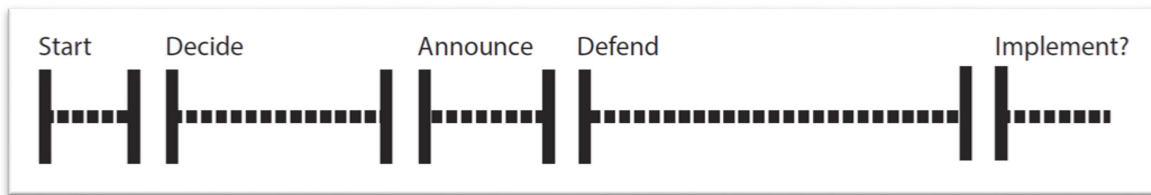


Figure 6 Decide-Announce-Defend process
(Bishop 2015, p.22)

Another approach is *Announce-Design-Defend* (ADD) whereby no design or forethought has been given to a major policy announcement before it has been designed. This approach was reviewed by Terrill (2016) and her assessment on 836 transport projects valued at over \$20 million across a range of jurisdictions, Terrill found cost blow outs account for nearly a quarter of the total budgets of these projects, and could be attributed to premature announcements – when a politician promises to build a road, bridge or rail line without a funding commitment, often in the run up to an election – typical of the ADD approach.

An alternative suggested by Bishop (2015) is the consensus based approach, called *Engage-Deliberate-Decide* (EDD), shown in Figure 7. This process is also called ‘front loading’ where people are brought together early in the process, often with a longer decide stage than the DAD model, but allows as many people as possible to participate in the deliberations through a more collaborative process that generates a widely understood and widely agreed proposal (Bishop 2015, p.23).

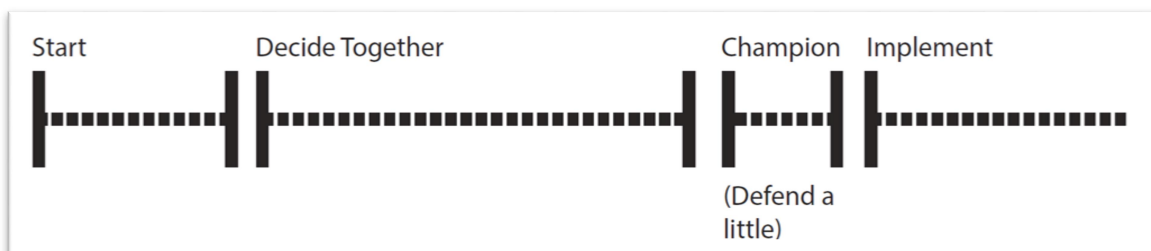


Figure 7 Engage-Deliberate-Decide process
(Bishop 2015, p.22)

There are many obstacles to introducing an EDD process, Chapman (2002) identifies the following government decision-making obstacles:

- A culture that is averse to failure.
- A desire for uniformity in public services that stifles innovation and variety.
- An adversarial political system, supported by the media, that uses failure to score points.
- Shared assumptions between politicians and civil servants that command and control is the correct way to exercise power.
- A lack of feedback on the results of policies.
- A lack of time to do anything other than cope.
- A tradition of secrecy that is used to stifle feedback and learning.
- A system that requires policies to be negotiated with competing power centres in government.
- Turf wars between departments and individuals.
- Loss of professional standards under the knife of efficiency.

In this environment, Chapman (2002) suggests *systems thinking* can address the problems associated with the growing disillusionment in government, the tendency to spend more time putting a positive 'spin' on outcomes rather than generating genuine progress or good news, and the complexity associated with a more connected and more aware community. The key element of *systems thinking* is learning – a never-ending learning system for investigating messy problems: a culture of action, evaluation and reflection (Chapman 2002). Accepting that some policies will inevitably lead to a failure, *systems thinking* does not provide simple solutions, or a panacea or silver bullet for complex problems, rather it is a paradigm shift in policy thinking. One way to understand *systems thinking* is to contrast it to a reductionist approach to tackling complexity. A reductionist approach simplifies a complex problem into sub-problems or lesser components, until the resulting

pieces are simple enough to analyse and understand. In contrast, *systems thinking* goes up in a level of abstraction, as higher levels of abstraction lose detail and it is through the loss of detail that the complex issue becomes simpler (Chapman 2002). If nothing is done, if business as usual continues, then the 'current approach to policy making and implementation can be *expected to fail*' (Chapman 2002, p.52). One of the chief tenets of *system thinking* is that it is essential that institutional and organisational change is undertaken by those within; who can appreciate the constraints, and ultimately it is they who have to implement and carry forward the changes (Chapman 2002). The ultimate goal of an organisation established under a *systems thinking* approach is the creation of a system of governance that can *learn for itself*, on a continuous basis, and be guided by democratically legitimated goals and priorities (Chapman 2002). This approach would build a culture of ideas, and a respect for evidence that is able to transcend the immediate concerns of political masters.

The inherent obstacles of government decision-making are compounded by the demands of political masters. Delahunty (2010) describes her experiences as a former Minister for Planning where she was undermined within her own party by repeated leaks to the media, destined to inflict maximum damage without leaving a physical mark. The modern media 'salivate over politicians' rise and fall, their personal peccadilloes' (Delahunty 2010, p.208). These insider leaks are designed to curry favour with the media, however it is a 'corrosive current in modern politics that deters good people from public service' (Delahunty 2010, p.209). Bracks (2012) attributes this culture to the journalists and the media, but Delahunty says the perpetrators of this is the 'fellowship of the few' who in their 'grubby togetherness' play war games at their colleagues cost (Delahunty 2010, p.207). These individuals 'much prefer the thrust and parry of the party numbers game to any thought of civic service' and whom 'roam lawlessly around the political landscape, sometimes doing their political masters' bidding, sometimes freelancing' (Delahunty 2010, p.207).

This section of the literature review has identified a number of decision making models and the application of public service decision making, the reasons why decision making is done behind closed doors and the cultural aspects that reinforce the current framework. The literature suggests early engagement, or 'front loading', is of critical importance as it generates a more collaborative process that delivers a widely agreed proposal, however, current decision making perpetuates secrecy in decision making and a lack of accountability.

2.4 Erosion of advice

Building on the experiences of Deane (2015) and Delahunty (2010), this section of the literature review explores the erosion of 'frank and fearless' advice to government – a key element of Melbourne's East West Link case study cited by the Victorian Auditor-General (2015a) – the long term hollowing out of the public service and the lack of authoritative institutions in Melbourne. Drawing upon several literature sources, it suggests the erosion of 'frank and fearless' advice can be attributed to a move away from the public service and towards political service (Banks 2014) – a trend that emerged in the 1970s through a distrust of 'bureaucratic lapdogs' (Deane 2015, p.164) by the reformist Whitlam Government. This section draws together the path dependency concepts of Low and O'Connor (2013) and Sturup and Low (2013), and Mees (2009b) who identified advice to government lacks the institutional authority to work towards a city in the public interest.

Mees (2009b) argued independent funding, organisational capacity and transparent and participatory governance structures are required to meet our future transport challenges. The cities that have done transport well, London, Vancouver, Zurich, Toronto, all had strong central transportation organisations (Mees 2009b). Mees wanted nothing less than a revolutionary reframing of state transport institutions that would end the modernist path dependency that favoured the private car as the principle means of transport (Gleeson and Beza 2014). Mees' idealised city governance model would comprise a strongly authorised metropolitan planning

institution with an overriding zeal for sustainable urban transition, interrogated constantly by a robust citizen participation structure (Gleeson and Beza 2014): a system that worked for the public interest – what he referred to as the Public City.

In our representative democracy, regular fluctuations in leadership and policy are natural and necessary, enabling society to accommodate changing circumstances and prevailing attitudes. Our elected representatives are in power for only a short time, creating urgent windows of opportunity. One of the many obstacles to such a change is the theory of path dependency – the persistence of policy, and resistance to change, over a variety of policy areas. Low and O'Connor (2013) suggest path dependency theory for strategic transport planners requires an examination of two related sorts of path: the first is the weight of physical infrastructure (the sunk costs of transport infrastructure) and the second is the institutional determination of policy. The circumstances that have led to our current path dependency are complex, and have been shaped by a unified institutional structure for road planning, in contrast to a weak and fragmented structure for public transport (Sturup et al. 2013). The continuity of public policy from one political administration to another is something taken for granted. Government would be chaotic, if not impossible, if root and branch reform was part of each change of government (Sturup et al. 2013). However, this continuity is considered policy failure when the path of policy development becomes inconsistent with the long-term public interest, or when a 'holding pattern' emerges which discourages, and becomes an obstacle to publicly announced policy. In addition to these structural aspects, Kelly and Donegan (2015) suggest that the societal shift from agriculture and primary industries in the nineteenth century, to manufacturing in the twentieth century, and to the knowledge economy in the twenty-first century is part of a global trend, whereby cities are critically important to the national economy – yet are not reflected in our civic institutions.

Healey's argument is that planning is about the greater good when she stated 'the motivating idea of planning activity [is] to promote better and more sustainable conditions for the many and not just the few' (Healey 2010, p.10). These 'laudable motivating ideas' should guide decision-making processes (Buxton et al. 2016, p.10). However Buxton suggests traditionally, strategic planning has been based on continuance of current trends in a predict and provide manner and that today's transport planning decisions create a path dependency that determine ways of living for decades to come (Buxton et al. 2016).

The failure of strategic planning and decision-making started with the 'hollowing out' of the public service; a phrase identified by Rhodes (1994, p.138) to describe a range of reforms in which 'the State is being eroded or eaten away'. In Australia, this commenced with the election of the Whitlam Government in 1975, after 23 years of Liberal and Country Party rule. Deane (2015) argues that Whitlam wasn't ready to trust the bureaucracy and established his own political staff, to work around the public service and was also reflected at a Victorian level following the election of the Cain Government in 1982. This was compounded by the notion that the public service was to administrate, rather than instigate big picture policy direction (Deane 2015). Significantly there was also a shift in the *composition* of Ministers' offices; away from people with policy expertise, towards those with political, communication or media management skills (Banks 2014).

A lack of public service 'frank and fearless' advice was highlighted by the Auditor General report on East West Link decision-making that found 'advice to government did not always meet the expected standard of being frank and fearless' partly attributed to 'some public officials [who] indicated that providing frank and fearless advice when they believe a government does not want to receive it will negatively impact their influence or career opportunities' (Victorian Auditor-General 2015a, p.xv). This was a view expressed to the Auditor-General by more than one official in more than one

agency, however the Department of Treasury and Finance rejected the comment and disputed its finding (Victorian Auditor-General 2015a).

Banks however suggests that one need look at the incentives: 'If one can be sacked, moved or not renewed for giving unwanted advice, one will tend not to give it' (Banks 2014, p.8). Gittins (2017) suggests that a culture of fear and bullying pervades the public service and 'when you mistreat the [public] servants they stop warning you about the hazards you face and, ultimately, indulge in schadenfreude when you fall over the cliff'. The politicised culture creates an environment where 'frank and fearless' advice is not forthcoming and Ministers surround themselves with 'yes men', where 'successive governments' desire to avoid confronting unpleasant truths' have filled their departments with armies of public relations people (Gittins 2017). Norris identified that 'sycophancy naturally surrounds the powerful, particularly when they have such extensive powers of patronage through government appointments' (Norris 1996, p.150). Former Victorian Premier Bracks identifies the great debates that occurred at Cabinet during the period 2000-2007, where contested ideas were exchanged freely, and his acknowledgement that 'if you have a Cabinet where people don't feel they can speak freely, then you've got a problem' (Bracks 2012, p.240). Bracks (2012) recalls strong Ministers and staff who would routinely challenge his views whenever they felt it necessary, this would result in policy decisions being tested and debated.

The failure of Victorian transport planning decision-making has been a recurring theme throughout history. In 1982 a special Public Service Board review found that the Transport Ministry was 'relatively weak and does not provide a basis for efficient and effective management of the overall transport task' (Wilkinson 1984, p.219) and that there was no coherent decision-making for an explicit transport strategy for Victoria. Stone and Beza (2014) argue Melbourne road-transport planning agencies have strong economic and political power bases, that have maintained transport policies that support the continued dominance of the car, in part by asserting the impossibility of

greater Melbourne being serviced by public transport (Stone and Beza 2014). This has been aided by public transport managers that share the same beliefs to limit public transport use (Stone and Beza 2014).

This section of the literature review has identified the erosion of 'frank and fearless' advice to government, a distrust of the bureaucracy, and a path dependence in transport planning towards private vehicles. The literature suggests that to create an environment and culture where decisions are tested and debated requires a strongly authorised metropolitan planning institution working in the public interest, constantly interrogated by citizen participation.

2.5 Groupthink

This section on groupthink relies on the concurrence thinking work of Janis (1971), a situation where the dominant in-group overrides the realistic appraisal of alternative courses of action. This is a critical component of the Melbourne East West Link case study where groupthink involved the deliberate suppression of alternatives by the government (Hansen quoted by Green 2014), and also the late response from the then Opposition to oppose the project (Lucas 2013). Janis (1971) says many fiascos are victims of groupthink – a process in which a group displays social conformity as a result of powerful social pressures brought to bear by the members of a cohesive group whenever a dissident begins to voice objections to a group consensus. This type of thinking bolsters group morale at the expense of critical thinking. It is defined as a situation where remaining loyal to the group, by sticking with a position the group has already committed themselves, is preferred even when the position is working out badly and has unintended consequences (Janis 1971). This is what Janis describes as concurrence-thinking. The dominant in-group overrides realistic appraisal of alternative courses of action.

Groupthink involves non-deliberate suppression of critical thoughts as a result of internalisation of the group's norms, which is different to deliberate suppression on the basis of external threats of social punishment (Janis 1971). Janis (1971) describes eight main symptoms of groupthink:

1. Invulnerability: group members think they are invincible, become over optimistic and take extraordinary risks, it also causes them to fail to respond to clear warning signs.
2. Rationale: group members construct rationalisations to discount warnings or negative feedback.
3. Morality: group members believe unquestioningly in the inherent morality of their in-group.
4. Stereotypes: group members hold stereotyped views of the leaders of enemy groups.
5. Pressure: group members apply direct pressure to any individual who expresses doubts about any of the group's shared illusions.
6. Self-censorship: group members avoid deviating from what appears to be group consensus and keep silent of any misgivings.
7. Unanimity: group members share an illusion of unanimity partly because of self-censorship.
8. Mindguards: group members protect the leader and fellow members from adverse information.

When a group succumbs to groupthink they are often limited to a few alternative courses of action rather than a broad array of options, often only one or two, without any survey of possible alternatives (Janis 1971). Then, after learning of the risks and drawbacks of the preferred direction, the group fails to re-examine the course of action proposed. Often there is little or no time spent discussing the proposed action and members of the group make no attempt to obtain contrary advice from experts. Finally, groupthink members show interest in facts and opinions that support their own policy and tend to ignore the facts and opinions that do not.

Swiss psychotherapist, Gruen (2007) wrote about the 'insanity of normality' where societies are able to develop a strong story line on any subject that is false, full of contradictions and riddled with flaws and claim it is normal. Under the guise of normality, we may act in the most inhumanly destructive manner, so that those who oppose normality or merely point out the inconsistencies are marginalised and isolated and categorised as insane. Societal conformity within these generally accepted views is the norm and opposition or dissent is the exception. Janis (1971) identifies the following remedies to groupthink:

1. Leadership that encourages open airing of objections and doubts.
2. Group members adopt an impartial stance instead of stating preferences and expectations at the beginning, thus encouraging open inquiry and impartial probing of policy alternatives.
3. Establish external policy-making evaluation groups, such as academia or industry to prevent the insulation of the in-group.
4. Before reaching a consensus each member of the group should discuss the deliberations with close associates and report back to the broader group.
5. Invite outside experts to meetings to challenge the views of core members of the group.
6. At least one member of the group should play 'devil's advocate'.
7. The group should discuss all warning signs from rivals and develop alternative scenarios to the rivals intentions.
8. Divide the group into two or more groups to survey policy alternatives under different chairmen and then come back together to discuss differences.
9. After reaching consensus, the group should reconvene for a second chance meeting where any residual doubts can be expressed before making a definitive choice.

Groupthink is evident in most governments and Donovan (2000, p.183) says one of the downfalls of the Kennett Government was 'he didn't have any close assistant political boosters who would respect the leader's enthusiasm but also redirect him when he looked like going over the top'.

Instead Kennett developed an 'us' and 'them' mentality and surrounded himself by advisers who feared they may be 'pushed out a window or fed to the Treasury Place garbage trucks' (Donovan 2000, p.183). Critics were side-lined or, in the case of Kennett Government adviser Stephen Mayne, departed altogether and founded independent news website, *Crikey*, in February 2000.

Related to groupthink is loyalty which produces pressures towards conformity (Likert 1971). Likert (1971) raises the concern that this may stifle individuality, creativity and value rigidity of behaviour, which robs a group of original ideas. Highly effective work groups stimulate individual creativity and imaginative and original contributions from their members, without fear or favour. Likert (1971) argues that in a highly effective group, individual members feel secure in making decisions which seem appropriate to them, because the goals and philosophy of operation are clearly understood by each member and provide a solid base for decisions.

This section of the literature review has identified the symptoms of groupthink, where the dominant in-group overrides the realistic appraisal of alternatives, and only facts or opinions that support their own policy are considered. Groupthink applied to the broader society creates an 'insanity of normality' whereby outcomes are pursued despite knowledge of the undesirable side effects. There are remedies to groupthink, which requires unique leadership and group decision making, however in practice, the literature suggests groupthink, loyalty and conformity are well established within current decision making.

2.6 Trust and public debate

The erosion of trust is explored through Susskind and Field (1996) and their work on an angry public. The role of citizens in decision-making has emerged strongly in recent decades. Government leaders have covered up mistakes, concealed important information from public scrutiny, made misleading statements and often lied (Susskind and Field 1996). Susskind and Field (1996) contend that the

public is angry. There is a rising tide of public distrust and an erosion of confidence in basic institutions. The challenge facing government is how to manage this frustration to achieve better outcomes, to negotiate with critics and increase political capital in decision-making. Susskind and Field (1996) assert that an angry public saps the government of productivity and demands large amounts of time, money and human capital. These resources are an opportunity cost that cannot be spent on other more pressing problems.

Susskind and Field (1996) argue that Government relies on a 'stonewalling' technique of obfuscation and concealment, whitewashing facts and blaming other parties. Latham (2014) says modern politics follows a cycle of deceit and broken promises made during election campaigns that over-promise and manufacture a false hope for what can be achieved in power. Susskind and Field (1996, p.7) suggest 'too many mistakes have been made, and too many situations mishandled for the public to trust the opinions and reports of high-level executives and government officials'. The public is especially angry when its beliefs have been ignored or ridiculed, because their basic notions of self-worth are at stake – they are not just beliefs about what the community holds dear, but fundamentally they are about who they are (Susskind and Field 1996). Manipulation of information also undermines community confidence and trust, for example, the 1969 Transport Plan authors were conscious of the massive scale of the proposed freeway network and disguised its impact by announcing broad maps, lacking the necessary detail to enable full comprehension of the impacts (Davison and Yelland 2004).

Mees (2003a) abhorred the charades of citizen engagement in contemporary Australian urban processes, particularly in Melbourne: sporadic, farcically shallow consultation processes overlaid on a grinding underflow of petty litigation through planning appeal systems (Gleeson and Beza 2014). Mees (2007c) desired a model of regular, open-hearted public participation in plan-making, with minimal recourse to statutory revision through the appeal system (which he saw as favouring money

and power), to redress the organisational infrastructure deficiency in Melbourne. An *exchange* of information rather than a one-way flow. Legacy (2014) says civil society in Melbourne is increasingly wary of government-led planning exercises where the rhetoric invokes a conversation around broad planning principles set out in a discussion paper. The more controversial decisions, such as investment in expensive pieces of infrastructure, are made by elected officials with very little public deliberation, often avoiding public and rigorous debate (Legacy 2014).

In Australia, citizen participation in plan-making concentrates activity on heavily stage managed 'events' that deliberately reduce the depth and breadth of public deliberation (Legacy 2014). Planners have shifted from their traditional role as 'guardians of the public good' (Mees 2003a, p.54) to being facilitators of growth and development (Rydin 2013). The optimism of the Hamer Government's new paradigm of participatory planning has faded. Lewis recounts that there is little emphasis on the value of community planning or participatory democracy in today's planning system (Lewis 1999). Examples include changes to the Planning Appeals Board, established by the Hamer Government to allow third party community groups' access to the planning process, to the less accessible Planning List of the more adversarial Victorian Civil and Administrative Tribunal in 1998, and the removal of third party appeal rights under the new Residential Zones introduced in 2014.

Howe et al. (2014, p.191) notes 'there are now substantial barriers in challenging development investment decisions involving powerful global capital institutions. Consultation and transparency are no longer priorities in planning decision-making as the inner suburbs are absorbed into the central city as an economic unit for planning'. Legacy suggests plan-making in Melbourne is 'a hollow shell of engagement where people simply share their ideas around what they value about a city with little actual deliberation' (Legacy 2014, p.81). This was highlighted by the Ministerial Advisory Committee (MAC), an advisory body established to guide the development of Plan Melbourne, all of whom except one, resigned after the draft plan departed from the community's views expressed

during the 'Melbourne: Let's Talk About It' two-year consultation process. MAC Chair, Roz Hansen, recalls that after the public consultation concluded, the planning department began 'putting a political spin on the document and certain individuals within the department decided they were going to write this document. So they started to completely reshape it even though I was being told they were just 'tweaking it'. It was clear that they were on a mission and they weren't interested in what I or the other members had to say. It just reeked with arrogance and 'I know best' culture' (Roz Hansen quoted by Green 2014).

Latham (2014) describes the collapse of trust and hope in Australian politics, and charts the way in which, over the past 20 years, the major political parties have broken the social compact and discredited themselves in the process. Latham (2014) argues that citizens are better educated and more confident in their views, more inclined to challenge the political system and its shortcomings. The destructive effects of contemporary political culture was highlighted by Murphy (2017) who described the unrelenting demands of parliamentary life, an unhealthy obsession with technology which has changed the speed at which politics is practised, and politicians were on a knife edge, they becoming more territorial and more paranoid. This trend is also reflected in government institutions becoming more inward looking, more resistant to public scrutiny and accountability. Latham (2014) describes examples where, when faced by chronic internal difficulties, these organisations become more cynical and less responsive to community standards and their first instinct is to manipulate, or spin, the media coverage and gather powerful allies around them, rather than facing up to the nature of the scandal.

The erosion of trust in politics means it is difficult to achieve reform in the current environment. Carson (2011) describes the existing political system and an adversarial Parliament as not ideal for addressing complex problems. As a result, citizens have lost faith in the political process and representatives in what has been described as a 'democratic deficit' (Carson 2011, p.39). In November 2016, Oxford Dictionaries identified the term 'post-truth' as international word of the

year (Flood 2016). This word is defined by Oxford dictionary as an adjective 'relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief' (Oxford Dictionaries 2016).

This section of the literature review has identified a growing distrust of government, an angry public frustrated by a succession of cover-ups, concealed information, misleading statements and even outright lies. The literature suggests modern politics has become defined by a cycle of deceit and broken promises. Sporadic and shallow consultation in a one-way monologue has become the norm. Manipulation of information and spin that attempts to resist public scrutiny and accountability. The literature suggests the adversarial political arrangement has created polarised debates and an 'I know best' culture.

2.7 Loss of authority

This next section of the literature review deals with a decline of political authority, an empowered public, a demanding media cycle and the political classes' desire for winning power, wielding power and ultimately losing power. Political authority in our Westminster system of governance is expressed through the modern politician. Cumes (1988, p.34) suggests the modern politician comes into politics for a raw hunger for power, that is 'staying in, or returning to office'. Political life is shorter than most other professions, potentially concentrating the windfalls of political office and increasing a short-term focus. The advantages of political incumbency have faded, creating greater volatility of electoral outcomes. Latham (2014) describes how with shorter periods in office, governments are forced to devote greater time and resources towards electoral tactics, producing continuous campaigning. This was witnessed in elements of Kevin Rudd's term as Prime Minister where he churned through political staff due to the unreasonable demands and long working hours (Walsh 2008). Deane (2015) argues political power is nomadic: winning it, wielding it and losing it. It

moves from person to person, faction to faction, party to party – the danger is for participants to think otherwise.

The gradual hollowing out of the public sector (Banks 2014) and declining rates of support for major political parties (Worthington 2001), has created what Latham (2014) describes as an era whereby vested interests and ideologies have found it easier to control the old parties. With the decline of political trust (State Services Authority 2007), a void has been created in the electoral system for niche candidates and minor political parties. Naim (2013, p.77) argues 'political power is growing more fragile; gaining a majority of votes no longer guarantees the ability to make decisions, inasmuch as a multitude of micropowers can veto, delay, or water them down. Power is seeping away ... from large and long-established political parties to small ones with narrow agendas or niche constituencies'. This is witnessed by the rise of The Greens in Melbourne's inner city where traditionally dominant Labor is losing ground and increasingly local government is becoming Greens dominated (Willingham 2016). This is not new, with Bracks (2012, p.251) conceding that 'over time [support for The Greens] rose quite a bit higher than I had expected'. Naim (2013, p.77) argues 'politicians in government are finding that their tenure is getting shorter and their power to shape policy is decaying. Politics was always the art of the compromise, but now politics is downright frustrating—sometimes it feels like the art of nothing at all'.

Mees (2007b, p.11) argued that no one is in charge of transport and that the real deficiency in transport is with 'organisational infrastructure', not physical infrastructure. To answer the question of 'who should be in charge?' Mees (2009b) suggested three non-negotiable features:

- a) The agency should have jurisdiction over the entire functional urban area rather than just the central municipality.
- b) It must control overall finances, allowing the pooling of revenue to avoid endless disputes and permit the cross-subsidy that is essential to network planning.

- c) It must be allowed to operate independently of the day-to-day political and media cycle, while being publicly accountable for its performance.

Mees (2009b) says the combination of these three elements is necessary to guard against capture by vested interests (such as trade unions or private contractors), encourage efficiency and customer focus, and enable the agency to advocate for adequate funding in the public arena. Independence is of utmost importance, as political interference and bureaucratic remoteness from the consequences of decisions can inhibit efficient and innovative tactical planning (Mees 2009b). This section of the literature review has identified the increasingly volatile and fragile political environment, the decline of political authority and support for major political parties. This is also reflected in the organisational infrastructure and the ambiguity of 'who is in charge?'

2.8 Wicked problems

The concept of wicked problems was developed by Rittel and Webber (1973), both urban planners at the University of California. It refers to complex planning problems that display the ten distinguishing properties identified in Appendix 1. Wicked problems represent the kind of problems planners deal with – societal problems – inherently different to the problems that scientists and engineers deal with. Innes and Booher (2010) argues wicked problems are becoming more widespread as planners face increasing uncertainty, higher expectations, a proliferation of interests and traditional government institutions becoming less effective. Complex problems fall between the cracks of government with no one able to make meaningful, feasible plans (Innes 2016a). This has created an institutional void—a space where community actors are inventing new ways of making decisions and taking collective action.

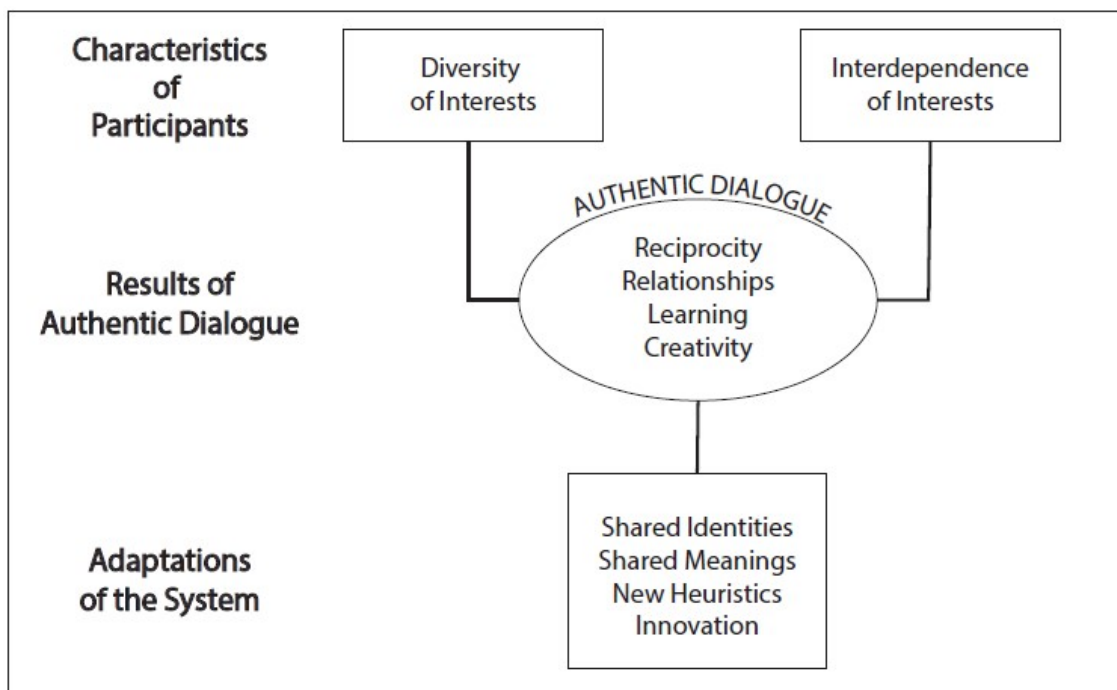
Innes (2016a) describes how new approaches often involve collaboration among public agencies, private entities and other stakeholders. These approaches rely on multiple forms of knowledge, they build relationships, engage in joint learning and frequently move forward jointly. This is consistent

with Susskind and Cruikshank (1987) and the process of 'joint fact finding' to answer the questions of 'what do we know and what don't we know?'. A written agreement of this joint fact finding ensures the parties hear and understand each other and ensure the parties have something they can report back to their members to review and ratify (Susskind and Cruikshank 1987). A *single text procedure* process has been identified whereby one person (or a very small group of the broader group) is designated to produce a draft that captures his or her sense of the agreement (Susskind and Cruikshank 1987). This draft is then circulated back and forth amongst the participants to improve the draft until agreement, or 'closure' is reached (Susskind and Cruikshank 1987). As part of this process the focus is on interests not positions, spending great lengths of time outlining their concerns as candidly as possible. Instead of win-loss statements like 'the freeway must not proceed' the group should describe the possible impacts: 'the freeway will create traffic congestion elsewhere, will increase noise and impact property values'. Innes (2016a) identified the need for strategies to deal with the fast-moving world, technology, globalization and rapid change, suggesting wicked problems are complex with many moving parts, competing players, interests and knowledge and intervention creates other unexpected consequences, and that they are not amenable to standard solutions.

Building on the work of Hajer (2003), Innes (2016b) discusses 'institutional voids' where government has not been successful in getting things done. In this environment no one has authority and authority is dispersed. Critical public problems fall through the cracks. This allows vocal public groups to form easily, however no single player can make meaningful plans and inaction is the result. In these institutional voids the only emerging technique is collaboration. Innes (2016b) uses case studies to demonstrate how informal grass-roots groups, deliberately working outside of mandated government (Innes argues it would not work if mandated), can match the fluidity of a rapidly changing world. Innes and Booher (2010) describe how collaboration is not equal, not fair and often does not work. Innes identifies preconditions to create 'authentic dialogue', that includes a 'diversity

of interests' and 'interdependence of interests'. This is a collaborative rationality theory described as DIAD (diversity, interdependence, authentic dialogue), shown in Figure 8.

This collaboration requires both the deal makers and the deal breakers to be part of the discussion (Innes and Booher 2010). Innes (2016b) says that such collaboration must involve all participants, even the most obnoxious of participants, as it simply won't work if all players not involved. This is consistent with Habermas' (1981) idea of communicative rationality and the requirement for inclusion of all perspectives. Other pre-conditions for authentic dialogue include a shared purpose and task and a team that functions in a self-organizing manner, without direction from an external party (Innes and Booher 2010). Innes (2016b) suggests the interaction process needs to be legitimate, accurate, comprehensible and sincere. It also needs to be reasonable, as Habermas (1989) notes, only in a society in which a general notion of reason can be invoked can we hope to sustain a good society, without this, life gravitates towards an endless power struggle among antagonistic interest groups.



*Figure 8 DIAD (diversity, interdependence, authentic dialogue) network dynamics
(Innes and Booher 2010, p.35)*

Innes (2016b) argues information exchange is important and it needs to be of a high quality and agreed upon. The group must have the ability to challenge assumptions and the status quo which Innes (2016b) says is the most difficult part, as citizens are often afraid to challenge, but are often the underlying assumptions hiding the wicked problem. Innes (2016b) also says that the group should not seek consensus until all the options have been explored. From an authentic dialogue comes reciprocity (creating a larger pie), building relationships, learning and creativity (new ideas), an ability to develop shared meaning and shared identities (Innes 2016b). Innes (2016b) contends that collaboration, if done properly, is a far more effective strategy for wicked problems than traditional command and control approaches. Inclusive and deliberative processes also offer the greatest potential for legitimacy to be achieved (Innes and Booher 1999).

Painter (1984, p.43) argues that urban policy may be fundamentally too complex and that, rather than transformative acts of 'administrative heroism', decision makers should accept the inherent limitations of urban policy and focus on 'simpler and more direct approaches to dealing with some of the problems'. This reductionist approach can be used to simplify a complex problem into sub-problems or lesser components, until the resulting pieces are simple enough to analyse and understand. This is in contrast to Bishop (2015) and the *systems thinking* approach which looks broader to resolve detailed problems.

New Zealand's Secretary to the Treasury acknowledges the complexity of wicked problems and the need to 'apply an open mind, long term thinking and a multi-disciplinary approach' and 'one of the most valuable things that officials can do is filter out the noise of social media and the relentless 24-hour news cycle, and help ministers focus on longer term considerations' (Makhlouf 2016). This highlights a need for decision makers to create time and space to consider longer term objectives. In addition, governments must resist the temptation to tighten a grip on power in response to complex problems, rather pursue 'more devolution of responsibilities (and funding), supported by more

investment in capability building in the devolved areas, but packaged with very tight specification of outcomes to be delivered' (Makhlouf 2016).

This section of the literature review has introduced the concept of wicked problems, the characteristics, the complexities and the approaches to managing wicked problems. The literature suggests the solution lies in devolved power, collaboration, joint learning and agreement – producing a sense of closure and respect for the process.

2.9 Consensus and negotiated outcomes

To understand the question of how should transport planning decisions be made in a highly complex (wicked) environment to achieve better processes and outcomes, this section reviews the thresholds for change or the tipping points (Walker and Salt 2006), and the small windows of opportunity that are available to introduce change (Low and O'Connor 2013). Thresholds, or tipping points, are crossing points that have the potential to alter the future of the systems that society depends upon (Walker and Salt 2006). A threshold is reached when a known vulnerability – such as financial crisis, disease, storms, climate change, water shortages – reaches a point such that it becomes an acute event that results in an emergency that compels decision makers to take extraordinary action. Winston (2014) suggests an extreme world calls for extreme change, and cites problems that reside firmly in the commons – such as climate change and regional water shortages – which demand large-scale solutions beyond the capabilities of any single entity. Rodin (2014, p.284) says 'never let a good crisis go to waste' and suggests a crisis is an opportune time to introduce change as decision makers are likely to be willing to devote energy to the task and look for solutions. In the history of Melbourne's land use and transport planning, these tipping points have largely related to environmental crises, such as the Royal Commission into Sanitation (Allen 1889) which resulted in the creation of the MMBW, or a construction catastrophe such as the collapse of the King Street

bridge in 1962 and the subsequent decision to establish a Metropolitan Transportation Committee to plan for Melbourne's transport needs to 1985 (Wilkinson 1984).

As noted above, change is only possible in very tight windows of opportunity. These windows often involve a change of political leadership and long term institutional change such as a new policy framework (Low and O'Connor 2013). A crisis is a window of opportunity which forces political leadership to respond, and in this state of collapse, rapid innovation is facilitated that bypasses the inertia of business as usual. Stone and Legacy (2013) suggest that in successful cities, political entrepreneurs seize these windows of opportunities to construct new policy communities to shape and implement programmes though moving towards consensus and negotiated outcomes. Mees (2009b) says one of the most encouraging opportunities is the critical role played by citizens and their elected representatives. However in Melbourne, the citizens and community campaigners could not build sufficient support for the task of re-orienting urban planning and transport policy following the 2010 Frankston Railway Line Victorian election (Stone and Legacy 2013). In this instance, the sitting government was defeated due to poor reliability on the Frankston railway line, delivering an unexpected win to the incoming Baillieu Government. This pattern of a failure of a community movement to take advantage of a tipping point has emerged after successive transport elections, from 1982 and the election of the Cain Government after the Lonie report, through to 1999 and Regional Fast Rail, and most recently in 2014 with East West Link. In all examples, although elected on transport, the tipping point threshold was not successfully implemented. Thus, the community has been unsuccessful in promoting an improved transport system.

Also it is apparent that the centralisation of control over urban policy and resource distribution is held tightly by the Victorian Government, and that it has structural dominance over weak local governments in Melbourne (Stone and Legacy 2013). Low (2013) argues that real change requires new people in important bureaucratic and political positions. This is supported by Innes (2016b, p.1)

who suggests 'bureaucrats, elected officials and planners themselves often stand in the way of collaboration, preferring to keep control, without recognising how collaboration can reduce conflict, prevent mistakes, enrich their thinking, offer new options and reframe difficult problems.' Thus, new outsiders can bring in new ideas and motivations to facilitate change to take advantage of this threshold opportunity. Innes (2016b) describes an approach of 'collaborative rationality', rational because it considers a full range of views, depends on well vetted information and reaches conclusions that stand up to scrutiny. This approach involves joint-learning and joint reasoning as initiated by the outsider.

The form of participation of outsider influences is important to initiate changes at these threshold opportunities. However, it is not only the participants and their ability to effect change, but the way that power is shared and distributed amongst the agents of change in order to achieve a consensus of the preferred options at this threshold point. There are significant amounts of literature about how consensus can be achieved with the community; the following discussion explores this. The seminal 'Ladder of Citizen Participation' developed by Arnstein (1969) identifies a power structure for community engagement (see Figure 9) which implies higher rungs of the ladder are better. This is similar to the four step model used to describe the ways in which the public can influence decision-making (Creighton 1992): (1) Consensus building to agree to the decision; (2) Consultation to be able to influence the decision; (3) Formalised participation to be heard before a decision and (4) Public information to be informed of the decision. Creighton (1992) claims the most effective is consensus building, the least effective is public information. Bishop (2015) identifies a weakness in these models in that a shift up the ladder merely places more and eventually all of the power with one party or another, fundamentally a win/lose outcome, this is shown in Figure 10.

In response, Bishop (2015) suggests a collaborative working and consensus building environment that attempts to create win/win outcomes, creating added value from bringing together skills,

knowledge, information and power from a range of parties – a process that is about both ‘us’ and ‘them’ rather than one or the other. Bishop (2015) concedes there may be no perfect typology, but describes one option he calls the *Level's Framework* – shown in Figure 11 – that allows both increased influence (arrow on the left), while at the same time fewer people likely to be involved (arrow on the right). Bishop (2015) suggests many benefits and outcomes from a collaborative approach including:

- Widespread agreement to a project, programme, plan or policy.
- Introduce detailed knowledge, skills, issues, experiences, ideas and judgements alongside, not instead of, those of professionals.
- Draw out and clarify, perhaps prevent, but also diffuse or resolve conflict.
- Speed the overall timetable.
- Use resources more effectively and efficiently.
- Increase indirect ownership, increased acceptability and speedier implementation.
- Increase involvement and encourage mutual education, understanding and respect.
- Improve relationships between the powerful and professionals and less powerful, laypeople.
- Build confidence, trust and skills for the next engagement process.
- Re-establish trust in governmental processes and systems and in the professional classes.

Whilst the method is important, the decisions made by the community need to be transparent and be accepted by the decision makers in a relationship of goodwill for the threshold point to be used effectively.

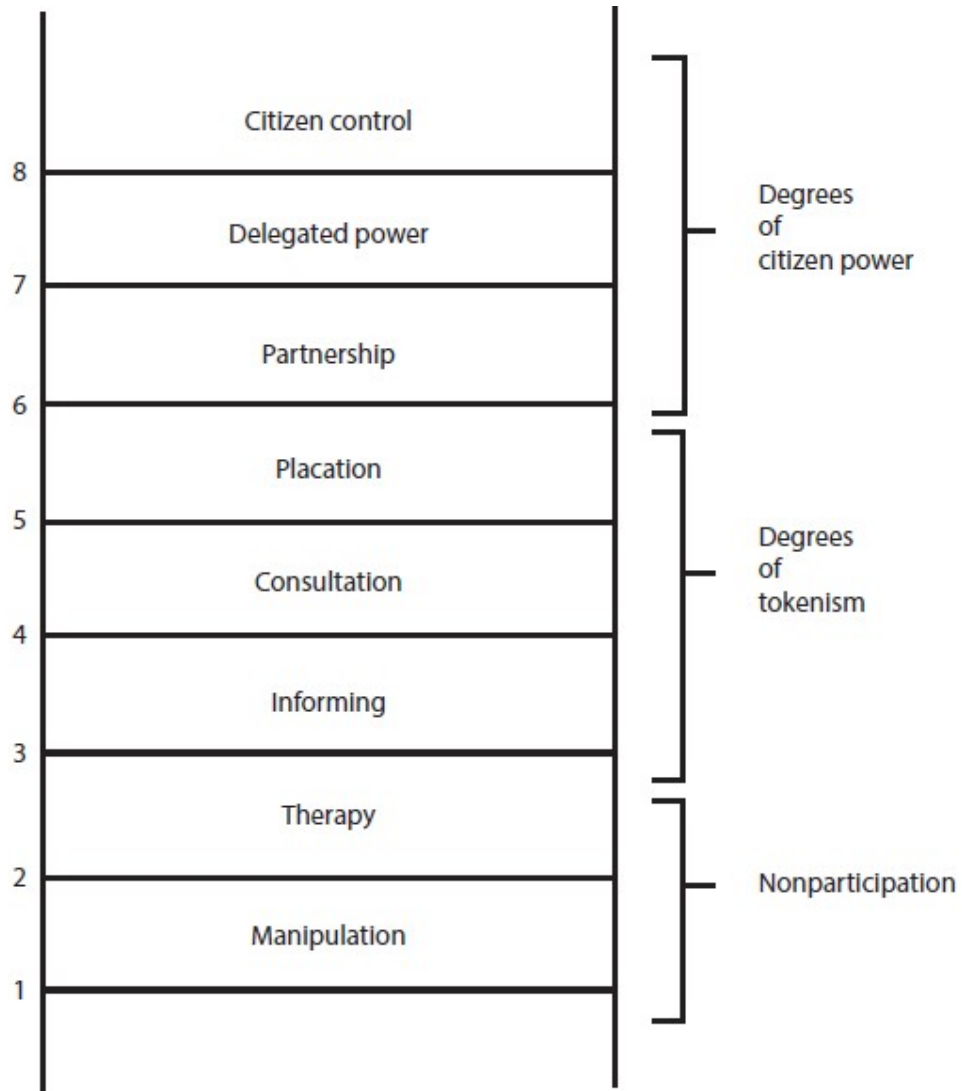


Figure 9 Ladder of Citizen Participation
(Arnstein 1969, p.217)

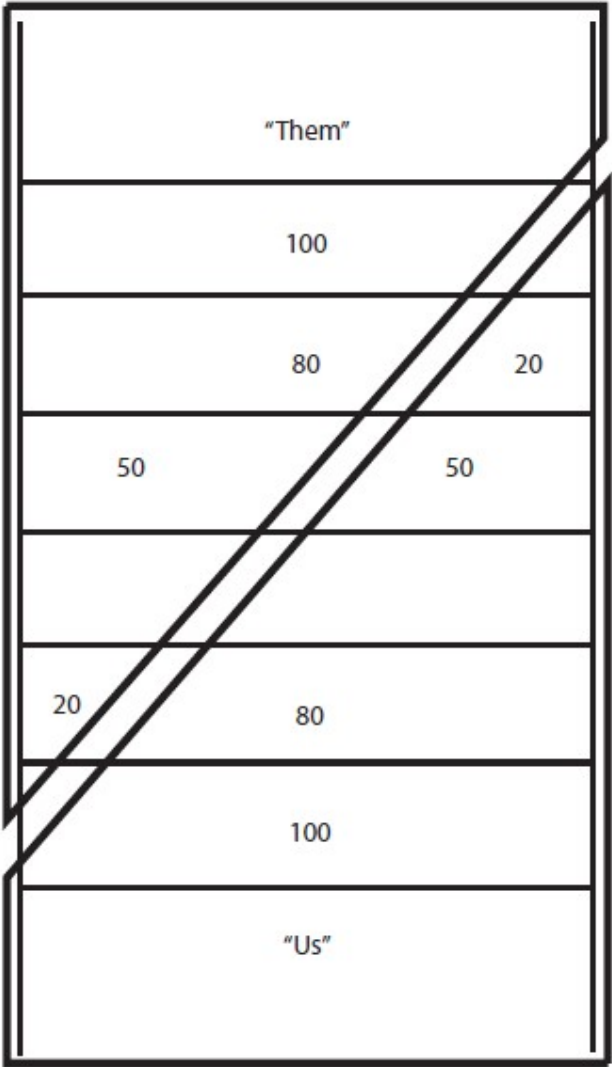


Figure 10 Power Interpretation of the Arnstein Ladder of Citizen Participation
(Bishop 2015, p.13)

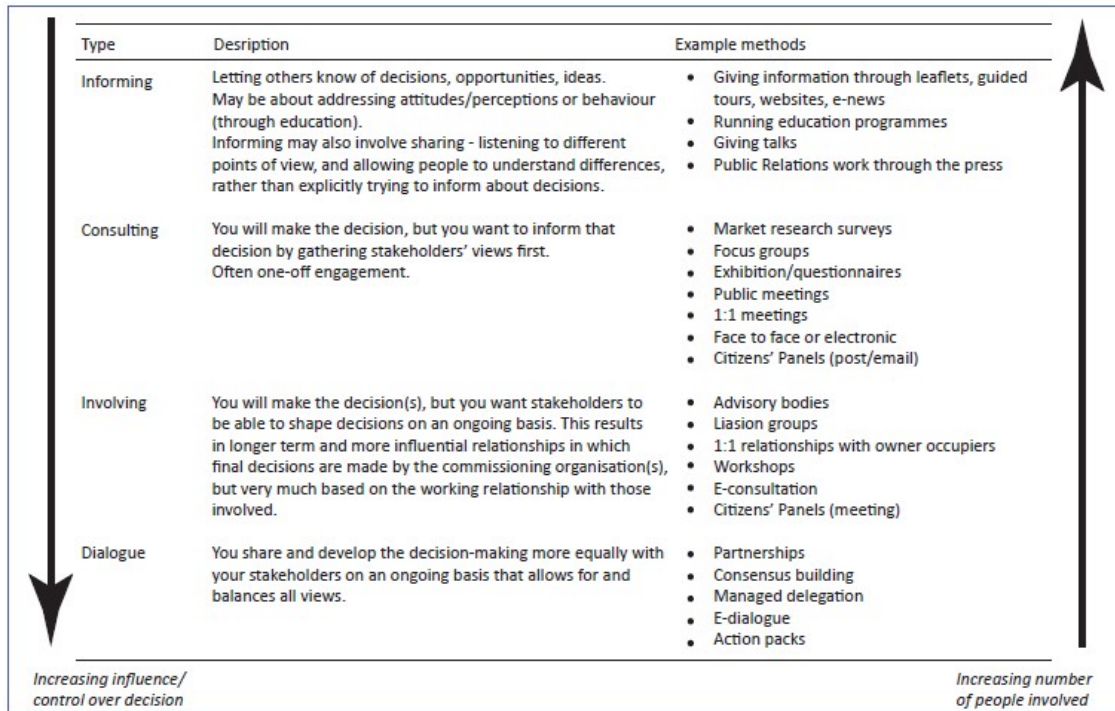
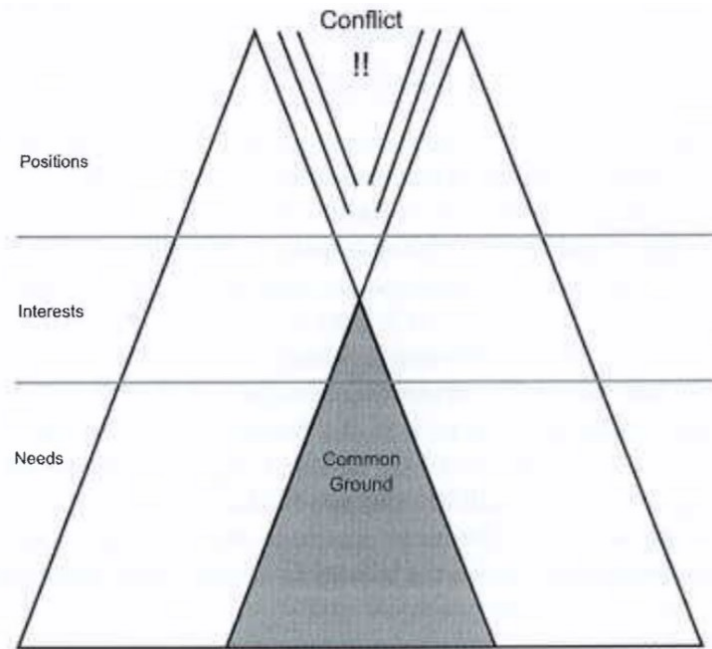


Figure 11 The Level's Framework
(Bishop 2015)

Bishop (2015) establishes that a collaborative approach means decisions are shared by many, and eventually supported by the largest possible number, greatly increasing the chances that others will support, rather than prevent or delay the approval and implementation. Rather than taking positions, by drawing out the interests of participants, it is possible to find common ground. Bishop identifies in Figure 12, that taking positions involves narrowing down of needs which inevitably produces conflict. Interests can be more personalised and may be shared by other parties in an adversarial situation. Needs, however are broader and are more likely to be shared across society. Bishop (2015) argues that once the conversation is framed around interests and needs, there is scope for shared aspirations and mutual benefit – the common ground.



