



# **ROADS 2040**

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# Pilbara

# Regional Strategies for Significant Local Government Roads

2022 (Amended 2025)



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3	November 2022	Updated to reflect road hierarchy changes to 5 roads within the Shire of East Pilbara.	Pages 16, 25, 29, 51, 58, 61, 66 & 65
4	February 2023	Include, Balmoral Road and Hill View Road.	Pages 13 & 28
5	5 May 2024 Addition of roads in the Shire of Ashburton and Town of Port Hedland		Various
6	May 2025	Addition of roads in the Shire of Karratha	Pages 15, 39 & 41

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# Significant Local Government Roads Development Strategy

The Roads 2020 Regional Road Development Strategies, released during 1997 and 1998, were an initiative of the 1992 Memorandum of Understanding between the State Government and the Western Australian Local Government Association, then known as the Western Australian Municipal Association. The Memorandum of Understanding requires that the road development strategies be reviewed at five yearly intervals to assess the effects of changing circumstances.

The Roads 2025 Regional Road Development Strategy, for all regions constituted the first review of Roads 2020 Regional Road Development Strategy. Local Governments within the Regions were consulted and engaged in the process of reviewing and defining the Roads 2025 road network. Local Governments reviewed and updated the Roads 2025 documents to produce Roads 2030 in 2013.

The latest iteration *Regional Strategies for Significant Local Government Roads (Roads 2040)* are live documents which allow amendments from the Regional Road Groups. An overall review will take place approximately every five years.

Only projects on local roads in the *Roads 2040* will be eligible for *Road Project Grant* funding under the *State Road Funds to Local Government Agreement*.

#### **CHANGES AND AMENDMENTS**

Should a Regional Road Group agree to seek an amendment to the endorsed road development strategy this should be documented and endorsed by the *State Road Funds to Local Government Advisory Committee*. If an affected road crosses into another Region, agreement should be reached with the adjoining Regional Road Group on the proposed change.

All roads submitted to be added to *Roads 204*0 should meet the criteria specified within the *GUIDELINES AND CRITERIA for the Identification of Significant Local Government Roads with Regional Importance.* 

Note - A separate Main Roads WA process is required to amend the <u>WA Road Hierarchy</u> category.

#### THE PILBARA REGION

The Pilbara is Western Australia's second most northern region. The Region covers a total area of 507 896 square kilometres. The Pilbara has a residential population of 62 841 people. There are four local government areas in the Region, the Shires of Ashburton and East Pilbara, the Town of Port Hedland, and the City of Karratha. The major town centres are Port Hedland, South Hedland and Karratha, with other important centres being Roebourne, Wickham, Point Samson, Dampier, Onslow, Pannawonica, Paraburdoo, Tom Price, Yandeyarra, Marble Bar, Newman, Jigalong and Nullagine. The Pilbara's economy is crucial to

the State, providing two of the State's largest export revenue earners – iron ore and liquefied natural gas.

Some of the Pilbara's most popular natural attractions are the Karijini and Millstream-Chichester National Parks with their spectacular gorges and waterfalls, Marble Bar and Cossack with their historical features and the Dampier Archipelago for those interested in aquatic pursuits.

The Pilbara economy is based primarily on its mining, petroleum and gas industries and is a significant driver of the Western Australian economy. For the financial year ending June 2021 the State of Western Australia had a recorded output of \$599 billion. The Pilbara (on and offshore) contributed 14.65% of this. The Mining industry sector makes the greatest contribution to economic output in the region, which at \$69.8 billion accounts for 79.48% of total output. This industry sector is also the largest employer with 29,151 jobs which represents 45.66% of total employment within the region.

The Pilbara Region Gross Regional Product (net measure of wealth generated by the region) was \$32.3 billion in 2018. Main Roads WA works closely with its portfolio colleagues and Local Government to plan, build and maintain an integrated and efficient world-class road transport network of over 18,500 kilometres. We manage road assets valued at \$39 billion that support the needs of all road users across the State. The Pilbara region manages 881 km length of national network (17.3% of WA State), 1521km length of state roads (11.4% of WA) and 7000km length of local roads (5.3% of WA)

All roads designated 'Highways' within the Pilbara Region are sealed but 35% of the main road network is unsealed.

The Pilbara is easily accessible by road from Perth by two major highways – the Great Northern Highway (National Highway) and the North West Coastal Highway. Several transport companies provide daily freight deliveries to major Pilbara centres.

Strong growth in the resource sector is driving the need for urgent improvements on Great Northern Highway between South Hedland and Port Hedland; on Port Hedland Highway and on Dampier Highway between Karratha and the Burrup Peninsula. The establishment of a natural gas processing plant for BHP Billiton at Onslow will have a significant impact on road infrastructure in that vicinity. Substantial investment in the Port (Port Hedland) is proposed and projected increases in rail traffic to the Port will cause lengthy delays at level crossings. The Port development will also give rise to significant increases in the tonnages of minerals being carted by road and the re-routing of road freight traffic. There will be a need for a major re-alignment of Great Northern Highway with grade separations at rail crossings.



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#### **40 MILE BEACH ACCESS ROAD**

#### Road No. 8140429 Access Road

#### **City of Karratha**

#### Last Reviewed: April 2021

#### **FUNCTION**

Regional Route- Industry and Tourism. The First 700mtrs from North West Coastal Highway is sealed and services a major natural gas processing plant with the remainder of the road servicing a major developing tourist camp site area (with natural boat ramp launching all year) overseen, policed and serviced by the City of Karratha.

The road in its entire is a RAV Tandem Concessional 4.1 route (CAO7 Conditioned must have City of Karratha approval) with the first 700mtrs being up to RAV 7.2 LVL 3 (No conditions). Natural gas is piped parallel to the road from the processing plant and then out to sea making the road itself an industry service access road as well.

#### **DEVELOPMENT NEED**

Sealing of high-risk areas of the road from a Type 3 (unsealed) to a Type 5 (sealed 7mtr wide) Road. The City will create a 7mtr width seal in selected high-risk areas to minimise shoulder grading maintenance activities in the future and to provide extra width traffic lanes for caravan type traffic, roadside parking if required.

#### **DEVELOPMENT STRATEGY**

The development strategy consists of two stages.

Stage One a proposed pavement design of 200mm for traffic with a 20-year life, culvert upgrades, floodways and a 2-coat bitumen seal in selected high-risk areas. These areas are prone to damage from rain events and traffic wear such as the floodways, culverts, the corner of SLK 8.64 to 8.9 and the approach to the camping areas. This will enable full weather access to the campgrounds, provide better road accessibility for RAV vehicles and reduce maintenance servicing costs.

Stage two - reseal the full remaining length.



#### ASHBURTON DOWNS ROAD

#### Road No. 8110003 Local Distributor

#### **Ashburton Shire**

#### Last Reviewed: June 2021

#### FUNCTION

Regional Distributor – primary link between Mt Augustus and Tom Price.

#### **DEVELOPMENT NEED**

This road, along with Ashburton Downs-Meekatharra Rd (already included in Roads 2030), is the primary link between Mt Augustus and other outback areas of the Gascoyne and the central south Pilbara and receives a lot of tourist traffic during the dry season. There is a need for more direct access between Paraburdoo and Meekatharra to service a proportion of the Pilbara workforce, tourist travel, stock agistment to southern pastures and general mining traffic. An improved standard of road is required for the proportionally high number of heavy mining and stock transport vehicles.

#### **DEVELOPMENT STRATEGY**

Upgrade to uniform Type 3 paved road standard, including reforming road carriageway where required, prior to paving, to provide a wider safer carriageway with greater drainage capacity.



#### ASHBURTON DOWNS – MEEKATHARRA ROAD

#### Road No. 8110032 Local Distributor

#### **Ashburton Shire**

#### Last Reviewed: April 2021

#### **FUNCTION**

The Ashburton Downs – Meekatharra Road has regional significance as a connection from Paraburdoo and the western Pilbara through Meekatharra to Perth. The road services three active mines and two large exploration bases. It carries significant mining and tourist traffic in addition to serving the needs of Aboriginal communities and pastoral stations.

#### **DEVELOPMENT NEED**

There is a need for more direct access between Paraburdoo and Meekatharra to service a proportion of the Pilbara workforce, tourist travel (including those between Mt Augustus and the Central South Pilbara), stock agistment to southern pastures and general mining traffic. An improved standard of road is required for the proportionally high number of heavy mining and stock transport vehicles.

#### **DEVELOPMENT STRATEGY**

Upgrade to uniform Type 3 paved road standard, including reforming road carriageway where required, prior to paving, to provide a wider safer carriageway with greater drainage capacity.



#### **BALMORAL ROAD**

#### Road No. 8140103 Local Distributor

#### **Karratha City**

#### Last Reviewed: July 2022

#### **FUNCTION**

Town distributor located in the City Centre and provides access to shopping centre, nearby amenities like the Hospital and emergency services. Balmoral Road links major distributor roads; Dampier Road and Bayview Road.

#### **DEVELOPMENT NEED**

Pavement is at end of life and is under stress. Reconstruction recommended with landscaping updates from SLK 0.00 to 0.33. The road geometry has been aligned to provide safer and efficient environment for the road user

#### **DEVELOPMENT STRATEGY**

RRG funding is proposed to be used for road reconstruction activities to upgrade pavement and safety for road user. Current daily traffic is AADT 3403 per day.



#### **BANJIMA DRIVE**

#### Road No. 8110051 Local Distributor

#### **Ashburton Shire**

#### Last Reviewed: April 2021

#### **FUNCTION**

Banjima Drive is the principal entry road into Karijini National Park from Karijini Drive. The road runs from its western junction with Karijini Drive in a winding loop back to its eastern junction with Karijini Drive near the National Park Rangers' Headquarters. It provides access to a network of roads to scenic and recreational features in the Park including Weano Road and Weano Gorge, Joffre Falls and Joffre Gorge, Knox Gorge and Wittenoom Gorge, Kalimina Gorge, Fortescue Falls, Dales Gorge and Circular Pool. The Park is set in the Hamersley Ranges in the heart of the Pilbara, and offers spectacular rugged scenery, which is a major attraction for tourists.

#### **DEVELOPMENT NEED**

As per the development need provided in the 2030 document, the 28.18km section of Banjima Drive from the western entrance off Karijini Drive to the intersection of Joffre Rd has been upgraded to a uniform Type 5 sealed road standard. However, this sealed road will require preservation works into the future via resealing and eventually reconstruction works.

#### **DEVELOPMENT STRATEGY**

Continue preserving this uniform Type 5 sealed road standard along Banjima Drive to the intersection of Joffre Rd, 28.18 km from the western entrance off Karijini Drive, via resealing and future reconstruction works.



#### **BATHGATE ROAD**

#### Road No. 8140332 Local Distributor

#### **Karratha Shire**

#### Last Reviewed: April 2025

#### **FUNCTION**

Bathgate Road is Type 5 (7m seal) sealed road travelling north/south. It provides access to residential areas from Bayview/Dampier and links to retail complex, restaurants/pubs and fuel station.

#### **DEVELOPMENT NEED**

Continued maintenance and road geometry changes aligned to traffic type and vehicle increases. Based on the *Liveable Neighbourhoods* document, Bathgate Road should be designed and constructed to a Neighbourhood Connector A based on recorded traffic volumes.

#### **DEVELOPMENT STRATEGY**

Based on volume, traffic categories using the road and any required traffic control treatment modifications. In 2020, traffic counters recorded an ADT of 6697 vehicles, with Class 1-2: 59.6 % and Class 3-12: 40.4%.



