



Held at the City of Cockburn Reception
Room on Friday, 11 April 2014

Regional Freight Forum

Speakers:

- Sean Jeffries, *Patrick*
- Sue McCarrey, *Department of Transport*
- Laurie Piggot, *Laurie Piggot Consulting*
- Mick McCarthy, *South West Group*

Freight Forum Paper prepared by the South West Group

A photograph of two men in work attire at a port terminal. The man on the left is wearing a light blue hard hat with 'PATRICK' written on it, a yellow high-visibility jacket, and is smiling. The man on the right is wearing a blue hard hat with 'PATRICK' written on it, orange ear protection, safety glasses, and a brown high-visibility jacket. He has his arm around the shoulder of the man on the left. The background shows industrial equipment and structures.

Regional Freight Forum

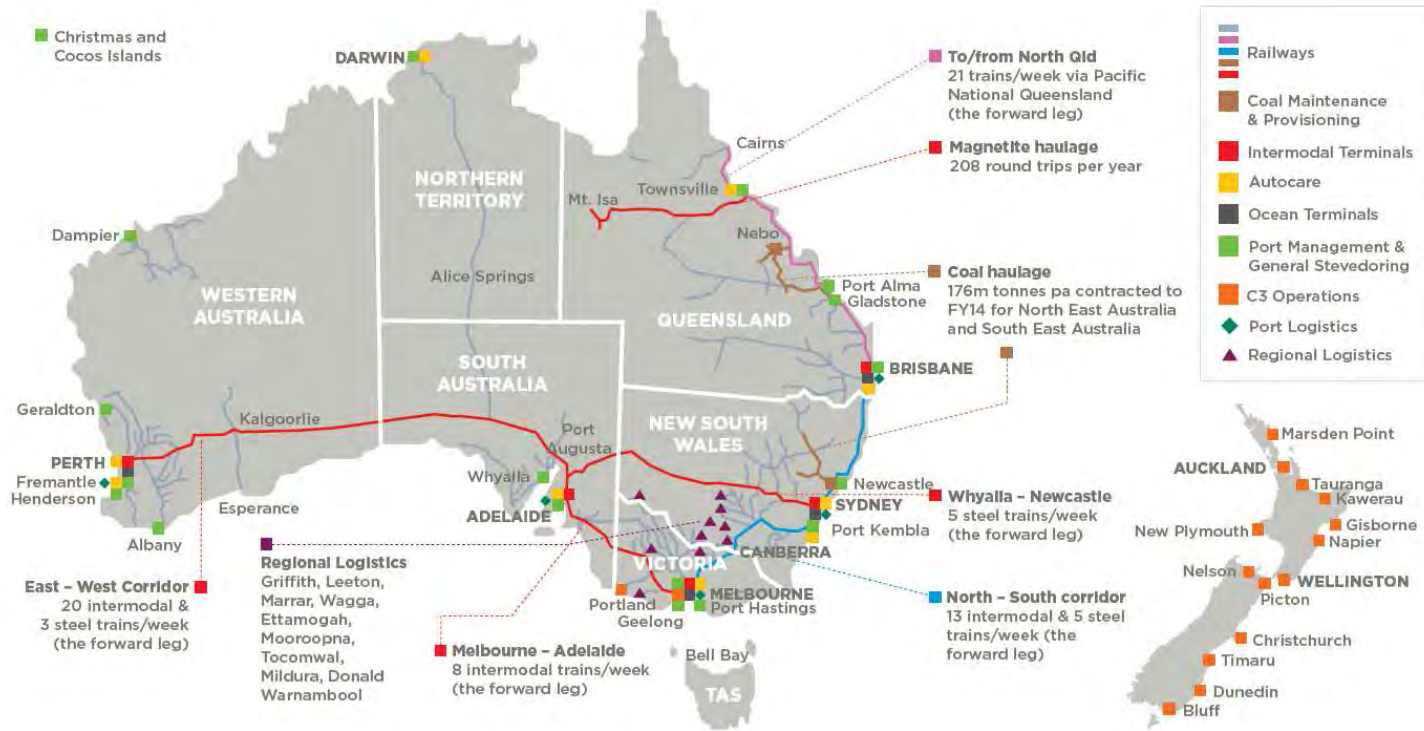
‘IMPROVING FREIGHT PRODUCTIVITY’

Sean Jeffries

Port Manager, Port Terminal and Logistics - Fremantle

asciano 

ASCIANO'S OPERATIONS



ASCIANO AT A GLANCE



OVER 10,000

Skilled and motivated employees

★ **TOP 50** ★

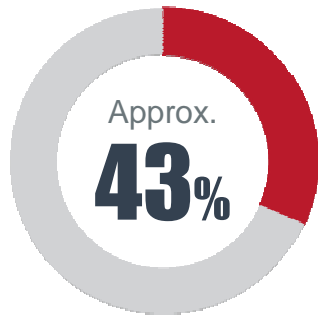
ASX LISTED COMPANY

Offering integrated transportation solutions
with a focus on ports and rail across Australia

\$3.727

BILLION REVENUE
as at 30 June 2013

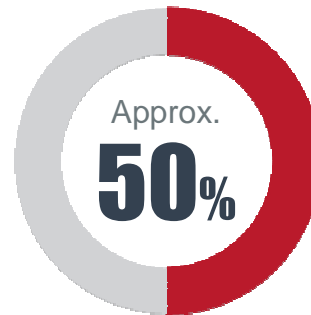
ASCIANO HOLDS LEADING POSITIONS IN THE MARKETS IN WHICH WE SERVE. WE HANDLE AND HAUL:




Australian
coal exports




Rail freight on the
east-west and north-south
long haul rail corridors



Containerised
freight through
our ports

54% 
New car imports

95% 
Steel transported
domestically by rail

AGENDA



Establishing a master
plan for the
freight network



The right
infrastructure
investment



Public and private
sector roles



Freight Network Masterplan

ISSUES/AREAS OF FOCUS



WA's unique
logistics challenge



Roles of the private and
public sectors



Community expectations
The importance of certainty

WA's

**Logistics
Challenge**



PUBLIC AND PRIVATE SECTOR ROLES



Economic

v

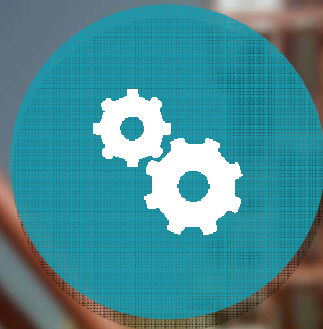
**Community
Expectations**



WHERE WE CAN IMPROVE



Efficient
Regulation



Enhancing
Infrastructure



Linking
Government Funding
to Priority List



A Proactive
Private Sector

Thank you





Department of
Transport

Regional Freight Forum

Sue McCarrey – Deputy Director General
Department of Transport





WA – Current Situation

WA is experiencing

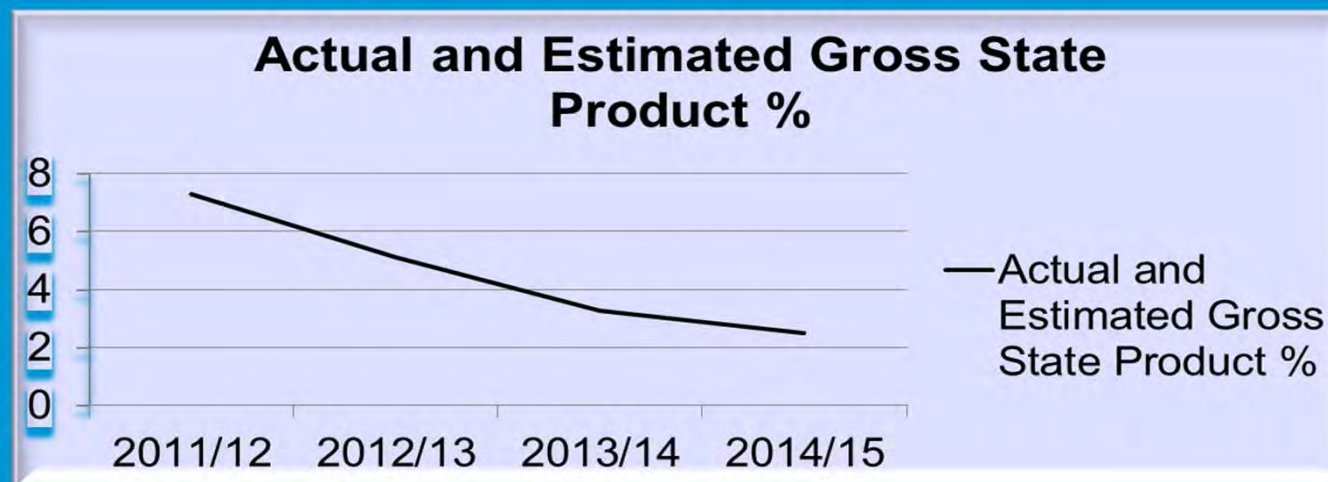
- increased demand for freight transport providers and networks
- increased pressure on transport infrastructure





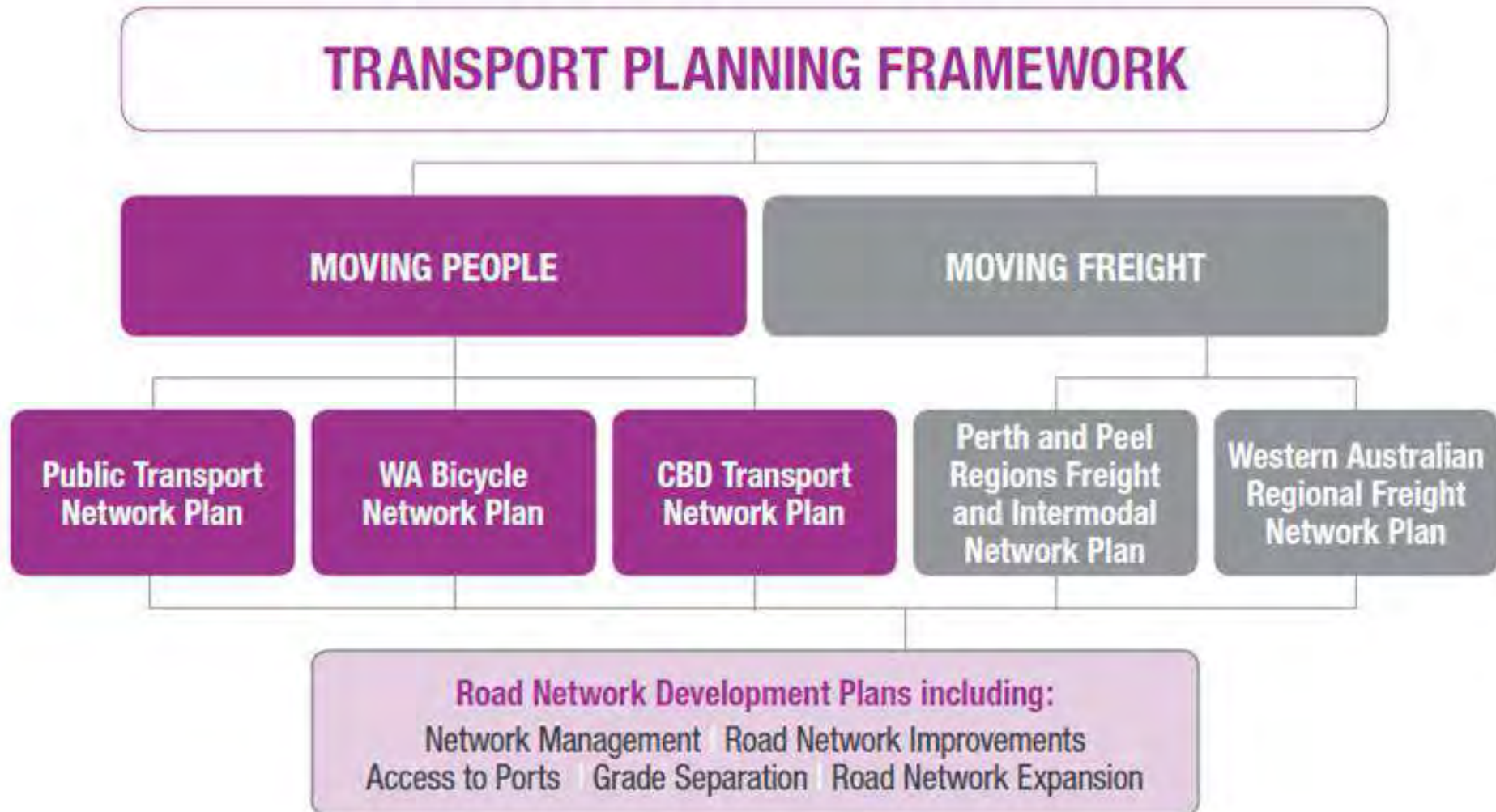
Challenges

- Government priorities
- Rapid population growth:
 - 2.7 million residents by 2031
- WA's economy is slowing:





Strategic Transport Planning





Metropolitan Freight and Intermodal Plan

This Plan is part of the *Moving Freight* theme

The Plan is essential to:

- align national, state and local freight strategies
- ensure long term productivity of freight, focusing on congestion and export demands
- protect freight network from urban encroachment





Metropolitan Freight Network Plan - Elements

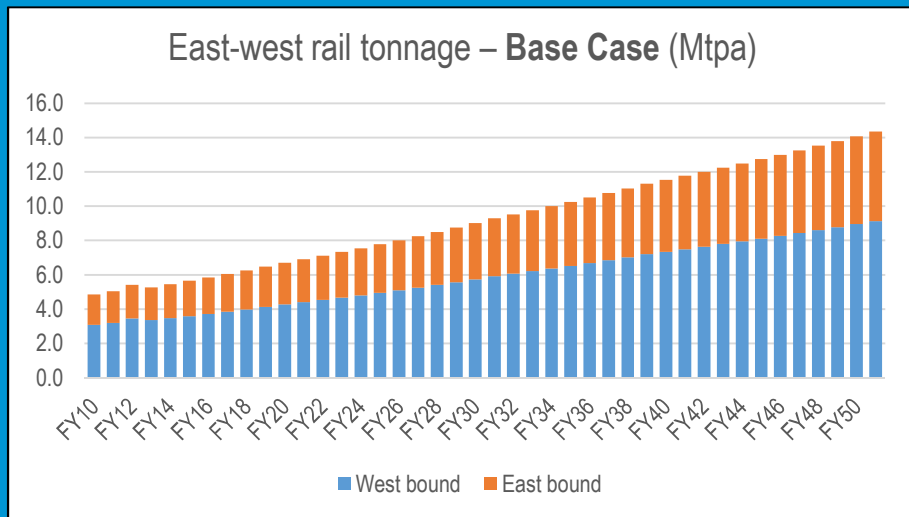
- Defined metropolitan road freight network identifying strategic and major freight roads
- Road freight network investment priorities for to 2031
- Rail freight mainline infrastructure and management priorities to 2031
- IMT development priorities to ensure capacity to 2031
- Inner and Outer Harbour growth plans
- Better protection of the freight network





Freight Forecasts

- **Interstate Freight:**
 - demand and forecasts expected to double to 9-10 Mtpa by 2031 and triple to 2051
 - Presently around 600 KTEUs, expanding to almost 1.2 MTEUs by 2021 and 1.8 MTEUs by 2051



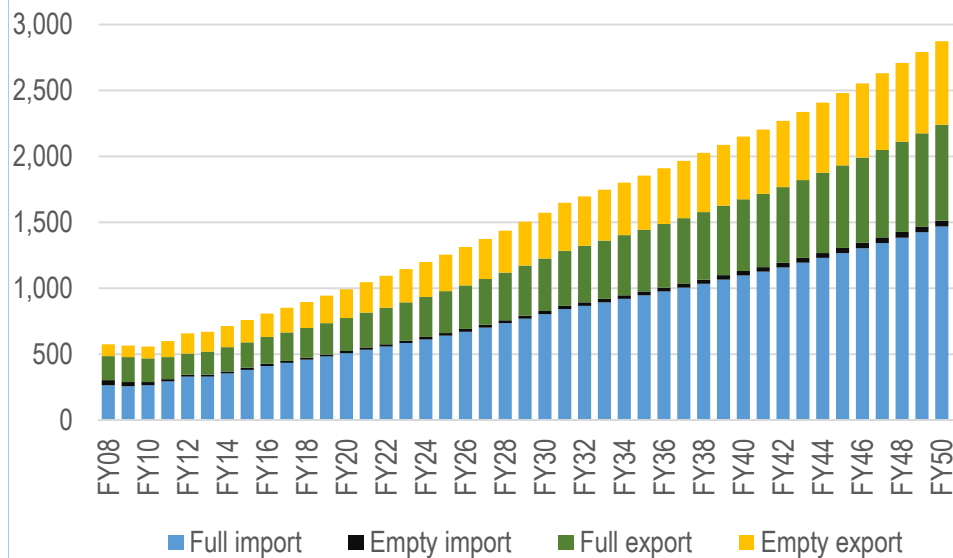
BASE CASE GROWTH	2011	2021	2031	2041	2051
Interstate traffic	Mt	Mt	Mt	Mt	Mt
- Westbound	3.2	4.4	5.9	7.5	9.1
- Eastbound	1.9	2.5	3.4	4.4	5.2
- Total	5.1	6.9	9.3	11.9	14.3
- CAGR		3.1%	3.0%	2.5%	1.9%



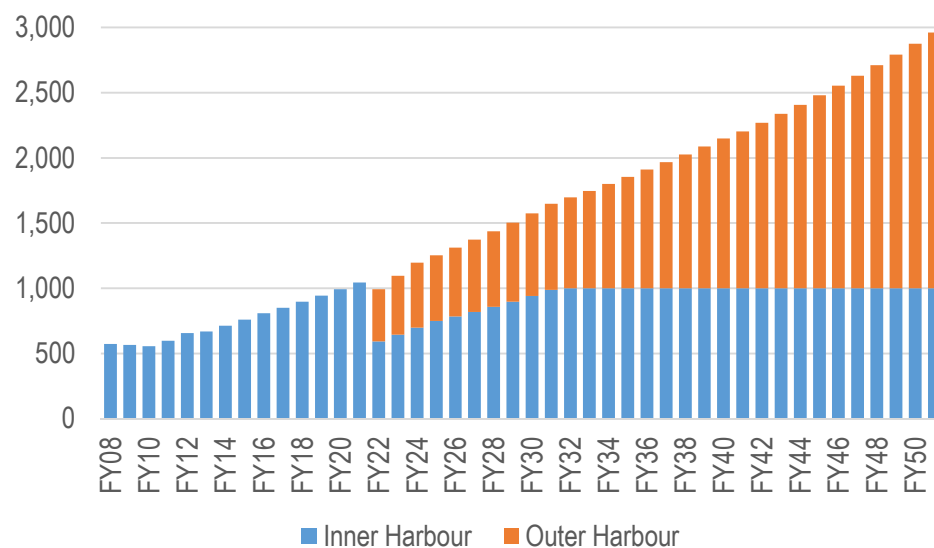
Freight Forecasts

- **International Freight (Port-Rail Shuttles)**
Total through port presently around 700 KTEUs, expected to increase to around 1.6 MTEUs by 2031 and 3.0 MTEUs by 2051

Fremantle Port - Base Case Forecasts ('000 TEUs)



Inner - Outer Harbour volumes - BASE Case ('000 TEUs)





- Volume of containers within metro system around 1.25m TEUs
- Forecast to grow to 2.85m by 2031 and 4.8m by 2051
 - Interstate market – to a near threefold increase
 - International market – equates to a fivefold increase
- Overall market for intermodal terminals is substantial - increasing more than twofold by 2031 and fourfold by 2051
- Current market is evenly split between interstate and international demand
 - international likely to outstrip interstate demand
 - planning priorities focus on port related IMT needs



Primary Freight Road Network - configured to complement EELS

Provides high
productivity vehicle
connectivity with
strategic industrial
centres; IMTs; multi-
user ports; resource
provinces and/or
regional centres





Initiatives to Improve Freight on Rail

- Inner Harbour container trade to rise to 1.2 million TEU by 2020-2025
- Government actions to support rail efficiencies:
 - Rail productivity improvements (2014): NQRT sidings and Spearwood passing loop
 - \$15.5M subsidy funding (July 2012 to June 2017)
- 30% of containers on rail long term target for Inner Harbour. 2% in 2002, current average 13%
- Rail service results in 70,000-100,000 avoided truck movements p.a
- Long term freight policy and planning issues for Outer Harbour and Latitude 32 being considered



Department of
Transport

Leach Highway (High Street) Fremantle Upgrade

- Commonwealth and State committed funding for \$118m
- Improved safety, community amenity and transport and freight efficiency
- Concept design has been developed
- Design elements are being progressed
- Seeking environmental approvals
- Construction scheduled to commence mid-2015





Department of
Transport

Heavy Vehicle Services

- Over Size Over Mass (OSOM) Unit
- Permits
- Chain of Responsibility
- Accredited Mass Management Scheme
- 36.5 m RAV access to Bunbury





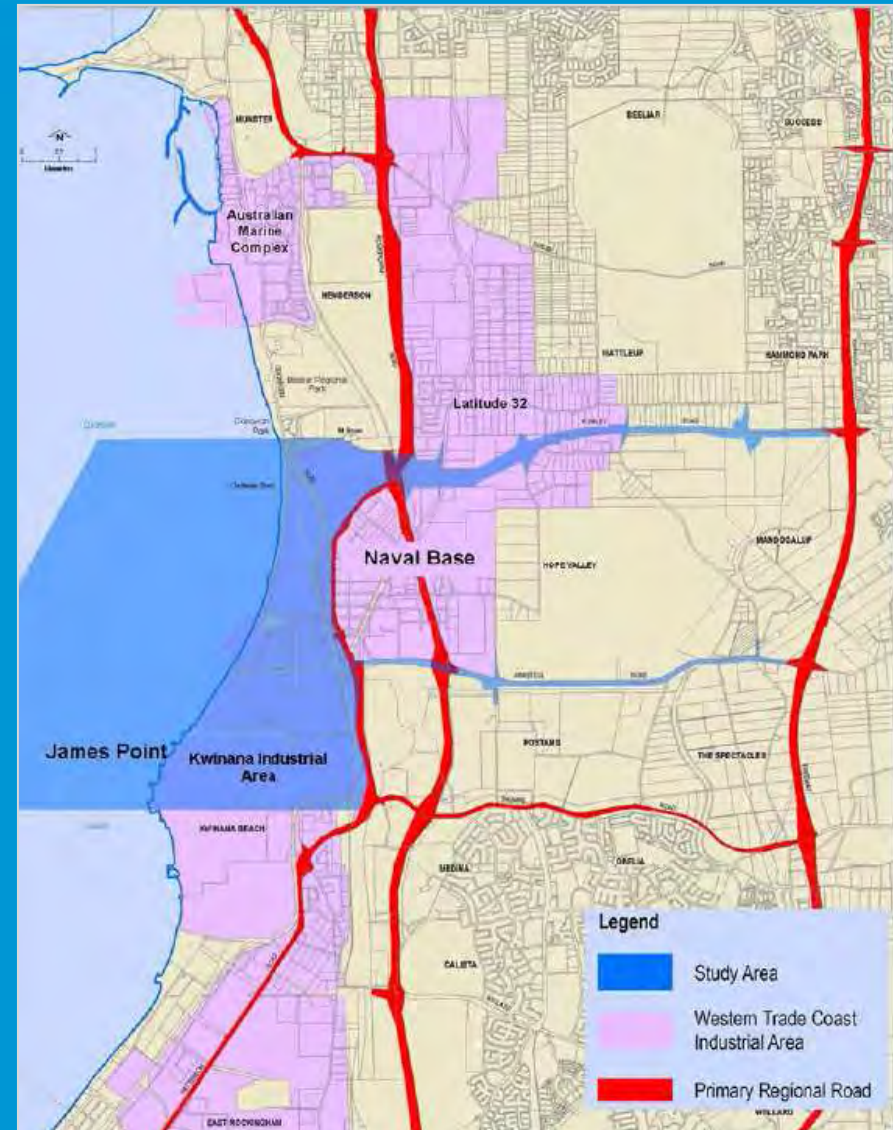
Insights from the Cockburn Sound Ports Planning WAPC/Hyder Study

- Fremantle Port is WA's largest container port
- Handles nearly all of WA's container trade
 - 670,000 TEUs in 2012/13
- Expected to reach operational capacity ~2025
- Need more container facilities in the long term
- Where should they go?





