Specific Purpose Strategy

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Division:	**Planning & Development Services**
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Rockingham City Centre - Transport Strategy

1. Executive Summary

Since the 1970's successive State Government regional planning strategies have identified Rockingham as the major activity node for the south west corridor of the Perth Metropolitan Region. *Directions 2031 and Beyond*, the State Government's current regional planning instrument, confirms Rockingham as a 'Strategic Metropolitan Centre' for the south west corridor.

The City of Rockingham has also recognised the need to provide a credible long term planning vision for the development of its Strategic Metropolitan Centre ('City Centre'). This vision has been expressed in a series of strategic planning documents produced by the City since the late 1980's.

The vision for the City Centre is for a modern, distinctly coastal centre offering a wide range of mixed uses including retail, commercial, office, civic, residential, education, cultural and recreation within an accessible and highly inter-connected, urban scaled townscape, comprising a major activity centre and related urban villages based on a 'main street' model.

Key 'transport' elements of this vision are:-

- A street-based transit system, with closely spaced stops.
- A permeable network of streets, laneways, arcades and public spaces that provide high quality linkages, particularly for pedestrians, to Centre activities.
- High levels of pedestrian activity.
- Connected urban villages along the transit system.

This Specific Purpose Strategy applies to the City Centre planning envelope, which covers approx. 600 hectares stretching from the Rockingham train station to the Rockingham beachfront (Refer to Figure 1). It includes the main shopping centre, Waterfront Village, joint tertiary education campuses, along with associated commercial, residential and recreation uses.

Figure 1 - Rockingham Strategic Metropolitan Centre Planning Envelope

Planning for the City Centre has consistently sought to establish a symbiotic relationship between land use and transport, so that they complement each other to achieve key economic, social and built form objectives.

The transport components of the approved planning framework are taken from a variety of sources, and are primarily based on the development of a City Centre focussed on a Transit Oriented Development model, with an emphasis on a light rail transit system, linking the major activity points within the Centre.

The purpose of this City Centre Transport Strategy is to consolidate the transport proposals from various state and local planning and transport strategies, identify what implementation actions have been carried out and list what is still required to reach full implementation.

Figure 2 below depicts the relationship between the Community Plan Aspiration, the purpose of the Strategy and the Key Elements (which are required to successfully implement the Strategy).