#### **BAYLY AVENUE**

#### Road No. 8140106 Access Road

#### **City of Karratha**

#### Last Reviewed: April 2021

#### **FUNCTION**

Regional Route / Significant Road - Industry and Tourism. Bayly Avenue provides the only access to the City of Karratha's Airport and services tourism, general passenger flights, fly in fly out workforces for mining, freight cartage for local business, specific helicopter companies, vehicle hire companies and a fuel cartage route for the aero industry. It is classed as a RAV Tandem Drive concessional 7.1 Lvl 3 and Tri Drive concessional 4.4 Lvl 3 route.

#### **DEVELOPMENT NEED**

Reconstruct the failing road throughout. Reconstruct the road on a new alignment (north of the current road) enabling land development between the new alignment and the airport boundary, as well as allowing internal road development to service new commercial lots. Traffic counts ADT 7 day is 1513 vehicles per day in 2006 (before mining construction phase) and MRWA counts in 2013 / 14 indicate ADT 7 day is 2611 vehicles per day. Flight Data indicates 291,230 passengers in 2006 and 441,449 passengers in 2018, an increase of approximate 52% over that period.

#### **DEVELOPMENT STRATEGY**

Reconstruct the road on the new alignment rather than reconstruct the failing road like for like. Increase both subbase and base course strengths to accommodate RAV Vehicles. Type 5 road with 2 x 3.6mtr lanes and central median for delineation. The project will be funded by City of Karratha Airport reserve funds as well as normal Regional Road Group and City of Karratha contributions. This was completed in 2021.



#### **BAYVIEW ROAD**

#### Road No. 8140675 Local Distributor

#### **City of Karratha**

#### **FUNCTION**

Major Route, Main distributor for traffic travelling west and east from the City Centre to various City of Karratha suburbs as well as secondary east route to recreational precincts (Ovals boat facilities). Dual lane adjacent City Centre Hospital areas.

#### **DEVELOPMENT NEED**

Continued maintenance and road geometry changes aligned to traffic type and vehicle increases.

#### **DEVELOPMENT STRATEGY**

RRG funding to be spent on future road maintenance activities aligned with both the traffic volumes and traffic categories using this road and any required traffic control treatment modifications. Current Daily traffic is ADT 7244 per day.



#### **BEADON CREEK ROAD**

#### Road No. 8110036 Access Road

#### **Ashburton Shire**

#### Last Reviewed: May 2024

#### FUNCTION

Beadon Creek Road is the sole access to the Onslow Marine Supply Base and Discovery Parks Onslow accommodation facility and is the northern boundary of the Onslow industrial estate. The latest traffic data has an AADT of 567 with 16.1% Heavy Vehicles. Beadon Creek Rd is not a RAV route.

#### **DEVELOPMENT NEED**

Beadon Creek Road requires reconstruction to improve shape and drainage, as well as edge delineation or kerbing to be installed.

#### **DEVELOPMENT STRATEGY**

Improve the shape of the road and associated drainage and delineation as well as the alignment of the intersection with Second Ave / McAullay Rd.

Funding for future works on this road will be sought from Road Project Grants, Municipal Funding, Roads to Recovery and Industry (mining / resources companies).



#### **BORE LINE ROAD**

#### Road No. 8120144 Local Distributor

#### **East Pilbara Shire**

#### Last Reviewed: November 2022

#### FUNCTION

This unsealed road provides access to pastoral leases and mining tenements as well as road access to the coast as well as vital water bores servicing the mining industry. It carries significant heavy mining and pastoral traffic as well as local and tourist traffic.

#### **DEVELOPMENT NEED**

Traffic levels are expected to increase because of the continued growth in mining activity in the area. Additionally, tourist traffic as well as local traffic is expected to increase as this road connects remote inland communities with the coast.

#### **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable road to service the pastoral and mining industries as well as tourist and local traffic. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds.



#### **CLEAVERVILLE ROAD**

#### Road No. 8140170 Access Road

#### **City of Karratha**

#### Last Reviewed: April 2021

#### **FUNCTION**

Cleaverville Road is a popular coastal recreational destination between Karratha and Wickham for locals and tourists alike. It provides a vehicle access to the beach. Despite the absence of formal camping facilities, large numbers of caravans are frequently reported to be at the site. The visitor numbers and the lack of facilities are having a detrimental effect on the quality of the natural environment. Proper recognition and upgrading of the access road needs to be considered as part of the overall question of coastal access.

#### **DEVELOPMENT NEED**

Provision of this significant road proposal will provide access to a regionally significant recreational and tourist area.

#### **DEVELOPMENT STRATEGY**

This proposal is to upgrade 14km of Type 3 road to a Type 4 sealed road. This will involve upgrading the existing varying formation width of 5.5m to 10m to a minimum 8m wide formation, constructing a base course, and priming and sealing to a width of 6m – a Type 4 standard.



#### **COOKE POINT DRIVE**

#### Road No. 8130140 Local Distributor

#### Port Hedland Town

#### Last Reviewed: April 2021

#### **FUNCTION**

Cooke Point Drive is a primary distributor road listed in ROMAN, connects Port Hedland eastern part, Pretty Pool area with Wilson Street. Recent and proposed development in and around Port Hedland will increase its traffic volume significantly.

#### **DEVELOPMENT NEED**

To meet the future and current traffic volume on the road.

#### **DEVELOPMENT STRATEGY**

Single lane carriageway is proposed to upgrade to dual lane carriageway as development increases. Road Project Grant fund will be used to fund this project.



#### **COOLAWANYAH ROAD**

#### Road No. 8140079 Local Distributor

#### **City of Karratha**

#### Last Reviewed: April 2021

#### FUNCTION

Coolawanyah Road is a local distributor road with a RAV Network 10 classification. This road is one of two main access roads to the Karratha Industrial Estate (KIE) and provides access to all the major businesses that service Karratha and other outlying areas including the mining sector and major projects.

#### **DEVELOPMENT NEED**

It is anticipated that in line with the projected growth in and around Karratha and the mining projects Coolawanyah Road requires upgrading to allow safer access to all businesses and services that operate from the KIE.

#### **DEVELOPMENT STRATEGY**

It is proposed to rip the seal, pad foot roll and compact, add a 100mm of base course. From SLK 0.04 to 1.35 and 1.93 to 2.11 we are proposing a 50mm asphalt seal; and from SLK 1.35 to 1.93 and 2.11 to 2.85 - a 40mm asphalt seal. Works will also be required at intersections for improving turning movement roads included are Pemberton Way, Woodbrook Road, Anderson Road and Cowle Road. Funding: Regional Road Group, HVSPP and City of Karratha. Additional works are also required for the intersection at De Witt Road and Coolawanyah to improve RAV safety.



#### **COWLE ROAD**

#### Road No. 8140303 Access Road

#### **City of Karratha**

#### Last Reviewed: April 2021

#### **FUNCTION**

Cowle Road is an access road with no RAV rating. The road services business such as Allied Pickfords, Golden Hiabs, Toll, Steel One, Monadelphus and the City of Karratha Depot which are all major businesses for the town and mining sector. The intention is to have Cowle Road rated as RAV 10 which will complete the RAV 10 rating around the block of Coolawanyah Road, Augustus Drive and Seabrook Crescent.

#### **DEVELOPMENT NEED**

The upgrade will provide a better road network for the businesses and access to/from Augustus Drive and Seabrook Crescent back on to Coolawanyah Road.

#### **DEVELOPMENT STRATEGY**

This road will require major upgrade in relation to the pavement thickness, width of road and connecting intersection with Coolawanyah Road.

Funding: Regional Road Group and City of Karratha.



#### DAMPIER ROAD

#### Road No. 8140653 Regional Distributor

#### **City of Karratha**

#### Last Reviewed: April 2021

#### **FUNCTION**

Regional Route, Main distributor for Karratha City and Town site traffic from Madigan / Dampier end west (Includes Gap Ridge Industrial Site, Burrup Industrial site, Dampier Town site and all directional traffic) to the City of Karratha and main dual lane distributor throughout the City of Karratha.

#### **DEVELOPMENT NEED**

Continued maintenance and road geometry changes aligned to traffic type and vehicle increases.

#### **DEVELOPMENT STRATEGY**

Dampier Road was de-proclaimed by MRWA back to the City of Karratha in 2012/13 and 2013/14.

RRG funding to be spent on future road maintenance activities aligned with both traffic volumes and traffic categories using this road and future traffic management issues and treatments when required. Current Daily traffic is ADT 4662 heading west and 4209 heading East per day.



#### **DE WITT ROAD**

#### Road No. 8140654 Regional Distributor

#### **City of Karratha**

#### Last reviewed: April 2021

#### **FUNCTION**

Regional Route, RAV Tandem Drive Concessional N10.3 53.5m – 175.5t capable. Main distributor for Karratha City and Town site traffic as well as only access and egress for the Karratha Light Industrial Area. This route provides access to NWCH which services the City of Karratha's satellite towns of Roebourne, Wickham, Cossack (tourism) and Samson.

#### **DEVELOPMENT NEED**

Continued maintenance and road geometry changes aligned to traffic type and vehicle increases.

#### **DEVELOPMENT STRATEGY**

Dewitt Road was de-proclaimed by MRWA back to the City of Karratha in 2012/13 and 2013/14.

RRG funding to be spent on future road maintenance activities aligned with both the traffic volumes and traffic categories using this road and any further required traffic control treatments. Current Daily traffic is ADT 6435 per day.



#### **GOLDSWORTHY ROAD**

#### Road No. 8120004 Access Road

#### **East Pilbara Shire**

#### Last Reviewed: April 2021

#### **FUNCTION**

This unsealed road provides access to pastoral leases and the indigenous community of Warralong. It provides essential road access for the provision of services to the Warralong Community as well as recreational access for the community to the DeGrey River.

#### **DEVELOPMENT NEED**

Traffic levels are steadily increasing due to the need to provide essential services to the Warralong Community as well as the surrounding pastoral stations.

#### **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable allweather road to service the pastoral stations and Warralong Community needs. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds



#### **GOLDSWORTHY – SHAY GAP ROAD**

#### Road No. 8120065 Access Road SLK 0.00 to 46.90 / Local Distributor SLK 46.90 to 75.59

#### **East Pilbara Shire**

#### Last Reviewed: November 2022

#### **FUNCTION**

This sealed section of road provides access to pastoral leases and mining tenements as well as road access to the coast. It carries significant heavy mining and pastoral traffic as well as local and tourist traffic.

RAV Network rating is 6 and 10.

#### **DEVELOPMENT NEED**

Traffic levels are expected to increase due to the continued growth in mining activity in the area. Additionally, tourist traffic as well as local traffic is expected to increase as this road connects remote inland communities with the coast.

#### **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable road to service the pastoral and mining industries as well as tourist and local traffic. The sealed section of road requires pavement rehabilitation as well as unsealed shoulder reconstruction. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds



#### HAMERSLEY - MOUNT BRUCE ROAD

#### Road No. 8110045 Local Distributor

#### **Ashburton Shire**

#### Last Reviewed: May 2024

#### **FUNCTION**

Hamersley – Mt Bruce Road is a major link for tourists accessing the gorges in Karijini National Park located off Karijini Drive and Nanutarra Munjina Road. There is also a major pastoral operation producing fodder near the south end of the road. Latest traffic data resulted in an AADT of 87 with 20.4% Heavy Vehicles.

SLK 20.54 – 30.74 (southern end only) Hamersley – Mt Bruce Road is on the following RAV networks with a minimum of 4 RAV using the road each day:

N7.1 / TD1.1 / PGS2B.1 / OBD1 / 8TPALLING (full length of road) PTR1 (full length of road)

#### **DEVELOPMENT NEED**

Due to the proximity of Hamersley – Mt Bruce Road to FMG's Solomon mining hub, a large number of HV / RAV are using this road, which also negates the need to use a block truck or break up RAV's to travel over Marandoo Hill.