‘Overall planning assessment of the environmental, transport, planning and community issues associated with strategic port and industry development proposals in the coastal area from Naval Base to James Point...’





Investment Model for Ports and IMTs

Role of Government

- Balance state strategic economic development needs with commercial considerations
- Where profitability precludes private sector development of greenfields sites, assess the role for government subsidy or development prior to later date sale i.e. address market failure
- Consider future accessibility to services and make provision for multi user access e.g. - Lumsden Point General Cargo Facility
- Facilitate private infrastructure investment e.g. Esperance Port Iron Ore Facility
- Encourage private beneficiary contributions toward construction and operation e.g. Cranes, Sheds, Wharfs
- Invest in foundation multiple beneficiary infrastructure where there is no return on investment for private investors e.g Preston River Deviation



Department of
Transport

THANK YOU

Sue McCarrey
Deputy Director General Transport

T: (08) 6551 6111

E: Sue.McCarrey@transport.wa.gov.au

Port Related Landside Infrastructure Planning

Laurie Piggott Consulting Pty Ltd

Items to be covered

- Not the Outer Harbour
- Simple description of the Landside Supply Chain elements
- The key role played by stevedore terminals
- Operational Relationships
- Lessons from Forrestfield and Kewdale from early planning to the present

Container Supply Chain

- Container description and movement.
- Empty Container Parks.
- The complexity of the Container Supply Chain.
- Intermodal Terminals and Road Transport Depots.
- Land Use Planning and Infrastructure Development.

Containers

- Are owned by shipping lines
- Come in different lengths and heights
- Are set up for different products (food grade, reefer, dry storage, open top and various door locations).
- Therefore limited opportunities for easy reallocation from import to export use.
- Supply chain and infrastructure solutions needed.

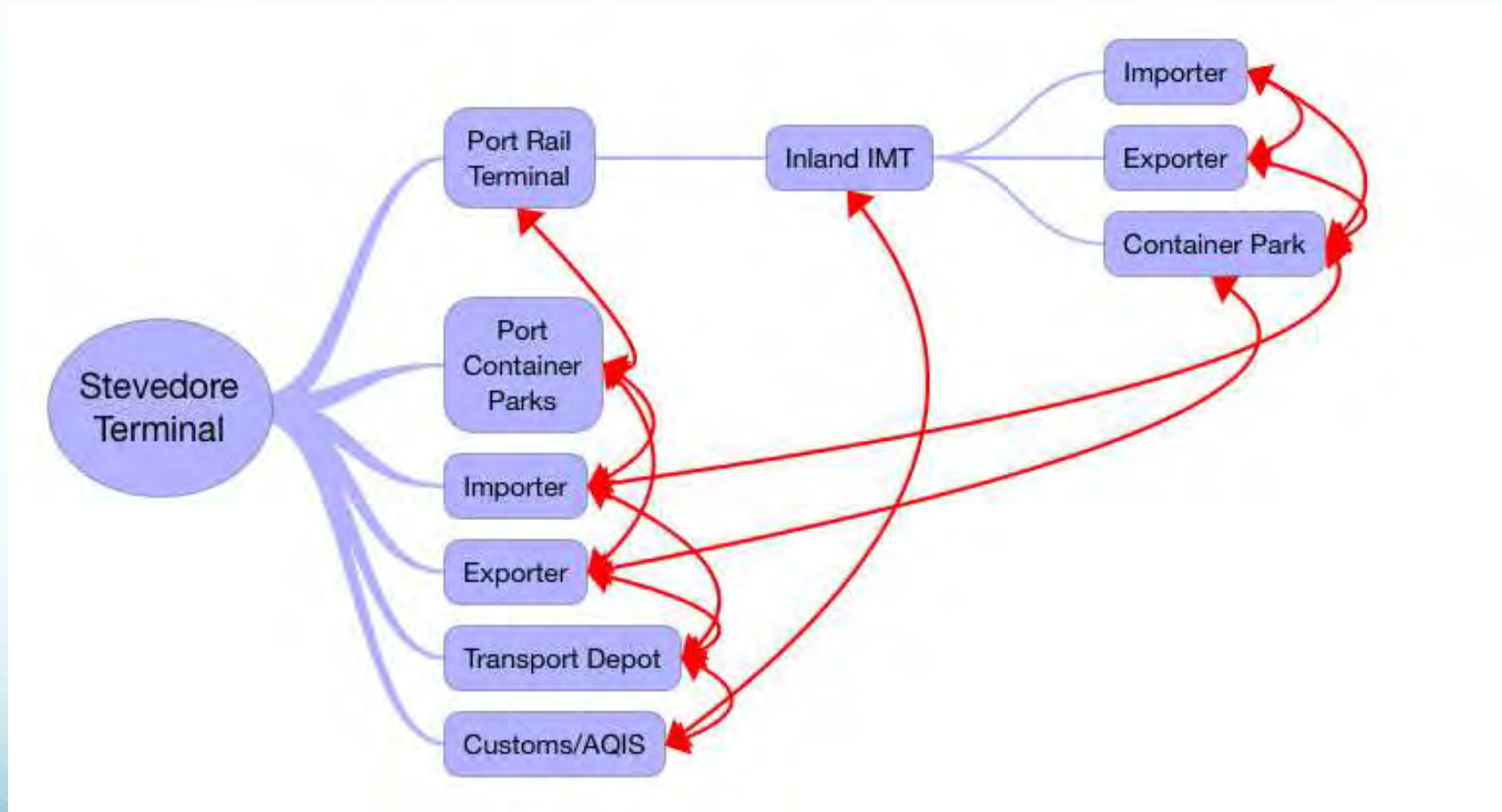
Container Movement

1. Import Movement: Full to importer, empty to Empty Container Park (ECP) for transfer to exporter.
2. ECP: Receives empty (dehire) from importer (inspects, repairs and cleans) then allocates to exporter or relocates overseas via transfer to Terminal (Bulk runs).
3. Triangulation (rare movement) –importer transfers empty direct to exporter.
4. Export Movement: Full from exporter, overseas relocation of empty from ECP.

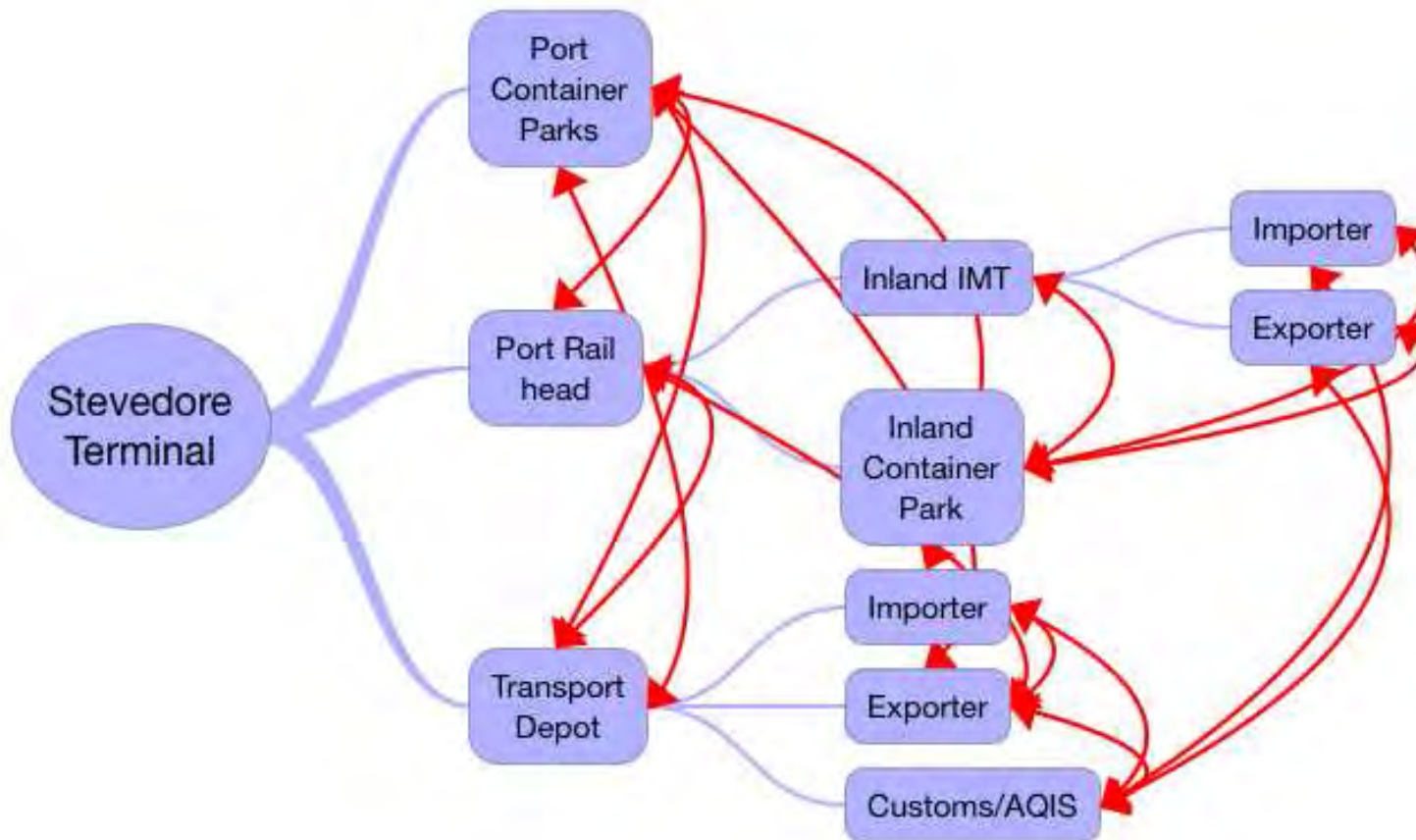
Empty Container Parks

- Contracted by shipping lines.
- Not just for storage because they:
 - ❖ Coordinate movement of the various container types mostly for import dehire and reassignment to exporter.
 - ❖ Relocate excess empties overseas.
 - ❖ Survey, clean and repair containers on behalf of shipping lines.

Container Supply Chain (1)



Container Supply Chain (2)



Supply Chain Restrictions

- Terminals must clear their decks to keep servicing vessels due to the limited window to unload and load.
- Competition for Terminal slots due to restrictions on the time containers can be held on site.
- Time limit for importers to return import boxes to ECP's.
- Difficult to coordinate time of Terminal (1Stop) and ECP (ContainerChain) slot bookings – to reduce empty truck running.

Benefits of Inland Intermodal Terminals and Road Depot's

Relieves pressure on Port by:

- Providing off Port full container storage.
- Being open outside of normal business hours to allow extended port operating times.
- Providing large sites for rail and efficient large capacity trucks operating from the Port.
- Allowing transfer to trucks that can unload at small importer sites (small table top or sidelifter)
- Association with a local (inland) ECP.

Planning for Infrastructure

Land use planning for the Supply Chain must:

- Have an understanding of Supply Chain operations.
- Facilitate efficient operations including how to provide end of line rail facilities; at the Port and inland.
- Create suitable lots in the right locations (structure plan design).
- Identify and protect transport corridors.

History of Forrestfield and Kewdale

- Planned in the 1960's as part of the project to bring standard gauge rail to Western Australia.
- Included a new urban freight rail system independent of the urban system.
- Terminals were designed for the 'regulated' rail network – all country town freight carried by rail.
- Deregulation decision in mid 1970's coincidental with containerised freight revolution.
- WAGR management decided to act as if deregulation was already in place.

1975 Forrestfield



2014 Forrestfield





Kewdale IMT

from 1975 to 2014

- Changed from a less than vanload operation to a fully containerised IMT.
- Changed to a private operation (avoided the cycle of doom).
- The current Kewdale Terminal is a long term lease.
- Substantial increase in rail modal share.
- Accommodates a small freight village which is currently Australian best practice.