*Figure 12 Positions, interests and needs
(Bishop 2015, p.20)*

Implementation of policy requires an opening up of process, in a deliberative way. During implementation mutually exclusive positions and competing conceptions of transport policy are contested in a political arena. They are debated, understood and communicated in a transparent manner. Part of the difficulty achieving this idealised implementation process is the tight institutional control exercised by established policy networks over problem definition and 'solution sets' (Low and O'Connor 2013, p.20). An inclusive process promotes ongoing interaction and minimises power imbalances between stakeholders (Habermas 1990) that allows these aspects to be negotiated.

Deliberative democracy has a transformational quality that comes from the opportunity for participants to learn about the interests of others and to build trust (Wigan and Legacy 2013). In this environment, conflicts of interest and perspective are fully confronted and worked through. Critics of deliberative democracy argue such groups are self-selecting, that only the loudest voices get heard and others are better positioned financially to contribute to the discussions (March and

Olsen 1989). Flyvbjerg (1998) argues that power relationships need to be managed or deliberation becomes a forum for antagonistic confrontation. If not properly managed, the situation is neither *deliberative* nor *democratic*. Much depends on the rules of engagement whereby communication is free from domination (Habermas 1990).

To achieve consensus through a deliberative democratic model requires a skilled facilitator who can neutralise power imbalances and effective leadership of a group. Likert (1971) identifies twenty-four characteristics that are evident in highly effective groups that are also applicable to a collaborative process, see Appendix 2. A good leader, Likert (1971) argues, is one who accepts the responsibility of the role, actively seeks to minimise the influence of the hierarchical position, is self-aware and de-emphasises status. A good leader listens well and patiently, accepts more blame than may be warranted for any mistake or failure, provides ample opportunity to express thoughts without pressing their own views, is careful to never impose views on others, puts contributions as questions to elicit a discussion and encourages others to help perform leadership functions (Likert 1971). A good leader discourages complacency and passive acceptance of the status quo, assists others become aware of new possibilities, demonstrates enthusiasm for the significance of the task of the group and uses sensitivity and skill in supporting relationships (Likert 1971).

Often in protracted public disputes decision makers attempt to break a deadlock by imposing their wills – a command and control approach. As a direct consequence, Susskind and Cruikshank (1987) suggest that more intense versions of the same disputes are likely to erupt. The laws of public policymaking parallel the laws of physics: for every imposed action, there is an equal and opposite reaction (Susskind and Cruikshank 1987). This spiral of escalation creates more heated and protracted opposition. Often in public disputes, it is necessary to 'go slow to go fast' (Susskind and Cruikshank 1987, p.27). Susskind and Cruikshank (1987) argue compromise is not the answer as it requires each party to give up something. Rather a time intensive *negotiated approach to consensus building* is the answer, requiring informal, face-to-face interaction among specially chosen

representatives of all stakeholders, a voluntary effort to seek 'all-gain' rather than 'win-lose' solutions and often the assistance of a neutral facilitator or mediator (Susskind and Cruikshank 1987). Susskind and Cruikshank (1987) stresses that these processes are in addition – not alternatives – to traditional decision-making and are often assisted by political leaders taking more responsibility for building consensus. Choosing appropriate representatives who are empowered to speak on behalf of the groups they claim to represent can be difficult, thus, it is better to include too many people rather than too few. The representatives should not speak *for* their constituents, but speak *with* them (Susskind and Cruikshank 1987).

Senge (1994) suggests each person's view is a unique perspective on a larger reality and by looking through another person's view, it is possible to see something we might not have seen alone. In a wicked problem environment, it may be a presentation from an expert, a viewpoint from another participant. The process can work the against consensus building, it can reaffirm a representative's preferences. However, the most important aspect is to provide the space to test ideas and views, and to do it with a spirit of inquiry. This is the true strength of a deliberative democratic process, a commitment to deliberation rather than holding onto a fixed position (Carson 2011). Susskind and Field (1996) suggest an alternative called the *mutual gains approach*. This method, developed over many years at the MIT-Harvard Public Disputes Program considers the public as a multi-party, multi-issue negotiation. Susskind and Field (1996) identifies six principles to the *mutual gains approach*:

1. Acknowledgement of the concerns from the other side.
2. Encourage joint fact finding.
3. Offer contingent commitments to minimise impacts if they do occur.
4. Accept responsibility, admit mistakes and share power.
5. Act in a trustworthy fashion at all times.
6. Focus on building long term relationships.

The major theme of the *mutual gains approach* is to be honest. Tell the community (and the media) what is unknown, avoid the need for 'spin doctors' which 'offers limited long-term gains and imposes numerous short-term costs' (Susskind and Field 1996, p.206) citing examples where overly optimistic claims, half-truths, or outright denials have exacerbated anger, criticism and ultimately a loss of credibility in the eyes of the public. Susskind and Field (1996) suggest information gathered, analysed, modelled and carefully packaged behind closed doors may have no credibility when it appears, even if it is accurate. The answer is to open the doors and pursue fact-finding together, a frightening proposition for government who so often want to control the outcome. Susskind and Cruikshank (1987) argue consensual approaches to dispute negotiation achieves a fairer and better outcome where the parties involved will be more satisfied. Such consensual outcomes will only be possible if participants agree to abandon the 'zero sum' approach which assumes there are only limited gains available and if one party wins the other party loses. Carson (2011) says good decision-making needs an exploration of the agreement as much as the disagreement. If a consultative process can create a shared meaning, there is an untapped resource in the people that can achieve support from a wider population and with elected representatives. Not simply the 'squeaky wheels' or usual suspects, not even special interest groups, but rather everyday citizens (Carson 2011). This is an approach adopted by the Infrastructure Victoria Citizen Jury during 2015-16. This deliberative democracy approach is representative of the community and helps foster a confidence from the broader community that it consists of 'people like me' (Carson 2011).

Healey (2006) identifies the collaborative planning process as an interactive and communicative process of community-focused participatory governance. Healey (2006) suggests collaborative planning provides a comprehensive, open and inclusive participatory process that can facilitate unforced consensual agreement of participating actors who can redefine the problem rather than just find a solution. Lots of different people coming together and sharing, accepting that the best answers coming from people working together, talking together and helping to comment on each

other's work (Bishop 2015). Deliberative democracy is a process that involves all the aspects of best practice wicked problem management; learning, change, agreement, and disagreement. A shared understanding of the challenges of the problem and the options to manage them.

This section of the literature review has built on the previous section which introduced approaches to managing complex wicked problems. Whilst the existing models of decision making are well established, this section identified tipping points, thresholds, or windows of opportunities, where change is possible. The most effective way to change the way decisions are made is to focus on consensus building – through varying degrees of citizen power. A collaborative approach means decisions are shared by many and it is possible to find common ground. This requires a skilled facilitator who can neutralise power imbalances and provide effective leadership.

2.10 Conclusion

The literature review suggests that a decision making process that has the following characteristics is likely to lead to better outcomes, leading to implementable initiatives that support achievement of society's goals and the broader vision. These characteristics include:

- Productive debate between government and the community regarding strategic planning – with government often engaging in shallow and superficial foresight exercises that make no attempt to address the question of what is really happening;
- Strategic planning exercises to ask the question of 'what do we want to achieve?' or 'what sort of city do we want?';
- Increased transparency of decision-making models that currently exist behind closed doors and reinforce the current framework and consciously or unconsciously works against the public interest; and
- Early community engagement, or 'front loading', that generates a more collaborative process and is more likely to deliver a widely agreed proposal.

However, current decision making perpetuates secrecy in decision-making and reinforces a lack of accountability. The erosion of 'frank and fearless' advice to government, a distrust of the bureaucracy, and the path dependence in transport planning towards private vehicles is embedded in the current approach.

The increasingly volatile and fragile political environment, the decline of political authority and declining support for major political parties is also reflected in the organisational infrastructure and the ambiguity of 'who is in charge?' The literature suggests that there is a need for an independent institution to guide transport planning and guard against capture by vested interests who seek to capitalise on the political turmoil. This strongly authorised metropolitan planning institution working in the public interest, constantly interrogated by citizen participation, would create an environment and culture where decisions are tested and debated.

The literature has identified the symptoms of groupthink, where the dominant in-group overrides the realistic appraisal of alternatives, and only facts or opinions that support their own policy are considered. The application of groupthink to the broader society creates an 'insanity of normality' whereby outcomes are pursued despite knowledge of the undesirable side effects. There are remedies to groupthink which requires unique leadership and group decision making, however in practice, the literature suggests groupthink, loyalty and conformity are well established within current decision making.

The literature review has identified a growing distrust of government, an angry public frustrated by a succession of cover-ups, concealed information, misleading statements and even outright lies. The literature suggests modern politics has become defined by a cycle of deceit and broken promises. The literature review has introduced the concept of wicked problems, the characteristics, the complexities and the approaches to managing wicked problems. The literature suggests the solution

lies in devolved power, collaboration, joint learning and agreement – producing a sense of closure and respect for the process.

Whilst the existing models of decision making are well established, the literature identifies tipping points, thresholds, or windows of opportunities, where change is possible. The most effective way to change the way decisions are made is to focus on consensus building – through varying degrees of citizen power. A collaborative approach means decisions are shared by many and it is possible to find common ground. This requires a skilled facilitator who can neutralise power imbalances and provide effective leadership for the group. If nothing is done, if business as usual continues, then the current approach to policy making and implementation can be *expected to fail*.

2.11 Research Gap/Problem Statement

Against a backdrop of balkanised transport and land use planning, a fragmented and disjointed transport planning environment has evolved in Melbourne. Buxton et al. (2016, p.95) identifies Melbourne's 'fundamental challenge' of managing the consequences of planning and building a city around cars, and the need to plan a less car dependent future. Decades of institutional reforms have attempted to provide greater integration of public transport and roads, including the creation of Transport for Victoria in 2016. However few researchers have investigated the 'operation of Melbourne's system of spatial planning, the institutions which have managed the system and its application across a range of economic, social and environmental sectors' (Buxton et al. 2016, p.vii). Legacy (2010) suggests conventional methods of decision-making are unlikely to achieve an ecologically sustainable future and that, deliberative democracy could achieve legitimate collective goals in the context of metropolitan strategic spatial plan making. The environment is highly charged and political, the 2014 Victorian election highlighted the transport investment choices more than any other in Victorian history, and Victorians rejected the massive freeway project by changing government (Buxton et al. 2016).

Few researchers have explored the link between transport planning decision-making and wicked problems. This thesis seeks to provide an analysis of transport planning decision-making through the Melbourne case study, up to and including East West Link, and apply wicked problem approaches to its ongoing management. London was chosen as the comparator as the creation of the Greater London Authority in 2000, and the associated transport governance structures provides a relevant case study to Melbourne, for reasons further elaborated in Chapter 1. London and Melbourne have similar experiences and histories of metropolitan governance. As discussed in the Chapter 5, after the Thatcher Government abolished the Greater London Council in 1986, there was a period of governance dysfunction in London (Travers 2004). A pattern of governance described as messy and fragmented (Newman and Thornley 1997) with over 272 appointed bodies in London – an ‘unelected state’ or ‘quangocracy’ developed (Travers 2004, p.36) with gross annual expenditure in 1992/93 of £6 billion (Skelcher and Stewart 1993). Following the May 1997 United Kingdom General Election, a thorough, but energetic, process was undertaken to create a Greater London Authority, with a directly elected Mayor and 25 seat assembly. This was part of a deliberate strategy to create ‘a new style of non-confrontational politics in London’ (Department of Environment 1998, paragraph 4.6). It came into effect from 2000 and has achieved its stated objectives of addressing the ‘democratic deficit’ in London and providing the city with ‘a voice to speak up for the interests of Londoners’ (Department of Environment 1997, paragraph 1.02). In Melbourne, metropolitan government was never recreated following abolition in the 1980s. This research attempts to fill a gap in the knowledge by investigating the transport decision-making in Melbourne and an analysis of London decision-making for comparative purposes to address the question of how should transport planning decisions be made in a highly complex (wicked) environment to achieve ‘better’ processes and outcomes?

3. Methodology

3.1 Introduction

This chapter describes the methodology used to examine the Melbourne and London case studies, and transport planning decision making in highly complex (wicked) environments. For a definition of wicked problems, refer to Chapter 2.8. The research establishes a conceptual framework in the literature review and then identifies the qualitative assessment of London and Melbourne case studies through a descriptive exploration of interviews and primary and secondary data sources. This exploratory look at the history of the case studies helps to understand the current transport environment and how and why transport decisions are made. For London, this includes an understanding of how and why metropolitan governance was re-established in the 2000s and for Melbourne it provides an understanding of the transport decisions in the absence of metropolitan governance. The document review, combined with interviews, was carried out to provide an overall account of London and Melbourne's decision-making process for transport planning and to gain a historical perspective. The comparison of transport governance suggests the learnings from London can be applied to Melbourne and other cities to better manage the transport planning complexity and achieve better transport governance.

The need to gather data from actors involved in the case studies required in depth interviewing. Consequently, the approach is qualitative, using semi-structured interviews with key participants together with the primary and secondary source data. Through the analysis of this qualitative data, this thesis is going to explore the decision-making environments of the two case studies highlights how any learnings from London can be applied to Melbourne and other cities that appear to be struggling with the decision-making process. Using grounded theory, through a line-by-line analysis of the interviews, an emergent set of categories was developed – looking for patterns, similarities and differences in the data collected. The data was then sorted, summarised and grouped into

categories and documented in the two case study chapters. By drawing together the relevant data and evidence this leads to the research question of how better processes can improve transport planning decision-making in a highly complex environment.

3.2 London and Melbourne

As discussed in Chapter 1, there are many cities in the world with what would appear to be best-practice transport governance arrangements, however London and Melbourne have been selected for this research as both cities have a long history of metropolitan governance:

- The predecessor of the Greater London Authority (GLA) – the Metropolitan Board of Works – was created following the 1854 Royal Commission on pollution of the River Thames. In 1980, after 131 years, this organisation was abolished by Prime Minister Margaret Thatcher, but was restored, in a very different and unique GLA structure in 2000 and is led by a Mayor elected by 8 million people, supported by a 25-member Assembly.
- The Melbourne and Metropolitan Board of Works (MMBW) was created following the 1889 Royal Commission on sanitary conditions in Melbourne. In 1990, after 101 years, this organisation was abolished by Premier John Cain following many years of reforms to improve accountability. Unlike London, Melbourne did not restore metropolitan governance and today decision making for the city resides with the Victorian Government.

Through an almost paralleled history of metropolitan governance (with a lag), Melbourne has followed London's footsteps with metropolitan governance, however this pattern appeared to take a different course in the 2000s when London re-introduced metropolitan governance and Melbourne did not.

3.3 Research methodology

A critical component of the research methodology is the collection of data from various public sources. The research is concerned with human behaviour; why people act the way that they do.

This is an attempt to explore and understand people's beliefs, experiences, attitudes, behaviour and interactions – qualitative research. The methodology of this thesis can be segregated into two discrete aspects:

- Firstly, the research has a descriptive exploration of two case studies in London and Melbourne – case study methodology; and
- Secondly, interviews and fieldwork in both London and Melbourne looked for patterns, similarities, differences that emphasised theory building, rather than theory testing – grounded theory methodology.

Qualitative research brings an understanding of human behaviour and experiences and attempts to 'make sense or interpret phenomena in terms of the meaning people bring to them' (Denzin and Lincoln 2011, p.3). Qualitative research explores and understands people's beliefs, experiences, attitudes, behaviour and interactions (Hakim 1987) and attempts to capture people's descriptions of events, in contrast to quantitative research which aims to count and measure things (Minichiello et al. 1990). Typically, qualitative studies involve smaller numbers of participants than quantitative research and has data gathered through observation or one-on-one interviews (Blair 2016). Using qualitative research, this Master of Philosophy explores the interaction of three elements of human behaviour and experiences of transport planning:

1. The Melbourne case study, particularly the Melbourne transport planning environment, with historical, contemporary and empirical research concerned with the causal processes and recent transport planning decision-making;
2. Understanding and interpreting political, social, economic and environmental trends; and
3. Analysis of wicked problems and the solutions found in the case study of London.

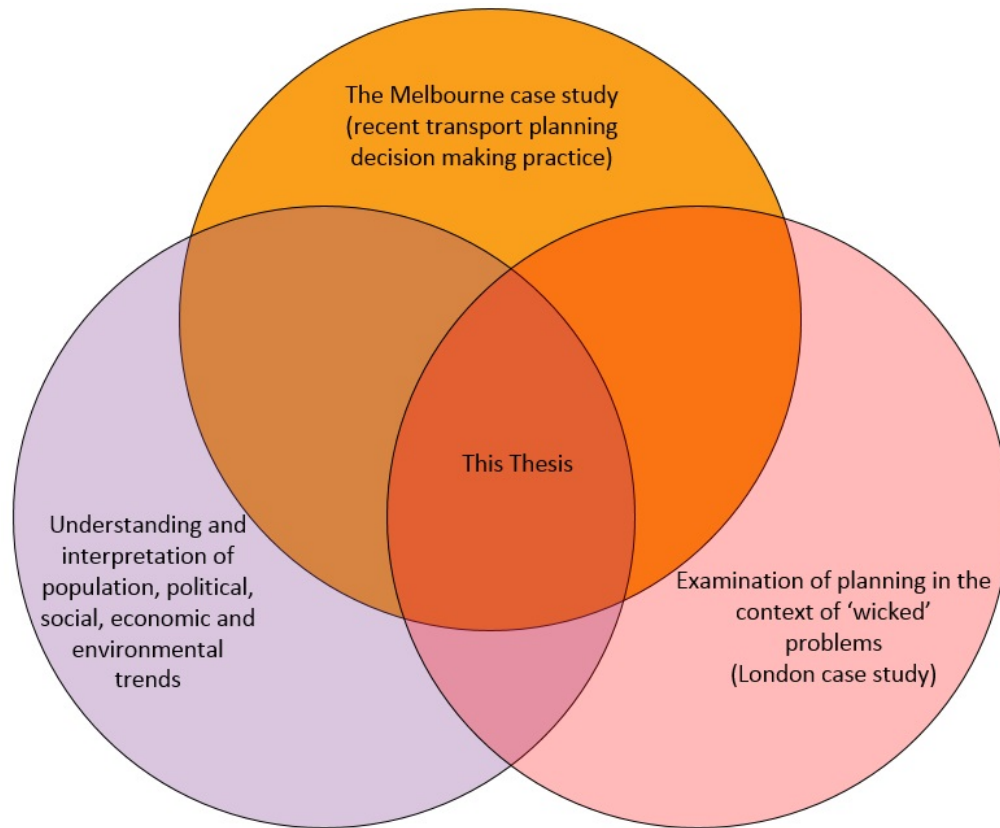


Figure 13 MPhil Thesis Elements

The first aspect of the research has a descriptive exploration of two case studies in London and Melbourne. Case study methodology emphasises depth over breadth – to describe, understand and explain transport decision-making in London and Melbourne. The value of the case study methodology accommodates a range of inputs for data collection, including interviews, literature review, document review, observations, together with an interpretation and descriptive approach (Yin 1984). Case studies are used extensively in social sciences, particularly in practice oriented fields such as urban planning or public administration. Kuhn (1987) suggests a discipline without thoroughly executed case studies is a discipline without the systemic production of exemplars, and that a discipline without exemplars is an ineffective one. The case study methodology allows a researcher to understand and explain complex social phenomena (Yin 1984). To understand how things are happening and to answer the questions of *why* is it happening? Case studies are the preferred strategy when 'how' and 'why' questions are posed (Yin 1994). Case study research is an

empirical inquiry that investigates a contemporary phenomenon where the boundaries are not clearly evident; and where multiple sources of evidence are used (Yin 1984). Flyvbjerg (2006) suggests social sciences may be strengthened by the execution of good case studies and that to understand a complex issue requires in-depth case study research.

Schramm argues the objective of case study research is to 'illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result' (Schramm 1971, p.6).

Schramm argues a case study is an effort to contribute to policy and decision-making, rather than to science. This thesis aims to describe, understand and explain a complex contemporary urban transport planning problem. The use of a descriptive and explanatory case study methodology is considered appropriate in this context. As a result of the research, transport planning decision-making may be re-orientated, altering people's definition of the situation and, in due course, the way they deal with it (Hakim 1987). The interpretative approach of the case study in this research establishes the wickedness of transport planning in Melbourne and London; *why* we act the way that we do. Through an identification of concerns with the current decision-making framework, this research can frame a response of what improvements could be made.

The second aspect of the research involved interviews and fieldwork in both London and Melbourne. This data collection looked for patterns, similarities, differences and emphasised theory building, rather than theory testing. Grounded theory was developed in 1967 by Anselm Strauss and Barney Glaser as a body of thought about data analysis, which has the aim of generating theory rather than simply providing mechanistic processes to undertake analysis (Walter 2010). Grounded theory is an appropriate theoretical framework for this research as it seeks to build theory from the data collected and in doing so emphasises theory building rather than theory testing (Strauss and Corbin 1990). The foundations of grounded theory is theoretical sampling – that is continued analysis of

data until the researcher can see the research situation and its associated data in new ways, and to explore the data's potential for developing theory (Strauss and Corbin 1994).

3.4 Interviews

This research used a qualitative research methodology, and eight face-to-face interviews were conducted in London and a further eight sought in Melbourne, there was one instance where one person selected for interview was unable to participate due to work commitments, another interview was not conducted as the person had a medical issue and a third was unresponsive to enquiries. Table 1 summarises the participants' characteristics. A consistent interview schedule was developed around the key concepts identified in the literature review, these themes included transparency and accountability, community engagement, political representation, decision making priorities, transport integration, governance and political reform (refer Appendix 9). Whilst Yin (1984) acknowledges interviews are the most important sources of case study information, there is the concern that the interviewer may be biased and be an active participant during interviews. To overcome this concern, the question schedule guided discussion in a manner that made the most of the allocated time, usually one hour for each participant, and kept a consistent approach to interviews to reduce the influence of interview bias.

The methodology for the semi-structured interviews was a combination of systematic, consistent interview process and questions that sought to elicit descriptions of the current transport planning context and decision-making framework. The questions were primarily open-ended to seek the participant's opinion on events and facts, this was useful to corroborate previously gathered data from secondary sources or prior interviews. In London, questions had an emphasis on the history and process that surrounded the establishment of a Greater London Authority and the separate but connected Transport for London, and in Melbourne the questions had a focus on the more recent establishment of Public Transport Victoria and Transport for Victoria. Participants were selected to

ensure a broad cross section of views reflecting multiple actors in transport decision-making and governance, refer Table 1.

London Interviews

CrossRail executive at Transport for London	Former Chief of Staff to Mayor of London	Transport activist in London	Transport advocacy group in London
Former Minister for Transport in United Kingdom Parliament	Former Transport for London Board Member	Professor in transport planning at London based University	Mayor of London candidate (political party)

Melbourne Interviews

Public servant in Victorian Government transport authority	Chief executive of government transport authority	Public servant in Victorian Government regulatory authority	Councillor in Melbourne local government
Former Chief of Staff to Victorian Minister for Transport	Policy adviser to transport industry advisory group	Transport activist in Melbourne	Senior researcher at Melbourne based University

Table 1 Interview participant characteristics

The research required University of Melbourne Human Research Ethics approval, which was granted on 28 April 2017. The student researcher undertook all communication with potential participants who were provided with both the Consent Form and Plain Language Statement as part of early communications (Appendix 10). These documents included the full details of the research and the contact details for the Human Research Ethics, Office for Research Ethics and Integrity, University of Melbourne, where participants could raise any concerns or complaints about the conduct of the research project. This research included field work in London from 17 to 26 September 2017 and involved eight semi-structured one-on-one interviews each of about one hour in duration. In Melbourne, interviews commenced on 21 November 2017 and were completed on 15 January 2018. The voluntary interviews were guided by a series of open-ended questions that sought to uncover the thoughts, perceptions and feelings experienced by participants (Appendix 9). Each participant was asked the same questions, in the same order, to ensure comparability and prevent differences or bias between interviews. The questions were flexible enough to facilitate the emergence of new and unanticipated categories of meaning and experiences. All interviews were conducted face-to-

face and recorded electronically with the audio retained by the researcher and only available for the purposes of this research. Consent forms, transcripts and audio recordings have been securely stored and will be held for a minimum period of 5 years.

Interview participants were selected based on their expressed interest in the topic as identified from public domain sources during the research. In addition, further participants in the study were identified using personal network sampling technique to engage a maximum variation of information-rich sources (Patton 1987). This 'snowballing technique' created a cross section of participants that included community advocates from special interest groups, administrative and departmental representatives, local government Councillors and former Ministers for Transport. Interviews were sought with a further eight additional individuals (six in London, two in Melbourne) who were unable to participate or did not respond to enquiries.

3.5 Data Analysis

The data collected from the interviews was documented and the comments attributed to participants had pseudonyms applied to protect their identity. Pseudonyms were developed to attribute quotes using a randomised algorithm of letters with combinations such as AA, AB, AC, BA, BB, BC etc. These labels were randomly generated to identify each participant throughout the data analysis process. The only people with access to the identifying data are the Supervisor, Dr Janet Stanley and the Researcher, Lawrence Seyers. To identify the Melbourne interview results a prefix of 'M' was used i.e. 'Interview MAC' for 'Interview AC' and an 'L' prefix for London interviews.

The data was transcribed by the student researcher and several common themes were observed in the collected data: (1) Historical framework for decision-making today; (2) Achievements in decision-making; (3) Transport integration; (4) Transparency and accountability; (5) Project assessment; and (6) Improvements. The data was then grouped according to these common themes and presented in

the case study chapters which provided additional primary and secondary source data. The data has been reported in the language of the participant – direct quotations that are anonymised. The descriptive data collected has been used to illustrate a point of analysis and the use of open ended questions allowed the respondent to talk in depth, choosing their own words to describe their reactions. This methodology for data analysis draws on the data analysis methodology identified by Minichiello et al. (1990). It draws on the grounded theory methodology which seeks to identify patterns in data and to extract the relevant data. This type of data analysis is used to generate theory (Strauss and Glaser 1967) and to build on the data collected (Strauss and Corbin 1990) through theoretical sampling, that is, the continued analysis of data.

3.6 Hypothesis

A hypothesis is a statement which invites further investigation and requires proof or validation. During this research the hypothesis was reviewed, refined and further developed over time, influenced by the discovery of relevant literature, fieldwork, articulation of the research and the process of reflection. In framing the hypothesis, the researcher is not in a position to know whether the hypothesis is valid and must not form a view prior to undertaking the research. As a consequence of the research question, the hypothesis tested in this thesis is:

The decision-making process in Melbourne has failed to recognise transport as a 'wicked' or complex problem, which has led to many poor transport planning and decision making outcomes. To fix this shortcoming requires improvements in governance, including the adoption of a London style metropolitan model of governance.

In testing this hypothesis, the contribution of this thesis is to address the gap in the literature about what is known of wicked problems in the transport decision making environment in both London and Melbourne and frame a response around 'what is better?', as described in Chapter 1.4. This has been achieved through the collection of interpretative and factual based data that has been

consolidated throughout the research and then establishing a different argument that has application to the existing knowledge. Significant amounts of research have been conducted about transport planning decision making in Melbourne, however the literature search has found no research that has linked governance and decision making to the principles of wicked problems and their inherent unsatisfactory resolution or ongoing management.

4. Melbourne Case Study

4.1 Introduction

This chapter describes the historical context of the Melbourne case study. Drawing on an historical document review, the chapter describes the inception of metropolitan governance in Melbourne, the establishment of the Melbourne and Metropolitan Board of Works (MMBW), the seminal 1969 Transport Plan and the political elements of the post-war transport planning environment. The chapter also explores the recent Melbourne transport planning environment, drawing on a combination of interviews and document reviews to examine the current framework that has resulted in Melbourne's complex transport planning environment.

4.2 Melbourne Interviews

During this research eight face-to-face interviews were sought in Melbourne, with the sample identified through desktop research of public sources and added through a snowballing technique of referrals from other participants. The eight participants represented a range of views and perspectives and seemed sufficient in number to compliment the case study approach which utilised significant amounts of secondary data sources. There was one instance where one person selected for interview was unable to participate due to work commitments, another interview was not conducted as the person had a medical issue and a third was unresponsive to enquiries. Of the remaining five interview participants, there was a broad cross section of representation in Melbourne's transport planning decision making environment, including a Chief Executive of government transport authority, a senior public servant in a Victorian Government regulatory authority, a Councillor from local government with transport portfolio responsibility, a senior researcher at a Melbourne based university with a research interest in metropolitan governance and a former Chief of Staff to a Victorian Minister for Transport.

Table 2 provides an analysis of the Melbourne interview participants' views towards the thesis hypothesis that the decision-making process in Melbourne has failed to recognise transport as a 'wicked' problem. This analysis is based on the responses provided during interviews and supported by secondary public source documents. All Melbourne interview participants support the thesis hypothesis with varying levels of support, from strongly support (transport activist) who commented "it is unprecedented that an incoming government would pay \$1 billion compensation to terminate a previous government project (East West Link), this shows transport planning has failed in Melbourne" to conditionally support (policy advisor to industry group or former Chief of Staff) who commented "Melbourne's transport planning is complicated, but not unusual in Australia". Government participants were likely to support the hypothesis as evidenced by their expressed views in the interviews and secondary public source documents, with comments such as "East West Link was the equivalent to building an extension on your house when you can't afford the mortgage repayments" or "Melbourne doesn't do integrated transport and land use plans".

Public servant in Victorian Government transport authority = support the hypothesis through comments in secondary public source documents (was not interviewed)	Chief executive of government transport authority = support the hypothesis through responses at interview and secondary public source documents	Public servant in Victorian Government regulatory authority = support the hypothesis through responses at interview and secondary public source documents	Councillor in Melbourne local government = support the hypothesis through responses at interview and secondary public source documents
Former Chief of Staff to Victorian Minister for Transport = conditional support for the hypothesis through responses at interview and secondary public source documents	Policy adviser to transport industry advisory group = conditional support for the hypothesis through comments in secondary public source documents (was not interviewed)	Transport activist in Melbourne = strongly support the hypothesis through comments in secondary public source documents (was not interviewed)	Senior researcher at Melbourne based University = support the hypothesis through responses at interview and secondary public source documents

Table 2 Analysis of Melbourne interview participant views towards thesis hypothesis

4.3 Creating Metropolitan Governance

During the period 1850 and 1960 there was a general movement, particularly in Western cities, from the piecemeal and fragmented provision of networked infrastructure to an emphasis on centralised and standardised systems (Graham and Marvin 2001). In Melbourne, this included the establishment of the MMBW in 1890, following a Royal Commission (Allen 1889) which found the 'absence of authority was by far the worst source of dysfunction' (Dunstan 1983, p.65). The MMBW was introduced 'to provide for the better local management of the metropolis' (Victorian Parliament 1890), with its primary objective the sewerage of the metropolis (Melbourne and Metropolitan Board of Works 1895), however it also represented a fundamental change towards collaborative decision-making and included 39 members representing the 24 cities, towns and boroughs of the Melbourne metropolis. The City of Melbourne Town Clerk Edmund FitzGibbon was an agitator for the creation of a Board of Works and was appointed inaugural Chairman and served until his death in 1905 (Dunstan 1983). A St Kilda Road statue memorialises his contribution, see Figure 14. As a municipal parliament the MMBW allowed 'all parties to watch and criticise each other and to decide by the will of the majority without change of the executive' (FitzGibbon 1893).



Figure 14 Edmund Gerald FitzGibbon statue, St Kilda Road Melbourne

The MMBW grew to become part of 'the largest and most comprehensive use of state power outside of Russia' (Eggleston 1932, p.1), and there were successive attempts to create a Greater Melbourne Metropolitan Council, with Bills presented and defeated in the Legislative Council in

1913, 1915, 1936, 1937 and 1951-2 (Sandercock 1977). In 1920 the City of Melbourne called for 'immediate action' due to the rapid growth of the metropolis and the resultant unsatisfactory conditions (Metropolitan Town Planning Commission 1929, p.1). In December 1922 legislation was passed to establish an honorary nine person advisory Metropolitan Town Planning Commission, led by the City of Melbourne, with four municipal representatives and four technical experts (Metropolitan Town Planning Commission 1929, p.,1) to prepare Melbourne's first strategic plan.

The Commission's 1925 interim report recommended a Greater Melbourne Council be created and given planning powers, however non-Labor interests opposed this and instead preferred to expand the powers of the MMBW (Dingle and Rasmussen 1991). The Commission's 1929 final report recommended a body to oversee implementation of the plan, to 'give town planning the necessary impetus' and ensure 'continuity of town planning administration' (Metropolitan Town Planning Commission 1929, p.307). During the depression years the enthusiasm of the 1929 plan faded and few of its recommendations were pursued. A 1936 Bill proposed to establish a Melbourne Metropolitan Council (Victorian Parliament 1936), however it was immediately defeated on the grounds it would create a new authority too powerful that would eventually rival Parliament, 'a sort of socialist octopus whose chief disadvantage would be its intense centralisation' (Sandercock 1977, p.73 and p.146). Instead, in 1937 the MMBW powers were expanded to include town planning, roads and bridges, parks and gardens, foreshores, housing and reclamation.

4.4 Post-war Planning

Following the Second World War, Melbourne experienced an automobile revolution, with rapidly escalating motor vehicle registrations (Figure 15), and a steady program of road construction and upgrades. This initially saw a rapid acceleration of bituminous road sealing from 1943 to 1953 (Figure 16), followed by the construction of main roads, which then developed into the rapid construction of freeways (see Figure 17 and Appendix 3). The latter period of freeway construction was facilitated by

the 1954 Planning Scheme, prepared by the MMBW, which represented a turning point for strategic planning in Melbourne (Melbourne and Metropolitan Board of Works 1954). This began a period of 'car wars' (Davison 2004) – four decades of conflict from 1945 to the early 1980s that culminated in a prolonged battle over proposals for an extensive system of urban freeways in Melbourne.

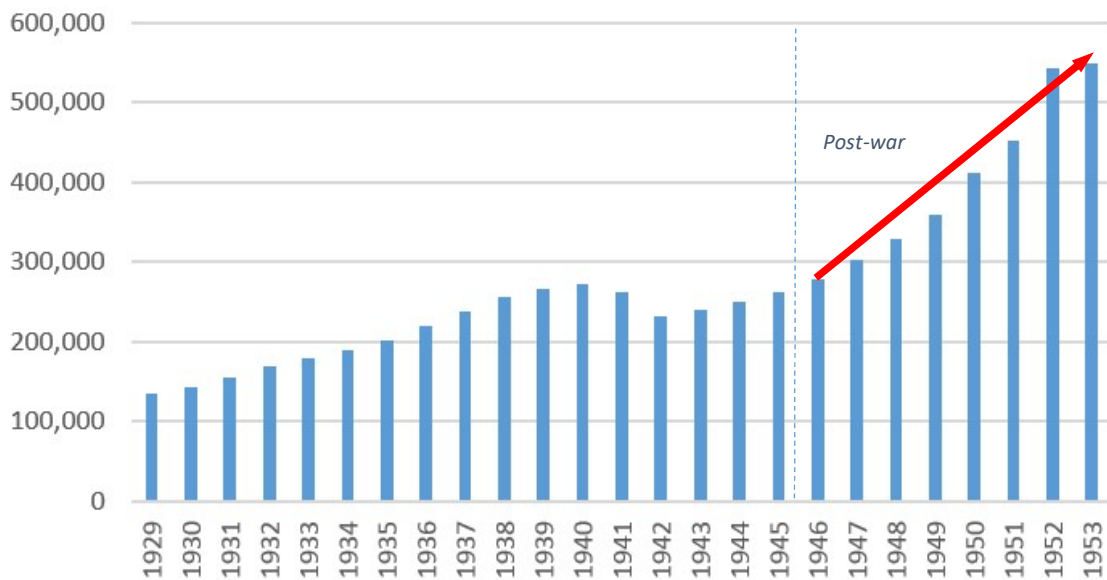


Figure 15 Motor vehicles registered in Victoria, 1929-1953
(Country Roads Board 1953, p.8)

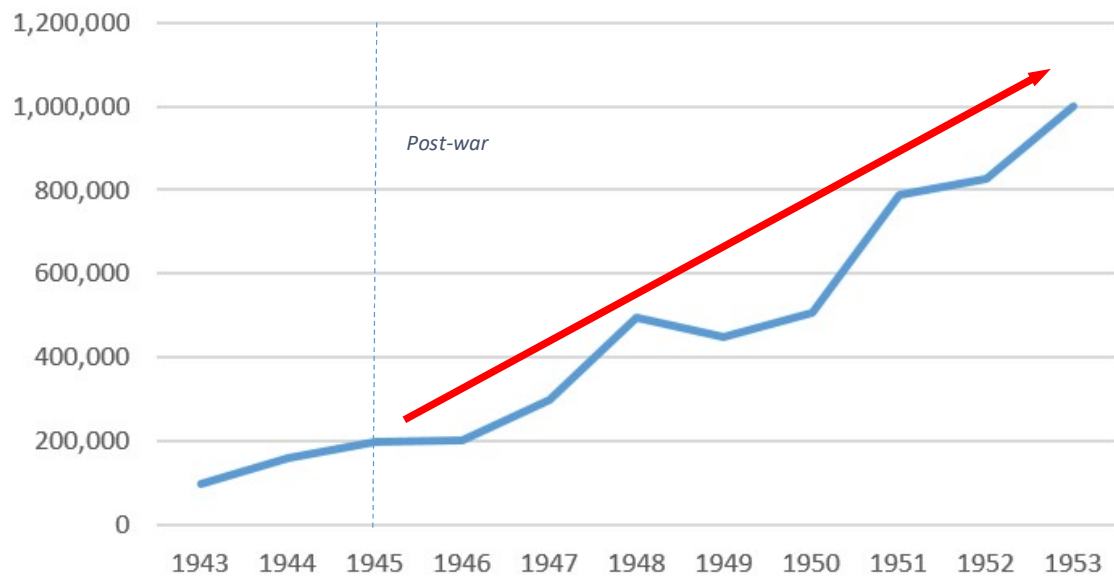


Figure 16 Annual expenditure (£) on bituminous surfacing in Victoria, 1943-1953
(Country Roads Board 1955, p.73)

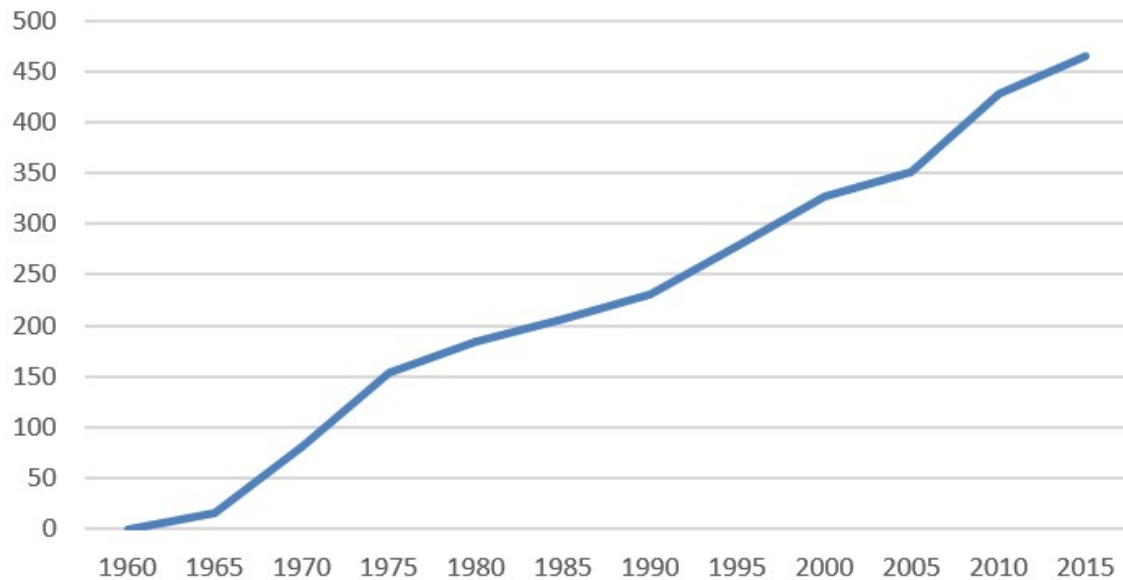


Figure 17 Cumulative length (kms) of freeway construction in Melbourne, 1960-2015
(Country Roads Board Annual Reports 1960-1982, Victorian Auditor-General 1999, Mees 2001, Lay 2003, Public Transport Users Association 2014)

The 1954 Planning Scheme was conceived in 1949 when the Victorian Parliament passed the *Town and Country Planning (Metropolitan Area) Act*, which required the MMBW to prepare a planning scheme for Melbourne. The 1954 Planning Scheme for a 'modern highway system' attracted over 4,000 objections (Melbourne and Metropolitan Board of Works 1967). One third of the objections related to the acquisition of properties for main roads (Dingle and Rasmussen 1991). Despite the objections, the government issued an 'Interim Development Order' on 1 March 1955 and the Plan was formally approved, with some modifications, on 16 December 1958 (Melbourne and Metropolitan Board of Works 1967). MMBW Chairman Richard Trickey, declared 'the solution of the city-suburban traffic problem lies in the progressive development of a system of freeways designed to permit the rapid and uninterrupted movement between the city and the main suburban areas' (Trickey 1957). This was later reflected in the UK Buchanan Report 'Traffic in Towns' which proposed the wholesale reconstruction of British cities to prepare for the 'motor age' with split level interchanges and urban motorways (Buchanan 1963). In 1962 the MMBW built the Morshead Overpass, which would later become Melbourne's first freeway, the South Eastern (Monash Freeway), see Figure 18.



*Figure 18 Morshead Overpass, South-Eastern Freeway, opened 31 May 1962
(Melbourne and Metropolitan Board of Works 1967, p.16)*



*Figure 19 Opening Kings Bridge, 12 April 1961
(Country Roads Board 1961, p.41)*

In 1962 a span of the fifteen-month old Kings Bridge (King Street extension over the Yarra, see Figure 19) collapsed (Dingle and Rasmussen 1991). The bridge reopened in 1965 (Melbourne and Metropolitan Board of Works 1967), however the collapse was the catalyst for the *Metropolitan Transportation Committee Act 1963*. This Act established a Metropolitan Transportation Committee (MTC) to plan for Melbourne's transport needs to 1985 (Wilkinson 1984). The MTC appointed American transport engineering consultants Wilbur Smith Associates, who partnered with a local engineering firm Len T. Frazer and Associates, and began the post-war 'Americanisation of the Australian City' (Davison and Yelland 2004, p.78). Today, Melbourne boasts more-lane kilometres of urban freeways constructed than any other Australian city (Kenworthy and Laube 2001). Whilst the MTC work was underway, in July 1967 Victorian Cabinet approved four major road projects: Tullamarine Freeway, St Kilda Junction, the South-Eastern Freeway extension to Toorak Road and the Hoddle Street widening (Dingle and Rasmussen 1991).

The 1969 Transport Plan prepared by the MTC proposed a 307-mile (494 kilometre) radial urban freeway system, combined with a series of inner, middle and outer ring roads, designed to carry traffic around the city (Melbourne Transportation Study 1969), see Figure 20. The MTC sought to design a new road freeway system broadly utilising the road corridors proposed under the 1954 Planning Scheme (Davison and Yelland 2004).



Figure 20 Recommended Melbourne transport system
(Melbourne Transportation Study 1969, p.49)

Little account was taken, at least until the final stages, of the cost of construction, or the consequences of not building the system, the 'no-build' option (Davison and Yelland 2004). The three volume 625 page report, contained only two pages devoted to the cost of the proposals (Melbourne Transportation Study 1969). The 1969 Transport Plan project cost totalled \$2.6 billion, of which \$1.675 billion was required for the urban freeway network and only \$355 million required for public transport including \$80 million for the Underground Rail Loop (Melbourne Transportation Study 1969), see Figure 21. Davison says 'not since the land boom of the 1880s, when politicians indulged in a reckless spree of railway construction, had Melbournians indulged their dreams so extravagantly' (Davison and Yelland 2004, p.186).

Once the 1969 Transport Plan was revealed in detail, it aroused organised and vocal opposition and pressure mounted on the Government. Opponents claimed that the city could not afford the financial, environmental or social costs of a transport system geared around a system that emptied local streets in the short term, but in the longer term encouraged more cars into the road system and for longer trips, exacerbating existing problems (Wilkinson 1984). In November 1970, Rupert Hamer expressed the view that current freeway plans would ruin the inner suburbs, yet with mixed messages, approved the Eastern Freeway through the Yarra Valley only a month later (Dingle and Rasmussen 1991).

Cost of Proposals

Rail	Million \$
Underground rail loop	80
New lines on new alignments	60
Extension of electrification along existing lines	8
Route capacity improvements on existing lines	42
New stations on existing lines	2
Additional suburban trains	35
Modal interchange	15
	242
Street Public Transport	
910 new trams	55
2,540 new buses	50
Bus depots	8
	113
Highways	
Freeways	1 675
Major divided arterial roads	64
New arterial roads	28
Widened arterial roads and bridges	359
Grade separation (rail/road)	95
	2 221
Parking	
CBD (Financed by M.C.C. and private enterprise)	40
Total	2 616

Figure 21 Cost of Transport Recommendations
(Melbourne Transportation Study 1969, p.57)

The 1969 Transport Plan has often been characterised as one of the great planning disasters (Manning 1991), as it skewed public investment towards the car and away from public transport (Sandercock 1977). It also reinforced an 'edifice complex' in Victorian transport planning, which prefers projects like new freeways, new bridges, new underground tunnels, to less dramatic improvements like traffic calming and demand management, which featured in earlier plans, such as the 1929 Plan. These mega projects generate their own pathology whereby it is a 'survival of the unfittest' (Flyvbjerg 2014) where the worst projects get built rather than the best. Part of this pathology is the need to justify decisions using predict and provide modelling. The assumption of transport modelling is that demand is independent of supply. Predict and provide is defined as

calculating how much unconstrained demand for travel exists and then adopting policy and funding measures to deliver the required capacity (Parkhurst and Dudley 2008). The theory of induced demand implies that supply of road capacity itself generates demand (Sturup et al. 2013). This was recognised in a less well known 1969 report from a bipartisan Victorian Parliamentary Committee which noted about the West Gate Bridge:

'The high rate of growth over the first few years is due to induced and generated traffic, that is, additional or new east-west traffic resulting from the increased accessibility afforded by the crossing. In the early 1990's, growth begins to be limited by the capacity effects of the crossing. Beyond this point, traffic growth was assumed to reduce gradually to an approximate zero growth rate in the year 2011' (State Development Committee 1969, p.22)

This is illustrated in Figure 22, which correlates to the actual traffic growth, with 200,000 vehicles recorded on the West Gate Bridge in 2008 (Eddington 2008).

In early 1971, Labor Member of Parliament for Brunswick East, David Bornstein, stumbled across a map in the Victorian Parliamentary Library of a proposed freeway through Carlton from Nicholson Street to Sydney Road (Howe et al. 2014) – along what we now regard as the route of East West Link. This spawned a short-lived inner city revolt that resulted in the October 1971 decision of the Bolte Government to cancel the F1 freeway (an extension of the Eastern Freeway to the West Gate Freeway) and order the MTC to substantially modify their plan to minimise its sociological impact (Davison and Yelland 2004). In cancelling the F1 freeway, the government had increased the pressure on the F2 (Hoddle Street), a proposed parallel freeway from Clifton Hill to St Kilda junction. This 1971 decision was seen as a major defeat of the MMBW and its Chairman who were ardent supporters of the freeway scheme (Wilkinson 1984).