#### **DEVELOPMENT STRATEGY**

Upgrade the road pavement to enable ultimate construction of Type 5 or 6 sealed road. This would include alterations to horizontal and vertical alignments to enable the addition of the road to RAV10.3, TD5.3 and associated RAV networks.

Funding for future works on this road will be sought from Road Project Grants, Municipal Funding, Roads to Recovery and Industry (mining companies).



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#### HAMERSLEY ROAD

#### Road No. 8110038 Access Road

#### **Ashburton Shire**

#### Last Reviewed: May 2024

#### **FUNCTION**

Hamersley Road is the primary access road for supply of materials to FMG's Solomon mining hub and Eliwana mining operations. Latest traffic data resulted in an AADT of 702 with 50.0% Heavy Vehicles.

SLK 0.00 – 16.00 Hamersley Road is on the following RAV networks with an average of 54 RAV movements per day:

N10.3 / TD5.3 / PBS1B.3 / OBD1 / OSDP8 (full length) / PTR1

#### **DEVELOPMENT NEED**

Hamersley Road will remain the primary access to FMG's Solomon and Eliwana mining operations with regular RAV and OSOM movements along the road.

Hamersley Road will also become a link between Hamersley Gorge, Karijini NP and Millstream NP upon the completion of Manuwarra Red Dog Hwy Stage 4 construction.

#### **DEVELOPMENT STRATEGY**

Upgrade the road pavement to enable ultimate construction of Type 5 or 6 sealed road. Funding for future works on this road will be sought from Road Project Grants, Municipal Funding, Roads to Recovery and Industry (mining companies).



#### HILLSIDE – WOODSTOCK ROAD

#### Road No. 8130396 Regional Distributor and Access Road

#### **Port Hedland Town**

#### Last Reviewed: April 2021

#### **FUNCTION**

This road is under the RAV network and being heavily used by the mining and resources companies. Maintaining this road is costing a huge amount of money to Town of Port Hedland and every time when it rains road gets closed for many days. To provide the desirable level of service to the business and community in the Town it is advisable to seal this section of road.

#### **DEVELOPMENT NEED**

Road will be open throughout the year and maintenance cost of the road will go down significantly. It will provide more opportunity to the mining and resources business.

#### **DEVELOPMENT STRATEGY**

The road is proposed to be funded under Road Project Grant. 7.2m wide sealing and upgrading of existing floodway crossing will improve the existing condition of road.



#### **HILL VIEW STREET**

#### Road No. 8140269 Local Distributor

#### **Karratha City**

#### Last Reviewed: July 2022

#### **FUNCTION**

Town distributor located in the City Centre and provides access to shopping centre, emergency services, including Police and Fire Station, accommodation/restaurant facilities, Youth Centre and Emergency Services. Hill View Road links major distributor roads- Balmoral CBD, Dampier Road and to CBD Sharpe Av

#### **DEVELOPMENT NEED**

Pavement is at end of life and is under stress. Reconstruction recommended with landscaping updates from SLK 0.00 to 0.48. The road geometry has been aligned to provide safer and efficient environment for the road user. This will include update to the roundabout to accommodate buses on the route

#### **DEVELOPMENT STRATEGY**

RRG funding is proposed to be used for road reconstruction activities to upgrade pavement and safety for road user. Current daily traffic is AADT 754 per day.



#### **KALGAN DRIVE**

#### Road No. 8120188 Local Distributor

#### **East Pilbara Shire**

#### Last Reviewed: April 2021

#### **FUNCTION**

This sealed road provides the main access into the Newman town site off the Great Northern Highway for heavy vehicles as well as most of the vehicle traffic. This road provides the main access link to the light industrial area as well as the shopping precinct, education, health, sporting, and recreational facilities.

RAV Network rating is 7.

#### **DEVELOPMENT NEED**

The town site of Newman is still experiencing a major population growth as a direct result of the mining industry. Ongoing upgrades are needed to this road to ensure the infrastructure supports the population growth and increase in traffic volumes.

#### **DEVELOPMENT STRATEGY**

Continued upgrade including widening, improvements to intersection turning radiuses and the installation of traffic islands and pedestrian crossing points along with improvements to street lighting and signage.

Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds, and Black Spot.



#### LAMBERT ROAD

#### Road No. 8140084 Access Road

#### **City of Karratha**

#### Last Reviewed: April 2021

#### FUNCTION

Lambert Road services Northwest Honda, Wridgways, CMC Group, Beaurepaires, Bridgestone, Harvey Norman Depot, which are all major businesses for the town and mining sector.

Lambert Road has no RAV rating.

#### **DEVELOPMENT NEED**

The upgrade will provide RAV access to the businesses that operate from Lambert Road and provide access for businesses to/from Anderson Road.

#### **DEVELOPMENT STRATEGY**

This road will require major upgrade to realise RAV 10 specifications, particularly regarding pavement thickness, width of road and connecting intersections to Anderson Road. Funding: Regional Road Group and City of Karratha.



#### LIMESTONE – MARBLE BAR ROAD

#### Road No. 8120242 Regional Distributor

#### **East Pilbara Shire**

#### Last Reviewed: November 2022

#### **FUNCTION**

This sealed road provides the main access into the Marble Bar town site off the Marble Bar Road. It carries local and regional traffic between the town and mining operations and Aboriginal Communities in the surrounding area. Additionally, it also services recreational and sporting facilities as well as the Marble Bar Airstrip. RAV Network rating is 9.

#### **DEVELOPMENT NEED**

This road provides the principal access to a significant population centre providing services to surrounding Aboriginal Communities as well as mining and pastoral stations.

#### **DEVELOPMENT STRATEGY**

Maintaining current service levels. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds.



#### **MARBLE BAR – ALICE SPRINGS ROUTE**

Desert Road (8120265) Jupiter Well Access Road (8120246) Kiwirrkurra Access Road (8120243) Kunawarritji Access Road (8120245) Punmu Access Road (8120244) Access Roads

#### **East Pilbara Shire**

#### Last Reviewed: April 2021

#### **FUNCTION**

The road system forms part of the essential connection to Marble Bar (major service centre) and Alice Springs for several Aboriginal Communities between the Telfer Mining Centre and the WA/Northern Territory State Border. These roads provide sole access to key mining centres including Telfer as well as the remote Aboriginal Communities of Punmu, Kunawarritji and Kiwirrkurra.

For all the Desert Road, Jupiter Well Access, Kiwirrkurra Access, Kunawarritji Access, Punmu Access – RAV Network No: Not Listed.

Telfer Road – RAV Network No: 10.

#### **DEVELOPMENT NEED**

This route is a vital link to Aboriginal Communities and mining companies to access services such as shopping, medical, educational, sporting, and recreational facilities. It provides the link and opportunity for Communities to attend social, cultural, and sporting events. It also provides a road link between Alice Springs and WA frequented by many travelling tourists.

#### **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable road to service the aboriginal communities and mining industries as well as tourist and local traffic. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds, Aboriginal Access Road Funds, Special Grants, Mining Company Contributions.



#### **MARBLE BAR – PARNNGURR ROUTE**

#### Balfour Downs Road (8120043) – Access Road Cotton Creek Access (8120247) – Access Road Jigalong Road (8120036) – Access Road Talawana Track (8120239) – Access Road

#### **East Pilbara Shire**

#### Last Reviewed: April 2021

#### FUNCTION

Jigalong Road, Balfour Downs Road and first 8km of Talawana Track – RAV Network No: 10 Cotton Creek Access – RAV Network No: Not Listed

The road system forms part of the essential connection to Newman (major service centre) for several Aboriginal Communities between the Marble Bar Road and the Karlamilyi National Park. It services the community at Parnngurr just south of the Karlamilyi National Park and provides access to the Jigalong Community.

#### **DEVELOPMENT NEED**

This road is a vital link to Aboriginal Communities, pastoral stations, and mining companies to access services such as shopping, medical, educational, sporting, and recreational facilities. It also provides a link and the opportunity for Communities to attend social, cultural, and sporting events.

#### **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable road to service the aboriginal communities, pastoral and mining industries as well as tourist and local traffic.

Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds, Aboriginal Access Road Funds, and Special Grants.


# MARBLE BAR – WOODSTOCK ROUTE

# Hillside – Marble Bar Road (8120001) Regional Distributor Hillside – Woodstock Road (8120037) Access Road Marble Bar – Woodstock Road (8120266) Regional Distributor

# **East Pilbara Shire**

# Last Reviewed: April 2021

## FUNCTION

The road is an important east-west connector between two major north-south inter-regional freight/tourist routes – Great Northern Highway and Marble Bar Road. It services local and regional pastoral needs, remote communities, mining resource development and tourism. Regional Functional Road Hierarchy class for these three roads is Regional Distributor.

### **DEVELOPMENT NEED**

The current standard of the road is placed is inappropriate for a road of this function. There is a need to improve the standard to ensure greater reliability of service and safety for the road user.

### **DEVELOPMENT STRATEGY**

The development strategy is to improve the road to a consistent Type 2 formed road standard.



# **MCAULLAY ROAD**

# Road No. 8119001 Access Road

## **Ashburton Shire**

# Last Reviewed: May 2024

## **FUNCTION**

McAullay Road is the only road permissible for RAV's to access for supply of materials to Onslow's industrial area and the Onslow Marine Supply Base. There is a Road Train Assembly area located at SLK 2.12. There is no current traffic data available for McAullay Road.

McAullay Road is on the following RAV networks with an average of 1 RAV movement per day:

N10.1 / TD4.1 / PBS3B.1 / PBS1B.3 / OBD1 / OSDP8 (full length)

## **DEVELOPMENT NEED**

Works will include installation of larger / additional drainage infrastructure and building up the road pavement to assist with minimising road closures due to flooding / tidal inundation.

# **DEVELOPMENT STRATEGY**

Improve the pavement and associated drainage to cater for the larger vehicles using the road plus assist with minimising damage caused by flooding.

Funding for future works on this road will be sought from Road Project Grants, Municipal Funding, Roads to Recovery and Industry (mining / resources companies).



### **MILLSTREAM ROAD**

# Road No. 8140043 Local Distributor

### **Karratha Shire**

# Last Reviewed: April 2025

## **FUNCTION**

Millstream Road is the southern collector road Type 6 (8m seal width) and connects the residents of Bulgarra to Karratha town. It provides access to schools and recreational facilities such as ovals, courts and community facilities. Creates the link to CBD and access to other areas.

## **DEVELOPMENT NEED**

General maintenance of road pavement due to age.

## **DEVELOPMENT STRATEGY**

Based on volume of traffic categories using the road and any required traffic control treatment modifications and funding will be RRG funding and Council funding. Traffic counters have recorded an AADT 1684 vehicles in 2020.



# **MINE ROAD**

# Road No. 8110216 Local Distributor

## **Ashburton Shire**

# Last Reviewed: May 2024

## **FUNCTION**

Mine Road is the only route to Rio Tinto's Tom Price mining operations plus the Rio Tinto heavy industrial estate. Traffic classifier data collected from Mine Rd in August/September 2023 had AADT of 3,878 with 20.3% heavy vehicles.

Mine Road is on the following RAV networks with an average of 40 RAV / day during the latest data collection:

N10.3 / TD5.3 / PBS3B.3 / OBD1 / ORT1 / OSDP8 / PTR1

## **DEVELOPMENT NEED**

Mine Road will remain the primary access to Rio Tinto's Tom Price mining operations as well as the Rio Tinto heavy industrial estate.

## **DEVELOPMENT STRATEGY**

Installation of additional guard rail along sections, replacement / relining of large diameter drainage pipes under road.