Kewdale Interstate IMT



Kewdale Freight Village







Lessons

- Privately run freight operations are very dynamic – substantial change can occur quickly.
- State and local government are best placed to provide the basic services and land and the private sector are best placed to use that land to maximise operational creativity and effectiveness.
- The key is provision and protection of land to accommodate the development opportunities that will occur over time.



South West Group

**“An Integrated Approach and Program
of Freight Projects for the South West
Metropolitan Region”**

Regional Freight Forum

Friday 11 April 2014

Mick McCarthy
Director



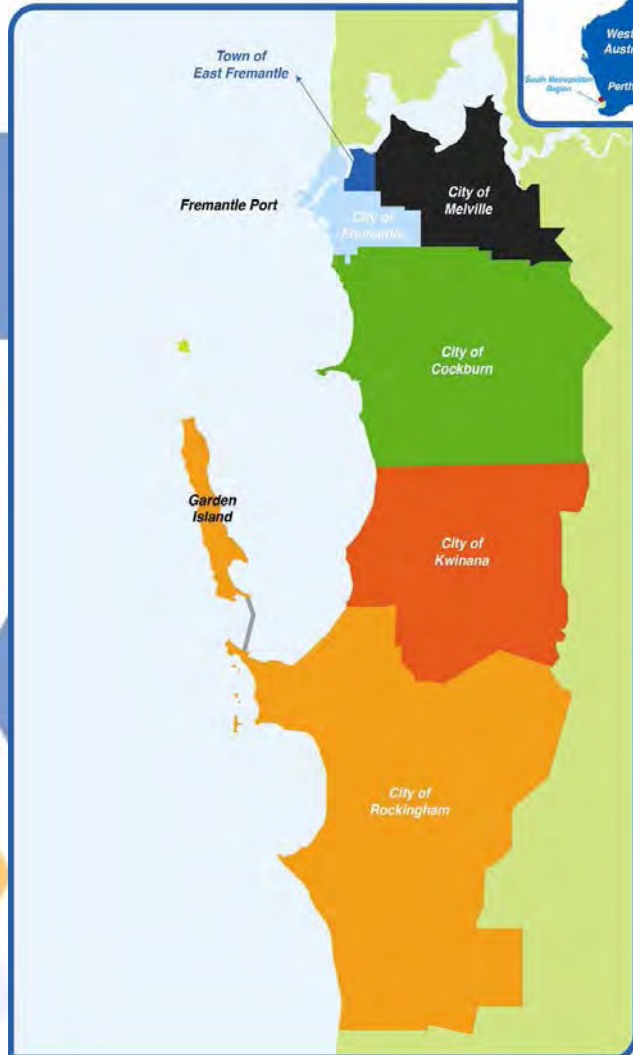
Context and Overview

- Why a Freight Forum?
- Regional Integrated Transport Framework and Component Programs
- The Importance of Freight
- Congestion Impacts on Productivity
- Inner Harbour and Connections
- Proposed Outer Harbour and Connections
- South West Group's Approach



South West Group - Background

- Established in 1983
- Voluntary Regional Organisation of Councils (VROC)
- Member Councils
 - **City of Cockburn**
 - **Town of East Fremantle**
 - **City of Fremantle**
 - **City of Kwinana**
 - **City of Melville**
 - **City of Rockingham**
- Population - 403,561 (June 2013)
- Growth – 3.7% pa (WA 3.3%, Aust 1.8%)



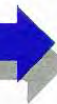


Key Activities of the South West Group

- Lobbying and Advocacy
- Integrated Transport and Land Use Planning
- Economic Development
- Employment and Workforce Development
- Industry, Trade and Business Support



SOUTH WEST GROUP





Key Facts

Latitude 32 and Kwinana Intermodal Freight Terminal



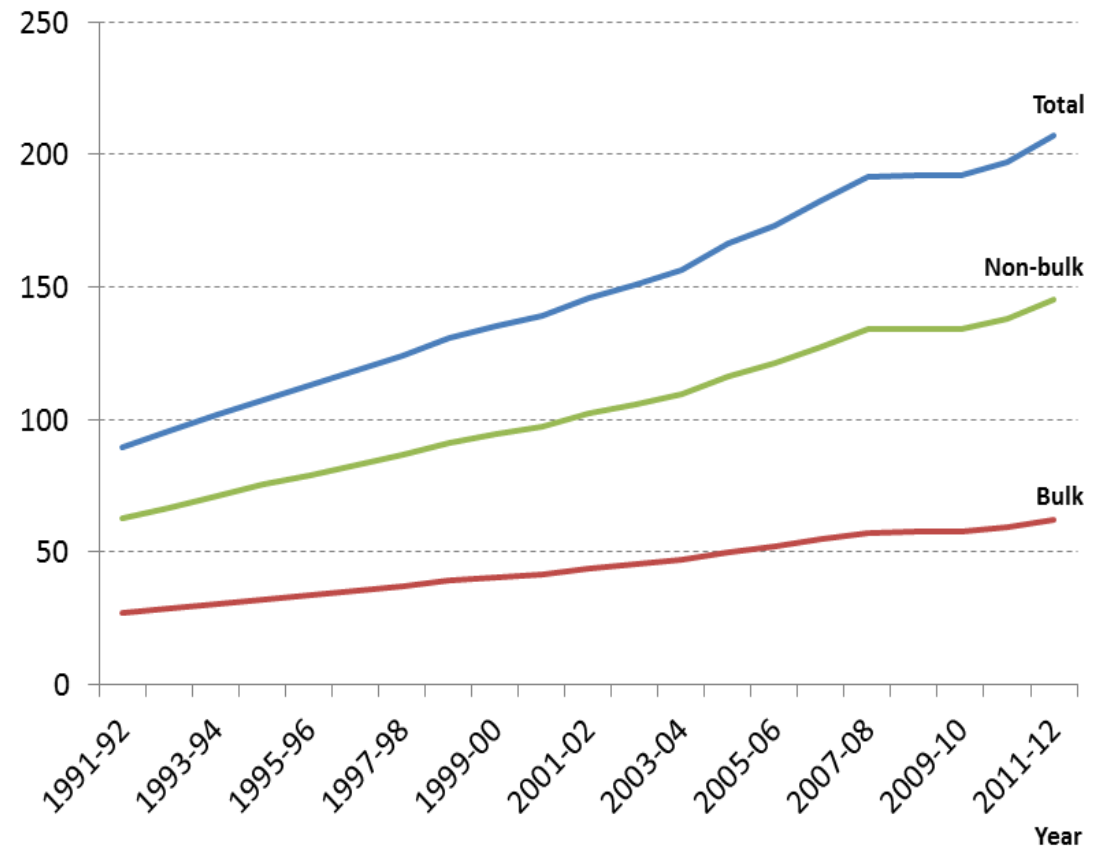
- **\$1 in every \$6** is earned in the region - \$12.8 billion out of \$77 billion in WA
- SWG estimates the **region contributes \$31.6 billion** (12.3%) to WA's **\$253 billion** economy (2012-13)
- **Over 50% of Perth's future population growth** will occur south of Perth
- The region **connected to global economy**
- The region has the **highest proportion of industrial land** of any sub-region in the metropolitan area
- **Major challenges and investment required** to support growth, develop industry, provide employment, address congestion and establish freight corridors (road and rail)



Freight Task

- The national **total road freight task** grew steadily **1991–92 to 2007–08**
- **2008–09 and 2009–10 growth slowed** due to the global financial crisis
- **Freight task recovering, growing by 5 % pa** from 2010–11 to 2011–12, to a total of **208 billion tonne kilometres**
- **Freight task has returned to growth post GFC**

Billion tonne kilometres





Fremantle Port Related Freight

- Fremantle Port handled **32 million tonnes** in **2012/13** with **14 million tonnes** in imports & **18 million tonnes** in exports
- **Every tonne is transported through the region**
- **24.6 million tonnes** of the throughput is **bulk cargo** - petroleum products the largest component is (8.6 million tonnes)
- **668,200 containers** were handled at the port in **2012/13**
- **91,700** of these were handled by rail representing **13.78%**
- **Containers handled by rail** was **16.6% in February 2014**, with year to date being **13.1%**



Fremantle Port Related Freight



- An average of **2,644 trucks carrying containers** travel to and from North Quay **each weekday**.
- **11% of vehicles in Tydeman Road are container trucks**
- From 2002 to 2013, the number of **container trucks** has grown by **5% pa**
- The region plays a significant role as a container **unpacking destination (25%)** and **packing destination (43%)**



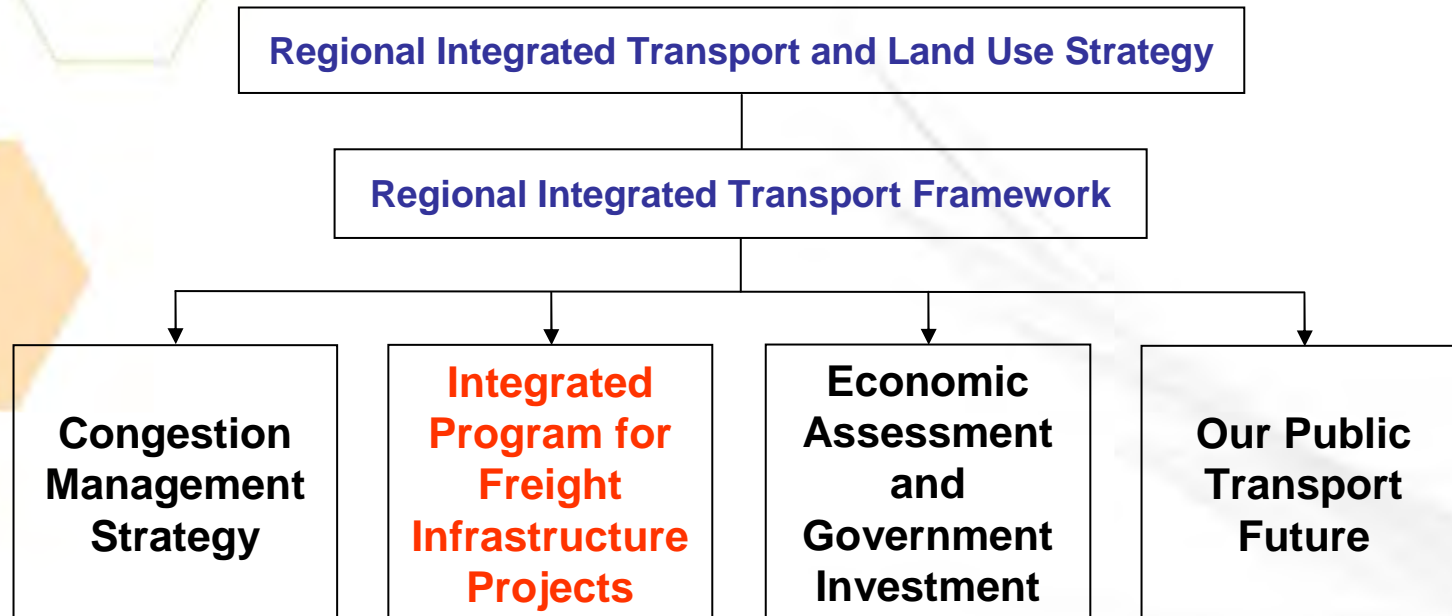
Economic Importance of Freight

- **1,814 Transport related businesses** in the region (2009)
- **Employment 9,072** (14.4% of transport sector in WA)
- **Output \$4.1B** (15.8%)
- **Value add \$1.97B** (16.2%)
- **Exports \$2.18B** (16.0%)
- **Imports \$703M** (8.3%)





Regional Integrated Transport Framework





Freight Challenges for the Metro Area and Region



- Raising general and community awareness on the importance of freight
- Increasing priority user status on key transport corridors (road, rail)
- Integrated transport and land use planning
- Mode shifts that facilitate freight movements and efficiencies
- Collaboration for improved freight outcomes (State Government, private sector, Local Government, community)
- Reducing congestion impacts on productivity



