



PERTH TRANSPORT PLAN

FOR 3.5 MILLION

PREPARED BY:

THE SOUTH WEST GROUP OCTOBER 2016

EXECUTIVE SUMMARY



The draft Perth Transport Plan (PTP) for 3.5 Million presents a strategic blueprint for investment in transport infrastructure and services to stimulate economic growth and to meet planned regional growth in population, residential, commercial and industrial land use and development of activity and employment centres. The PTP links with the comprehensive land use planning undertaken with extensive local government consultation. It also seeks to meet business and community expectations for high levels of access and mobility within the South West Metropolitan Region.

Over 50% of future population growth in Perth will be south of the river. South Metropolitan and Peel's population (+700,000 people), dwelling demands (+300,000 new homes) and job growth (+290,000 jobs) exceeds all other sub-regions including Central sub-region (+400,000 people, +215,000 homes, +240,000 jobs). The enhancement of activity centres as regional employment hubs will be critical for providing jobs, relieving congestion and maintaining acceptable standards of living for residents into the future.

Major economic drivers for WA located in the region include Fremantle Port and the planned outer harbour, Kwinana Industrial Area (KIA), Jandakot City and the Australian Marine Complex (AMC). The Murdoch Activity Centre is also a major specialised centre recently branded as a health and knowledge precinct.

Without this long term plan and timely public investment in the transport network, the emerging capacity and serviceability constraints will hinder balanced regional development and productivity improvements, discourage or divert private investment from the planned growth locations and frustrate business and community with unpredictable travel times, extensive time delays and increasing congestion.

The South West Group supports the PTP proposals for implementation with adjusted timelines and identifies additional priority projects not included in the plan, which are relevant and important, particularly in regards to increasing public transport usage, managing congestion and enhancing freight productivity.

The South West Group was not able to form a regional position on the Perth Freight Link and proposed timing for the development of the Outer Harbour due to contrary positions established by the member Councils.

The State Government spends about \$2 billion annually on transport related infrastructure in the Perth and Peel Regions. This equates to expenditure of \$68 Billion from now to 2050. The proposals in the PTP suggests that expenditure is mainly planned for the Perth CBD and north east corridor, however further investment in the south west and south east corridors is required where most of Perth's population, dwellings and jobs growth are planned to occur.

EXECUTIVE SUMMARY CONTINUED

The South West Group is committed to working with the State Government to identify and progress the expenditure for new projects, with an emphasis for investment in the short term (by 2.7 million) to address population and employment growth pressures.

A rigorous benefit cost assessment of proposals is required to determine the priority and timing of public and/or private investment in infrastructure and services to promote economic growth and cater for regional growth. Five, ten and twenty year forward public investment programs will encourage businesses to plan complementary investments all to the benefit of the local community, region and the State.

An independent governance framework is required to ensure the benefit cost assessments are fully integrated into project definition and scope, timing, cost estimates, delivery planning and execution. A complementary process for active engagement with local government and the private sector in finalising plans, setting priorities, identifying funding sources and implementation is advocated.

The South West Group of Councils welcomes the opportunity to work with the State Government in project planning and delivery to align project specific plans and achieve the full benefits for the community and the State.

Long term plans require bipartisan support to ensure project development, implementation and delivery can create the certainty required to optimise private sector business planning and investment.

The South West Group is committed to working with the Government, Opposition and minor parties in attracting investment for the development of transport projects and other forms of infrastructure to support the rapidly expanding region through partnerships with member Councils, industry and businesses and residents in the South West Metropolitan Region.



- Thornlie Rail Line proposal as a high priority public transport initiative that should be implemented by 2020
- Perth Light Rail Stage 2: Curtin University to Canning Bridge and recommends that Stage 2 be undertaken by 2.7 Million or 2031
- Light Rail or bus rapid transit (BRT) major activity corridors identified in the PTP such as:
 - Canning Bridge to Booragoon and Murdoch Rail Station
 - Murdoch Rail Station to Fremantle and Cockburn Coast
 - Cockburn Coast to Cockburn Central
- Stirling Murdoch Orbital Rail Stage 3: Murdoch Rail
 Station to Thornlie Rail Extension by 3.5 Million or 2050
- The establishment of high priority public transit corridors in the region and recommends further consultation with member Councils to confirm and prioritise corridor development
- Fremantle Rockingham Controlled Access Highway and grade separation along Stock Road
- Stock Road Tunnel and recommends further consultation with the City of Melville on connections to Canning Highway
- Rowley Road as the principal freight access route to the proposed outer harbour and the planned upgrades for Anketell Road and Mundijong (Kulija) Road.
- Increased freight rail capacity to Kwinana Industrial Area, however the most southern alignment option (Kwinana Loop Railway) is not supported due to adverse impacts on the Rockingham Strategic Metropolitan Centre
- Grade separation of the freight rail line at North Lake Road as a high priority and recommends consultation with the City of Cockburn on planning and environmental impacts
- An intermodal logistics centre at Latitude 32 Industrial Area and investigations into the most appropriate container transfer system for the planned outer harbour
- Duplication of freight rail track Cockburn Triangle to Latitude 32 to Kwinana Triangle
- Proposals to increase active transport in the region such as the Three Point Bridge and recommends further consultation with member Councils involved
- The expansion of the cycling and pedestrian networks in the region
- The use of Intelligent Transport Systems (ITS) to assist in journey planning, improve safety and maintain road capacity.



EXECUTIVE SUMMARY CONTINUED

The South West Group supports the following additional proposals being included as priority proposals in the final PTP:

- Relocation of Canning Bridge Bus Interchange
- Canning Highway Bridge Duplication
- Bus Rapid Transit or Light Rail Connections
 - Canning Vale to Murdoch
 - Cockburn Central to Cockburn Coast
 - Canning Highway from Canning Bridge to Fremantle
 - Rockingham city centre and foreshore to the Rockingham Train Station and Read Street/Warnbro Sound Avenue
- Armadale Road Bridge (previously known as the North Lake Road Bridge)
- Replacement of Fremantle Traffic Bridge, including provision for passenger rail and the re-use of all or parts of the existing bridge structure for use by pedestrians and cyclists
- Additional High Wide Load (HWL) corridors, including the retaining of Anketell Road as HWL when Rowley Road is constructed and designating Mundijong Road-Fremantle Rockingham Highway-AMC-Latitude 32 as HWL corridor
- Additional rail/road grade separation locations
- New rail stations on the Mandurah Line such as Karnup Station.





OVERVIEW

The South West Group is a voluntary regional organisation of councils (VROC) with member local governments including the cities of Cockburn, Fremantle, Kwinana, Melville and Rockingham and the Town of East Fremantle.

The South West Metropolitan Region covers almost 620 square kilometres, has a population of 419,200 (June 2015) and a gross regional product of \$25.85 billion (NIEIR, 2015).

The region contains major economic assets of state significance including Fremantle Port, Kwinana Industrial Area (KIA), Australian Marine Complex (AMC), Jandakot Airport and Jandakot City, Murdoch Health and Knowledge Precinct as well as major industrial and commercial areas (O'Connor, Myaree, Bibra Lake, Cockburn, North Fremantle, Rockingham, Canning Bridge) and retail centres (Fremantle, Booragoon, Cockburn Central, Kwinana, Rockingham).

The transport network and connections between these centres and where people live and work is of critical importance to future success and productivity of the region.

The South West Group commends the State Government in the recent release of the draft Perth Transport Plan (PTP) for 3.5 Million and Beyond and provides this submission in response to the proposals identified in the PTP and other initiatives in the region.