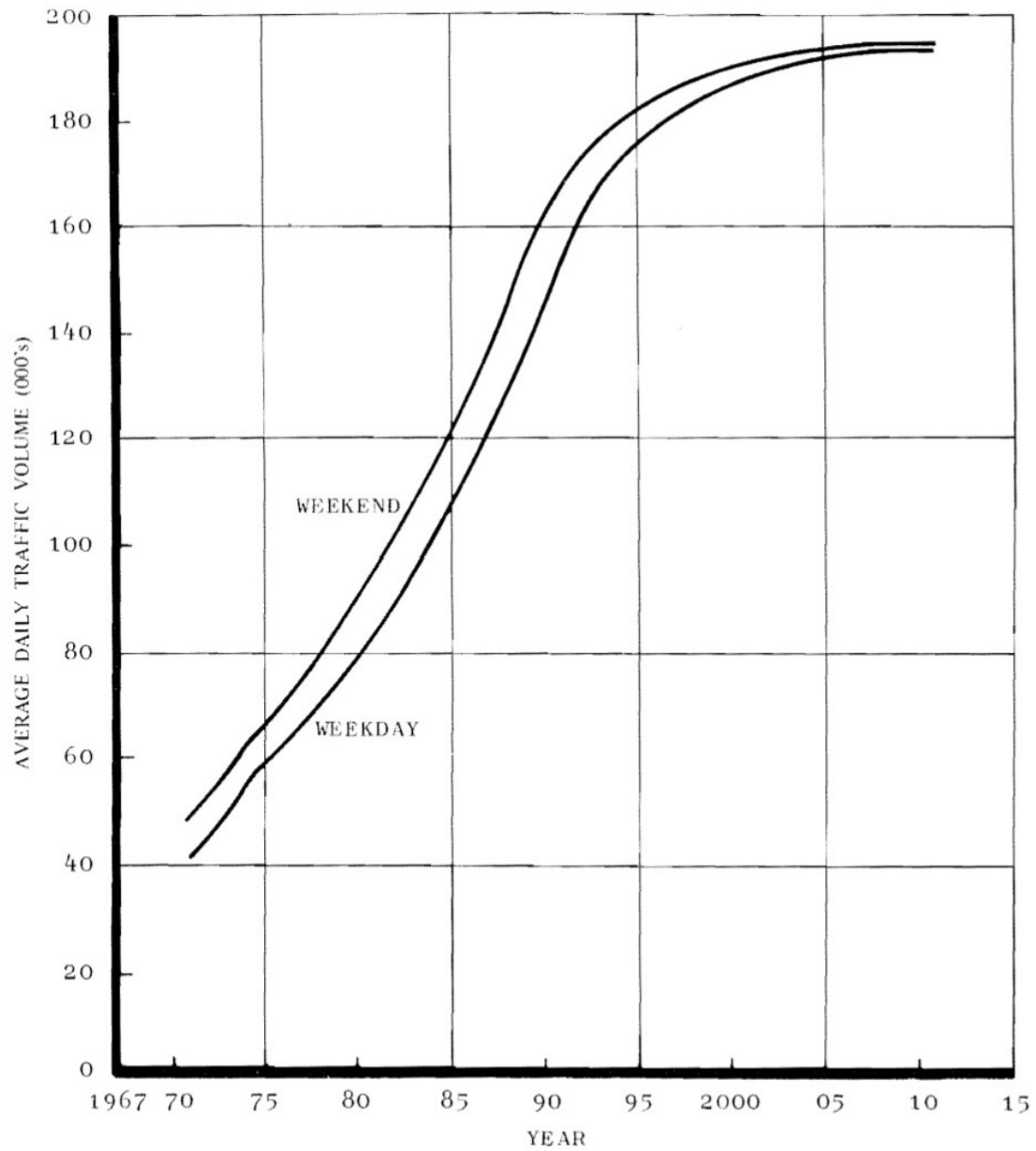
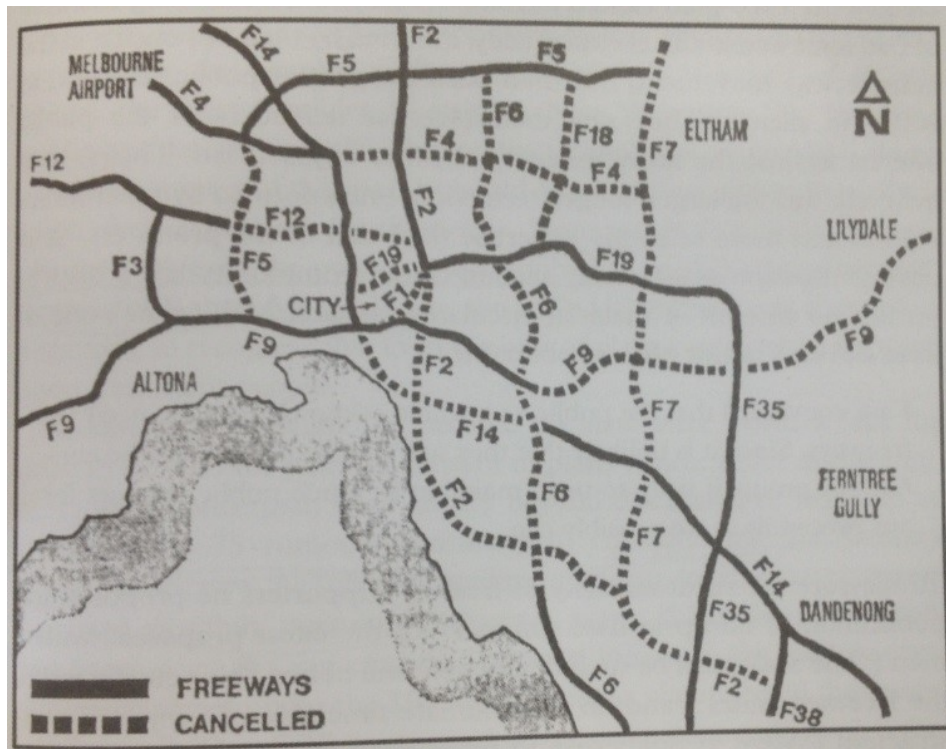


Figure 22 Estimated West Gate Bridge traffic growth
(State Development Committee 1969, p.22)

In August 1972 Rupert Hamer succeeded Henry Bolte as Premier of Victoria. The transfer from hard-nosed country farmer to the more conciliatory and urbane lawyer marked an ideological as well as political shift (Davison and Yelland 2004). Newly appointed Minister for Local Government Alan Hunt recognised the importance of public participation in planning and the essential nature of consultation. Hunt said 'without consultation there would never be community ownership of policies. If there was consultation and genuine participation and genuine listening, you got a result that people accepted, felt they owned it' (Howe et al. 2014, p.94). Although the MMBW had overriding responsibility for the planning of Melbourne there had been little commitment to participatory planning. Consultation was usually confined to displays of plans at the MMBW offices, at the Town and Country Planning Board, and in the offices of affected municipalities (Howe et al. 2014). A new era of participatory planning in Melbourne was ushered in with the elevation of Rupert Hamer and a raft of legislation passed, including the establishment of a Planning Appeals Board, a *Heritage Act*, an overhaul of the *Town and Country Planning Act*, and the cancellation of two urban renewal projects that sought further inner city slum clearance (Howe et al. 2014).

The period 1972-1973 was a turning point for Victoria and Australia. In December 1972, the Federal Whitlam Government was elected and threatened to withhold Commonwealth funding to Victoria. Within days, the Hamer led government promised to stop any further freeway construction in the inner city (Davison and Yelland 2004). Executive Director of the MTC, Robert Risson, wrote to the Minister for Transport Vernon Wilcox, stating financial constraints would oblige the government to cut the cost of the proposed freeway network by approximately two thirds (Davison and Yelland 2004), see Figure 23.



*Figure 23 1973 cancelled freeways
(Davison and Yelland 2004, p.203)*

When the government's revised freeway plans were officially announced in March 1973, more than 150 miles of the original 307 mile freeway plan had been cut (Davison and Yelland 2004). In February 1973, the Country Roads Board chief Robert Donaldson confirmed a privately held view that, despite this decision of government, it was business as usual in the long term: 'I hope they will create public appetite for high-capacity roads to take traffic through inner areas. These are frustrating times for us all, but the pendulum will swing our way again' (quoted in Davison and Yelland 2004, p.205). Indeed, whilst half the 1969 Transport Plan was cut due to the construction cost, the remaining half proceeded at pace and the F19 freeway (Eastern Freeway) was agreed upon to link Doncaster with the inner city through the Studley Bend bushland.

The anti-freeway movement in the period 1969-1973 created a number of resident associations in Carlton, North Melbourne, Fitzroy, South Melbourne and the Committee for Urban Action (Wilkinson 1984). These were supplemented by Fitzroy and Collingwood Councils who donated

money, manpower and equipment to lend support to the anti-freeway campaign (Wilkinson 1984).

The cities of Collingwood, Fitzroy and Brunswick even appointed special 'anti-freeway organisers'

(Davison and Yelland 2004). As the completion date for the F19 freeway (Eastern Freeway)

approached, the MMBW chairman Alan Croxford offered Collingwood and Fitzroy councils \$400,000

each, as compensation for lost rates and a package of abatement measures such as pedestrian

overpasses and 'aesthetic schemes' in an attempt to 'buy them off' (Davison and Yelland 2004,

p.209). In July 1974 responsibility for the design and construction of the road network for Melbourne

was transferred from the MMBW to the Country Roads Board (Wilkinson 1984). Opposition to the

road proposals continued and the major part of the construction program was redirected to the

outer suburbs (Melbourne and Metropolitan Board of Works 1977), where opposition was virtually

non-existent.

During 1974-75 the Country Roads Board continued pursuing its freeway plans, purchasing

properties along freeway routes that had been cancelled only a few years earlier (Davison and

Yelland 2004). As Howe et al. noted 'radical action was spurred by frustration and anger at the

unreasonable intransigence of bureaucracy, business, planners and government' (Howe et al. 2014,

p.100). The groundswell of opposition generated one of the most passionate battles in Melbourne's

planning history: a wall of wrecked cars, lying upturned across Alexandra Parade (see Figure 24).

Weeks of street protests culminated in up to 3,000 local residents occupying the nature strip for a

'Community Day' on 9 October 1977 (Davison and Yelland 2004). On Monday 7 November 1977 a

melee with Police resulted in dozens of protesters being arrested, including the two mayors of

Collingwood and Fitzroy, dressed in Mayoral robes (Davison and Yelland 2004).



*Figure 24 The battle for Alexandra Parade, 1977
(Yarra Campaign for Action on Transport 2016)*

Today the inner city has become what Howe describes as 'Trendyville' where groups of residents consolidate and reject the modernist dreams of autopia and Conservative politics symbolised by the suburban brick veneer houses of their parent's generation (Howe et al. 2014). This is 'contested territory' that shoehorns public housing alongside a 'distinct and privileged middle class' (Howe et al. 2014, p.xviii), a community steeped in radical traditions, a stomping ground for trade unionists, the Australian Labor Party, and renowned for hard-fought struggles to defend values they perceive as inherent to inner-city neighbourhoods (Howe et al. 2014).

A major political conflict over transport re-emerged in June 1979 when an uncontroversial motion was passed in the Victorian Parliament. The motion was put after all parties agreed that the little-used country railway line to Balmoral would not be closed until the government instituted 'a study into all freight and passenger transport in Victoria' (Wilkinson 1984, p.211). The Liberal Government appointed a BHP General Manager, Walter Lonie, as a one-man inquiry into Victorian transport, with another ex-BHP General Manager appointed as a consultant and the Country Roads Board Chief Engineer appointed as Secretary (Wilkinson 1984). The Lonie inquiry recommended the deregulation of road freight, and described rail freight as an 'outmoded system' protected by regulations that were 'discriminatory' to industry (Loney 1980, p.1). The Lonie inquiry also ventilated an earlier *Inquiry into the Victorian Land Transport System* (Bland 1972) that sought the elimination of eight

suburban railway lines, seven tram lines and further route rationalisation (Wilkinson 1984). Despite the support of the Transport Minister Robert Maclellan, Cabinet was divided and the Lonie inquiry recommendations proved difficult to achieve (Wilkinson 1984).

Manning (1991) recounts how in the late 1970s the Victorian Government toyed with the idea of setting up a Metropolitan Transport Authority to give policy control over all public transport in Melbourne and to make arrangements for a single ticketing system. The proposal was not supported by the administrators and the functions were carried out by the Ministry of Transport unaided (Manning 1991). It was not until 1981 that the Hamer Government introduced multi-modal tickets valid for trams, trains and buses in metropolitan Melbourne, and whilst 'there was evidence that their incorporation was a last-minute affair' (Manning 1991, p.99), it represented a major milestone in integrated transport planning in Victoria.

The Hamer Government was severely damaged by perceptions that the government's attitude to transport implementation was 'soft' (Dingle and Rasmussen 1991, p.331), further compounded by revelations of corruption and incompetence of the Housing Commission in 1977, which led to the Gowans inquiry (Gowans 1978) and the Frost Royal Commission (Frost and Ellwood 1981). In October 1979 an editorial in *The Age* argued: 'Melbourne's development has been stained by political and commercial expediency, bureaucratic bungling and parochial jealousies. There has been a plethora of plans, followed by endless arguments and lost opportunities' (*The Age* 1979). In addition, MMBW rates had increased significantly: thirty percent in 1973-74, an unprecedented increase followed by a further 22.3 percent increase in 1974-75 (Dingle and Rasmussen 1991). The MMBW grew to become the single most powerful authority in Victoria (Saunders 1984). The Labor Opposition knew that Ministers had little control over the MMBW and regularly asked 'who runs this State?' (Dingle and Rasmussen 1991, p.350). In March 1977 Cabinet constituted a Board of Inquiry into 'whether the MMBW should continue to perform all or any and which of its functions' (Darvall

and Samuel 1978). The inquiry recommended that the MMBW should continue to perform all its current functions, including planning, but 'increasing public interest in planning and its effect on people and areas' (Darvall and Samuel 1978, p.7). One of the recommendations was to replace the Board of 54 Commissioners and an Executive Chairman with a Board of six non-executive, part time, paid commissioners as well as a government appointed executive chairman (Darvall and Samuel 1978). They formed the view that 'in the interests of the community, a change is essential' (Darvall and Samuel 1978, p.9), however Dingle and Rasmussen (1991) suggest the inquiry was only concerned with operational efficiency rather than broader issues of representation or democracy. The MMBW saw this as an 'unjust attack' and the municipalities were 'horrified' of the reform which had reformed them out of it (Dingle and Rasmussen 1991, p.356).

The 1970s demonstrated that Melburnians had a different set of values from the 1950s and different expectations of planning (Dingle and Rasmussen 1991). The long post-war expansion of the MMBW had come to an end. The recommendation to replace commissioners with non-executive part-time commissioners was the beginning of the end for metropolitan governance in Melbourne. The MMBW had become distant from parliamentary and executive control (Dingle and Rasmussen 1991). This would be the justification for the abolition of the MMBW in the following decade.

4.5 Abolishing Metropolitan Governance

In April 1982 the first Labor Party government for twenty-seven years was elected, taking all but a handful of metropolitan seats and having publicly committed itself to improving and extending public transport (Wilkinson 1984), see Figure 25. In the entire Victorian history before 1982, the Labor Party had occupied Government for less than nine years.

How many trams can you buy for the cost of one freeway?

For nearly 30 years Melbourne has lived with a myth: that the answer to this city's transport problems is more and bigger and better freeways.

The result: Communities and parklands have been carved up by miles of concrete highways; roads have become congested to saturation point; our public transport has been neglected and allowed to deteriorate to a sorry state.

Transport in Victoria is ridiculously expensive, both to the traveller and taxpayer, and yet uncomfortable and inefficient.

The promises: Where are the orange trams and silver trains and new buses Mr. Hamer promised? While the State Government has been sleeping, our transport system has been allowed to rot.

The answers: Labor does not believe that more freeways will solve Melbourne's transport problems.

Rather, let us use the money we are spending on freeways (\$50 million a mile in the inner city!) and improve public transport.

Labor has developed exciting new plans that need not increase expenditure, but which will use public moneys in a more sensible, logical way — like reduced fares to encourage more economical use of existing facilities; like mini-buses for uneconomical routes; like new tram and train lines to the new, unserved areas of this city; like flexible work times to even out the rush hours.

Now is the time to act on transport, before the whole city grinds to a halt in one almighty jam. And the most important action you can take is to vote Labor on March 20th.

If you want to know more about Labor's transport policies, send a stamped, self-addressed envelope to Labor's Minister of Transport, Mr. Barry Jones, M.L.A., 11 Brunswick Street, Fitzroy, 3065.

Let's all wake up, Victoria.
Labor's ready.



A simplified fare structure for trams, trains and buses — free transport within 5 kilometres of the G.P.D. (5 cents) up to 15.5 kilometers, and a maximum of 20 cents to any destination outside the metropolitan area.



Clyde Harding
Leader of the
Victorian Labor Party.



Barry Jones, Labor's Minister of
Transport — one of Victoria's
best minds.

Australian Labor Party.

Adapted by M. Tacey, 11 Brunswick Street, Fitzroy

VL25

Figure 25 1982 Labor Party Advertisement

In 1979 the Bains Review commissioned by the former Hamer Government had recommended the establishment of a new higher tier multi-purpose elected authority for the metropolitan area, but this was not well received by the then government (Saunders 1984). At the time, the fragmentation of elected local government in Victoria was mirrored by the fragmentation of non-elected statutory authorities. These non-elected and generally non-democratically accountable authorities, each pursued their own narrow interests with little regard for broader considerations (Saunders 1984). This may have been a deliberate strategy; as Holmes argued, the political significance of a system of administration by statutory authorities 'has been to shield four-fifths of the state's administrative sector from the mainstream of party politics' and thus enable sectional interests to be 'brought directly into the structure of government' (Holmes 1976, p.197). These authorities often wielded significant power and autonomy without scrutiny. Cumes suggests that few matters lose anything from being exposed to public scrutiny, rather 'most gain immeasurably from such scrutiny' and secrecy allows policy makers to 'hide incompetence behind a veil' (Cumes 1988, p.194).

In June 1982 a reorganisation of the state's transport authorities was announced by the Labor Government (Manning 1991). Two new authorities were created, the State Transport Authority to run country public transport services and the Metropolitan Transit Authority to run Melbourne public transport services which represented a 'complete shake up of the administrative structures' (Australian Labor Party 1982, p.i). A difficulty arose immediately following the 1982 election when the new Labor Transport Minister Steve Crabb declared he supported the continuation of the freeway building program, which was at odds with the policy platform it took to the election (Stone and Legacy 2013). The Minister instructed a group of road engineers to ignore the Labor Party policy and continue work on their current freeway plans (Stone 2009). The MMBW was explicitly designed to insulate critical policy making decisions from the elected and political pressures (Saunders 1984), however over time, this authority grew to become its greatest weakness. It took on more responsibilities, particularly contentious decisions like freeway planning, and grew 'unwieldy and

incapable of effective and coherent decision-making' (Saunders 1984, p.93). Illustrative of this incompetence was the 23-storey MMBW headquarters at 120 Spencer Street – at that time the second largest building in the Central Business District – completed in 1973 at a cost of \$16m (CityScope 2017). Within twelve months of completion, the bluestone slabs covering the facade began falling from the building. Scaffolding was erected to protect the public and in 1977 the MMBW began a \$3.9m program to replace the cladding with aluminium (CityScope 2017). The replacement works took six years to complete and cost \$17.4 million (Money 2014) – more than the initial cost of construction. The problems with the building were symbolic of a more fundamental breakdown of the MMBW (Dingle and Rasmussen 1991). The MMBW had taken on too much, had become too big, undertook projects that were poorly scoped, poorly delivered and had become a threat to the public interest.

On 10 October 1982 Ray Marginson replaced MMBW long serving Chairman Alan Croxford, and immediately commissioned management consultants to undertake a review of operations (Melbourne and Metropolitan Board of Works 1983). Despite opposing the Darvall Inquiry in 1978 describing it as a 'weak, fragile, lightweight report' (Labor spokesman quoted in Dingle and Rasmussen 1991, p.356), the election of the Cain Government in 1982 marked a turning point for the MMBW. Continuing the efficiency drive of the previous Liberal Government, they introduced a corporate approach to public sector management with Ministerial responsibility and the slogan 'To Run the State Like a Business' (Dingle and Rasmussen 1991, p.363). In February 1983 a working party was established headed by consultant John Mant to provide recommendations on a restructure of the MMBW, its report completed in May 1983 provided three options to government:

1. Minor adjustments to the MMBW with greater accountability to Ministers;
2. Create 'Metro Melbourne', an elected body based on the MMBW, perhaps with other functions added; or

3. Partially or completely dismantle the MMBW and transfer its functions to other organisations (Mant 1983).

There was little support for 'Metro Melbourne' which would create a fourth level of government and politicians were uncomfortable with such a powerful and independent authority (Dingle and Rasmussen 1991). In June 1984 the Cain Government decided to retain the Board as a statutory authority with fewer responsibilities – only accountable for water, sewerage and drainage services, and on 1 July 1985 planning functions were relinquished to the Ministry for Planning and Environment (Dingle and Rasmussen 1991). This was a significant occasion in Melbourne planning history, with the MMBW having been 'central to the concept of the Melbourne Metropolitan Planning Scheme since its inception in the late 1940s' (Ray Marginson quoted in Melbourne and Metropolitan Board of Works 1985, p.5).

Spiller describes this moment as a 'unilateral fiat of the State Government' which left Melbourne 'in a curious governance limbo' (Spiller 2014, p.371). Premier Cain took a different view and suggested the abolition of the MMBW was a 'major democratic advance' (quoted in Spiller 2014, p.371). The truth was technocratic and comprehensive planning found it difficult to survive the shift to an increasingly globalised political economy driven by liberalised flows of capital, technology and information (Graham and Marvin 2001). Buxton et al. (2016) assert that the MMBW presented a modernist planning approach for Melbourne, with a strong state-led technocratic process inspired by a top-down conception of the public good. Buxton et al. (2016, p.29) argue the demise of the MMBW was a 'critical precondition' for a change from the 1950s style of decision-making and strategic planning but shifted decision-making from an environment where there was a 'level of certainty and autonomy from political processes' to the current system where 'planning policies are compromised by political decision-making increasingly subjected to pressure from developers and political donors'. This is what Low (2017a, p.11) describes as the 'corruption of the planning profession'. The decision in 1985 to transfer responsibility for planning to the Ministry of Planning

and Environment had the effect of establishing planning as a political battleground between state political parties, state and local government, and community groups (Buxton et al. 2016). This ushered in a new era where Ministers for Planning would become hands on administrators of the planning scheme – a recurring problem for successive Ministers who have become embroiled in conflicts. This has included Liberal Minister Robert MacLellan with the Seal Rocks approval (Costar and Economou 1999), Justin Madden with the Windsor Hotel approval (Victorian Ombudsman 2011); Matthew Guy with the Ventnor approval (Victorian Ombudsman 2014) and today Richard Wynne with the Apple store at Federation Square. This is a result of both the deregulation and centralisation of planning, where Ministers are enmeshed in development approvals, a process that politicises the role of Planning Ministers and creates a competitive and adversarial system of strategic planning (Tomlinson 2012). Spiller describes this as an era of 'paralysis in metropolitan planning and management, punctuated by acrimonious disputes between the State Government and local communities' (Spiller 2014, p.371).

In its final annual report to Parliament in 1990, before being wound up and its remaining functions transferred to other organisations, the MMBW was rebranded as the 'Board of Works' and was governed by a Chairman and six members appointed by Governor in Council, with the Chairman and two Board members Victorian Government nominees and the other members elected by 'area commissions' (Board of Works 1990), see Figure 26 – a far cry from the metropolitan government model advocated by FitzGibbon that saw a broad representation of Council nominees during the period 1891 through to 1984.



Figure 26 Board of Works Local Government Area Commissions
(Board of Works 1990, p.12)

Reflecting on the imminent abolition of the Board of Works Chairman, Ray Marginson, commented that 'the pendulum has swung back from an excess of autonomy' towards a future of 'commercialisation, corporatisation and privatisation' (Dingle and Rasmussen 1991, p.10). This was reflected in other New Public Management reforms that emphasised a move from government intervention as 'steering' rather than 'rowing' (Osborne 1992). In 1991 the MMBW was officially disbanded and its functions were split across a plethora of smaller state agencies. This was part of a wave of corporatisation and privatisation that included the creation of the Public Transport Corporation in 1989 and the privatisation of the State Electricity Commission of Victoria in 1993.

Throughout the 1980s Melbourne enjoyed a surge of growth, fuelled by a speculative boom in property and shares. The stock market crash of 1987 sounded a first warning to government, then in the early 1990s the boom collapsed. Towards the end of the Cain Government, John Button, long serving Labor Senator from 1974-93, described Victoria as 'Bongo Land' (Button 1999, p.141) with double-digit unemployment, skyrocketing interest rates, blockages of trams in Bourke Street as part of an industrial dispute, the collapse of Pyramid and Tricontinental Bank and infighting amongst the

parliamentary Labor team. By 1991 the Labor Government was a 'terminal case' (Deane 2015, p.48) and Cain admitted a paralysis of decision-making which meant his government was simply 'decaying' (Cain 1995, p.259). Bracks – who was a senior adviser to both Premiers Cain and Kirner – recalls 'every day was a crisis' (Deane 2015, p.51). Cain resigned and was replaced by Joan Kirner, Victoria's first female Premier in August 1990. The Kirner Government was desperate to resuscitate the stalled Victorian economy and commenced a process that would forever change Melbourne: in December 1990 they invited bids for Victoria's first casino licence and in May 1992 sought expressions of interest for the construction of Southern Link and Western Link (CityLink). By joining together three of the four dead-end freeways, to the south (what is now known as the Monash Freeway), to the west (the West Gate Bridge) and to the north (the Tullamarine Freeway), the Kirner Government had resuscitated a program of inner-city freeways excised by the Hamer Government only two decades earlier. This was reflective of the Kirner Government, described as a 'Labor government prepared to shred its traditional principles in a desperate bid to hang onto power' (Davison and Yelland 2004, p.241). Although there was an initial impetus from the private sector, there was also strong bipartisan political will to get CityLink going (Sturup 2010).

4.6 The Kennett Government

In October 1992, Liberal leader Jeff Kennett won power in a landslide over an exhausted and discredited Labor Party (Davison and Yelland 2004). The immediate introduction of the *Public Sector Management Act 1992* entrenched new public administration values and determined that the Premier would become the employer of all departmental heads, who in turn employed all staff within their agencies. This created an embedded culture of subservience, whereby department heads 'could hardly go to the executive washroom without first checking with Jeffrey's office first' (Donovan 2000, p.154). With 70 percent of the upper and lower house seats in Parliament (Buxton et al. 2016), the Kennett Government initiated a political revolution (Costar and Economou 1999). Kennett set about transforming Victoria from Rupert Hamer's 'Garden State' where quality of life

was the issue of the day, to a place that was 'On The Move', signalling a determination to break sharply from his moderate predecessor. Kennett even reinstated the desk of his childhood mentor and political hard-head Henry Bolte in his office at Parliament House (Davison and Yelland 2004).

Part of this recovery drive was a major projects agenda that included the CityLink project conceived by the Kirner Government. In a cosy relationship with CityLink, the Kennett Government funded a \$500,000 advertising campaign to promote the benefits of CityLink with the message 'we're clearing this car park to get you... on the move' (Davison and Yelland 2004, p.251). So intertwined were the relationships, CityLink then became the sponsor for the inaugural Melbourne Grand Prix. When the Western Link (Tullamarine Freeway) was opened on 16 August 1999, Kennett described the day as his most satisfying in 23 years of politics, better than his two election victories in 1992 and 1996, for CityLink was an achievement that would last 500 years (Davison and Yelland 2004). The satisfaction would not last. At the 1999 Victorian election, Kennett promised to continue building urban freeways, with a commitment to complete the Scoresby Bypass (now known as East Link) and engage private interests to build, own, operate a new underground toll road linking the Eastern Freeway with the Tullamarine Freeway (East West Link).

On 18 September 1999 the Kennett Government was thrown from office losing three seats in metropolitan Melbourne and nine seats in rural and regional Victoria (Bennett and Newman 2000). The state-wide swing of 3.8 percent was more pronounced in regional Victoria, which swung 7.8 percent to the Labor Party (Woodward and Costar 2000). Labor performed best in provincial cities which delivered six new seats in Ballarat, Bendigo and Geelong (Woodward and Costar 2000). These new seats together with unexpected wins in peri-urban areas of Tullamarine, Gisborne and Seymour accounted for a total of 13 new Labor Members of Parliament. The regional cities had been promised fast train services to Melbourne – far removed from Kennett's description of Melbourne as the 'beating heart' and the regions as the 'toenails' (Brumby 2015, p.31). Brumby (2015) suggests

this comment sealed the government's fate. Bracks recalls: 'The mood at the time was quite fearful.

A large number of Victorians felt isolated in their own state. The message from the Kennett Government seemed to be that if you weren't with it, you we're against it. Anyone who spoke out against it feared being punished somehow' (2012, p.68). The term 'Jeffed' entered the political lingo, referring to someone victimised by Jeff Kennett or his government. The 'New Style of Leadership' offered by Bracks signalled the end to the one-man band and involved working with colleagues and in partnership with the community (Bracks 2012). The strength of Kennett as a leader had now become his weakness.

Bracks says nothing provided greater contrast than infrastructure priorities: whilst Kennett focused on urban freeways and the 'beating heart', the centrepiece of Labor's pitch was the Regional Fast Rail project. Providing faster rail links between Melbourne and the regional centres of Ballarat, Bendigo, Geelong and the Latrobe Valley, the project was designed to stimulate confidence and growth in the regions. It was a popular policy with Bracks admitting 'it is hard to find a critic of the 60 minute train trip to Ballarat or the 45 minute trip to Geelong' (Bracks 2012, p.276). Bracks recalls the National Party spokesperson at the time saying 'Steve Bracks is the best country candidate that the Labor Party has ever produced' (Bracks 2012, p.31).

Throughout the Kennett Government an arrogance emerged, which was perceived as an attempt to silence critics. Barry Donovan, a thirty-year veteran of the Labor Party, identified the 'Restoring Democracy' platform as a critical moment for the Labor Party, a time when Opposition Leader John Brumby recognised 'strong democracy is about listening, learning and then leading' (Donovan 2000, p.141). The platform successfully capitalised on the perceived arrogance of Kennett and was able to run a series of 'Labor Listens' forums throughout regional Victoria.

The 1999 Victorian election ended the 'most activist, controversial and ideological administration in twentieth-century Victoria' (Costar and Economou 1999, p.vii) and added weight to the view that voters are displaying greater volatility, with massive majorities no longer safeguarding a return to government (Woodward and Costar 2000). With the support of three independents elected in Mildura, West Gippsland and East Gippsland – all electorates where regional rail had been promised by the Labor Opposition, Labor was elected. In the negotiations with the independents who held the balance of power, Kennett all but conceded that he had gone too far, accepting almost all the demands spelled out in the *Independents' Charter 1999* (Woodward and Costar 2000).

4.7 The Bracks and Brumby Governments

Within seven months of attaining office, the Bracks Government recognised the importance of regional Victorians with the release of the *Growing Victoria Together* policy. No longer referred to as the 'toenails', regional Victoria was part of an inclusive agenda prepared through an exercise in consensus politics led by former Prime Minister Bob Hawke (Brumby 2015). In metropolitan Melbourne the *Melbourne 2030* strategic plan was underway and for the first time there was an attempt to turn around the transport model that dominated post-war Melbourne and move towards a carefully planned compact city with 'smart growth' plans (Delahunty 2010). It was intended that new communities on the outskirts of Melbourne would be supported by timely provision of infrastructure and the 'lungs of Melbourne', the Green Wedges, would be protected from further urban encroachment by a permanent Urban Growth Boundary.

In other areas, the Bracks Government was making progress, such as in Melbourne's inner north, where the Northern Central City Corridor Study was established with representation from community groups, to examine a range of alternative proposals to an underground tunnel from the Eastern Freeway to the Tullamarine Freeway. The Northern Central City Corridor Study was notable in that it examined the evidence for travel time and other benefits from the proposed East West

Link, and based its conclusions on the evidence rather than any prior conviction of the project's merits (Morton 2014). The key finding of the Northern Central City Corridor Study was that of all the daily westbound traffic coming off the Eastern Freeway, only nine percent of cars continued to CityLink or beyond; the majority (over two-thirds) turned south and headed toward the city (Department of Infrastructure 2003), see Figure 27.

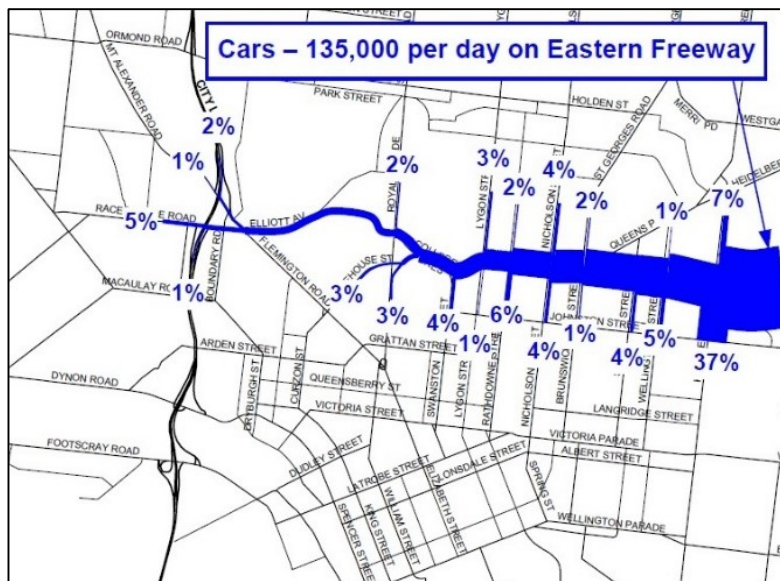


Figure 27 Distribution of westbound Eastern Freeway traffic, 2001
(Department of Infrastructure 2003, p.9)

The Northern Central City Corridor Study concluded that no case could be made for extending the Eastern Freeway further west, because this would only redistribute traffic congestion. In its place, it recommended a suite of local traffic management measures to boost the efficiency of traffic flow on the inner-city road network (Department of Infrastructure 2003). This was a notable exception in the history of post-war strategic planning in Melbourne, however the honeymoon did not last and whilst there were some notable transport policy reversals, including the decision to toll the Scoresby Freeway (East Link), the most significant transition seemed to occur with the handover of Premiership from Bracks to Brumby in 2007.

The Minister for Planning expected the *Melbourne 2030* interventionist vision to be 'diluted by the detail by the careering self-interest of lobby groups' (Delahunty 2010, p.169). This occurred with the release of *Melbourne @ 5 Million* (Brumby and Madden 2008) after Delahunty was reshuffled from the Planning portfolio and John Brumby became Premier. This policy reversal followed the periodic five year review of the implementation of *Melbourne 2030* by an Audit Expert Group headed by Professor Rob Moodie (Moodie et al. 2008). Delahunty knew implementation was going to be difficult and that government would not 'have the heart to tackle the naysayers' (Delahunty 2010, p.170). The Audit Expert Group found '*Melbourne 2030* is seen by many as a plan imposed from above, with a resultant lack of community ownership' (Moodie et al. 2008, p.4) and three essential issues needed to be resolved for *Melbourne 2030* to be successfully implemented:

1. Clarity of responsibility;
2. Adequate resources to implement the Plan; and
3. Creation of broad-based support for the Plan's Directions (Moodie et al. 2008).

Delahunty describes how, despite transport generating the greatest volume of submissions, there was 'resistance from Treasury about putting any serious transport goals in *Melbourne 2030*' (Deane 2015, p.176). Delahunty describes her experiences meeting with community groups as part of the consultation on *Melbourne 2030* as 'depending on my mood, how little sleep, what other political dramas or appointments were pressing in, I found myself either admiring their single-mindedness or wanting to lean over and choke them' (Delahunty 2010, p.192). What is fascinating, and hugely disappointing for those that believe in community empowered decision-making, is that she recalls 'the meetings were simply colour for a press release that had mostly been written, and content for the press conference that had already been called' (Delahunty 2010, p.192) – hardly surprising that the Audit Expert Group found there was a lack of broad-based support. This process is reflective of the modern political environment, which Delahunty describes as a charade 'it is not so much a contest of ideas so much a battle for hard numbers' and 'that deals have already been done' (Delahunty 2010, p.215-216). Under the Brumby Government, planning in Melbourne became about

hard numbers, how many jobs will be created, how much profit will be made, how much stamp duties will be collected.

Buxton et al. (2016) confirm the lack of implementation of *Melbourne 2030* was its biggest failure and that *Melbourne @ 5 Million* represented the abandonment of *Melbourne 2030*. Buxton et al. (2016) assert that the failure to implement *Melbourne 2030* was due to the government refusing to adopt the principles of cross-sectoral planning – that is to support the plan across government agencies and departments with a lead agency reporting to Cabinet. Adviser to Bracks and Brumby Governments Andrew Herrington said ‘the Department of Transport were very roads focused and they never believed that public transport numbers would go up’ (Deane 2015, p.181). Mees argued Melbourne’s balkanised transport system meant that each entity planned their networks on their own turf, largely to the detriment of the system as a whole (Hillier 2014). An example was Lynne Kosky, a capable Minister for Public Transport, who attended a media event designed to show how the new MyKi ticketing system would work. In front of an assembled media pack, the ticket machine refused to accept the money, the gate failed to open on cue, and most seriously the MyKi card reader literally fell apart (see Figure 28). As Brumby recounted, this all unfolded in front of rolling cameras and MyKi became ‘the single most politically damaging issue for our government as we approached the 2010 election’ (Brumby 2015, p.47). MyKi was a project developed in isolation, by a single purpose entity – the Transport Ticketing Authority – whereby the time taken to develop the system more than quadrupled from the initial two years, to in excess of nine years, incurred additional unanticipated costs of \$550 million, or 55 percent of the initial budget, was burdened by poor initial planning, vague specifications, overly ambitious expectations and delivery risks because of shortcomings in the initial governance and oversight of the project (Victorian Auditor-General 2015b).



*Figure 28 Minister for Public Transport inspects MyKi reader
(7 News Melbourne 2008)*

An unnamed Minister in Deane's book says: 'There's a big lesson for public policy, around being deeply suspicious of anything around technology. The cost blowout was enormous and the Cabinet was bewitched by MyKi, and in truth, you couldn't get the thing to work' (Deane 2015, p.283). The Brumby Government was also dogged by other technology projects commissioned in isolation including the UltraNet, an Education Department Intranet system and Smart Meters, rolled out to all Victorian households. Despite several reports, including an Auditor General's report which identified a number of inadequate governance and probity matters (Victorian Auditor-General 2007), Brumby maintained that with regard to MyKi 'we got the governance process about right' (Brumby 2015, p.47). Brumby attributes the failure to the poor public service advice: 'The real problem with MyKi was the transport department's recommendation about the successful tender was wrong. It was just the wrong team' (Deane 2015, p.283).

Unfortunately for Brumby, the public did not see MyKi as a public service failure, and after seven years of government he ran the risk of 'appearing a bit flat and complacent, closed to thinking and fresh policy ideas' (Brumby 2015, p.37). When the tide of public opinion changes, it is very difficult, if not impossible, to avoid being swept away in it (Brumby 2015). Brumby argues that thanks to an 'ever-quickenening media cycle and changing expectations on the role of governments, no government

can realistically expect more than two or three terms in office' (2015, p.105). When Brumby took on the Premiership from Bracks in 2008, he summarised his challenge of population growth and the need to 'get on top of the problems in public transport' (2015, p.38). Brumby (2015) says transport is a notoriously difficult area of public policy and that his government paid the ultimate political price. Service delivery of transport affects the quality of people's life more than any other, often several times a day – accounting for far more contact points than any other State Government essential service, from health, education, child protection, law and order or emergency services. In what became known as the 'Frankston Line' election of 2010, the Brumby government was blamed for overcrowding and late or cancelled services and was marked down severely as a result (Brumby 2015). Brumby attributes the 2010 Election loss to a community that had stopped listening and suggests widespread disillusionment with the political class meant 'voters were sick of the modern-day circus that counts as politics' (2015, p.43). As in the 1999 State Election, a strong and confident government was in a position where everyone thought they would win. A dangerous position to be in. They didn't.

In the review of the 2010 election, the Labor Party cited the most important factor in their electoral defeat was rising dissatisfaction with public transport and MyKi: 'The issue of financial management and waste, symbolised by MyKi, increasingly drove voters away from Labor' (Griffin 2011, p.33), with MyKi and chronic implementation problems creating a perfect storm for the Coalition and turning public transport into a toxic issue for Labor (Griffin 2011). This was particularly evident on the Frankston train line, and 'at one point the government simply did not have enough trains to run every peak hour service in the event of mechanical failure, maintenance requirements or vandalism, leading to inevitable peak hour cancellations and chronic overcrowding' (Griffin 2011, p.36). The Labor Party review concluded 'the 2010 Victorian State election is perhaps the first in the last 60 years to be so strongly influenced by issues of public transport investment' (Griffin 2011, p.36) and 'almost certainly contributed to the loss of all four marginal sand belt seats on the Frankston line,

which in the 18 months leading up to the State election, had the worst on time running performance of any line on the metropolitan rail system' (Griffin 2011, p.37). At the 2010 election the Liberal Opposition promised to 'Fix the problems. Build the future' (Austin 2010), particularly focussed on dissatisfaction with performance of public transport services along the Frankston line. Victorians were finding life too hard (Deane 2015) and the Liberals had promised a suite of rail line extensions and reform of the management of public transport that had voter appeal (Morton 2014), even winning endorsement from the Public Transport Users Association who attributed the win to 'their proactive stand on public transport' which holds 'great promise for positive action to transform the public transport system' (Public Transport Users Association 2010a, p.1).

4.8 The Eddington Report

In 2005, then Treasurer John Brumby took a helicopter ride that forever changed his view of what needed to be done to make Melbourne a better city. This birds eye view included the Eastern Freeway during peak hour which Brumby described as 'one of the most worthwhile things I've ever done, until you see things from the air, you have quite a wrong impression' (Millar and Moynihan 2006). The Bracks Government was so keen on 'helicopter planning' that in June 2007, Premier Bracks spent a record \$1.7 million to film a television commercial that included a helicopter flyover of Melbourne's water storages to promote the newly announced desalination plant (Ker 2009), see Figure 29. Following the shock retirement of Premier Bracks, Water Minister John Thwaites and Attorney-General Rob Hulls in July 2007, Brumby was elected Premier unopposed and was keen to deliver the missing link in Melbourne's freeway network – the East West Link.



*Figure 29 Our Water Our Future Helicopter Advertisements
(Bracks 2007)*

As Treasurer in 2006, Brumby asked Sir Rod Eddington to investigate the best transport solutions for connecting Melbourne's eastern and western suburbs – the East West Link Needs Assessment – known colloquially as the Eddington Report. Tony Canavan, National Transport Leader at Ernst & Young, and member of the Eddington study team noted that: 'Sir Rod Eddington only accepted the East West Link Needs Assessment task if the government accepted two items: (1) that Eddington could choose his team and (2) that they would immediately release his report upon completion' (Canavan 2015). These demands were accepted and over the next twelve months the Eddington study team worked towards the release of their report in March 2008.

The Eddington Report (2008) made twenty recommendations, including:

- Commence planning for Melbourne Metro tunnel;
- Construct a new rail connection from Werribee to Sunshine;
- Make better use of the existing network to increase capacity;

- Commence planning for a cross city road connection extending from the western suburbs to the Eastern Freeway;
- Implement a Truck Action Plan to remove truck traffic from local streets in the inner west;
- Rapid, high quality bus services to Doncaster;
- Cross city cycle connections;
- Escalate city-wide implementation and enforcement of priority measures for trams and buses;
- Investment in Park & Ride facilities;
- Develop a single, common user, interstate, intermodal freight terminal north of the city.

The final recommendation to create a single statutory transport authority was never accepted by government, and in the period post release, the Linking Melbourne Authority progressed West Link and East West Link projects, whilst Melbourne Metro Tunnel Authority was created in 2015 to deliver Metro Tunnel – continuing the pattern of disintegrated transport decision-making. The Eddington Report retained echoes of earlier metropolitan strategies, with 294 pages, of which only 26 pages were dedicated to financing and delivery.

In October 2010 *The Age* reported on a leaked *Proposed 2040 Road Network Development Plan* prepared by VicRoads, see Figure 30, which contained ‘hundreds of kilometres of new freeways and expanded roads to be built across Melbourne over the next 30 years’ (Lucas 2010) including an Outer-Outer Metropolitan Ring Road from Geelong through Bacchus Marsh to Epping; East West Link; the North East Link; a freeway through the middle of Boorondara from the Dingley Bypass to the Eastern Freeway/North East Link junction; a freeway bridge over Corio Bay; a second Geelong Ring Road and a Green Wedge Freeway from the Rosanna Road/Western Ring Road junction through Eltham, Kangaroo Ground, Yering, Chirnside Park and connecting to the Healesville Freeway from EastLink to Mooroolbark Road. This highlighted decades of opposition to freeway proposals since the 1969 Transport Plan ‘had taught the road lobby nothing’ (Mees quoted in Lucas 2010).



Legend

Current Urban Development	Major Parks	Purpose of Future Links
Urban Growth Boundary	Proposed Grassland Reserve	To address existing congestion
Proposed Urban Growth Boundary Extensions	Regional Rail Link	To cater for currently envisaged land development
Possible Development Pressure	Central Activity District	To address potential longer term development
Public Purposes	Intermodal Freight Terminals	Format of Future Links
Special Purposes		Freeway
Commonwealth Land		Primary Arterial - 6 lanes +
		Secondary Arterial - 4 lanes

Proposed 2040 Road Network Development

4.9 The Baillieu and Napthine Governments

The Bracks and Brumby Governments produced five transport plans over an 11-year period but it was their inability to implement those plans which was the primary factor that led to their election defeat in 2010 (Davidson 2010). The Liberal Opposition party pledged to 'Fix the problems. Build the future' (Austin 2010), see Figure 31, with public transport forming its key election platform. The centrepiece was a \$1.55 billion commitment for improved train, tram and bus services and the construction of rail links to Tullamarine and Avalon airports (Legacy 2014) and to 'create a one-stop-shop independent public transport authority' (Interview: MFA) as 'without an independent public transport authority, political decision making will always end up political' (Interview: MFA). Urban freeway projects did not feature, with Shadow Transport Minister Terry Mulder stating 'we support in principle a further link (East West Link), but we have got to be responsible in terms of what we commit to' (ABC Radio 2010). Mulder continued and explicitly stated 'we are not going to this state election with a plan [to build East West Link]. You are not going to drive yourself out of the problems this government has created, our vision is an efficient, reliable public transport system' (ABC Radio 2010). This was a key point of difference between the Brumby Government and Baillieu Opposition at the November 2010 election.



*Figure 31 Baillieu 2010 Election Campaign Launch
(The Age, 14 November 2010)*

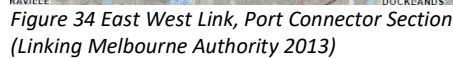
Twelve months after their election win, and without any consultation, in November 2011 East West Link became the top project in the Baillieu Government's Infrastructure Australia submission (Victorian Government 2011). A year later in December 2012 it became a 'declared project' under the *Major Transport Projects Facilitation Act* – a fast-track approval process for large projects. Within the space of two years, East West Link had rapidly escalated to become the 'most significant investment ever proposed' (Victorian Auditor-General 2015a, p.19).



Figure 32 East West Link, Eastern Section
(Linking Melbourne Authority 2014)



Figure 33 East West Link, Western Section
(Victorian Auditor-General 2015a, p.1)



Research on mega-projects, such as East West Link, indicates they are technical solutions in search of a problem (Priemus et al. 2008). Trapenberg Frick (2008) describes these mega-projects as the six C's: colossal in size; captivating because of their size, engineering achievements or design; costly, often under costed; controversial; complex; and they have control issues. This is similar to the 'four sublimes' identified by Flyvbjerg (2017). Sturup found the power to act on a mega urban transport project becomes a function of the decision to move forward, and that individuals are empowered to

act by virtue of the decision to proceed with the project (Sturup et al. 2013). For such a process to work, the decision must be made by someone capable of delivering the project, such as the Premier of the day (Sturup 2010). Sturup argues power is therefore pharaonic or sovereign – ‘I am King, my will shall prevail’ (Sturup et al. 2013, p.118). As a result, it is almost impossible to retreat from a mega urban transport project once committed, and it is also impossible for genuine consultation because such consultation must allow for the possibility that the project should not proceed. This is what Sturup describes as the *Art of Government of Mega Urban Transport Projects*. These projects perpetuate a business as usual approach and result in wasteful expenditure with little or no comparative benefit (Sturup 2010). East West Link is also considered a ‘Zombie Road’, a project previously proposed, killed off, only to return later despite it being a ‘seriously defective road scheme’ (Kinnersly 2014).

The Baillieu Government was vulnerable to the politically savvy and agile approach from the Linking Melbourne Authority, a single purpose entity, solely responsible for construction of new tolled freeways. Having been established initially to construct EastLink, then Peninsula Link, the Linking Melbourne Authority was looking for the next big project and a government willing to accept their business model. Premier Ted Baillieu had failed to deliver on the weight of expectations that followed his narrow election win in November 2010 and resigned amidst the ‘police tapes’ scandal of March 2013. The Napthine Government was desperate after being an ‘empty vessel’ (OGrady 2012) for so long under Ted Baillieu. It was in a ‘volatile state election environment’ (Interview: MFA) that the Napthine Government decided in April 2013 to approve the business case for the Eastern Section of East West Link and allocate \$7.96 billion to the project (Victorian Auditor-General 2015a). ‘It was the view of decision makers at the time, that if the community was dissatisfied with this approach then the government can be voted out’ (Interview: MFA). Ironically, the April 2013 announcement established a fast-track timeline to orchestrate a process to guarantee execution of contracts in the fourth quarter of 2014 (see Figure 35), just days prior to the 29 November 2014 State Election. Thus

East West Link would become the Napthine Government's defining policy, one which Napthine believed could win him re-election (Main 2015), but ultimately one that demonstrated 'the community's willingness to change government and the State's transport priorities' (Interview: MBC). The fast-track process included legislation in June 2013 to 'reduce procedural delays and red tape' for all large urban transport projects, including East West Link (Victorian Parliament 2013). During the second reading of the Bill, Opposition Planning Minister Brian Tee stated his concern arguing that the amendment would 'exclude local communities from the process' and give 'the minister power to decide which matters to be considered at a public hearing. The minister, not the public, will decide what is important' (Tee 2013). Despite these criticisms from Opposition, these provisions remain in the statute and were also used for the West Gate Tunnel and North East Link Planning Panel hearings.

Legacy suggests this reflects the East West Link (and West Gate Tunnel) 'linear and top-down' process that 'did not invite an interactive or reflexive engagement between citizens, project proponents and the multiple tiers of government' (Legacy 2015, p.8). Others went further suggesting 'it can only be understood as a combination of arrogance and a disconnect with public sentiment' (Main 2015, p.15). East West Link was also shoehorned into the metropolitan plan – Plan Melbourne (Green 2014) – and the government's top down intervention to position the East West Link as the state's number one transport and infrastructure priority occurred in a vacuum of critical debate over transport projects in the state (Legacy 2014). Legacy says 'signing contracts just weeks before the November state election was widely held by civil and professional interest groups to be an assault on the democratic process' (Legacy 2014, p.9).

