

MITCHELL SHIRE COUNCIL.

ROADS.

Supporting Growth in Mitchell Shire



Preliminary Business Case

May 2018

MITCHELL SHIRE COUNCIL





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Executive Summary

Mitchell Shire is located on the edge of metropolitan Melbourne. Its southern border is approximately 40 kilometres north of the Melbourne Central Business District. It is a large municipality comprising vast areas of public land, private agricultural holdings, and townships of varying sizes. The Shire is one of 10 municipalities (Interface Councils) that form a ring around metropolitan Melbourne. These municipalities are expected to accommodate over 60% of Melbourne's population growth.

Part of the Shire falls within Melbourne's urban growth boundary. As such, the Shire's population is expected to grow substantially over the next 25-30 years, from 45,000 to over 230,000. This population growth is placing enormous pressure on the existing infrastructure throughout Mitchell Shire, which reflects that of a rural environment rather than a suburban/metropolitan one. This additional pressures are particularly evident throughout the road network.

Three problems were identified as part of an investment logic mapping exercise:

Problem 1: The road network within towns across the Mitchell Shire is struggling to cope with a rapid shift in demand constraining further development and investment.

Problem 2: Communities are split by an unsafe, unsatisfactory road network acting as a barrier to walking, cycling and activity within commercial centres.

Problem 3: Unacceptable bottlenecks along the Hume Freeway and Northern Highway impose costly delays on all local and long-distance traffic.

The three problems translate to a road network that does not support the Shire's existing residents, the anticipated population growth, and the movement of vehicles – passenger and freight - through the Shire. Main roads are severely congested with bottlenecks throughout the day. Other roads are lacking in scale and condition, and represent major impediments to the development of the housing estates and commercial centres anticipated in various endorsed planning strategies and schemes.

The advantages of addressing the problems and how these will be delivered and measured were also identified as part of the mapping exercise. The key benefits derived from addressing the problems are:

Benefit 1: Growth pressures on Melbourne are alleviated.

Benefit 2: A healthier, more vibrant community.

Benefit 3: Improved retention of wealth within the local community.

Benefit 4: Improved freight efficiency.

By addressing the problems, the quality of living for Shire residents will be improved as the road network will better support work, leisure, and family requirements. This in turn will see a reduction in the extraneous pressures placed on individuals and families, particularly as they relate to financial and interpersonal issues.

The preliminary business case presents a number of initiatives that would solve the problems and facilitate the achievement of the anticipated benefits. While these initiatives fall outside the Shire's area of responsibility, it stands ready to support their advancement as part of the State Budget process. The initiatives are summarised below:

Gunns Gully Road Extension and Interchange: The project entails the extension of Gunns Gully Road and a full diamond interchange at the Hume Freeway. The new road and interchange will facilitate the development of the Cloverton Estate (Lockerbie) and provide a catalyst for the proposed Cloverton Metropolitan Activity Centre. At present, Donnybrook Road is the only east-west arterial road in the Northern Growth Corridor.

Hume Freeway Diamond Interchange and Watson Street Upgrade: The project entails the construction of southern ramps and an upgrade of the existing half diamond interchange to the Hume Freeway into a full diamond interchange at the Hume Freeway and Watson Street, Wallan. It also includes the duplication of Watson Street to the west of the interchange toward the existing intersection of Watson Street and the Northern Highway in Wallan.



Camerons Lane Enhancement and Interchange: The project entails an enhanced Camerons Lane and the construction of a full diamond interchange at the Hume Freeway. The arterial road and interchange will provide the main access for residential communities within the Beveridge Growth Corridor.

Kilmore / Wallan Bypass: The project entails:

- utilisation and upgrade of the existing alignment of Epping-Kilmore Road between the Hume Freeway interchange at Wandong and the Northern Highway just South of Kilmore.
- upgrades to Epping-Kilmore Road to remove steep sections of road to improve the efficiency of freight movement.
- construction of a new roundabout at the intersection of the Northern Highway and Epping-Kilmore Road just South of Kilmore.
- construction of a new arterial standard road to the South, West and North-West of Kilmore in proximity to Gehreys Lane, Paynes Road and Kings Lane
- constructing a roundabout at the Kilmore / Lancefield Road
- various local road connections

The primary objective of the Kilmore / Wallan Bypass is to relieve traffic congestion and the number of heavy vehicles driving through the main streets of Kilmore and Wallan.

Capacity improvements to the Northern Highway: The project entails capacity improvements to the Northern Highway between the Hume Freeway and Watson Street, Wallan.



1 Part 1 Problem

1.1 Background

1.1.1 Shire of Mitchell

1.1.1.1 Location

Mitchell Shire is located on the edge of metropolitan Melbourne; its southern border is approximately 40 kilometres north of the CBD. Covering 2,861 square kilometres, it is a large municipality comprising vast areas of public land and private agricultural holdings, as well as the townships of Beveridge, Broadford, Heathcote Junction, Kilmore, Puckapunyal, Pyalong, Seymour, Tallarook, Tooborac, Wallan, and Wandong. The Shire shares boundaries with Hume and Whittlesea to the south, Macedon Ranges, Mount Alexander and Greater Bendigo to the west, Strathbogie to the north and Murrindindi to the east. A map of Mitchell and its location relative to other key parts of Victoria is at Figure 1.