Funding for future works on this road will be sought from Road Project Grants, Municipal Funding and Rio Tinto.



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# **MOF ROAD**

# Road No. 8140459 Access Road

### **Karratha Shire**

# Last Reviewed: April 2025

# **FUNCTION**

Mof Road is on the RAV Network with access for RAV 6 movements and the only Access Road Type 6 (8m seal width) to Dampier port. Mof Road is a significant high priority transport task associated with the transport of Oil, Gas and Rock to and from Dampier port and industry. This is a key route for construction of industry and has experienced intermittent traffic volume peaks during numerous regional construction campaigns.

### **DEVELOPMENT NEED**

Some reconstruction required due to observed pavement fatigue. Traffic categories using the road and any required traffic control treatment modifications which will also result in upgrading the safety barriers in time to standards.

## **DEVELOPMENT STRATEGY**

Based on traffic volumes an AADT of 353 vehicles were recorded in 2019-2020 with Class 1-2: 68% and Class 3-12: 32%. Funding will be through Regional Road Group and Council. Commodity route Funds \$ 275,000 has been granted for FY21/22/23.



# **MOOLIGUNN ROAD**

# Road No. 8140075 Local Distributor

## **City of Karratha**

# Last Reviewed: April 2021

### **FUNCTION**

Mooligunn Road has a RAV Network 10 rating. This road is one of two roads that service the Karratha Industrial Estate (KIE) and provides access and service to major businesses for Karratha and outlying areas as well the major projects and the mining sector.

### **DEVELOPMENT NEED**

It is anticipated that in line with the projected growth in and around Karratha and the mining projects Mooligunn Road requires upgrading to allow safer access to all businesses and services that operate from the KIE.

## **DEVELOPMENT STRATEGY**

Sections of the road are affected with typical surface deterioration. The proposed works will be to rip the seal, pad foot roll and compact, add a 100mm of base course. It is proposed to lay a 40-50mm asphalt seal with edge treatments and batters to be reworked. Funding: Regional Road Group and City of Karratha.



# MOUNT AUGUSTUS TO PARABURDOO ROAD

### **Proposed Road**

### **Ashburton Shire**

### Last Reviewed: May 2021

### **FUNCTION**

Talis Consultants was contracted by the Shire of Upper Gascoyne to administer a feasibility study in the aim of providing a clear plan for improved connectivity between two major tourist attractions; Mount Augustus and Karijini National Parks, and improved accessibility and connectivity between the Gascoyne and Pilbara regions of Western Australia.

The Study determined a feasible 170km road alignment, and documented the investigations, approvals and stakeholder consultations that would be required to progress the project to construction.



# **MUCCAN – SHAY GAP ROAD**

# Road No. 8120008 Local Distributor

### **East Pilbara Shire**

## Last Reviewed: April 2021

## **FUNCTION**

This unsealed road provides access to pastoral leases and mining tenements as well as road access to the coast. It carries significant mining and pastoral traffic as well as local and tourist traffic.

RAV Network rating is 4.

### **DEVELOPMENT NEED**

Traffic levels are expected to increase as a result of the continued growth in mining activity in the area. Additionally, tourist traffic as well as local traffic is expected to increase as this road connects remote inland communities with the coast.

### **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable road to service the pastoral and mining industries as well as tourist and local traffic. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds



# **MUNJINA – ROY HILL ROAD**

# Road No. 8120232 and 8110295 Local Distributors

# **East Pilbara and Ashburton Shires**

# Last Reviewed: April 2021

# FUNCTION

This section of unsealed road provides access to pastoral leases and mining tenements as well as a direct link between the Great Northern Highway and the Marble Bar Road. It carries significant heavy mining and pastoral traffic as well as local and tourist traffic. RAV Network rating is 10.

## **DEVELOPMENT NEED**

Traffic levels are expected to increase as a result of the continued growth in mining activity in the area. The sealing of 64km is currently underway and heavy haulage traffic has commenced transporting ore to the port of Port Hedland.

# **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable road to service the pastoral and mining industries as well as tourist and local traffic. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds, Mining Company Contributions



# **MURDOCH DRIVE**

# Road No. 8130148 Local Distributor

### Port Hedland Town

## Last Reviewed: April 2021

## **FUNCTION**

Murdoch Drive connects the newly developed South Hedland CBD with North Circular Road and provides access to many current and future developments.

### **DEVELOPMENT NEED**

To meet the future demand of the road.

### **DEVELOPMENT STRATEGY**

Road may need Rehabilitation depending upon the future traffic growth.



### NAMELESS VALLEY DRIVE

## Road No. 8110319 Local Distributor

### **Ashburton Shire**

### Last Reviewed: April 2021

### **FUNCTION**

The road is an important east-west connector between the Nanutarra – Munjina Road and the town of Tom Price and is an inter-regional freight / tourist route. It services local and regional pastoral needs, remote communities, mining resource development and tourism. Nameless Valley Drive is a RAV Network 10 road.

### **DEVELOPMENT NEED**

The road services a significant population centre, mining community, pastoral properties, and tourist destinations. The current road configuration is a uniform Type 5 sealed pavement road.

# **DEVELOPMENT STRATEGY**

Maintain current service levels for traffic using the road.



## **NEWMAN DRIVE**

# Road No. 8120090 Local Distributor

## **East Pilbara Shire**

# Last Reviewed: April 2021

## **FUNCTION**

Newman Drive is a sealed road providing the main access into the Newman town site off the Great Northern Highway. This road provides the main access to the shopping precinct, education, health, sporting, and recreational facilities as well as RAV access to fuel facilities. RAV Network rating is 6.

## **DEVELOPMENT NEED**

The town site of Newman is still experiencing a major population growth as a direct result of the mining industry. Ongoing upgrades are needed to this road to ensure the infrastructure supports the population growth and increase in traffic volumes.

## **DEVELOPMENT STRATEGY**

Continued upgrade including widening, improvements to intersection turning radiuses and the installation of traffic islands and pedestrian crossing points along with improvements to street lighting and signage.

Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds, Black Spot



# NORTH CIRCULAR ROAD EAST

## Road No. 8130342 Regional Distributor

### Port Hedland Town

### Last Reviewed: April 2021

### **FUNCTION**

North Circular Road connects South Hedland Eastern end to Port Hedland and Wedgefield area. Town of Port Hedland's Growth plan projects of massive subdivision in and around North Circular Road. This development will add more traffic volume on the road, and it is expected it will grow by more than 15000 vpd.

### **DEVELOPMENT NEED**

To meet the future demand of the road.

### **DEVELOPMENT STRATEGY**

Road is proposed to be upgraded to dual lane carriageway under Road Project Grant.



## NORTH CIRCULAR ROAD WEST

# Road No. 8130136 Local Distributor

### Port Hedland Town

## Last Reviewed: April 2021

### **FUNCTION**

North Circular Road connects South Hedland to Port Hedland and Wedgefield area. Town of Port Hedland's Growth plan projects of massive subdivision around the road. This development will add more traffic volume on the road, and it is expected it will grow by more than 15000 vpd.

### **DEVELOPMENT NEED**

To meet the future demand of the road.

### **DEVELOPMENT STRATEGY**

Road is proposed to be upgraded to dual lane carriageway under Road Project Grant.



# **OLD ONSLOW ROAD**

Road No. 8110275 Access Road

### **Ashburton Shire**

## Last Reviewed: June 2021

### **FUNCTION**

Road connects the region with a significant tourist destination including camping and caravanning for one or more nights at this location.

### **DEVELOPMENT NEED**

An upgraded route will provide safer access to tourist attractions or recreation areas of State or Regional significance – Old Onslow. This route also provides access to tourists that camp along the Ashburton River and heavier vehicles supporting the Urala Pastoral Station and nearby Australian Gas Industry Group's Oil and Gas Development. The current semi formed, partly paved and unpaved road is narrow and requires constant maintenance from the tourist and heavy traffic loads. An upgraded sealed road will provide safer access with sustained higher service levels for all traffic.

### **DEVELOPMENT STRATEGY**

Upgrade to a uniform Type 5 paved and sealed road standard from Twitchin Rd to Old Onslow at SLK 21.05. Upgrade to a uniform Type 3 paved road standard from Old Onslow to the Ashburton River mouth at SLK 22.51.



## **ONSLOW – PEEDAMULLA ROAD**

# Road No. 8110008 Access Road

### **Ashburton Shire**

# Last Reviewed: June 2021

### **FUNCTION**

Access Road from Onslow Road (M049) northeast to North West Coastal Highway (H007) provide a key tourist route, community access and commercial traffic route.

### **DEVELOPMENT NEED**

An upgraded route will provide safer access to the one pastoral station, an indigenous community, station stay accommodation and tourists travelling between the Northwest Coastal Hwy and Onslow. The current semi formed, partly paved and unpaved road is narrow and requires constant maintenance from the tourist and heavy traffic loads. An upgraded paved road will provide safer access with sustained higher service levels for all traffic.

### **DEVELOPMENT STRATEGY**

Upgrade to uniform Type 3 paved road standard, including reforming road carriageway where required, prior to paving, to provide a wider safer carriageway with greater drainage capacity.



# PANNAWONICA – MILLSTREAM ACCESS ROAD

# Road No. 8110317 Regional Distributor

### **Ashburton Shire**

## Last Reviewed: April 2021

### **FUNCTION**

The road forms part of a regionally significant tourist route from North West Coastal Highway to the Millstream – Chichester National Park. It primarily services tourist traffic.

## **DEVELOPMENT NEED**

The Millstream – Chichester National Park is a significant tourist destination that is gaining increasing international recognition. The Pannawonica – Millstream Access is the principal access into this important tourist area. The importance of the link and its regional significance in the road network will increase with the development of the Karratha – Tom Price route. The existing road to Millstream from Pannawonica has been cut by extensions to Robe River Iron Ore mining operations. There is a need to provide alternative access via a new route to maintain a direct link from the North West Coastal Highway to the Park.

### **DEVELOPMENT STRATEGY**

From Paraburdoo to Kanjenjie – Millstream Rd (SLK 0.00 to SLK 92.02), this road is currently mainly a narrow semi formed, partly paved and unpaved road (Type 2/3 standard road) and requires constant maintenance. Upgrade this section to a uniform Type 3 paved road standard to provide a route with safer access and sustained higher service levels for all traffic. From Kanjenjie – Millstream Rd to the Roebourne – Wittenoom Rd (SLK 92.02 to 106.69), this road is currently a uniform Type 5 standard sealed road. Preserve this sealed section via resealing and future reconstruction works.



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# **PIPPINGARRA ROAD**

# Road No. 8130301 Access Road

### **Port Hedland Town**

### Last Reviewed: April 2021

### **FUNCTION**

Pippingara Road is under the RAV network (0301) and being heavily used by the mining and resources company. Maintaining this road is costing a huge amount of money to Town of Port Hedland and every time when it rains road gets closed for many days. To provide the desirable level of service to the business and community in the Town it is advisable to seal this section of road.

### **DEVELOPMENT NEED**

Road will be open throughout the year and maintenance cost of the road will go down significantly. It will provide more opportunity to the mining and resources business.

### **DEVELOPMENT STRATEGY**

The road is proposed to be funded under road project grant. 7.2m wide sealing and upgrading of existing floodway crossing will improve the existing condition of road.



### **REDBANK ROAD**

## Road No. 8130219 and 8130365 Access Road

### Port Hedland Town

## Last Reviewed: April 2021

### FUNCTION

Redbank road is on RAV network for Cat 10 vehicles. It connects a semi urban population in Port Hedland with Wilson Street. Heavy road rolling in this section of road is damaging the pavement rapidly. Town's maintenance budget is not sufficient to keep this road is a standard to deliver an agreed level of services.