The submission responds to the PTP under the key headings of:

- Strategic regional and community development opportunities
- Importance of the South West Metropolitan Region @ 3.5M
- Support for PTP Proposals
- Additional Proposals for PTP
- Proposal Evaluation and Programming
- PTP Implementation and Collaboration
- A Bipartisan Approach and Commitment Required

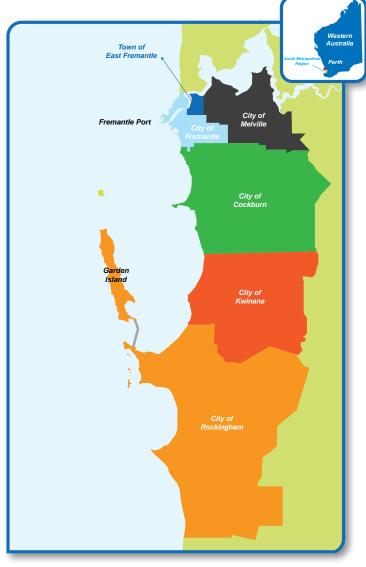


Figure 1: South West Metropolitan Region

STRATEGIC

REGIONAL AND COMMUNITY DEVELOPMENT OPPORTUNITIES

The PTP is a blueprint for regional growth and community benefit in the South West Metropolitan Region.

The implementation of the PTP aims to address current and emerging access and mobility constraints which hinder regional development and affect community wellbeing. With bipartisan commitment, the PTP can provide the certainty required for incentivising effective and interrelated public and private investment in integrated transport planning infrastructure solutions.

Comprehensive assessment of the PTP infrastructure and service proposals and timing of their implementation must include the extent to which it facilitates private sector investment in regional economic growth and employment. This approach acknowledges that the PTP proposals have the potential to deliver transformational change in the South West Metropolitan Region through the advancement of:

- productive private sector investment
- competitive commercial operations
- employment growth and
- substantial contribution to the State's economy

The South West Metropolitan Region has the planned capacity to accommodate its projected population growth and a wide spectrum of activity centres and employment generating businesses. The activity centres and businesses will increase regional employment opportunities and support the growing demand for jobs and their complementary skills mix, thereby increasing employment self-sufficiency and self-containment.

Integrated transport planning and connections to, and between, activity centres are critical to their success and a key factor in their ability to reach their economic and social potential and become highly productive locations for jobs, businesses and investment.



IMPORTANCE

OF THE SOUTH WEST METROPOLITAN REGION @ 3.5 MILLION



Over 50% of future population growth in Perth to 2050 will be south of the river. Investment in infrastructure and services are required to support this growth.

The enhancement of activity centres as regional employment hubs will be critical for providing jobs, relieving congestion and maintaining acceptable standards of living for future residents.

The South Metropolitan and Peel's population (+700,000 people), dwelling demands (+300,000 new homes) and job growth (+290,000 jobs) to 2050 exceeds all other subregions including the Central sub-region (+400,000 people, +215,000 homes, +240,000 jobs).

The Town of East Fremantle and the Cities of Melville and Fremantle are located in the Central Sub-region and contain the strategic metropolitan centre in Fremantle, secondary centre of Booragoon and the specialised centre at Murdoch. Murdoch Activity Centre is being planned as the largest employment centre outside the Perth CBD with an estimated 35,000 jobs by 2031.

The PTP focuses largely on connections and access to Perth CBD.

More emphasis is needed on transport related investment to support economic development and employment growth south of the river particularly:

- In, around and between activity centres
- Along east-west links (journey to work and school, recreation)
- In providing greater level of service resilience in the critical transport network corridors (Kwinana Freeway, Mandurah Rail Line, freight corridors)



Key transformational elements of the transport infrastructure proposals identified for the region are required earlier than planned under PTP to incentivise and facilitate private investment and employment growth.

Information communicated at the Department of Transport briefings on PTP indicated that the State Government spends \$2 billion annually on transport related infrastructure in the Perth and Peel Regions. This equates to \$68 Billion to 2050.

A high level analysis of PTP proposals suggests a heavily skewed investment in the CBD and north eastern portion of the metropolitan area compared to the south west and south east corridors where most of the population, dwellings and jobs growth are planned to occur.

This disproportionate spread of expenditure requires adjustment to ensure that investment in transport infrastructure is targeted to meet population and employment growth demands.

Given this, it is appropriate that the level of investment in the South West Metropolitan Region is equitable and targeted to meet defined growth demands.

The South West Metropolitan Region represents about 20% of the metropolitan area, so it would be fair to say that our share in the transport infrastructure spend should be around \$14 Billion over this period.

The South West Group has estimated that the proposals put forward in the draft PTP would deliver about \$9 Billion in transport infrastructure, which is well below a proportional and equitable share.

The South West Group has identified necessary additional transport infrastructure projects in the region costing about \$3 billion are required and has put these forward for inclusion in the final Perth Transport Plan.

This will still leave a shortfall of about \$ 2 billion for new projects up to 2050.

The South West Group is committed to working with the State Government to identify and progress the expenditure of this \$2 billion for new projects, with an emphasis for investment in the short term (by 2.7 million) to address population and employment growth pressures.

IMPORTANCE OF THE SOUTH WEST METROPOLITAN REGION @ 3.5 MILLION CONTINUED

As the economic gateway to the west and a powerhouse sub-region in the metropolitan area, it is essential that the South West Metropolitan Region is provided with the required infrastructure to:

- capitalise on expanding industrial and commercial development opportunities
- accommodate future population growth and
- provide the much needed jobs for our communities in our region.



The South West Metropolitan Region is probably one of the few sub-regions in the metropolitan area that can actually achieve employment self-sufficiency based on future land use potential, but need our share of investment in infrastructure to realise this aspiration.

A greater level of public investment overall, particularly public transport, is needed to match population growth and support economic and social development in the South West Metropolitan Region.

The South West Group has identified accelerated timeframes for implementation of some PTP proposals and additional transport infrastructure proposals to correct this imbalance.

SUPPORT FOR PTP PROPOSALS

The PTP is a long term, aspirational plan with multiple linked objectives and aims to achieve an integrated, multi-modal and land use based plan to respond to growth challenges. The South West Group supports the core intent of the PTP in:

- Designating a principal road network
- Providing increased capacity and level of service resilience in road and rail networks
- Promoting active transport through innovative infrastructure and network extension
- Putting broad timeframes for proposals, noting the timing of some projects require review to meet growth demands and to bring forward beneficial land use, investment and activity centre development and activation outcomes

There are a number of additional projects in the region that require consideration for PTP that target areas experiencing significant growth pressures and will result in a more balanced and equitable allocation of funding throughout the Perth and Peel Region.



The proposals for travel demand management and behavioural change to mode share requires much more development and consultation with local government and other stakeholders.

The prioritisation and timing for implementing proposals identified in the PTP will be critical in providing greater certainty and attracting complementary investment from local government and the private sector.

Further work on project definition and prioritisation is required using a comprehensive evaluation framework involving the use of multi-criteria assessment and cost-benefit analysis.

There are a number of proposals in the PTP that it was not possible for the South West Group to achieve a consensus position on including the Perth Freight Link and the timing of the Outer Harbour. In some cases, the South West Group member Councils had adopted contrary positions that proved difficult to consolidate into a regional position.

The South West Group Board respects the positions established by its member Councils and considered it beneficial to outline the positions of the respective member Councils so that stakeholders gain a better understanding on these issues.