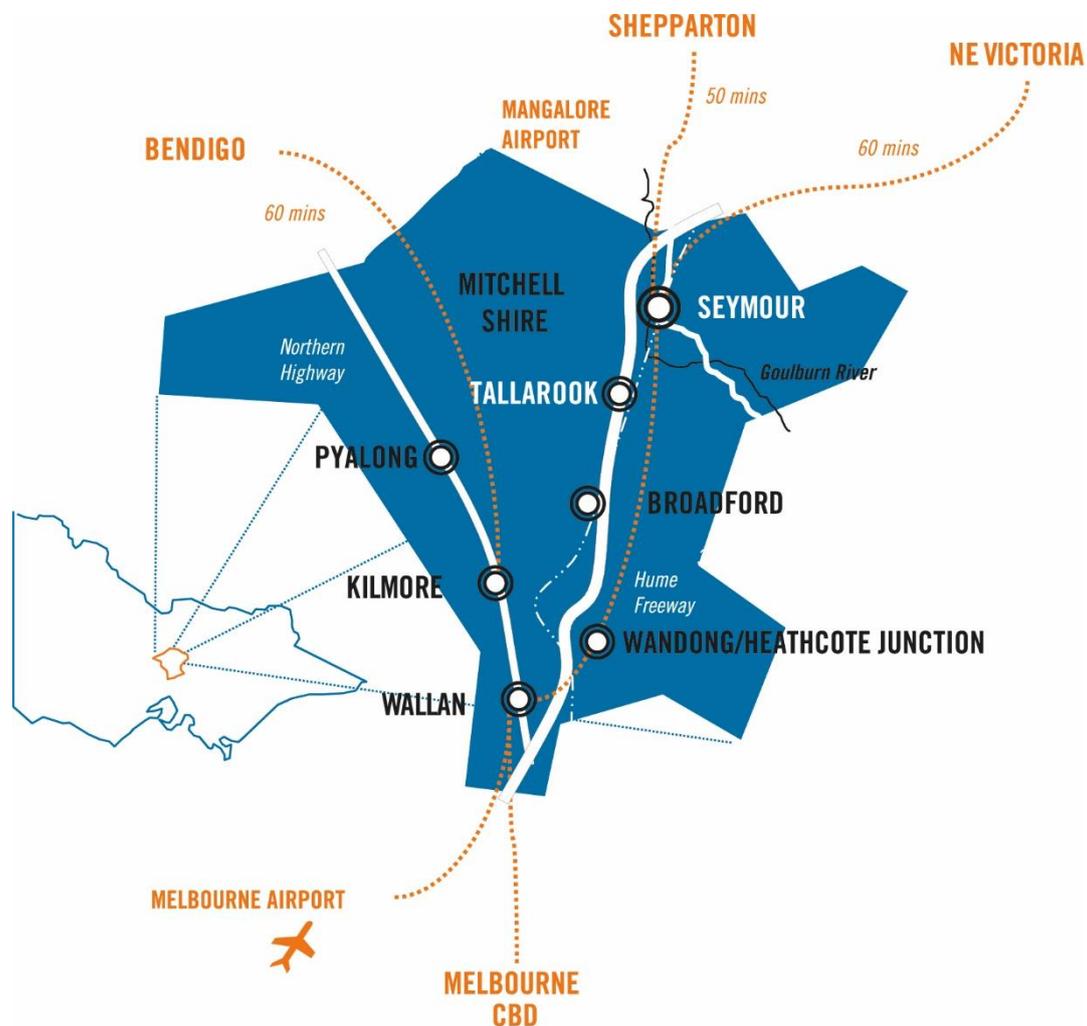


Figure 1: Shire of Mitchell Map and Location



1.1.1.2 Demographic Profile

The demographic profile of Mitchell compared with Greater Melbourne is summarised in Table 1.

Demographic Features ¹	Shire of Mitchell	Greater Melbourne
People	45,000	4,485,211
Males, Females	50.3%, 49.7%	49%, 51%
Median age	37	36
Average people per household	2.7 (Beveridge and Wallan 3.1 in growth area)	2.7
Median weekly household income	\$1,391	\$1,542
Median monthly mortgage repayments	\$1,582	\$1,800
Median weekly rent	\$265	\$350
Employed	88.4%	88.6%
Average motor vehicles per dwelling	2.1	1.7
Travel to work - car, as driver	69%	60.2%
Travel to work - car, as passenger	4.2%	3.9%
Worked at home	4.2%	4.2%
Train	2.8%	7.2%
Walked only	2.8%	3%
People who travelled to work by public transport	5.1%	15.6%
People who travelled to work by car as driver or passenger	75.4%	66.9%

Table 1: Mitchell Demographic Profile

1.1.1.3 Key Demographic Features

The following points summarise the key demographic features of Mitchell.

- The current estimated residential population is 45,000 (March 2018), which is expected to grow substantially in the next 25-30 years to over 230,000.
- Considerable population growth and development are expected to occur in the next 25-30 years:
 - Beveridge - estimated growth from 2,607 to 106,000
 - Wallan - estimated growth from 13,171 to 55,000
 - Kilmore – Kilmore East - estimated growth from 9,428 to 28,000
 - Broadford Area – estimated growth from 5,087 to 11,000.
- The number of one and two parent families with dependents is projected to increase at a higher rate (109%) than the number of sole person or couple only households (91%). (forecast id)
- The Socio-economic Index for Areas (SEIFA) uses census data to rank the relative socio-economic advantage/disadvantage of Australian communities. The Index of Relative Socio-

¹ <http://www.censusdata.abs.gov.au>, accessed 15 February 2018



economic Disadvantage ranks areas from most disadvantaged to least and can be analysed at different geographic levels. At the local government level, there are 79 municipalities within Victoria, with 1 being the most disadvantaged and 79 the least. In the SEIFA Index of Relative Socioeconomic Disadvantage, Mitchell Shire is ranked 47th of the 79 municipalities; and the scores recorded for Seymour and Broadford place them amongst the most disadvantaged areas in the Nation. Beveridge is one of the least socioeconomically disadvantaged suburbs in the Nation, with 70% of towns (State Suburbs) more disadvantaged than Beveridge.

1.1.2 Locational Context

1.1.2.1 Interface Councils

Mitchell Shire is one of 10 municipalities (Interface Councils) that form a ring around metropolitan Melbourne. These municipalities are expected to accommodate over 60% of Melbourne's population growth to 2026. Along with this rapid population growth, the Interface Councils have unique characteristics that create significant challenges including:

- established urban areas
- peri-urban and rural townships
- growth corridors with large scale housing development
- high socioeconomic disadvantage including rent and mortgage stress
- large numbers of newly arrived migrants and refugees
- ageing populations from both English speaking and non-English speaking backgrounds
- larger populations of families with young children than the metropolitan Melbourne average.

1.1.2.2 One Melbourne or Two?

In February 2013, the Interface Councils launched 'One Melbourne or Two?', a report identifying service and infrastructure deficiencies for the growing population in Melbourne's outer suburbs, and recommended immediate action from State Government for the 1.3 million Melbournians it said are being forced to live like second class citizens compared to the rest of the state's residents. The report has been updated (2017) and highlights:

- Interface residents have significantly lower educational qualifications compared to non-Interface residents e.g. only 18 per cent of Interface residents over the age of 15 hold a degree or higher qualification compared to 24 per cent of non-Interface residents.
- Approximately one job provided for every two labour force participants (compared to more than a 1:1 ratio for non-Interface areas).
- Median personal income for Interface residents (\$33,240) are 9 per cent lower than for non-Interface residents (\$36,160).
- There are eight aged-care and retirement facilities per 10,000 residents 65 years and older in the Interface, compared to over 13 in non-interface regions.
- There are 10 hospital beds per 10,000 people in Interface suburbs but those living in the rest of Melbourne have access to almost three times that number with 30 beds available for every 10,000 people living in non-interface areas.
- There is half the number of public transport options for Interface residents as there are for workers living closer to the CBD, amounting to a heavy reliance on cars which causes billions of dollars in social costs and productivity through congestion (business and private time costs, the costs of operating additional vehicles and air pollution costs).

1.1.2.3 Parliamentary Inquiry into Liveability Options in the Outer Suburbs

The Parliamentary Committee found that the outer suburbs of Melbourne currently lag significantly behind the rest of Melbourne on many measures of liveability, and that the divide is growing. In particular:

- 'A significant lag in the provision of services, social infrastructure and physical infrastructure, particularly transport infrastructure in the form of roads and public transport.
- A significant decline in housing affordability, which has had a disproportionate impact on residents of Melbourne's outer suburbs due to the relatively greater living costs that they face.



- The existence of pockets of relative socio-economic disadvantage, as well as reduced social participation and social cohesion due to the relative isolation of some outer suburban communities.
- A relative lack of access to parks and public open space, as well as to private open space.
- Relatively poor access to medical, health and support services, as well as poorer health outcomes.²

1.1.2.4 Parliamentary Inquiry into Growing the Suburbs

The 'Parliamentary Inquiry into Growing the Suburbs' found that Melbourne's outer suburban residents face the following issues leading to reduced liveability of their suburbs:

- The unsustainable practice of agglomeration that results in the double challenge for outer suburban residents of a shortage of local 'knowledge industry' jobs and a decline in those industries, such as manufacturing and retail, that have traditionally provided a large proportion of local jobs.
- There is great emphasis, in the findings and recommendations of this report, on the development of measures to increase local employment opportunities and transport infrastructure to support those opportunities.

1.1.2.5 Developing Transport Infrastructure and Services for Population Growth Areas

The Victorian Auditor General's Office's 'Developing Transport Infrastructure and Services for Population Growth Areas' report concluded that 'over many years, the state has failed to deliver the transport infrastructure and services needed to support rapidly growing communities. This is adversely impacting accessibility, and risks the future liveability of metropolitan Melbourne. Urgent action is required to address this serious problem. Inadequate public transport and growing gaps in the road network in these communities are creating barriers to mobility, including access to critical services, education and employment opportunities.