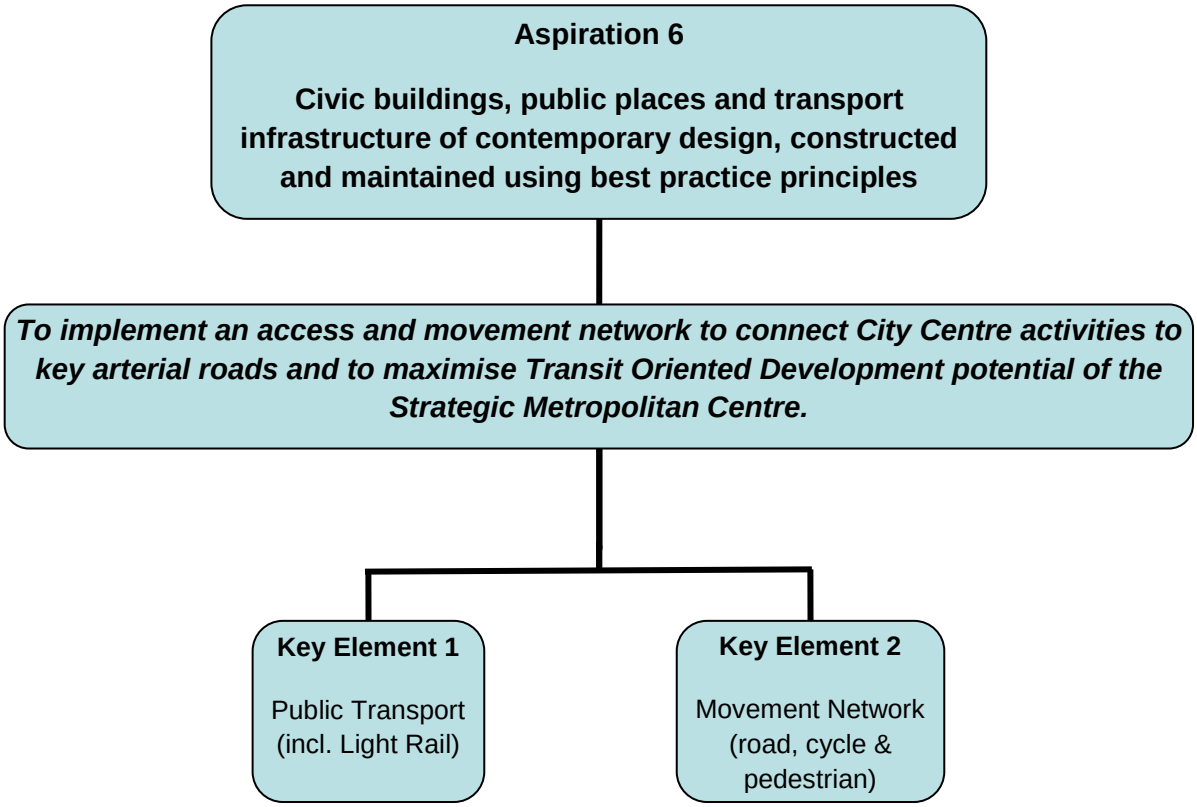

Figure 2 – Community Plan Context

2. Purpose of this Specific Purpose Strategy

The purpose of this Strategy is to:-

- Assist in the implementation the agreed land use and transport planning framework, as set out in the approved Activity Centre Plan (as described in Section 3.5).
- consolidate the transport proposals for the Rockingham Strategic Metropolitan Centre,
- identify what actions are required to implement the adopted transport initiatives.

3. Background Information

3.1 Development Policy Plan

In 1995, the City Centre Development Policy Plan (DPP) was incorporated into the City's Town Planning Scheme. It provided the mechanism by which planning and development was governed in the City Centre precinct.

The DPP was based on 'main street' principles with mixed use, street front development framing an activated public domain. At the core of the DPP was the integration of land use and transport, both in terms of road and pedestrian/cycle infrastructure and modes of transport.

One of the key features of the 1995 DPP was a central transit spine, capable of carrying different modes of public transport (e.g. rail, streetcar and bus), along with normal road traffic and pedestrians.

3.2 Perth Urban Rail Supplementary Master Plan

In 2002, the State Government released the Perth Urban Rail Supplementary Master Plan for the proposed "heavy rail" Perth to Mandurah Railway.

The Master Plan confirmed that the alignment of the railway would not pass through the City Centre transit spine (as previously planned) and that the Rockingham Station would be approximately 2km east at the corner of Rae Road and Ennis Avenue. A 'city centre' rail alignment and the location of the station within the City Centre had been a key element around which the City's City Centre planning framework had been previously developed.

In announcing the relocation of the Rockingham Station, the State Government committed to developing a rapid transit system to link the Station to the City Centre, Murdoch University campus and the Rockingham beachfront (all key destinations and activity nodes). The rapid transit system would be known as the Rockingham City Centre Transit System (RCCTS).

3.3 Rockingham City Centre Transit System Study

In 2003, a State Government Taskforce produced a Master Plan for the RCCTS outlining a preferred route that linked the Rockingham Station with key destinations.

The Master Plan recommended that the best option was the construction of transport infrastructure that would allow a bus mode and light rail system to operate in the same route corridor. The preferred mode recommended by the Taskforce was a 'streetcar' option.

The preferred route comprised a combination of existing and proposed corridors, both 'in-traffic' and along dedicated routes.

The Study recommended that the RCCTS as a street based transit system, to be developed initially as a busway, with the understanding that it will be upgraded to an electric streetcar or light rail operation once a more supportive level of development has been achieved along the route.

3.4 Rockingham Shuttle

With the completion of the Rockingham Station in 2008, the RCCTS was implemented using dedicated buses traversing a combination of constructed transit corridors and existing roads.

The full extent of the RCCTS, as recommended by the Taskforce, was not implemented as some of the route corridors (including the Murdoch University link) were (and remain) unconstructed.

The 'Rockingham Shuttle' provides a high frequency service that allows convenient access to and from the Rockingham Station. The Shuttle runs each 15 minutes during peak times, with eight stops along its route.

3.5 Activity Centre Plan

3.5.1 Review of 1995 Development Policy Plan

In 2006 the City commenced a review of the 1995 DPP. The City considered that although the base planning principles contained within the 1995 DPP remained sound and valid, the planning document required updating to provide a more comprehensive and contemporary instrument to guide growth.

Stage 1 of the review considered Access and Movement Network options, Transit Oriented Development opportunities and recommended a Preferred Access and Movement Network. The Preferred Access and Movement Network formed the basis of the subsequent planning proposals dealt with in Stage 2 of the review. The Stage 1 review produced a Concept Plan, illustrating the integration of the land-use and movement network. Refer to Figure 3 below.