Critical Freight and Logistics Corridor

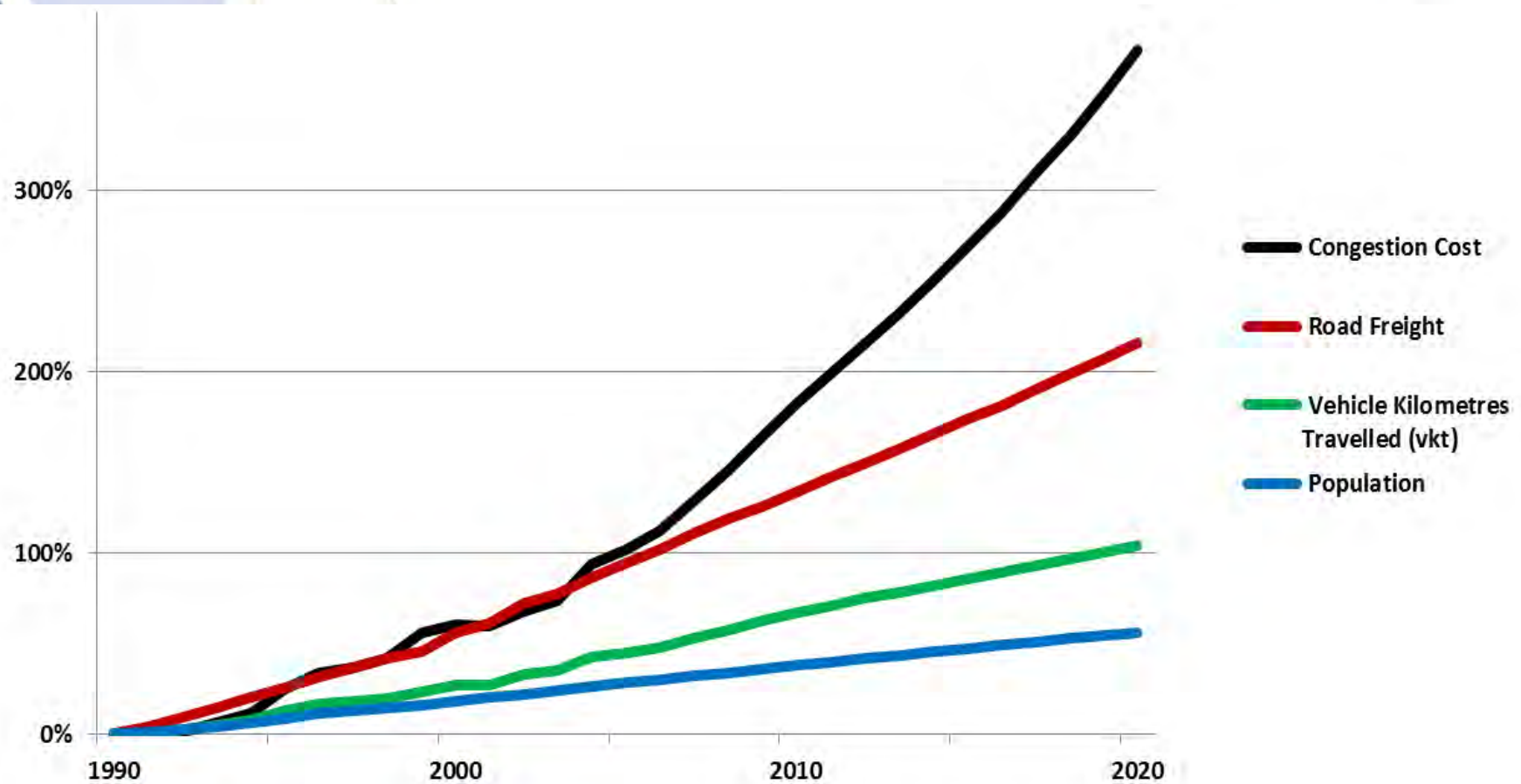


Congestion Hot Spots





Perth Congestion





Traffic Congestion – Regional Impacts

- **Congestion Hot Spots**

Kwinana Freeway and Highways (Roe, Canning Leach), Stock Road, South Street, North-South Arterials

- **Productivity Losses** - \$330M+pa for region currently, \$450M+ pa for region by 2020
- **Freight Congestion Economic Impact** in the region - \$84.2M
- Congestion Impacts on **Major Freight Facilities and Employment Centres** (Fremantle Harbour, AMC, KIA, FSH, Cockburn Central)
- **Pack and Unpack** – inter and intra regional route



Traffic Congestion - Management



- **Traditional Approach** - Increase Capacity
- **Emerging Approaches** – Demand management, operational efficiency, infrastructure optimisation, use of technology
- **Main Roads Congestion Management Program**
– 8 Focus Areas
- South West Group working with Main Roads and other agencies to address congestion across **multiple fronts**



Freight Priorities– Fremantle Inner Harbour

- Capitalise on North Quay upgrades
- Freight on rail – targets, constraints, intermodals
- Leach Highway/High Road – equitable outcome
- Stock Road – grade separation (start north)
- East West links – South Street, Leach Highway, Roe Highway, decision on RHE)
- Fremantle Traffic Bridge, Curtin Ave realignment
- **Longer term**
 - Fremantle Rockingham Controlled Access Highway (FRCAH)
 - Fremantle Rail Capacity (longer trains, double stacking)
 - Stirling Bridge Upgrade
 - Freight Rail Grade Separation





Freight Priorities – Fremantle Outer Harbour



Produced by Mapping & GeoSpatial Data Branch, Department of Planning, WA, on behalf of Western Australian Planning Commission
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<http://perth.wa.gov.au/projects/wa-planning-commission/future-ports-and-industry>.msd
Base information supplied by Western Australian Land Information Authority LJ 430-2009-4

- Integrated Planning, Coordination and Investment Required
- Critical components – connections, corridors, facilities
 - Mundijong Road
 - Latitude 32 Industrial Area
 - Kwinana Intermodal Freight Terminal
 - Rowley Road, Anketell Road
 - Stock Road and RHE
 - FRCAH
- Investment Plan to Match Freight Demands
- Funding Models
- Governance Arrangements



Fremantle Outer Harbour and Intermodal Terminal

Governance Elements

- Precinct wide outcomes integrating with a Cabinet Committee
- Ministerial accountability, portfolio chief executive and precinct coordination group led by experienced project director
- Project planning and coordination of steering group chairs by project director
- Coordinated, but separate project control groups involving contributing parties with delegation to deal with technical issues

Project Principles

- Whole of government commitment
- Time planned and resourced for optimum long term outcome
- Directed by experienced and proven track record project personnel
- Based on collaboration and coordination of project partners/contributors
- Achievement of approved scope, time, cost and quality project outcome objectives



South West Group's Approach to Freight

- Responding to major studies, budget submissions
- Ongoing engagement with key stakeholders (MPs, Industry) and agencies (DoT, Main Roads)
- Promoting transport framework and components
- Supporting
 - integrated land use and transport planning
 - Awareness raising and education of freight
 - Increased use of public transport
 - More freight on rail
- Partnering with stakeholder groups and organisations
- Advocating and lobbying for regional priorities and investment
- Coordinating regional transport forums



Thankyou

Questions?

Further information


director@southwestgroup.com.au

www.southwestgroup.com.au



SOUTH WEST GROUP SEMINAR SERIES

SOUTH WEST GROUP



“FREIGHT PRIORITIES FOR THE SOUTH WEST METROPOLITAN REGION - INVESTMENTS TO ACHIEVE AN INTEGRATED FREIGHT TRANSPORT NETWORK”



A PAPER PREPARED BY THE SOUTH WEST GROUP FOR THE REGIONAL FREIGHT FORUM HELD AT THE CITY OF COCKBURN ON 11 APRIL 2014

ABSTRACT

The South West Group has developed a regional transport framework and component programs in response to a range of transport and land use related challenges faced by the South West Metropolitan Region. The approach recognises the financial constraints evident in State and Federal Government budgets, for future investment on transport and freight related infrastructure projects, and the current political climate underpinning decision making and priorities.

Freight is a key component of the transport network in the region and the South West Group's regional transport framework has identified an “Integrated Program of Freight Infrastructure Projects” as a key element. Raising awareness on the importance of freight, reducing the productivity impacts associated with traffic congestion and achieving efficiencies in the current and future freight network are key planks for the South West Group's lobbying and advocacy activities.

The South West Group has taken a “Do It Yourself” approach that builds upon the aspirations for the region, whilst recognising the difficult challenges ahead in attracting priorities and investment for freight infrastructure, facilities and services. The South West Group is also eagerly awaiting the completion and release of the Perth and Peel Region Freight and Intermodal Network Plan to assess its implications for the South West Metropolitan Region, which is central to the effective operation of the Perth Metropolitan Area and State's freight task.

The South West Group and its member Councils will be engaging with its stakeholders and seeking their support to progress initiatives that benefit the region and our communities. We welcome your interest and active support in this journey.



INTRODUCTION TO THE SOUTH WEST METROPOLITAN REGION

The South West Group, comprising the Cities of Cockburn, Fremantle, Kwinana, Melville, Rockingham and the Town of East Fremantle, is an advocate for projects and activities that benefit the South West Metropolitan Region.

As the Voluntary Regional Organization of Councils (VROC) that recently celebrated its 30th anniversary, the South West Group has a long history in working with its member Councils and stakeholders across a range of issues.

The most recent population data (30 June 2013 – ABS 3218.0) identifies the regional population as 403, 561 and growth in the region at 3.7% pa compared to the state and national population growth rate of 3.3% pa and 1.8% pa respectively.

The region performs well above its Perth metropolitan area spatial extent (11%) and population share (20.4% over the last 2 years) across a range of economic development indicators including:

- State lot activity (subdivision lots) – 27% in 2011/12, 24.4% in 2012/13
- Building approvals (new houses) – 25.2% in 2011/12, 23.5% in 2012/13
- 68.8% employment self-sufficiency

From a WA perspective, \$1 in every \$6 earned in the State (actual 16.5% of earnings) is attributed to the South West Metropolitan Region.

Key industries, facilities, activity centres commercial developments in the region include:

- Major industrial areas (Kwinana, Latitude 32, East Rockingham)
- Australian Marine Complex
- Fremantle Ports
- Defence Facilities (HMAS Stirling - Garden Island and Leeuwin Barracks)
- Jandakot Airport
- Major hospitals (Fremantle, Fiona Stanley, St John of God Murdoch, Rockingham)
- Universities (Murdoch, Notre Dame and a campus of Curtin University)
- Activity Centres – Murdoch (specialised), Fremantle (strategic), Rockingham (strategic), Cockburn Central (secondary), Kwinana (secondary) and Jandakot Airport (specialised)
- Retail/commercial centres (Booragoon, Fremantle, Rockingham, Cockburn Gateway, Jandakot City, Phoenix, Kwinana Marketplace, Canning Bridge)
- Industrial centres - Bibra Lake, Cockburn Central, Jandakot, Myaree, North Coogee, North Fremantle, O'Connor, Port Kennedy, North East Baldivis (priority)



Figure 1: The AMC Floating Dock in action and construction of Fiona Stanley Hospital (FSH). AMC and FSH are major facilities and employers in the region.



Combining these figures and facts, the region is essentially the “powerhouse” of the metropolitan area and plays a crucial role in managing the majority of seafaring import and export trade servicing Perth and surrounding regions.

The centres and facilities above, together with other commercial and light industrial areas throughout the region, are major employers and this important function is expected to grow in the future as planned expansions and new investments come on stream. The aim is to increase the region’s employment self sufficiency, which is currently just below 70%, so that more people living locally can work in the region.

THE IMPORTANCE OF FREIGHT

The region is connected to the global economy through the supply chains the span the world and transport the essential goods and materials people need for living and businesses need to supply consumers.

Freight is an essential service that ensures society is able to operate with the things it needs on a day to day basis. The wider community has a vested interest and survival need for the ongoing transport and receipt of goods and services and this demands the efficient operation of the freight and logistics industry.

The movement of freight is directly related to the growth in population and economic activity.