In turn, these deficiencies are increasing car dependence, pollution and exacerbating traffic congestion at significant community cost. This both limits state productivity and the time that people can spend with their families. Despite these growing problems, funding to address the transport needs of growth areas can take more than a generation to materialise. This longstanding disconnect between planning and funding, gives credence to the perception that past statewide planning initiatives have been disingenuous.

Growing pressure on state finances heightens the need to effectively prioritise limited funds, and to develop alternative funding sources and implementation strategies to meet the growing challenge.

This audit's recommendations are focused on addressing these longstanding issues. However, they will have limited value if their implementation is not supported by a realistic and effective whole of government approach.³

1.1.2.6 Future Cities

In February 2018, Infrastructure Australia released its Future Cities paper the purpose of which was to 'test and better understand the trade-offs between potential long-term growth pathways for Australia's largest cities.'⁴ Various development scenarios were run for Melbourne and Sydney to test how 'Australian cities could grow and change, including:

- Should our cities expand outwards, at a low density, or consolidate inwards at a higher density?
- Should we seek to locate jobs in a small number of large centres or distribute them more evenly across the metropolitan area?
- What mix of modes and network structure is best suited to meet the needs of a larger city?'⁵

The scenarios assumed common population and employment growth totals in the year 2046 against a reference base of 2015/16, within consistent metropolitan boundaries, but differed by the location of

² Parliament of Victoria, Outer Suburban/Interface Services and Development Committee Inquiry Into Liveability Options in Outer Suburban Melbourne December 2012, pp51-52

³ <https://www.audit.vic.gov.au/report/developing-transport-infrastructure-and-services-population-growth-areas>

⁴ Infrastructure Australia, Summary Report, Future Cities, Planning for our Growing population, February 2018, p. 2

⁵ Ibid, p. 3



this growth, and by the future structure of the transport network. Nine findings were derived from the scenario analysis of Melbourne and Sydney. Of relevance were the findings that:

- 'The scenario analysis shows that well-planned cities, where the location of jobs, homes and their supporting infrastructure networks are coordinated to maximise accessibility and liveability, will deliver the best outcomes for Australian communities.'⁶
- 'The scenario analysis shows increases in demand for transport, health services, schools and tertiary education facilities, which will require new and upgraded infrastructure. Governments and the community will face a series of choices about the sequencing, type and location of infrastructure to support growth. Problems arise when new developments and infrastructure are planned and delivered in isolation. A place-based approach that considers interrelated elements and the broader needs of an area can deliver better community outcomes.'⁷

1.1.2.7 Culturally and Linguistically Diverse (CALD) Communities

The dominant cultural background of Mitchell residents is white Australian. Only 21% of residents were born overseas, of which 5.5% were born in non-English speaking countries. According to the 2016 Census, data, the top three non-English speaking birthplaces were India, Italy, and China.

Approximately 1,290 people or 8.7% of the population in Mitchell speak a language other than English at home. This includes a range of languages, the most common of which are Italian, Mandarin, Punjabi, Greek, and Maltese.

Aboriginal and/or Torres Strait Islander people made up 1.6% of the population.

The Census data indicates an increase in cultural diversity within Mitchell Shire between 2011 and 2016. However, local anecdotal evidence suggests this has accelerated in recent years. Predicted population changes founded on the migration patterns flowing north from Melbourne's centre suggest that Mitchell Shire is beginning to, and will continue to experience, an increase of CALD population groups. This change is likely to be most pronounced in the southern growth townships of Wallan and Beveridge.

1.1.3 Policy and Planning Context

1.1.3.1 Plan Melbourne 2017-2050

Melbourne is forecast to grow from 4.5 million residents in 2017 to nearly 8 million residents by 2050. *Plan Melbourne 2017-2050* is a long-term plan designed to respond to the challenges that will arise from this population growth. It provides a framework that emphasises housing affordability and access by focusing growth in the central city, activity centres, urban renewal areas and the outer urban growth areas. It aims to give communities, developers and infrastructure providers greater clarity about where growth is being preferred, and where and when services are needed.

The *Plan* maintains the urban growth boundary to ensure that urban sprawl is contained. The urban growth boundary includes Beveridge and Wallan in Mitchell Shire.

'Melbourne needs an integrated 21st-century transport system to connect people to jobs and services. Creating an integrated transport system will require...significant improvements to arterial road connections across Melbourne, and improved efficiency of the motorway network...better transport infrastructure and services in newer suburbs—including new bus services for outer suburbs and, where there is sufficient demand, expansions to the rail network, significant investments in new suburbs to create pedestrian and cyclist-friendly neighbourhoods...enhancing the efficiency of Melbourne's freight network by upgrading road and rail freight infrastructure, creating new intermodal freight terminals in Melbourne's north and west, and increasing the volume of interstate freight transported by rail'⁸

⁶ Ibid, p. 9

⁷ Ibid, p. 12

⁸ The State of Victoria, Department of Environment, Land, Water and Planning, *Plan Melbourne 2017-2050, A global city of opportunity and choice, Summary, 2017*, p. 11



1.1.3.2 Hume Regional Growth Plan

The *Hume Regional Growth Plan* provides a regional approach to land use planning in the Hume Region, which includes the municipalities of Alpine, Benalla, Greater Shepparton, Indigo, Mansfield, Mitchell, Moira, Murrindindi, Strathbogie, Towong, Wangaratta and Wodonga.

The *Plan* identifies opportunities to encourage and accommodate growth and to manage change in the region to 2034. The *Plan* identifies:

- 'locations where future development will be supported, assessed at a regional scale
- environmental, economic, community and heritage assets that should be conserved, maintained or sensitively developed
- key regional priorities for future infrastructure planning and development to support growth.⁹

Section 14 of the Plan deals with regional infrastructure and states that 'The Hume Strategy aims for an integrated network of efficient and high functioning transport systems to provide for a mobile region. It also aims for access to services, facilities and other opportunities to support more healthy, vibrant and resilient communities.'¹⁰

'Opportunities for improving network capacity include...maximising the use of existing infrastructure, new roads, bypasses of towns and inner town centres and associated link roads...the Kilmore-Wallan Bypass... (is a) specific example(s), expansion of road space such as widening, sealed shoulders, duplication and clearways, improved walking and cycling links'.¹¹

1.1.3.3 Growth Corridor Plans, Managing Melbourne's Growth

The Metropolitan Planning Authority has developed four Growth Corridor Plans that describe high level integrated land use and transport plans. The plans are expected to guide housing, employment, town centres, open space, and transport and other infrastructure.

'Melbourne's four Growth Corridors...are expected to accommodate close to half of Melbourne's new housing and much of the city's future supply of industrial land over the next thirty to forty years. Substantial new communities will emerge in these Corridors. The transport, town centre and open space networks established in the initial development of them will be in place for many generations.'¹²

The North Growth Corridor Plan makes provision for the following populations and jobs:

- dwelling capacity – 93,000 to 117,000
- population capacity – 260,000 to 330,000
- jobs capacity – 83,000 to 105,000.

Activity will be concentrated at:

- Central Activity Area – Broadmeadows
- Principal Town Centre – Epping, Donnybrook
- Major Town Centre – Beveridge, Mickleham, Craigieburn, Roxburgh, Wollert, Mernda, South Morang, and Gladstone Park.

'In order to provide future access between urban communities in the corridor, the Growth Corridor Plan proposes a new grid of north-south and east-west arterial roads crossing the freeways. These roads will provide critical access across local communities and between housing, jobs and services. The Corridor Plan recognises the potential for additional access onto the Hume Freeway, north and south of the OMR, and also recognises the need for further investigation of these interchanges. There is a need to ensure that this important national freight route does not become congested with local traffic, but there is also a need to provide some additional access to the Freeway to serve the new homes and jobs proposed. Further investigations regarding this issue are required.'¹³

Appendix A summarises the (draft) North Growth Corridor Plan.