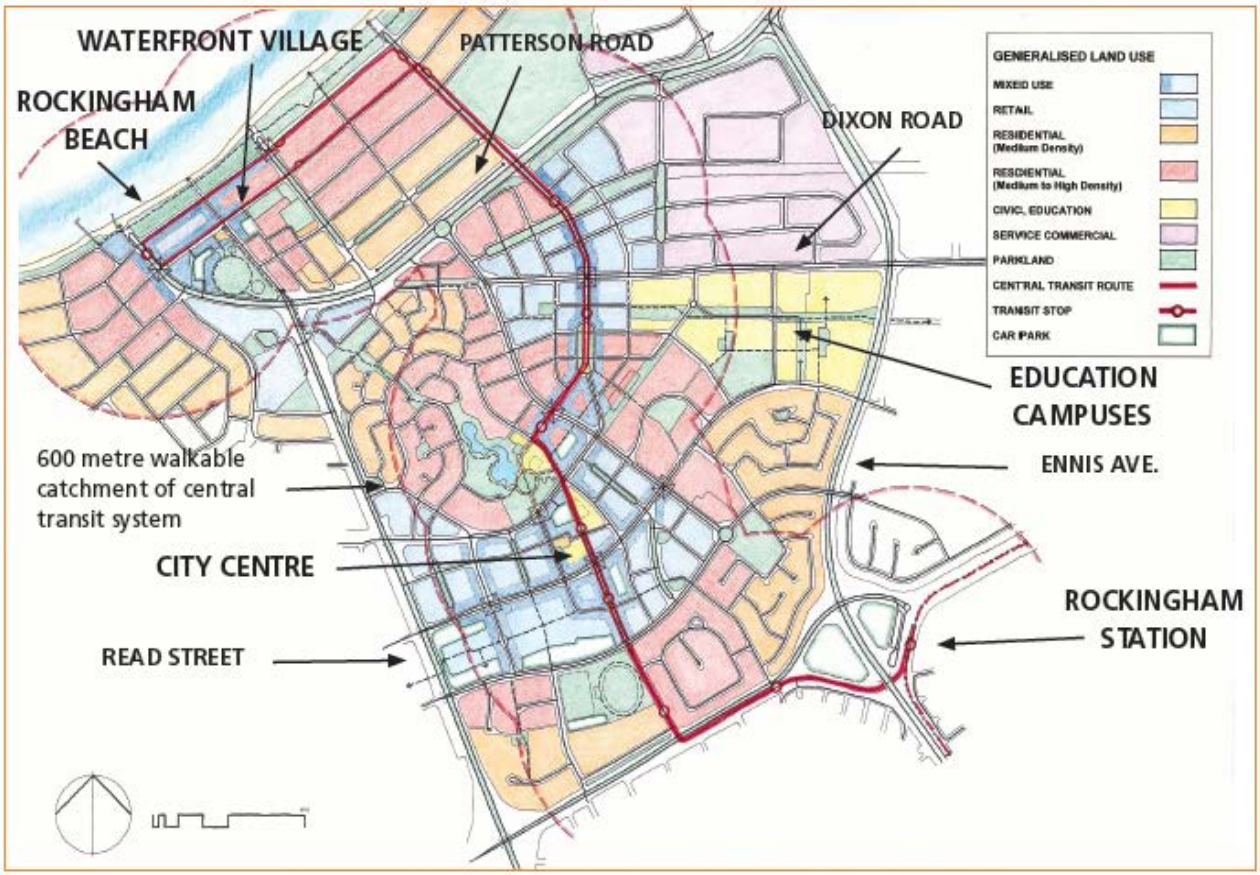

Figure 3 - Rockingham Centre Concept Plan

Stage 1 of the DPP review was adopted in February 2008, with the completion of an overall draft Framework Plan which illustrated how development could be arranged across the City Centre. The Plan provided for a transit oriented land use pattern with greatly improved access and connectivity. Refer to Figure 4 below.

Figure 4 – Framework Plan (Stage 1 DPP Review Report)

Stage 2 was undertaken during 2008 and 2009 and involved a consolidation of the Stage 1 Report findings and the drafting of preliminary planning guidelines for each of the eleven planning Sectors. It also produced a modified and updated DPP for the City Centre Sector.

In September 2009, following an extensive public consultation process on the draft Stage 2 Reports, the Council adopted the Final Strategic Planning Reports, as the approved Activity Centre Plan ('Centre Plan') for the Rockingham Strategic Metropolitan Centre.

The Western Australian Planning Commission endorsed the Reports in November 2009.