COUNCILS

POSITION ON THE PERTH FREIGHT LINK AND OUTER HARBOUR

City of Cockburn

Since 2001, Council has officially opposed the construction of the Perth Freight Link / Roe Highway (Stage 8). The City's alternative proposal is for the State to proceed with development of the outer harbour in Kwinana and associated intermodal facility, with this infrastructure investment also recommended by Regional Development Australia (Perth). The first stage of this should be construction of an intermodal facility (which can move freight from rail to road and vice versa) at Latitude 32; as this could alleviate a significant amount of freight being moved by road into the current Fremantle Harbour from southern suburbs.

Town of East Fremantle Town of East Fremantle has voted to reject the proposed Perth Freight Link and work with the City of Fremantle to urge the Government to rethink the current proposal, and seek information on alternatives that provide a higher long term cost/benefit to freight movement to Fremantle Port.

City of Fremantle

The City of Fremantle does not support the Perth Freight Link as currently proposed due to insufficient planning and inadequate analysis of the implications associated with the current proposal. Whilst the draft Perth Transport Plan provides further planning details for the Perth Freight Link, questions still remain around the planning for the proposed Fremantle Tunnel, connections from the proposed tunnel to the port and the impacts of these links to the surrounding communities, particularly White Gum Valley, Beaconsfield, O'Connor, Samson and North and East Fremantle. The further details provided on the last mile of the proposed freight link, referred to as Fremantle Port Connect, raise additional questions about the connectivity between the existing train station at North Fremantle, the North Fremantle local centre and the coast, along with questions about the planned alignment of the Curtin Ave expansion and how this relates to the adopted Leighton master plan alignment.

The City continues to support for the planning and development of an outer harbour serviced by rail, keeping with many decades of freight, transport and urban planning. The City of Fremantle supports a working port in Fremantle, and aspires to see a working port in long term planning for the future of Fremantle along with the redevelopment of South Quay for tourism and commercial opportunities. The predicted increase in container trade makes it essential an outer harbour is progressed and adequately planned for as a matter of urgency.

City of Kwinana

In accordance with it's Indian Ocean Gateway proposal, the City of Kwinana submits there is an immediate need for the construction of a 21st century port in Kwinana (the Outer Harbour) and the associated upgrades of Rowley and Anketell Road through to Tonkin Highway as the primary freight network to service the future growth of Perth. The network will be further strengthened by the construction of the Fremantle Rockingham Controlled Access Highway between Mundijong Road and Rowley Road and the construction of additional freight rail lines servicing the new port.

The City of Kwinana supports this nation building initiative that will create thousands of direct and indirect jobs for generations to come and allow Western Australian industries to increase their international competitiveness.

City of Melville

With the south west metro road network in crisis and predicted to fail at peak hours by 2021, the City of Melville Council continues to support the extension of Roe Highway between Kwinana Freeway and Stock Road, and recognises the critical role it will play to improve the safety of our local roads and reduce traffic congestion across City of Melville suburbs.

The Council also supports extending Roe Highway west of Stock Road to Stirling Highway, however utilising an original road alignment (known as the Fremantle Eastern Bypass) with all or part of the route tunnelled to avoid Melville's western suburbs and minimise any potential impact on community.

City of Rockingham

The City of Rockingham has adopted the following policy:

- Support the construction of the Perth Freight Link/Roe Highway Extension, in the absence of any legitimate or viable alternative that might relieve current and predicted heavy freight and domestic traffic congestion in the vicinity of Melville and Fremantle.
- Support the development of the Outer Harbour acknowledging the significant economic benefit such a project would bring to the region.
- Support the commencement of planning for the new facility which should include resolution of issues relating to regional land use and transport planning.
- Request all member local governments of the South West Group to support the planning and development of the Outer Harbour and for the South West Group to lead State and Federal Government engagement in the planning process on relevant regional issues.

The South West Group supports the major elements of the remaining fifteen proposals identified in the PTP that are located within, or have implications for, the South West Metropolitan Region. These are summarised below and a more detailed response is provided in Attachment 1.

THORNLIE RAIL LINE EXTENSION (BY 2031)

The South West Group supports the proposal as a high priority public transport initiative that should be implemented by 2020 in preference to the proposed Morley Rail line given its ability to provide a much needed complement to the Mandurah Rail Line. The Thornlie Rail Line would also provide a crucial role in supporting the travel demands arising from the south eastern corridor and provide a direct passenger rail link to service the Perth Stadium.

PERTH LIGHT RAIL – STAGE 2: CURTIN UNIVERSITY TO CANNING BRIDGE (BY 2050)

The South West Group supports the proposal and recommends that Stage 2 be undertaken by 2.7 Million or 2031 as it is only an extra 5.6 kilometres on from Curtin University and would be a catalyst to establish a light rail network connecting Canning Bridge to Booragoon and Murdoch Activity Centre in the short term, with connections to Fremantle and Cockburn Coast in the longer term.

Current bus patronage between Canning Bridge and Curtin University comprises 115 services each way with three to five minute intervals during peak periods, suggesting it is already operating as a bus rapid transit link. The establishment of a light rail connection will promote infill residential and development in the Canning Bridge Precinct and Curtin University Masterplan Precinct as well as along the route alignment.



BUS RAPID TRANSIT OR LIGHT RAIL (BEYOND 2050)

The South West Group supports bus rapid transit (BRT) or Light Rail along major activity corridors identified in the PTP such as:

- Canning Bridge to Booragoon and Murdoch Rail Station
- Murdoch Rail Station to Fremantle and Cockburn Coast
- Cockburn Coast to Cockburn Central

It is recommended that the timing of the above networks be reviewed, given the potential to implement sooner to relieve heavy congestion and facilitate activation of land use plans and more rapid development of activity centres and activity corridors.

Additional BRT and Light Rail routes recommended for the South West Metropolitan Region are discussed in the following section.

STIRLING MURDOCH ORBITAL RAIL (STAGES 1 AND 2 BY 2050 AND STAGE 3 BEYOND 2050)

The South West Group supports the Stirling Murdoch Orbital Rail involving:

- Stage 1 Stirling Rail Station to UWA/QEII
- Stage 2 UWA to Murdoch Rail Station
- Stage 3 Murdoch Rail Station to Thornlie Rail Extension

It is recommended that the Stages 1 to 3 get implemented by 2050 as it will provide improved access from the east to the Murdoch Activity Centre as the largest employment centre outside the Perth CBD and it will be more cost effective for the tunnelling between Murdoch Rail Station to Thornlie Rail Extension (Stage 3) to be undertaken at the same time as Stages 1 and 2.

HIGH PRIORITY PUBLIC TRANSIT CORRIDORS

The PTP puts forward a number of corridors in the region that would benefit through high frequency bus services including:

- Armadale to Cockburn Central and Fremantle
- Jandakot Airport to Murdoch
- Booragoon to Rossmoyne (along Leach Highway)
- Safety Bay Road, Rockingham to Woodman Point (via Gilmore Ave, Rockingham Road and Cockburn Road)
- Canning Highway Fremantle to North Lake Road
- Cockburn Coast to Rockingham
- Rockingham to Warnbro Station
- Leach Highway to Bull Creek Station and Riseley Street

The South West Group supports high priority public transit corridors established in the region and recommends that further consultation be undertaken with member Councils to confirm and prioritise transit corridor development and staging and how these corridors relate to BRT and Light Rail proposals.

FREMANTLE ROCKINGHAM CONTROLLED ACCESS HIGHWAY AND GRADE SEPARATION OF STOCK ROAD INTERSECTIONS (BY 2050)

The South West Group supports the Fremantle Rockingham Controlled Access Highway and the grade separation of intersections along Stock Road to facilitate the efficient north-south movement of freight and passenger vehicles in the western part of the region. The final alignment of the FRCAH will need to facilitate development of Latitude 32.