⁹ Victorian Government, *Hume Regional Growth Plan*, 2014, p. i

¹⁰ *Ibid*, p. 61

¹¹ *Ibid*, p. 63

¹² Growth Areas Authority, *Growth Corridor Plans, Managing Melbourne's Growth*, 2012, p. 5

¹³ *Ibid*, p. 72



1.1.3.4 Mitchell Growth Corridor Plan

In 2009, the State Government, following the release of Melbourne@5Million and Delivering Melbourne's Newest Sustainable Communities, expanded the metropolitan urban growth boundary to include land surrounding the township of Beveridge, namely land between Old Sydney Road and the Melbourne - Sydney Railway line. More recently, the State Government, following the logical inclusions investigation in 2012, moved the urban growth boundary and the growth corridor was expanded to include Wallan, as well as land surrounding Beveridge.

This change will rapidly increase the rate of development in the south of the Mitchell Shire with the growth corridor expected to house an additional population in the order of over 150,000 people over a period of 30-50 years. The role and function of Beveridge and Wallan is already changing from rural townships to areas providing housing for young families seeking affordable accommodation and good transport links to Melbourne. The growth will have significant implications for the road network, employment and retail, and the range and level of services to be provided to meet the population needs.

Appendix B summarises the Mitchell Growth Corridor Plan.

The rollout of the Plan is described in five yearly stages in the *Potential Development Sequencing Northern Growth Corridor, Final Version, April 2016* report, which has been endorsed by the Mitchell Shire Council.

1.2 Definition of the Problem

A summary of the problem is presented in the Investment Logic Map (refer Appendix C). Table 2 expands upon the three identified problems.

1. The road network within towns across the Mitchell Shire is struggling to cope with a rapid shift in demand constraining further development and investment

Mitchell Shire is experiencing unprecedented population growth that is expected to accelerate over the next 20 to 30 years. Small, rural towns are being transformed into urban areas. The infrastructure to support this population growth is lagging well behind. In the absence of alternative forms of travel, the road network is increasingly being called upon to sustain the:

- traffic generated by local residents and industries
- freight and private vehicles moving through the municipality.

Saturation has been reached on many of the Shire's main roads leading to congestion and delays. In other instances, roads within towns are either not of the scale needed to allow for new residential developments or, in fact, have yet to be constructed.

The variability in, and extension to, travel times on freight routes limits the efficiency of freight movements. A reliable and efficient road network is critical to sustaining the productivity and competitiveness of industries within the Shire and beyond.

As a consequence of the constrained road network, potential residents and investors are either delaying their take-up in the Shire or going to other parts of Victoria that do not have such critical infrastructure deficiencies.

2. Communities are split by an unsafe, unsatisfactory road network acting as a barrier to walking, cycling and activity within commercial centres

Modern, urban communities require a road network that allows easy and safe access to local services, shops, schools, amenities, and residences. Many of the Shire's towns have narrow roads without adjoining footpaths, and bike lanes. This means that residents:

- walk on the road or its edge using unformed or informal walking tracks
- cycle on the road
- resort to private motor vehicle transport

Consequences include greater community severance, dislocation, and personal isolation.



3. Unacceptable bottlenecks along the Hume Freeway and Northern Highway impose costly delays on all local and long-distance traffic

The freeways and highways in, and adjacent to, Mitchell Shire were conceived in the 1970s, when access points were required to service small, rural towns. Since then, population growth and industry development in Victoria in general, and the Shire in particular, has resulted in these major roads being unable to cope with traffic volumes. The resultant bottlenecks cause:

- variable and unpredictable travel times
- congestion and delays
- frustration and inconvenience for the road users
- additional personal and business costs.

Without increasing the freeway / highway capacities and alignments, these bottlenecks will only worsen as demand increases over the next 20 to 30 years.

Table 2: Problem Definition

1.3 Evidence of the Problem

1.3.1 Increase in Traffic

1.3.1.1 Kilmore / Wallan

'Growing local traffic combined with regional freight and commercial vehicles along the Northern Highway is resulting in increased congestion and reduced amenity in Sydney Street, Kilmore and High Street, Wallan as well as reduced network efficiency on the Northern Highway.'

'It is likely that the population growth experienced by Wallan and Kilmore will be sustained for some time into the future. This strong population growth is and will continue to generate strong traffic growth along the main arterial roads including the Northern Highway as well as local roads. The Northern Highway is also an important freight and commercial link which connects Melbourne to Northern Victoria. VicRoads figures show that current traffic volumes through Kilmore are in excess of 13,800 vehicles per day (vpd) which is predicted to increase to 21,000 vpd by 2041. For Wallan current volumes are 15,600 vpd and predicted to increase to 34,600 vpd. Around 1,600 trucks travel through Kilmore per day and 1,500 through Wallan per day and these volumes are expected to increase in line with the strategies outlined in Victoria the Freight State – The Victorian Freight and Logistics Plan (2013).

In light of these increases in traffic volumes, VicRoads Road Crash Information System records that there have been 77 casualty crashes along the Northern Highway over the past five years, including 17 in the Kilmore urban area. Many of the crashes can be attributed to conflicts with turning traffic and property access.

The increased local traffic combined with regional freight and commercial vehicles along the Northern Highway is resulting in increased congestion and reduced amenity in Sydney Street, Kilmore and High Street, Wallan as well as reduced network efficiency on the Northern Highway.¹⁴

1.3.1.2 Northern Highway

The Northern Highway is a significant state freight route linking the primary production areas of the Murray Valley and southern New South Wales to markets, airport and shipping port in Melbourne. It serves a number of agricultural and tourism-related industries along its length including the popular Murry River Township of Echuca.

The Northern Highway also provides the only southerly access point into Wallan township as well as travelling directly through the heart of the Kilmore town centre. There are currently significant



¹⁴ MITCHELL SHIRE, Submission – July 2014, Kilmore-Wallan Bypass Environmental Effects Statement, p. 2 and 3



congestion issues as a result of the growth around Wallan township and increase in regional through traffic. Combined, this is significantly affecting travel times for the Wallan community and is affecting the operation of the Northern Highway.

1.3.1.3 Queuing to Exit the Hume Freeway at the Northern Highway Interchange

Due to a higher than expected increase in traffic volumes exiting the Hume Freeway in peak periods, queuing from Taylors Lane southward to the off-ramp from the Hume Freeway is common. As this is the only major access into the Wallan township, and with Wallan continuing to grow, this issue will become more pronounced and will affect the operation of the Hume Freeway (northbound) during peak periods.

1.3.2 Population Growth Constraints

1.3.2.1 Lockerbie North Precinct Structure Plan

The Lockerbie North Precinct Structure Plan was prepared by the Growth Areas Authority in consultation with the Mitchell Shire Council, Whittlesea City Council, Government agencies, service authorities and major stakeholders. It applies to approximately 515 hectares of land generally bound by Minton Street to the North, the Hume Freeway to the west, the Melbourne-Sydney rail to the east and the proposed Outer Metropolitan Ring Road (OMRR) to the south. The Beveridge Township is situated outside the plan area located to the west.

The Plan contains requirements that must be adhered to in developing the land and are usually included as a condition on a planning permit. One such requirement limits the development of land beyond a specified number without consideration by VicRoads on the need to provide improved local roads as set out below.