3.5.2 Planning and Development Principles

The approved Centre Plan provides the land use and transport principles for the future development of the City Centre. Development is to be defined and characterised as follows:-

- *Medium to high density development based on 'Main Street' principles.*
- *A configuration of generally contiguous street front buildings and a mix of uses that generate high levels of pedestrian activity and a sense of vitality.*
- *A street-based transit system, with closely spaced stops.*
- *A permeable network of streets, laneways, arcades and public spaces that provide high quality linkages, particularly for pedestrians, to Centre activities from the transit stops, street and off-street car parking and from the surrounding walkable catchment.*
- *An identifiable City Centre hub to provide major CBD functions.*
- *Connected village precincts between the City Centre and Rockingham Beach along the route of the transit system. The new village precincts will make provision for mixed and consolidated education (university), technology, commercial and medium to high residential development, based on sustainable planning principles and design criteria.*

The relationship between land use and transport underpins the City Centre planning framework. Most notably, the ability to achieve meaningful transit oriented development is reliant upon there being efficient and accessible public transport links, of which the RCCTS is the central feature.

3.5.3 Land Use and TOD Principles

The Centre Plan contains land use principles that have a direct relationship to transit oriented development, as follows:

- *Encourage land uses and developments that employ and attract high numbers of people, and have the potential to activate the city centre and*

related village precincts by day and night along the route of the principal, street based public transport system. Such uses should include medium to high density residential, retail, civic and community facilities, educational and cultural facilities, cafes, restaurants, hotels, offices and other intensive employment uses.

- *Avoid land uses and developments that generate high volumes of cars and trucks and have low employment intensities within the city centre or the adjacent transit–oriented development village precincts.*
- *Discourage the undue aggregation of facilities along "main street" corridors, pedestrian links and major public spaces that are characterised by low levels of activity during normal shopping hours.*
- *Encourage new development to provide options for future flexibility and changes in land use.*

3.5.4 Transport and Movement Principles

Of particular relevance to this Strategy, the Centre Plan contains Transport and Movement principles, as follows:

- *Make walking the most important mode of transport within the Centre. Streets, public places and adjacent development should be designed to provide a safe, secure, stimulating and pleasant walking environment.*
- *Link the major regional and sub-regional road systems to the City Centre by a range of direct and legible street connections.*
- *Ensure that the City Centre and related activity centre networks are 'fined grained' to provide a multiple choice of routes for pedestrian, cyclists and vehicles.*
- *Provide a custom-designed, street-based public transit system to link the City Centre with the railway station, the university precinct and the Rockingham foreshore.*
- *Provide convenient access from surrounding suburbs, Kwinana and Fremantle via an integrated bus system. Support this transit system by ensuring that appropriate land uses and located adjacent to the route.*

3.6 Access and Movement Network

The Centre Plan is informed by the Preferred Access and Movement Network, as shown in Figure 5 below, which evolved from an Integrated Transport Workshop undertaken as part of the Stage 1 review process. The workshop reviewed the strengths and weaknesses of two network options, before selecting the most appropriate option which addressed the transport and planning objectives of the Centre.

Issues considered during the assessment of the transport options included:-

- Traffic modelling and traffic predictions
- Public transport network planning
- Parking policy and principles
- Infrastructure network staging
- Network changes
- Access from the north and east
- Access from the south and west

Specifically, the Preferred Access and Movement Network Plan provided for an expanded alignment of the RCCTS and a review of the road network to aid accessibility to the City Centre, particularly north-south connectivity.

The Preferred Access and Movement Network includes a range of street types which enable different functions to be undertaken in different areas in and around the City Centre. The Network was developed around the modified street based public transit route, connecting the City Centre to Rockingham Beach.

Figure 5 - Preferred Access and Movement Network

Key advantages of the Preferred Access and Movement Network include:-

- The proposed street network and public transport network provides well connected linkages through the proposed Smart Village and Activity Centre North, between the City Centre and the Rockingham beachfront.
- The street network in the City Centre and in the proposed Smart Village is 'fine grained' and highly connected, providing a high degree of robustness and flexibility for future planning.
- The street network linking the major arterials road connections to the City Centre is direct and legible.

3.7 Public Infrastructure Investment

3.7.1 Roads and Public Infrastructure

Major public infrastructure works commenced in 1992 and included the construction of Civic Boulevard, Whitfield Street, City Park (Stage 1), City Square, Council Administration Building, Arts Building and Lotteries House.

In November 1994, the Rockingham City Centre Infrastructure Development Report provided the scope of works and costing of further infrastructure required to build on the earlier improvements. It contained a five year plan that was used as the basis to secure State Government funding of $4M, matched with City funds, to carry out priority public road and infrastructure works.

The implemented programme resulted in significant changes to the City Centre and involved the construction of Central Promenade, Chalgrove Avenue, Ako Lane, City Park (Stage 2) and a section of the Transit Mall.