### **DEVELOPMENT NEED**

To meet the future and current load movements on the road.

# **DEVELOPMENT STRATEGY**

The pavement of the roads requires a rehabilitation and reconstruction. The current pavement shall be milled out and reinstate with proper formation construction.



## **ROEBOURNE – WITTENOOM ROAD**

# Road No. 8110299 Regional Distributor Road Ashburton Shire Last Reviewed: April 2021

### **FUNCTION**

Roebourne – Wittenoom Road is the main traffic route between the major Pilbara towns of Karratha and Tom Price. As such it represents a vital link between the coast and the Pilbara mining and tourist areas. A section of the road has been proposed as a more direct route between Karratha and Tom Price with Warlu Road, the Tom Price Railway Road and Bingarn Road. It is likely that upgrading of the road will lead to a significant increase of traffic between the coastal and the Tom Price/Paraburdoo/Karijini area.

### **DEVELOPMENT NEED**

The 25.76 km section of Roebourne – Wittenoom Road from the northern shire boundary just north of Python Pool to the junction with Red Dog Hwy / Warlu Rd is partly sealed / unsealed. Currently, 9.66km of this section is sealed, and the remaining sections are partly formed and paved / unpaved and requires constant maintenance.

The 160.37km section of Roebourne – Wittenoom Road from the junction with Red Dog Hwy / Tom Price Railway Rd is mainly unsealed through to its eastern end junction with the Nanatarra – Munjina Road. This section is currently mainly a narrow semi formed, partly paved and unpaved road (Type 2/3 standard road) that requires constant maintenance.

### **DEVELOPMENT STRATEGY**

From the northern Shire Boundary near Python Pool to Red Dog Highway / Warlu Rd (SLK 0.00 to 25.76), complete upgrading this partly paved / sealed road to a uniform Type 5 sealed road standard. Improve the vertical alignment and carriageway cross section to provider a safer road section with greater drainage capacity. From the Red Dog Highway / Tom Price Railway Rd to the Nanutarra – Munjina Rd at Wittenoom (SLK 74.14 to 208.75), upgrade this section to a uniform Type 3 paved road standard to provide a route with safer access and sustained higher service levels for all traffic.



# **SHAY GAP ROAD**

# Road No. 8120074 Local Distributor

### **East Pilbara Shire**

### Last Reviewed: November 2022

### **FUNCTION**

Shay Gap Road is unsealed road that provides access to pastoral leases and mining tenements as well as road access to the coast. It carries significant heavy mining and pastoral traffic as well as local and tourist traffic. RAV Network rating is 10.

RAV Network rating is TO.

### **DEVELOPMENT NEED**

Traffic levels are expected to increase because of the continued growth in mining activity in the area. Additionally, tourist traffic as well as local traffic is expected to increase as this road connects remote inland communities with the coast.

### **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable road to service the pastoral and mining industries as well as tourist and local traffic. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds



# **SKULL SPRINGS ROAD**

# Road No. 8120021 Local Distributor

### **East Pilbara Shire**

# Last Reviewed: April 2021

# **FUNCTION**

This section of unsealed road provides access to pastoral leases and mining tenements as well as road access to recreational areas. It carries significant heavy mining and pastoral traffic as well as local and tourist traffic.

RAV Network rating is 10.

### **DEVELOPMENT NEED**

Traffic levels are expected to increase because of the continued growth in mining activity in the area. Additionally, tourist traffic as well as local traffic is expected to increase as this road connects remote inland communities with recreational areas.

### **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable road to service the pastoral and mining industries as well as tourist and local traffic. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds, Mining

Company Contributions.



# **STYLES ROAD**

# Road No. 8130220 Access Road

### Port Hedland Town

## Last Reviewed: April 2021

### **FUNCTION**

Styles road connects the Pretty Pool area with the rest of the town. LandCorp is developing in and around Styles Road with residential area that will increase the future traffic.

### **DEVELOPMENT NEED**

To meet the future and current demand of the road.

### **DEVELOPMENT STRATEGY**

Single lane carriageway will be upgraded to dual lane carriage way to meet the future demand. Road Project Grant will be used to upgrade this road.



# **TOM PRICE & OSOM ROUTE**

# Doradeen Road (8110205) – Local Distributor Boonderoo Road (8110265) – Access Road Blake Street (8110300) – Access Road Ashburton Shire

## Last Reviewed: May 2024

## FUNCTION

Doradeen Road, Boonderoo Road and Blake Street are part of the MRWA designated "High Vehicle Detour Route" for vehicles that are too high to drive under the Rio Tinto Paraburdoo Rail bridge crossing Manuwarra Red Dog Highway. This route is also regularly used by OSOM vehicles moving mining equipment exceeding 200 tonnes. Latest traffic data resulted in an AADT of 2,016 with 38.3% Heavy Vehicles on Doradeen Road. All three roads are on the following RAV networks with an average of 4 RAV / day and a minimum of 5 Oversize Over Mass movements / day: N6.1 / TD1.1 / PGS2B.1 / OBD1 / 8TPALLN6

## **DEVELOPMENT NEED**

Until an alternative route is constructed by MRWA and Rio Tinto, Doradeen Road will remain part of the only bypass available for vehicles exceeding 4.5m in height.

# **DEVELOPMENT STRATEGY**

## Doradeen Road & Boonderoo Road

Due to damage caused by OSOM vehicles, the road needs to be fully reconstructed. This will include investigating changing priority at the intersection with West Road (Doradeen Road) and the potential softening of the 90 degree bend at SLK 0.12 (Boonderoo Road) <u>Blake Street</u>

The road needs to be reconstructed to facilitate OSOM movements with drainage improvements and final pavement to Type 6 standard.

Funding for future works on these roads will be sought from Road Project Grants, Municipal Funding, Roads to Recovery and Industry (mining companies).



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# **TOWERA ROAD**

Road No. 8110227 Access Road

## **Ashburton Shire**

# Last Reviewed: June 2021

### **FUNCTION**

Access road linking Towera-Lyndon Rd (existing Roads 2030) to North West Coastal Hwy. This road is the primary link between the western outback areas of the Gascoyne and the west Pilbara regions.

## **DEVELOPMENT NEED**

This road, along with Towera-Lyndon Rd, is the primary link between the western outback areas of the Gascoyne and the west Pilbara and provides for tourists as well as for local pastoral traffic needs. This road is currently a narrow semi formed, mainly paved road (Type 3 standard road), with some unpaved (Type 2 standard road) sections that requires constant maintenance. Upgrading this road will provide a safer road with sustained higher levels of service for all traffic.

## **DEVELOPMENT STRATEGY**

Upgrade this section to a uniform Type 3 paved road standard, to provide a route with safer access and sustained higher service levels for all traffic. The Upgrade works will require some reforming of some sections, prior to paving, to provide a wider carriageway with greater drainage capacity.



### **TOWERA – LYNDON ROAD**

# Road No. 8110017 Local Distributor

### **Ashburton Shire**

# Last Reviewed: April 2021

### **FUNCTION**

This road is the primary link between the western outback areas of the Gascoyne and the west Pilbara regions.

### **DEVELOPMENT NEED**

This road, along with the Towera Rd, is the primary link between the western outback areas of the Gascoyne and the west Pilbara regions and provides for tourists as well as for local pastoral traffic needs. This road is currently a narrow semi formed, mainly paved road (Type 3 standard road), with some unpaved (Type 2 standard road) sections that requires constant maintenance. Upgrading this road will provide a safer road with sustained higher levels of service for all traffic.

## **DEVELOPMENT STRATEGY**

Upgrade this section to a uniform Type 3 paved road standard, to provide a route with safer access and sustained higher service levels for all traffic. The Upgrade works will require some reforming of some sections, prior to paving, to provide a wider carriageway with greater drainage capacity.



# **TWITCHIN ROAD**

# Road No. 8110004 Access Road Ashburton Shire Last Reviewed: June 2021

### **FUNCTION**

This road is an Access Road, that connects several Pastoral properties to the North West Coastal Highway to the south and the Onslow Rd to the north. The northern end connects the Old Onslow and Ashburton River mouth Tourist attractions via the Old Onslow Road to the Onslow Rd.

### **DEVELOPMENT NEED**

This road is utilised by tourists travelling between the North West Coastal Highway to Old Onslow, the Ashburton River mouth, and Onslow and also Pastoral and heavy traffic from the Urala facility and the Australian Gas Industry Group facility located off Urala Rd, and three Pastoral Properties to access the North West Coastal Highway and Onslow. This road is currently a narrow unformed and semi formed, partly paved and unpaved road (Type 1/2/3 standard road) and requires constant maintenance. The maintenance requirement on the first 5.33km on the northern end to the Old Onslow Rd intersection is extensive due to the high volume of tourist traffic heading to Old Onslow and the Ashburton River mouth and camping areas. Upgrade this section to a uniform Type 3 paved road standard to provide a route with safer access and sustained higher service levels for all traffic.

### **DEVELOPMENT STRATEGY**

From Onslow Rd to Old Onslow Rd (SLK 0.00 to 5.33) located on the northern end, upgrade this section to a uniform Type 5 paved and sealed road standard to provide a route with all-weather safe access. From Old Onslow Rd to the North West Coastal Highway (SLK 5.33 to 124.36), upgrade this section to a uniform Type 3 paved road standard to provide a route with safer access and sustained higher service levels for all traffic. The Upgrade works will require some forming / reforming of sections, prior to paving to provide a wider carriageway with greater drainage capacity.



### WALLWORK ROAD

# Road No. 8130188 Local Distributor

### Port Hedland Town

## Last Reviewed: April 2021

## **FUNCTION**

Wallwork Road is the main road that connects Port Hedland, South Hedland and Wedgefield. Recent traffic shows it has currently 1500 vpd and 23% of it is heavy vehicles.

### **DEVELOPMENT NEED**

To meet the future demand of the road.

### **DEVELOPMENT STRATEGY**

Road is proposed to be upgraded to dual lane carriageway under Road Project Grant.



# WARRAWAGINE ROAD

# Road No. 8120003 Local Distributor

# **East Pilbara Shire**

# Last Reviewed: November 2022

# FUNCTION

This section of unsealed road provides access to pastoral leases and mining tenements as well as road access to the coast. It carries significant heavy mining and pastoral traffic as well as local and tourist traffic.

RAV Network rating is 10.

## **DEVELOPMENT NEED**

Traffic levels are expected to increase because of the continued growth in mining activity in the area. Additionally, tourist traffic as well as local traffic is expected to increase as this road connects remote inland communities with the coast.

# **DEVELOPMENT STRATEGY**

Ongoing improvement works are needed to provide and maintain a safe and reliable road to service the pastoral and mining industries as well as tourist and local traffic. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds, Mining Company Contributions.



### WEDGEFIELD INDUSTRIAL ROADS

RidleyStreet (8130065) – Access Road Pinnacles Street (8130062) – Access Road Leehey Street (8130066) – Access Road Trigg Street (8130072) – Access Road Moorambine Street (8130071) – Access Road Cajarina Road (8130099) – Local Distributor Kangan Way (8130263) – Access Road Harwell Way (8130105) – Access Road Pinga Street (8130061) – Local Distributor Yanana Street (8130069) – Access Road Peawah Street (8130069) – Access Road Schillaman Street (8130070) – Access Road

# **Ashburton Shire**

## Last Reviewed: May 2024

### **FUNCTION**

The town has identified twelve streets as a high priority for upgrading.

- These streets are on the unrestricted RAV 10 network and serve major Industrial sites by providing convenient truck access to an industrial area. It experiences high levels of truck traffic and accommodates the needs of freight movement.
- These streets get used for regional heavy haulage route and get used by Triple and quad road trains, and many other categories of vehicles in the Category 9 and Category 10 RAV lists. These streets serve as access and circulation routes for delivery of goods and services to neighbourhood serving commercial.