National figures in total freight (BITRE, Australian infrastructure Statistics Yearbook 2013, Table T 2.1a-c) show an interesting trend in freight growth (see Figure 2)

The total road freight task grew steadily from 1991/92 to 2007/08 before the global financial crisis (GFC) slowed growth during 2008/09 and 2009/10. Since that time, a steady growth rate in freight, averaging 5% pa and consistent with the pre-GFC period, has continued with total freight recorded at 208 billion tonne kilometres in 2011/12.

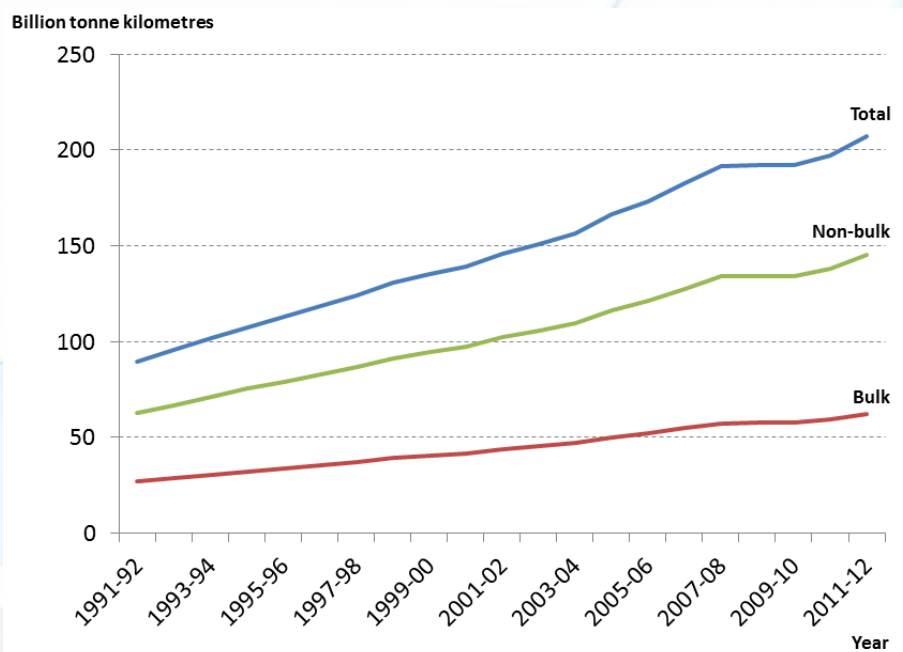
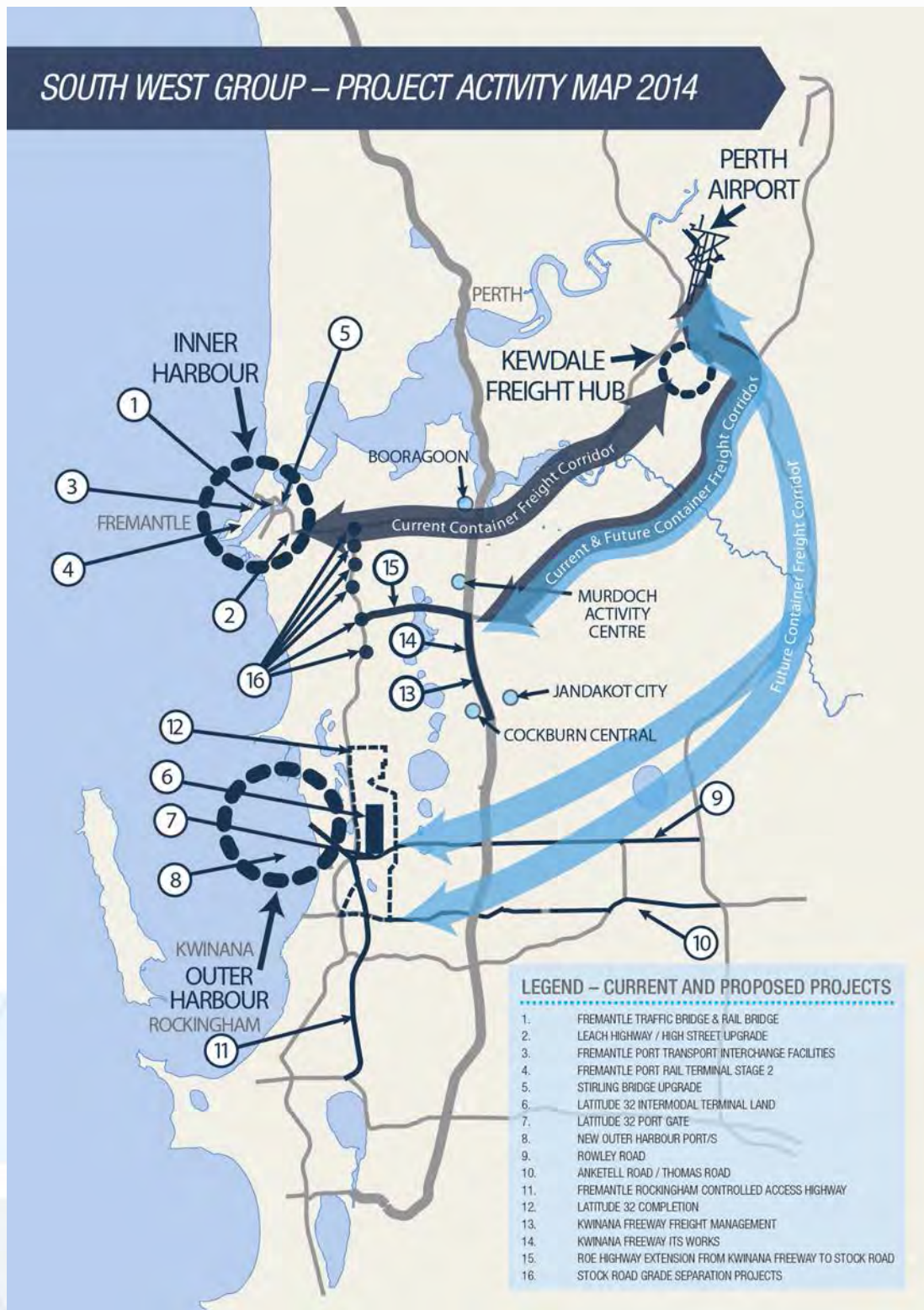


Figure 2: Total Road Freight Task in Australia - 1991/92 to 2011/12



The Project Activity Map for 2014 prepared by the South West Group (see Figure 3 below) shows current and future container freight transport routes and key strategic projects in the region, noting many projects are specifically aimed at improving the movement of freight. The map provides a regional context for the projects in the region and forms the basis for the South West Group to advocate in the short to medium term.





Over the last twenty years, and more prominently in the last decade, WA has experienced a boom in economic activity (mostly driven by the mining and resources sector) and significant population growth has occurred.

In terms of the regional economy (South West Group Economic Profile 2011/12 <http://economy.id.com.au/south-west-group>), freight is a major contributor as shown in the following indicators:

- 1,814 Transport related businesses
- 9,072 people employed in the transport sector (14.4% of transport jobs in WA)
- Output - \$4.1billion (15.8% of WA's total output)
- Value add - \$1.97 billion (16.2% of WA's value add)
- Exports - \$2.18 billion (8.3% of WA's imports)

Fremantle Ports handled 31.98 million tonnes in 2012/13 with 14.03 million tonnes in imports and 17.95 million tonnes in exports. 24.6 million tonnes of the throughput is bulk cargo of which the largest component is petroleum products (8.6 million tonnes).

Every tonne of freight handled by Fremantle Ports is transported through the South West Metropolitan Region.

In regards to container freight, Fremantle Port handled 668,200 containers in 2012/13, with 91,700 containers (or 13.78%) handled by rail. Containers handled by rail achieved a high of 16.6% in February 2014, however the year to date average is currently tracking at 13.1%.



Figure 4: Fremantle Ports handled 668,200 containers in 2012/13, with 91,700 (13.78%) on rail



An average 2,644 trucks carrying containers travel to and from North Quay each weekday resulting in container trucks representing 11% of vehicles travelling along in Tydeman Road in North Fremantle. From 2002 to 2013, the number of container trucks has grown by 5% a year.

BITRE expect Vehicle Kilometres Travelled (VKT) in WA to reach 30 billion VKT by 2020, which is increase of 26 billion from 4 billion VKT recorded in 1965 and represents an average increase of 0.5 billion VKT a year.

Western Australia had 27.3 billion VKT to June 2012 of which 7.8 billion was attributable to freight based on the following data:

- 5.4 billion VKT was light commercial vehicles
- 1.3 billion VKT was rigid trucks and
- 1.1 billion VKT was for articulated trucks.

Fremantle Ports commissioned a study completed in March 2012 to provide updated information on the origin and destination of containers travelling to and from Fremantle Port.

The findings are used to improve industry planning and understanding of inland origins and destinations of full containers (i.e. pack and unpack locations), mode of transport used, staging of containers between origins and destinations and timing of elements of the inland logistics chain (day and timing).

These studies are undertaken every 5 to 6 years.



Figure 5: Container ships at Fremantle Port



Some of the key findings of the 2012 container movement study of particular relevance to the South West Metropolitan Region include:

- Total containers have increased from 354,227 twenty foot equivalent units (TEUs) in 2000/01 to almost 600,000 TEUs in 2010/11, with imports marginally exceeding exports as occurred historically
- Although the Kewdale/Forrestfield/Welshpool area had the greatest percentage of unpack destinations (35%), the O'Connor/Spearwood/Bibra Lake area was an important unpacking destination at 16%, supported by the Inner Harbour (6%) and Kwinana/Rockingham/Naval Base/Henderson (3%). The South West Metropolitan Region contains 25% of all unpack destinations
- In terms of pack locations for exports, the South West Metropolitan Region represents a significant 43% of all container pack locations spread between Kwinana/Rockingham/Naval Base/Henderson (26%), O'Connor/Spearwood/Bibra Lake (8%) and Inner Harbour (6%).

The container movement study highlights the importance of the South West Metropolitan Region for container freight into and out of the Inner Harbour and to support the proposed Outer Harbour.

The South West Metropolitan Region has risen in prominence as a key area for unpacking and packing containers. Sites identified are likely to increase road traffic and congestion.

The transport of container freight by rail is an important and ongoing issue, particularly as there is pressure on trucks with parking and container storage in the Fremantle Inner Harbour.

There is currently subsidy provided by the State Government for each container on rail and it is important that this subsidy continues to be available as an incentive to retain freight on rail.

Car importing and transfer is also an important role undertaken at Fremantle Port. A total of 123,486 motor vehicle units were imported through Fremantle Port in 2012/13.

Motor vehicle registrations in the South West Metropolitan Region are currently 288,433 vehicles (or 743 vehicles per thousand population) with future growth expected to increase at a similar rate to population growth (3.7%).

Freight vehicle registrations account for 39,208 light commercial vehicles (13.6%) and 8,152 trucks (2.8%) in the region.

THE REGIONAL INTEGRATED TRANSPORT FRAMEWORK

The South West Group has developed a Regional Integrated Transport Framework to gather important information on the drivers of transport issues in the region and to respond to the transport challenges now and in the future.

The framework sits within, and supports the future development of, the Regional Integrated Transport and Land Use Strategy for the South West Metropolitan Region and progresses implementation of the South West Group Regional Transport Action Plan (RTAP).

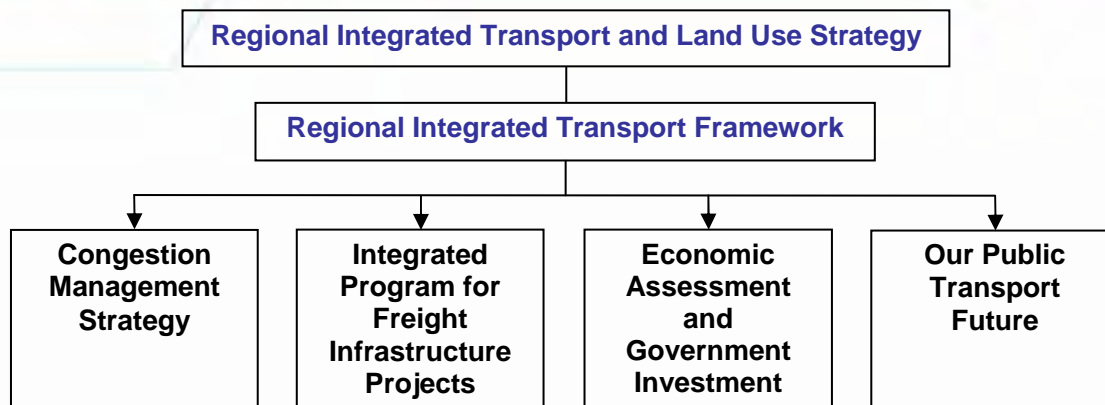


Figure 6: Regional Integrated Transport Framework and Component Programs

The Integrated Program for Freight Infrastructure Projects is a key component of the framework and reflects the importance of the freight and logistics industry to the regional and State economy.