3.7.2 Public Transport

Public transport investment within the City Centre is primarily associated with the implementation of the RCCTS, including the construction of transit corridors (e.g. Contest Parade and dedicated transit lanes in Chalgrove Avenue), the acquisition of the buses and other supporting infrastructure.

$12.6M was spent by the State Government to construct Stage 1 of the RCCTS.

3.8 2012 Infrastructure Development Strategy

In 2012 the City prepared an Infrastructure Development Strategy (IDS) to identify the major essential services which will be required to service the City Centre and develop a framework to integrate the public infrastructure components with the desired land use vision.

The report addresses civil infrastructure and essential services required in the City Centre which included:-

- Roads

- Road corridors
- Public transport
- Pedestrian and bike facilities
- Potable and recycled water
- Wastewater reticulation
- Stormwater drainage
- Gas and electricity supply
- Telecommunications and cabling

The IDS also prioritised infrastructure works, provided preliminary costings and identified the necessary steps to progress the works.

4. Situation Exploration

4.1 Current Situation

The Council has an adopted planning framework to guide the development of the City Centre, which is based on a Preferred Access and Movement Network. Some parts of the Movement Network have already been implemented, however, there are still major road and public transport components required to be delivered in order to achieve a fully functional Activity Centre to service the south west metropolitan region.

The Council has also identified in its City Business Plan (2012/13 - 2021/22) funding of $10M to carry out 'City Centre Infrastructure Works', allocated in $2.5M moieties in 2014/15, 2016/17, 2019/20 and 2020/21. The source of this funding is anticipated income from the State Government, stemming from the development of Council vested land within the Dixon Road precinct (i.e. Smart Village Sector).

4.2 Desired Future Situation

The City seeks implementation of the Preferred Access and Movement Network to deliver:-

- A more direct and legible access street network to the City Centre
- A legible grid of streets in the core of the City Centre
- The route of the permanent major street based public transport system
- Implementation of the fixed route light rail/streetcar transit system, in combination with supporting bus feeder routes.

4.3 Key Elements

4.3.1 Public Transport

The three main public transport elements within the City Centre are:

- the RCCTS, as the major element for transit oriented development.

- the Rockingham to Fremantle bus service which departs the Rockingham Station, follows the current route of the RCCTS and exits north via Dixon Road, en route to Kwinana and eventually Fremantle.

- local and district bus services from the south and east entering the City Centre via Read Street and Central Promenade/Council Avenue.

4.3.2 Movement Network (Roads, Pedestrian and Cycle)

The Centre Plan contains a network of proposed new roads and recommends modifications to selected existing roads to increase connectivity and permeability through and within the City Centre.

The Centre Plan also establishes a functional road hierarchy and classifies the streets by type to confirm their role and function. The classifications range from 'Major Traffic Routes' to 'Pedestrian Malls/Accessways'.

The Centre Plan notes that staging of the movement network will be closely linked to the development priorities for land within the City Centre.

The proposed staging plan is based on:-

- The urgent need to establish a more direct and legible access street network in the City Centre.
- The urgent need to create a legible grid of streets in the City Centre.
- The urgent need to establish the route of the permanent major street based public transport system to provide certainty and to guide development within the walkable TOD catchment.
- Development of the spine of the Smart Village south of Dixon Road and along the principal transit route as soon as possible.
- Development of the proposed new street links at the western end of the City Centre, including possible new street link through the shopping centre site, as long term proposals. A number of these proposals would affect private property and would be subject to the agreement and co-operation of the various property owners.