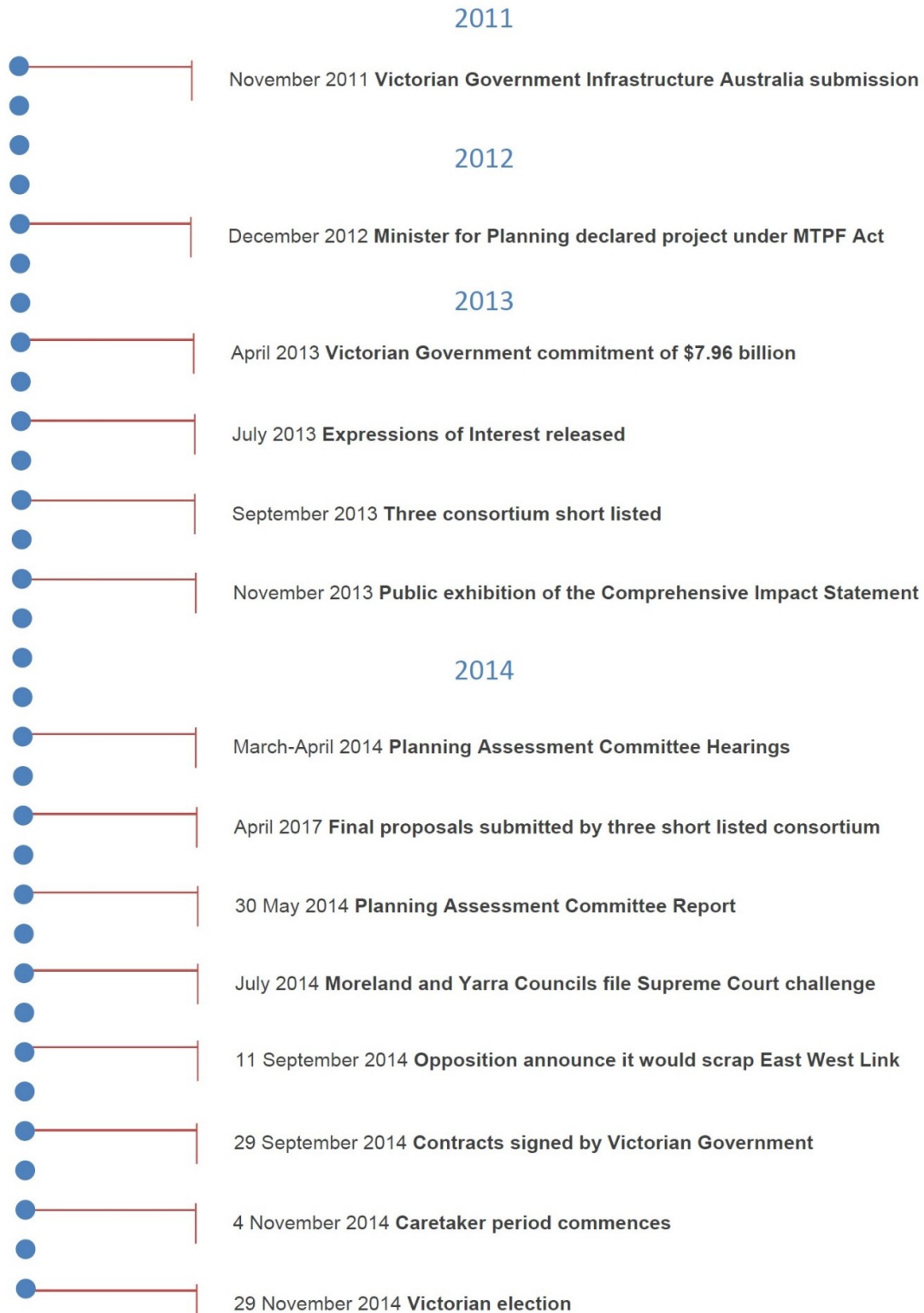


Figure 35 East West Link Project Timeline

(modified from Victorian Government 2013, p.9 and Victorian Auditor-General 2015a, p.3)

Morton argued East West Link would crowd out any alternative investment in transport infrastructure (Morton 2014), this echoed Mees' final public address at the Fitzroy Town Hall where he argued 'there will be no money left for any substantial transport projects for Melbourne for at least a generation' and with a negative benefit to cost ratio was a 'mad scheme' (Mees 2013). Local Labor Member of Parliament Richard Wynne attended a public forum in July 2013 where he was 'visibly shaking and sweating as he was booed and heckled' (Main 2015, p.18). It was the start of months of pressure on the Labor Opposition, and in September 2014, two months before the Victorian State election, the Labor Party obtained legal advice that determined 'the Minister for Planning failed to comply with the *Major Transport Projects Facilitation Act 2009* when making his approval decision for the East West Link project' and 'if no legally binding contracts exist, [Labor] will not proceed with the East West Link project' (Andrews and Pallas 2014). The legal advice suggested as there was no 'approved project', the Supreme Court could set aside the approval decision and annul the contract (Finklestein et al. 2014). If elected, Labor would not defend a Supreme Court challenge from Moreland and Yarra Councils and use the legal ruling to invalidate the contract (Main 2015). Main noted the visible nervousness of Andrews in making the announcement, and his profuse sweating (see Figure 36) which he attributed to a 'soft approach' of letting the courts deal with a complex dispute and reflected Labor's 'fence sitting' and 'fake opposition' to the project which they had previously supported (Main 2015, p.84 & 94).



*Figure 36 Opposition Leader Daniel Andrews East West Link Announcement, September 2014
(Campbell 2014)*

Gordon said this was part of an Opposition strategy that sought to offer a credible alternative that focused on the notion that 'everything in politics is local' with a platform of level crossing upgrades, school refurbishments, local road upgrades, and sporting facility upgrades (Gordon 2014a). On the eve of the election Prime Minister Abbott reinforced the Liberal approach of East West Link and the 2014 Election stating: 'This election is about many things, but in the end, it is a referendum on the East West Link. It is a referendum on the plan that this Premier [Napthine] and no one else has, to build a modern 21st century with 21st century infrastructure' (Abbott 2014). East West Link, as a large project in the inner city, was contrasted to the Labor alternative of 'Project 10,000' (Victorian Labor 2013), whereby fifty of Melbourne's most congested and dangerous level crossings would be removed. This initiative targeted 10,000 jobs created across Melbourne compared to the 6,000 created by East West Link. This argument struck a chord throughout Victoria (Main 2015). Meanwhile the Liberals had no option but to 'place all their eggs in the East West Link toll road basket' (Main 2015, p.95-96) and convened an emergency Cabinet meeting where they agreed on some extraordinary contractual terms, including a 'side letter' which would later expose taxpayers to hundreds of millions of dollars in compensation. A contract was signed on Monday 29 September

2014 (Lucas and Gordon 2014), see Figure 37, one month before caretaker convention commenced on 4 November 2014 (Victorian Government 2014), with an unresolved Supreme Court legal challenge pending and with the Labor Opposition vowing to not proceed with the project.



*Figure 37 Signing the East West Link Contract, September 2014
(Lucas and Gordon 2014)*

On 29 November 2014, the Labor Party was elected to government winning 47 of the 88 Legislative Assembly seats and the East West Link tunnel was immediately removed from the state transport agenda, to the relief of community campaigners (Legacy 2015). Legacy says East West Link offered an extreme kind of colonisation of decision-making that restricts debate and avoids conflict, hides behind confidentiality, fast-tracks the signing of the contracts and avoids a public discussion around transport alternatives (Legacy 2015). Perhaps prematurely, Buxton et al. (2016) declared the election of the Andrews Government was a demonstration of 'the public's rejection of further massive investment in freeways over rail projects' (p.102).

The Liberals have refused to accept the recklessness of a mega urban transport project being rushed to a contractual close before the caretaker period for the November 2014 State Election. This is despite it ending the careers of Premier Denis Naphthine and Transport Minister Terry Mulder who

both retired in August 2015. The Liberal Party Electoral Review interpreted East West Link and its contribution to their defeat as:

- 'The party's campaign appeal was based around infrastructure development, especially the East West Link' (Kemp et al. 2015, p.9);
- 'Instead of being part of a larger more comprehensive plan, the East West Link came to be seen as an either/or choice between better roads, and better public transport, which it was not. Other announcements were lost, and the campaign seemed to have stalled' (Kemp et al. 2015, p.74).

Labor also acknowledged East West Link, particularly the early release of an alternative strategy:

- 'Labor announced Project 10,000 in 2013: a number of different projects including the removal of level crossings which would create 10,000 new jobs' (Lindell 2016, p.6);
- 'These announcements denied the government the opportunity of suggesting that Labor had no policies or vision for the future and contributed to Daniel Andrews being seen as a credible alternative to the electorate and the media' (Lindell 2016, p.6);
- 'Labor's decision to not only oppose East West Link but to present an alternative, which impacted across the Melbourne metropolitan area and especially along the Frankston line with its key marginal seats' (Lindell 2016, p.6).

The perception that East West Link was the only transport project on the Napthine Government agenda was partly self-inflicted, having consigned Melbourne Metro in May 2014 to an inferior route via Fisherman's Bend, entirely bypassing the Central Business District – known for a short time as Melbourne Rail Link (Department of Treasury and Finance 2014a). This was described as the 'Napkin Rail Link' as 'it was designed on the back of one' (McDougall 2014), recalling an earlier 2011 admission from the Secretary of the Department of Transport who stated 'the budget for [Regional Rail Link] was basically haggled over between the state and the Commonwealth one weekend and we ended with a number written on the back of an envelope' (Betts, quoted in Lucas 2011). Both

Regional Rail Link for the Brumby Government, and Melbourne Rail Link for the Napthine

Government were late, last ditch attempts to broaden the Government's public transport offer. For the Napthine Government, the combined Melbourne Rail Link/Airport Rail link failed to provide credibility when \$15 million worth of advertisements, including mock boarding passes, appeared touting the Napthine Government's delivery of the Airport Link (Gordon 2016c), for a project not scheduled to open until 2025 (Department of Treasury and Finance 2014b), some two further Victorian elections away.

A subsequent \$630,000 Auditor General report released in December 2015 found East West Link was 'an important marker in the history of public administration in Victoria' and 'provides sobering lessons for government, the public officials who advise and serve it, and for taxpayers' (Victorian Auditor-General 2015a, p.vii). 'Throughout 2014 the Napthine government was advised by the Department and the Linking Melbourne Authority to delay signing a contract until after the November 2014 election, however the September 2014 memo that provided the final contract to government was silent on a recommendation' (Interview: MAB). This silence represented an 'absence of frank and fearless advice at a critical stage of the project approvals that ultimately cost the State of Victoria over a billion dollars' (Interview: MAB). Morton referred to East West Link's significance as 'unprecedented both in the haste with which it was being pushed through the planning and pre-construction stages, and the apparent determination of the State Government not to seek any kind of public mandate for the project at a State election' (Morton 2014, p.6). The Auditor-General (2015a) found multiple failings of East West Link including:

- Unsound business case;
- Artificial and unrealistic timelines;
- Lack of frank and fearless advice;
- Lack of alternatives that could be argued were in the public interest;
- Use of a side letter in contract to override judicial review;

- Lack of follow the dollar audit powers; and
- Fear of retribution or career limitations of public servants if providing contrary views to government policy.

The Auditor-General stated 'the East West Link business case did not provide a sound basis for the government's decision to commit to the investment and key decisions during the project planning, development and procurement phases were driven by an overriding sense of urgency to sign a contract before the November 2014 state election' (Victorian Auditor-General 2015a).

In December 2014 the Andrews Government released the previous Napthine Government's Cabinet documents, an unprecedented occurrence in the history of Australian political convention. The most critical revelation of the East West Link business case was the deliberate withholding of the Benefit Cost Ratio of the project from Infrastructure Australia because it may prejudice its Commonwealth funding (Andrews 2014). This highlights the glaringly weak justification of many mega urban transport projects, which is aided and abetted by truly defective methodologies. Whitelegg (2014) cites high up the list of defectives is cost-benefit analysis which is used to create vastly inflated benefits on the back of never to be achieved job creation and time savings. Marchetti (1994) describes the relationship between time and space that shows time savings through new transport infrastructure projects results in people consuming the time savings as extra distance. Thus the freeway project promoted to 'save 20 minutes' serves to feed longer distances between origins and destinations (Taylor 2013). Thus, the perceived (and accounted for) benefits are never realised.

The East West Link business case computed a respectable benefit cost ratio of 1.4 by including 'wider economic benefits', however this was only made public as a 'short form' 8-page summary document (Victorian Government 2013). At a Federal Senate committee, Infrastructure Australia confirmed that without including the wider benefits, the benefit cost ratio of the road was only 0.8 – a return of 80 cents per dollar spent (Gordon 2014b). The Auditor-General later reported that the

base case, excluding wider economic benefits was 0.45 (Victorian Auditor-General 2015a) – a return of only 45 cents for every dollar spent. Morton suggests the motivator for East West Link lies not in its economic return (or lack thereof), but rather the illusion that by joining up all the motorways we can confine all the traffic there, and banish all congestion from arterial roads and residential streets (Morton 2014). This amounts to a perpetuation of a program of urban freeway road construction in Melbourne that followed the 1969 Transport Plan, which resulted in over 464 kilometres of urban freeways constructed by 2015. The program of freeway construction is detailed in Appendix 3. The outcome of this program of joining the dots is reflected in the Odgers study on CityLink, which found travel time dis-savings with motorists spending more time in traffic than before it was built (Odgers 2009). Morton (2014) appropriates the German word 'schlimmbesserung' – meaning an improvement that makes things worse – to describe the program of new road construction that has marked Melbourne's solution to its transport challenges over the last several decades.

Buxton et al. (2016, p.107) argue the 'determination of the previous Baillieu/Napthine Government to build the East West Link and replace the original north-south rail route [for Melbourne Metro] illustrated all that was wrong with transport-related decision-making in Victoria'. Buxton et al. (2016, p.154) contend the neoliberal relegation of government to a 'facilitator of development' has 'promoted unprecedented development' and has 'generally disenfranchised citizens from effective participation in decision-making processes'. Buxton et al. (2016, p.155) argue for *sectoral integration* of land use planning with all other government sectoral activities (such as transport planning) and the 'failure to achieve such sectoral integration has been the greatest failure of land use policy since the mid-1990s'. Others suggest that 'Victoria has never done integrated land use and transport planning, that Plan Melbourne and other strategies are predict and provide models that is not a determinative plan to direct how people live, how people work' (Interview: MEB).

The Coalition defeat in the 2014 Election provided the Andrews Government with a clear mandate to do things differently with an alternative transport agenda to deliver what is now known as the 'Big Build', however there remains a 'weak transport planning agenda in Melbourne and the last forty years have been technocratic restructures and not addressing the core issues' (Interview: MEB). 'The Minister is still the decision maker and whilst bodies can provide independent advice and communities can hold government to account, the community has limited insight into decision making in Melbourne' (Interview: MBC). Transport planning in Victoria remains hotly contested and politicised, so much so that it took two years following the 2014 election result for the Commonwealth Government to accept the fate of East West Link, and on 15 November 2016, Coalition Prime Minister Turnbull announced \$1.5 billion Commonwealth funding originally set aside for East West Link had been reallocated to a range of other Victorian projects (Turnbull 2016). Colebatch (2013) suggests East West Link will continue to be a high priority for the Coalition over other projects 'not because it would be the most effective way of spending \$8 billion on solving Melbourne's transport problems, but because it sees it as an issue to wedge Labor, at federal and state level, between its inner-city and outer-suburban voters'. Indeed it remained a commitment for the Coalition at the 2019 federal election despite the Victorian Government's refusal to proceed.

As Mees might say, the East West Link could be the greatest political folly Victoria has yet seen (Morton 2014). 'Transport remains a vexed issue for the Victorian community, and with so many significant changes in recent years, there is an important role of the Minister in exercising sound judgement' (Interview: MFA). The Auditor-General reported the outcome of East West Link was the direct payment of \$424 million to a private consortium as direct compensation, \$350 million spent on land acquisitions including the entire 'Evo' apartment tower, which had only been completed, \$26 million on a business case described as 'unsound' (Victorian Auditor-General 2015a, p.11) and \$3.1 million in costs relating to the termination of the contract (Victorian Auditor-General 2015a). The final termination settlement is expected to total \$1.157 billion depending on interest rate swap

arrangements (Victorian Auditor-General 2015a). Whilst it appears to be over \$1 billion squandered, it compares favourably with the estimated total project cost of \$22.8 billion in nominal terms over the life of the project (Victorian Auditor-General 2015a), this would equate to about \$10,500 for every household in Victoria (based on 2,154,400 Victorian households in 2011, contained in Department of Environment 2016). Indeed, \$22.8 billion of expenditure saved by not proceeding with East West Link could be spread evenly across Victoria's 88 Legislative Assembly electorates, resulting in alternative local infrastructure projects in the order of \$250 million per electorate.

4.10 Governance Environment in Melbourne

One of the difficulties of transport planning in Melbourne is the political framework for carrying thoughts into action – the governance. The forms of political organisations required to implement strategic plans are dispersed – a disintegration of governance. The Melbourne transport governance model is 'weak and fragmented' (Interview: MBD) and bureaucratic restructures likened to 'moving the deck chairs on the Titanic whilst not addressing the core issues' (Interview: MEB). A shift to stronger and more explicit metropolitan governance that is practiced in London is no simple panacea, but it is a precondition for a comprehensive policy response (Gleeson et al. 2012). It is a core component of the definition of 'what is better?' – particularly element 4 as described in Chapter 1.4 – a strongly authorised transport authority with improved opportunities for citizen accountability and transparency. Historically, public transport was a clear responsibility of state government, but it was discharged through several, often warring, bureaucracies (Davison and Yelland 2004). The Railways was a state government department administered by Commissioners with independent statutory powers. The Tramways were administered by a Tramways Board. The local roads were administered by municipalities, but major highways, beyond the tram network, were administered by the Country Roads Board. There was an institutional complexity in implementing the freeway network: the Country Roads Board and the MMBW battled for road construction supremacy, with the Country Roads Board focused on radial rather than cross-city

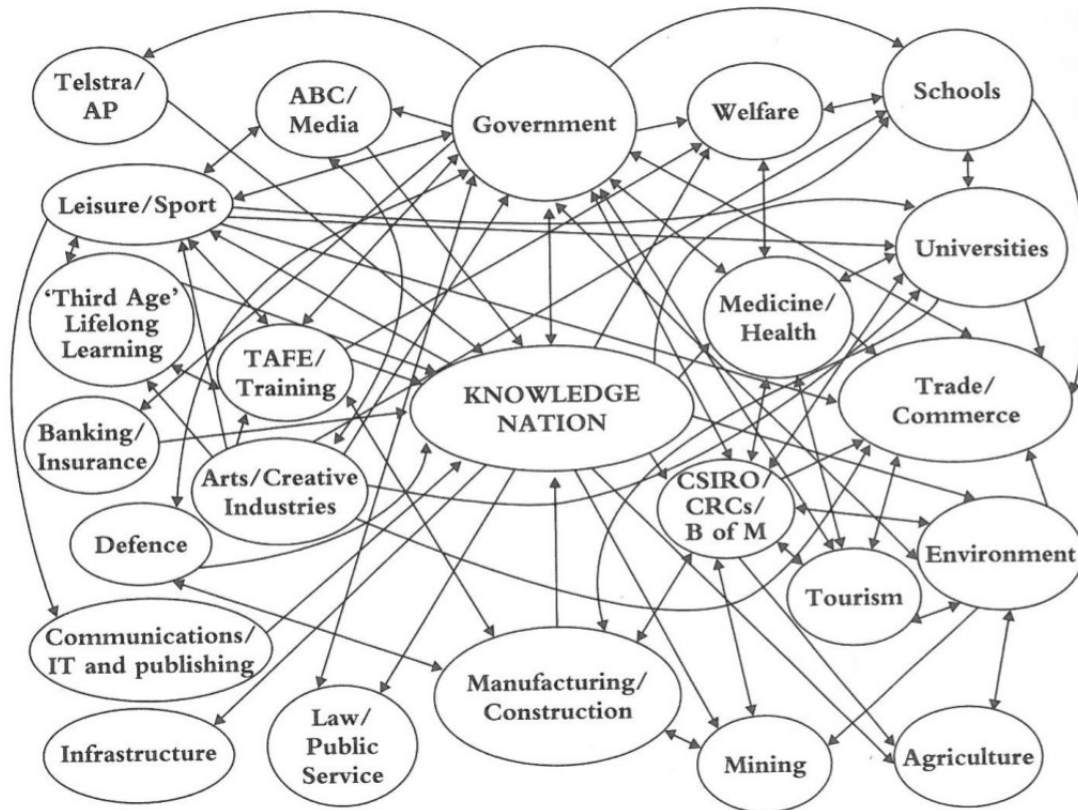
movements due to their responsibility for country roads (Davison and Yelland 2004). This highlights a distinctive feature of Melbourne historical transport planning: the power wielded by interlocking and often competing interests of special-purpose statutory authorities such as the MMBW, the State Electricity Commission, the Harbour Trust, the Victorian Railways, the Housing Commission Victoria and the Country Roads Board (Howe et al. 2014). Howe notes they were all established during the era of 'state socialism', run at arm's length from government and were repositories of great technical expertise that garnered public trust with both formal and informal power, however they developed an 'authoritarian culture' and became 'bastions of macho engineering, hard-edged, no-nonsense stuff and to say that some of them had delusions of grandeur would not be at all exaggerated' (Howe et al. 2014, p.20). 'The MMBW was not a great model, its 1960s grand plans were prepared in secret and were by in large never implemented' (Interview: MFA). It was a culture sympathetic to the large-scale development of American style urban freeways which proceeded without cost-benefit analysis and without consideration of community impacts. 'They were plans from car based era' (Interview: MBD).

The MMBW consisted of Commissioners elected by local Councils and provided a participatory forum for planning decisions, but it operated in a remote and secretive manner under a succession of powerful Chairmen, the most autocratic of whom, Alan Croxford (1966-82), summoned Ministers to his Spencer Street office, rather than visiting them in Spring Street (Dingle and Rasmussen 1991). At the same time, political responsibilities were fractured and 'no single Minister had an overall responsibility for the coordination of transport' (Davison and Yelland 2004, p.124). Melbourne developed an 'unwieldy amalgam of competing state and local governments and special purpose statutory authorities' (Davison and Yelland 2004, p.178). Parkin (1984) posits that these institutional structures are not neutral; they constrain or predispose public policy in different directions. Australia's structure of governance, based on strong states and relative weak local municipalities, has created a raft of state-dominated bureaucratic organisations for the delivery of urban services.

Organisational fragmentation has limited the effectiveness of urban governance and created 'a bureaucratic network of state-wide authorities and tiny agencies, each with its share of power and authority, operating within a territory carved out in the past and zealously defended ever since' (Holmes 1976). This bureaucratic self-interest has perpetuated a business as usual mindset, with each silo of government working towards the achievement of its own narrow band of interest. There is often a tension between central direction and sub-central autonomy and self-determination. To what extent can elected and appointed office holders in sub-central agencies of government make and carry out policies independently of central direction or constraint? This is often clarified by the authorising environment: the legislation, the terms of reference, the letter of appointment. This has created a situation where a plethora of single purpose agencies have been constituted, in a bifurcation away from relatively open and electorally accountable institutions, to a more closed corporatist institutional form, where policy making process is likely to be structured so as to include certain sectional interests while excluding others (Saunders 1984).

Balkanisation or 'urban splintering' (Graham and Marvin 2001) is a term used to describe the transformation of urban infrastructure networks from a singular centralised public network, to a more fragmented, complex set of networks where there are simply too many power players competing with the public interest. This balkanisation was famously illustrated with a complexity diagram used to illustrate relationships of the Knowledge Nation Taskforce (Jones 2001), see Figure 38. Described as 'the most important single element' (Jones 2006, p.459) of the Knowledge Nation Taskforce, it illustrated that there was not a single unifying institution linking together complex and dynamic institutions. The Treasurer of the day, Peter Costello, derided the report as 'Noodle Nation' as it looked like 'spaghetti and meatballs' (Jones 2006, p.460), which resulted in Knowledge Nation 'dead-in-the water, never to be mentioned again' (Jones 2006, p.460). The principle of complexity stands and is equally relevant to transport governance in Victoria. Indeed it was quoted by Liberal MP Robert Clark during debates on legislation to create Development Victoria, as a successor to the

Places Victoria in 2016 when he stated: 'in this plethora of structures that this government is creating, we will end up with something akin to Barry Jones' Noodle Nation – that is a spaghetti tangle of entities with divided responsibilities, lack of clear accountabilities and no-one actually taking charge of getting things done in a proper and responsible manner' (Clark 2016). In 2010 the Public Transport Users Association (PTUA) prepared a diagram illustrating a public transport lack of responsibility, see Figure 39. This diagram was effective and led to the Baillieu Opposition commitment to create as single public transport agency to plan, co-ordinate and manage the complex public transport system. The resulting Public Transport Victoria 'had high levels of public visibility and created a strong voice with high levels of community recognition' (Interview: MEB).



*Figure 38 The Complexity Diagram, colloquially known as 'Noodle Nation'
(Jones 2006, p.460)*

- Authority of Parliament lacked any innate structural affinity with metropolitan Melbourne, its duties were to the wider State of Victoria; and
- State entities were an ad hoc layer of authority created by Parliament largely in response to individual crises.

These examples are still relevant today and whilst 'Victoria lurches from one transport crisis to the next' (Interview: MBC) 'there is a need for catalytic leadership for things to change' (Interview: MBD). No government likes criticism; however accountability is an essential part of democracy. Delahunty (2010) described the slippery slope of the latter years of the Kennett Government and the critical role for checks and balances, from the parliament, public dissent, the media and the various watchdogs and in particular the Auditor General. Often a controversy or catastrophe triggers a chain reaction and reforms are introduced. One example is the Sunbury land scandal of 1973, which continued to dog the Hamer Government until they were defeated in 1982 and was the subject of a Board of Inquiry (Gowans 1978) and a Royal Commission (Frost 1981). This resulted in the establishment of the Victorian Government Land Monitor, an independent office working within the Planning portfolio, to advise government on land acquisition and disposal – to restore public confidence in government property transactions. Recently the rezoning of Fishermans Bend, a decision taken by Minister for Planning Matthew Guy in July 2012, saw windfall property value escalation and allegations that Liberal Party activists and donors reaped multi-million-dollar windfalls (Millar et al. 2015). Had a Royal Commission been established – as occurred in 1889 or in 1981 – it may have provided the catalyst for change. This may have resulted in a Planning Monitor (similar to the Land Monitor) to restore public confidence in Ministerial interventions or more fundamental reforms to metropolitan governance and decision making that has been identified in this research.

There remains a deep chasm between London and Melbourne transport planning and decision-making, from the 'defined set of levers available to the Mayor of London, to the Mayor's

accountability to the community, or the transport agenda being driven in London' (Interview: MEB) and is highlighted by this example: On 23 October 2017 Mayor of London Sadiq Khan introduced the T-charge (Toxicity Charge) to combat London's chronic air pollution and publicly released a community consultation report (including three volumes of technical information totalling 291 pages) on a radical scheme for pedestrianisation of Oxford St, receiving almost 12,000 submissions (Transport for London 2017d). The same day in Melbourne, Planning Minister Richard Wynne received the West Gate Tunnel Panel Report for an inner city tollway that envisages 14 lanes of traffic (6 of which are on elevated structure) along Footscray Road and the media reported on 50,000 submissions received for the Metro Tunnel project station naming competition, with the public debate focused on whether the five new railway stations should be called Barak, Kirner, Chloe, Shane Warne or Vegemite (Bowden 2017). This also occurred in the same week as the Victorian Government released their response to Infrastructure Victoria's 30-year strategy and 'snuck it out, quietly on a Friday when no one was noticing' (Dodson 2017). One interview participant noted that 'London may be an aircraft carrier: slow moving and interesting, but Melbourne is a frigate: fast and furious' (Interview: MEB). London's transport planning environment is mature, with strong governance foundations, Melbourne's is built for speed and manoeuvrability, with constant change and is about 'Getting Things Done' (Andrews 2018).

In this rapid growth, Melbourne is growing towards a divided city of 'two Melbourne's' of haves (inner city) and have nots (outer suburbs), where the further out you live, the more limited the job opportunities, longer travel times, higher car dependency and less time with families (Hansen 2014). Motor vehicle registrations are growing faster than population growth (Appendix 7), the lengths of Melbourne's freeway network continues to expand (Appendix 3) and Melbourne boasts the most freeways of any Australian city (Kenworthy and Laube 2001). Melbourne is experiencing an era of multibillion mega projects as part of a 'Big Build', some of which falsely promise benefits and which run counter to aspirations for Melbourne as a liveable city. Since the Second World War, Melbourne

has developed a transport network that allows a motorist to travel from Frankston in the south east to Geelong in the south west without encountering a single stop sign or traffic light – a remarkable achievement, but will this create a tragedy of the commons, a problem which Hardin (1968) identified that, has no technical solution, that with a finite resource and the jobs and growth spirit of Adam Smith leads to an 'inevitableness of destiny', whereby the result of 'freedom in a commons brings ruin to all' (Hardin 1968, p.1244). Societies throughout history have favoured 'psychological denial' where the laws of society are 'poorly suited to governing a complex, crowded, changeable world' (Hardin 1968, p.1245). The challenge facing society is to adopt corrective feedbacks that keep the decision makers honest – and at the same time, minimise the wasted effort and expense to taxpayers. If Melbourne continues along its current trajectory it will be a case of 'the same people, getting the same outcomes, whereas London has moved their tactical debates to a strategic level' (Interview: MEB). This was only possible in 'the window of opportunity of the late 1990s and early 2000s when all things came together in London and they got away with it' (Interview: MEB).

It is taken for granted that a group with a common interest will have a tendency to further this interest – for example a community opposed to a freeway project, however the Olson paradox of group behaviour identifies that in the absence of special arrangements or circumstances, large groups will *not* act in their group interests (Olson 1982). This is due to the individual's knowledge that a contribution to collective action in the interests of the broader group are trivially small and the gains are smaller still – the individual's contribution will not make a perceptible difference (Olson 1982). A rational individual will reflect on the considerable sacrifice required to contribute and, because the costs of participation are too high and the benefits of participating are low, the Olson paradox predicts it is less likely the individual will contribute, illustrated in Figure 40. Consequently, small groups are more likely to organise than larger groups.

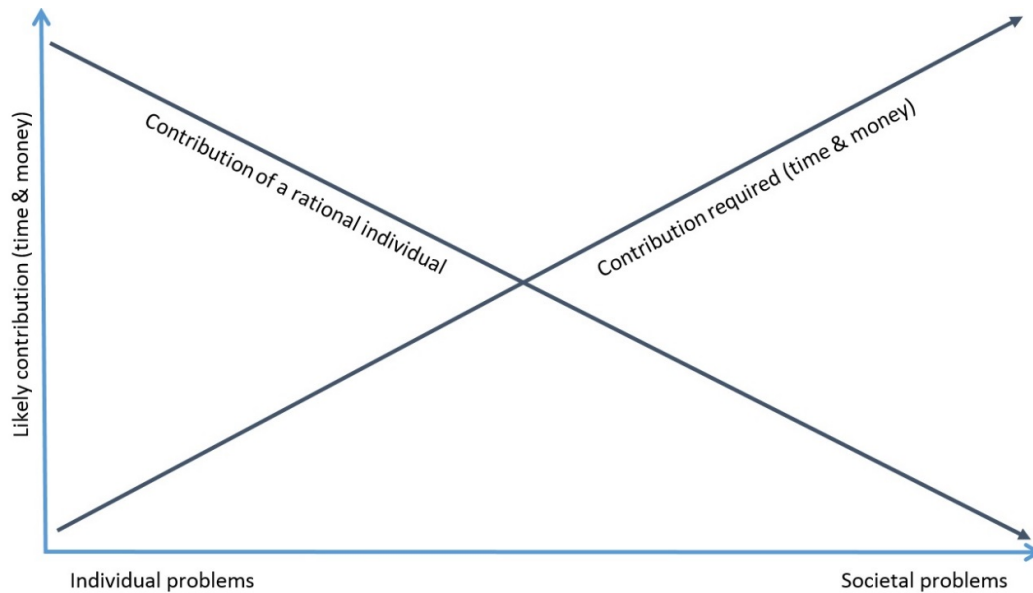


Figure 40 The Olson Paradox of Group Participation
(adapted from Olson 1982)

The Olson paradox is applicable to complex societal issues, including the challenges facing our growing cities. The increasingly divided nature of special interest groups makes 'society ungovernable' (Olson 1982, p.47) and an argument can be made to establish a broad encompassing organisation with rational leadership to provide stewardship for society as a whole, incentivised to concern itself with the productivity of society (Olson 1982). Whilst Olson notes such organisations perform 'unusually bad' and have a tendency to create more centralised decision-making, with less diversity of opinion and fewer checks to erroneous ideas – he concedes there is 'some incentive to the society in which they operate to be more prosperous' (Olson 1982, pp.52-53).

Victoria's *Climate Change Act 2017* commits Victoria to transition to a net zero emissions target by 2050 (Department of Environment 2017a). Transport emissions account for 16 percent of Victoria's greenhouse gas emissions and it is the second largest contributor to Victoria's net greenhouse gas emissions (Department of Sustainability and Environment 2012). In this context, the current decision-making framework for transport planning can be described as management at the margins which perpetuates a predict and provide infrastructure model – a model that identifies how much

unconstrained demand exists and then orients policy and funding to deliver the required capacity, through projects like Western Distributor, North East Link, or East West Link. This current framework is contrary to the aspirations of Victoria's *Transport Integration Act* and continues Melbourne's path dependency towards an automobile dependent future.

The administrative units that form the basis of Melbourne's land use and transport planning is detailed in Appendix 8, for 2016/17. These institutions have combined annual expenditure of \$22 billion, over 10,000 staff and a complex governance web that includes Departments, statutory authorities (with and without Boards), private interests who are service delivery agencies of the State and several quangos. Appendix 8 also details over 730 executives earning over \$180,000 per annum, with the highest paid earning over \$692,000 in 2016/17. This was a situation replicated in London prior to the creation of the GLA – where £6 billion of annual expenditure (Skelcher and Stewart 1993) was distributed among 272 appointed bodies in what Travers (2004) described as a 'quangocracy'. This 'messy and fragmented' system (Newman and Thornley 1997) required intervention. Melbourne has not yet reached a tipping point, however Chandler asked the question: 'What is the relationship between DELWP (where the P stands for Planning) and the Victorian Planning Authority, Development Victoria, Infrastructure Victoria, VicRoads, VicTrack, Public Transport Victoria, Transurban, Sustainability Victoria – and the various related Ministerial portfolios such as Suburban Development?' (Chandler 2017, p.3). Transport and land use planning in Victoria represents a 'Noodle Nation', or a complex and opaque web, where each entity has its own vision, purpose and goals, and each has its own management team including internal functions of payroll, finance, human resources, communications and Freedom of Information. It is a deliberately hard to understand web of interrelated entities. This thesis demonstrates the 'ungovernable' Melbourne case study with Figure 41. This is a complex diagram, but if the reader wishes to understand the intricacies then it is possible to use the 'zoom' function in the PDF file to read the interrelated connections between the various entities. Appendix 8 also identifies over 2,939 Freedom of

Information requests were received in the government agencies responsible for transport and land use planning in 2016/17, demonstrating a significant demand for information from the community that is not being met by current practices.

Following the 2014 election, the Melbourne model progressed to the stage of creating Infrastructure Victoria to 'take the politics out of infrastructure' (Jennings 2017). This was part of an early election commitment made in November 2012 (Victorian Labor 2012). In 2015 Infrastructure Victoria was established to 'provide independent and expert advice about Victoria's current and future infrastructure needs and priorities to support improved social, economic and environmental outcomes' (Victorian Parliament 2015, Section 7). The legislation requires the tabling in Parliament of a 30 year infrastructure strategy, with the first report tabled in December 2016 (Infrastructure Victoria 2016b), which must be updated every three to five years, with a government response to the 30 year infrastructure strategy, including a five year infrastructure plan, which must also be tabled in Parliament.

In October 2016 a new Ministry for Suburban Development was created and a series of Metropolitan Partnerships established to provide 'a stronger voice' that reflected the 'unique needs' of each metropolitan sub-region (D'Ambrosio 2016). Metropolitan Partnerships were created for inner, inner south-east, western, northern, eastern and southern regions of Melbourne. Annually, each Metropolitan Partnership will establish the top priorities for their region, and provide advice to government for consideration as part of State Budget development. Time will tell whether this new governance model will be anything more than an ephemeral attempt at better engagement between the Victorian Government and local communities, or whether it continues decision-making on a business as usual basis.

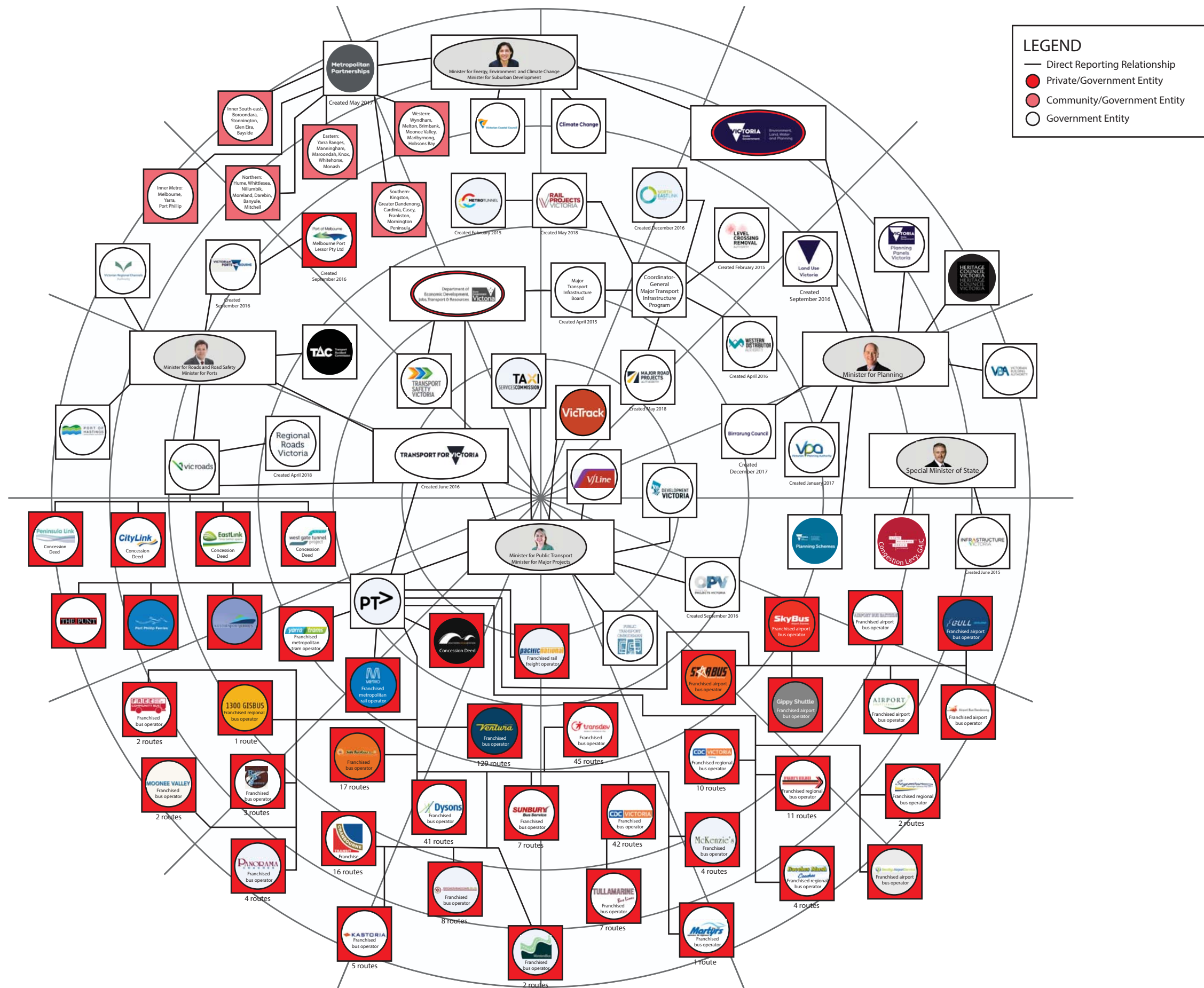


Figure 41 Web of Victorian transport and land use planning entities

Melbourne policy networks have become very successful in resisting change, even when a mandate is delivered through an electoral result, or when watershed legislation is introduced, such as the *Transport Integration Act*. Stone (2009) suggests the Cain Government in the 1980s created a highly politicised bureaucracy dominated by road proponents with an 'intellectually bereft culture of transport policy making' (Stone 2009, p.20). Stone (2009, p.20) suggests new public transport managers are needed who can develop 'a tradition of thinking outside the box' – a renewal of political imagination within the public service. Melbourne's experience with political leadership is that is subject to regulatory capture, colloquially known as 'captured by department', where the decision maker, required to act in the public interest, instead advances the commercial or political concerns of special interest groups that dominate the industry. This follows a pattern of broken or unmet promises in transport and politics, from the Cain Government, to the Baillieu Government, to the Andrews Government. The result has been 'watching a slow-motion car crash of Melbourne's development where we are spending record amounts on transport in the absence of a transport plan' (Interview: MEB). 'Nothing is threatening the Melbourne paradigm at the moment, everyone is a winner, but there will be a moment when this intoxicating growth paradigm reaches breaking point' (Interview: MEB).

One mechanism to anticipate this moment is to avoid regulatory capture, with greater 'hands on administration' by political leaders and decision makers, and the adoption of a 'management by walking around' approach, which can redress problems of asymmetric information, or deliberately withheld information encountered in the public service. This is resisted by many, as with knowledge comes complicity and guilt. Many public servants and politicians are starstruck by the private sector and unable to recognise its limitations, or motivations – which are often counter to the public interest, particularly in monopolistic industries. In addition, there exists a deep mistrust of the public service by political classes, and a fear of powerful interest groups which combines to create a perfect storm of poor decision-making. The 'dead hand of the civil service' (Wolmar 2008, p.x) often

cautions against risk and radicalism and relies on consultants whose advice often favours the most complex schemes in order to ensure further contributions will be required.

Narrow, silo-based thinking has long been a tradition in urban and land use transport planning (Stanley et al. 2017). Integrated land use transport planning is not widely practiced, despite legislative support to do so. The experience of a succession of strategic plans for Melbourne since Plan Melbourne in 2002 has shown that, without committed community engagement (and deliberation), strategic plans will not have the buy-in needed to ensure success and will simply be superseded in an ineffective and wasteful strategic planning churn of strategic planning documents, as shown in Figure 42. It is worth noting that the 1929, 1954 and 1969 strategic plans for Melbourne were created as a result of legislation requiring such plans and were developed after months, if not years, of research and collaboration within government (and in some cases the community).

Governance structures of the metropolitan area have a direct impact on the public engagement and accountability of government of the day. A review of metropolitan governance completed for the World Bank suggested:

‘Neither theory nor practice tells us clearly which model of governance is best for large metropolitan areas. The appropriate model depends on both the national and local context. Models that work well in one jurisdiction may or may not be appropriate in another jurisdiction. There is no ‘one size fits all’ model’ (Slack 2007, p.3).

Despite there being no ‘one size fits all’ model, the World Bank review concluded that ‘the *process* of reforming government structures is often as important as the outcome itself. All of the relevant stakeholders need to be included in the early stages of restructuring reform for the outcome to be accepted’ (Slack 2007, p.4). This collaboration of stakeholders is critical for success and was evident in London with the comprehensive process of engagement that led to the creation of the GLA in 2000. The World Bank review noted ‘politics (and not economics) often dictate the ultimate

structure' (such as in London) and 'metropolitan governments require sufficient resources and fiscal autonomy to raise the funds needed to deliver services, but they rarely have them' (Slack 2007, p.5) and without this, 'they will be doomed to fail' (Slack 2007, p.57).



Figure 42 Melbourne's transport and strategic land use planning churn

The Melbourne model has a complex history; however, the trend is of strengthening road planning institutions and outcomes, and a weakening of public transport. This is despite travel speeds on metropolitan Melbourne roads declining in both peak and off-peak periods (Figure 43), average delays increasing in both peak and off-peak periods (see Figure 44), and total vehicle kilometres travelled increasing by 17 percent (VicRoads 2015). Keys (2017) found the growth in Melbourne's freeway network over the period 2002-2012, shown in Figure 45, expressed as the number of kilometres per million residents, has increased by 22 percent. If Melbourne continues to build more freeways and more lane capacity, it will further entrench automobile dependency and these outcomes. This is consistent with UK experience where building roads has not resulted in journey time savings, rather longer distances travelled (Metz 2008) and is echoed by the Public Transport Users Association who published a graph of freeway construction over the period 2002-2013

juxtaposed against the VicRoads Traffic Monitor data showing declining travel speeds on the Melbourne monitored road network (see Figure 46).

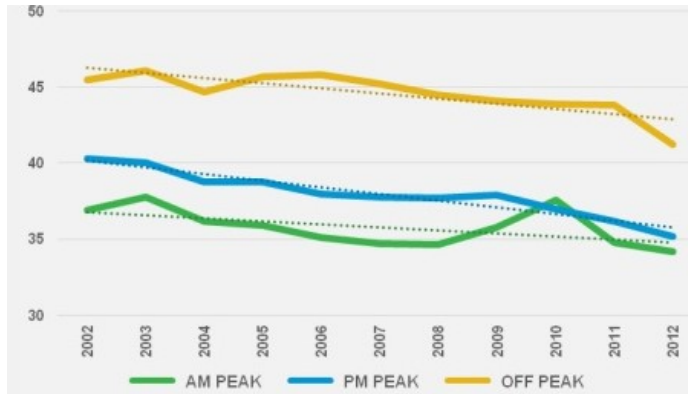


Figure 43 Average travel speeds all monitored Melbourne roads, 2002-2012 (VicRoads 2015, p.15)

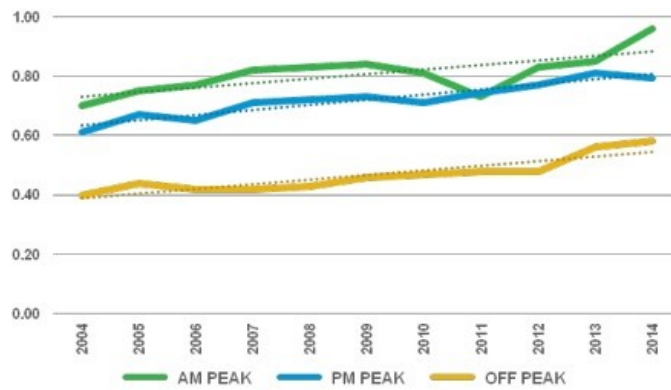


Figure 44 Average delay all monitored Melbourne roads, 2002-2014 (VicRoads 2015, p.15)

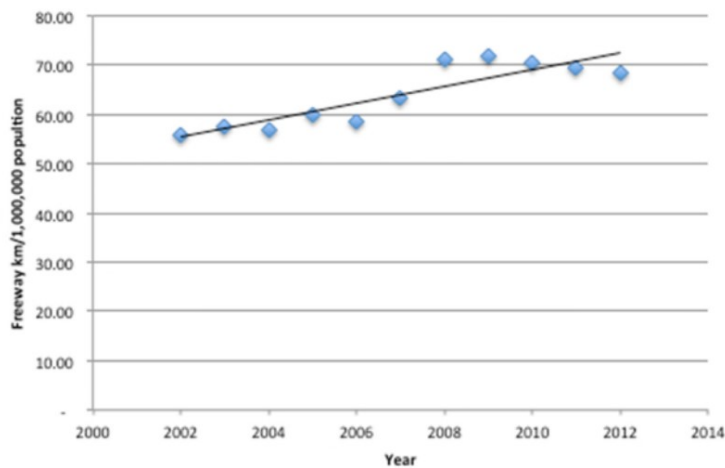


Figure 45 Melbourne Freeway Network per 1,000,000 residents (Keys 2017)

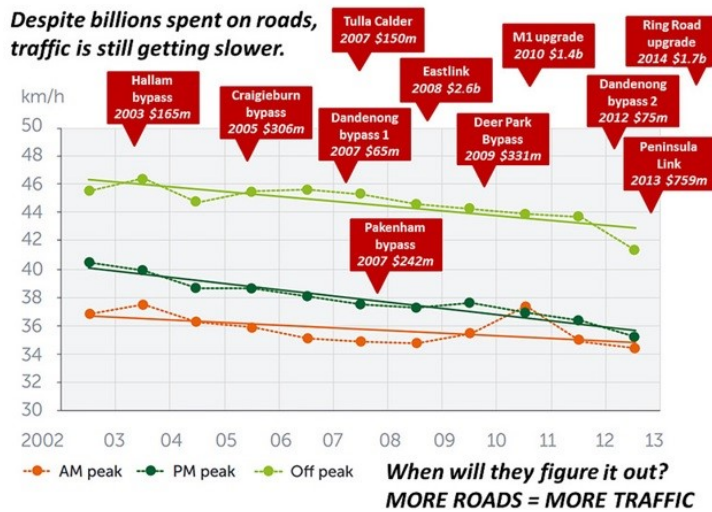


Figure 46 Average travel speeds, Melbourne and freeway construction activity, 2002-2012
(Public Transport Users Association 2014)

Projects such as the West Gate Tunnel and North East Link are perpetuating the same decision-making process that led to the case study of East West Link, and the 'Transport Referendum' of 2014. In what has been described as a 'love affair with Transurban' (Springle 2017, p.15), the Andrews Government has failed to heed the 2014 advice from the electorate, advice that has been repeated in earlier transport elections of 1999 and 2010, and has instead proceeded with a project in which 'traffic will vomit into the already clogged city centre from the tunnel' (Ramsay 2017, p.5). This is the outcome of a transport planning environment that has a long standing path dependency – a self-reinforcing mechanism perpetuated by an institutional framework that ensures freeway construction prevails even though better alternatives exist (Low and Astle 2009). It is a failure to learn from history and develop a coherent way forward that has characterised successive Victorian Governments.



*Figure 47 West Gate Tunnel crossing of the Maribyrnong River, artists illustration, April 2017
(West Gate Tunnel Project 2017)*

The abolition of Melbourne metropolitan governance after 101 years and the transfer of powers to the Cain Government was intended to increase accountability, however it achieved the opposite. In hindsight, the best approach might have been to reform the MMBW to make it more accountable (Mees 2007a). Metropolitan Melbourne has no voice to express its collective will and reinstatement of a metropolitan governance forum, with its own democratic mandate and fiscal capacity, to operate separately from, but in cooperation with, state and local governments may be necessary (Spiller 2014). When interviewed in 2013, all four immediate past Victorian Premiers were reluctant to 'roll back the clock' (Spiller 2014, p.379) and reinstate a body such as the MMBW. Some remarked that the MMBW was a 'dinosaur' that represented an era of redundant bureaucracy when the community was calling for 'less rather than more government' (Spiller 2014, p.379). The lesson from London is to deliberately design a structure through a public process to avoid any new entity recreating the MMBW, nuanced so it does not pose a threat to central government.