It is recommended that the timeframe for the grade separation along Stock Road be reviewed following the decision by the State Government to proceed or otherwise with part or all of the Perth Freight Link.

It is relevant to note that the Kulija Road section of the FRCAH will require re-classification to 'Primary Regional Road' to fall under the jurisdiction of the State Government.



STOCK ROAD TUNNEL (BY 2050)

The South West Group supports the construction of the Stock Road Tunnel as the key "cross river" road connection between Canning Bridge and Stirling Bridge.

It is recommended that access arrangements for Canning Highway be further clarified in consultation with the City of Melville.

ROWLEY/ANKETELL/MUNDIJONG ROAD UPGRADES (ROWLEY BY 2031, ANKETELL AND MUNDIJONG BY 2050)

The South West Group supports Rowley Road as the principal freight access route to the proposed outer harbour and the planned upgrades for Anketell Road and Mundijong (Kulija) Road.

It is recommended that land acquisition and detailed design be undertaken as soon as possible to facilitate alignment with local planning schemes and attract private sector investment to support the development of Latitude 32 and the proposed outer harbour.

● INCREASED FREIGHT RAIL CAPACITY TO KWINANA INDUSTRIAL AREA (BY 2031)

The South West Group supports additional rail access to Kwinana Industrial Area, however the most southern alignment option (Kwinana Loop Railway) would adversely impact on the Rockingham Strategic Metropolitan Centre and is not consistent with the WAPC approved planning framework for the Rockingham City Centre.

 REMOVAL OF LEVEL FREIGHT RAIL CROSSINGS (BY 2031)

The South West Group supports grade separation of the freight rail line at North Lake Road as a high priority identified in the PTP.

It is recommended that the State Government work closely with the City of Cockburn to ensure that planning and environmental impacts are adequately managed for the North Lake Road grade separation project.

 LATITUDE 32 INTERMODAL LOGISTICS CENTRE AND CONTAINER TRANSFER SYSTEM FOR OUTER HARBOUR (BY 2050)

The South West Group supports an intermodal logistics centre being established in the Latitude 32 Industrial Area and investigations into the most appropriate container transfer system for the planned outer harbour.

It is recommended that the timeframe for investigations into the logistics centre and container transfer system be reviewed following a decision to proceed or otherwise with the sale of Fremantle Port and planning for the relocation of some trade (e.g. livestock) to the outer harbour.

 DUPLICATION OF FREIGHT RAIL TRACK COCKBURN TRIANGLE TO LATITUDE 32 AND TO KWINANA TRIANGLE (BY 2050)

The South West Group supports the duplication of the freight rail track, subject to compatibility with adjacent land uses and consistency with member Council planning schemes and land use planning.

THREE POINTS BRIDGE (BY 2031)

The South West Group supports proposals to increase active transport in the region. There is a range of commercial and tourism related opportunities that could complement the proposed bridge and require investigation.

It is recommended that further consultation be undertaken with the cities of Fremantle and Melville and the Town of East Fremantle to examine the feasibility of this proposal and the commercial and tourism opportunities related to this key piece of active transport infrastructure spanning the lower reaches of the Swan River.

 EXPANSION OF OFF-ROAD RECREATIONAL CYCLING AND PEDESTRIAN NETWORKS AND ON-ROAD CYCLING NETWORKS (BY 2050)

The South West Group supports the expansion of the cycling and pedestrian networks in the region. The PTP identified the following upgrade and new proposals by 2031:

- Fremantle Railway Principal Shared Pathway (PSP) Grant Street to Fremantle Station
- Kwinana Freeway PSP Cranford Avenue and upgrading of existing PSP to Mount Henry Bridge from the north
- Stock Road between South Street and Rockingham
- Upgrading of South Fremantle Recreational Shared Pathway (RSP) to PSP standard and linking to Stock Road via the freight rail corridor
- A route linking Rockingham and Warnbro to the Kwinana PSP

It is recommended that further consultation be undertaken with member Councils to assess priority pathways and identify links to local pathways managed by the respective Councils.

 IMPROVING NETWORK EFFICIENCY USING ITS (BY 2031) AND INFLUENCING TRAVEL DEMANDS (BY 2050)

The South West Group supports the expansion of the cycling and pedestrian networks in the region, as well as the use of Intelligent Transport Systems (ITS) to assist journey planning, improve safety and maintain road capacity.

As there was limited information provided on these proposals, it is recommended that further consultation is undertaken with the member Councils to ensure that optimisation and behaviour programs are appropriately planned and managed to ensure alignment and consistency with local government plans and programs.



ADDITIONAL PROPOSALS

FOR INCLUSION IN PTP

A number of additional projects and initiatives not included in PTP but necessary for the region have been identified, with several being part of the South West Group's previous and ongoing advocacy activities including:

- Relocation of Canning Bridge Bus Interchange
- Canning Highway Bridge Duplication
- Bus Rapid Transit or Light Rail Connections (Canning Vale to Murdoch, Cockburn Central to Cockburn Coast, Canning Highway from Canning Bridge to Fremantle, Rockingham city centre and foreshore to the Rockingham Train Station and Read Street/Warnbro Sound Avenue
- Armadale Road Bridge (previously known as the North Lake Road Bridge)
- Replacement of Fremantle Traffic Bridge, including provision for passenger rail and the re-use of all or parts of the existing bridge structure for use by pedestrians and cyclists
- Additional High Wide Load (HWL) corridors as well as retaining Anketell Road as HWL when Rowley Road is constructed and designating Mundijong Road-Fremantle Rockingham Highway-AMC-Latitude 32 as HWL corridor
- Additional rail/road grade separation locations
- A clear program for delivering new rail stations on the Mandurah Line (e.g. Karnup Station)

These additional projects are described below, with more detailed information provided in Attachment 2.

RELOCATION OF CANNING BRIDGE BUS INTERCHANGE

The relocation of the Canning Bridge bus interchange to the eastern side of the Canning River in the City of South Perth will free up much needed capacity on Canning Highway, above the Canning Bridge rail station. An approved structure plan has been prepared for the bus interchange precinct, which includes improved bus transfer facilities, community use and commercial opportunities. It has been estimated that the bus interchange relocation is likely to cost around \$85 million. The South West Group supports the relocation of the Canning Bridge bus interchange proposal and recommends its inclusion as a priority project in the PTP.



ADDITIONAL PROPOSALS FOR INCLUSION IN THE PTP CONTINUED

CANNING HIGHWAY BRIDGE DUPLICATION

The Canning Bridge duplication has been identified by Main Roads and the cities of Melville and South Perth as a priority project that is required to provide additional capacity on a severely constrained river crossing and entry point into and out of the region. The current bridge has reached capacity and has limited ability to accommodate further measures to improve traffic flows and relieve congestion, particularly during peak periods. It has been estimated that the bridge duplication is likely to cost in the order of \$80 million.

The South West Group supports the Canning Highway Bridge duplication proposal and recommends its inclusion as a priority project in the PTP

ADDITIONAL BUS RAPID TRANSIT OR LIGHT RAIL CONNECTIONS

The South West Group supports the planning and development of a BRT and/or Light Rail network in the region. The South West Group and member Councils have identified a number of BRT and Light Rail routes throughout the region that are additional to those outlined in the PTP including:

- Canning Vale to Murdoch
- Cockburn Central to Cockburn Coast
- Canning Highway from Canning Bridge to Fremantle (including the section from Riseley Street to North Lake Road which was not identified in the PTP)
- Rockingham city centre and foreshore to the Rockingham Train Station (as depicted in the State Government endorsed Activity Centre Plan) and Read Street/Warnbro Sound Avenue

It is recommended that further consultation be undertaken with the South West Group and member Councils to discuss additional BRT or Light Rail routes in the region.