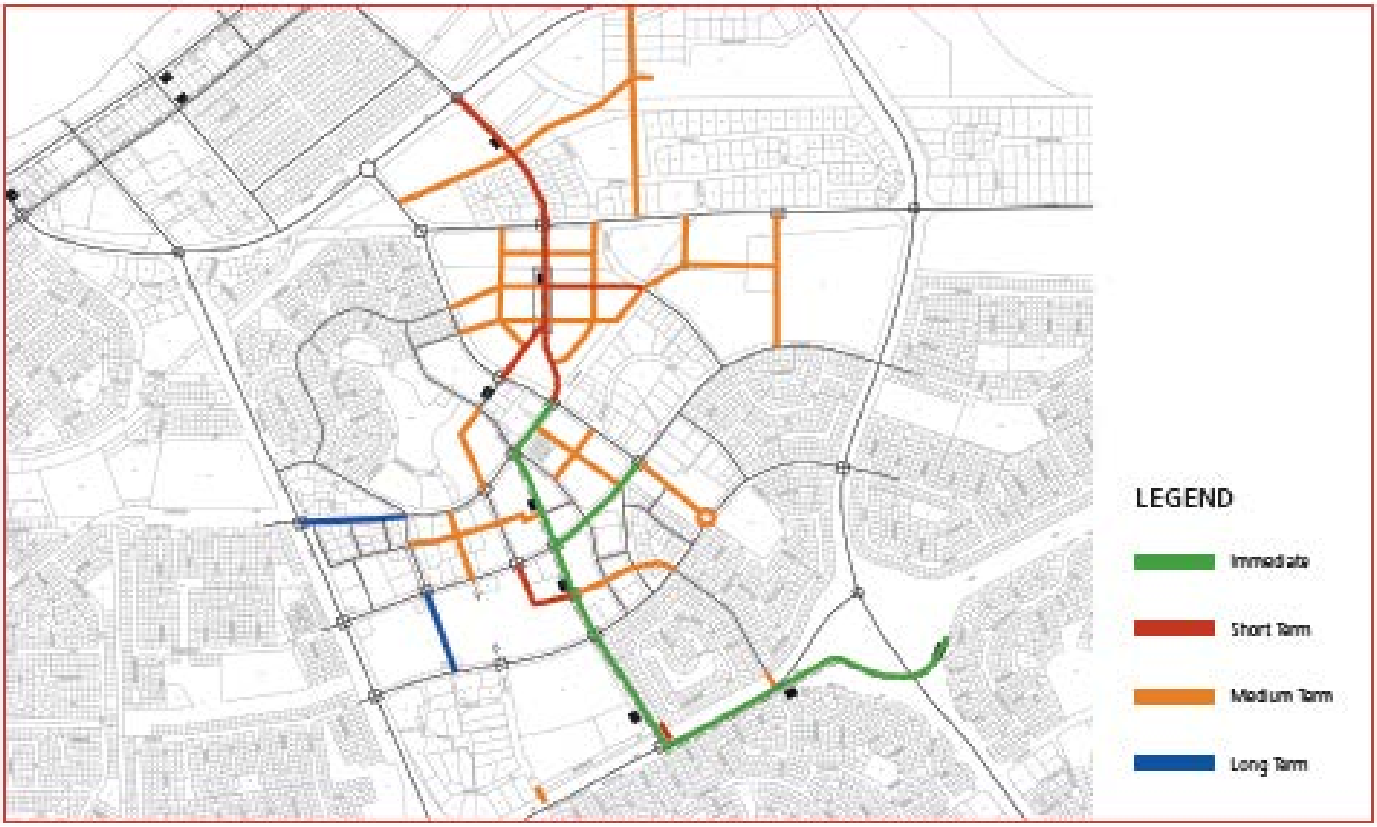

Figure 6 Street Network - Staging Plan

The IDS contains 'Typical Road Cross Sections' for each of the street types to assist in road reservation allocation and detailed design, an example of which is shown in Figure 7.

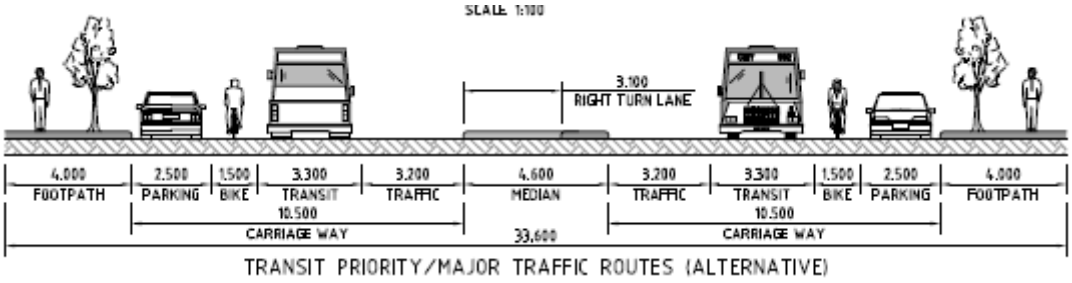

Figure 7 - Example of Typical Road Cross Section showing dedicated transit lane for buses (light rail to ultimately be accommodated in transit lane)

The Preferred Access and Movement Network sets the principles for pedestrian movement by identifying pedestrian routes and the street type descriptions confirm the need for pedestrian facilities.

The 'Typical Road Cross Sections' in the IDS identify the land requirements for pedestrian facilities and those street types where dedicated cycle facilities should be provided.

5 Implementation Actions for each Key Element

5.1 Key Element 1: Public Transport (including Light Rail)

The IDS provides an 'Order of Magnitude Cost' to upgrade the RCCTS to street car (or Light Rail) mode. The preliminary costing includes the track and rolling stock infrastructure, along with the associated civil works. The estimated cost is approximately $108M.