4.11 Conclusion

This chapter has described the historical context of the Melbourne case study which has resulted in the long-term failure to develop an integrated transport plan, one which reflects the desired outcomes from a strategic land use plan. Each process has been a closed process, often focused on an individual transport mode (with an ideological preference for vehicles over public transport), with a lack of genuine community engagement, driven for political purposes. This lack of long term consensus to transport and land use planning and a desire to 'fix' transport concerns with the next big investment, usually a major urban freeway, is inconsistent with the research question raised in this thesis of 'what is better?' – particularly element 1 as described in Chapter 1.4 – an acceptance of the intractable nature of a wicked problem. The next chapter looks at the London model and whether this model is delivering the better outcomes desired for a city of 8 million residents.

5. London Case Study

5.1 Introduction

This chapter describes the historical context of the London case study. Drawing on an historical document review, the chapter describes the inception of metropolitan governance in London, the establishment of the London Metropolitan Board of Works (MBW), the political elements of the abolition and re-establishment of London metropolitan governance. The chapter also explores the recent London transport planning environment, drawing on a combination of interviews and document review to examine the current framework that manages London's complex transport planning environment.

5.2 Governing Nineteenth-Century Imperial London

In the 1850s London experienced rapid population growth and chronic overcrowding, documented by Barker and Robbins (1974) and provided as Appendix 4. London doubled its population from just over 1 million in 1800 to 2.6 million by 1850 (Greater London Authority 2017b). In 1848 a Metropolitan Commission of Sewers replaced eight separate municipal bodies who were responsible for sewers in London (Cook 1999) and commenced a program to remove 30,000 cesspools, which London had used for centuries, and construct a sewerage system that discharged sewage directly into the River Thames (Cook 1999). The highly tidal River Thames closed the sewerage outlets at high tide, accumulating stagnant sewage for 18 to 24 hours a day (Cook 1999). In the nine years following its formation in 1848, the Metropolitan Commission of Sewers was superseded on six occasions, highlighting the increasingly dysfunctional governance of London (Cook 1999). This political turmoil led to a Royal Commission on the Corporation of the City of London and chronic pollution of the River Thames, which reported in 1854 (Travers 2004). The Royal Commission recommended a *Metropolis Management Act 1855* and the creation of the MBW. The establishment of the MBW in 1856 represented the first time that a rate-aided improvement authority had powers over the whole

London metropolis (Barker and Robbins 1974) and established a metropolitan governance model that has evolved into the Greater London Authority (GLA) today. The MBW consisted of 46 members representing the cities, towns and boroughs that comprise the London metropolis (Halliday 1999) and was led by Chief Engineer Joseph Bazalgette.

The summer of 1858, described as 'the great stink' (Halliday 1999), resulted in new powers and finances to the MBW to commence the London Main Drainage scheme, which included the creation of the Victoria Embankment on The Thames (Cross-Rudkin and Chrimes 2008). This program of works was based on Bazalgette's plan for a series of 'interceptor sewers' to convey sewage by gravity to an outfall 14 miles downstream of London Bridge (Cook 1999). The sewer scheme was opened in 1865 and by 1866 most of London was connected to the sewer network devised by Bazalgette in 1858. This achievement would not have been possible without the creation of the MBW in 1856.

In addition to his competency in engineering, an important part of Bazalgette's work was to 'monitor the progress of private bills passing through select committees of Parliament which would have an impact on the public amenities of London' (Cross-Rudkin and Chrimes 2008, p.68). These included railways, tramways, docks, water supply and utilities such as gas, electricity, energy and hydraulic power – a gamut of public assets that required broad strategic planning. Bazalgette later described his role to a select committee of Parliament in June 1874 as 'private individuals are apt to look after their interests first, and to forget the general effect upon the public, and it is necessary that there should be somebody to watch the public interest' (Cross-Rudkin and Chrimes 2008, p.68).



Figure 48 Joseph Bazalgette statue, Victoria Embankment, London

Whilst the MBW was effective at discharging its metropolitan wide duties, in many ways it was undemocratic with membership drawn from unreformed parishes and vestries (Travers 2004). Over time, the MBW became a 'byword for corruption' (Livingstone 2011, p.232) and in 1889 London County Council (LCC) replaced the MBW with directly elected city-wide Councillors, whose boundaries aligned to what is now known as inner London. After a forty-year career as London's chief engineer, Bazalgette retired having presided over the creation of the MBW, construction of London's sewers, several bridges over the River Thames, wharves and other civil infrastructure.

Owing to its increased democratic roots, the London County Council was described as a more determined institution than the MBW and was noted for radicalism in its early years (Barker and Robbins 1974). It undertook an 'uncompromising, almost ruthless' attack upon privilege and vested

interests (Gibbon and Bell 1939, p.79). LCC became the standard-bearer for metropolitan governance and was responsible for planning Greater London, including the Abercrombie Plans of 1943. It was an era when 'people had faith in central government to plan everything' (Schabas 2017, p.5). In 1965 Greater London Council (GLC) replaced the LCC and was provided with expanded responsibilities for fire services, transport and major roads, whilst boroughs were responsible for social services, housing, local roads, libraries, recreation and parks (Travers 2004).

5.3 Abolishing Metropolitan Governance

By the 1970s the GLC had 'become too bureaucratic and like all monopolies was exhibiting an arrogance spawned from knowing that, however bad or expensive its services, the public had no choice but to use them' (Livingstone 2011, p.438). Livingstone described the GLC as 'a nightmarish bureaucracy which crushed enthusiasm, creativity and originality out of bright young staff as they began their forty years' servitude inside the system' (Livingstone 2011, p.211-12). In 1981 Livingstone was elected Mayor of Greater London Council and sought radical change following 'dreadful service' provided by 'arrogant and insensitive' staff towards public housing tenants (Livingstone 1987, p.58). However 'Livingstone ranged far beyond his local government brief and deliberately and provocatively engaged in national politics' (Travers 2004, p.30), including displaying banners across the front of the GLC building directly opposite Parliament (see Figure 49). These 'great Maoist banners screamed messages of abuse literally across the rooftops at the Conservative [Thatcher] Government' (Norris 1996, p.96) and provided a daily reminder that Thatcher's economic strategy was not working; in 1979 there were 1.2 million unemployed people in the UK, an alarming figure by post-war standards which never exceeded an average of 650,000 between 1945 and 1970. However, this figure had ballooned to 2.2 million by 1980 and was at 2.9 million by 1981 (Beckett 2015). It was a chaotic time for the Thatcher Government, with the head of the Downing Street Policy Unit John Hoskyns describing the early 1980s as 'trying to pitch a tent in the middle of a landslide' (Beckett 2015, p.79).



Figure 49 GLC Mayor Ken Livingstone (left) and London's Unemployed Banner (Getty Images 1982)

The GLC had developed into 'the most powerful and effective city-wide government London has yet enjoyed' (Travers 2004, p.26), but Livingstone proved to be the catalyst to undo metropolitan governance in London. For Thatcher there was no alternative and at midnight on 31 March 1986 the GLC was abolished and its functions dispersed through a number of Advisory Committees and to borough councils (Gordon 2016a). The Thatcher Government decision to abolish the GLC was 'very much a personal decision' (Travers 2004, p.30) and was 'widely regarded as an act of spite' (Hebbert 1998, p.115). Thatcher considered the GLC was 'an unnecessary tier of government that provided no real services at all' (Livingstone 1987, p.80). The greatest paradox of the Thatcher reforms was the large *increase* in direct state intervention and more government, not less (Dudley and Richardson 2000). Towards the end, the GLC had created 'the worst of all possible worlds: a large, expensive bureaucracy providing such a low level of service that its continued existence was hard to justify' (Livingstone 1987, p.104). The GLC had become 'cumbersome, inefficient and indefensible' (Cullingworth and Nadin 2003). However, abolition proved to be 'a cure far worse than the disease'

(Norris 1996, p.97) and led to the next chapter of Ken Livingstone's career as a martyr of London governance – a 'people's champion' (Norris 1996, p.97).

5.4 Messy and Fragmented Metropolitan Governance

In the 1980s and 1990s there was a widespread move in the United Kingdom, United States and Australia towards a technocratic view of government, that emphasised the state as 'steering' rather than 'rowing' (Osborne 1992). This management style focused government on making policy direction rather than producing services (Travers 2004). The balkanised network of London governance following the abolition of the GLC was not accompanied by decentralisation, but by centralisation. New organisations were created within government to attempt to manage London (Travers and Jones 1997) and 'London would now be governed by 62 new quangos' (Livingstone 1987, p.307); a period of London governance described as 'seething and chaotic' (Travers 2004, p.xii). The fragmented system of governance had made co-ordination more difficult and led to an absence of strategic planning for London (Travers 2004). It would be wrong to suggest there was no city-wide system of government in the period post-1986; some GLC functions were passed onto borough councils, others were put in the hands of London-wide joint committees of boroughs, others were transferred to government appointed boards of Whitehall (Travers 2004). This balkanised, but closely controlled and centralised, system of government led to the 1992 decision to create a Cabinet Sub-Committee for London, a Minister for London and a Minister for Transport in London (Travers 2004).

In 1992 Steve Norris became Minister for Transport in London, which was an election commitment of the Major Government. His title included Parliamentary Under Secretary of State, Minister for Transport in London and Minister for Local Transport and Road Safety. Norris recalled that he was 'not massively enthusiastic about the portfolio' (Norris 1996, p.177) and the long title proved 'an invariable rule in politics that the length of titles are an inverse proportion to their importance'

(Norris 1996, p.229). Indeed the brief was so unimportant that he had never even read the election manifesto (Norris 1996). The intent of the portfolio was to bring the voice of business more prominently into decision-making in London (Norris 1996). Norris sought to rethink the predict and provide mentality where 'new roads simply generate new traffic and move the problem one place to another' (Norris 1996, p.195-6), and that simply providing more trains and buses, even when they were more reliable and cheaper, would not in itself solve this problem (Norris 1996). A complex problem would require complex response, one that includes land use planning, service delivery and operation, financing and information systems. Part of this response was cultural change. Norris recalled a conversation with a senior engineer about why they did so little for cycling in London: his answer was 'we don't build cycling provision because not many people cycle' (Norris 1996, p.197). This convinced Norris that the attitude of government was the problem.

Norris regrets not doing more to increase pedestrian spaces in London and a 'fear of the unknown' and a 'small-minded Treasury team undermined our best efforts' (Norris 1996, p.198). These experiences highlighted the need for a more powerful voice for London, one with financial resources to enable it to carry out its task and Norris was 'convinced London needed a voice' (Norris 1996, p.199). Norris' preference was to draw together politicians, environmentalists, planners and transport planners to build consensus about what needed to be done (Norris 1996). Norris wanted to make a difference through collaboration and got quite a lot done just by being active (Dudley and Wolmar 2016). The period 1992-1997 was characterised by the development of dozens of partnerships within London to fill the void from a lack of city-wide governance (Travers 2004), including the development of a central-London focused business pressure group called London First and the London Pride Partnership. The pattern of governance was described as 'messy' and 'fragmented' (Newman and Thornley 1997), with a 'complex web of bodies responsible for aspects of city-wide policies' (House of Commons Library 2006, p.2), as shown in Figure 50.

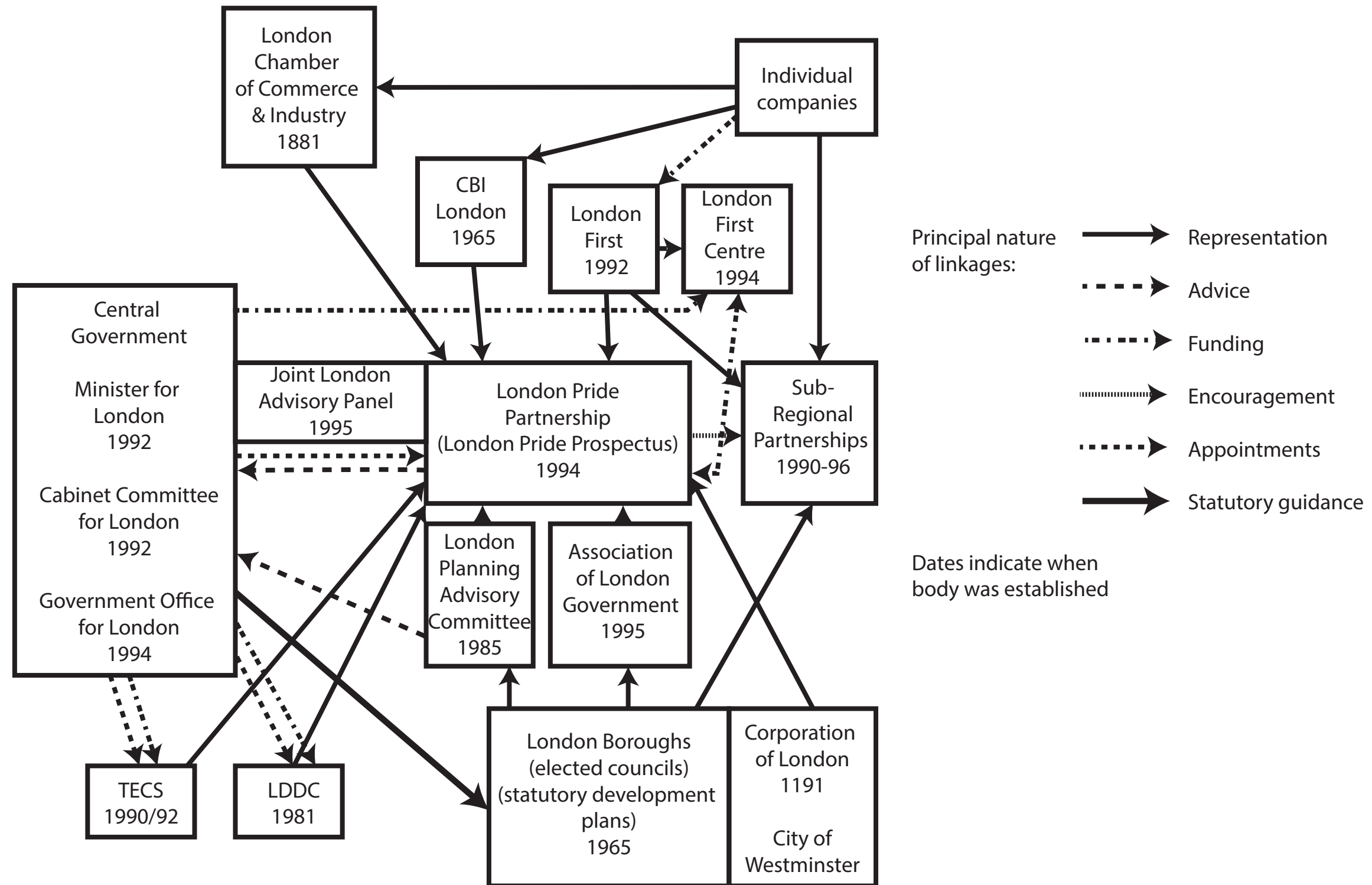


Figure 50 Authorities responsible for urban policies and strategies for London, 1990-2000 (Newman and Thornley 1997, p.981)

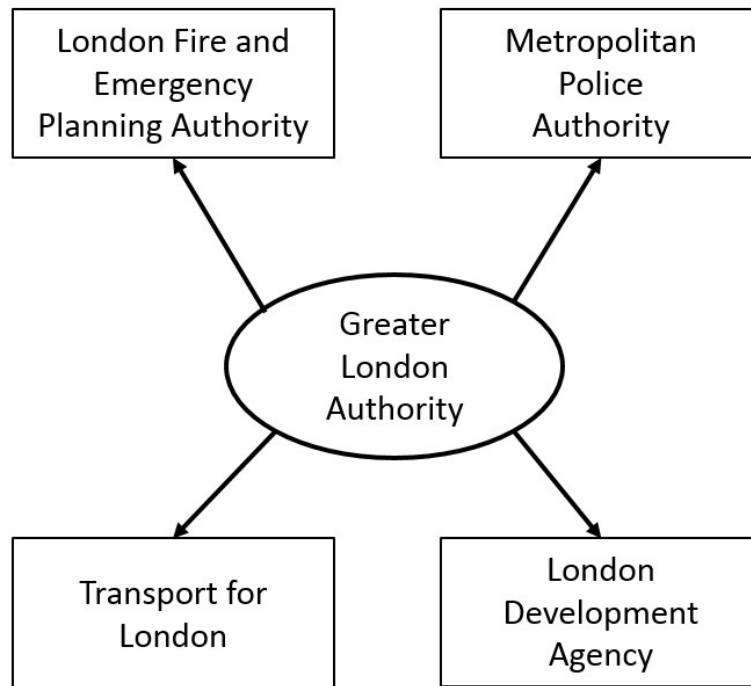
Travers (2004, p.36) identified 272 appointed bodies in London in what he described as an 'unelected state' or 'quangocracy', with gross annual expenditure in 1992/93 of £6 billion (Skelcher and Stewart 1993). In response to a dramatic increase in London's population and employment, in 1994 the Government Office for London was established to allow central government to act as a strategic authority and bring together a disparate group of regional agencies with London responsibilities. However, it created a divisive structure that was only exacerbated by New Labour's separate Regional Development Agencies (Gordon 2016a).

5.5 Creating the Greater London Authority

The Labour Party had been committed to reinstating London-wide government since the abolition of GLC in 1986. Election manifestoes in 1987, 1992 and 1997 were contested with a platform of a new 'Greater London Authority' with a directly elected Mayor and a supervisory assembly (Travers 2004). It was part of a devolution platform to foster 'local solutions to local problems' and included new elected administrations in Scotland, Wales and Northern Ireland (MacKinnon and Vigar 2008) to overcome the centralised nature of UK government and the silo mentality of Whitehall (Cabinet Office 1999). The British general election of 1 May 1997 was 'one of the most exciting in recent history' (King 2002, p.ix) and, following the election of the Blair Government, a process was immediately commenced to implement the GLA policy. On 29 July 1997 a Green Paper was released titled *New Leadership for London* (Department of Environment 1997). The model proposed a two-tiered system: a directly elected full time paid Mayor and an Assembly. The Mayor would have powers to propose the GLA budget, devise policies, make executive appointments and be the 'voice' for London. The Assembly would examine the budget and policies and scrutinise the Mayor and the publicly-funded London organisations, such as Transport for London, police, economic development, fire, planning, environment and culture authorities. The Blair Government wanted to create an institution with a core (consisting of the Mayor's officials, the Assembly and a small number of control functions) and four functional bodies at some distance from the central institution (Travers

2004), see Figure 51. The retention of local councils was regarded as a 'courageous pro-democracy reform' (Gleeson et al. 2012, p.124) that ensured representation and leadership at both a local and metropolitan level.

Following the Green Paper consultation, a White Paper was published in March 1998 and informed a £1.5 million referendum held in May 1998. The referendum confirmed 72 percent support for the London government proposal – although with a low 34 percent turnout (Travers 2004). In November 1998 the *Greater London Authority Bill* was introduced into Parliament and proposed a directly elected Mayor and an Assembly of 25 full time and paid members (Travers 2004). The GLA model was designed to avoid the same political challenges that the GLC created for the Thatcher Government (Gordon 2016a) as 'Blair was terrified of recreating the GLC' (Livingstone 2011, p.379). The Assembly consisted of fourteen members elected in constituencies, plus another eleven as London-wide members – a deliberate structure to create 'a new style of non-confrontational politics in London' (Department of Environment 1998, paragraph 4.6). Each elector in London would have four votes: a first and a second preference for the Mayor, plus a constituency and London-wide vote for the Assembly. The *Greater London Authority Bill* was the longest since the *India Act 1935* and contained 425 clauses (Travers 2004). It was a creature of New Labour and contained confusion about a desire to devolve and a desire to control (Travers 2004). It was amended 1,392 times during its passage through Parliament, demonstrating 'how little planning had gone into the mayoralty' (Livingstone 2011, p.383-84). Nevertheless, the Act was given Royal Assent in November 1999.



*Figure 51 The GLA structure and functional bodies
(Department of Environment 1998)*

5.6 Leading the Greater London Authority

The GLA was created on 1 January 2000 with strategic planning responsibilities for London and responsibility for Transport for London (TfL), led initially by independent, Labor aligned Ken Livingstone (2000-2008), then by Conservative Boris Johnson (2008-2016) and today by Labour's Sadiq Khan (2016-). GLA elections are held in the first week of May every four years. The most recent elections took place on 5 May 2016. Despite differences in political backgrounds of the succession of Mayors, the GLA direction has remained consistent in broad strategic direction. The inaugural Mayors' Transport Strategy was prepared in 2001 in concert with an economic development strategy and land use strategy – named the London Plan by inaugural Mayor Ken Livingstone and retained by successors (Stanley 2015). Gordon suggests the succession of Mayors, and their sequence of London Plans since 2000, has 'outdone in efficiency and intelligibility the record of other peacetime London administrators' (Gordon 2016a, p.44) and TfL had made major progress in integrating the system, and after decades of central government indecision and was now implementing £15 billion Crossrail;

a project that had been on hold for 40 years (Livingstone 2016). The Crossrail Bill moved through the Parliament without serious opposition and received Royal Assent in July 2008 (Schabas 2017).

Schabas (2017) attributes this success to advocacy by the Mayor of London and strong support from both Canary Wharf developers and the London business community.

The GLA model is akin to the Mayor as a Chief Executive, unlike at the GLC where the Mayor would 'spend all day in County Hall as GLC Leader managing the Labour Group and dealing with outside organisations, building alliances around specific issues' (Livingstone 2011, p.428). Under the Act, the Mayor must hold two public People's Question Time events per year; and Mayor's Question Time, in front of the Assembly, must take place ten times a year (House of Commons Library 2017). These opportunities allow the Assembly to ask pre-submitted questions to the Mayor, with the possibility of follow-up (unscripted) exchanges. The Assembly is an important check and balance against the Mayor's authority. One weakness of the Assembly model is that 'for most politicians being a scrutineer, and little more, is not attractive – politicians want to do something' (Travers 2004, p.117). In response, Assembly members are also appointed to the Transport for London, police and fire Boards.

5.7 Transport for London

Transport for London (TfL) brought together thirteen transport bodies and gave the Mayor the power to appoint and remove members of the Board and set its policies (Livingstone 2011).

Livingstone did things differently. Following his election, Livingstone recalls advice from Margaret Thatcher when she said 'stick to your guns. Everyone will be trying to tell you to do something else, but you must keep your resolve' (Livingstone 2011, p.422). For Livingstone, politics was a 'marathon rather than a sprint' (Livingstone 1987, p.261) and he was increasingly worried that he could not deliver on expectations (Livingstone 2011). As a Mayor without the support of a party machine, Livingstone acknowledged his vulnerability and the need for consensus from all parties. Accordingly,

he proposed a role in the new administration for each of the defeated Mayoral candidates, as 'there was a degree of mutual respect' between the candidates who all shared the view 'I want London to be a better city' (Interview: LDB):

- Offering Graham Tope (leader of the Liberal-Democrats) the role of Chair London Fire and Emergency Planning Authority, which he declined (Livingstone 2011);
- Appointing Steve Norris (Conservative Mayoral candidate) and Susan Kramer (Liberal-Democrat Mayoral candidate) a role on the Board of TfL (Livingstone 2011).

This 'grand-coalition' of diverse interests (Travers 2004, p.91) was in addition to a range of experts asked to join the Board of TfL, including business leaders (David Quarmby), Heathrow airport operator (Mike Hodgkinson), trade unionists (Jimmy Knapp) and academics from Imperial College (Stephen Glaister) and University of Westminster (Rob Lane). This was described as the 'big tent' approach and helped soften the 'radical, left-wing agenda' that marked Livingstone's past at the GLC in the 1980s (Travers 2004, p.91-92). An international search was undertaken to find a Transport Commissioner. Livingstone found Robert Kiley, a one-time CIA officer who had been Chairman and Chief Executive of New York's Metropolitan Transportation Authority in the 1980s and early 1990s. Kiley had transformed New York's subway system from 'a nightmare of graffiti and crime' into a relatively modern system (Travers 2004, p.92). 'Ken realised the importance of the post. It was a very very big job to be done – it was not a political appointment at all. He just wanted the best person to run a very complicated system' (Interview: LEA) and 'when the post was advertised, Ken said in public, that he was determined to get the best person in the world' (Interview: LEA). This was a new experience for London's staid transport bureaucracy, 'the idea of recruiting across the world, for the TfL Commissioner was really quite unusual and unique in history' (Interview: LEA). Combined, the Board and executive appointments neutralised transport politics in London. In addition, GLA and TfL Board meetings were public forums under the 1999 Act and the Mayor and assembly agreed that 'openness should be achieved wherever possible' (Travers 2004, p.94). In contrast to New Labour which sought to shut down and stifle debate, with one-on-one meetings, the way Livingstone

operated the GLC and TfL was to encourage 'really good debate by very bright people' (Livingstone 2016, p.52).

Recruiting Bob Kiley from New York to run London's transport system, he became the 'highest paid public servant in Britain by a mile' (Livingstone 2011, p.440) and took the role on the proviso he could bring 'half a dozen people from America to help him get control of the TfL bureaucracy' (Livingstone 2011, p.441). Livingstone developed a very close relationship to Kiley, 'closer than any other official' (Livingstone 2011, p.442) and turned 'TfL into the most effective service I have ever dealt with' (Livingstone 2011, p.551). 'Kiley was brilliant and whilst he was regarded as rather right wing as a former CIA chief, having watched Ken at close quarters, he was a very good administrator and let Bob get on with it, and do the business, whilst Ken ran the Board Meetings and everyone got their say' (Interview: LEA). When Livingstone lost the Mayoralty to Boris Johnson, his advice was 'the TfL team are the best transport officials in the world' (Livingstone 2011, p.632). Schabas (2017, p.246) affirms this view and under Livingstone's leadership 'TfL created one of the most professional transport planning teams in the world'. The transition from Livingstone to Johnson confirmed that because the structures and processes were not dismantled – 'we got it right' (Livingstone 2016, p.50). In addition, all Mayors of London have supported and chaired TfL, which is allowed for under the legislation, but it is not a requirement. As Mees admits, there is no single correct answer to the question of 'who should be in charge?' but there is a universal principle that a public body must control tactical planning and incentives for sustainable transport must be complemented by disincentives for the automobile (Mees 2009b). On this assessment, TfL has got it right, both with public control of tactical planning through a strong authoritative institution created with a public mandate, incentivising sustainable transport through programs such as the 'Cycle Superhighways', Healthy Streets and the introduction of the symbolic congestion charging to discourage auto travel (Schabas 2017).

5.8 Livingstone's London

Charismatic leadership is an important feature in the London case study. Firstly, with Steve Norris as Minister for Transport in London, who acknowledged the problem of transport planning and governance, who became a Conservative Party flagbearer for reform and their unsuccessful candidate for GLA Mayor, and most significantly Ken Livingstone as the persistent and determined campaigner for metropolitan governance in London. Another charismatic leader, Margaret Thatcher, provided the platform for Livingstone's elevation to GLA Mayor in 2000, and his transformation from a 'left wing nut, into a folk hero' (Ted Heath quoted in Livingstone 2016, p.27). The persistent nature of Livingstone was also the result of a lifelong friction with other charismatic leaders, from his earliest beginnings with 'mediocre Councillors at Lambeth Council' (Livingstone 1987, p.15) to Prime Minister Tony Blair: 'If my enemies had ignored me, no one would have ever heard of me. I was turned into a star by Thatcher and then revived by Blair' (Livingstone 2016, p.31). The result of the 'relentless attacks by powerful national political leaders had the effect of turning the victim into a martyr' (Travers 2004, p.74). Livingstone's decision to stand up to the politicians is part of the success of the London case study, from Thatcher's decision to abolish the GLC in 1986 to Blair's attempt in 2000 to engineer a Labour Party preselection system that excluded Livingstone as Mayoral candidate (Travers 2004).

On 4 May 2000 Livingstone was elected with 39 percent of the popular vote, his nearest rival Conservative candidate Steve Norris received 27 percent and the Labour candidate received 13 percent (House of Commons 2000). This was vindication of a career politician who refused to accept the business as usual model of politics. It was also an indication of growing disillusionment with the Blair Government's direction (King 2002). Livingstone's sense of joy was evident in his first words after the GLA result: 'As I was saying before I was so rudely interrupted fourteen years ago' (Waugh and Grice 2000).



*Figure 52 Election of Ken Livingstone as Mayor of London, 2000
(Evening Standard 2000)*

Livingstone's election to GLA Mayor in 2000 provoked a 'splenetic response' from all sections of government (Travers 2004, p.71). His career had been peppered with criticism of both the public service and the political classes. Livingstone had a strong view of the 'monopolising transport bureaucrats' and promised to 'sack the dullards and bring in new management' (Livingstone 2011, p.439). This was indicative of the need for root and branch reform of a governance system that was failing London, a system that perpetuated a 'long-standing myth' of an impartial public service but had rather delivered a 'civil service determined not just to avoid taking risks but avoid making any change at all' (Livingstone 2011, p.663).

Livingstone was a fierce critic of Public-Private-Partnerships, describing these as 'a nightmare of complexity' that would fill two four-drawer filing cabinets (Livingstone 2016, p.36). Livingstone was critical of the public service who often lied to stop projects and created an 'endless stream of red boxes' just to keep Ministers busy (Livingstone 2011, p.665). Livingstone recounted a period in the

1980s when he had a desire for a 'full modernisation programme' for public housing and encountered 'deliberate sabotage' from the public service (Livingstone 1987, p.97). Livingstone also attacked the political classes recalling a quote from Labour MP Len Duvall 'there's two types of politician: those who want to do something and those who want to be something' (Livingstone 2011, p.426). Livingstone's criticism of the political classes were evident in his early career at Lambeth Council, which he described as 'a quiet backwater of local government where the leadership was never challenged' and a place where 'a group of mediocre councillors were treated as lobby fodder' and 'if they did as they were told and did not cause trouble, they might after ten or fifteen years' loyal service, be rewarded with a year as Mayor and enjoy all the job's little perks' (Livingstone 1987, p.15). Livingstone (2011, p.171) had a stubbornness in his world-view that meant he resisted 'behind the scenes manoeuvring' that is so common amongst modern politicians. Livingstone was a staunch critic of New Labour and the Blair Government's spin doctors and 'control freakery' (Livingstone 2011, p.400), phrases indissolubly linked with New Labour (King 2002). At the GLC, Livingstone was viewed as a 'troublesome little bastard' (Livingstone 1987, p.47) and he was first to admit to having an 'intemperate tongue and pen' often aimed at colleagues on the Labour side (Livingstone 1987, p.82). Livingstone was not one to abide by New Labour dictum of being 'on message' and 'singing from the same hymn sheet' (King 2002, p.30).

Livingstone attributed his success as being 'open to new ideas', whereas for most politicians 'it's a matter of faith and if the facts don't conform to their preconceptions they tend to ignore them' (Livingstone 2016, p.4). Livingstone was never going to be ignored, his career was peppered by very public debates and 'he fought his way back into the race because of the power of his ideas' (Ed Milliband quoted in Livingstone 2016, p.89). Despite describing Livingstone's dogmatic socialism as 'incoherent and unworkable' (Norris 1996, p.43), Norris was also prepared to speak one's mind, to say the unsayable and to challenge conventional orthodoxies' (Norris 1996, p.93). Both Norris and Livingstone also shared the cruel reality of modern machine politics that 'you will always be forgiven

if you are wrong, but never if you have the temerity to be right' (Norris 1996, p.93). Norris remarked Livingstone was 'personally brave, being prepared to argue views which are unpopular simply because he believes strongly in what he is saying' and 'expounded his views with passion and sincerity' (Norris 1996, p.97).

Livingstone described his political career as 'a workaholic activist, putting almost everything second to the pursuit of political change' (Livingstone 2011, p.318). Livingstone identified 'every society is divided by those with wealth and power and those without' (Livingstone 2011, p.659) and that 'each generation in turn is seduced by leaders who promise so much and deliver so little, creating a cynicism which destroys the hope that parties can transform society' (2011, p.34). Livingstone felt 'nothing but contempt for the majority of Labour Group who had thrown away the most important opportunity of their lives to achieve real and positive improvements for Londoners' (Livingstone 1987, p.75). Livingstone was an ambitious radical who seized the moments in power because 'in the past, Labour governments have had power in their hands and declined to use it, leaving office with the balance of wealth and power in society unchanged' (Livingstone 1987, p.343). Having experienced thirteen years of Blair and Brown Government, and describing them as 'Labour's greatest lost opportunity' (Livingstone 2011, p.662), Livingstone was determined to make the GLA a success. Earlier in the 1980s Livingstone described Labour as 'unimaginative, cautious and comatose' (Livingstone 1987, p.85), later he described New Labour as a 'disgrace to democracy' (Livingstone 2016, p.112). Livingstone as Mayor surprised many pundits including Conservative candidate Steve Norris who initially claimed 'he would be a disaster' (Livingstone 2011, p.410). The persistence of Livingstone meant that he would return and the resilience of Livingstone meant that he would run against *his* own party to become London's first elected Mayor. His views on political power meant that he would leave a significant legacy that would survive the test of time.

5.9 Catalyst for Metropolitan Government

Metropolitan government in London was restored in 2000 as the city became 'ungovernable' (Travers 2004). Today, London is a city of over 8 million, Europe's fourth largest city (European Union 2016), and is anticipated to accommodate 9.8 million residents by 2025 (Office for National Statistics 2016). Since the 1880s there have been five different systems of metropolitan government in London: Metropolitan Board of Works (1885-1899), London County Council (1889-1965), Greater London Council (1965-1986), a balkanised city-wide system of government (1986-2000), and Greater London Authority (since 2000). Travers (2004) argues the regularity with which London's government is reorganised suggests there is something unusual about the pressures that affect successive systems and the difficulty of governing a complex city. The current London governance framework recognises that London lacked a voice following the abandonment of metropolitan government in 1986, but it has been nuanced so that its voice does not pose a threat to central government.

A recurring theme identified through this research is the long history of metropolitan governance in London (interviews: LBD, LGH, LEA, LDB and LHC¹) – this extends beyond the 1986 decision to abandon metropolitan governance (although this is an important moment) to the Victorian age of Bazalgette, who was instrumental as a civil servant and engineer making his radical scheme possible. The *Journal of Medical Biography* noted that, whilst Bazalgette was not medically qualified, his contributions made a 'colossal impact (probably greater than any other person in history) to the state of health in Victorian London' (Cook 1999, p.23). Whilst Bazalgette was chiefly an engineer and civil servant – famous for his interceptor sewers and creation of the Embankment and bridges over the River Thames – it was Bazalgette's governance structures and administration of London which has contributed to the current practices with the GLA and Transport for London.

¹ As discussed in Chapter 3, the interview participants are identified in this thesis via a randomised letter combination, with the first initial of 'L' or 'M' indicating the data was collected in either London or Melbourne.

One interview participant noted 'London could not function without a metropolitan governance system' (interview: LGH), there was a 'vacuum post the Greater London Council' (interview: LCE) created from a complicated history of private transport, nationalised transport and privatisation (interview: LEA). The role of metropolitan government was radicalised with the arrival of Ken Livingstone to the GLC as Mayor in 1981 where 'Red Ken was regarded as particularly left wing, and Mrs Thatcher was particularly right wing, creating a lot of tension' (interview: LEA). Whilst the GLC wound up in 1986, their transport powers were removed in 1984 when the Thatcher government created London Regional Transport Board to take ownership of all the transport assets, effectively nationalising the system (Interview: LEA). Abolition of the GLC created a lot of ill will amongst the public, who resented the dissolution of a democratically elected metropolitan government authority (Interview: LEA). One participant suggested it was right for Thatcher to abolish the GLC in 1986 as 'under Ken it had forgotten what it was there for, it had more policy on Northern Ireland and Nicaragua than it had on housing in Hackney' (Interview: LDB); however 'the mistake Thatcher made was leaving a void, an assumption that the boroughs could talk to each other, but they didn't, and they never will' (Interview: LDB). When successor to Margaret Thatcher, John Major, became Prime Minister he established a Minister for London, and a Minister for Transport in London 'as a nod that there was a need for a wider body, that there was a lack of strategic authority' (Interview: LDB).

Slowly through the 1990s there was a growing understanding that 'London needed to recreate something, not the GLC, but a pretty thin authority, with some very clear remits, to do with transport, housing and planning and economic regeneration' (Interview: LDB). One detrimental element of this void was 'a lack of accountability' (Interview: LCE) and 'transport was effectively a politics free zone, in the sense that the transport politics involved the government of the day defending what it was spending, the opposition saying you are not spending enough' (Interview: LDB). The debate was not willing to take London forward and it began to affect the economic performance of the city. During this time 'there was no coherent transport planning for London – an

unsustainable period of paralysis' (Interview: LGH). Another participant noted 'nothing happened, very little was ever spent, this pleased Treasury but not Londoners' (Interview: LDB). Through the 1990s a 'consensus was reached that fundamentally London was not working' (Interview: LBD). The 1997 election of Labor Prime Minister Tony Blair provided the mandate to restore metropolitan government to London.

5.10 Greater London Authority and Transport for London Achievements

There have been three Mayors of London under the GLA structure, and they have generally been viewed as successful (Interviews: LBD, LEA, LDB, LGH, LCE). Some of the 'radical reforms' have included the Congestion Charge (refer Figure 53), Oyster, London Summer Olympics, long term Spatial Land Use Plans, Healthy Streets program (refer Figure 54), Cycle Superhighways (refer Figure 55) and an ambitious Transport Strategy that sets a 2041 target of 80 percent of trips in London by walking, cycling and public transport, up from 64 percent in 2015 (Transport for London 2017e). One of the long-term successes of the GLA model has been to provide a proper strategic view on issues that could not be resolved borough to borough (Interviews: LDB, LGH, LEA), such as improving London's air quality (refer Figure 56). Whilst the Mayor provided a voice for London, the 'real issue was London had no serious integrated transport policy, with 33 boroughs, no serious housing policy, one police force but no single point of contact' (Interview: LDB). The GLA model allows the Mayor to do things at a strategic level and influence the longer-term nature of transport planning (Interview: LGH). With the change in Mayoralty from Labour to Conservative to Labour there has 'not been massive change, there have been some shifts, but in general transport has been agreed upon across the political spectrum' (Interview: LDB), noting that the bike hire scheme proposed by Livingstone was delivered by Johnson and is colloquially known as the 'Boris Bike' (Interview: LDB).

The long-term nature of transport decisions means there is a need to develop greater consensus and bipartisan approach to transport planning (Interview: LHC). One of the difficulties in London was

described as the 'Bickering Boroughs' who cannot plan beyond borough boundaries (Interviews: LBD, LGH, LFG), who have 'always been very partisan and difficult to work with' (Interview: LBD). Another participant commented that the Mayor needs more powers to undertake improvements to bus routes, Cycle Superhighways and on street parking (Interview: LGH). Another concern related to the 'very partial and patchy' improvements to cycling (Interview: LEA), however the Transport Strategy provided a more coherent framework than any previous plan (Interview: LDB). The GLA legislation requires the preparation of a Transport Strategy and a Spatial Development Strategy (a Land Use Plan) which London 'never had before, but which central government had done bits and bobs. It was very ad hoc and would change with governments' (Interview: LEA). The need to undertake a plan was cited as very important, 'it was not just about running trains, it was about having a plan, a land use plan, and a transport plan that goes with it' (Interview: LEA).

Transport for London has introduced a central traffic control centre which means 'policing and traffic control is more integrated, partly because of terrorism, but also for managing traffic incidents' (Interview: LEA). Transport for London does not control the National Railway, which provides public transport for most commuters coming into London, with services franchised by the UK Government, meaning 'if you go to Waterloo, or Euston, or Victoria, all those trains arriving are not under the control of the Mayor at all' (Interview: LEA). This was highlighted by several interview participants as a future reform (Interviews: LFG, LBD, LEA). One participant identified this was a long-standing problem, with London Regional Transport in the 1980s having provisions in the legislation to take over some of the rail services, which didn't happen (Interview: LEA). Transport for London has successfully assumed responsibility for the Overground, which was a British Rail Service and recent investments have improved services (Interview: LFG).

London's Congestion Charge was introduced on 17 February 2003, as a £5 charge per vehicle per day for all trips between 7am and 6.30pm on weekdays, irrespective of the number of times a vehicle enters the cordon. Discounts of 90 percent are applied to residents within the zone.

In the first year of operation, there was a 30 percent reduction in car traffic (Transport for London 2007), substantially more than the 10 to 15 percent reduction anticipated (Transport for London 2003).

In July 2005 the charge increased to £8, however the high cost of collection resulted in a small net surplus of only £120 million in 2006/07 (White 2008).

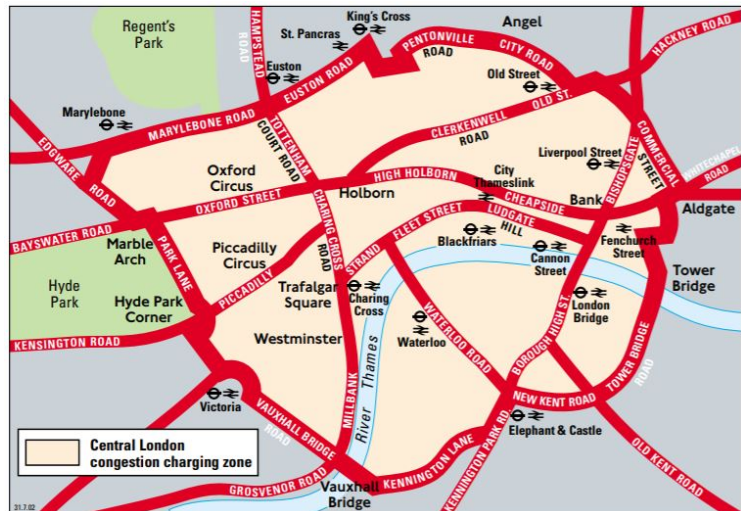
In February 2007 the original scheme was extended west, almost doubling in size. It was also announced that the charge would cease at 6pm instead of 6.30pm.

In December 2010 the Western Extension Zone was removed by Mayor Boris Johnson.

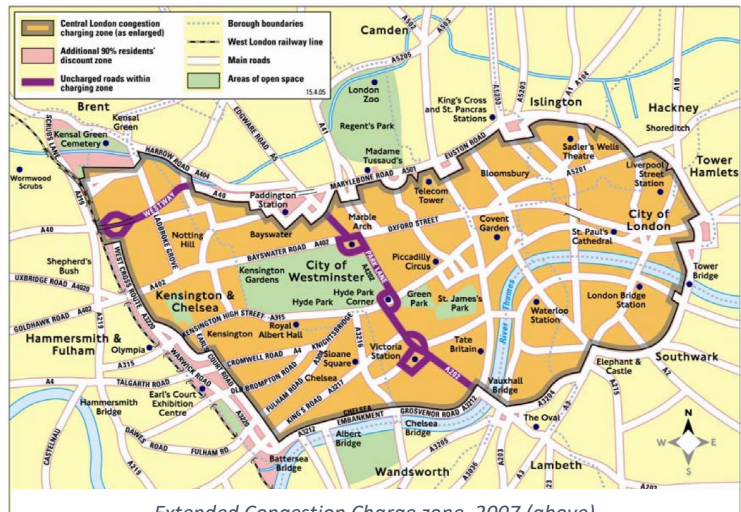
After ten years of operation, in 2014 Transport for London reported traffic entering the original charging zone has remained stable at 27 percent lower than pre-charging conditions in 2002 – equivalent to nearly 80,000 fewer cars entering the original charging zone each day (Transport for London 2014).

In 2016 the charge increased to £11.50 per vehicle per day and generated a net surplus of £250 million in 2016/17 (Transport for London 2017a).

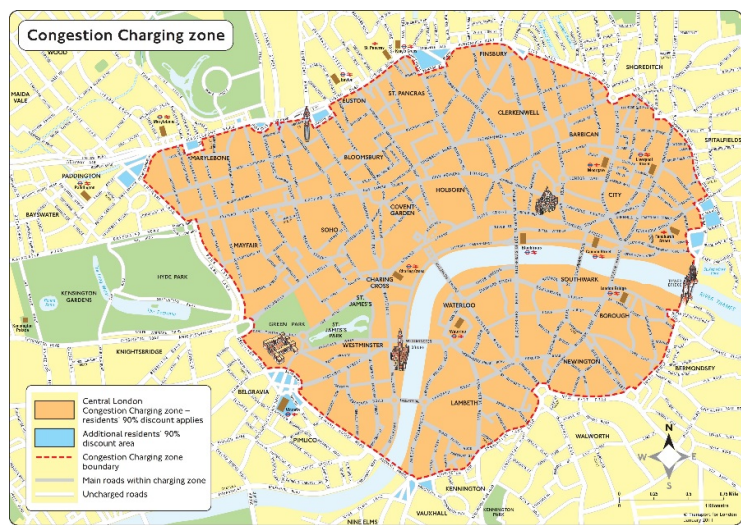
Cycling levels within the congestion charging zone have increased by 66 percent since the introduction of the scheme with revenues collected from the charge being spent on transport across London, including the Cycle Superhighways program (Transport for London 2014).



Original Congestion Charge zone, 2003 (above)



Extended Congestion Charge zone, 2007 (above)



Current Congestion Charge zone, 2018 (above)

Figure 53 London's Congestion Charge zone

London has a strong focus on creating 'Healthy Streets' (Transport for London 2017c), this is the penultimate stage of Peter Jones' three stages of cities (Jones 2014): first stage build roads, second stage invest in public transport, third stage create great streets (Interview: LBD).

London's 'Healthy Streets' is a response to the move away from predict and provide and an acceptance and understanding of induced demand and the short-term nature of road capacity expansion (Interview: LDB). Prior to the 1990s it was exceptional to question government road building capacity, predict and provide was business as usual, 'no one ever questioned why building a road was the right answer' (Interview: LDB), however when funds became scarce, questions arose about what to spend the money on. This occurred in the early 1990s when a proposal was submitted to expand the M25, the 188 km London Orbital Motorway that encircles Greater London. This proposal was to widen a section from Junction 15 to Junction 27 (9am-1pm on the clock face of the M25) from 8 lanes and add a further three lanes in each direction as 'collector distributors'. A decade earlier the Thatcher Government had expanded the M25 from 6 lanes to 8 lanes. There was a realisation that this capacity would only be available for ten years, and 'it makes no sense to continually expand, where would this end' (Interview: LDB). The idea that predict and provide could solve all London's transport problems 'was a difficult proposition to continue in terms of land take, construction cost, let alone the environmental issues of pollution' (Interview: LDB).

The 1960s trend of grade separation and motorway construction has disappeared in London, replaced by projects such as Exhibition Street 'naked street' and Oxford Street pedestrianisation (Interviews: LFG, LBD).

The Oxford Street pedestrianisation scheme proposes to reroute buses, convert buses to low emission vehicles and radically improve the quality of the public realm. This project was initiated by Mayor Livingstone as pedestrian-only pre-Christmas shopping trial in 2005. In December 2015 Mayor Johnston announced Transport for London and Westminster City Council would examine a range of options to improve the Oxford Street environment for pedestrians following completion of Crossrail (Johnson 2015).

In April 2017, Mayor Khan led these Transport for London and the City of Westminster consultations on Oxford Street and 11,953 responses were received – although 4,461 raised identical issues generated through a campaign organised by Living Streets (Transport for London 2017d). The consultation report was made publicly available in October 2017 and contained strong support for changes to Oxford Street.

The fastest bus journey on Oxford Street is currently 4.6mph on weekdays, compared to the walking pace of 3.1mph (British Broadcasting Corporation 2016a) and Mayor Sadiq Khan commented 'Oxford Street on some days of the year is the most polluted street in the world' – true of nitrogen dioxide pollution in 2013 (British Broadcasting Corporation 2016b).



Transport for London and City of Westminster consultation for Oxford Street, 2017 (above)

Figure 54 London's Healthy Streets

Since the term of Mayor Boris Johnson, there has been a significant conversion of road space in London to support cycling schemes. Johnson, a keen cyclist, doubled London's cycling budget – to a total of almost £400m over the three years, two-and-a-half times more than previously planned (Greater London Authority 2013). This funding was a deliberate element of the 'Mayor's Vision for Cycling in London' (Greater London Authority 2013) which set an 'ambitious programme of work to deliver a step-change in the quality of provision for London's cyclists' and would 'become the ultimate symbol of how we are claiming central London for the bike'

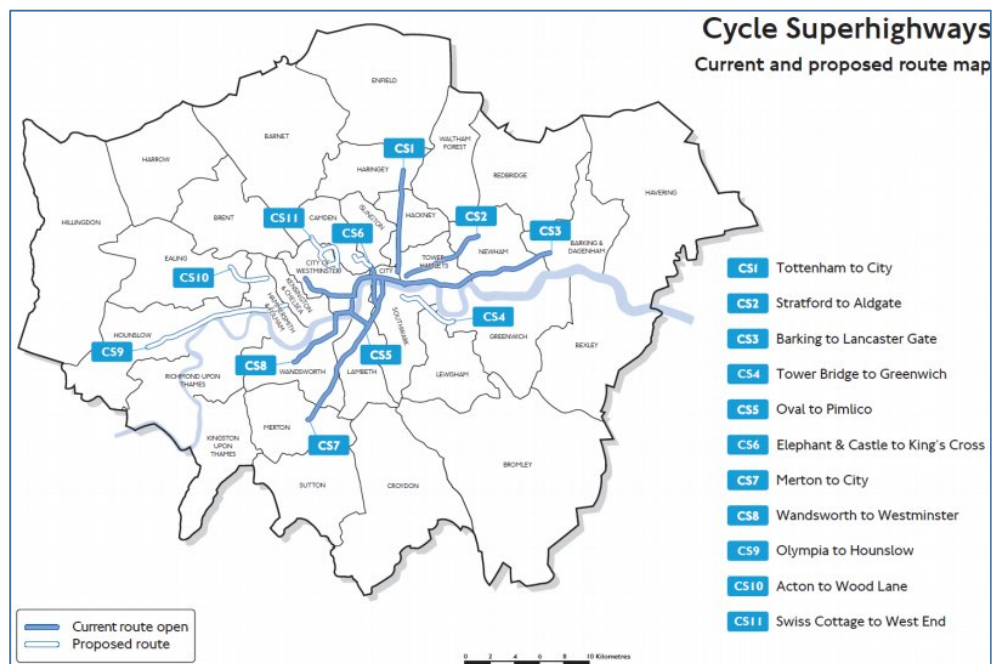


(Johnson quoted in Greater London Authority 2013, p.5).