A full description of the Regional Integrated Transport Framework and Component Programs is available in a paper presented by the South West Group to the Regional Transport Forum held on 8 November 2013 and available through the following link.

<http://www.southwestgroup.com.au/south-west-group/events-1/past-events/regional-transport-forum-2013-8-november-2013/south-west-group-paper.pdf>

INTEGRATED PROGRAM FOR FREIGHT INFRASTRUCTURE PROJECTS

Purpose

To develop the value proposition through the “packaging” of regional priority transport projects to attract investment and priority funding of infrastructure for more efficient freight movements associated with the Fremantle Ports and the industrial and commercial precincts within the region.

Objectives

- *To develop the capacity and capability to respond to the projected growth of the regional freight task*
- *To avoid adverse productivity impacts of congestion on key freight corridors*
- *To provide integrated solutions that optimizes the use of existing freight infrastructure and investment in new infrastructure and upgrades, including intermodal facilities*

Freight is the major economic driver for the South West Metropolitan Region, which is strategically located and has major facilities and infrastructure including the Fremantle Inner Harbour, proposed Fremantle Outer Harbour port/s and a range of businesses supporting the freight, logistics, supply chain and warehousing industries.



The transport links in the region are critical in connecting the infrastructure and facilities via the main freight corridors to the Kewdale freight hub.

The Freight and Logistics Council of WA prepared a summary of issues across the urban and freight interface (October 2013) which identifies the arc between the Fremantle Port, the Kewdale road/ rail intermodal terminal and Perth Airport is the most critical freight and logistics corridor in the city, with high demand for staging and distribution sites along this arc.

The most critical freight and logistics corridor coincides remarkably with the major traffic congestion hotspots identified in a study by the Planning and Transport Research Centre (PATREC), which are most prevalent in the South West Metropolitan Region.



Figure 7: Most Critical Freight and Logistics Corridor (Freight and Logistics Council, October 2013) and **Major Congestion Hot Spots in the Perth Metropolitan Area** (Source www.patrec.org)

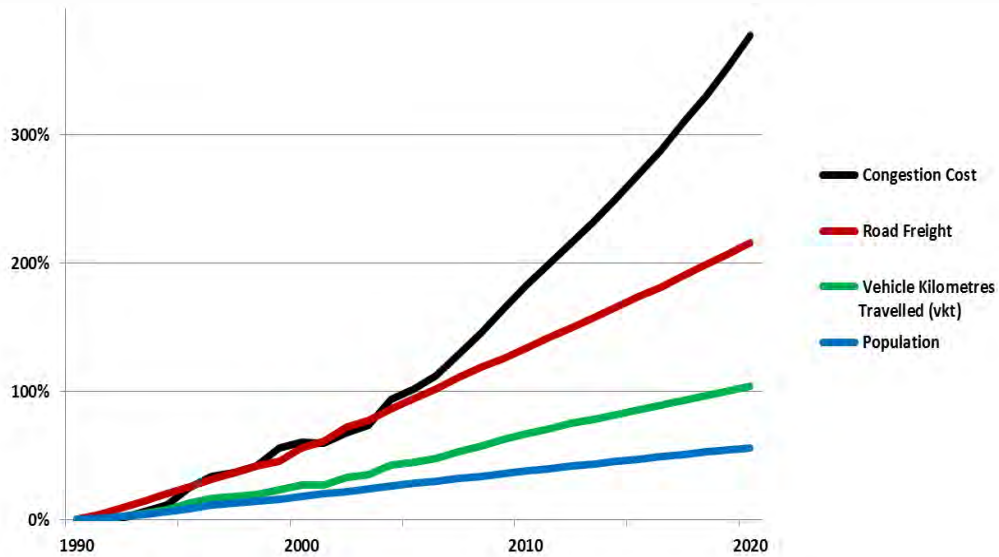
It is therefore not surprising that the freight and logistics industry operating in the South West Metropolitan Region has significant challenges in the ability to effectively and efficiently move freight into and out of the Fremantle Inner Harbour, particularly container freight.

This level of congestion in the region is likely to be exacerbated over time as additional vehicles compete for the road network as a result of population growth and increases in freight demands.



TRAFFIC CONGESTION IMPACTS AND MANAGEMENT

The traffic congestion in Metropolitan Perth has been increasing significantly over the last decade and is projected to accelerate to 2020. Figure 8 shows the dramatic rate of increase and the rapid growth of metropolitan road freight (tonne kilometres) and vehicles (kilometres travelled).



re 8: Perth Congestion (Source WA Department of Transport)

Figuro

The growth in population, vehicles on the road, together with the growing freight task, has led to traffic congestion in parts of the South West Metropolitan Region. Traffic congestion has major economic impacts on the movement of freight throughout the region.



Figure 9: Traffic congestion has major economic impacts on the freight and logistics industry

The South West Group have identified congestion as a major challenge for future development of the South West Metropolitan Region and are promoting a broad strategy of integrated land use and planning, enhanced public transport, increased active transport, freight on rail, use of technology to optimise infrastructure capacity and use as well as additional road and grade separation investment.



Most of the main congestion hotspots identified by the South West Group, through a consultative approach involving its member Councils, undertake a freight function and would benefit through congestion relief (refer to Figure 10).

LGA	Congestion Site	Current Action	Further Action	Impact on Freight Productivity
East Fremantle	Stirling Highway	High Street upgrade will have an impact	Stirling Bridge at capacity by 2031	Connection to Fremantle Inner Harbour
Fremantle	High Street	High Street upgrade funded and construction scheduled	30% of containers through port on rail and extend port hours	Connection to Fremantle Inner Harbour and light commercial access (LCV) to Fremantle CBD
	Hampton Road		Improved Public Transport and reconstruct Rockingham Road intersection	Access to commercial centre
Melville	Canning Highway from Canning Bridge to Riseley Street		Improved Public Transport Use	Access to commercial centre and improved LCV access
	Canning Bridge		New Bridge and bus interchange	Improved LCV access
	Mount Henry Bridge to Perth		Emergency land running with ITS	Improved LCV access
	Murdoch Activity Centre	South Street Murdoch Drive Intersection	Canning Vale Park and Ride and Improved Public Transport use	Facilitate supply for functioning of Health and Education Precinct
	South Street		Grade Separation at Stock Road and decision on Roe Highway extension	Port Access and improved LCV access
	Leach Highway		Grade separation at Stock Road	Port Access and improved LCV access
	Murdoch Drive and Farrington Street		Southern connection of Murdoch Drive to the Freeway	Facilitate supply for functioning of Health and Education Precinct
	Karel Avenue	Jandakot Eastern Link	Improved Public Transport	Improved freight access to Jandakot City
Cockburn	Stock Road		Grade Separations	Improve freight movements along National Freight Corridor
	Kwinana Freeway between Roe Highway and Cockburn Central	Kwinana Congestion Management. South bound additional lane funded as joint State and Federal project	Additional lane northbound and construct Roe Highway Extension	Key Freight Route
	North Lake Road from Beelihar Drive to Phoenix Road		Bridge over Kwinana Freeway	Access to light industrial areas
	Armadale Road west of Warton Road		Dual Carriageway	Access to light industrial areas
	Rockingham Road and Russell Road		Improve public transport	Access to AMC
Kwinana	Access and Egress to Kwinana Industrial Area		Intersection redesign	Access to KIA

Figure 10: Congestion Hotspots in the South West Metropolitan Region and impacts on freight productivity



In order to provide a focus for lobbying and advocacy for transport issues, the South West Group has packaged priorities into three key areas to facilitate engagement with stakeholders and present simplified messages that reflect a regional context with key elements:

- Fremantle Inner Harbour and connections
- Fremantle Outer Harbour and connections
- Activity Centres (Cockburn Central and Murdoch)

Resolving the transport issues involved with the Inner and Outer Harbours will also enhance the movement of freight for all other purposes throughout the region. This is because the port infrastructure is located along the western extremity of the region with inland intermodal terminals east of the region. The development of Stock Road/Rockingham Road, the Fremantle Rockingham Controlled Access Highway, the Kwinana Freeway and the east west freight links are required to support the development of industrial and commercial areas throughout the region and their interface with the port and inland intermodal terminals.

The Bureau of Infrastructure Transport and Regional Economics prepared Working Paper 71 in 2007 titled "Estimating urban traffic and congestion costs for Australian Cities and estimated that annual social costs of congestion for the Perth metropolitan area will increase from \$0.9 billion per annum in 2005 to \$2.1 billion in 2020 (BIRTE 71, 2007). This equates to a current (2014) congestion cost of \$1.62 billion for Metropolitan Perth.

Given the broad assumptions in BITRE71, a conservative estimate of the avoidable annual cost of congestion for the South West Metropolitan Region is currently around \$330 million and that this is likely to increase to over \$450 million by 2020.

There are examples of major developments and facilities in the region that have been severely impacted upon by congestion, leading to delays and/or additional costs, including:

- Fiona Stanley Hospital and St John of God Hospital expansion at the Murdoch Activity Centre
- Australian Marine Complex and Kwinana Industrial Area
- Cockburn Central Activity Centre
- Jandakot City Commercial Development



Figure 11: Heavy traffic congestion during the construction of the Fiona Stanley Hospital had negative impacts on access and safety, with congestion likely to be an ongoing problem once the hospital is opened in October 2014, despite recent upgrades to the intersection of Murdoch Drive and South Street, Murdoch



The South West Group estimates that the avoidable economic impact of congestion on freight in the region is equates to losses around \$84.2M pa. This is equivalent to 6.4 cents per freight vehicle kilometre.

There are many congested locations that have a much higher proportion of heavy vehicles than average. High Street and parts of the Kwinana Freeway, Stock Road, Leach Highway and South Street have traffic profiles with up to 20% commercial vehicles.

The South West Group supports priority being given to road investment that improves productivity for the movement of freight that is crucial for the long term development and prosperity of the South West Metropolitan Region.

The South West Group has advocated for a range of transport projects aimed at alleviating traffic congestion in hot spots throughout the region, including projects for increasing the use of public transport and reducing the dependency on private vehicle travel.

The South West Group has prepared a draft Congestion Management Strategy (July 2013) for the purpose of seeking feedback from internal stakeholders, recognizing that this will be reviewed following the imminent release of the State Government's Moving People Plan.

In addition, Main Roads is currently developing a Congestion Management Strategy for the Perth Metropolitan Region and the South West Group will be actively engaging with this study to ensure that traffic congestion issues affecting the region are considered during its development and implementation.

The Main Roads Congestion Management Strategy is based on 8 key areas:

- Planning and evaluation
- Arterial optimization
- Freeway optimization
- CBD traffic management
- Public transport
- Travel information
- Demand management
- Network expansion

Main Roads has indicated that a dynamic approach to congestion is required over next 5 years involving pilot trials and demonstrations to test options in key areas of activity including:

- Freeway – emergency lane running
- Merge changes
- Managed freeways (ramp metering)
- Arterial optimisation (e.g. Canning Bridge)
- SCATS and Traffic lights (review filtering, STREAMS system)
- Network optimization – Freeway, High St
- Integrated transport model – involvement and active participation of key transport and planning agencies
- Data and Apps – sharing data

The Main Roads Congestion Management Strategy once completed will also have major influence in the review of the South West Group's Congestion Management Strategy.