ARMADALE ROAD BRIDGE

The Armadale Road Bridge (previously referred to as the North Lake Road Bridge) has remained a priority for the region since 2013 and forms part of the Community Connect South initiative promoted by the Cities of Cockburn and Armadale in the last two State and Federal elections.

Traffic congestion has spread beyond peak periods and is a real barrier for people living and working in the region. Residential, commercial and retail growth in the Cockburn Central area has significantly increased road traffic problems. Traffic at both Cockburn Central and Armadale Road is regularly gridlocked for large parts of every day. This causes significant impacts on families, small business owners, commercial and larger industries.

The South West Group supports the construction of the Armadale Road Bridge to address congestion impacts currently experienced at this locality, which are likely to further increase following completion of the Cockburn ARC (Aquatic and Recreation Centre) and the duplication of Armadale Road. It is estimated that the Armadale Road Bridge would cost \$160 million to construct.

The South West Group supports the Armadale Road Bridge proposal and recommends its inclusion as a priority project in the PTP

REPLACEMENT OF FREMANTLE TRAFFIC BRIDGE

The PTP identifies the construction of a dedicated rail bridge in North Fremantle over the Swan River by 3.5 Million to provide separation with passenger rail.

The Fremantle Traffic Bridge has important historical and heritage values, but is at the end of its economic life and a number of options have been canvassed with the community for its replacement. The South West Group supports the replacement option which includes provision of passenger rail and the re-use of part or all of the existing bridge for use by pedestrians and cyclists.

This proposal would enable the current rail bridge to undertake a dedicated freight function. It is estimated that the cost of the Fremantle Traffic Bridge replacement would be in the order of \$250 to \$300 million. The South West Group and the City of Fremantle have worked with Main Roads WA through a consultative process with other stakeholders that identified the preferred replacement option, which has since been further refined by the City of Fremantle as part of its Freo 2029 transformational moves initiative.

The South West Group supports the Fremantle Traffic Bridge replacement proposal and recommends its inclusion as a priority project in the PTP.

ADDITIONAL PROPOSALS FOR INCLUSION IN THE PTP CONTINUED

ADDITIONAL HIGH WIDE LOAD (HWL) CORRIDORS

The efficient movement of oversize freight in the region relies upon a network of high wide load (HWL) corridors connecting key destinations. The South West Group supports the identification of Rowley Road as the principal access route linking the Kwinana Freeway to the proposed outer harbour and through the Latitude 32 industrial area.

Rowley Road should become a designated HWL corridor and connect with Anketell Road (current HWL corridor) and the Australian Marine Complex (AMC). In the longer term, establish the proposed Fremantle Rockingham Highway as a HWL corridor connecting Kwinana Industrial Area (KIA) to Latitude 32 and the AMC.

The South West Group supports plans to establish and protect HWL corridors linking key industrial areas across the region and recommends that the Department of Transport develops a more comprehensive HWL corridor program and align with the development and expansion of key industrial areas.

ADDITIONAL RAIL AND ROAD GRADE SEPARATION LOCATIONS

There are 25 level crossings for freight rail in the South West Metropolitan Region, with only one of these (North Lake Road in Yangebup) identified as requiring grade separation in the PTP. The South West Group has identified other grade separation priorities required including:

- Gilmore Avenue in Hillman/East Rockingham/Leda by 2.7 Million
- Rockingham Road in Spearwood by 3.5 Million
- Russell Road in Munster by 3.5 million
- Barrington Street in Bibra Lake by 3.5 Million

The South West Group supports plans to improve safety and reduce traffic congestion caused by at grade freight rail crossings in the region and recommends the Department of Transport to develop a freight rail grade separation program and implement to support the development and expansion of key industrial areas and the proposed development of the outer harbour.



It was also noted that Mason Road in Kwinana was identified by train drivers in 2013 as one of 10 most dangerous at grade rail crossings in WA and requires the installation of early warning flashing lights on both approaches in the short term to improve advance notice of trains.

The South West Group has undertaken a review of freight rail and road grade separations in the region and will share this information with the Department of Transport to assist in identifying priorities for the recommended grade separation program.

ADDITIONAL RAIL STATION ON THE MANDURAH RAIL LINE - KARNUP RAIL STATION

The Mandurah Rail Line is the busiest in the Perth Metropolitan area with over 20 million in annual boardings recorded over each of the last four years. This level of patronage represents one third of all branch line boardings, with data for the first quarter of 2015/16 suggesting the boardings trend is likely to continue.

The 2015 Australian Infrastructure Audit predicts that the Mandurah Rail Line will reach or exceed "crush capacity" by 2031.

There is a need for additional rail stations in the rapidly growing southern portion of the South West Metropolitan Region. The distance between Mandurah and Warnbro station is 25 kilometres by road. The proposed Karnup Rail Station is located mid-way between these stations and is expected to have a catchment of 45,000 residents within a five kilometre radius from the proposed station by 2026. The cost of establishing new rail stations is estimated to be around \$50 million, including rolling stock.

The South West Group supports the development of a clear program for additional rail stations along the Mandurah Rail Line and recommends that the proposed Karnup Rail Station be built by 2026.

EVALUATION & PLANNING

The comprehensive suite of medium and longer term transport proposals in the PTP will need to undergo a thorough evaluation to determine costs, benefits, priorities and more detailed timeframes for implementation.

Any proposals seeking Federal Government funding will need to be supported by a sound business case and funding options assessment as required by Infrastructure Australia.

A clear process for proposal evaluation and prioritisation as well as a governance structure to manage this process and subsequent project programming and management is required.

PROJECT EVALUATION AND PRIORITISATION

The broad timeframes in the PTP (by 2031, 2050 or beyond) are not sufficiently detailed to provide for local planning and investment certainty. There is a need for the development of 5 year plans with budgets and forward estimates to guide implementation of the PTP, supported by 10 year plans to address medium term projects and 20 year+ plans for the longer term initiatives.

An agreed process for the evaluation of projects is required using multi-criteria analysis and cost benefit analysis.

The South West Group has developed evaluation criteria for regional proposals that could be used to assist the State Government in its own evaluation process. The criteria includes economic, social, environmental and deliverability factors.

The application of weighting and scoring of proposals will enable them to be ranked against one another to determine which projects should progress first and those that should be considered at a later date.

The South West Group supports the use of a rigorous proposal evaluation process to assess and prioritise infrastructure projects and recommends that the State Government consult with local government in the development of infrastructure project evaluation and prioritisation tools.

GOVERNANCE AND PROJECT DEVELOPMENT

It is important that projects identified for development and implementation are determined through an open and transparent process that is independent of political influence. Short listed projects need to be justified through a business case and undergo rigorous cost benefit analysis, with selection ultimately determined on merits and benefits.

A detailed implementation program and budget is required to ensure projects are planned and delivered based on their agreed merits and wider economic and social benefits against the outcomes of Perth and Peel @ 3.5 Million.

It is clear that the development of the PTP was undertaken through a collaborative approach involving multiple government agencies (Transport, Planning, Main Roads, PTA). This approach ensured that the transport outcomes were integrated with land use planning and supported areas subject to future population growth and the development of employment centres.

A governance structure should be designed to ensure the integrated approach in the preparation of the plan is carried through to project development and delivery. The governance structure will require early engagement with local government, industry and the community and need to collaboratively consider funding mechanisms such as public private partnerships (PPPs), value capture and coinvestment by the private sector in the delivery of much needed transport infrastructure.

This governance structure should oversee the transparent process established to oversee evaluation of priorities, costs, programming and implementation of projects.