East West Cycle Superhighway, 2017 (above)

These cycling schemes have attracted significant criticism (Interview: LDB) and when appraised by Transport for London revealed a 'terrible rate of return' (Interview: LBD). Transport for London assessed the East West Cycle Superhighway project against the standard project Business Case Development Manual and noted 'several important benefits arising from Cycle Superhighways cannot be monetised so cannot be captured in the quantified benefit to cost ratio (BCR)' (Transport for London 2015b, p.56). The result of the standardised BCR assessment delivered a negative return for the Cycle Superhighway scheme (Transport for London 2015b).

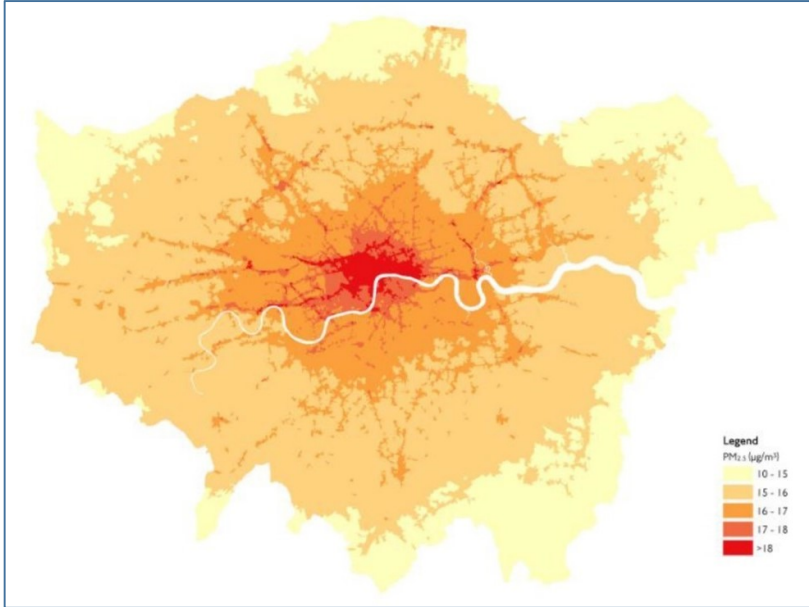
Despite this negative return, Transport for London concluded that the scheme is an 'essential part of the wider cycling network and re-allocates space from motorised modes to cycling, allowing more people to travel on the system as a whole' (Transport for London 2015b, p.65).



Plan for London's Cycle Superhighway, 2018 (above)

Figure 55 London's Cycle Superhighways

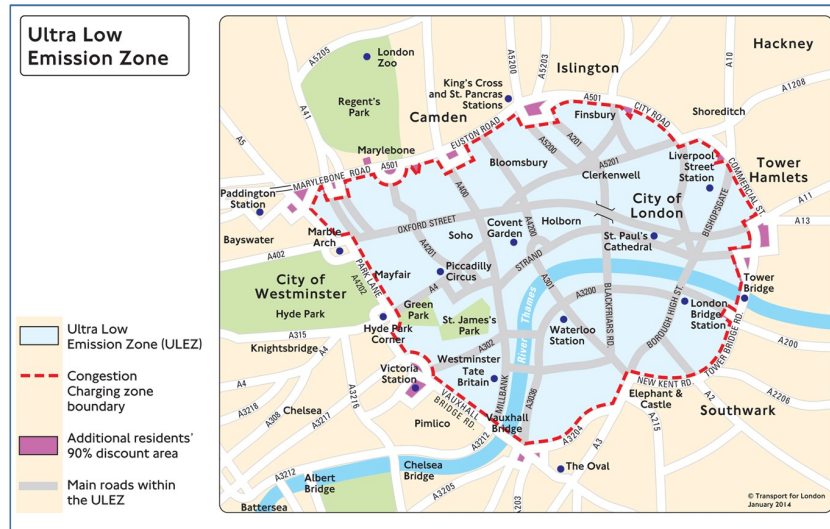
In 2015 Kings College London completed a report for Transport for London and the Greater London Authority to estimate the mortality burden of 2010 concentrations of London's fine air particles (PM_{2.5}). PM_{2.5}, also known as fine particulate matter, is the generic term used to refer to solid particles and liquid droplets with a diameter less than 2.5 micrometres across (one 400th of a millimetre), some PM_{2.5} is naturally occurring, such as dust and sea salt, and some is manmade, such as particulates formed in combustion processes, particularly diesel fuels which is common in London (Transport for London 2017g).



London's annual mean PM₂ concentrations, 2017 (above)

The final report found 9,416 deaths every year in London due to long-term exposure to air pollution, more than twice as many as previously thought – with an estimated health related economic cost of between £1.4 billion to £3.7 billion (Walton et al. 2015). In October 2017 Transport for London released revised air quality data that revealed 9 in 10 Londoners live in areas where superfine PM_{2.5} particles exceed World Health Organisation guidelines by more than 50 percent (Transport for London 2017g). World Health Organisation guidelines stipulate PM_{2.5} particles must not exceed 10 micrograms per cubic metre of air.

Short and long-term exposure to PM_{2.5} increases the risk of mortality from respiratory and cardiovascular diseases and increased hospital admissions. The Mayor of London introduced a toxicity charge (T-Charge) on 23 October 2017 to remove older, more polluting vehicles from central London, and committed to an Ultra-Low Emission Zone which commences in September 2020 (Transport for London 2017h).



London's proposed Ultra Low Emission Zone (above)

In March 2017 London's first Low Emissions Zone commenced in Putney where 145 diesel buses, operating on seven different routes, were replaced by ultra-low emission Euro VI buses. In 2016 Putney High Street exceeded hourly legal levels of nitrogen dioxide on 1,248 occasions – European Union standards stipulate these levels must not be exceeded 18 times in a year. Monitoring results collected since the introduction of the low emission bus fleet recorded only six exceedances of nitrogen dioxide between February and June 2017 compared to 742 exceedances during the same six months in 2016 (Transport for London 2017c). The Mayor of London has eleven more Low Emissions Zones planned (Greater London Authority 2017c).

Figure 56 London's Air Quality

Transport for London has developed clear and consistent branding, leadership and messaging to provide a unified system for a city of 8 million (Interview: LFG) and provides greater integration of services (Interview: LCE). The introduction of 'spider bus routes', see Figure 58, has also provided a better user experience and the Overground is now shown on London Underground maps (Interview: LFG). There is also an accumulation of corporate knowledge within Transport for London, with detailed data presented to Board meetings and made publicly available (Interview: LEA). A comprehensive Commissioners Report is tabled at every Board meeting which details all aspects of day to day operation through to long term strategic planning, see Figure 57.



*Figure 57 Commissioners Report, 19 September 2017
(Transport for London 2017c)*

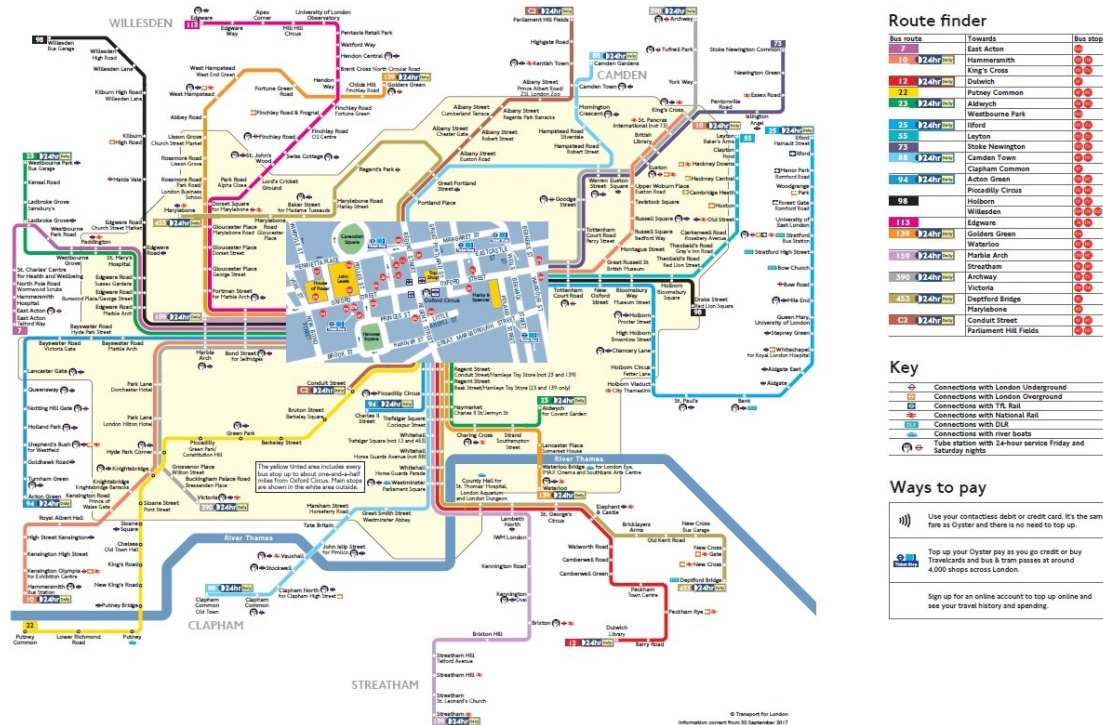


Figure 58 Spider bus route map for Oxford Street (Transport for London, 2018)

5.11 Transparency and accountability

One of the critical elements of a 'better' governance model is that of improved transparency of decision making. It can prevent corruption, contribute to legitimacy, enhance performance and promote principles of good government (Grimmelikhuijsen et al. 2013). The high levels of transparency exhibited by GLA Councillors meeting attendances, activities and expenditure is not new. In the 1980s Livingstone described how 'all GLC Councillors had to submit a detailed account of activities in order to claim our attendance allowance' (Livingstone 1987, p.164), which was then deposited for public inspection by any ratepayer. This was a result of the *Local Government (Access to Information) Act 1985*, which required publication of certain information to 'provide for greater public access to local authority meetings, reports and documents' (UK Parliament 1985, Chapter 43). Livingstone was a staunch defender of the public's right to criticise and for greater accountability in the face of bureaucratic obfuscation, recalling an example at Lambeth Council in the 1980s where 'faced with an increasingly well researched catalogue of council errors of policy and fact, the officer

leadership had two options: either it could learn from public criticism, correct its failings and then operate in a more participatory and efficient way; or it could seek to exclude and marginalise its critics' (Livingstone 1987, p.30). In almost all cases, and in Lambeth Council's example, the bureaucracy sided with the latter course of action. This outraged Livingstone and he describes how bureaucrats at the GLC in the 1980s were hostile to public disclosure, how politicians were routinely lied to by the civil service and provided an example where a staff member accessed files and discovered 'all the crap the government was telling you' (Livingstone 2016, p.13). This distrust was a direct consequence of a lack of transparency throughout earlier periods of governance.

In 1994 the Major Conservative Government adopted the *Code of Practice on Access to Government Information* as an alternative to a *Freedom of Information Act*. The Code sought to extend public access to official information, but awareness of the Code amongst officials was low (House of Commons Library 1997). It was not until 2000 that a *Freedom of Information Act* was passed by the United Kingdom Parliament. Victoria's *Freedom of Information Act 1982* was well ahead of its time in comparison (Victorian Parliament 1982). Today, the internet has created new opportunities for transparency in decision-making: information can be stored, retrieved and disseminated more easily. This is part of a new era of 'computer-mediated transparency' (Meijer 2009), an era where transparency creates a culture of openness in government that strengthens citizen trust (Hood 2006). Grimmelikhuijsen et al. (2013, p.583) contend that transparency may not improve citizens' opinions of government in the *short* term, as often it 'construes their government in a less competent light'. In the long term, Heald (2006) suggests transparency reduces government malfeasance through its 'sunshine' effect and has a positive effect on trust and accountability. Prat (2006, p.91) also acknowledges 'the more information about an agent's behaviour makes the agent more accountable', but more disclosure does not necessarily make the agent behave better. Increased transparency in government decision making will deliver a pathway towards inclusive,

prosperous and environmentally sustainable decisions that lead to an integration and sustainable transport system as required under the *Transport Integration Act*.

One of the common themes that emerged from the London interviews was that of transparency of decision-making and the public accountability associated with the GLA and Transport for London.

Interview LFG noted Westminster was 'designed for fighting' – the government on one side and the opposition on the other – with dispatch boxes located two sword-lengths apart demonstrating an adversarial arrangement (UK Parliament 2017), contrasted to the GLA, which is held in the transparent sphere of City Hall with members in a roundtable configuration (see Figures 59 and 60).



Figure 59 House of Commons, an adversarial decision-making institution
(UK Parliament 2017)



Figure 60 Greater London Assembly, a consensus focused decision-making institution
(Greater London Authority 2017a)



*Figure 61 London's City Hall
(personal photo)*

City Hall was deliberately designed as a model of democracy, accessibility and sustainability (Foster + Partners 2002). Foster + Partners also designed the new German Parliament, Reichstag, with similar features to London's City Hall (Foster + Partners 2017). London's City Hall is set amidst a plaza of public open space (more than half of the total site area is given over to public space). It is a highly public building, and seeks to bring visitors into close proximity to the workings of the democratic process (Foster + Partners 2002). The building is refreshing in an era of heightened security associated with recent terrorist incidents in London. When visitors arrive at City Hall they are greeted by the reception desk, and whilst all visitors must pass through security at the entrance (including metal detector and bag scan), once in, visitors are free to walk down the ramp to the lower ground floor, where a large aerial map of Greater London takes pride of place (see Figure 62). The GLA staff eat at the lower ground level restaurant called 'London's Café' mingling with the public and during Board meetings. At Transport for London Board meetings there are no physical barriers between the Board and the public, there is no visible security despite the heightened terror events and it would be entirely possible for a member of the public to meet and shake the hand of Mayor Sadiq Khan, see Figure 64.



*Figure 62 Greater London Authority map on lower ground floor, City Hall
(personal photo)*



*Figure 63 'London's Café' located on the lower ground level of City Hall
NB: Transport for London Board meeting held in meeting room located to the left-hand side of the photo
(personal photo)*



Figure 64 Transport for London Board Meeting and Public Gallery, September 2017
(personal photo)

The Board meetings of Transport for London and the GLA Assembly have full disclosure of comprehensive reports (see Figure 65). At the September 2017 Transport for London Board meeting, the full financial statements were released, including the Commissioners' remuneration report, which noted a performance bonus was refused following the November 2016 tram derailment (Transport for London 2017c). All reports include staff contact details (phone, email, title). Transport for London and GLA meetings are streamed live online, or available to watch later, with the records kept online indefinitely, with records available from 2000 (Transport for London 2017b). This is consistent with the 'no stopping rule' of managing wicked problems.



Figure 65 Transport for London Board Papers available for the public, September 2017
(personal photo)

A Board Effectiveness Review is undertaken every year to inform the operation of its decision-making arrangements and succession planning (Transport for London 2017c). In two years out of three, these are conducted internally by the Deputy Chair of the TfL Board and every third year by an external expert, appointed following an open competitive tender process (Transport for London 2015a). In 2015 the external review was undertaken by Deloitte LLP's specialist Board Advisory Team and was released publicly in December 2015 (Transport for London 2015a). In October 2015 Transport for London adopted a Transparency Strategy which stated a presumption that all of Transport for London information should be made publicly available, except in circumstances involving disproportionate cost, personal data or information which would harm its ability to maximise value for money for taxpayers (Transport for London 2016b). This Strategy was also subject to public consultation with 93 responses received. As a result, Transport for London proactively publishes an extensive range of datasets and information.

Transport for London publishes all expenses claimed by Chief Officers, including London's Transport Commissioner and expenditure on their use of mobile phones, published quarterly and available online (Transport for London 2016a) and the organisation chart discloses individual salaries of management from Mike Brown as Commissioner on £355,000 to the Programme Manager on £70,000 and includes previous years' organisational structures for historical reference, refer Figure 66 (Transport for London 2017f). The improved transparency and accountability of decision-making is one of the key benefits identified by participants involved in the interviews (Interviews: LEA, LHC, LFG, LGH), with one commenting 'the public is more engaged about the GLA and Transport for London than at any time in history' (Interview: LHC).

Theories and Practice of Urban Transition: Melbourne's Wicked Transport Planning Environment

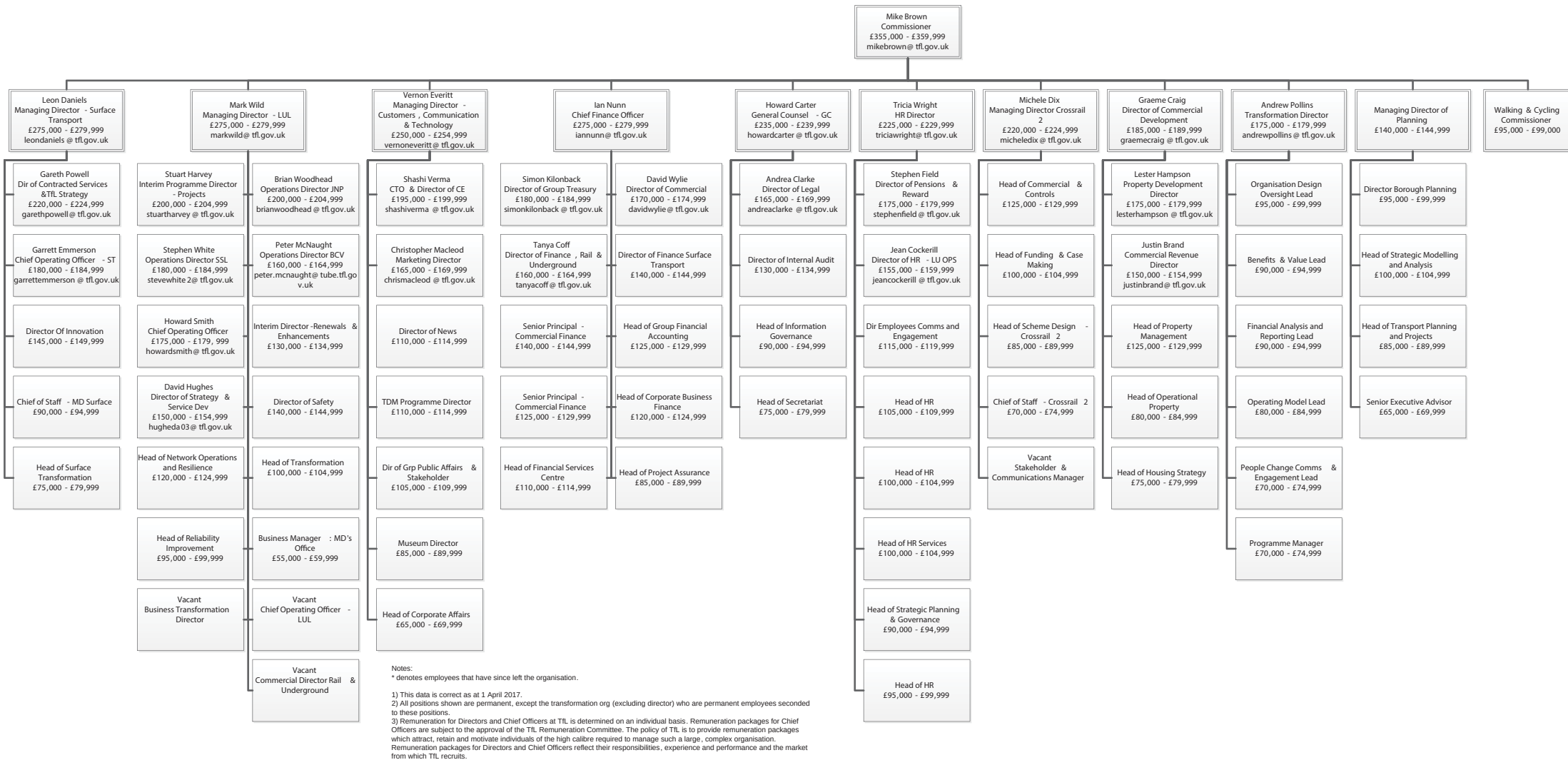


Figure 66 Transport for London Organisation Chart
2016-17 (Transport for London 2017f)

5.12 Centralised, Devolved Decision Making

The Greater London Authority Assembly model of 25 elected representatives was a deliberate attempt to 'get away from the adversarial regime of public inquiry, to one where there was a consensus approach' (Interview: LDB). In the past, public inquiries – described by Self as the 'judicialization of public inquiries' (1970) – would gather the interested parties, seek submissions and then the Department would 'knock over all opposition and get a project built' (Interview: LDB). The Assembly was an attempt to turn this around, to 'listen to what the community is saying and think about what they wanted to do – the department was not always right' (Interview: LDB). This has been reflected in practice. The proportional representation model of electing Members to the London Assembly is perceived to be a good model as it ensures a good mix of parties (Interviews: LBD, LFG) and the use of committees has also been effective (Interview: LFG).

One participant identified that the Assembly 'has not been very confrontational' (Interview: LEA) and suggested it was because of a serious flaw in the governance model: Transport for London is an executive body with the Mayor as Chair of the Assembly. The Mayor is accountable to the Assembly, but the Assembly is constitutionally very weak. The only formal power of the Assembly is to disallow the Mayor's budgets. One participant noted 'the Assembly model provides a nuclear power to destroy the budget, but otherwise it is just a scrutiny role' (Interview: LBD). The Assembly was described as a 'slightly odd body with not enough to do' (Interview: LGH). In practice, the Mayor has broadly ignored the Assembly (Interviews: LGH, LEA, LDB); the various Mayors 'have done what they think is right without having to account for the Assembly' (Interview: LEA). The Assembly 'snaps at the Mayor's heels' but the strong Mayor model means the 'Mayor can pretty much do as he likes' (Interview: LDB). One participant suggested the Mayor treated the Assembly with contempt and the model is redundant with radical change needed (Interview: LGH). Although not the London Assembly, at the Transport for London September 2017 Board meeting, Mayor Sadiq Khan encouraged open and transparent discussions, commenting that he expected Board members to

'challenge the Mayor' and mentioned 'the more Members are involved in decision-making the better' (Khan 2017). There also appeared to be honest discussion at the Board meeting and gave the appearance that Members were unlikely to have caucused prior to the meeting. The Assembly is an important accountability and representative feature of the London model. Although the directly elected Mayor may ignore the Assembly in practice, there is a clear requirement to reach consensus through deliberation and public transparency, which is not apparent in the Whitehall, or Victorian governance models.

6. Discussion

6.1 Introduction

This chapter draws on the theory from the literature review and the qualitative data presented in the previous London and Melbourne case studies to provide a discussion on some of the constraints and practices to transport planning decision making. These constraints reference the six elements of 'what is better?' and the systemic issues that reinforce the wickedness of transport planning decision making in the two case studies, i.e. that there is a 'no stopping rule' and that transport is unable to be 'fixed'. The chapter describes the specific constraints found in Melbourne and London including Public Private Partnerships which have become business as usual, the nature of mega-projects and their attraction to decision makers, and the desire for integrated transport outcomes with higher levels of public participation. The chapter concludes with a discussion on Melbourne's rapid population growth and how we can achieve 'better' outcomes and direct this growth towards the sort of city residents want. The literature and document review completed by this thesis suggests a strongly authorised independent institution is required to guide transport planning and guard against capture by vested interests who seek to capitalise on the ongoing political turmoil of transport planning. This chapter then leads into the conclusion and the key findings.

6.2 Public Private Partnerships

One of the most pervasive constraints found in London and Melbourne transport decision making has been the adoption of Public Private Partnerships as the preferred method for infrastructure finance. Whilst Public Private Partnerships are increasingly popular for governments unable or unwilling to finance public infrastructure the traditional way, through public-sector investment, they are also a paradox, in that they are vaguely defined, hotly disputed and poorly evaluated (Hodge 2006). In Victoria, privatisation of traditional public utilities has had many critics. Davidson (2016) identifies the 'boondoggle' of the largest reverse osmosis desalination plant in the world as typical of how taxpayer interests were secondary to the needs of the private sector. For the desalination plant,

the cost of water increased 320 percent to cover the \$640 million annual costs paid to the private consortium – without ordering a single drop of water.

Hodge (2006) suggests the Public Private Partnership method of project procurement lacks legitimacy in the eyes of citizens in whose name it is being employed. A 2004 Review of Victorian Public Private Partnerships, commissioned by the Victorian Government, found taxpayers had paid \$350 million more than needed for the eight projects reviewed (Fitzgerald 2004). The Melbourne CityLink project is the most profitable Public Private Partnership in the world, with toll charges that are at least three times the level they would have been if it had been entirely funded by government (Davidson 2014). City Link has been described as 'one of the worst deals any government anywhere has ever negotiated on behalf of its motorists' (Mayne 2014). Under the Concession Deed struck on 20 October 1995, CityLink is able to increase toll rates each year by 4.5 percent, or the inflation rate, whatever is greater (State of Victoria et al. 1995, Clause 2). Hodge (2006, p.327) speculates that a 'confluence of interests' of political actors, financiers, consulting firms, advisors, lobbyists and infrastructure companies means everyone is a beneficiary of Public Private Partnerships – except taxpayers, and as a result their legitimacy remains weak.

One concern flagged early in the West Gate Tunnel Transurban negotiations was the close relationships of its politically connected executives, including head of Transurban corporate affairs Alison Crosweller who was a former Chief of Staff to Premier Bracks, and Transurban head of public affairs Tim Salathiel, who was an adviser and Chief of Staff to Victorian Treasurer Tim Pallas, when Mr Pallas was Minister for Roads in the former Brumby Government (Millar and Schneiders 2016). Opposition Member of Parliament Bernie Finn described this as a 'buddy-buddy' relationship (Finn 2016) and, following contractual close, described it as 'very crook', 'despicable' and 'disgraceful' (Finn 2017a). In 2017 the Liberal Opposition called for an immediate probe into any deals being made between the Andrews Government and CityLink owner Transurban (Galloway and Masnauskas

2017); however this did not result in any investigation. John Laurie, the former chairman of the Melbourne City Link Authority who oversaw the development of CityLink, also called for an independent audit of the tollway before owner Transurban wins a lucrative contract extension (Dagge 2017). The Andrews Government has never responded to these criticisms and there appears to be a reluctance to review the existing CityLink concession. The Public Transport Users Association, in their submission to the 2017 Senate inquiry into toll roads, noted the 'significant financial contributions to political parties' (Public Transport Users Association 2017a, p.4) and the potential for political donations to influence government decisions. The Public Transport Users Association analysis of Transurban donations to the Labor Party and Coalition for the period 1999-2016 revealed \$416,442 was donated to Labor and \$350,055 to the Coalition (Public Transport Users Association 2017a). William McDougall identified that 'excessive corruption or undue influence of politicians is why the situation is getting worse' (McDougall 2017). It appears the public interest is no longer driving transport planning in Victoria despite community groups expressing the view 'we are mad as hell and we are not going to take it anymore' (Nathan 2017). Despite this anger, the Andrews Government pushed ahead and released the West Gate Tunnel contract on the last business day of 2017, described as a 'desperate attempt to hide the dud deal he has signed Victorians up to' (Hodgett 2017).

Hodson and Marvin (2010) identify the term 'neo-liberal urbanism' to describe the ties between the market as both the favoured mechanism for resource distribution and the arbiter of public opinion and preference. Gleeson and Beza (2014) suggest this system has been so successful it has displaced, if not extinguished, progressive ideology in public and political cultures – so much so it now appears that Margaret Thatcher's 'there is no alternative' phrase has been proven correct (Gleeson and Beza 2014). Australian Prime Minister Kevin Rudd's 2009 declaration of the 'end of neo-liberalism' (Rudd 2009) appears to be premature. Pusey (2008) argues our current generation of policy makers and officials have no idea how to design and implement collective solutions to the increasing array of

problems facing society. Pusey (2008) believes environmental threats will reanimate public interest in the complex problems and reauthorise state intervention. Low (2017b) suggests the Andrews Government is perpetuating the cycle of Transport Referendums through the commitment to West Gate Tunnel, North East Link and SkyRail, none of which have a mandate.

6.3 Mega Transport Projects

Another constraint found in London and Melbourne transport decision making has been the focus on mega transport projects to 'fix' congestion – the first element in the 'what is better?' model of this thesis. In Melbourne this has been witnessed through East West Link, North East Link, West Gate Tunnel, Metro Tunnel and most recently Suburban Rail Loop. Even the fifty level crossing removals have been packaged together as a bundle under a headline of the 'Big Build' (Victorian Government, 2018). Mees (2013) described East West Link as a 'mad scheme' promoted to 'fix' Melbourne's transport woes, which would further entrench congestion and the transport model that has created this situation. This 'fix it' model is based on premature project announcements, which the Grattan Institute found was the main source of project cost overruns, which have cost taxpayers \$28 billion more on transport infrastructure in the past fifteen years (Terrill 2016). Terrill (2016) suggests that to overcome this problem, governments should not be able to commit public money to a project until the project evaluation and the business case are tabled in Parliament.

It is increasingly difficult to move away from mega urban transport projects, to better manage society's wicked transport planning model, despite all evidence suggesting these projects are likely to fail – from social, economic and political perspectives. Part of their attraction lies in what Flyvbjerg (2017) identifies as the 'four sublimes' that drive megaproject development (see Table 3). Mega urban transport projects remain attractive due to these 'four sublimes', despite evidence showing otherwise. In the instance of Europe's largest mega project, Eurotunnel, capital costs were 80 percent higher than budget, revenues started at a dismal 10 percent of forecast, eventually

growing to half forecast and delivered an internal rate of return of -14.5 percent, equating to a \$17.8 billion loss (Flyvbjerg 2017). The Eurotunnel *detracted* from the economy instead of adding to it. The post project review of Eurotunnel concluded 'the British economy would have been better off had the Tunnel never been constructed, as the total resource cost outweighs the benefits generated' (Anguera 2006, p.291).

Type of sublime	Characteristic
Technological	The excitement of pushing the envelope for what is possible, the 'longer-taller-faster' type of projects
Political	The rapture of politicians in building monuments to themselves and their causes, and the visibility generated with the public and media
Economic	The delight of making money: trade unions, financiers, contractors, consultants, bankers, investors, landowners, lawyers, developers
Aesthetic	The pleasure designers and people who love good design get from building a large and iconic project

*Table 3 The 'four sublimines' of megaproject development
(adapted from Flyvbjerg 2017, p.6)*

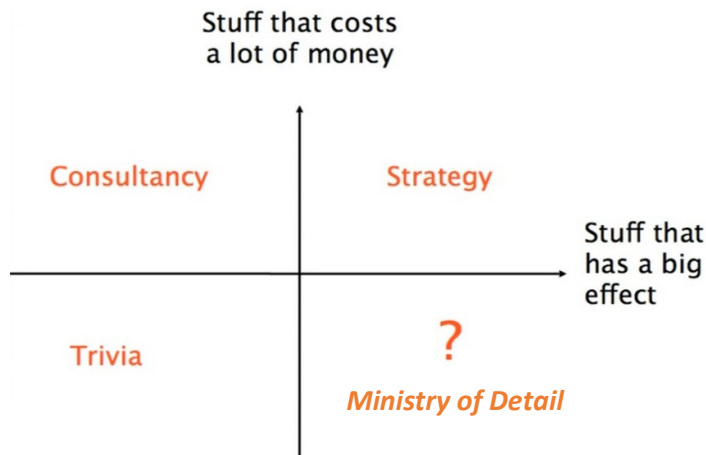
In the world of megaprojects, the front end planning is rushed and deficient, bad projects are not stopped, implementation phases and delays are long, costs soar and revenue realisation diminishes and recedes in the future – this is what Flyvbjerg identifies as the 'iron law of megaprojects' (Flyvbjerg 2014, p.9). In the case of mega projects, project proponents need to go slow at first during project planning, in order to run fast later during delivery – however the reality is often the opposite (Flyvbjerg 2017). Flyvbjerg identifies a 'mega project paradox' where demand for mega projects has never been greater, whilst the evidence from 90 years of megaprojects demonstrates poor performance that includes cost overruns, delays and benefit shortfalls (Flyvbjerg 2017). The reason we persist lies in the 'four sublimines' – these projects are innately attractive to short term thinking that is persuasive to both politicians and governments.

There are many beneficiaries from mega urban transport projects, for instance the West Gate Tunnel Environment Effects Statement (Western Distributor Authority 2017) identified nineteen

expert witnesses that would be called to defend the project (refer Appendix 5), in addition to the Senior Counsel representing the Planning Minister, Western Distributor Authority, local government, submitters and the Planning Panel itself (Western Distributor Authority 2017). On North East Link almost \$3 million was spent on consultants in its first three months (Galloway 2017). This is only a fraction of the initial \$35 million commitment towards the business case (Andrews 2016) which within three months had escalated to a commitment of \$100 million for critical design, planning, and preconstruction works (Andrews 2017a) and only months later was revealed the total project cost of \$16.5 billion (Andrews 2017b).

In contrast to mega projects, small changes can have exponentially large impacts. In transport this could be banning right turns in front of trams, removal of on street car parking to provide trams a separated right of way, or changes to taxation or regulations. In their submission to the West Gate Tunnel Environment Effects Statement, the Public Transport Users Association (2017b) set out a list of alternative measures that could be funded with the Andrews Government contribution of \$1.5 billion (see Appendix 6). Some of the alternative projects identified are not attractive to politicians; not beneficial to the army of vested interests; but more effective. Schumacher (1973) championed this 'small is beautiful' agenda. Lindblom (1959) also identified the process of 'muddling through' and 'disjointed incrementalism' (Lindblom 1979) as an alternative to 'bigger is better'. The use of incrementalism, or small changes with big impact, has been described as the 'butterfly effect' (Sutherland 2010) – a reference to chaos theory and the phenomenon of a small localised change in a complex system having large effects elsewhere. Sutherland (2010) developed a matrix to identify the need to 'sweat the small stuff', comprised of four quadrants, with two axes, a left-right showing the impact, and a top-bottom showing the cost (see Figure 67). Using this matrix, Sutherland creates a 'Ministry of Detail' where small nudges, and incremental changes have a big effect, but cost little money (Sutherland 2010). This was reflected in the UK Cameron Government decision to create a 'Behavioural Insights Team', known colloquially as the 'Nudge Unit', to develop high-value, low-cost

initiatives in the public sector aiming to deliver a 10:1 return on investment (Halpern 2015). This pilot demonstrated small changes can have a big effect and has grown from seven staff to over 100 employees and the program is being rolled out throughout the world (Behavioural Insights 2017).



*Figure 67 Sweat the small stuff
(Modified from Sutherland 2010)*

Urban and transport planning tends to centre on projects rather than comprehensive and strategic planning; on getting other agencies to deliver required urban services or infrastructure; and on pragmatic attempts to address perceived local problems rather than utopian or visionary frameworks for re-engineering metropolitan regions according to idealised blueprints or desired urban forms (Graham and Marvin 2001). Fundamentally a new model of transport and land use planning decision-making and accountability is required in Melbourne to avoid repeating past mistakes of mega urban transport projects and refocus towards small interventions that deliver better returns for the investments and are aligned with a broader vision for our cities. Former Secretary of the Department of Transport, Jim Betts, was often quoted saying that ninety percent of the infrastructure that we need in 2050 already exists – the question is how to use it better (Betts 2012). The problems of governance are not merely technical, they are also social and political, necessitating new arrangements to strengthen, not diminish, accountability (Gleeson et al. 2012). Davison argues cities by the very nature, are complex systems in which the desires and interests of groups and individuals, each good according to their point of view, clash with those of others

(Davison and Yelland 2004). This proliferation of conflicting interest groups tends to 'undermine the political consensus required to carry out large scale planning projects' (Filion 1996, p.1640) and as a result, urban planning has lost its ability to conceive of a 'public interest'. This conflict will continue to be an ongoing intractable problem until metropolitan governance is addressed in a way that seeks to develop consensus based and transparent decisions. The solutions are to be found in a renewal of political imagination, not further technocratic reorganisation (Gleeson et al. 2012). As long as Victorian transport planning continues to be a behind closed doors process, it is likely that further Parliamentary Committees and Auditor General reports will find, as did a May 2017 Legislative Council Committee report on West Gate Tunnel, that 'the processes that lead to infrastructure projects being built in Victoria are not being properly scrutinised' (Finn 2017b).

6.4 Transport Integration

In Victoria, the adoption of the *Transport Integration Act* on 1 July 2010 required all decisions affecting the transport system be made within the same integrated decision-making framework and support the same objectives. These objectives are used throughout this thesis to define a 'better' transport decision making framework, and are described in Chapter 1.4. In 2011 amendments were made to create Public Transport Victoria (Mulder 2011), however an earlier criticism of a fundamental lack of accountability was not corrected. In 2010 Mulder stated 'the last clause of the *Transport Integration Bill* is that no one will be held legally responsible or accountable if they fail to take on board any of the aforementioned' describing the situation as 'absolutely disgraceful' (ABC Radio 2010). The perpetuation of a weak legislative framework continues to guide transport decision-making in Victoria and a significant missing component of the aspiration of a 'better' outcome. In 2017 Chandler asked the question 'Why have governments given only token regard to the requirements of the *Transport Integration Act*?' (Chandler 2017, p.3), Low responded arguing that whilst the objectives and principles of the *Transport Integration Act* 'must be considered'; it

does not mean they must be given any determinative status, leading Low to conclude it is a 'toothless' act of Parliament (Low 2017a, p.10).

On 27 June 2016, the Andrews Government announced a new agency Transport for Victoria (TfV) would be established (Allan 2016c). TfV would have overarching responsibility for transport across Victoria and would be part of the Department of Economic Development, Jobs, Transport & Resources. Its role would include planning, coordinating and managing Victoria's transport networks as one system (Allan 2016a). PTV and VicRoads would be part of TfV. Legislation was introduced in October 2016 that would establish the role 'Head, TfV' and provide a framework for further (unspecified) changes to agency functions through Transport Restructuring Orders, such as VicRoads or Public Transport Victoria amongst others, through a Governor-In-Council process (Allan 2016a). Despite raising concerns in the Second Reading speech – particularly about the ability to undertake Transport Restructuring Orders 'at the stroke of a pen' (Ryall 2016, p.58), and that 'the structures we have in place do not facilitate the intent of the *Transport Integration Act*' (Hodgett 2016, p.60), on 7 February 2017 the Liberal Opposition supported the legislation with a minor government initiated amendment to *remove the ability* of a Transport Restructuring Order to abolish a sector transport agency (O'Donohue 2017). All other powers remained and the Act was provided with Royal Assent on 14 February 2017. Time will tell if Transport for Victoria will utilise Transport Restructuring Orders to better reflect the aspirations of the *Transport Integration Act*, or if it will continue decision-making on a business as usual basis. Low (2017, p.11) suggests both transport and land use planning are 'controlled by politicians who know little about either' and by 'transport corporations and land developers who stand to gain financially, sometimes massively, from political decisions'. This, Low argues, 'amounts to a systemic corruption of planning' (Low 2017a, p.11). Organisational transport integration over many decades has failed to bring order to a transport system described as 'consciously or unconsciously colluding against the public interest' (Mees 2007c, p.12) and has instead further balkanised the system in a quagmire of complexity. Mees recognised that dedicated

agencies were needed to plan and coordinate all modes in a single integrated system. If this was achieved a 'network effect' could be realised which would mean the whole was greater than the sum of its parts. This is a critical element in the 'what is better' definition used throughout this thesis – a strongly authorised transport decision-making body that provides genuine land use and transport integration.

6.5 Public Participation

Both London and Melbourne transport decision making has sought to improve community participation in transport decision making, however as Legacy argues, it is not possible to separate politics from infrastructure implementation, nor is it desirable (Legacy 2015). Transport decision making will inevitably continue to be political, however new urban governance structures such as the London model provide an opportunity to respond to these politics. The London model invites debate and public deliberation and does not disavow this process of its politics. In the absence of such a framework, citizen action groups will continue to seek ways to dictate an alternative urban transport policy agenda and reinstate democratic practice into planning (Legacy 2015). Legacy explores the post-GFC policy environment where urban infrastructure has been driven by an urgency for economic recovery, which subverts the relationship between urban infrastructure planning, implementation and planning process (Legacy 2016). Under this model, the 'jobs and growth' or 'Nation building' agenda has subverted good planning and infrastructure prioritisation. This has only been achieved by an 'urgency politics' (Legacy 2016, p.2) that produces an action/response dialectic that serves to suspend and subvert processes that link strategic planning with infrastructure implementation. Thus, there is no link between strategic planning and implementation. Using urgency politics, governments have been emboldened to amend legislation and subvert decision-making processes to truncate and minimise opportunities for disruption (Legacy 2016). In the post-GFC period, decision-making about infrastructure policy and implementation has been framed by very narrow economic parameters surrounding economic growth (Legacy 2016). This ultimately

played out with the contrast between 3,500 jobs created by East West Link, or 10,000 jobs generated by removing fifty level crossings throughout Melbourne.

Legacy (2016) argues, in the absence of a strong institutional landscape that actively engages, evaluates and assesses infrastructure projects, it is difficult to think strategically about the infrastructure to build, the priorities and how to do so in a manner that is quick. Legacy (2015) explores how citizens respond to the inherently political, yet not always democratic, aspects of setting transport investment priorities by looking at East West Link. Legacy (2015) suggests transport planning is deeply political as it involves priority setting and investment decision-making that will ultimately serve some needs better than others. Legacy (2015) argues political decisions are shielded from public interrogation where challenges could be lodged and bigger questions could be asked about the social distribution of benefits. Such a model is displayed in London with public accessibility to important decision makers through regular public Assembly meetings and TfL board meetings. Legacy (2015) notes few urban scholars have been dedicated to theorising the role of citizen participation in transport implementation, in stark contrast to the expansive body of theoretical and empirical research within the strategic planning literature that examines the relationship between citizen participation and policy decision-making. This distinct difference is often the more controversial end of the transport planning spectrum, when projects have been decided at a strategic policy level and are subsequently being constructed.

Under current conditions, the relationship between inclusive citizen participation, which is deliberative and supports transparency of decision-making, and infrastructure delivery, remains partial if existing at all (Legacy 2015). Instead, citizen engagement at the implementation stage – the point in the planning process when infrastructure is delivered – is typically reduced to narrow consultation briefs and rarely associated with broader discussions about transport problems and possible solutions (Sturup et al. 2013). Recent attempts have been made to introduce citizen juries,

such as Infrastructure Victoria and the development of their 30 year vision, however Legacy (2014) suggests these are very limited and are for the purposes of political experiments and grandstanding. Legacy (2014) suggests that in the context of urban transport, deliberative planning in practice offers an insufficient democratic experience to residents seeking to transform urban transport decision-making. When engagement does persist, these processes are characterised by engagement that corrals citizens into formulaic objection narratives that are very strict and limiting in scope (Legacy 2014). This is similar to Mees' (2003b) critique of the development of *Melbourne 2030*. Mees suggested Melbourne planning consists of 'edicts handed down by faceless committees' (2007, p.1115). A system where the community is left to fight against government decisions and the environment becomes adversarial, with few opportunities to solve problems and creating disenchanted and disempowered community participants who are less likely to engage in decision-making on the next occasion (Stanley et al. 2017).

There is a clear role for greater community participation in decision-making to achieve 'better' outcomes. It needs to be the right consultation framework, one which in itself builds a sense of community, a shared identity, creates social capital, provides an opportunity to grow capabilities, self-esteem and confidence and leadership possibilities (Stanley et al. 2017). To support this, a governance structures and institutions need to have the flexibility and responsiveness to accept new and different viewpoints – a contrast to business as usual whereby there is often a pressure to discount alternatives.

6.6 Population Growth and Planning

The final constraint facing both London and Melbourne has been planning for population growth. Since 2000, Melbourne has added 1.3 million new residents – forty percent – and is home to 4.7 million residents (Australian Bureau of Statistics 2017). Modern Melbourne has developed in an uneven manner; historically Melbourne grew to the south-east and east, where fertile soils,

undulating landscapes and well-established transport systems were developed, today and for the foreseeable future, Melbourne will be concentrating population growth in regions currently poorly serviced with transport and infrastructure. Urban demographer Bernard Salt, calls this Melbourne's 'big flip' (Salt 2016). The completion of Regional Rail Link in 2015 was one of the few significant public transport investments in this growth area, and will be supplemented by the Melbourne Metro project, scheduled for completion in 2026 (Melbourne Metro Tunnel 2017).

The problems arising from a city of 8 million people are not double those of a city of 4 million – they are radically different in scale and type (Buxton et al. 2016). In December 2004, Jane-Frances Kelly, of the Grattan Institute, former policy adviser to UK Prime Minister Tony Blair, gave a presentation to the Brumby Government Cabinet, which provided an assessment of Victoria's productivity performance (Deane 2015). Although Victoria was prospering, Kelly warned of increased income inequality, increased suicide rates and an underclass of long term unemployed, this was being shown through an 'inner and outer Melbourne' story (Deane 2015, p.235). This emerging two Melbourne's, was one with an affluent, more educated core, with poorer, less educated outer suburban residents often travelling long distances to work. This tale of two cities is not new. The first evolution of Melbourne's two cities emerged from the Second World War, when Melbourne, a city relatively well serviced by public transport, decided with the completion of the first Holden from the Fishermans Bend plant in 1948 that post-War Melbourne would be built *beyond* the tram lines (Wilkinson 1984). Victoria has become Australia's fastest growing state, with the real value of construction work almost 20 percent higher than the average for the last decade (Gordon 2016b). Behind this growth is an inconvenient truth, Victoria's performance is underpinned by booming population growth (Gordon 2016b). In the 12-months to 30 September 2016, Victoria's population grew by 127,498 people, the largest increase of all the states (Victorian Planning Authority 2017), comprising of 68,613 overseas migrants, a net inflow of 17,185 people migrating from interstate and 41,700 from natural increase (82,000 births minus 40,300 deaths). This growth also carries costs: rising housing

unaffordability, rising crime rates and congested roads and public transport. A shortage of land is not a concern for Melbourne, which has at least thirty years supply through the *Melbourne @ 5 Million* policy of an expanded Urban Growth Boundary (Brumby and Madden 2008), the concern relates to how these new urban areas are provided with transport choices.

As Gordon states, political leaders who ignore public sentiment on population growth, ignore the issue at their peril (Gordon 2016b). During February 2017 parliamentary debate to establish the Victorian Planning Authority, the Opposition was critical of the Andrews Government's approach to establishing a new authority to manage population growth. Opposition Member of Parliament Robert Clark declared 'It is in no way an adequate solution to the problem' and the Victorian Planning Authority is 'one of a plethora of bodies that are going to be operating in the planning and development space' creating a 'spaghetti mess of connected entities' and it was difficult to see how they relate to each other (Clark 2017, p.26). This is illustrated in Figure 41.

Since the early 1990s Melbourne has been consistently voted the world's most liveable city by the Economist Intelligence Unit. This indicator does not reflect the liveability of ordinary citizens; it is primarily a guide for international executives (Tomlinson 2012). This veneer of liveability masks a structural problem that Melbourne is failing to plan for the expected population of 8 million – a city the size of London today. This failure to plan is a long term trend and Sandercock (1977) wrote about the failure of any Australian city planning to improve the welfare of city dwellers due to counter-productive land use plans that perpetuate income transfers from the poor to the rich. Sandercock argued society had abandoned the ideals of town planning movement pioneers, who were inspired to regulate, in advance, the orderly arrangement and use of land to promote the greatest good of the greatest number. This, Sandercock (1977) argued, is a direct result of a reluctance of both major political parties to support purposeful planning, as it could impede economic growth. Similarly,

Gleeson (2014) noted the planning system had 'been twisted to violate its very core and historical and founding rationale, which was to control urban development in the public interest'.

The basic rationale of the planning system was to correct market failure, today it has been 'tipped on its head and is deployed as an instrument of economic development' (Gleeson 2014). Town planning originated in Britain due to the social and economic consequences of the industrial revolution and the need for sanitary reform in increasingly congested urban areas. Ebenezer Howard developed the concept of Garden Cities – an anti-urban movement that emphasised environmental health, housing and sanitation – in contrast to the dirty, gritty environments found in urban areas. The growth of cities and managing negative consequences has almost always resulted in political reforms.

Sanitation was prominent in the establishment of the MMBW which followed a Royal Commission into sanitary conditions (Allen 1889). It also featured in Melbourne's first strategic plan in 1929 which was commissioned at a time of political turmoil, with twelve changes of Ministry in the period 1922-29 (Sandercock 1977). Today, planning is again failing to address the environmental, health, housing and congestion problems of our cities at a time when our cities are experiencing their most rapid growth – both in number and percentage. The question that our governance framework should support is 'what sort of city do residents want?'

6.7 Conclusion

This chapter has described the practices and constraints of transport planning decision making particularly in Melbourne. As described in the case study chapters, Melbourne and London had very similar metropolitan governance histories. However, in the 2000s, the two cities took different approaches and London reinstated metropolitan governance. Since that time, a cultural change has been achieved in London, partly attributed to a strong authorising environment of a directly elected Mayor of London who speaks for the city, partly through the preparation and articulation of a co-ordinated transport and land use planning vision, and partly through the consensus and public

decision-making framework that was enshrined in the legislation. The Greater London Authority – and its subordinate Transport for London – has dramatically improved decision-making in London, consistent with the ‘what is better’ criteria used throughout this thesis, and described in Chapter 1.4. London has transformed a ‘messy and fragmented’ and ‘seething and chaotic’ system of governance by quangos, into a clear, accountable, transparent and bipartisan system of metropolitan governance for a city of 8 million residents. A system of metropolitan governance where the institutions involved in decision making are legislatively required to undertake genuine collaboration with the community and borough councils, where transport and land use planning decisions are integrated, where citizen participation is encouraged through increased transparency of information and where independent own-source funding is provided through means of a congestion levy – core components of the ‘what is better’ criteria. Whilst no model is perfect, and further improvements could be made, London has provided its city with a democratic voice, it has a broad democratically elected Assembly, it has a transparent and accountable decision-making framework and is delivering important transport improvements that are consistent with a broad spatial strategic planning, environmental and economic development strategy. These are the lessons for Melbourne if it seeks to achieve a ‘better’ transport decision making environment.