### **DEVELOPMENT NEED**

Reconstruct the failing roads throughout. The proposed Local Distributor network identifies that not all junctions could accommodate the RAV 10 vehicle within the road space. Main Roads' RAV mapping tool identifies that most of the roads in the Wedgefield precinct are categorized up to Category 10. Category 10 includes Prime Mover, B-Doubles, Triples and Quads up to 53.4m in length. In several cases, this involved the vehicle swinging across both carriageways causing potential hazards and delays. These Local Distributors roads will be upgraded to a standard which allows for RAV category 10 vehicles to operate and turn within their own lane.

### **DEVELOPMENT STRATEGY**

- Reconstruct the road on the new alignment rather than reconstruct the failing road like for like.
- Increase both subbase and bases course strengths to accommodate RAV Vehicle.
- The most appropriate way of dealing with retrofitting design standards to older areas of Wedgefield would need to focus on localised improvements, with the goal of bringing the whole precinct up to an improved standard.
- Not only would this be cost effective but also it would allow targeting and involvement of stakeholders who were most affected by local improvements.
- The strategy is to ensure that RAV users use the designated Local distributor roads where possible. The existing pavement will be rehabilitated and reconstruct the current and future heavy load movements.
- It was identified that MRWA standards have been updated recently with larger radius required for Tri-drives; 22m radius rather than 20m. This will enable Two-way traffic flow which will be more attractive and accessible to Heavy Vehicles. This will give sufficient space to heavy vehicles to turn at some junctions.
- Pinga St Single lane carriageway will be upgraded to dual lane carriageway to meet the future demand. Road Project Grant will be used to upgrade this road.



# **WELSH DRIVE**

# Road No. 8120172 Local Distributor

# **East Pilbara Shire**

# Last Reviewed: April 2021

# FUNCTION

This sealed road provides the main access into the Newman Light Industrial Area and Mine Site as well as residential areas and schooling facilities. RAV Network rating is 7.

## **DEVELOPMENT NEED**

The town site of Newman is still experiencing a major population growth as a direct result of the mining industry. Ongoing upgrades are needed to this road to ensure the infrastructure supports the population growth and increase in heavy traffic volumes.

# **DEVELOPMENT STRATEGY**

Continued upgrade including widening, improvements to intersection turning radiuses and installation of traffic islands and pedestrian crossing points along with improvements to street lighting and signage. Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds, and Black Spot.



# WOODBROOK ROAD

# Road No. 8140007 Access Road

# **City of Karratha**

# Last Reviewed: April 2021

# FUNCTION

Woodbrook Road is an unsealed road with no RAV network. This road provides the only access to the Harding River Dam which is of major importance to the Pilbara Region.

## **DEVELOPMENT NEED**

The upgrade will provide easier and all-weather access to the Harding River Dam.

# **DEVELOPMENT STRATEGY**

A two-coat seal has been proposed for this road. This will require a full pavement build with culverts for drainage where required.



# WOODIE WOODIE ROAD

# Road No. 8120263 Local Distributor

# **East Pilbara Shire**

# Last Reviewed: November 2022

# FUNCTION

This road is an important connector between the Ripon Hills Road and the Woodie Woodie and Nifty Mine Sites and is to all intents and purposes a continuation of the Ripon Hills Road (M063 Main Roads).

The primary function of Woodie Woodie Road is related to the transportation of ore from mine sites to the port of Port Hedland for export.

RAV Network rating is 10.

# **DEVELOPMENT NEED**

The majority of traffic is predominantly road trains in triple and quad configuration (3 <sup>1</sup>/<sub>2</sub> trailers) estimated at 100 per 24 hours (day/night operation) and due to this extreme high traffic loading ongoing pavement rehabilitation is required including a continuation of the road widening program to allow for the continued growth in traffic volumes.

# **DEVELOPMENT STRATEGY**

Continuous pavement rehabilitation program including cement stabilisation and widening from the existing 7.2m seal to an 8m seal.

Funding Sources: Road Project Grants, Roads to Recovery Program, Municipal Funds, Mining Companies Contribution.



# YANDEYARRA ROAD

# Road No. 8130395 Access Road

# **Port Hedland Town**

# Last Reviewed: April 2021

# FUNCTION

Yandeyarra Road is providing access to the Yandeyarra Aboriginal Community. This community is isolated and in the event of cyclone or other emergencies the only way to get access is via helicopter. Sealing this section of road will provide better access to the people living in the community and other people who need to visit the community. This is also an opportunity to close the gap between aboriginal and non-aboriginal people.

# **DEVELOPMENT NEED**

Federal Government is working on a strategy to hand over these kinds of aboriginal communities to the local government councils. Once it is handed over to the LG, it will be the responsibility of the council to provide the services like waste collection and street maintenance. To provide the services from Town's perspective and to facilitate the emergency evacuation process, road shall be sealed and operational throughout the year. Now the road is closed at the time of cyclones.

# **DEVELOPMENT STRATEGY**

The road is proposed to be funded under Road Project Grant. 7.2m wide sealing and upgrading of existing floodway crossing will improve the existing condition of road.



# SERVICE LEVELS

# Type 1 – Unformed Road

(Cleared-flat bladed, minimum construction, formation consists of adjacent material) This type is the first stage development of the road when the alignment is cleared of all vegetation with the running surface constructed from materials in-situ. This type of road allows for light traffic. With minimal drainage provision, the road is prone to closure during periods of heavy rainfall.

# Type 2 – Formed Road

(Formed (raised) and drained road without imported material or a constructed pavement) To avoid possible further relocation of the road and the resultant impact on the landscape environment, Type 2 earthworks are constructed using local road-making material and improved drainage control.

## Type 3 – Gravel Road

(Road construction from imported material of adequate thickness, shaped and drained) When maintenance costs increase to unacceptable levels or when economic or social benefits are evident, a Type 2 road can be improved by sheeting the surface with suitable gravel material to become a Type 3 road.

## Type 4 – Sealed Road (6m Seal Width)

### (Sealed with no kerbing)

Sealing is carried out to improve road-user comfort and safety when the road is experiencing higher traffic volumes or when significant numbers of heavy vehicles are required to use a Type 3 road. A Type 3 road is upgraded to Type 4 by building up the residual gravel pavement to full thickness. This is then compacted and sealed.

### Type 5 – Sealed Road (7m Seal Width)

This is further development of the Type 4 road with extra seal width being provided to cater for higher traffic volumes and a high proportion of heavy vehicles.

### Type 6 – Sealed Road (8 - 9m Seal Width)

This stage represents further development of a Type 4 or Type 5 road with additional seal width being provided as traffic volumes increase to improve safety; reduce maintenance costs; provide space for a stationary vehicle to stand clear of traffic lanes; and to assist cyclists.

### Type 7 – Sealed Road with Overtaking Lane

An additional lane is provided on two-laned sealed roads when the traffic volume; proportion of heavy vehicles; and overtaking opportunities on adjoining sections of road cause traffic bunching to occur.

### Type 8 – Dual Carriageway

An additional carriageway is provided to improve safety and increase the capacity on high volume roads.
### **ROAD NUMBERING SYSTEM**

The road numbering system used throughout this Strategy document is explained as follows.

Local Roads, managed by Local Government Authorities (LGAs), have seven-digit road numbers. The first three digits indicate the LGA that manages the Local Road, the final four digits denote the number, or label, assigned to that road by the LGA. The following table summarises the LGA codes for the Kimberley Region.

Local Government Authority	Code
Ashburton	811
East Pilbara	812
Karratha (C)	814
Port Hedland (T)	813

### **RESTRICTED ACCESS VEHICLE (RAV) NETWORKS**

Main Roads Western Australia has granted certain Restricted Access Vehicles (RAVs) conditional access to specified Western Australian roads, through the gazettal of a Class 2 and 3 Notice under the provisions of the Road Traffic (Vehicle Standards) Regulations 2002.

Refer to the Heavy Vehicle website:

https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/

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### **APPENDIX 1: TABLE OF ROUTES WITH SLKS**

		PI	LBARA RRG ROADS							
					SLKS &	LENGTH	4		ROAD SURFACE KMS	
Route Name	Road Name/s	Road Number	Road Hierarchy	Local Government	SLK FROM	SLK TO	ROAD LENGTH	TOTAL KMS	SEALEI	DUN SEALED
40 MILE BEACH ACCESS ROAD	40 Mile Beach Access Road	8140492	Access Road	Karratha	0.00	11.35	11.35	11.35	0.75	10.60
ASHBURTON DOWNS ROAD	Ashburton Downs Road	8110003	Regional Distributor	Ashburton	0.00	55.53	55.53	55.53	0.05	55.48
ASHBURTON DOWNS MEEKATHARRA ROAD	Ashburton Downs Meekatharra Road	8110032	Local Distributor	Ashburton	0.00	88.52	88.52	88.52		88.52
BALMORAL ROAD	Balmoral Road	8140103	Local Distributor	Karratha	0.00	0.88	0.88	0.88	0.88	
BANJIMA DRIVE	Banjima Drive	8110051	Local Distributor	Ashburton	0.00	28.19	28.19	28.19	28.19	
BATHGATE ROAD	Bathgate Road	8140332	Local Distributor	Karratha	0.00	1.25	1.25	1.25	1.25	
BAYLY AVENUE	Bayly Avenue	8140106	Access Road	Karratha	0.00	2.17	2.17	2.17	2.17	
BAYVIEW ROAD	Bayview Road	8140675	Local Distributor	Karratha	0.00	12.71	12.71	12.71	12.71	
BEADON CREEK ROAD	Beadon Creek Road	8110036	Access Road	Ashburton	0.00	1.32	1.32	1.32	1.32	
BORE LINE ROAD	Bore Line Road	8120144	Access Road	East Pilbara Shire	0.00	45.87	45.87	45.87		45.87
CLEAVERVILLE ROAD	Cleaverville Road	8140170	Access Road	Karratha	0.00	13.99	13.99	13.99	1.10	12.89
COOKE POINT DRIVE	Cook Point Drive	8130140	Local Distributor	Port Hedland	0.00	1.03	1.03	1.03	1.03	
COOLAWANYAH ROAD	Coolawanyah Road	8140079	Local Distributor	Karratha	0.00	5.16	5.16	5.16	3.02	2.14
COWLE ROAD	Cowle Road	8140303	Access Road	Karratha	0.00	0.54	0.54	0.54	0.54	
DAMPIER ROAD	Dampier Road	8140653	Regional Distributor	Karratha	0.00	6.33	6.33	6.33	6.33	
DE WITT ROAD	De Witt Road	8140654	Regional Distributor	Karratha	0.00	6.57	6.57	6.57	6.57	
GOLDSWORTHY ROAD	Goldsworthy Road	8120004	Access Road	East Pilbara Shire	0.00	69.96	69.96	69.96		69.96
GOLDSWORTHY SHAY GAP ROAD	Goldsworthy Shay Gap Road	8120065	Access Road	East Pilbara Shire	0.00	75.59	75.59	75.59	28.00	47.59
HAMERSLEY ROAD	Hamersley Road	8110038	Access Road	Ashburton	0.00	16.13	16.13	16.13		16.13
HAMERSLEY – MOUNT BRUCE ROAD	Hamersley – Mount Bruce Road	8110045	Local Distributor	Ashburton	0.00	30.74	30.74	30.74		30.74
HILLSIDE WOODSTOCK ROAD	Hillside Woodstock Road	8130396	Regional Distributor / Access Road	Port Hedland	0.00	49.43	49.43	49.43		49.43
HILL VIEW STREET	Hill View Street	8140269	Local Distributor	Karratha	0.00	0.55	0.55	0.55	0.55	
KALGAN DRIVE	Kalgan Drive	8120188	Local Distributor	East Pilbara Shire	0.00	2.14	2.14	2.14	2.14	
LAMBERT ROAD	Lambert Road	8140084	Access Road	Karratha	0.00	1.23	1.23	1.23	1.23	
LIMESTONE MARBLE BAR ROAD	Limestone Marble Bar Road	8120242	Local Distributor	East Pilbara Shire	0.00	8.05	8.05	8.05	8.05	
MARBLE BAR - ALICE SPRINGS ROUTE	Desert Road	8120265	Access Rd	East Pilbara Shire	0.00	225.03	225.03	813.51		225.03
	Jupiter Well Access Road	8120246	Access Rd	East Pilbara Shire	0.00	129.12	129.12	]		129.12
	Kiwirrkurra Access Road	8120243	Access Rd	East Pilbara Shire	0.00	141.90	141.90			141.90
	Kunawarritji Access Road	8120245	Access Rd	East Pilbara Shire	1.48	176.88	175.40			175.40
	Punmu Access Road	8120244	Access Rd	East Pilbara Shire	0.00	142.06	142.06			142.06
MARBLE BAR - PARNNGURR ROUTE	Balfour Downs Road	8120043	Access Road	East Pilbara Shire	0.00	45.18	45.18	349.55		45.18
	Cotton Creek Access	8120247	Access Road	East Pilbara Shire	0.00	20.54	20.54			20.54
	Jigalong Road	8120036	Access Road	East Pilbara Shire	0.00	108.26	108.26			108.26
	Talawana Track	8120239	Local Distributor	East Pilbara Shire	0.00	175.57	175.57			175.57
MARBLE BAR - WOODSTOCK ROUTE	Hillside Marble Bar Road	8120001	Regional Distributor	East Pilbara Shire	0.00	91.07		151.40	25.00	66.07
	Hillside Woodstock Road	8120037	Regional Distributor	East Pilbara Shire	0.00	26.16	26.16			26.16