Development Staging Requirement 77 'Due to capacity issues, access to the existing Beveridge Interchange (at Lithgow Street) will be reviewed at the issue of statement of compliance for 1100 lots. Subdivision beyond 1100 lots must be referred to VicRoads for their consideration to determine whether a permit can be issued prior to the construction of a new interchange at Rankin Street. The 1,100 lot capacity restriction is not limited to the Lockerbie North Precinct Structure Plan.'

1.3.2.2 Beveridge Central Precinct Structure Plan

The Beveridge Central Precinct Structure Plan was prepared by the Victorian Planning Authority in consultation with Mitchell Shire Council and with the assistance of Government agencies, service authorities and major stakeholders. The Precinct Structure Plan (PSP) is a long-term plan for urban development. It describes how the land is expected to be developed, and how and where services are planned to support development. It guides proposed development within the Beveridge Central precinct.

The Plan contains requirements that must be adhered to in developing the land. Where they are not demonstrated in a permit application, requirements will usually be included as a condition on a planning permit whether or not they take the same wording as in the precinct structure plan. One such requirement limits the development of land beyond a specified number without consideration by VicRoads on the need to provide improved local roads as set out below.

Development Staging Requirement 67 'Due to the capacity issues, access to the existing Beveridge Interchange (at Lithgow Street) will be reviewed at the issue of statement of compliance of 1,100 aggregate lots for Beveridge Central PSP, the Beveridge North-West PSP and the Lockerbie North PSP.'

Subdivision beyond 1,100 aggregate lots must be referred to VicRoads for their consideration to determine whether a permit can be issued prior to the construction of a new interchange at Rankin Street or Camerons Lane as will be required by clause 2.7 of Schedule 5 to clause 37.07 of the Mitchell Planning Scheme.'

1.3.2.3 Land Supply and Costs

In January 2018, the average cost of buying a standard housing lot (512m²) in the Mitchell Shire was \$303,000 compared with an average cost of \$163,500 in January 2017 – an increase of 86%¹⁵.

¹⁵ Red23



'Developers blame the state government's lengthy approvals process for new suburbs and delays in bringing necessary infrastructure to their projects for the drop in supply. This now stands at just 14 days of trading stock across all growth corridors, according to the Urban Development Institute of Australia.

"To keep prices in a range which is affordable, we need a pipeline of at least 90 days stock," said Danni Addison, Victorian boss of the UDIA "More accountability must be put on power and water companies as well as local government for moving approvals through the system and getting land to homeowners," she added.

The rise in Melbourne land prices has been so fast and the delays in titling and building so long that a secondary market to trade sales contracts has sprung on classified websites like the Gumtree, which currently lists 377 lots for sale.

"Offer above the contract price," reads one ad for a \$375,000 lot in Cloverton, a Stockland development in the northern suburbs.¹⁶

1.3.3 Case Studies

1.3.3.1 Beveridge / Mandalay

Beveridge dates back to the 1840s. It is located on the eastern side of the Hume Freeway approximately 42 kilometres north of the Melbourne CBD. The bluestone, Beveridge Primary School is located in a former Roman Catholic Church that was constructed between 1857 and 1862. In 2007, the School had 45 students. In 2018, enrolments had grown to approximately 290. Other notable buildings in the town are the Beveridge Tavern (former post office built in 1844) and the (recently built) Beveridge Community Centre.

The Mandalay Estate is located on the western side of the Hume Freeway, approximately 2.5 kilometres from Beveridge township. It is a 2,050 lot residential development. Construction of the Estate began in the late 2000s; several stages have been delivered with 500 lots released to market and around 450 houses either constructed or currently under construction. Further stages are continuing to be delivered and the uptake of lots is estimated to be around 100 per annum. The Mandalay Estate is marketed as being resort style living with a golf course and recreational facilities a key focus. The Mandalay Community Centre is under construction. Other community facilities such as kindergartens are planned.

At the 2016 Census, Beveridge, including the Mandalay Estate, had a population of 2,330.

Beveridge and the Mandalay Estate are joined by a single, narrow road (Lithgow Street) that runs under the Hume Freeway. The road has major deficiencies:

- rural standard road
- road fabric is poor
- no footpaths
- narrow underpass to Hume Freeway
- does not encourage pedestrians or bikes
- interaction between the two areas occurs either by residents walking / cycling on the side of the road or travelling by car (e.g. children attending the Beveridge Primary School).

As a consequence, the old and new areas are divided by the poor access. This will only worsen as the population increases. Beveridge Central (existing township) is expected to have a population of 10,881 by 2035. Mandalay is expected to have a population of 6,000 by 2030.

1.3.3.2 Schools

There are a limited number of public and private secondary schools in Mitchell Shire, namely:

- Broadford
 - Broadford Secondary College (public)
- Kilmore
 - Assumption College (catholic)
 - Kilmore International School (private)
- Seymour
 - Seymour College (public)

¹⁶ Australian Financial Review, 28 February 2018



- St Mary's College (catholic)
- Wallan
 - Wallan Secondary School (public)

As a consequence, there is a great deal of local traffic generated by parents taking and collecting their children from school.

1.3.3.3 Offal Spill in Sydney Street, Kilmore

On the evening of 20 April 2016, a truck carrying offal lost parts of its load on the Northern Highway in multiple locations between Pyalong and Wallan. The messy spill of offal caused havoc for commuters, residents, and clean-up crews. An extensive clean-up was required with southbound traffic on the Northern Highway diverted at Tooborac and northbound traffic slowed. VicRoads crews worked through the night up until 6:30 am the next morning to assist with the clean-up operations, which covered nearly 35 kilometres.

The emphasis of the clean-up was to make sure the road was safe. This included using a vacuum sweeper to remove as much of the solid spillage and to spread sand on parts of the highway that were very greasy. Given the health aspects associated with the spill, crews endeavoured to clean up in nearby urban areas to ensure that the larger pieces of offal were removed before daylight.¹⁷

1.3.3.4 Learnings from the Point Cook Experience

Port Cook is a new suburb in Melbourne's west (located in the City of Wyndham). From a population of approximately 2,000 in 2001, it has grown to approximately 50,000 in 2016. Similar to the current access arrangement to Beveridge, Point Cook largely relied on one major access point to connect to the regional road and transport networks. This gave rise to major traffic congestion with residents unable to readily exit and enter the suburb during morning and afternoon peak periods. The suburb was effectively gridlocked.

Should there be no additional access points, or no significant upgrades to major transport infrastructure, Beveridge will cease to grow as the existing infrastructure will be unable to cope with the emerging demands. This will have significant impacts on social outcomes of the emerging community as the scale of development will not warrant or attract social and community infrastructure investment.

1.4 Timing Considerations

Mitchell Shire is experiencing unprecedented population growth that is expected to continue for the next 30 plus years. This growth has placed considerable strain on the area's road network. In addition, the system will need to grow and be enhanced to meet the various needs of the new residents. These needs are social, community and employment related and sit across all age groups and demographics.

Some parts of the Shire are unable to develop beyond a certain lot size without improvements to local and main roads. These areas fall within Melbourne's growth boundary.

If Mitchell Shire's liveability is not to be compromised then improvements to the road network are needed as a matter of urgency.

1.5 Consideration of the Broader Context

Mitchell Shire forms part of the Hume Region and a coordinated approach to the road network is required across the Region.

¹⁷ North Central and Whittlesea Review / The Free Press, Tuesday, April 26, 2016, p. 8



2 Part 2 Benefits

2.1 Benefits to be Delivered

A summary of the four benefits that will flow from solving the problems is presented in the Investment Logic Map (refer Appendix C) and further considered in Table 3.