7. Conclusion

This research aimed to examine the political, historical, community and institutional framework for transport planning decision-making in Melbourne and London. The hypothesis was that the decision-making process in Melbourne has failed to recognise transport as a 'wicked' problem and, to fix this, improvements in governance are needed – specifically the London metropolitan model of governance – in order to better manage complexity and achieve 'better' transport decision-making processes. The thesis has asked the question of how should transport planning decisions be made in complex environments to achieve the 'better' outcomes as described in Chapter 1.4. The two cities selected for this research have a long history of metropolitan governance, but have taken different approaches to metropolitan governance at the point in which they become 'ungovernable' (Travers 2004). London adopted the Greater London Authority model of an elected Assembly and a directly elected Mayor, which was only possible following a political commitment from the Blair Labour Party which swept to victory on a platform of devolution in 1997. Today, the Greater London Authority is responsible for a city of over 8 million and has demonstrated all the elements of a 'better' transport decision making framework that was identified in Chapter 1, particularly a strongly authorised institutional structure that is required to undertake community engagement and make decisions in a transparent manner that is delivering on its goals for an integrated and sustainable transport network. Melbourne on the other hand is heading towards a similar population of 8 million by 2050 and this research has suggested there is something unusual about the pressures that have affected successive governance systems and the difficulty of governing a complex city without a metropolitan institution mandate. Other cities have also demonstrated integrated approaches to metropolitan governance, such as Vancouver in Canada, however for this thesis; the focus has been on London and Melbourne. This research suggests that learnings from London could be applied to Melbourne and to other cities that are experiencing governance failures in a number of aspects, as highlighted in the comparison between the London and Melbourne models.

Melbourne would make better transport decisions if it adopted the London model. It is likely that a period of disruption will be required to change the current paradigm in Melbourne. In the 1891 it was the boom and bust that resulted in the MMBW being established to provide for a different sort of growth through sound, de-politicised planning and the provision of infrastructure. The windows of opportunity to introduce such seismic change as the MMBW or Greater London Authority are rare, but they are genuine opportunities to introduce significant change. The mismatch between the Melbourne metropolis community of interest and that of Victoria means that the State Government will find it increasingly difficult to deal with the problems that emerge from Melbourne's rapid population growth and consequent infrastructure challenges. A response is needed to create an environment where transport problems are treated as puzzles, and government works collaboratively with the community to put pieces together to create a shared picture of the sort of city residents want. This environment exists in London and will be needed to manage the complexity of transport planning for a Melbourne that is predicted to reach 8 million residents. Since 2000, no Australian city has grown as quickly as Melbourne and the speed and scale of change that is occurring requires a new paradigm to consider the demands on the transport network. In the absence of such a system, we will continue to witness a succession of 'Transport Referenda' with more disruptive, expensive and volatile political debates about transport.

The Melbourne 'car wars', involving proposals for new urban freeways, culminated in the East West Link project and the 2010 'Transport Referendum'. Today the 'big build' (Victorian Government 2018) is the axiom for the future and mega-projects dominate transport debates. Indeed this was credited with the landslide election win for the Andrews Government in November 2018, won on the back of a commitment to build a \$50 billion Suburban Rail Loop – the largest public transport project in history – but which was developed in secret and without the knowledge of the Department of Transport (Stone and Legacy, 2018).

This thesis has confirmed the hypothesis that Melbourne has failed to recognise transport planning as wicked and new decision-making structures and processes are required. Melbourne's transport planning environment is wicked because of its complexity and the inability of a succession of reforms to resolve it. There are no solutions to wicked problems as one solution leads to another problem. The ambiguity means they are difficult to describe, often being broad-based societal problems with complex interactions between social, economic and environmental elements. Bureaucratic restructures, or glossy government plans are no longer appropriate. A courageous reimagination of political leadership is required to undertake wholesale transformation of transport decision making in Melbourne. This was achieved in London through the creation of the Greater London Authority in 2000 after a comprehensive and exhaustive process of public engagement which included a referendum of all Londoners. The subsidiary Transport for London has created an integrated transport planning agency under the control of a democratically elected Mayor. The lessons from London have demonstrated all the elements of a 'better' transport decision making framework that was identified in Chapter 1 and provides a better way to manage complex transport planning in a city of 8 million people.

One critically important lesson from London is the role of government in providing an appropriate legislative framework, demonstrated through the legislative requirement for the Greater London Authority to prepare *and publish* a number of strategies including a transport strategy and spatial development strategy and *must consult with* the London Assembly, the functional bodies and each London borough council. In Melbourne, the Department must only *prepare* a Transport Plan and provide a copy to the Minister, who *may* publish the plan. There is no requirement for any consultation, no requirement for a land use plan and there is no requirement to release a plan. As a consequence of this legislative provision, London has demonstrated how to make transport decisions that have delivered outcomes that include: mode share shifts to sustainable transport, more voices being expressed in decisions, investment decisions based on publicly available

information and reduced conflict in decision making. This is how transport planning decisions should be made in a highly complex city of 8 million residents.

The Victorian *Transport Integration Act* provides for Transport Restructuring Orders, which have recently been used to create a single Department of Transport from 1 July 2019. However, this may not be enough and the powers are opaque and lack transparency. What is required are new transport planning decision-making processes in Melbourne to break the pattern of political transport elections. This can be achieved with sound transport planning conducted by a deliberately collaborative agency to inform transport decisions guided by evidence and publicly released decision-making. Whilst decision-making must properly remain the province of elected parliamentarians – in this case Premiers, Treasurers, Ministers for Roads, Ministers for Public Transport and Ministers for Planning – having high quality advice and public input available improves the quality of the debate and leads to better decisions. As this research has shown, this will be difficult to achieve as there is a strong tendency to support the will of senior policy makers to hold onto power and to keep planning as a government-directed, technocratic exercise.

There is a sense of déjà vu to the 2014 'Transport Referendum' – won by the Andrews Government on a pro-public transport, anti-East West Link platform, who have since committed to two mega urban freeways, the West Gate Tunnel and North East Link. As PTV neutralised the dysfunctional public transport environment that existed under the Bracks and Brumby Governments, a Greater Melbourne Authority, modelled on the Greater London Authority, could neutralise current transport decision-making by meeting in public, accepting and encouraging scrutiny, fostering robust debate, and creating an entity that is responsible for and responsive to the metropolis: a voice for Melbourne that would deliver the step change in transport planning that Melbourne needs to plan for a city of 8 million residents.

In a political environment, transport decisions will remain political. To improve political processes requires a courageous reimagination of decision-making in Victoria: to conceive of an environment where the community has a say, where its views matter to decision makers, where decision makers better represent the community. This is what has been achieved in London with the Greater London Authority, its directly elected Mayor from eight million residents, its Assembly and the Transport for London processes and systems. If Victoria seeks to avoid the controversial, adversarial and antagonistic environment that has been evident in recent years, it could do no better than adopt the London model in its entirety. The pattern, created through the Westminster system of government, where if the community is dissatisfied by government decisions, they elect a new government, is only likely to perpetuate a cycle of more volatile Victorian elections, and a race to the bottom, with a shopping list of irrational election commitments, which undermine the effectiveness of transport investments.

Melbourne is at a critical moment in history due to population growth and the rapid rate of development in low-density suburbs on the city fringe and in high-rise apartment towers in the city centre. The current transport planning decision-making framework was established for a different kind of city and no city in Australia has ever added so many people so quickly. Melbourne's political and administrative structures and established infrastructure have not kept pace and are not effectively addressing the wider challenges present in environmental, social and economic contexts.

Institutional interventions such as Greater London Authority and Transport for London demonstrate that decision-making can be improved to provide 'better' outcomes. This research will contribute to an ongoing conversation about Melbourne's transport planning decision-making and proposes the London governance model which may be better than the status quo - a system where the tacit knowledge of the professional planner is valued and they are an active participant in their own right. If such a situation should arise, the complex transport planning environment in Melbourne may

generate improved decision-making by a strong administration, that restores the public trust and protects and enhances the public interest, while achieving outcomes preferred by the public that meet many strategic goals of establishing a better city.

7.1 Key findings

The definition of 'what is better' was provided in Chapter 2, and comprised six elements that support the better management of complex transport governance in a city of 8 million residents. These elements recognise the intractable nature of the problem; that transport decision-making must be transparent and provide genuine citizen participation; that transport and land use planning and delivery must be integrated; and hypothecated funding for transport investment decisions must be separated from the discretionary budgetary environment. These 'better' outcomes are demonstrated in London and the following key findings relate to the learnings from London applied to the Melbourne case study.

Key Finding 1: There is a long lead time for governance change and it requires bipartisan support.

Public Transport Victoria was established in 2012 after decades of concern at the balkanised public transport environment. The recreation of London metropolitan governance in 2000 provides an example of transport governance reform championed by an incoming government with a political mandate to effect change, which subsequently received bipartisan political support.

Key Finding 2: Creating new and enduring governance structures requires strong public participation.

Melbourne's approach to community engagement is ad hoc, superficial and infrequent (mainly project based), compared to an ongoing public deliberation in London. The return of London metropolitan government involved an exhaustive process of political commitments, a green paper, a referendum, a white paper and legislation, each step involving strong public participation.

Key Finding 3: Legislation requires a Transport Strategy and Spatial Strategy be prepared and released.

In London, the Mayor must prepare *and* publish a number of strategies including a transport strategy and spatial development strategy and *must* consult with the London Assembly, the functional bodies and each London borough council. In Melbourne, the Department of Economic Development, Jobs, Transport and Resources must prepare a Transport Plan and provide a copy to the Minister, who *may* publish the plan. There is no requirement for any consultation. Separately a spatial strategy, Plan Melbourne, is prepared via another mechanism altogether, through the Department of Environment, Land, Water and Planning.

Key Finding 4: Transport planning must move away from predict and provide planning.

In London, this was recognised by the Thatcher Government's Minister for Transport in London after repeated widening of the London ring road. In Melbourne, predict and provide planning drives project prioritisation, including an over reliance on narrow Benefit Cost Ratio assessments which fail to acknowledge the impact of induced demand or environmental externalities.

Thus these findings suggest that the hypothesis was confirmed, and the decision-making process in Melbourne has failed to recognise transport as a 'wicked' or complex problem, and has resulted in many poor transport planning and decision making outcomes. In order to fix this shortcoming, improvements in governance, including the adoption of a London style metropolitan model of governance is required to achieve 'better' processes and outcomes.

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Appendix 1

Distinguishing properties of wicked planning problems (Rittel 1973)

1. There is no definitive formulation of a wicked problem;
2. Wicked problems have no stopping rule;
3. Solutions to wicked problems are not true-or-false, but good-or-bad;
4. There is no immediate and no ultimate test of a solution to a wicked problem;
5. Every solution to a wicked problem is a "one-shot operation"; because there is no opportunity to learn by trial-and-error, every attempt counts significantly;
6. Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan;
7. Every wicked problem is essentially unique;
8. Every wicked problem can be considered to be a symptom of another problem;
9. The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution; and
10. The planner has no right to be wrong.

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Appendix 2

Characteristics of highly effective groups (Likert 1971)

1. Members are skilled in all the various leadership and membership roles and functions required for interaction between leaders and members and between members and other members.
2. The group has been in existence sufficiently long to have developed well-established, relaxed working relationship among all its members.
3. The members of the group are attracted to it and are loyal to its members, including the leader.
4. The members and leaders have a high degree of confidence and trust in each other.
5. The values and goals of the group are a satisfactory integration and expression of the relevant values and needs of its members. They have helped shape these values and goals and are satisfied with them.
6. Insofar as members of the group are performing linking functions, they endeavor to have the values and goals of the groups which they link in harmony, one with the other.
7. The more important a value seems to the group, the greater the likelihood that the individual member will accept it.
8. The members of the group are highly motivated to abide by the major values and to achieve the important goals of the group. Each member will do all that he or she reasonably can--and at times all in his or her power--to help the group achieve its central objectives. Each member expects every other member to do the same.
9. All the interaction, problem-solving, decision-making activities of the group occur in a supportive atmosphere. Suggestions, comments, ideas, information, criticisms are all offered with a helpful orientation. Similarly, these contributions are received in the same spirit. Respect is shown for the

point of view of others both in the way contributions are made and in the way they are received.

10. The superior of each work group exerts a major influence in establishing the tone and atmosphere of that work group by his or her leadership principles and practices. In the highly effective group, consequently, the leader adheres to those principles of leadership which create a supportive atmosphere in the group and a cooperative rather than a competitive relationship among the members.
11. The group is eager to help each member develop to his or her full potential. It sees, for example, that relevant technical knowledge and training in interpersonal and group skills are made available to each member.
12. Each member accepts willingly and without resentment the goals and expectations that the individual and the group establish for themselves. The anxieties, fears, and emotional stresses produced by direct pressure for high performance from a boss in a hierarchical situation are not present. Groups seem capable of setting high performance goals for the group as a whole and for each member. These goals are high enough to stimulate each member to do his or her best, but not so high as to create anxieties or fear of failure. In an effective group, each person can exert sufficient influence on the decisions of the group to prevent the group from setting unattainable goals for any member while setting high goals for all. The goals are adapted to the member=s capacity to perform.
13. The leader and the members believe that each group member can accomplish the Aim possible. These expectations stretch each member to the maximum and accelerate personal growth. When necessary, the group tempers the expectation level so that the member is not broken by a feeling of failure or rejection.
14. When necessary or advisable, other members of the group will give a member the help needed to accomplish successfully the goals set for that person. Mutual help is a characteristic of highly

effective groups.

15. The supportive atmosphere of the highly effective group stimulates creativity. The group does not demand narrow confirmation as do the work groups under authoritarian leaders. The group attaches high value to new, creative approaches and solutions to its problems and to the problems of the organization of which it is a part.
16. The group knows the value of "constructive" conformity and knows when to use it and for what purposes. Although it does not permit conformity to affect adversely the creative efforts of its members, it does expect conformity on mechanical and administrative matters to save the time of members and to facilitate the group's activities.
17. There is strong motivation on the part of each member to communicate fully and frankly to the group all the information which is relevant and of value to the group's activity.
18. There is high motivation in the group to use the communication process so that it best serves the interests and goals of the group. Every item which a member feels is important, but which for some reason is being ignored, will be repeated until it receives the attention that it deserves. Members strive also to avoid communicating unimportant information so as not to waste the group's time.
19. Just as there is high motivation to communicate, there is correspondingly strong motivation to receive communications. Each member is genuinely interested in any information on any relevant matter that any member of the group can provide. This information is welcomed and trusted as being honestly and sincerely given. Members do not look "behind" information and attempt to interpret it in ways opposite to its purported intent.
20. In the highly effective group, there are strong motivations to try to influence other members as well as to be receptive to influence by them. This applies to all the group's activities: technical matters, methods, organizational problems, interpersonal relationships, and group processes.
21. The group efforts of the highly effective group enable the members to exert more influence on the

leader and to communicate far more information to him or her, including suggestions as to what needs to be done and how the leader could do a better job, than is possible in one-to-one relationship. By "tossing the ball" back and forth among the members, a group can communicate information to the leader which no single person on a one-to-one basis dare do.

22. The ability of the members of a group to influence each other contributes to the flexibility and adaptability of the group. Ideas, goals, and attitudes do not become frozen if members are able to influence each other continuously.
23. In the highly effective group, individual members feel secure in making decisions which seem appropriate to them because the goals and philosophy of operation are clearly understood by each member and provide a solid base for making decisions. This unleashes initiative and pushes decisions down while still maintaining a coordinated and directed effort.
24. The leader of a highly effective group is selected carefully. His or her leadership ability is so evident that he or she would probably emerge as a leader in any unstructured situation. To increase the likelihood that persons of high leadership competence are selected, the organization is likely to use peer nominations and related methods in selecting group leaders.

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Appendix 3

Completion of Melbourne's Freeways, 1961-2018

In 1956 an amendment was made to the Country Roads Board Act enabling the Board to construct 'Bypass Roads', popularly known as 'Freeways', which have the distinguishing feature that they have no direct access from side roads or abutting properties (Country Roads Board 1963, p.9). Prior to this time, urban road construction activities were focused on 'Highways', which have limited access from side roads but allow access for abutting properties. This change represented a fundamental transition of Melbourne road planning, described as:

"The addition of by-pass roads to the State's declared road system represents a completely fresh approach in efficient and safe handling of high volumes of traffic between important centres of population. The frequent intersections with side roads which occur on an ordinary road are absent on a by-pass road, access being permitted only at properly designed interchanges located several miles apart; direct access is not allowed from properties alongside by-pass roads; no animals on the hoof are permitted on a by-pass road; thus the interruptions and hazards to motorists of intersecting traffic and wandering stock are eliminated. The main streets of townships by-passed are not subject to through traffic, thus providing safer conditions for shoppers and for local business people. Whilst local tradesmen are protected as no shops are permitted with frontages onto a by-pass road. The greater convenience and security with which motorists can travel, along by-pass roads will make these facilities extremely popular with all sections of the travelling public and will effect marked economies in road transportation" (Country Roads Board 1961, p.5).

Further legislative changes were made and the Country Roads Act 1969 allowed the Country Roads Board the ability to drop the 'Bypass' pretence and begin creating new roads as 'Freeways' (Lay 2003, p.53). Melbourne now has more-lane kilometres of urban freeways constructed than any other Australian city (Kenworthy and Laube 2001).

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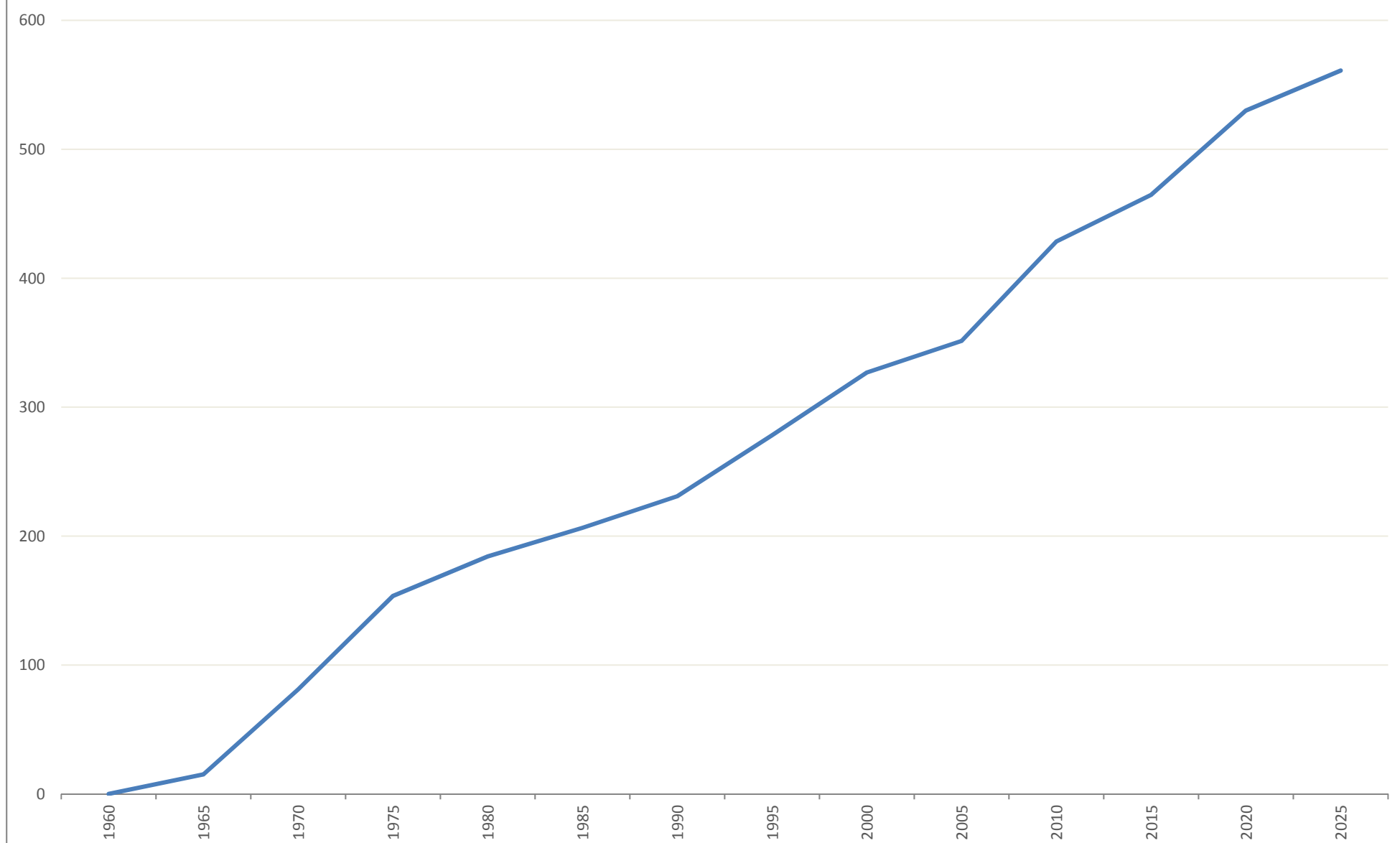
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Length of Melbourne Freeway construction (kms)





Completion of Melbourne's Freeways

- 1960-1970
- 1970-1980
- 1980-1990
- 1990-2000
- 2000-2010
- 2010-2020
- Future Fwy
- 1969 Plan

Sources

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Melbourne Transportation Study (1969)

Public Transport Users Association, More Roads = More Traffic (2014)



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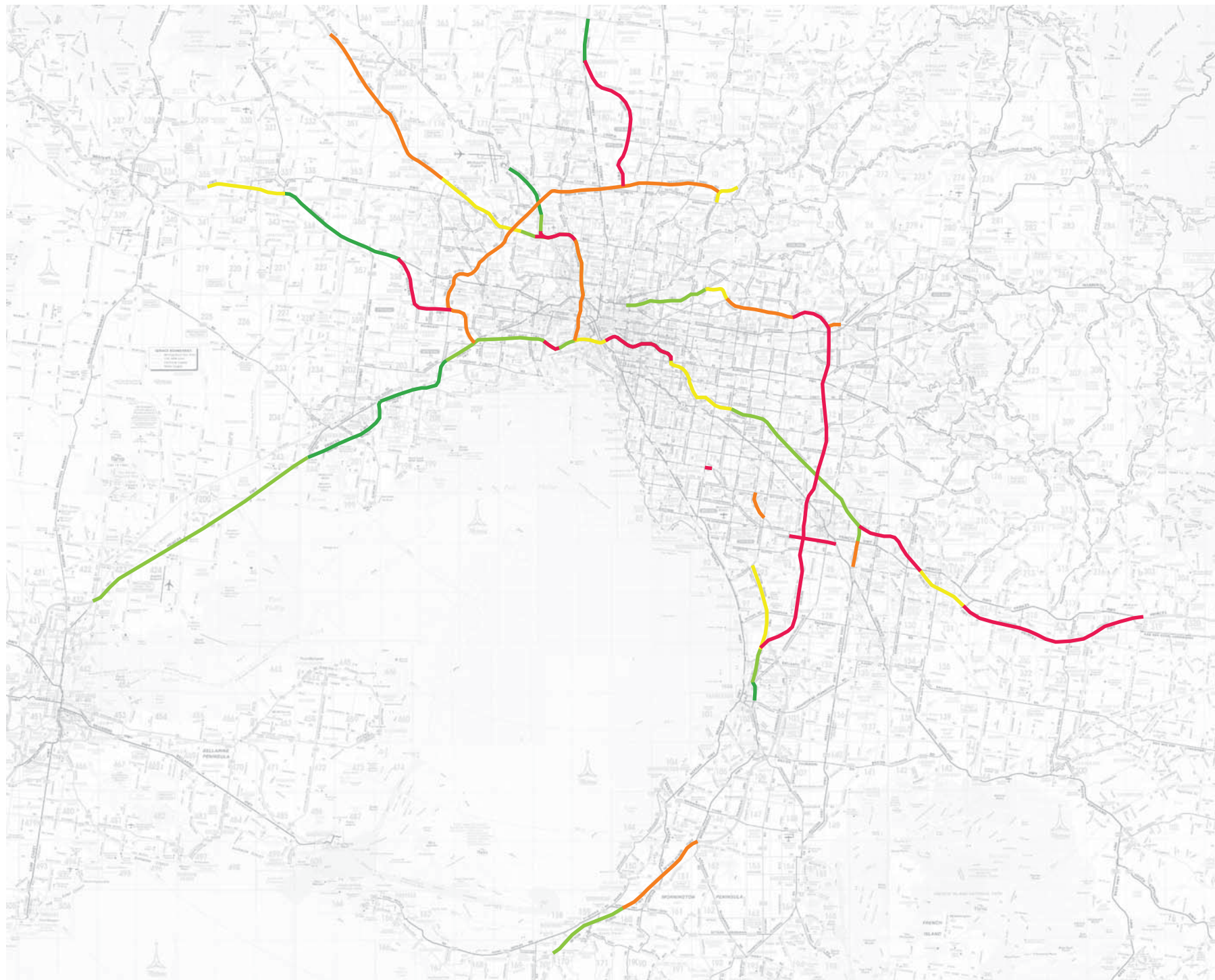
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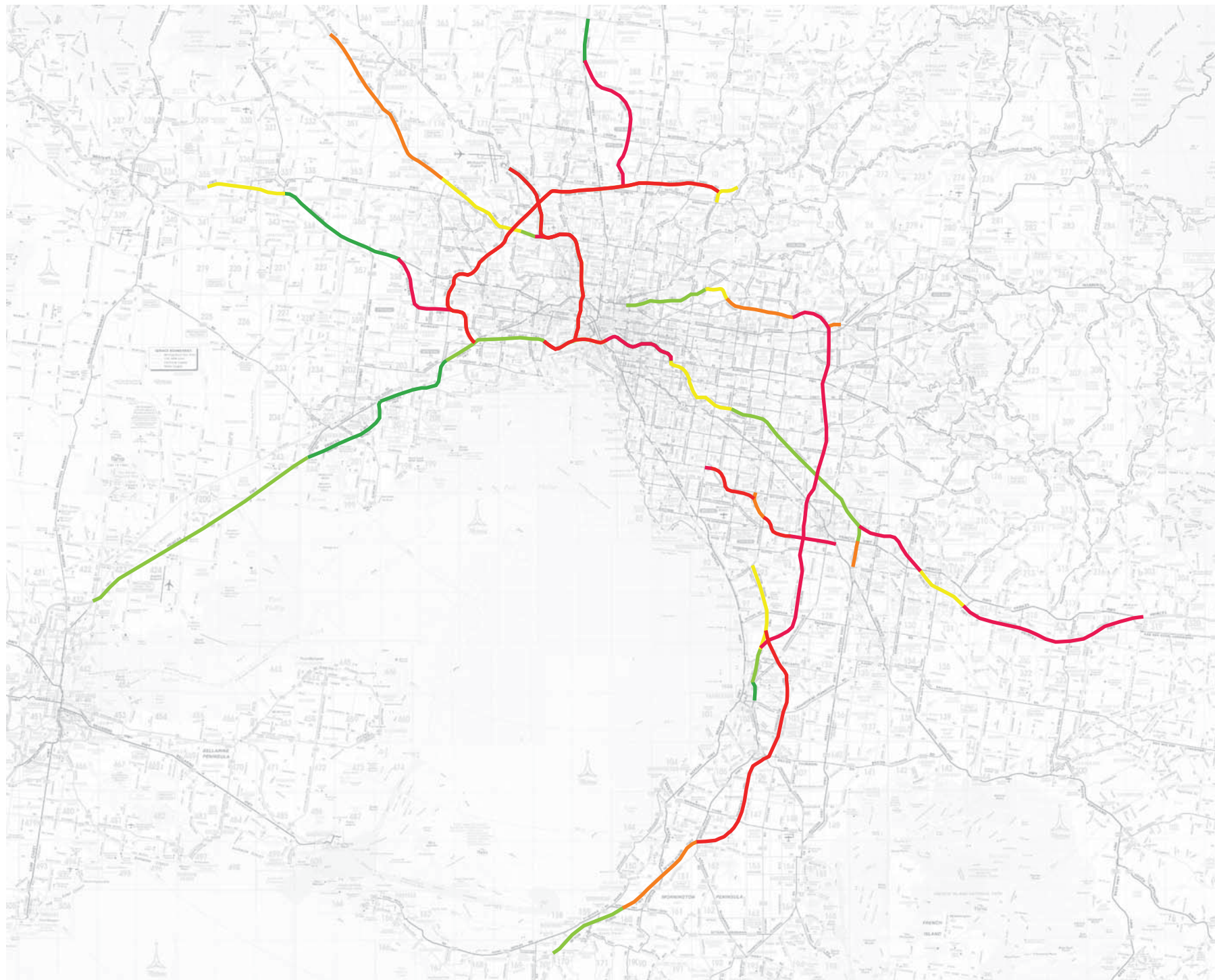
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Public Transport Users Association, More Roads = More Traffic (2014)



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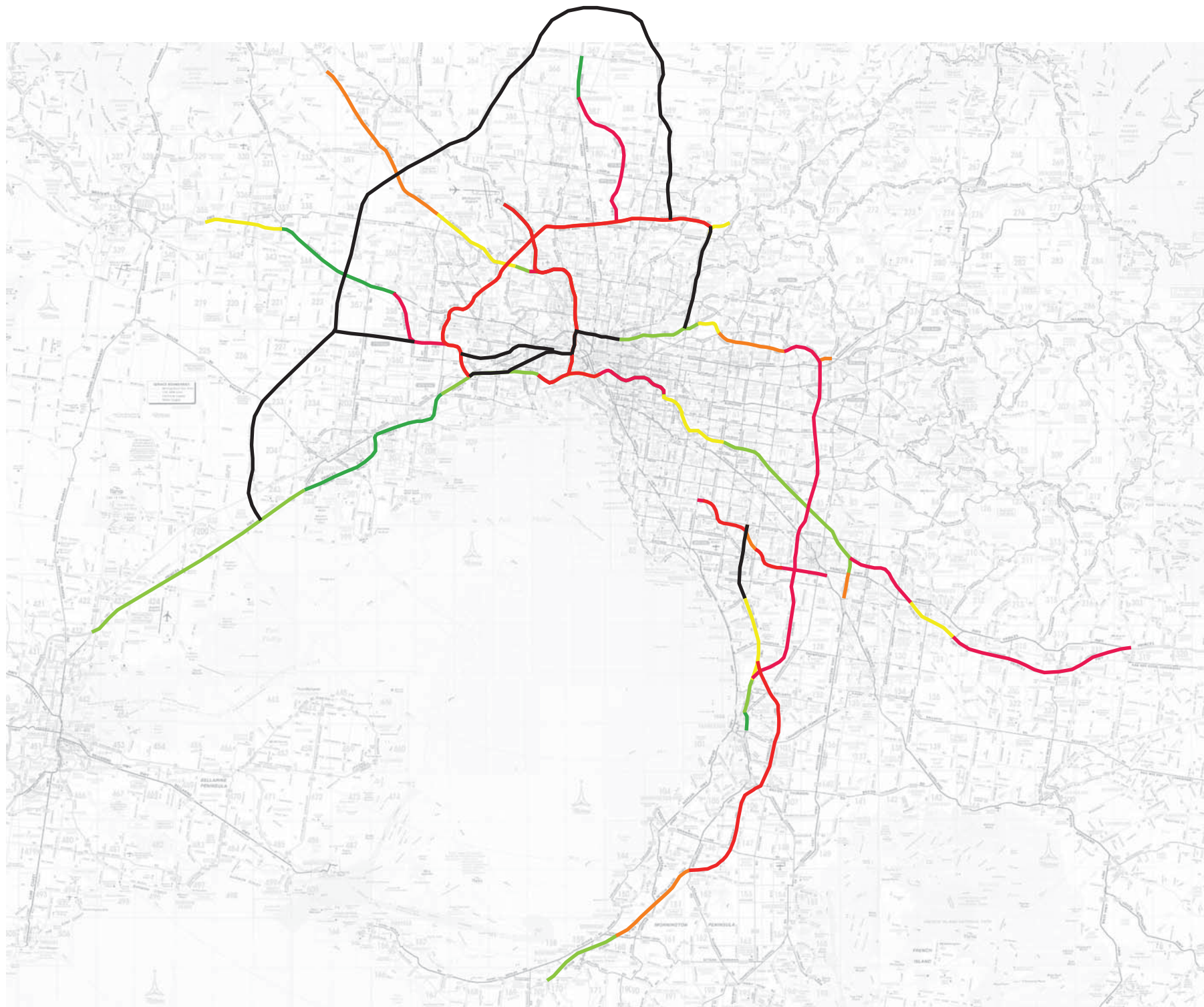
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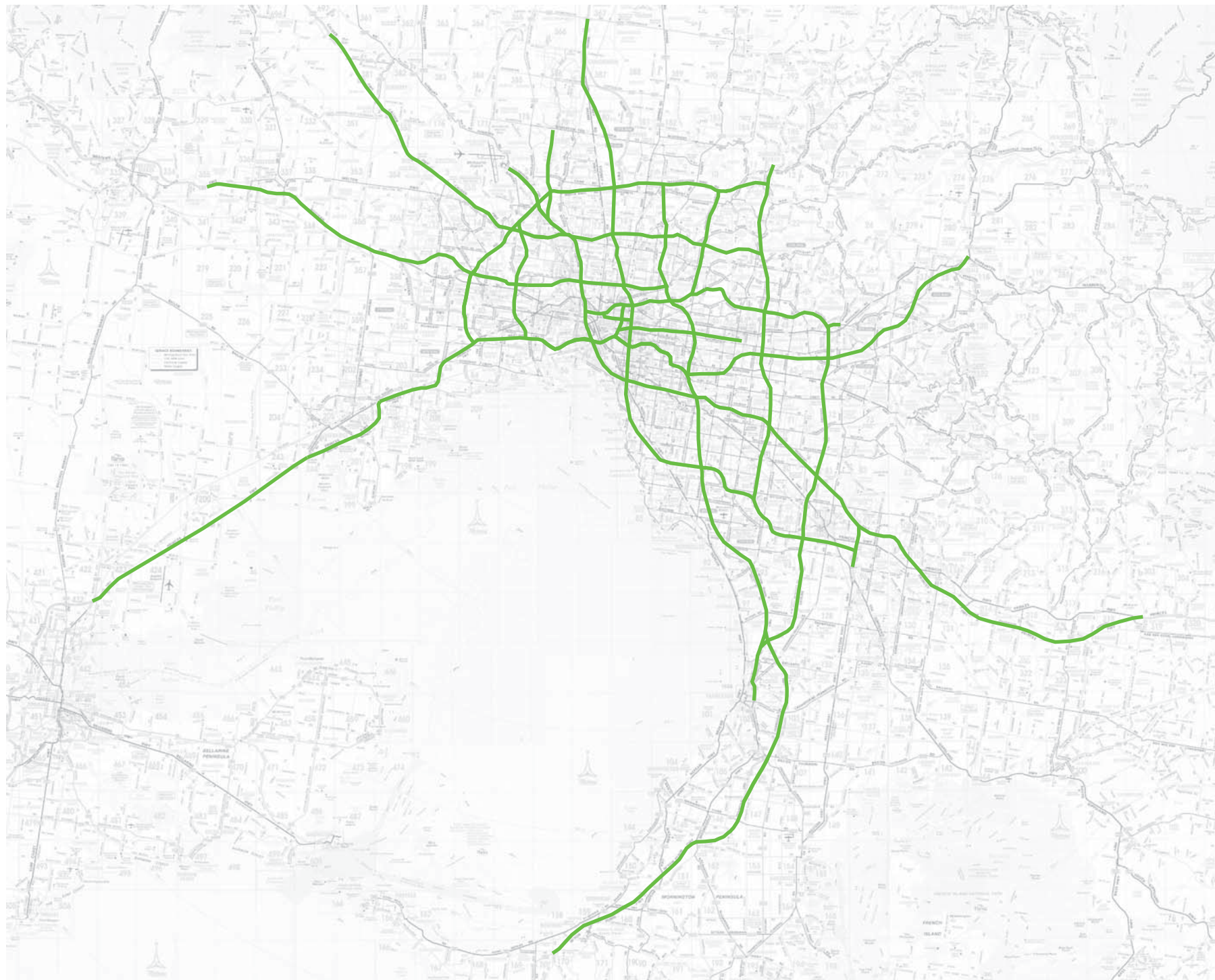
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Lay, Max, Melbourne Miles: The Story of Melbourne's Roads (2003)

Melbourne Transportation Study (1969)

Public Transport Users Association, More Roads = More Traffic (2014)

Year completed	Project	Location	Length of new road (km)	Accumulated length (km)	Cost
1961	Maltby Bypass	Princes Highway, Hoppers Crossing to Princes Highway, Werribee	10.5	10.5	£950,000
1962	South Eastern Arterial	Swan Street, Richmond to Burnley Street , Burnley	3	13.5	£2m
1963	Frankston Bypass	Frankston Dandenong Road, Frankston to Beach Street, Frankston	1.7	15.2	n/a
1967	Western Highway	Station Road, Deer Park to Leakes Road, Rockbank	12.8	28	n/a
1968	Tullamarine Bypass Road (Tullamarine Freeway)	Lancefield Road, Essendon Airport to Melbourne Airport entrance	7.5	35.5	\$3.74m
1968	Western Highway	Leakes Road, Rockbank to High Street, Melton East	4.8	40.3	n/a
1968	Laverton Bypass	Princes Highway, Hoppers Crossing to Kororoit Creek Road, Laverton	12	52.3	n/a
1968	Hume Freeway	Craigieburn Road, Craigieburn to Donnybrook Road, Kalkallo	7.08	59.38	n/a
1969	South Eastern Arterial	Burnley Street , Burnley to Toorak Road, Malvern	4	63.38	n/a
1970	Princes Freeway	Kororoit Creek Road overpass, Laverton North	0	63.38	n/a
1970	Strathmore Bypass Road (Tullamarine Freeway)	Bell Street, Pascoe Vale to the southern boundary of Essendon Airport	3.2	66.58	\$14.94m
1970	Tullamarine Freeway	Bell Street, Pascoe Vale to Mt Alexander Road, Flemington	14.5	81.08	
1971	Princes Freeway	Kororoit Creek, Altona North to Williamstown Road, Spotswood	8.9	89.98	\$414m
1972	Mulgrave Bypass	Stud Rd, Dandenong North to Laurel Ave, Doveton	3.9	93.88	\$6.5m
1972	Eumemmering Bypass	Laurel Ave, Doveton to Princes Hwy, Hallam	1.5	95.38	
1972	Calder Freeway	Tullamarine Freeway/Lancefield Road, Keilor to the Calder Highway, Niddrie	2	97.38	\$3m
1973	Frankston Bypass	Klauer Street, Frankston North to Armstrongs Road, Seaford	2.7	100.08	\$3m
1974	Princes Freeway	Princes Highway, Brooklyn to Princes Highway, Hoppers Crossing	13	113.08	n/a
1974	Princes Freeway	Princes Highway, Werribee to Princes Highway, Corio	25	138.08	n/a
1974	South Eastern Arterial	Springvale Road, Mulgrave to Stud Rd, Dandenong North	7.5	145.58	\$9.3m

Year completed	Project	Location	Length of new road (km)	Accumulated length (km)	Cost
1974	Calder Freeway	The Avenue, Keilor to Erberus Street, Keilor Park	2	147.58	\$2.5m
1975	Mornington Peninsula Freeway	Nepean Highway, Dromana to Jetty Road, Rosebud South	6	153.58	\$5.7m
1976	South Eastern Arterial	Springvale Road, Mulgrave to Blackburn Road, Glen Waverley	2.2	155.78	n/a
1977	South Eastern Arterial	Blackburn Road, Glen Waverley to Forster Road, Mount Waverley	1.2	156.98	\$13m
1977	Eastern Freeway	Hoddle Street, Clifton Hill to Chandler Highway, Kew	3.2	160.18	\$84.5m
1977	Eastern Freeway	Chandler Highway, Kew to Burke Road, Kew East	3.2	163.38	
1977	Eastern Freeway	Burke Road, Kew East to Bulleen Road, Bulleen	1.5	164.88	
1978	West Gate Freeway	Princes Freeway, Brooklyn to Graham Street, Port Melbourne (including West Gate Bridge)	8.9	173.78	\$202m
1979	Tullamarine Freeway	Along the western boundary of Essendon Airport (then known as Lancefield Road)	1.6	175.38	\$7.8m
1979	South Eastern Arterial	Huntingdale Road, Mount Waverley to Forster Road, Mount Waverley	2.1	177.48	\$8.7m
1980	Mornington Peninsula Freeway	Springvale Road, Keysborough to Eel Race Road, Seaford	6.7	184.18	\$14m
1981	South Eastern Arterial	Huntingdale Road, Chadstone to Warrigal Road, Chadstone	1.6	185.78	\$11m
1982	Eastern Freeway	Bulleen Road, Bulleen to Doncaster Road, Doncaster	3	188.78	\$24m
1982	Calder Freeway	Erebus Street, Keilor Park to Arundel Road, Keilor	3.8	192.58	\$15.5m
1983	Berwick Bypass	Princes Highway, Narre Warren to Pink Hill, Berwick	7.3	199.88	\$19.6m
1984	Keilor Bypass	Arundel Road, Keilor to Oakbank Road, Sydenham	3.2	203.08	\$30m
1985	West Gate Freeway	Rogers Street, Port Melbourne to Graham Street, Port Melbourne (including Ingles Street overpass and Graham Street works)	3.3	206.38	\$137m
1987	West Gate Freeway	Graham Street, Port Melbourne to Grant Street, South Melbourne	3.6	209.98	\$96m
1987	Melton Bypass	Djerrwarrh Creek to High Street, Melton East	8.8	218.78	\$44.2m
1988	South Eastern Arterial	Toorak Road, Malvern to Warrigal Road, Chadstone	6.7	225.48	\$152m
1989	Greensborough Bypass	Lenola Street, Macleod to Diamond Creek Road Greensborough	5.5	230.98	\$32m

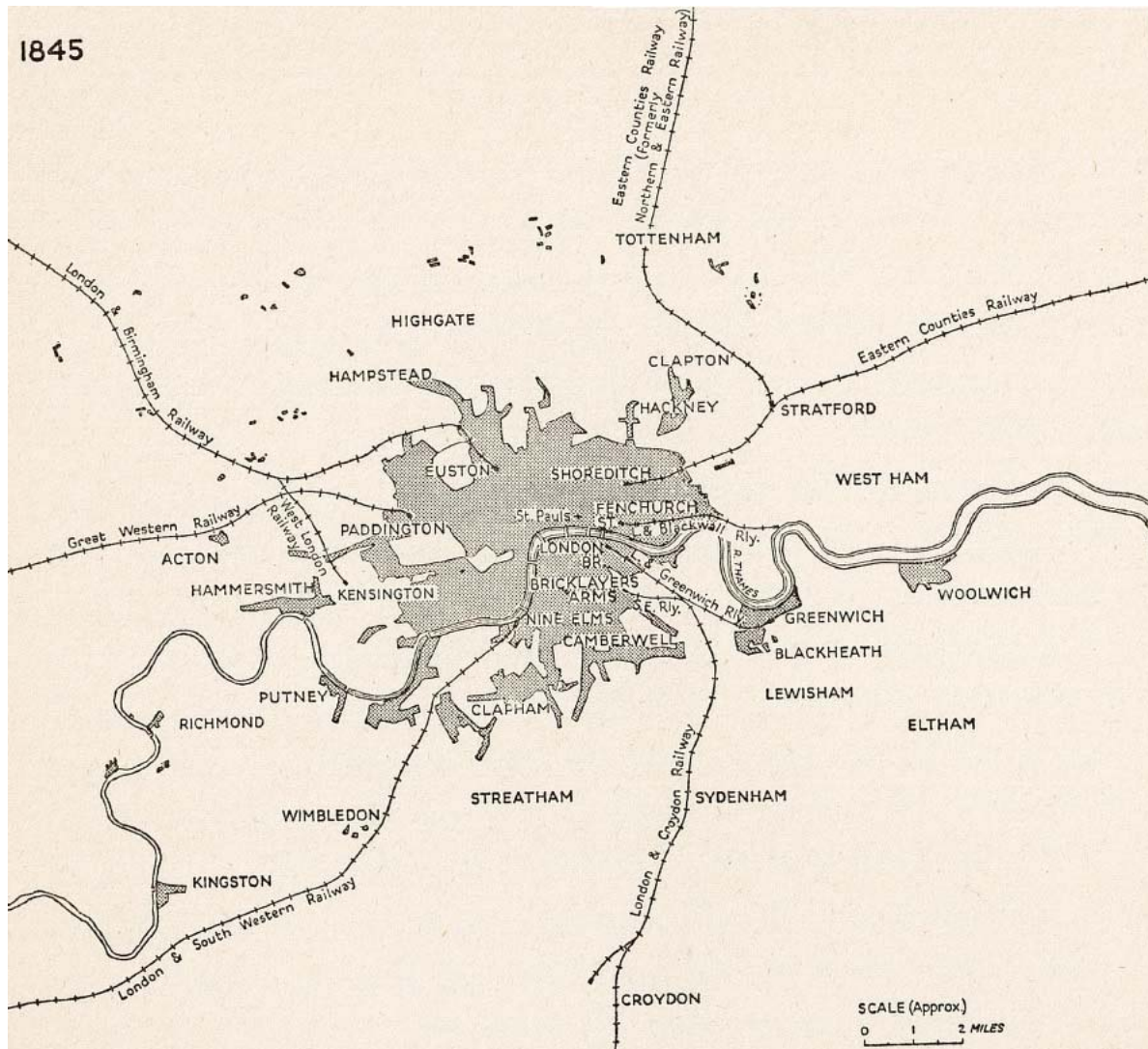
Year completed	Project	Location	Length of new road (km)	Accumulated length (km)	Cost
1991	Calder Freeway	Oakbank Road, Keilor North to Duncans Lane, Diggers Rest	7.7	238.68	\$14m
1992	Western Ring Road	Tullamarine Freeway, Gladstone Park to Pascoe Vale Road, Broadmeadows	2.7	241.38	n/a
1992	South Gippsland Freeway	Princes Highway, Doveton to Pound Road, Dandenong South	2.8	244.18	n/a
1993	Western Ring Road	Pascoe Vale Road, Broadmeadows to Sydney Road, Glenroy	3.8	247.98	\$63m
1993	Calder Freeway Diggers Rest bypass	Duncans Lane, Diggers Rest to Vineyard Road, Diggers Rest	6.5	254.48	\$32m
1993	Mornington Peninsula Freeway	Nepean Highway, Dromana to Moorooduc Highway, Moorooduc	12	266.48	\$10m
1994	South Eastern Arterial	Warrigal Road overpass, Chadstone	0	266.48	\$15m
1994	Western Ring Road	Greensborough Bypass, Greensborough to Plenty Road, Bundoora	2.5	268.98	\$15.5m
1995	Western Ring Road	Ballarat Road, Ardeer to Keilor Park Drive, Sunshine North	6.4	275.38	\$108m
1995	Westall Road Extension	Heatherton Road to Springvale Road	2.8	278.18	n/a
1996	Ringwood Bypass	Ringwood Street, Ringwood to Mt Dandenong Road, Ringwood	0.9	279.08	\$59.6m
1996	South Eastern Arterial	Tooronga Road overpass, Kooyong	0	279.08	n/a
1996	Calder Freeway Gap Hill section	Vineyard Road, Diggers Rest to Millett Road, South Gisborne	9	288.08	\$32m
1996	Western Ring Road	Keilor Park Drive, Keilor to Calder Freeway, Keilor Park	1.5	289.58	n/a
1996	Western Ring Road	Plenty Road, Bundoora to Dalton Street, Thomastown	3.5	293.08	\$85m
1996	Western Ring Road	Boundary Road, Laverton North to Ballarat Road, Ardeer	6.3	299.38	\$95m
1996	Western Ring Road	Boundary Road, Laverton North to Princes Freeway, Altona	1.5	300.88	n/a
1997	Eastern Freeway	Doncaster Road, Doncaster to Springvale Road, Donvale	7	307.88	\$250m
1997	Western Ring Road	Calder Freeway, Keilor Park to Tullamarine Freeway, Gladstone Park	5	312.88	\$50m
1999	Western Ring Road	Sydney Road, Campbellfield to Dalton Road, Thomastown	6	318.88	\$140m
1999	City Link Western Link	Flemington Road, Flemington to West Gate Freeway, Port Melbourne	5	323.88	\$1.8b
2000	City Link Southern Link	Domain and Burnley Tunnels	3	326.88	