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	Marble Bar Woodstock Road	8120266	Regional Distributor	East Pilbara Shire	0.00	34.17	34.17		19.17	15.00
MCAULLAY ROAD	McAullay Road	8119001	Access Road	Ashburton	0.00	2.77	2.77	2.77	2.77	
MILLSTREAM ROAD	Millstream Road	8140043	Local Distributor	Karratha	0.00	2.30	2.30	2.30	2.30	
MINE ROAD	Mine Road	8110216	Local Distributor	Ashburton	0.00	3.13	3.13	3.13	3.13	
MOF ROAD	Mof Road	8140459	Access Road	Karratha	0.00	1.14	1.14	1.14	1.14	
MOOLIGUNN ROAD	Mooligunn Road	8140075	Local Distributor	Karratha	0.00	1.65	1.65	1.65	1.65	
MUCCAN SHAY GAP ROAD	Muccan Shay Gap Road	8120008	Access Road	East Pilbara Shire	0.00	54.54	54.54	54.54		54.54
MUNJINA ROY HILL ROAD	Munjina Roy Hill Road	8120232	Local Distributor	East Pilbara Shire	0.00	133.09	133.09	140.55	55.00	78.09
	Munjina Roy Hill Road	8110295	Local Distributor	Ashburton	0.00	7.46	7.46		7.46	
MURDOCH DRIVE	Murdoch Drive	8130148	Local Distributor	Port Hedland	0.00	2.19	2.19	2.19	2.19	
NAMELESS VALLEY DRIVE	Nameless Valley Drive	8110319	Local Distributor	Ashburton	0.00	19.44	19.44	19.44	19.44	
NEWMAN DRIVE	Newman Drive	8120090	Local Distributor	East Pilbara Shire	0.00	3.50	3.50	3.50	3.50	
NORTH CIRCULAR ROAD EAST	North Circular Road East	8130342	Local Distributor / Access Road	Port Hedland	0.00	4.27	4.27	4.27	4.29	
NORTH CIRCULAR ROAD WEST	North Circular Road West	8130136	Local Distributor	Port Hedland	0.00	0.99	0.99	0.99	0.99	
OLD ONSLOW ROAD	Old Onslow Road	8110275	Access Road	Ashburton	0.00	22.51	22.51	22.51		22.51
ONSLOW - PEEDAMULLA ROAD	Onslow - Peedamulla Road	8110008	Access Road	Ashburton	0.00	64.17	64.17	64.17		64.17
PANNAWONICA MILLSTREAM ACCESS R	ROADPannawonica Millstream Access Road	8110317	Regional Distributor	Ashburton	0.00	106.69	106.69	106.69	15.26	91.43
PIPPINGARRA ROAD	Pippingara Road	8130301	Access Road	Port Hedland	0.00	63.87	63.87	63.87		63.87
REDBANK ROAD	Redbank Access Road (Roche Road)	8130365	Access Road	Port Hedland	0.00	0.29	0.29	1.47	0.29	
	Redbank Road	8130219	Access Road	Port Hedland	0.77	1.95	1.18	]	1.47	
ROEBOURNE WITTENOOM ROAD	Roebourne Wittenoom Road	8110299	Regional Distributor / Access Roa	dAshburton	0.00	25.76	25.76	25.76	9.66	16.10
	Roebourne Wittenoom Road	8110299	Regional Distributor / Access Roa	dAshburton	73.97	208.75	134.78	160.54	6.22	128.39
SHAY GAP ROAD	Shay Gap Road	8120074	Access Road	East Pilbara Shire	0.00	40.57	40.57	40.57		40.57
SKULL SPRINGS ROAD	Skull Springs Road	8120021	Local Distributor	East Pilbara Shire	0.00	141.74	141.74	141.74	8.90	132.84
STYLES ROAD	Styles Road	8130220	Access Road	Port Hedland	0.19	2.46	2.27	2.27	2.27	
TOM PRICE OSOM ROUTE	Doradeen Road	8110205	Local Distributor	Ashburton	0.00	1.14	1.14	1.45	1.14	
	Boonderoo Road	8110265	Access Road	Ashburton	0.00	0.25	0.25	]	0.25	
	Blake Street	8110300	Access Road	Ashburton	0.00	0.06	0.06		0.02	0.04
TOWERA ROAD	Towera Road	8110227	Access Road	Ashburton	0.00	44.45	44.45	44.45	0.11	44.34
TOWERA LYNDON ROAD	Towera Lyndon Road	8110017	Local Distributor	Ashburton	0.00	27.60	27.60	27.60		27.60
TWITCHIN ROAD	Twitchin Road	8110004	Access Road	Ashburton	0.00	124.36	124.36	124.36	0.62	123.74
WALLWORK ROAD	Wallwork Road	8130188	Local Distributor	Port Hedland	0.00	3.84	3.84	3.84	3.84	
WARRAWAGINE ROAD	Warrawagine Road	8120003	Access Road	East Pilbara Shire	0.00	181.69	181.69	181.69		181.69
WEDGEFIELD INDUSTRIAL ROADS	Ridley Street	8130065	Access Road	Port Hedland	0.00	0.34	0.34	9.91	0.34	
	Pinnacles Street	8130062	Access Road	Port Hedland	0.00	0.99	0.99	1	0.99	
	Leehey Street	8130066	Access Road	Port Hedland	0.00	0.53	0.53	1	0.53	
	Trig Street	8130072	Access Road	Port Hedland	0.00	0.66	0.66	1	0.66	
	Moorambine Street	8130071	Access Road	Port Hedland	0.00	0.89	0.89	1	0.89	
	Cajarina Road	8130099	Local Distributor	Port Hedland	0.00	1.03	1.03	]	1.03	
	Kangan Way	8130263	Access Road	Port Hedland	0.00	0.07	0.07	]	0.07	
	Harwell Way	8130105	Access Road	Port Hedland	0.00	1.65	1.65	]	1.65	
	Pinga Street	8130061	Access Road	Port Hedland	0.00	2.21	2.21	]	2.21	
	Yanana Street	8130069	Access Road	Port Hedland	0.00	0.52	0.52	]	0.52	

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	Peawah Street	8130068	Access Road	Port Hedland	0.00	0.63	0.63	]	0.63	
	Schillaman Street	8130070	Access Road	Port Hedland	0.00	0.39	0.39		0.39	
WELSH DRIVE	Welsh Drive	8120172	Local Distributor	East Pilbara Shire	0.00	3.97	3.97	3.97	3.97	
WOODBROOK ROAD	Woodbrook Road	8140007	Access Road	Karratha	0.00	16.61	16.61	16.61	16.61	
WOODIE WOODIE ROAD	Woodie Woodie Road	8120263	Access Road	East Pilbara Shire	0.00	35.82	35.82	35.82	35.82	
YANDEYARRA ROAD	Yandeyarra Road	8130395	Access Road	Port Hedland	0.00	37.87	37.87	37.87		37.87
							3177.56	3177.56	370.27	2807.43
			TOTAL KMS SLGR FOR R	RG = 3177.56 KMS						<u> </u>
			TOTAL SLKS RRG	I		=	3177.56	3177.56	370.27	2807.43

Sealed / Unsealed SLKS not provided where blank

### APPENDIX 2: GUIDELINES AND CRITERIA FOR THE IDENTIFICATION OF SIGNIFICANT LOCAL GOVERNMENT ROADS WITH REGIONAL IMPORTANCE



# **ROADS** 2040

We're working for Western Australia.

GUIDELINES AND CRITERIA for the Identification of Significant Local Government Roads with Regional Importance

# **Document Control**

Owner	ROAD CLASSIFICATION WORKING GROUP
Custodian	ROAD CLASSIFICATION MANAGER
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### Amendments

k	Revision Number	Revision Date	Description of Key Changes	Section / Page No.

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# Background

The *Regional Strategies for Significant Local Government Roads with Regional Importance* short title *ROADS 2040* are documented lists of regionally significant Local Government roads for each Regional Road Group (RRG) and the development strategies for them.

The first editions, , were released during 1997 and 1998 and were an initiative of the 1992 Memorandum of Understanding between the State Government and the Western Australian Local Government Association (WALGA), then known as the Western Australian Municipal Association (WAMA). This document will inform the compilation of the latest version, which will supersede Roads 2030 published in 2013.

Local Governments (via RRGs) work collaboratively to review and update the current list of Significant Local Roads to produce this next strategy. This provides an agreed, strategic approach to the allocation of limited funding across the extensive road network within the state of Western Australia. Only projects on local roads included in ROADS 2040 will be eligible for *Road Project Grant* funding under the latest *State Roads Funds to Local Government Agreement*. These Guidelines will be included in the annexure of each document.

ROADS 2040 documents for each RRG are available on the WALGA website.

Note - A separate Main Roads process is required to amend any Road Hierarchy classification. Enquiries regarding ROADS 2040, Road Hierarchy or other road classification process should be addressed to the Road Classification Manager at <u>RoadClassification@mainroads.wa.gov.au</u>

# **Intent of these Guidelines**

The intent of these guidelines and criteria is to assist Regional Road Groups to identify Significant Local Government Roads. Ideally, a consistent set of criteria will ensure equity for all Local Governments throughout the state when selecting roads to be added to ROADS 2040 However, a flexible arrangement is required to address the many geographical and other variations across the State, especially in the more remote and sparsely populated areas. To that end, the Regional Road Groups have autonomy to identify those circumstances where it is felt a road should be added, even if only one of the Criteria is met.

# **Strategy Principles**

ROADS 2040 are an investment-planning tool to assist with allocating funding in a systematic fashion to achieve long-term significant planning goals for the Region and State through improvement of road infrastructure. These documents are created for each Regional Road Group from the lists of *Significant Local Government Roads with Regional Importance*.