1. Growth pressures on Melbourne are alleviated
Solving the problems will support future population growth in Mitchell Shire so that it is able to take up what is envisaged in Plan Melbourne and the Northern Growth Corridor Plan.
2. A healthier, more vibrant community
<p>Mitchell Shire residents' quality of life will be improved as they will experience less delay on the roads, associated frustrations, and uncertainty in planning their journeys and route choices.</p> <p>Improving the local road network will increase the attractiveness of living and investing in the Shire. Residential areas and commercial centres will be better connected including with improved pedestrian and cycling links. These infrastructure related connections will make Mitchell Shire a preferred place to live and will also encourage businesses to invest.</p> <p>A key part of the Plan Melbourne vision is the creation of '20 minute neighbourhoods' – the planning and development of areas at the local level so that people can access a range of local services and facilities, ideally within 20 minutes of home. This vision is enhanced by the provision of roads that encourage easy and safe travel at the local level.</p> <p>Traffic related accidents will be reduced with improvements in the road network as dangerous behaviour associated with congestion, delays, unpredictable traffic movements, and frustrations will be minimised.</p> <p>Improvements to pedestrian and cycling links delivered as part of these road improvements will enhance health and safety.</p>
3. Improved retention of wealth within the local community
<p>The road improvements will support social and economic inclusion, enabling people to access jobs and services more easily. Economic prosperity will be boosted through better mobility and improved freight efficiency.</p> <p>Implementation of the '20 minute neighbourhood' will facilitate business investment and employment opportunities within the Mitchell Shire so that residents do not have to travel outside the municipality for work. This in turn will have a flow on affect to supporting industries such as food outlets.</p> <p>Working in the local area encourages residents to also shop in the local area generating a multiplier effect.</p>
4. Improved freight efficiency
<p>Freight efficiency will be improved by first reducing travel times, and secondly alleviating delays caused through queuing at bottlenecks. Improvements in the reliability of travel times will also have productivity benefits, as road users will not need to allow for extra travel time when planning trips in, and through, the Shire, and industry can plan deliveries and other journeys with greater certainty.</p> <p>Links with the proposed Intermodal Freight Terminal at Beveridge will be facilitated.</p>

Table 3: Benefits to be Delivered

2.2 Importance of the Benefits to Government

Transport for Victoria has been established to coordinate Victoria's growing transport system and to plan for its future. It brings together the planning, managing and coordinating of Victoria's transport system and its agencies, including VicRoads and Public Transport Victoria. In time, it will provide a single source for information about Victoria's road, train, tram, bus, taxi and freight networks, making it simpler and easier for Victorians to get the transport information they need. Transport for Victoria will



also plan for the future of Victoria's transport system, ensuring it grows as the community, economy and technology changes.

2.3 Evidence of Benefit Delivery

Key performance indicators (KPIs) have been identified for each of the benefits identified in the Investment Logic Map to ensure the impact and success of strategic interventions can be measured. The KPIs that will be used by Mitchell Shire to measure the delivery of the benefits are detailed in Table 4 below.

Benefit	Key Performance Indicator
1. Growth pressures on Melbourne are alleviated	KPI 1: Subdivisions constructed
2. A healthier, more vibrant community	KPI 1: Walking and cycling activity KPI 2: % of people who feel connected to community
3. Improved retention of wealth within the local community	KPI 1: Spend per capita in the community KPI 2: % of people who travel outside the shire for work
4. Improved freight efficiency	KPI 1: Travel times during peaks along the Hume and Northern through towns KPI 2: Queue lengths onto or off the Hume Freeway and the Northern Highway

Table 4: Evidence of Benefit Delivery

2.4 Interdependencies

There are no interdependencies for benefit delivery.



3 Part 3 Response

3.1 General

There are a number of interventions that could be employed to respond to the problem and through which the anticipated benefits could be realised. Typically, these interventions fall within the following criteria:

- changing demand
- improving productivity
- changing supply.

The range of possible interventions include:

- making the existing road network work harder (sweating the assets) by:
 - improving traffic flows and intersection management
 - facilitating route choices
 - ensuring appropriate road maintenance is carried out
 - funding road upgrades in a timely manner
 - restricting 'rat runs'
- reducing the demand on roads by:
 - encouraging and facilitating the '20 minute' city whereby residents are located close to their places of work, recreation, schools, etc to minimise the distances travelled
 - promoting and extending alternative forms of transport including trains, buses, cycling and walking
- stemming or reducing the population growth anticipated for the Northern Growth Corridor
- improving the capacity of the road network to better manage the traffic flows that are currently occurring and those that are anticipated.

It should be noted that the interventions fall largely beyond the control of Mitchell Shire.

3.2 Recommended Approach

For the purposes of the preliminary business case, it was determined that the most appropriate intervention, with the highest probability of success, was to improve the capacity of the road network.



4 Part 4 Projects

4.1 Gunns Gully Road Extension and Interchange

4.1.1 Description

The project entails the extension of Gunns Gully Road and a full diamond interchange at the Hume Freeway. The new road and interchange will facilitate the development of the Cloverton Estate (Lockerbie) and provide a catalyst for the proposed Cloverton Metropolitan Activity Centre. At present, Donnybrook Road is the only east-west arterial road in the Northern Growth Corridor.

The Hume Freeway is a significant barrier to movement between the large residential precincts of the Cloverton Estate and Donnybrook / Woodstock to the east, and the extensive Merrifield employment precinct to the west. The Cloverton Metropolitan Activity Centre is effectively land-locked, and residents will be required to travel by car to Craigieburn, Epping and Broadmeadows to access services and facilities – placing additional traffic load on the arterial road network.

4.1.2 Policy Alignment

The project aligns to:

- Plan Melbourne
- Northern Growth Corridor Plan
- Lockerbie and Lockerbie North Precinct Structure Plans

4.1.3 Benefits

The proposed Cloverton Metropolitan Activity Centre is central to the Northern Growth Corridor. It will provide retail, commercial, health, education, cultural, and leisure services. It is one of only two new metropolitan activity centres to be delivered in Melbourne's growth areas.

The Cloverton Estate is over 1,100 hectares and is being developed by Stockland. Once established, it will accommodate 11,000 homes and 30,000 residents, and generate over 4,000 ongoing jobs (by 2046).¹⁸

4.1.4 Cost

The Gunns Gully Road Extension and Interchange is estimated to cost between \$80 and \$100 million.

4.2 Hume Freeway Diamond Interchange and Watson Street Upgrade

4.2.1 Description

The project entails the construction of southern orientated freeway on/off ramps at Watson Street to create a full diamond interchange with the Hume Freeway. The project also includes the duplication of Watson Street between Wallara Waters Boulevard and the Northern Highway in Wallan.

Wallan is the Northern Growth Corridor's northern most urban community. With a current population of approximately 13,000 people, it is expected to grow to 55,000 within the next 20-30 years. Currently, residents experience difficulties travelling to Wallan from the south along the Hume Freeway as they must exit onto the Northern Highway to enter the town. The Northern Highway is not duplicated, and significant traffic delays and banking of traffic occurs at the exit from the Hume Freeway to the Northern Highway.

¹⁸ Stockland, KPMG, echelon planning, GTA Consultants, Gunns Gully Transport Corridor, Unlocking Opportunities in Melbourne's North, Nov 17



4.2.2 Policy Alignment

The project aligns to:

- Plan Melbourne
- Northern Growth Corridor Plan
- Wallan Township Structure Plan.

4.2.3 Benefits

The construction of a full diamond interchange at Watson Street will allow Mitchell Shire residents direct access off the Hume Freeway when travelling to and from the south. It will also provide greater accessibility to residents living in Wallan East who are currently separated from the town as they are on the eastern side of the Hume Freeway.

The completion of this full diamond interchange will also create better freight connections between the Hume Freeway and industrial estates located in Wallan East, therefore reducing the amount of heavy vehicles using High Street in Wallan.