FREMANTLE INNER HARBOUR AND CONNECTIONS

The State Government has committed \$73M of the \$431M capital expenditure budget for 2013/14 in the South West Metropolitan Region toward the Fremantle Inner Harbour based on a package of projects around the port, Victoria Quay and Rous Head.



Figure 12: Fremantle Inner Harbour and ongoing infrastructure upgrades and industrial development at Fremantle Port's North Quay have major implications for the current and future freight task travelling into, out of and within the region

The South West Group has, over a long period, advocated for the replacement of the Fremantle Traffic Bridge, with most recent proposals related to a replacement involving passenger rail and improved marine safety, pedestrian and cycling facilities. Business cases for this \$250M replacement option have been put forward to the State Government over several years and applications for Infrastructure Australia funding have also been submitted by Main Roads, without success.

It is now understood that a replacement option is not being actively pursued by Main Roads and only funding for asset maintenance and improvements are proposed to be provided over the next decade or so.

Although the South West Group will continue to support the bridge replacement option, these circumstances indicate that lobbying for bridge replacement funds would be unlikely to gain serious consideration at this time.

The South West Group also supports rail upgrades and passing loop proposed north of the Cockburn Triangle and other measures to increase freight onto rail. This section of rail is expected to have a 200% increase in freight movements by 2031 and these projects should assist in progressing further toward the target of 30% of freight on rail espoused by the State Government and advocated by the South West Group.



Given the above and existing commitments toward the port facilities and nearby road connections (e.g. High Street/Leach Highway Fremantle Upgrade), the South West Group lobbied the State and Federal Government for improved road freight corridor projects such as grade separation on the four most northern intersections of Stock Road including:

- Stock Road/Leach Highway
- Stock Road/Garling Street/Stockdale Road,
- Stock Road/South Street and
- Stock Road/Winterfold Road

The South West Group lobbied for the initiation of detailed design in 2014/15 for the above grade separations, with construction concluding in 2017/18 based on a \$200M total cost estimate and a cost sharing arrangement between the State and Federal Government.

The South West Group supports the inclusion of funding by the State and Federal Government in the respective 2014/15 budgets and forward estimates for the above grade separations, given that Stock Road forms part of the national freight network.

FREMANTLE OUTER HARBOUR AND CONNECTIONS

The development of a new port(s) at Kwinana is arguably the most significant project in the South West Metropolitan Region.

Work on the James Point Private Port has now ceased and the matter is being dealt with in the Supreme Court. This may add complexity to the development of future port(s) at Kwinana.

The State Government is currently undertaking a Planning Assessment to identify and consolidate existing information and determine future approvals required for future port and industry development.



Figure 13: Ports Planning Assessment Study Area

The Kwinana Intermodal Freight Terminal located within Latitude 32 is a key facility for the successful operation of the future port. A review of the footprint for the intermodal terminal has resulted in an increase from the 70 hectares originally proposed to 170 hectares.

The proposed port(s) and support facilities will require a Government-led program approach to the planning and coordination of infrastructure, connecting corridors and services related to the port and Latitude 32.

It is understood that the Department of Transport are developing the Cockburn Sound Ports Strategy and an Intermodal Strategy as part of the Perth and Peel Region Freight Network and Intermodal Network Plan currently under development.



This strategy and program approach for ports and intermodal facilities is supported by the South West Group.

Progress in land assembly and land acquisition for the intermodal terminal and key surrounding industrial land in Latitude 32 will be critical to the success of the ports and requires initiation early in the port development process.

The South West Group advocates for \$75M to be provided over the next four years to acquire critical land parcels to facilitate the planning and development of the industrial and intermodal terminal in a coordinated and timely manner based on the outer harbour being constructed by 2025.

Latitude 32 and Kwinana Intermodal Freight Terminal



Figure 14: Land acquisition and assembly is required to ensure the timely planning and development of Latitude 32 and the intermodal terminal

One of the critical issues in the planning, development and delivery of the Fremantle Outer Harbour and Kwinana Intermodal Freight Terminal facilities are the governance structure and lead agency role in the establishment of this economic asset of State significance.

There are a number of governance structures and project delivery models operating nationally that facilitate collaborative arrangements for these types of multi-disciplinary projects.



The key aim of these collaborative arrangements is to ensure that infrastructure and services are optimised and delivered efficiently, with the least capital and operational cost for government and industry.

There are a number of multi-agency governance structures currently operating in WA including the Metropolitan Redevelopment Authority (MRA), Infrastructure Coordinating Committee (ICC) and Western Trade Coast Industries Committee (WTCIC), however none of these structures have a mandate to plan, develop and deliver projects at the scale and complexity required for the Fremantle Outer Harbour and Kwinana Intermodal Freight Terminal.

One option is to establish a specific governance structure with the responsibility for the establishment of the Fremantle Outer Harbour and Kwinana Intermodal Freight Terminal.

The Gold Coast University Hospital precinct in South East Queensland established a project governance arrangements (refer to Attachment 1) with a structure that could be applicable to the Outer Harbour and Intermodal Terminal. This structure requires a responsible Minister and lead agency (in this case the Minister for Health and the Department of Health), reporting directly to Cabinet, to take carriage of the project, with a reporting relationship to the Queensland Government's Infrastructure Cabinet Committee (ICC).

Regardless of what governance structure and Ministerial responsibilities are established, there are some primary elements that should guide the arrangement to ensure transparency, certainty, effective delivery, accountability and collaboration such as:

- A precinct-wide outcomes governance framework integrating to a Cabinet Committee
- An accountable Minister, portfolio chief executive and a precinct coordination group informed and lead by an experienced and proven project director
- A project planning and coordination steering group chaired by the project director
- Separate coordinating project control groups as required by the spread of contributing parties to the overall project

The principles that would need to underpin the governance structure for a project like the outer harbour and intermodal terminal project include:

- Whole of government commitment
- Time planned and resourced for optimum long term outcome
- Direction by experienced and proven track record project personnel
- Arrangement based on collaboration and coordination of necessary contributors
- Achievement of the approved scope, time, cost and quality project outcome objectives.

Given that there is a lot of lead up work required plan such a significant infrastructure investment associated with a deep water port and supporting facilities, it is considered appropriate for a governance structure be established as soon as possible to provide direction and certainty for government and industry.

This certainty will be essential in attracting private investment for the establishment and operation of these important facilities.



SOUTH WEST GROUP'S APPROACH TO FREIGHT

The South West Group is an advocate for the efficient and effectively movement of freight throughout the region and the logistics businesses that support the freight industry.

The South West Group Transport and Land Use Policy (endorsed by the Board in December 2013) identifies that the South West Group supports:

- Greater recognition by Government, community and industry of the importance of the freight and logistics industry to both regional prosperity and the State's economy
- Optimising priority freight connections between the Kewdale Freight Hub and the Fremantle Inner Harbour through Leach Highway, Stock Road, Stirling Highway and Roe Highway
- Grade separation of Stock Road/Rockingham Road as the primary north-south freight route in the region
- Establishing priority freight connections between Kewdale Freight Hub and the Fremantle Outer Harbour through Roe Highway, Kwinana Freeway, Stock Road in the medium term and Tonkin Highway, Rowley Road/Anketell Road in the longer term
- Use of high productivity vehicles and off peak access to industry and ports
- Initiatives to increase freight on rail and intermodal efficiency
- Development of the Latitude 32 Intermodal Terminal and supporting infrastructure in parallel with new port development

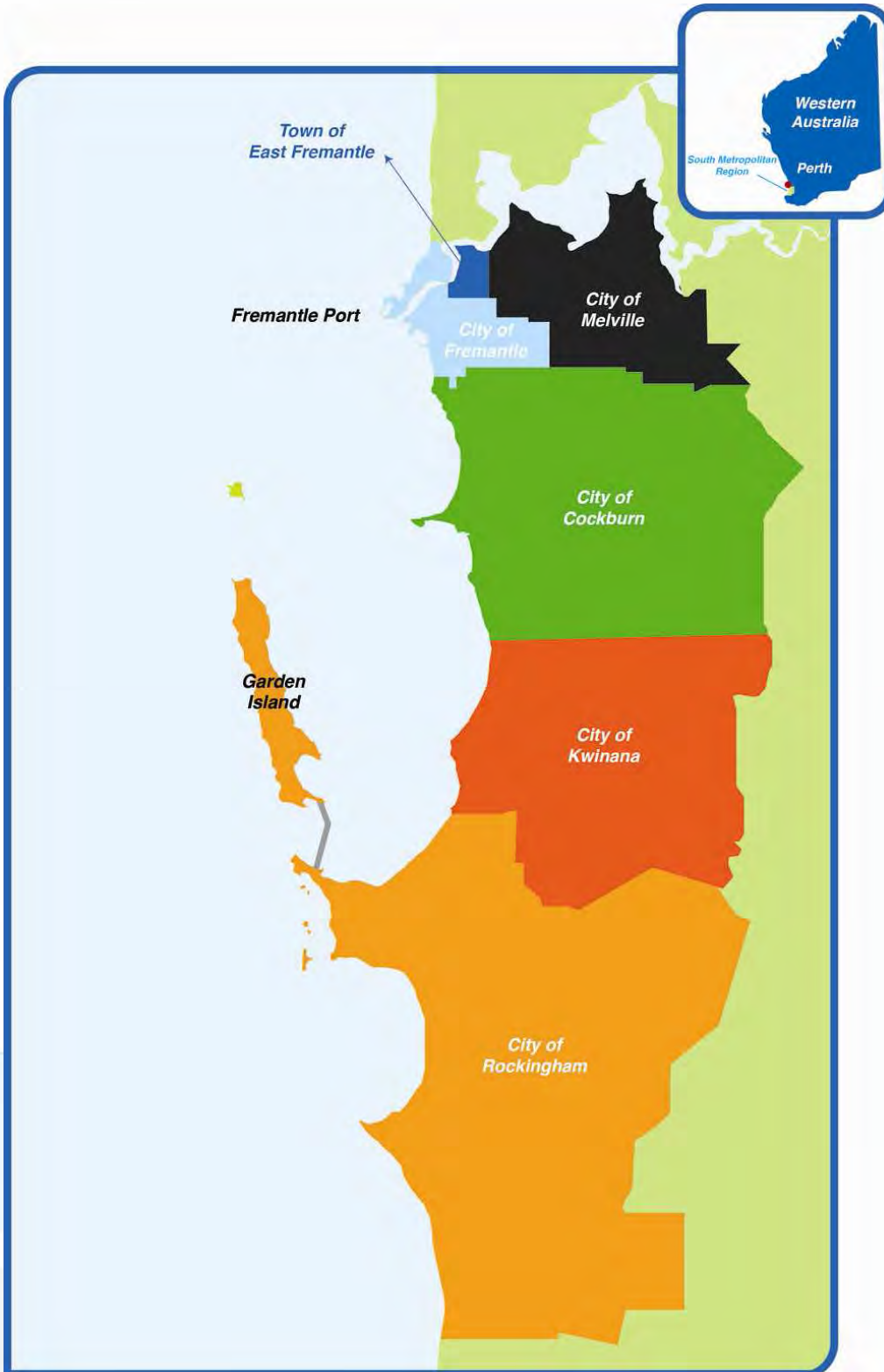
In order to progress this agenda, the South West Group will undertake the following activities:

- Responding to major studies (Moving People, Moving Freight, EPBC Act Strategic Assessment, Sub-regional Structure Plans) and preparing budget submissions (State and Federal)
- Ongoing engagement with key stakeholders (MPs, Industry) and agencies (Department of Transport, Main Roads)
- Promoting transport framework and components
- Supporting:
 - Integrated land use and transport planning
 - Awareness raising and education on the importance of freight
 - Increased use of public transport
 - More freight on rail
- Partnering with stakeholder groups and organisations (Freight and Logistics Council, Western Trade Coast Industries Committee)
- Advocating and lobbying for regional priorities and investment
- Coordinating regional transport forums

The South West Group is seeking partners, advocates and like minded organizations in the pursuit of its freight agenda and invites stakeholders to join us on this journey.



Map of South West Metropolitan Region





ATTACHMENT 1 - Proposed Decision Making Framework for Infrastructure Coordination across the Gold Coast Knowledge Precinct