Other states in Australia (NSW, Queensland, Victoria and SA) have established independent governance structures charged with identifying and prioritising infrastructure projects in their respective states. These state based independent bodies work closely with Infrastructure Australia to ensure that projects referred for assessment are supported with business cases to maximise the chances for securing Federal funding.

The South West Group supports an integrated approach to project evaluation, development and delivery and recommends the establishment of:

- A rigorous and transparent infrastructure project evaluation process
- A well-resourced and independent infrastructure body responsible for overseeing the evaluation, business case development and delivery of priority projects, including the negotiation of shared funding arrangements with Infrastructure Australia
- Increased project management capability within the State Government to oversee the project delivery phase, including procurement and project performance.

IMPLEMENTATION

AND COLLABORATION

The implementation of major elements of the Plan will require a specific governance structure and agreed process for stakeholder involvement in project funding and delivery. The implementation program also needs to be translated into budgets and forward estimates to ensure projects proceed in a logical manner, including projects that are suitable for private sector investment and need certainty to facilitate this investment.

Local government is a key partner in the implementation of projects and there are opportunities to achieve improved and more integrated outcomes through the alignment of State Government and local government activities. This is particularly important during in project planning and delivery phases where local planning schemes and investment priorities come together to maximise successful implementation.

Local governments in the South West Metropolitan Region will spend over \$1 billion on new road capacity over the period covered by the PTP.

Local government is also ideally placed to engage with the community and achieve higher levels of community engagement and acceptance through a partnership arrangement with the State Government.

The South West Group supports the establishment of governance structure and stakeholder engagement arrangement that facilitates integrated outcomes in the implementation of the PTP.

PARTNERSHIPS AND COLLABORATION

Partnerships and shared responsibilities for project planning and delivery will improve project implementation and identify project efficiencies and community benefits.

Collaboration requires resources and will enable closer links, regular communication and high level negotiations between all levels of government. It is important that the State Government identify resources and funding to facilitate partnerships and collaboration as this will ultimately achieve efficiencies and economies of scale throughout the PTP implementation process.

In addition, closer collaboration and the establishment of productive working relationships between the WA Government and Infrastructure Australia will pave the way for greater levels of agreement on priorities and shared funding arrangements for infrastructure projects.

The South West Group supports greater collaboration and an open and transparent process for PTP project delivery. This approach will ensure greater alignment of PTP projects with Local Government plans, networks and planning schemes and will significantly improve PTP project delivery outcomes.



A BIPARTISAN APPROACH

AND COMMITMENT REQUIRED

Investment in major transport infrastructure projects requires long term plans and bipartisan support to enable sound decision making on PTP project development, implementation and delivery. Bipartisan support and greater investment certainty will optimise private sector involvement opportunities leading to improved business planning and cost sharing.

Project priorities and timeframes need to have demonstrated economic and social benefits and support employment centres outside the Perth CBD and in areas with higher population growth.

The South West Group is committed to working with the Government, Opposition and minor parties in attracting investment for the development of transport projects and other forms of infrastructure to support the member Councils, industry and businesses and residents in the South West Metropolitan Region.

The South West Group supports a bipartisan approach to the provision of transport infrastructure in the South West Metropolitan Region and is seeking a commitment from the major parties to support the conclusions and recommendations outlined in this submission.













APPENDIX 1

PTP PROJECTS OVERVIEW **SOUTH WEST METROPOLITAN REGION**

PUBLIC	TRANSPORT						
			TIMELIN	E			
PROJECT	DESCRIPTION	BY 2.7M	BY 3.5M	Beyond 3.5M	COST	SOUTH WEST GROUP POSITION	SOUTH WEST GROUP SUBMISSION
Thornlie Line Extension	Heavy rail connecting Thornlie to Cockburn Central	✓			\$340M	Priority project for advocacy in lead up to the 2013 and 2016/17 State and Federal elections	Support project as a high priority that should be implemented by 2020 and in preference to the Morley line given significantly lower cost and ability to service the new stadium
Perth Light Rail	Inner orbital light rail link connecting UWA/QEII to Curtin & Bentley (Stage 1)	✓			\$1.2B	Outside the region, but connects to priority transit link at Canning Bridge	Support, but Stage 2 should be undertaken by 2.7M given that it is only 5.6 kilometres extra and provides a critical link to Canning Bridge servicing a large student catchment south of the river
	Connecting Curtin & Bentley to Canning Bridge (Stage 2)		✓		\$400M	Recognition of priority transit link between Curtin University and Canning Bridge	See above
Bus Rapid Transit or Light Rail	Connecting Canning Bridge to Booragoon, Murdoch Station to Fremantle and Cockburn Coast			✓	TBC	Selected light rail routes identified in South West Metro Transit Study (PB, 2010), with section priorities subject of consultancy planned for 2016/17	Support proposals, however requires staging program to implement by 2.7M and 3.5M
Stirling Murdoch Orbital Rail	Heavy rail connecting Stirling and Murdoch. Stage 1 - Stirling to UWA and QEII		✓		\$2B	Stage 1 not in the region, but part of the new proposal that is proposed to connect to Murdoch (Stage 2) and Thornlie rail line (Stage 3)	Support the proposal
	Stage 2 - UWA and QEII to Murdoch		\checkmark		\$3.5B	New proposal requiring a position to be established	Support the proposal
	Stage 3 - Murdoch to Thornlie Rail Extension			✓	\$2B	New proposal requiring a position to be established	Support the proposal, however Thornlie rail link should be completed by 3.5M
High Priority Public Transit	High frequency bus services (including queue jumps, signal priority and transit lanes in key				TBC	South West Group undertook journey to work investigations in 2013 for key employment locations such as Kwinana Industrial area, Australian Marine	Supported, but staging program to guide implementation needs to be developed taking into account:
Corridors	corridors) including: •Armadale to Cockburn					Complex and Booragoon Shopping Centre and concluded that improvements in the frequency and routes for bus services is	 Priority segments and more defined timetable for implementation Cost benefit analysis on light rail vs BRT,
	Central and Fremantle • Jandakot Airport to					required to increase utilisation and better support mobility options for workers.	including zoning uplift and value capture
	Murdoch					Other high priority public transit corridors identified in PTP include:	Light rail potential and ability to link to planned light rail network
	Booragoon to Rossmoyne (along Leach Highway)					•Canning Highway Fremantle to North	
	 Safety Bay Road, Rockingham to Woodman 					Lake Road	
	Point (via Gilmore Ave, Rockingham Road and					Cockburn Coast to Rockingham Rockingham to Warnbro Station	
	Cockburn Road)					Leach Highway to Bullcreek Station and Riseley Street	