Year completed	Project	Location	Length of new road (km)	Accumulated length (km)	Cost
2001	Western Freeway	Hopkins Road Interchange Western Freeway, Rockbank	0	326.88	\$13.1m
2003	Hallam Bypass	South Gippsland Freeway, Doveton to Princes Freeway, Narre Warren	7.5	334.38	\$165m
2005	Craigieburn Bypass	Hume Freeway, Craigieburn to Ring Road, Thomastown	17	351.38	\$306m
2007	Tulla Calder Interchange	New interchange and ramp configuration of Calder and Tullamarine Freeways, Keilor	2	353.38	\$150m
2007	West Gate Bridge Strengthening	West Gate Bridge	0	353.38	\$240m
2007	Pakenham Bypass	Clyde Road, Berwick to Princes Highway, Nar Nar Goon	20	373.38	\$242m
2007	Dandenong Bypass Part A	Perry Road and South Gippsland Highway	4.8	378.18	\$65m
2007	South Road Extension	Warrigal Road to Old Dandenong Road	1	379.18	\$9.3m
2008	EastLink	Springvale Road, Nunawading to Frankston Freeway, Seaford	40	419.18	\$2.5bn
2009	Deer Park bypass	Western Highway, Caroline Springs to Western Ring Road, Sunshine West and Leakes Road interchange at Rockbank	9.3	428.48	\$331m
2011	West Gate Bridge and M1 Upgrade	Monash Freeway and West Gate Freeway widening from Williamstown Road to CityLink including braided ramps at Montague Street, Port Melbourne	6	434.48	\$1.39b
2011	Dandenong Bypass Part B	Springvale Road - Perry Road	3.2	437.68	\$74.6m
2012	Calder Freeway	Kings Road interchange, Taylors Lakes	0	437.68	\$62m
2013	Peninsula Link	Eastlink, Seaford to Mornington Peninsula Freeway, Mount Martha	27	464.68	\$759m
2016	Dingley Bypass	Old Dandenong Road to Westall Road	6.4	471.08	\$156m
2017	Western Ring Road (M80 Upgrade)	Western Ring Road widening from Princes Freeway to Greensborough Bypass	38	509.08	\$2.25b
2017	CityLink Tulla Widening	Tullamarine Freeway widening from Melbourne Airport to West Gate Freeway	21	530.08	\$1.3bn
Construction commence 2018 Completion 2022	West Gate Tunnel	West Gate Freeway widening from the Western Ring Road to Williamstown Road, new tunnel under Yarraville and elevated freeway connection to Tullamarine Freeway	11	541.08	\$5.5b

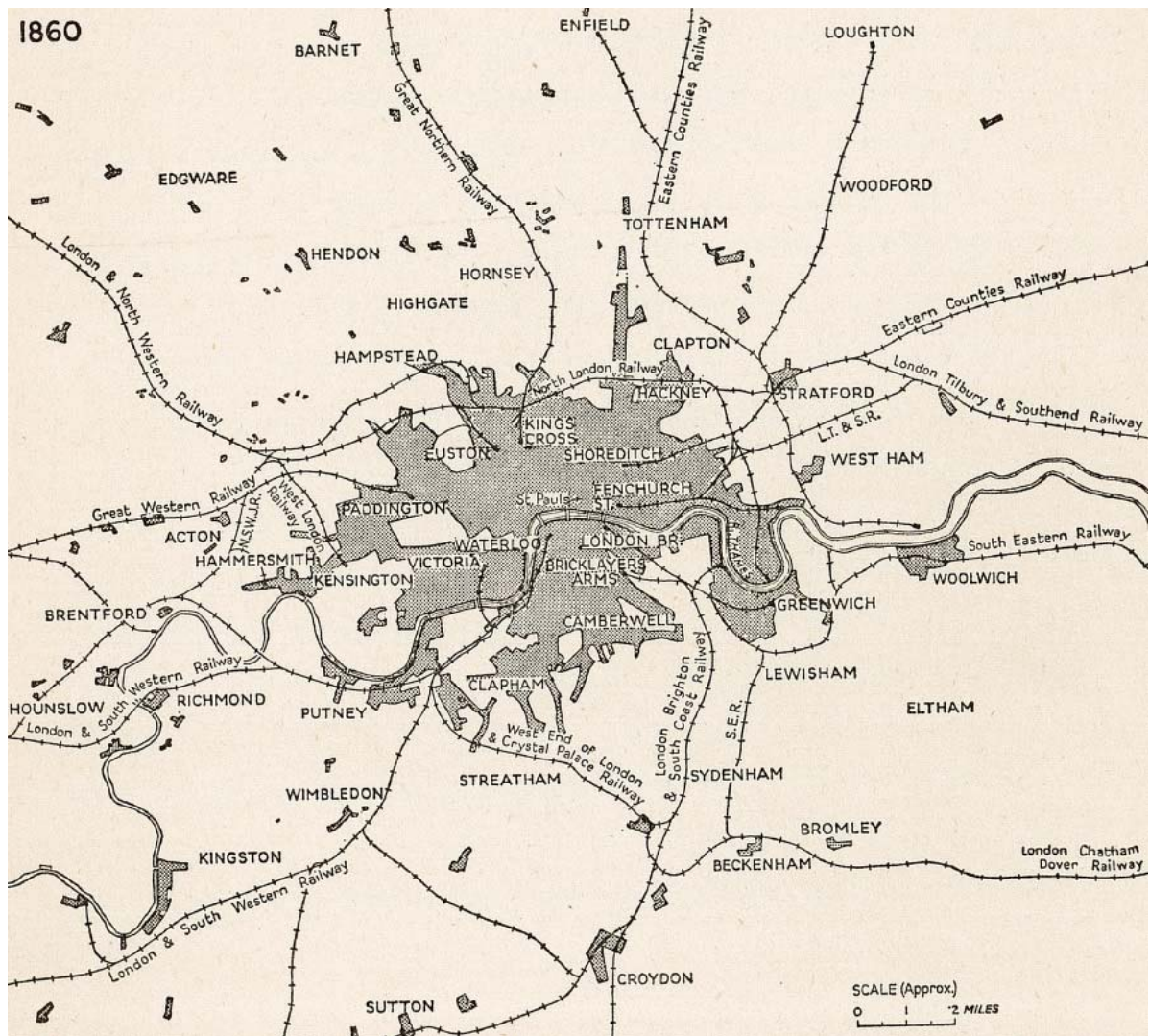
Year completed	Project	Location	Length of new road (km)	Accumulated length (km)	Cost
Construction commence 2019 Completion 2121	Mordialloc Bypass	Springvale Road, Keysborough to Dingley Bypass, Dingley	9	550.08	\$300m
Construction commence 2020 Completion 2025 (est.)	North East Link	Greensborough Hwy, Greensborough to Eastern Freeway, Bulleen	11	561.08	\$10b
n/a	West Link	New freeway connection from Western Ring Road, Derrimut to Port of Melbourne, including tunnel under Footscray	9.5	570.58	\$5b
n/a	Deer Park East-West Road	Outer Metro Road, Chartwell to Deer Park Bypass, Derrimut	7.7	578.28	n/a
Amendment VC68, gazetted 6 August 2010	Outer Metropolitan Ring / E6	From the Princes Freeway west of Werribee, through Rockbank, Plumpton, Bulla, Oaklands Junction, Mickleham, Beveridge, , Woodstock, Epping and joining the Western Ring Road at Thomastown	100	678.28	n/a

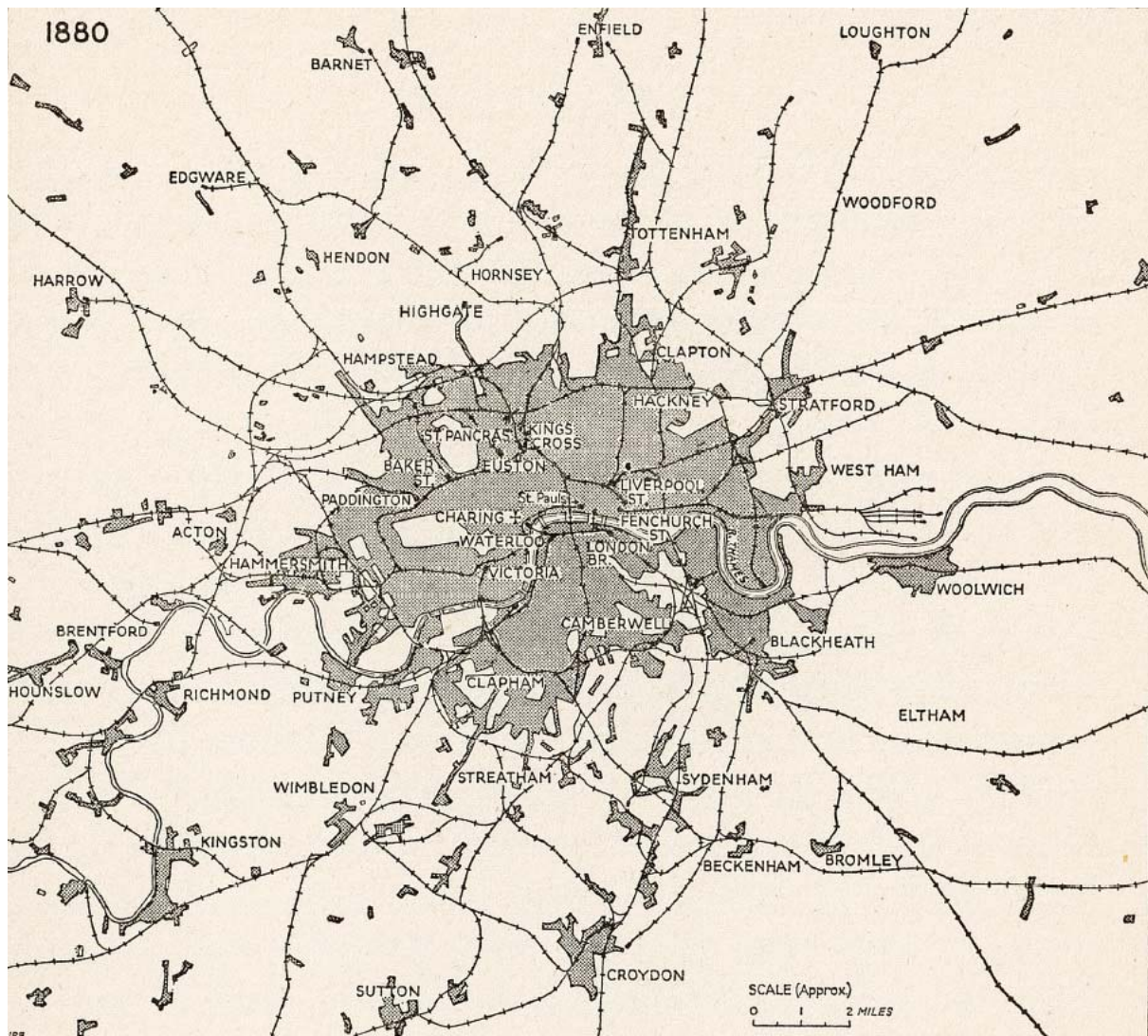
Appendix 4

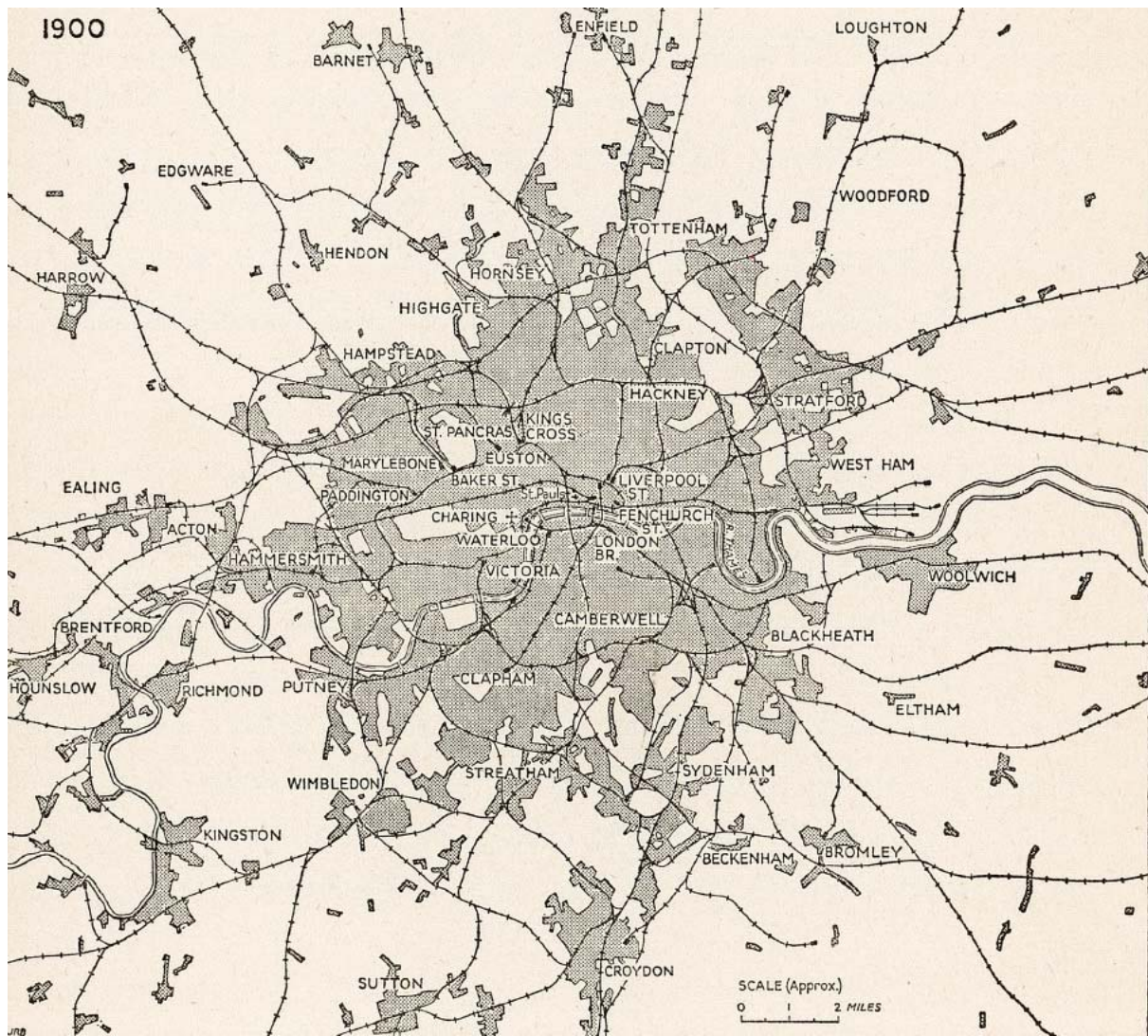
London's spatial growth, 1845-1961 (Barker and Robbins 1974)



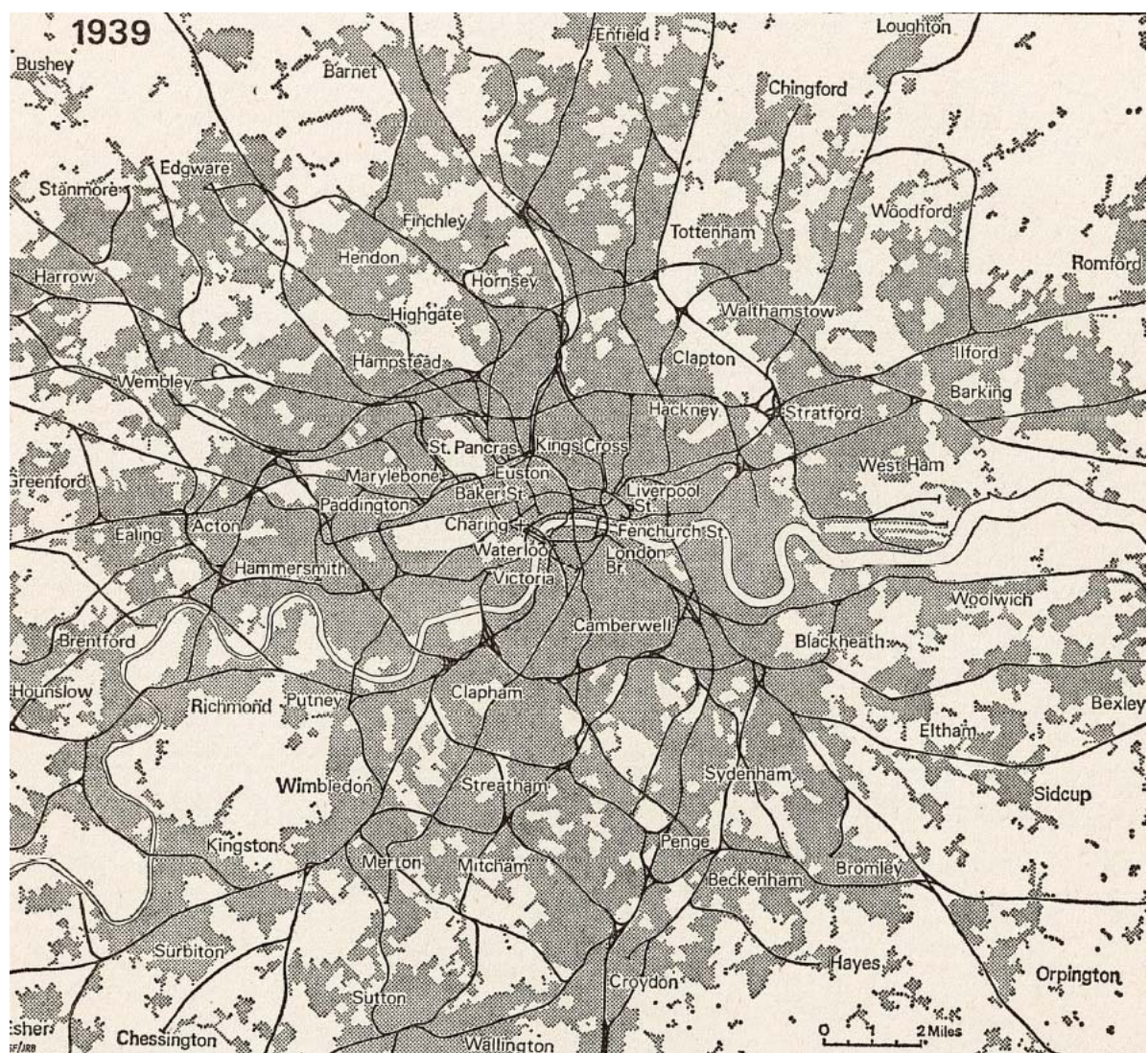
1860

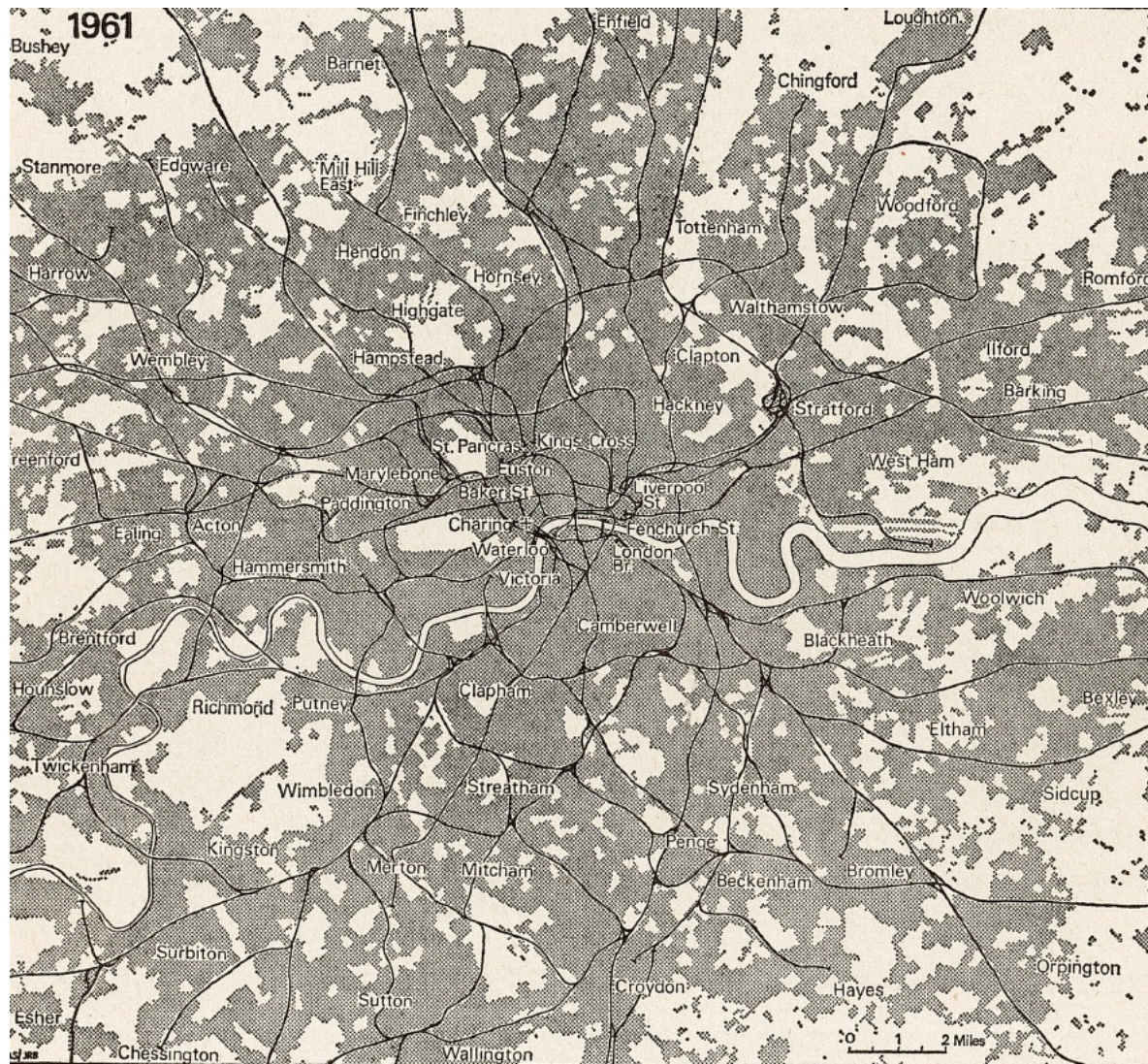












Barker, T and M Robbins, 1974, A history of London transport: passenger travel and the development of the metropolis, George Allan & Unwin Ltd, London, United Kingdom.

Appendix 5

West Gate Tunnel expert witnesses (Western Distributor Authority 2017)

1. Michael Barlow in strategic planning;
2. Roger Wood in urban design;
3. Dieter Lim in landscape;
4. Trevor O'Shannessy in ground movement;
5. Andrew Kalitsis in contaminated soil and spoil management;
6. Jonathan Medd in groundwater;
7. Melanie Collett in surface water;
8. Cameron Miller in ecology;
9. Tim Veitch in strategic transport modelling;
10. John Kiriakidis in transport;
11. Matthew Stead in airborne noise;
12. John Heilig in vibration and regenerated noise;
13. Frank Fleer in air quality;
14. Jackie Wright in human health;
15. Dr Pallavi Mandke in social impacts;
16. Natalie Lawlor in relation to businesses directly impacted by the Project;
17. Ricky Feldman in Aboriginal cultural heritage;
18. Kate Gray in historical heritage; and
19. Will Symons in greenhouse gas.

Western Distributor Authority, 2017, Submissions on behalf of Western Distributor Authority Part A, Planning Panels Victoria: Inquiry and Advisory Committee Appointed by the Minister for Planning, In the matter of the West Gate Tunnel Project Environment Effects Statement, 7 August, viewed 14 August 2017, <https://engage.vic.gov.au/application/files/1315/0215/7969/Part_A_Submissions_-_7_August_2017.pdf>

Appendix 6

West Gate Tunnel alternative projects (Public Transport Users Association 2017)

- Building the Port Rail Shuttle and developing the inland ports;
- Running trains every 10 minutes on all lines through the western suburbs, all day every day;
- Bringing forward rail electrification to Caroline Springs and Melton;
- Building the short connecting track from Werribee to Wyndham Vale planned as part of the original Regional Rail Link scope, to re-establish a connection between Geelong and Werribee train services;
- Identifying and rolling out a new network of Smartbus services running every 10 minutes during the day, 7 days a week;
- Extending tram route 57 from West Maribyrnong to Milleara Mall via Avondale Heights, providing interchange with the 903 Smartbus;
- Developing targeted road network solutions in consultation with the community to get large trucks off residential streets;
- Provide full time bus lanes on all road widening projects in growth areas and a commitment to provide a bus service every 10 minutes along the road in question; and
- Fully funding the implementation of the Principal Bicycle Network in the western suburbs.

Public Transport Users Association (2017). "West Gate Tunnel Project Submission on the Environment Effects Statement." Planning Panels Victoria: Inquiry and Advisory Committee Appointed by the Minister for Planning, In the matter of the West Gate Tunnel Project Environment Effects Statement.

Appendix 7

Motor Vehicle Registrations, Victoria 1910-2018 and Public Transport Patronage, Melbourne 1910-2018

The following data comprises information obtained from several sources to illustrate the growth of motor vehicle registrations in Victoria and Public Transport Patronage in Melbourne over a historical time-series. Note that data is illustrative only as problems with data quality or availability can impede the collation of consistent series.

Australian Bureau of Statistics, 1982-2019, Motor Vehicle Census. Cat. No. 9309.0, Commonwealth Government, Canberra, Australia.

Cosgrove, David, 2011, Long-term patterns of Australian public transport use, Australasian Transport Research Forum, Proceedings 28 - 30 September 2011, Adelaide, viewed 16 March 2019
<https://www.bitre.gov.au/sites/default/files/sp_006_Cosgrove.pdf>.

Country Roads Board, 1910-1982, Annual Report, Country Roads Board, Victorian Government Printer, Melbourne, Australia.

Public Transport Victoria, 2012, Melbourne Public Transport Patronage Long Run Series 1945-46 to 2010-11, viewed 16 March 2019, <<http://web.archive.org/web/20130410193124/http://corp.ptv.vic.gov.au/assets/PTV/PTV%20docs/Research-and-statistics/Market-Analysis-Patronage-Long-Run-Series-2012.pdf>>

Public Transport Victoria, 2013, Annual Report, viewed 5 November 2019
<<https://www.ptv.vic.gov.au/assets/default-site/2cc223b36a/PTV-Annual-Report-2012-13.pdf>>

Public Transport Victoria, 2014, Annual Report, viewed 5 November 2019
<<https://www.ptv.vic.gov.au/assets/default-site/1f229710b5/PTV-Annual-Report-2013-14.pdf>>

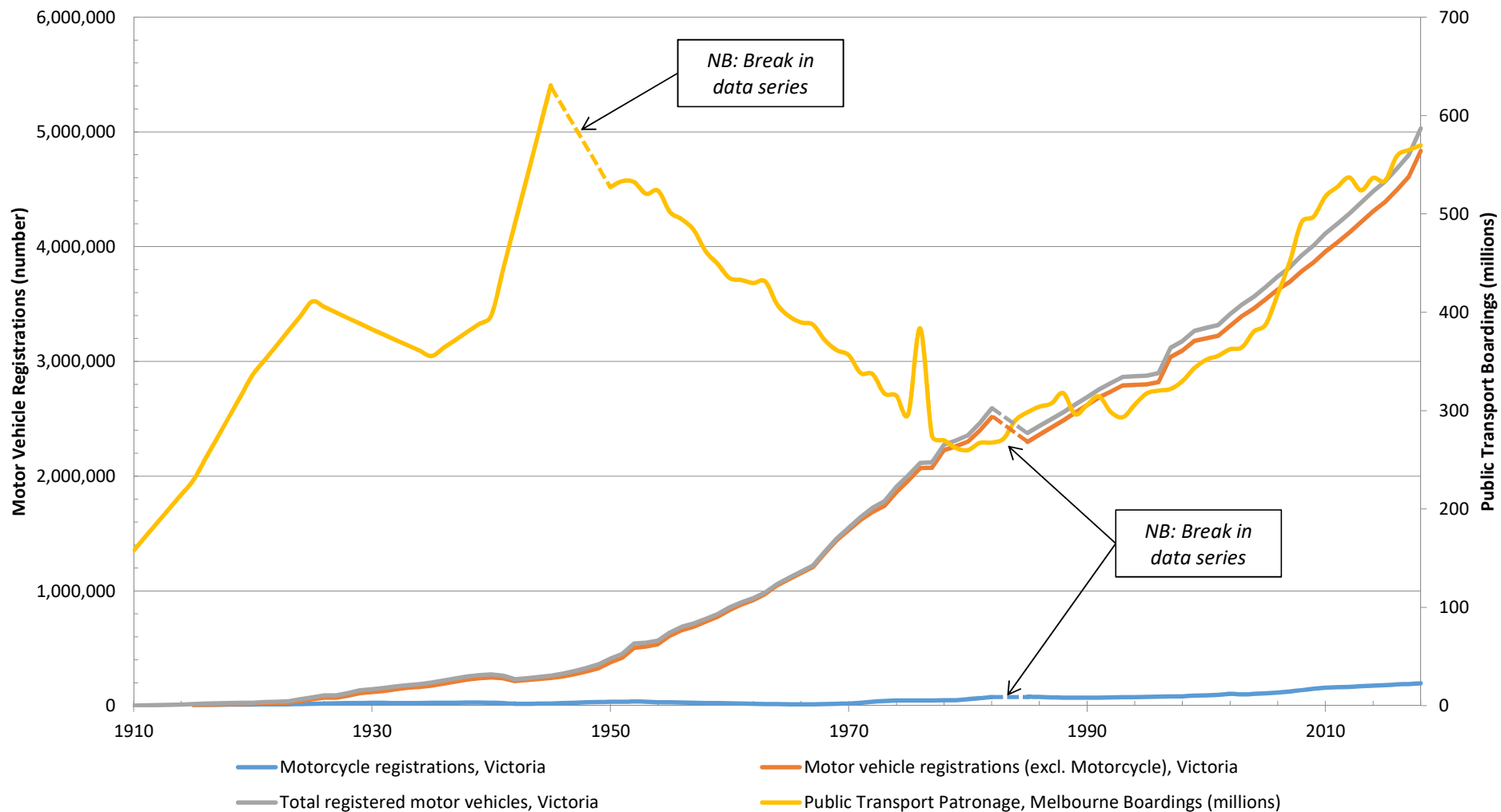
Public Transport Victoria, 2015, Annual Report, viewed 5 November 2019
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Public Transport Victoria, 2017, Annual Report, viewed 5 November 2019
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<https://www.ptv.vic.gov.au/assets/default-site/footer/data-and-reporting/annual-report/6b8c2cff5a/PTVH4043-Annual_Report_2019-A4-v1_ONLINE.pdf>

Motor Vehicle Registrations, Victoria 1910-2018 and Public Transport Patronage, Melbourne 1910-2018



Year	Motorcycle registrations, Victoria	Motor vehicle registrations (excl. Motorcycle), Victoria	Total registered motor vehicles, Victoria	Public Transport Patronage, Melbourne Boardings (million)
1910	N/A	N/A	2,181	157.6
1911	N/A	N/A	3,985	N/A
1912	N/A	N/A	5,789	N/A
1913	N/A	N/A	7,593	N/A
1914	N/A	N/A	9,400	N/A
1915	7,139	8,189	15,328	229.0
1916	7,797	10,051	17,848	N/A
1917	8,664	11,846	20,510	N/A
1918	9,530	13,642	23,172	N/A
1919	9,951	14,895	24,846	N/A
1920	10,371	16,149	26,520	336.5
1921	11,985	19,939	31,924	N/A
1922	12,283	22,267	34,950	N/A
1923	12,406	27,232	39,638	N/A
1924	14,674	41,570	56,244	N/A
1925	16,942	55,908	72,850	411.0
1926	19,212	70,246	89,458	N/A
1927	21,111	69,103	90,214	N/A
1928	23,010	87,940	110,950	N/A
1929	24,015	109,933	133,948	N/A
1930	24,554	118,853	143,407	382.7
1931	25,405	128,451	153,856	N/A
1932	22,568	144,084	167,952	N/A
1933	23,439	156,163	179,602	N/A
1934	24,248	164,008	188,256	N/A
1935	24,968	175,791	200,759	355.5
1936	26,095	193,830	219,925	N/A
1937	26,663	210,519	237,182	N/A
1938	27,333	227,677	255,010	N/A
1939	26,698	240,164	266,862	N/A
1940	25,765	246,264	272,029	396.3
1941	23,572	239,071	262,643	N/A
1942	16,688	214,092	230,780	N/A
1943	16,267	222,887	239,154	N/A
1944	17,937	232,018	249,955	N/A
1945	19,798	241,927	261,725	630.6
1946	23,228	255,601	278,829	N/A
1947	26,172	275,907	302,079	N/A
1948	29,083	300,188	329,271	N/A
1949	31,647	327,495	359,142	N/A
1950	34,231	377,667	411,898	527.2
1951	33,531	418,250	451,781	533.3

Year	Motorcycle registrations, Victoria	Motor vehicle registrations (excl. Motorcycle), Victoria	Total registered motor vehicles, Victoria	Public Transport Patronage, Melbourne Boardings (million)
1952	37,196	504,937	542,133	532.3
1953	33,437	515,506	548,943	520.4
1954	30,840	536,364	567,204	523.6
1955	29,150	608,512	637,662	502.0
1956	27,632	658,851	686,483	494.5
1957	25,585	690,712	716,297	483.6
1958	24,308	731,853	756,161	461.9
1959	23,435	774,456	797,891	449.2
1960	21,968	834,174	856,142	434.8
1961	19,274	882,372	901,646	432.7
1962	17,124	919,570	936,694	429.7
1963	15,145	972,254	987,399	431.2
1964	13,631	1,047,434	1,061,065	408.0
1965	12,792	1,102,084	1,114,876	395.9
1966	12,100	1,155,739	1,167,839	389.7
1967	12,713	1,208,639	1,221,352	387.4
1968	14,324	1,329,177	1,343,501	371.6
1969	16,655	1,442,710	1,459,365	361.4
1970	19,978	1,529,301	1,549,279	356.4
1971	26,275	1,618,147	1,644,422	338.2
1972	35,221	1,688,487	1,723,708	337.1
1973	40,735	1,740,805	1,781,540	317.4
1974	45,706	1,862,493	1,908,199	315.2
1975	44,753	1,961,601	2,006,354	296.5
1976	46,230	2,070,644	2,116,874	383.5
1977	45,602	2,074,101	2,119,703	274.2
1978	46,845	2,227,620	2,274,465	269.8
1979	48,205	2,260,496	2,308,701	261.9
1980	55,873	2,300,114	2,355,987	259.9
1981	65,636	2,398,594	2,464,230	267.2
1982	75,457	2,514,914	2,590,371	267.5
1983	N/A	N/A	N/A	271.6
1984	N/A	N/A	N/A	290.2
1985	78,790	2,297,475	2,376,265	298.3
1986	76,114	2,360,072	2,436,186	304.0
1987	73,438	2,422,669	2,496,107	307.2
1988	70,762	2,485,267	2,556,029	317.9
1989	70,668	2,552,143	2,622,811	296.3
1990	70,574	2,619,019	2,689,593	305.7
1991	70,480	2,685,897	2,756,377	314.4
1992	72,148	2,738,395	2,810,543	298.5
1993	73,817	2,790,894	2,864,711	293.3

Year	Motorcycle registrations, Victoria	Motor vehicle registrations (excl. Motorcycle), Victoria	Total registered motor vehicles, Victoria	Public Transport Patronage, Melbourne Boardings (million)
1994	75,430	2,795,102	2,870,532	306.0
1995	77,043	2,799,310	2,876,353	317.5
1996	78,656	2,819,174	2,897,830	320.3
1997	80,271	3,038,696	3,118,967	322.0
1998	82,324	3,095,066	3,177,390	329.9
1999	87,854	3,178,538	3,266,492	343.1
2000	91,297	3,200,739	3,292,036	351.7
2001	94,741	3,222,941	3,317,682	355.7
2002	102,764	3,310,944	3,413,708	362.4
2003	99,072	3,395,242	3,494,314	364.4
2004	102,463	3,462,687	3,565,150	380.4
2005	107,581	3,542,001	3,649,582	387.8
2006	114,438	3,626,288	3,740,726	418.4
2007	123,806	3,694,256	3,818,062	450.8
2008	136,019	3,785,555	3,921,574	491.5
2009	147,600	3,862,676	4,010,276	497.0
2010	156,390	3,956,518	4,112,908	517.7
2011	160,634	4,037,737	4,198,371	527.6
2012	164,778	4,121,506	4,286,284	537.0
2013	169,406	4,214,228	4,383,634	523.9
2014	174,336	4,308,762	4,483,098	536.5
2015	178,905	4,388,409	4,567,314	533.6
2016	185,248	4,496,089	4,681,337	558.8
2017	189,217	4,608,880	4,798,097	565.0
2018	195,780	4,835,126	5,030,906	569.6

Appendix 8

Victoria's Land Use and Transport Planning Government Entities 2016-17 Results

The following data comprises information obtained from the relevant entity Annual Reports for year ending 30 June 2017.

Australian Rail Track Corporation (2017). Annual Report. Keswick Terminal, Commonwealth Government Printer.

Department of Economic Development, Jobs, Transport and Resources (2017). 2016-17 Annual Report. Melbourne, Victorian Government.

Department of Environment, Land, Water and Planning (2017). Annual Report 2017. Melbourne, Victorian Government.

Infrastructure Victoria (2017). Annual Report 2016-17. Melbourne, Infrastructure Victoria.

Places Victoria (2017). Annual Report 2017. Melbourne, Places Victoria.

Port of Hastings Development Authority (2017). Annual Report 2016-17. Melbourne, Port of Hastings Development Authority.

Public Transport Ombudsman (2017). Annual Report 2017. Melbourne, Public Transport Ombudsman.

Public Transport Victoria (2017). Annual Report 2016-17. Melbourne, Public Transport Development Authority.

Taxi Services Commission (2017). 2016-17 Annual Report. Melbourne, Taxi Services Commission.

Transport Accident Corporation (2017). 2016-17 Annual Report. Geelong, Transport Accident Corporation.

V/Line (2017). Annual Report 2016-17. Melbourne, Transport for Victoria.

Victorian Planning Authority (2017). Annual Report 2016-17. Melbourne, Victorian Planning Authority.

Victorian Ports Melbourne (2017). Annual Report 2016-17. Melbourne, Victorian Ports Corporation.

VicRoads (2017). Annual Report 2016-17. Melbourne, VicRoads.

VicTrack (2017). Annual Report 2016-17. Melbourne, Department of Economic Development, Jobs, Transport and Resources.

Name of Authority	Total Revenue (\$m)	Source page	Expenditure (\$m)	Source page	Staff (EFT)	Source page	Executives earning over \$160,000	Source page	Highest paid Executive (\$000s)	Source page	FOI requests received	Source page	Other notes
DEDJTR	\$7,412.94	26	\$7,881.62	26	3030	250	242	261	\$520-539	261	185	282	
DELWP	\$2,183.65	19	\$1,987.13	19	108	30	72	31	\$520-530	130	183	92	
Infrastructure Victoria	\$9.95	71	\$9.95	71	27	25	5	26	\$500-509	90	4	30	
VicTrack	\$2,230.15	45	\$2,889.93	45	367	120	51	121	\$360-379	121	10	124	
MMRA	n.a.	n.a.	n.a.	n.a.	272	254	79	265	\$500-519	265	n.a.	n.a.	1
LXRA	n.a.	n.a.	n.a.	n.a.	301	252	76	263	\$360-379	263	n.a.	n.a.	1
ARTC	\$826.76	67	\$646.45	67	n.a.	n.a.	4	58	\$692-687	58	n.a.	n.a.	2
Taxi Services Commission	\$428.15	65	\$433.15	65	131	55	1	106	\$280-289	106	15	121	
The Punt	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Inter Island Ferry	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Metro Trains	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Transport Safety Victoria	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
PTV	\$4,634.00	28	\$4,669.00	28	462	42	62	44	\$400-419	44	64	52	
Yarra Trams	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Development Victoria	\$176.38	11	\$133.25	11	107	20	1	63	\$390-399	63	2	23	2
Victorian Ports	\$146.90	22	\$100.90	22	56	115	9	114	\$300-319	114	2	118	
Port of Hastings	\$4.40	22	\$4.60	22	8	18	2	56	\$230-239	56	0	62	3
V/Line	\$778.60	13	\$777.60	13	1,730	48	27	49	\$420-439	49	6	55	4
Pacific National	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
VPA	\$19.35	40	\$18.74	40	95	31	6	33	\$420-439	33	3	36	
VicRoads	\$2,797.30	41	\$2,376.40	42	2,416	56	76	57	\$420-439	60	1,245	64	
TAC	\$1,686.58	37	\$368.54	37	903	92	8	70	\$500-509	70	1,220	88	6
Western Distributor Authority	n.a.	n.a.	n.a.	n.a.	32	258	8	269	\$420-439	269	n.a.	n.a.	1
City Link Tulla Widening	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
North East Link Authority	n.a.	n.a.	n.a.	n.a.	14	256	5	267	\$380-399	267	n.a.	n.a.	1
City Link Authority	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
East Link Authority	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Victorian Regional Channels	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
PTO	\$1.70	44	\$1.80	44	13	10	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5
Southern Cross Station Authority	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Civic Nexus	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Various Bus Operators (19)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Local Government (79)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	

Totals \$23,336.81

\$22,299.06

10,072

734

2939

Notes: (1) Data sourced from DEDJTR Annual Report, (2) Eight person Board of Directors, (3) Three person Board of Directors, (4) Six person Board of Directors, (5) Seven person Board of Directors, (6) Expenses equate to marketing, road safety infrastructure, health compensation and disability research; income equals premiums received

Appendix 9

Interview Questionnaire

Questionnaire

Faculty of Architecture, Building and Planning



Project: Theories and Practice of Urban Transition: Melbourne's Wicked Transport Planning Environment

NB: Commence recording of Interview

Thank you for agreeing to participate in this interview. The purpose of this research is to examine the governance structures and decision making process within transport planning in London.

1. Can you confirm you have received a copy of the Plain Language Statement and Consent Form prior to this interview? Yes/No
2. Can you confirm you have signed the Consent Form? Yes/No

I will start with a series of questions about your role in the creation of the current governance framework for London:

3. Did you participate in the process to create the Greater London Authority during 1998-2000?
Yes/No (if Yes, proceed to question 4, if No, go to question 5)
4. Why did you participate in the process to create the Greater London Authority?

The following questions ask about the *process of creating* the current governance framework for London:

5. Why was the Greater London Authority created in 2000?
6. How did it come about?
7. What were the goals in creating the Greater London Authority?
8. Were these goals achieved?
9. How have these goals been maintained?

The following questions ask about your role in the transport governance of London:

10. Did you participate in the process to create Transport for London in 2000?
Yes/No (if Yes, proceed to question 11, if No, go to question 12)
11. Why did you participate in the process to create Transport for London?

The following questions ask for information about the governance framework for *transport planning* in London:

12. Why was Transport for London created?
13. How did Transport for London come about?
14. How has transport decision making improved in London as a result of Transport for London?
15. What weaknesses have emerged in the Transport for London decision making model?
16. How is Transport for London functioning as an integrated transport authority?
17. On a scale of 1-10 (1 being poor, 10 being excellent) how do you think transport planning is being done in London now compared to the period after the abolition of the GLC and before the creation of the GLA (1985-2000)?

18. How should “good” decisions be made about transport? Is this what happens?
19. Who do you think should be involved in the process of transport decision-making? Is this what happens?
20. The London Plan establishes a vision for the future city. How do transport decisions take this vision into account?
21. The triple bottom line consists of social, environmental and economic considerations. How are these given equal weight in London transport planning?

The following question asks for information about the “powerful Mayor model” that consists of a directly elected Mayor with scrutiny from a broader Assembly of democratically elected councillors:

22. The electoral model adopted for the Greater London Authority sought to create a “new style of non-confrontational politics in London”. How has the Greater London Authority (and Transport for London) achieved this?
23. Can you identify any changes proposed to the Mayor of London, Greater London Authority, Transport for London decision making model? Yes/No, elaborate...
24. Ken Livingstone described his five years as inaugural Mayor of GLA to ensure the “GLA was not the GLC” did he achieve this? Yes/No (If Yes, in what way? If No, thank you for your time).
25. Final question: Is there anything else you would like to say about transport planning or a related issue?

Questionnaire

Faculty of Architecture, Building and Planning



Project: Theories and Practice of Urban Transition: Melbourne's Wicked Transport Planning Environment

NB: Commence recording of Interview

Thank you for agreeing to participate in this interview. The purpose of this research is to examine the governance structures and decision making process within transport planning in Melbourne.

26. Can you confirm you have received a copy of the Plain Language Statement and Consent Form prior to this interview? Yes/No
27. Can you confirm you have signed the Consent Form? Yes/No

Introduce research

I will start with a series of questions about your role in the creation of the current governance framework for Melbourne:

28. Did you participate in the process to create the TfV/PTV?
Yes/No (if Yes, proceed to question 4, if No, go to question 5)
29. Why did you participate in the process to create the TfV/PTV?

The following questions ask about the *process of creating* the current transport governance framework for Melbourne:

30. Why was TfV/PTV created?
31. How did it come about?
32. What were the goals in creating TfV/PTV?
33. Have these goals been achieved? If yes, which goals have been achieved? What happened to the other goals not achieved?
34. How have these goals been maintained?
35. What would you view as a 'good process' for transport decision-making?
36. The Transport Integration Act identifies the triple bottom line of social, environmental and economic aspects as one of the "principles" to guide transport decision making. Are social, environmental and economic aspects integrated in transport policy and planning?
37. Are social, environmental and economic aspects given equal weight in Melbourne transport planning decisions?
38. Is transport policy and planning integrated with land use planning?
39. How are decisions about transport made in Victoria?
40. Is the decision-making process and outcome transparent?
41. Should the public be able to view and comment on all the evaluation reports?
42. What effect has TfV/PTV had on the transport decision-making process?
43. How should "good" decisions be made about transport? Is this what happens in Melbourne?

44. Who *should* be involved in transport decisions in Melbourne? Is this happening? Who is not involved?
45. Is transport planning done better or worse than today than it was done in the past?
46. Can you identify any changes that could be made to the Melbourne transport decision making model in order to achieve a better outcome? Yes/No, elaborate...
47. Do you think transport policy and planning is done better anywhere else in the world?
48. How might Melbourne transition into a better transport policy/planning model?
49. Final question: Is there anything else you would like to say about transport policy and planning in Melbourne or a related issue?

Appendix 10

Plain Language Statement and Consent Form

Plain Language Statement

Faculty of Architecture, Building and Planning



Project: Theories and Practice of Urban Transition: Melbourne's Wicked Transport Planning Environment

Lawrence Seyers (Responsible Researcher)

Tel: +61 409 177 544 Email: lseyers@student.unimelb.edu.au

Master of Philosophy student

Introduction

Thank you for participating in this research project. The following few pages will provide you with further information about the project, so that you can decide if you would like to take part in this research.

Please take the time to read this information carefully. You may ask questions about anything you don't understand or want to know more about.

Your participation is voluntary. If you don't wish to take part, you don't have to. If you begin participating, you can also stop at any time.

What is this research about?

The research investigates how to make transport planning decisions in highly complex environments. This research will provide an exploration of the Melbourne case study (East West Link) through an interpretation of political, social, economic and environmental motivators. It will then provide a comparative analysis of transport planning governance in London through a number of interviews with political leaders, professionals and academics.

What are the possible benefits?

You will not be paid to participate in this research.

What are the possible risks?

This research is considered low risk, however if you feel uncomfortable with the research procedures used in this project, you may limit the range of matters discussed or withdraw from the research.

Do I have to take part?

No. Participation is completely voluntary. You are able to withdraw (quit) at any time. There are no implications of withdrawal.

Will I hear about the results of this project?

The research will be made available to project participants via email at the conclusion of the thesis, expected October 2018.

What will happen to information about me?

Interviews will be recorded electronically and transcripts retained by the researcher and only available for the purposes of this research. Consent forms, transcripts and audio recordings will be securely stored. The only people with access to this data will be the Supervisor, Dr Janet Stanley and the Researcher, Lawrence Seyers.

Comments attributed to participants involved in the research will have pseudonyms applied to protect their identity. The pseudonyms will be developed to attribute quotes followed an algorithm of A, B and C, with combinations such as of AA, AB, AC, BA, BB, BC, CA, CB and CC. These labels will be randomly used to identify each participant. The only people with access to the identifying data are the Supervisor, Dr Janet Stanley and the Researcher, Lawrence Seyers.

Each participant in the research consent to the publication of a general attribution of their position and organisation for the purposes of a table of participant characteristics (title, organisation). Participants' data will be retained for a period of 5 years and only the Supervisor, Dr Janet Stanley and the Researcher, Lawrence Seyers will have access.

Who is funding this project?

The source of project funding for this fieldwork has been provided through the University of Melbourne's Collaborative Research Centre Future Cities scholarship that includes an operating allowance of up to \$5,000 to cover project expenses.

Where can I get further information?

If you would like more information about the project, please contact the researcher; Lawrence Seyers Tel: +61 0409 177 544 Email: lseyers@student.unimelb.edu.au

Who can I contact if I have any concerns about the project?

This research project has been approved by the Human Research Ethics Committee of The University of Melbourne. If you have any concerns or complaints about the conduct of this research project, which you do not wish to discuss with the research team, you should contact the Manager, Human Research Ethics, Office for Research Ethics and Integrity, University of Melbourne, VIC 3010. Tel: +61 3 8344 2073 or Email: HumanEthics-complaints@unimelb.edu.au. All complaints will be treated confidentially. In any correspondence please provide the name of the research team or the name or ethics ID number of the research project.

Consent Form

Faculty of Architecture, Building and Planning



Project: Theories and Practice of Urban Transition: Melbourne's Wicked Transport Planning Environment

Primary Researcher: Lawrence Seyers (Responsible Researcher)

Tel: +61 409 177 544 Email: lseyers@student.unimelb.edu.au

Master of Philosophy student

Name of Participant: _____

1. I consent to participate in this project, the details of which have been explained to me, and I have been provided with a written plain language statement to keep.
2. I understand that the purpose of this research is to research the governance structures and decision making within transport planning.
3. I understand that my participation in this project is for research purposes only.
4. I acknowledge that the possible effects of participating in this research project have been explained to my satisfaction.
5. In this project I will be required to participate in an open discussion guided by a series of questions to describe the current transport planning decision making framework.
6. I understand that my interviews may be audio recorded.
7. I understand that my participation is voluntary and that I am free to withdraw from this project anytime without explanation or prejudice and to withdraw any unprocessed data that I have provided.
8. I understand that the data from this research will be stored at the University of Melbourne and will be destroyed after 5 years.
9. I have been informed that the confidentiality of the information I provide will be safeguarded subject to any legal requirements; my data will be password protected and accessible only by the named researchers.
10. I understand that given the small number of participants involved in the study, it may not be possible to guarantee my anonymity.
11. I understand that after I sign and return this consent form, it will be retained by the researcher.

Participant Signature: _____

Date: _____