#### **Roads Maintenance**

Funds to implement the *ROADS 2040* improvement strategy are sourced from the Road Project Grants (Category 1) of the State Road Funds to Local Government Agreement (SRFLGA). State funding to assist with general maintenance needs of the local road network are typically allocated as Direct Grants.

The Office of the Auditor General (OAG) defines maintenance under two main types:

**Reactive maintenance** includes sealing cracks and fixing potholes, cleaning up verges, road markings and signs. It is short term and needs to be done on a day-to-day basis to keep roads safe and serviceable,

Planned maintenance is more costly but has long-term benefits. It includes:

- Resurfacing of roads in response to aging, traffic wear and to prevent water damage, bridge repairs and replacing road markings;
- Rebuilding to restore the structure of roads and bridges. That may include strengthening the roads and bridges, correcting the shape of the road or minor changes in road width.

#### **Routine Maintenance**

Reactive maintenance is often referred to as Routine Maintenance. Routine maintenance work is not to be included in strategies for individual roads within *ROADS 2040* as it is assumed such activities will always be undertaken on roads and thus do not need to be referred to in improvement strategies. Furthermore, by its nature, routine maintenance does not improve the road.

#### **Periodic Maintenance**

Planned maintenance is more often referred to as Periodic Maintenance.

The need for major periodic maintenance works can be included in strategies for individual roads in *ROADS 2040*. This includes works such as reseals and re-sheeting, rehabilitation, shoulder reconditioning and other heavy maintenance type works.

The potential need for inclusion of any periodic heavy maintenance work on a road must be documented as part of the overall strategy for the road.

#### Reconstruction

Reconstruction of roads is not maintenance as it replaces the existing asset with a new one, typically with a design life of 40 years. Where appropriate, the need to undertake reconstruction of all or part of a road is to be included in strategies for individual roads within *ROADS 2040*.

#### **Roads Forming Routes**

The terms "road" and "road/route" are used throughout this document. In some instances, a number of roads may be combined to create a route that is given an appropriate name for the purposes of identification. In the context of this document, "road" may include routes which have more than one individual road and an identifying route name.

# **ROADS 2040 Amendments**

Should a RRG agree to seek an amendment to the endorsed *ROADS 2040* this must be documented on the attached *Road Justification and Development Strategy Submission Form.* After approval by the RRG, the application must be sent to the Road Classification Manager (RCM) at Main Roads (<u>RoadClassification@mainroads.wa.gov.au</u>) who will assess the application and provide advice to SAC concerning alignment of the road/route with the criteria. If the RCM determines that the road does not meet the criteria, the RCM will refer the application back to the RRG requesting further investigation. The RCM will then submit the application to the *State Road Funds to Local Government Advisory Committee* (SAC) for endorsement. If endorsed, the Road Classification Manager shall update the relevant *ROADS 2040* documents (including on-line documents).

If an affected road/route crosses into an adjoining Region, then agreement should be reached with the adjoining RRG on the proposed change and both RRGs must apply for the amendments submitting copies of the approved forms from the adjoining RRG with the application.

Roads forming part of a larger Route should be shown as forming part of the Route and should be listed under the Route details on the *Road Justification and Development Strategy Submission Form*.

## Criteria

For any road/route proposed for inclusion in ROADS 2040, it shall meet <u>two (2)</u> of these criteria (from at least two of the five sections) unless motivated under section 5: **REGIONAL ROAD GROUP CRITERIA** 

#### **CRITERIA FOR SIGNIFICANT LOCAL ROADS/ROUTES**

#### **SECTION 1: NETWORK / SIGNIFICANT**

- Roads/routes connecting areas or towns of significance to the Region
- A road/route that is a Regional or Inter Regional Route providing the main connection between this region and other regions, in the State and interstate. Note – "region" does not refer specifically to Main Roads or RRG Regions in this instance refers to a generic region of significance i.e. tourist region, mining region, major town or centre etc.
- A road/route that connects **major transport terminals** or connects a **major transport terminal** to a major route. Examples of a **Major Transport Terminal include** Bulk Storage facilities, Container yards, Rail or Air terminals and other terminals that generate a significant freight movement.
- A road/route that serves a **major resource or industrial site.** Such as mine sites, abattoirs, stock yards etc.
- A road/route providing access to **significant institutions or regional community service centres**. Such as schools, hospitals etc.
- A road/route that provides access to a remote community (including Aboriginal communities), OR a road that is the only land access between a remote community (including Aboriginal communities) and at least one town centre.
- URBAN ROADS A road (or section of a road) which is the main connector to a significant hub e.g. industrial area, port facility, airport, major shopping centre or activity centre. A road (or section of a road) which connects two rural routes/roads qualifying as Significant Local Government Roads through a townsite via the most direct and/or suitable route (e.g. a heavy vehicle bypass). This is only for roads that do not form part of another significant route/road.

#### SECTION 2: ROAD FUNCTION/FREIGHT

- RURAL ROADS ONLY A **Major Route** that performs a Regional Distributor function as shown in the Road Hierarchy.
- URBAN ROADS ONLY A road that is a Local Distributor or higher category in the Road Hierarchy.
- RURAL ROADS ONLY A road that forms part of the Restricted Access Vehicle notice network 2 or above.
- URBAN ROADS ONLY A road that forms part of the **Restricted Access Vehicle notice** network 4 or above.
- A road used for hauling grain from an off rail bin to a railhead OR is included in a network such as the <u>Secondary Road Freight Network Map</u>. (Follow link and see page 24).

#### **SECTION 3: TRAFFIC VOLUME**

 Has a PCU adjusted traffic seasonal ADT count (see the attached table) of greater than 200. To ensure the traffic figures represent seasonal demand, traffic counts should show the high demand during the peak season. This should be taken over 6 to 8 weeks during the peak activity period

(PCU = Passenger Car Unit. ADT = Average Daily Traffic)

 URBAN ROADS ONLY- has a PCU adjusted traffic count (see the attached table) of over 10% of the town or city's current population OR a minimum 200 PCU.

#### **SECTION 4: TOURISM**

• Roads that provide access to tourist attractions or recreation areas of State or regional significance, OR Roads that form part of a State tourist drive or way. The Regional Road Group can also determine that a road is a significant Tourist Route.

#### SECTION 5: REGIONAL ROAD GROUP CRITERIA

• The Regional Road Group (RRG) may allow the submission of a road/route only meeting one criteria if it feels that the road/route in their opinion has merit for consideration as a Significant Local Government Road. The RRG must show why they consider the road/route as being significant.

#### **OTHER CONSIDERATIONS**

Parallel routes should be avoided. However, this is not to be a determining factor to reject an application if the Local Government and RRG approve the proximity of a parallel route being appropriately warranted.

#### DEFINITIONS

**Regional Route –** Shall be defined as a road that provides a connection between inter – regional routes (State Roads) or between inter – regional routes (State Roads) and areas or towns of significant population.

**Major Route –** A road that provides both regional and inter-regional access and is a Regional Distributor in the Western Australian Road Hierarchy.

Urban Road – A road mainly located within a built up area of a town or city.

#### **PCU CONVERSION**

The table below adjusts the AADT count to show approximate equivalent volumes of Passenger Car Units on the roads within Western Australia.

Austroads Class	Max Length in WA.	Passenger Car Unit
1 (1:1)	12.0m	1
2 to 5	14.5m	2.0
6 to 9	20.0m	3.0
10	27.5m	4.0
11	36.5m	6.0
12	53.5m	8.0
Motor cycle	-	0.4
Pedal cycle	-	0.2

Note – this conversion table is for traffic counts of mixed class vehicle types to approximate the counts to equivalent Passenger Car Units and may not be applicable to road design applications

**ONGOING REVIEW AND UPDATE PROCESS** 



#### **USEFUL LINKS**

Town and City populations WA <u>https://www.citypopulation.de/php/australia-westernaustralia.php</u>

ABS population data by region

Aboriginal Community Maps

Dept. Mines, Industry Regulation and Safety Mineral and Petroleum deposits.

Tourist Spot Map WA

Census quick stats data 2016 - Link Here

Secondary Road Freight Network Map

MRWA Traffic Map

RAV Map

Main Roads Portal Mapping

#### CONTACT AT MAIN ROADS:

ROAD Classification Manager - RoadClassification@mainroads.wa.gov.au

Other Enquiries - enquiries@mainroads.wa.gov.au

#### SUBMISSION FORM ROADS 2040

### Significant Local Roads with Regional Importance – Route/Road Justification and Development Strategy

Submission/Assessment Form...... Regional Road Group

**RRG** Determination

Office Use Only

Accepted Rejected

Yes

No

Local Government:

MRWA Road Classification Manager – does the route Yes	No
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Endorsed by SAC. Date	Endorsed by SA	AC. Date	
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**Road Description and Location** 

Road/Route Name: .....

Road Name	Koad	Road Type (LoS)	Start SLK	Finish SLK	Length (kms)	Un sealed (kms)	Sealed (kms)

If Route Name nominated provide details of all roads forming the route otherwise enter details of above road on the first line below Note - Location map MUST be attached

### **Road Justification**

Road Function
Include road hierarchy category, RAV Network No (if applicable) and a comment on how the road makes a positive contribution to the economic and/or social wellbeing of the region and WA as a whole
Road Development Need
Provide details of the road's future use
Road Development Strategy
Provide a brief high level summary for the future development of the road including proposed funding sources (i.e. Road Project Grant, Black Spot)
Criteria Met
List the Criteria items consider to be met against the CRITERIA FOR SIGNIFICANT LOCAL ROADS

### SERVICE LEVELS

#### Type 1 – Unformed Road

(Cleared-flat bladed. Minimum construction. Formation consists of adjacent material)

This type is the first stage development of the road when the alignment is cleared of all vegetation with the running surface constructed from materials in-situ. This type of road allows for light traffic. With minimal drainage provision, the road is prone to closure during periods of heavy rainfall.

#### Type 2 – Formed Road

(Formed (raised) and drained road without imported material or a constructed pavement)

To avoid possible further relocation of the road and the resultant impact on the landscape environment, Type 2 earthworks are constructed using local road-making material and improved drainage control.

#### Type 3 – Gravel Road

(Road construction from imported material of adequate thickness, shaped and drained)

When maintenance costs increase to unacceptable levels or when economic or social benefits are evident, a Type 2 road can be improved by sheeting the surface with suitable gravel material to become a Type 3 road.

#### Type 4 – Sealed Road (6 m Seal Width)

(Sealed with no kerbing)

Sealing is carried out to improve road-user comfort and safety when the road is experiencing higher traffic volumes or when significant numbers of heavy vehicles are required to use a Type 3 road. A Type 3 road is upgraded to Type 4 by building up the residual gravel pavement to full thickness. This is then compacted and sealed.

#### Type 5 – Sealed Road (7 m Seal Width)

This is further development of the Type 4 road with extra seal width being provided to cater for higher traffic volumes and a high proportion of heavy vehicles.

#### Type 6 – Sealed Road (8 – 9 m Seal Width)

This stage represents further development of a Type 4 or Type 5 road with additional seal width being provided as traffic volumes increase to improve safety; reduce maintenance

costs; provide space for a stationary vehicle to stand clear of traffic lanes; and to assist cyclists.

#### Type 7 – Sealed Road with Overtaking Lane

An additional lane is provided on two-laned sealed roads when the traffic volume; proportion of heavy vehicles; and overtaking opportunities on adjoining sections of road cause traffic bunching to occur.

#### Type 8 – Dual Carriageway

An additional carriageway is provided to improve safety and increase the capacity on high volume roads.