4.2.4 Cost

The cost of the Hume Freeway Diamond Interchange and Watson Street Upgrade project is yet to be estimated.



4.3 Camerons Lane Enhancement and Interchange

4.3.1 Description

Camerons Lane is proposed to be developed into a major, six lane arterial road.

The project entails an enhanced Camerons Lane and the construction of a full diamond interchange at the Hume Freeway. The arterial road and interchange will provide the main access for residential communities within the Beveridge Growth Corridor.

Currently, the Lithgow Street and Hume Freeway interchange/underpass provides access/egress into the developing Beveridge and Mandalay communities. The interchange is of a rural standard and the underpass at Lithgow Street is narrow, unsafe and in need of an upgrade as an interim measure until the Camerons Lane full interchange is constructed. Lithgow Street is required to be upgraded to provide safe pedestrian access/egress through the existing underpass to the Hume Freeway. Residents of the Mandalay Estate who require access to the Beveridge Township for services, such as the primary school, cannot walk and are forced to drive vehicles through the underpass.

Due to the capacity issues of Lithgow Street, VicRoads has imposed a lot release restriction on Beveridge pending its upgrade and the construction of the interchange.

4.3.2 Policy Alignment

The project aligns to:

- Plan Melbourne
- Northern Growth Corridor Plan
- Lockerbie North, Beveridge Central, and draft Beveridge North West Precinct Structure Plans.

4.3.3 Benefits

Construction of the arterial road and the Camerons Lane Interchange (and the associated upgrade to Lithgow Street) will allow the Beveridge Growth Corridor to develop as anticipated, with an additional 52,000 residents accommodated over the next 20 years. This will provide the necessary scale to allow for the investment in community facilities and improved amenities such as open space and active/passive recreation areas. Service providers will also be encouraged to set up.

The divide between the old parts of Beveridge and the new areas associated with the Mandalay Estate will be removed and residents of both areas will be able to move freely back and forth. This will lead to a decrease in the risk of social dislocation and isolation.

The Interchange will also provide linkages to the future Beveridge Intermodal Freight Terminal, which is a project of State significance and will provide employment and economic development opportunities.

4.3.4 Cost

The Camerons Lane Interchange (and enhanced Camerons Lane) is estimated to cost between \$150 and \$170 million.

4.4 Kilmore and Wallan Bypass

4.4.1 Description

Wallan is the Northern Growth Corridor's northern most urban community. With a current population of approximately 13,000 people, it is expected to grow to 55,000 within the next 20-30 years.

Kilmore is close to the metropolitan fringe and experiencing rapid growth, with its population forecast to reach approximately 28,000 within the next 20-30 years, up from around 9,500 currently.

The primary objective of the Kilmore and Wallan bypass project is to reduce the amount of through traffic, particularly heavy vehicle traffic that need to utilise the main streets of Kilmore and Wallan thus reducing congestion and improving amenity, road safety and local connectivity for local residents.



The Kilmore/Wallan Bypass project entails:

- utilisation and upgrade of the existing alignment of Epping-Kilmore Road between the Hume Freeway interchange at Wandong and the Northern Highway just South of Kilmore.
- upgrades to Epping-Kilmore Road to remove steep sections of road to improve the efficiency of freight movement.
- construction of a new roundabout at the intersection of the Northern Highway and Epping-Kilmore Road just South of Kilmore.
- construction of a new arterial standard road to the South, West and North-West of Kilmore in proximity to Gehreys Lane, Paynes Road and Kings Lane
- constructing a roundabout at the Kilmore / Lancefield Road
- various local road connections

4.4.2 Policy Alignment

The project aligns to:

- Plan Melbourne
- Northern Growth Corridor Plan
- Wallan Structure Plan
- Hume Regional Growth Plan.

4.4.3 Benefits

The project will significantly reduce the amount of traffic passing through both Wallan and Kilmore. As a result, both towns will become more liveable and attractive places to live and invest.

In addition, there will be improvements in:

- Improved amenity of residential and commercial precincts through reductions in through traffic and heavy vehicle volumes
- Improved efficiency of the arterial and local road networks promotes productivity throughout the region
- Improve road safety in the Kilmore and Wallan Townships
- Improved road safety along existing lengths of Epping-Kilmore Road between Kilmore and Wandong.

4.4.4 Cost

The Kilmore/Wallan Bypass is estimated to cost between \$180 and \$200 million.

4.5 Capacity Improvements to the Northern Highway

4.5.1 Description

The project entails capacity improvements to the Northern Highway between the Hume Freeway and Watson Street, Wallan.

Wallan is the Northern Growth Corridor's northern most urban community. With a current population of approximately 13,000 people, it is expected to grow to 55,000 within the next 20-30 years. Currently, residents experience difficulties travelling to Wallan from the south along the Hume Freeway. The Northern Highway is not duplicated, and significant traffic delays and banking of traffic occurs at the exit from the Hume Freeway to the Northern Highway.

This project complements the Watson Street/Hume Freeway Southern Ramps and Road Duplication project as both provide improved access to Wallan. The Capacity Improvements to the Northern Highway project will also cater for traffic passing through Wallan, particularly pending the construction of the Wallan Bypass.



4.5.2 Policy Alignment

The project aligns to:

- Plan Melbourne
- Northern Growth Corridor Plan
- Wallan Structure Plan.

4.5.3 Benefits

Noting the anticipated population growth anticipated for Wallan, the capacity improvements to the Northern Highway between the Hume Freeway and Wallan will allow improved access for Mitchell Shire residents when travelling from both the north and south. It will also facilitate the movement of through traffic.

4.5.4 Cost

The capacity improvements to the Northern Highway will be determined from further investigation.

4.6 Stakeholder Identification

Table 5 lists the key stakeholders and their particular interest in the five road projects.

Stakeholder	Interest	Position
VicRoads	VicRoads is the agency responsible for the delivery of major roads in Victoria. It will be its responsibility to have the roads referenced in this preliminary business case considered and approved for State Budget funding.	VicRoads's position will be confirmed through the State Budget funding application and approval process. Given previous announcements by VicRoads over many years, and formal and informal discussions with the Mitchell Shire Council, it is anticipated