ROAD NETWORK

			TIMELIN	IE			
PROJECT	DESCRIPTION	BY 2.7M	BY 3.5M	Beyond 3.5M	COST	SOUTH WEST GROUP POSITION	SOUTH WEST GROUP SUBMISSION
Perth Freight Link	PFL part of inner metropolitan freeway ring including: •Roe Highway Stage 8 •Fremantle Tunnel •Fremantle Port Connect PFL links to Gateway and North Link	√ √ √			\$1.85B based on \$1.2B Federal and \$650M State funding for Roe 8 and Fremantle Tunnel	The South West Group has not formed a position on the Perth Freight Link and defers to member Councils Project design and cost details regarding Fremantle Port Connect not known at this time	Acknowledge and respect the position: established by member Councils and that the South West Group was not able to establish a position due to potential conflicts with members
Fremantle Rockingham Highway	Freeway standard road extending from Leach Highway south to Kwinana Freeway at Mundijong Road		✓		TBC	Long term proposal identified in the MRS and previously acknowledged by South West Group as important regional road project along major freight corridor	Support the proposal
Stock Road Tunnel	Tunnel and at grade freeway standard alignment extending north from Leach Highway linking with Stephenson Avenue at Jon Sanders Drive in Osborne Park and extending to Mitchell Freeway south of Reid Highway		√		TBC	New proposal requiring a position to be established by the South West Group	Support the proposal, with Stock Roatunnel from Leach Highway to for the first stage of the tunnel. Access arrangements to Canning Highwar equires further definition in consultation with the City of Melville
Armadale Road Duplication and Bridge Connecting with North Lake Road	Armadale Road is planned as 6 lane divided standard between Kwinana Freeway and Tonkin Highway by 2050 According to PTP, Kwinana Freeway intersection and connection to North Lake	√	✓		Armadale Road Bridge -\$160M	South West Group previously advocated for the duplication of Armadale Road to 4 lane dual carriageway and Armadale (North Lake Road) bridge in lead up to 2013 State and Federal elections and 2016 Federal election. Further advocacy planned for Armadale Road Bridge in the lead up to the 2017 State election	Support proposal, but implement by 202 to coincide with the completion of th Armadale Road duplication

FREIGHT NETWORK

			TIMELIN	E					
PROJECT	DESCRIPTION	BY 2.7M	BY 3.5M	Beyond 3.5M	COST	SOUTH WEST GROUP POSITION	SOUTH WEST GROUP SUBMISSION		
ŭ	ink and Fremantle lighway (see above)	√			\$1.9B	See above	See above		
Rowley Road as Principle Access Route to Outer Harbour	Four lane divided standard road linking Tonkin Highway, Kwinana Freeway, Fremantle Rockingham Highway and future outer harbour in Kwinana		√		TBC	Previously identified as regional priorities for advocacy in lead up to the 2013 State and Federal elections	Support proposal, with review o timeframe required following the State election on 11 March 2017		
Anketell Road			✓		TBC		Support proposal, with review of timeframe required following the State election on 11 March 2017		
Mundijong Road			✓		TBC	Recognised as a long term major road project linked to Fremantle Rockingham Highway	Support proposal, with review o timeframe required following the State election on 11 March 2017		
Additional Rail Access Corridor to Kwinana Industrial Area	Rail to overcome capacity limits at Kwinana Triangle	√			TBC	Need for increased rail capacity acknowledged, however concerns over impacts of rail alignment options on Rockingham Strategic Metropolitan Centre planning	Recognition that additional rail access is required to service Kwinana, however any new rail alignments should not constrain the development of Rockingham city centre in accordance with WAPC approved planning framework. The Kwinana Loop Railway alignment would have adverse impacts on the development of the Rockingham city centre		
Removal of Level	Grade separation of freight rail line at North Lake Road.	\checkmark			\$30M	Likely to be supported, noting that other at grade crossings in the region require	Proposal supported, along with other priority grade separations in the region		
Freight Rail Crossings	Bibra Lake					grade separation	priority grade separations in the region		
Provide Transfer System to Container Port Facilities in Fremantle Outer Harbour	Planning being undertaken by the Department of Transport to investigate transfer model most suited to the outer harbour		✓		TBC	Freight planning work for the outer harbour identified as a priority activity for advocacy in lead up to the 2013 and 2016/17 State and Federal elections	Support proposal, with review of timeframe required following the State election on 11 March 2017		

FREIGHT NETWORK CONT'D.

			TIMELIN	E			
PROJECT	DESCRIPTION	BY 2.7M	BY 3.5M	Beyond 3.5M	COST	SOUTH WEST GROUP POSITION	SOUTH WEST GROUP SUBMISSION
Establish Latitude 32 Intermodal Logistics Centre	Planning being undertaken by the Department of Transport to investigate intermodal logistics model most suited to the outer harbour		√		TBC	Freight planning work for the outer harbour identified as a priority activity for advocacy in lead up to the 2013 and 2016/17 State and Federal elections	Support proposal, with review of timeframe required following the State election on 11 March 2017
Construct Dedicated Freight Rail Bridge at North Fremantle	Dedicated freight rail bridge over the Swan River at North Fremantle, separated from passenger rail		✓		TBC	Proposal to establish dedicated passenger rail line as part of the replacement of the Fremantle Traffic Bridge supported previously as a regional priority	The South West Group supports retaining the existing rail bridge for freight and replacing the Fremantle Traffic Bridge to accommodate passenger rail, with the re-use of part or all of the existing traffic bridge for use by pedestrians and cyclists
Duplicate Track Cockburn Triangle to Latitude 32 to Kwinana	Duplicate freight rail track between Cockburn Triangle and Latitude 32 and Latitude 32 and Kwinana Triangle		√		TBC	Need for increased rail capacity acknowledged, however requires assessment against member Council planning schemes and future land use plans	Support proposal for increased rail capacity, with further consultation with affected member Councils required to ensure duplicate track is aligned with local planning schemes

ACTIVE TRANSPORT NETWORK

			TIMELIN	IE			
PROJECT	DESCRIPTION	BY 2.7M	BY 3.5M	Beyond 3.5M	COST	SOUTH WEST GROUP POSITION	SOUTH WEST GROUP SUBMISSION
Three Points Green Bridge	Cycle and pedestrian bridge across the Swan River connecting Chidley Point, Point Walter and Point Resolution	√			\$200M+ based on cost of Swan River bridge for the new stadium	New proposal requiring a position to be established	Support proposal, noting that further consultation is required with the Cities of Melville and Fremantle to examine scale and opportunities related to this key piece of infrastructure spanning the lower reaches of the Swan River
Expansion of Off- Road Cycle Network	Fill gaps in off-road cycle network, expand off-road network (from 172kms to 850kms) to include additional river crossings and provide end of trip facilities at all major activity centres		√		TBC	The South West Group supports active forms of transport and investment in pedestrian and cycling infrastructure and facilities	Support the proposal, noting Department to work with member Councils to identify priority off-road cycle networks in the region
Expanding Recreational Network and Providing Boardwalks and Floating Pontoons for Cycling and Pedestrians	Along the Swan and Canning Rivers where necessary and expanding network to four regional parks and wetland sites in the metropolitan area		✓		TBC	The South West Group supports active forms of transport, subject to consultation and member Council support for planned facilities	Support the proposal, noting Department to work with member Councils to identify priority recreational cycle networks in the region

OPTIMISING THE SYSTEM

			TIMELIN	IE .			
PROJECT	DESCRIPTION	BY 2.7M	BY 3.5M	Beyond 3.5M	COST	SOUTH WEST GROUP POSITION	SOUTH WEST GROUP SUBMISSION
Improving Network Efficiency	Through optimising of the public transport network, introducing managed freeways and other Intelligent Transport System (ITS) technologies	✓			TBC	The South West Group supports improved efficiency and the use of ITS to better manage the transport network	Support proposal and request further engagement with local government on planned measures to improve network efficiency
Influencing Travel Choices	Though travel plans for new developments, parking strategies, transport pricing, travel behaviour programs and other factors influencing travel demand		✓		TBC	The South West Group supports improving travel demand and behaviour towards greater use of public and active transport modes	Support proposal and request further engagement with local government on planned strategies, policies and programs to influence travel choices