A Feasibility Study is required to further interrogate the engineering requirements for Light Rail and to confirm its feasibility. Detailed engineering design is also needed to specify the design requirements and provide a final cost estimate.

The IDS also provides infrastructure and cost estimates to establish the RCCTS in full bus mode, including civil works, traffic signals and services. The estimated cost is approximately $50M over three stages (upgrade existing RCCTS, Smart Village Sectors and Waterfront Village Sectors).

With respect to the recommendations associated with the re-routing of the existing bus services (separate to the RCCTS), implementation will require a commitment from the Public Transport Authority. The timing of the approach to the PTA is likely to occur when the RCCTS is further developed.

Key Element 1: Public Transport

Implementation Action	Estimated Cost	Estimated staff days	Responsible	Deadline
Feasibility Study (overall alignment)	$250,000	50	Consultants; Directors PDS and EPS; Special Projects Team	**Subject to State Government funding**
Detailed Engineering Design (overall alignment)	$1,100,000	200	Consultants; Directors PDS and EPS; Special Projects Team	**Subject to State Government funding**
Stage One - RCCTS Conversion to Full Bus Mode City Centre Sector Smart Village Sectors Waterfront Village Sectors	 $14,900,000 $18,600,000 $15,300,000	Not Known	Consultants; Directors PDS and EPS; Special Projects Team	**Subject to State Government funding**
Total - Stage One	**$48,800,000**			
Stage Two - Upgrade to Light Rail Mode Includes rolling stock, electrical feeder supply and services protection	 **$107,700,000**	Not Known	Consultants; Directors PDS and EPS; Special Projects Team	**Subject to State Government funding**

5.2 Key Element 2: Road, Pedestrian and Cycle Network

The IDS prioritises the road upgrades and modifications required to meet City Centre objectives.

The IDS contains a breakdown and cost estimates of the road network requirements for the City Centre and Smart Village Sectors (North and South). Civil, landscaping,

lighting and electrical components are itemised. Those roadworks specifically associated with the route of the RCCTS are also identified. Detailed engineering design will be required to confirm the requirements and cost estimates.

Implementation of the Pedestrian and Cycle components will occur as part of the major infrastructure works.

The IDS contains a breakdown and cost estimate of the pedestrian and cycle requirements for the City Centre and Smart Village Sectors. This element of the Access and Movement Network is estimated to cost approximately $1.03M.

The priority works associated with implementing the complete Access and Movement Network components total approximately $38M, of which $23M is required for the two Smart Village Sectors. The remaining funds are required for modifications and upgrades to the existing road network, primarily in the City Centre Sector.

Key Element 2: Movement Network - Road and Pedestrian/Cycle Network (excludes new roads in the Smart Village Sectors)

Implementation Action	Estimated Cost	Estimated staff days	Responsible	Deadline
New/Upgraded City Centre 'Access Roads' (incl. Lighting/Electrical etc.)	$1,832,000	Not known	Consultants; Directors PDS and EPS; Special Projects Team	**Subject to State Government funding**
New/Upgraded 'City Centre / Town Centre Streets (incl. Lighting/Electrical etc.)	$3,056,000	Not Known	Consultants; Directors PDS and EPS; Special Projects Team	**Subject to State Government funding**
New 'Green Parking Streets (incl. Lighting/Electrical etc.)	$3,341,000	Not Known	Consultants; Directors PDS and EPS; Special Projects Team	**Subject to State Government funding**
Pedestrian Links	$1,030,000	Not Known	Consultants; Directors PDS and EPS; Special Projects Team	**Subject to State Government funding**
Traffic Signals	$1,620,000	Not Known	Consultant: Directors PDS and EPS; Special Projects Team	**Subject to State Government funding**

5.3 Funding

Implementation of the City Centre transport components is reliant upon State Government funding for design and construction, as the total costs are beyond the capacity of the Council to deliver on its own.

The City and its development partners will seek to progress the transport initiatives so that the necessary preparatory work has been carried out to enable funding providers to have confidence in contributing to the infrastructure.

6. Ensuring Alignment with Team Plans (and Budgets)

The purpose of the Specific Purpose Strategy is to consolidate the City Centre transport initiatives to assist in securing funding from other sources; not to secure Council funding to implement the transport proposals for the City Centre. As such, funding from Team Plans* is not necessary. Implementation resources will come from existing in-house staff.