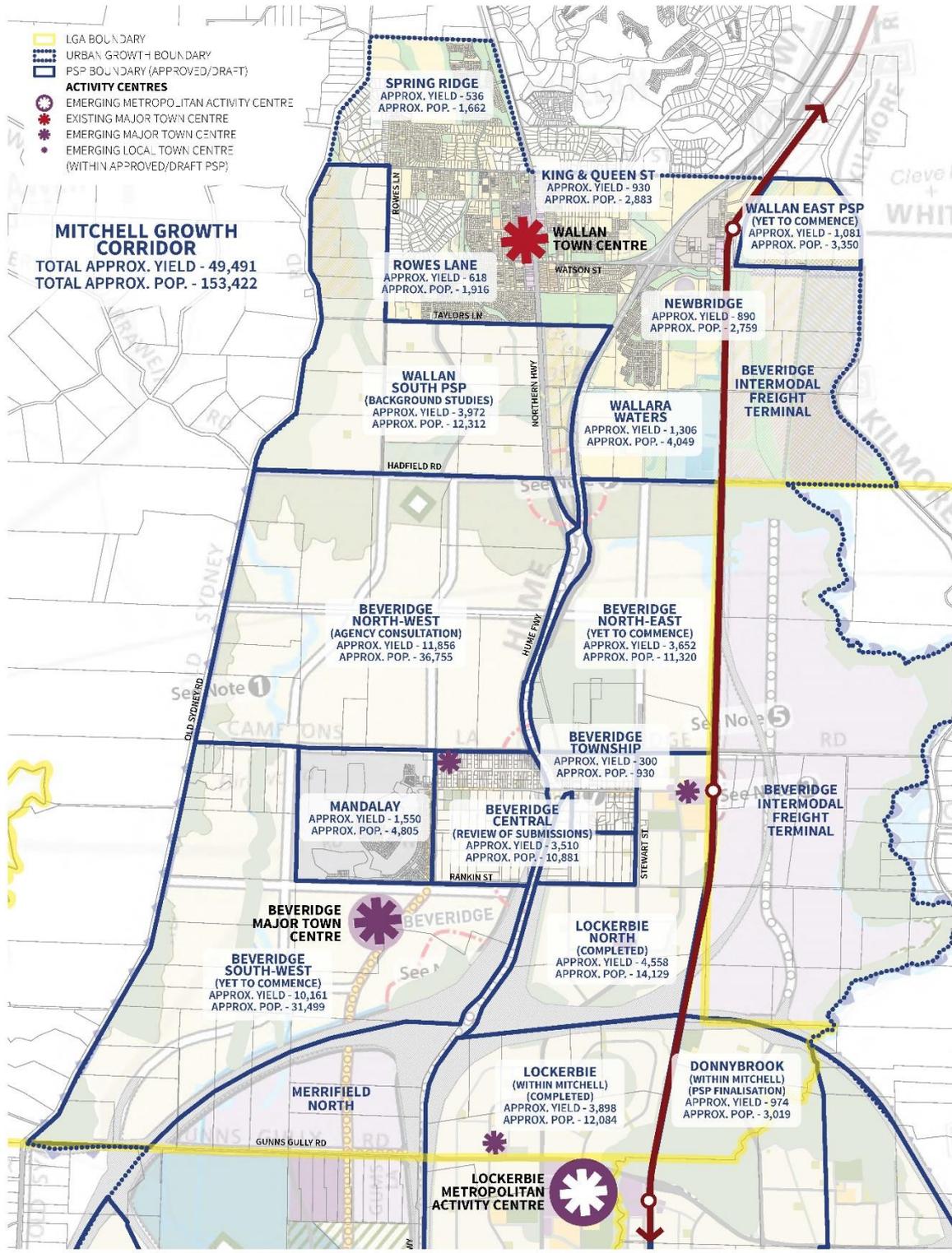


Stakeholder	Interest	Position
	VicRoads has indicated its support for these initiatives previously, particularly the (Wallan) Kilmore Bypass.	that VicRoads will be supportive of the five road projects.
Property Developers	There are a range of property developers who are very active in the Mitchell Shire. They have interests in both residential and industrial developments.	It is anticipated that property developers will be supportive of the road projects as they are either essential for development to occur or strongly enhance the development opportunities.
Community/Road Users	<p>The community expects access to a safe and functional road network that supports the population growth anticipated for Mitchell Shire.</p> <p>Representations to Mitchell Shire Council from school principals seeking appropriately located roads and footpaths that enable students to walk and cycle safely to school are indicative of the need to provide an improved road network.</p> <p>The Kilmore and District Residents and Ratepayers Association, and other formal and informal resident groups, expect the provision of infrastructure to underpin residential, social and commercial activities.</p>	The community/road users are anticipated to back the road projects as they will improve the quality of life for residents and other road users.

Table 5: Key Stakeholders



7 Appendix B: Mitchell Growth Corridor Plan







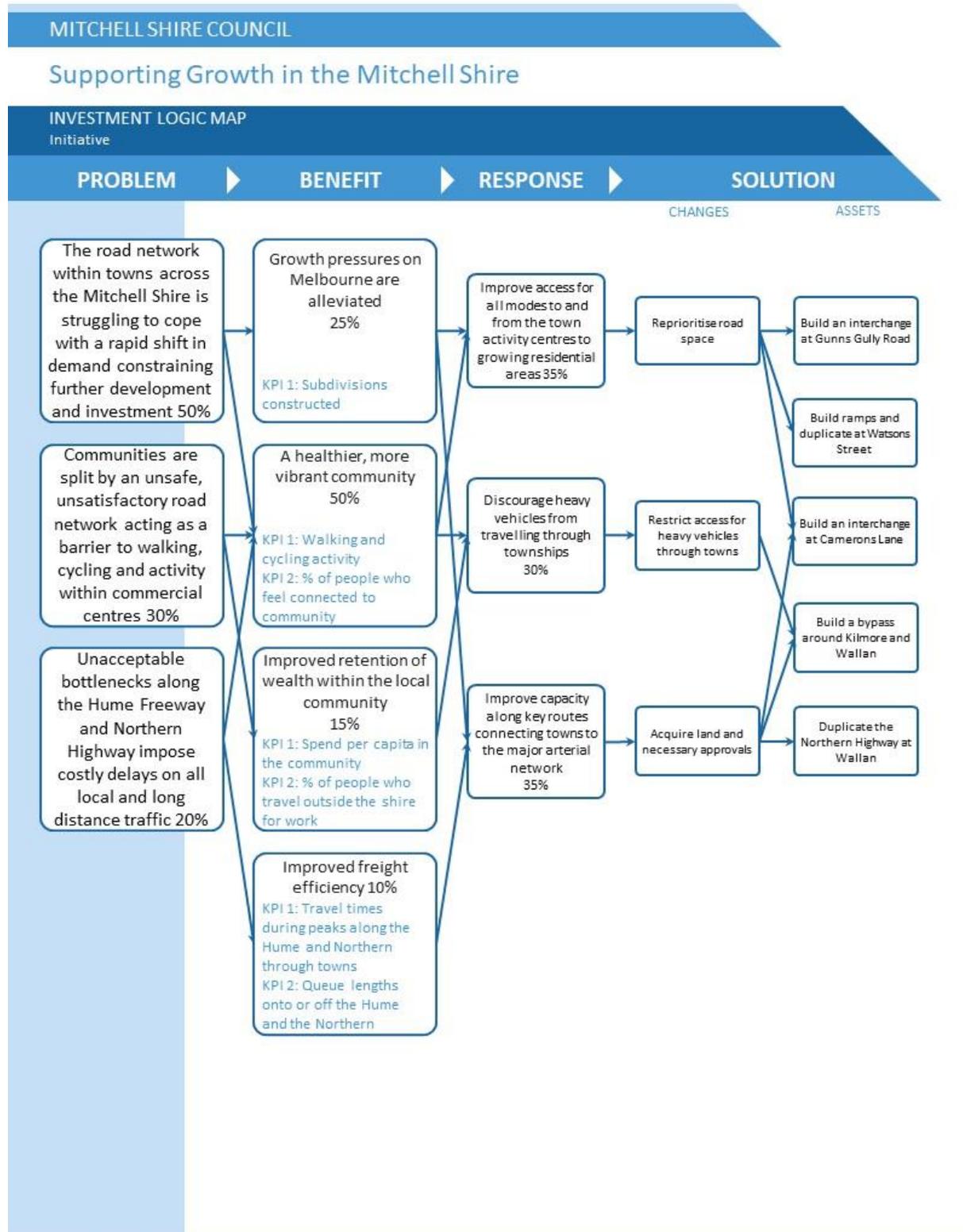
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VERSION:	02
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PROJECTED YIELD & POPULATION
NORTHERN GROWTH CORRIDOR
MITCHELL SHIRE COUNCIL

Potential Development Sequencing Northern Growth Corridor, final version (2016), PATCH Design and Build, Mitchell Shire Council



8 Appendix C: Investment Logic Map



Investor: Mitchell Shire Council
 Facilitator: Jeremy Smart
 Accredited Facilitator: Yes

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