APPENDIX 2

"OTHER" PROJECTS OVERVIEW SOUTH WEST METROPOLITAN REGION

Relocation of Canning eastern side of Canning Bridge Bus Station Perth Canning Canning Bridge duplication Duplication Manning Road South bound On-Ramp to Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge On-Ramp to Kwinana Freeway Bridge On-Ramp to Kwinana Freeway Bridge over Kwinana Freeway connecting North Lake Road and Armadale Road in Cockburn Central. Armadale Road is planned as 6 lane divided standard Armadale Road is planned as 6 lane divided standard Armadale Road is planned as 6 lane divided standard Armadale Road is planned as 6 lane divided standard Armadale Road is planned as 6 lane divided standard Armadale Road is planned as 6 lane divided standard Armadale Road is planned as 6 lane divided standard Armadale Road is planned as 6 lane divided standard Bridge Duplication of Canning Bridge Considered for advocacy in lead up to the State election in March 2017 SabM Priority project being considered for advocacy in lead up to the State election in March 2017 SabM Priority project being considered for advocacy in lead up to the State election in March 2017 SabM Priority project being considered for advocacy in lead up to the State election in March 2017 SabM Priority project being considered for advocacy in lead up to the State election in March 2017 SabM Priority project being considered for advocacy in lead up to the State election in March 2017 SabM Priority project being considered for advocacy in lead up to the State election in March 2017 SabM Priority project being considered for advocacy in lead up to the State election in March 2017 SabM Priori								
Relocation of Canning Bridge Bus Station Canning Bridge Gus Station Canning Bridge duplication to 4 lanes in both directions Manning Road South bound On-Ramp to Kwinana Freeway Bridge over Kwinana Freeway connecting North Amadale Road in Cockburn Central, Armadale Road is planned as 6 lane divided standard Armadale Road is planned as 6 lane divided standard Armadale Road is planned as 6 lane divided standard New bus interchange on \$85M Support project bas a be implemented by 3 by 35M Support project as a be implemented by 3 be im			TIMELINE					
of Canning Bridge Bus Station River in the City of South Perth Perth Canning Bridge duplication to 4 lanes in both directions Manning Road South bound On-Ramp to Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway Bridge over Kwinana Freeway connecting North Lake Road and Armadale Road in Cockburn Central. Armadale Road is planned as 6 lane divided standard Bridge over Kwinana Bridge over Kwinana Freeway connecting North Lake Road and Freeway connecting North Lake Road in Cockburn Central. Armadale Road is planned as 6 lane divided standard Bridge over Kwinana Bridge over Kwinana Freeway Support project as a be implemented by 3 be im	PROJECT	DESCRIPTION				COST	SOUTH WEST GROUP POSITION	SOUTH WEST GROUP SUBMISSION
Bridge Duplication Manning Road Southbound On-Ramp to Kwinana Freeway Bridge over Kwinana Freeway connecting North Lake Road and Armadale Road in Cockburn Central. Armadale Road is planned as 6 lane divided standard Bridge over Kwinana Freeway connecting North Lake Road is planned as 6 lane divided standard Bridge to 4 lanes in both directions for advocacy in lead up to the State election in March 2017 Support project as a be implemented by 2 support project as a suppo	of Canning Bridge Bus	eastern side of Canning River in the City of South	√			\$85M	priority transit link at Canning Bridge. Priority project being considered for advocacy in lead up to the State	Support project as a high priority that should be implemented by 2020
Manning Road South bound On-Ramp to Kwinana Freeway Bridge over Kwinana Freeway Canning Bridge. Priority project being considered for advocacy in lead up to the State election in March 2017 South West Group previously advocated for the duplication of Armadale Road to the State election in March 2017 Support project as a be implemented by 2 the State election in March 2017 Armadale Road Bridge Road Bridge Road in Cockburn Central. Armadale Road is planned as 6 lane divided standard Armadale Road is planned and 2016 Federal election. Further	Bridge	0 0 1	✓			\$80M	for advocacy in lead up to the State	Support project as a high priority that should be implemented by 2022
Armadale Freeway connecting North for the duplication of Armadale Road to Lake Road and Armadale Road in Cockburn Central. (North Lake Road) bridge in lead up Armadale Road is planned as 6 lane divided standard and 2016 Federal election. Further	Road South bound On-Ramp to Kwinana	On-Ramp to Kwinana	✓			\$35M	Canning Bridge. Priority project being considered for advocacy in lead up to	Support project as a high priority that should be implemented by 2020
between Kwinana Freeway advocacy planned for Armadale Road and Tonkin Highway by Bridge in the lead up to the 2017 State 2050 election		Freeway connecting North Lake Road and Armadale Road in Cockburn Central. Armadale Road is planned as 6 lane divided standard between Kwinana Freeway and Tonkin Highway by	✓			\$160M	for the duplication of Armadale Road to 4 lane dual carriageway and Armadale (North Lake Road) bridge in lead up to 2013 State and Federal elections and 2016 Federal election. Further advocacy planned for Armadale Road Bridge in the lead up to the 2017 State	Support project as a high priority that should be implemented by 2020

			TIMELIN	IE					
PROJECT	DESCRIPTION	BY 2.7M	BY 3.5M	Beyond 3.5M	COST	SOUTH WEST GROUP POSITION	SOUTH WEST GROUP SUBMISSION		
Bus Rapid Transit or Light Rail Connections	Connecting Canning Bridge to Booragoon via Riseley Street	✓			TBC	Selected light rail routes identified in South West Metro Transit Study (PB, 2010), with section priorities subject of consultancy planned for 2017	Support projects, however should be implemented through a staged and funded program that complements employment centres and connects activity corridors with residential and commercial density		
	Connecting Murdoch train station to Fremantle	✓					developments		
	Connecting Fremantle to Canning Bridge (Riseley Street)		√						
	Connecting Fremantle to Cockburn Coast		\checkmark						
	Connecting Rockingham city to the Rockingham train station and foreshore	√							
	Connecting Warnbro Sound Ave to Rockingham city and proposed Karnup train station and ultimately Warnbro train station and Baldivis		√						
Replacement of Fremantle Traffic Bridge	Redevelopment and re- alignment of the historic Fremantle Traffic Bridge to include passenger rail and improved cycling and pedestrian access	✓			\$1.25M	South West Group advocated for this project in lead up to the 2013 State and Federal elections and remains a priority for the region	The South West Group supports retaining the existing rail bridge for freight and replacing the Fremantle Traffic Bridge to accommodate passenger rail, with the reuse of part or all of the existing traffic bridge for use by pedestrians and cyclists		

			TIMELIN	IE			
PROJECT	DESCRIPTION	BY 2.7M	BY 3.5M	Beyond 3.5M	COST	SOUTH WEST GROUP POSITION	SOUTH WEST GROUP SUBMISSION
Additional High Wide Load (HWL) Corridors	Establish Rowley Road as new HWL corridor and connect with Anketell Road and the Australian Marine Complex (AMC) In the longer term, establish proposed Fremantle Rockingham Highway as		√	√	ТВА	The South West Group supports plans to establish and protect HWL corridors linking key industrial areas across the region	Department of Transport to develop a more comprehensive HWL corridor program and align with the development and expansion of key industrial areas.
	HWL corridor connecting Kwinana industrial Area (KIA), Latitude 32 and AMC						
Additional Rail/Road Grade Separation Locations	North Lake Road identified in PTP as crossing requiring grade separation. Other locations requiring grade separation in the region include:				TBC	The South West Group supports plans to improve safety and reduce traffic congestion caused by at grade freight rail crossings in the region	Department of Transport to develop a freight rail grade separation program and implement to support the development and expansion of key industrial areas and the proposed development of the outer harbour
	•Gilmore Avenue bordering Cities of Rockingham and Kwinana		✓				It was also noted that Mason Road in Kwinana is identified by train drivers in 2013 as one of 10 most dangerous at grade rail
	Rockingham Road in Spearwood Russell Road and Barrington Road			√ √			crossings in WA and requires the installation of early warning flashing lights on both approaches in the short term to improve advance notice of trains