*The $10M identified in the City Business Plan (2012/13 - 2021/22) to carry out 'City Centre Infrastructure Works', allocated in $2.5M moieties in 2014/15, 2016/17, 2019/20 and 2020/21, is anticipated as income from the State Government, stemming from the development of Council vested land within the Dixon Road precinct, i.e. Smart Village Sector.

Appendix 1: List of Definitions

1. Rockingham Community Plan

The Rockingham Community Plan is a document prepared by the Community and Council which provides strategic guidance with regards to the Core Services, Facilities and Leadership the City should provide for existing and new residents in the next 10 years. The Rockingham Community Plan guides and informs all other plans within the City.

2. Aspirations

There are a total of 16 Aspirations (captured under the headings "*Community*", "*Infrastructure and Services*", "*Environment and Land use*" and "*Civic Leadership*") that Council aspires to achieve in order to meet the Community's expectations as captured in the Community Plan.

3. Activity and Key Elements

Activities are those "things" that need to be done in order to meet the objectives of any particular Aspiration of the Community Plan. Each Activity will cover various Key Elements. Key Elements are those Key Issues that will be addressed within an activity to close the gap between a current and a desired state indicated in a Specific Purpose Strategy. Under each Key Element would be a list of Implementation Actions that need to be completed in order to achieve the expectations for that Activity. Each of these Implementation Actions will also be represented in a Team Plan or the Asset Management Plan or the Infrastructure Plan.

4. Specific Purpose Strategies and Plans

A Specific Purpose Strategy or Plan is a Strategy that is aimed at achieving one or more of the Aspirations indicated in the Community Plan, with actions to implement and consideration of resource constraints (*time, financial, people*).

5. Implementation Actions

All the actions that have been identified in the Specific Purpose Strategy and that are aimed at achieving a particular aspiration in the Community Plan.

6. Team Plan

A Team Plan is a 10-year strategic implementation document that drives the implementation of the Rockingham Community Plan right through to the operational level. Every Team Plan is informed by the Rockingham Community Plan and the Specific Purpose Strategies, and contains the implementation actions as identified in the Specific Purpose Strategy.

Every operational team is held responsible for the development and implementation of a Team Plan, thus ensuring implementation of all identified Activities.

7. Asset Management Plan

The Asset Management Plan addresses the costs associated with the maintenance of the City's assets over the next 10 years. The Asset Management Plan is informed by the Rockingham Community Plan and the Specific Purpose Strategies.

8. Infrastructure Plan

The Infrastructure Plan is a 10-year Plan that addresses the Infrastructure projects for the City within a given Capital constraint as determined by the Revenue and Operational expenses. The Infrastructure Plan is informed by the Rockingham Community Plan and the Specific Purpose Strategies.

9. Implementation Actions

The list of actions from the Specific Purpose Strategy, which is aimed at achieving one or more Aspirations in the Community Plan. These actions are also all represented in a Team Plan.

10. Revenue Strategy

The Revenue Strategy is a 10-year Plan that addresses all Revenue sources for the City. The Revenue Strategy is informed by the Rockingham Community Plan and the Specific Purpose Plans.

11. City Business Plan

The City Business Plan is a Financial document which culminates the information presented in the Team Plans, Asset Management Plan, Infrastructure Plan and Revenue Strategy into one comprehensive picture representing the 10-year Financial Position of the City of Rockingham. The City Business Plan is a document that ensures the financial sustainability for the future strategic positioning of the Council and follows the Rockingham Community Plan.

12. Budget

Budgets are informed by the Team Plans, and are prepared annually to guide decision making with regards to available funds. Budgets are fed by the Team Plans and thus also follow the Rockingham Community Plan.

13. Strategic Metropolitan Centre

In the Western Australian Planning Commission's State Planning Policy 4.2 "Activity Centres for Perth and Peel" (August 2010), Strategic Metropolitan Centres are defined as the main regional activity centres. They are multipurpose centres that provide a diversity of uses, and the full range of economic and community services necessary for the communities in their catchments. They are also an important focus for passenger rail and high frequency bus networks.

14. Centre Plan

The Rockingham Strategic Regional Centre – Activity Centre Plan, Volumes 1 and 2 as adopted by Council on the 22nd September 2009 and the Western Australian Planning Commission on the 10th November 2009.

15. Development Policy Plan

A Development Policy Plan is the Planning Policy document that will be adopted under the Town Planning Scheme to guide and control new/future development for a defined area. An Indicative Development Plan forms part of the Development Policy Plan.

16. Indicative Development Plan

An Indicative Development Plan is a plan that is prepared for an area, showing an recommended general arrangement for built form, including all buildings, setbacks, road layouts, landscaping and tree planting, car parks, parks and public spaces and the like.