

REVIEW OF THE INTEGRATED TRANSPORT PLANS OF THE EDEN DISTRICT MUNICIPALITY

District Integrated Transport Plan 2016 - 2021



Final Report

March 2016







PREPARED BY:
ACE CONSULTING
STURGEON CONSULTING
CONTACT PERSON:
Mr Waseef Allie
Tel No: 021 553 4167



PREPARED FOR:
Department of Transport & Public Works
Eden District Municipality
CONTACT PERSON:
Mr Hans Ottervanger
hans@edendm.co.za

PROJECT TEAM

	<u>Company</u>	<u>Contact</u>	<u>Email</u>
	Eden District Municipality	Hans Ottervanger	hans@edendm.co.za
	Western Cape Government	Mario Brown	mario.brown@westerncape.gov.za
	ACE Consulting	Waseef Allie Marwaan Taliep	waseef@aceconsulting.co.za marwaan@aceconsulting.co.za
	Sturgeon Consulting	Barend du Preez Gerhard Hitge Sarah Larratt Matthew Rehbock	barend@sturgeonsa.co.za gerhardhitge@mweb.co.za sarah@sturgeonsa.co.za matthew@sturgeonsa.co.za

DOCUMENT CONTROL SHEET



DATE	REPORT STATUS	AUTHORED BY:	APPROVED BY:
March 2016	Final Draft	NAME Gerhard Hitge Pr Eng	NAME Barend du Preez Pr Eng Waseef Allie
		SIGNATURE 	SIGNATURE 
TITLE: INTEGRATED TRANSPORT PLAN REVIEW OF EDEN DISTRICT MUNICIPALITY: DISTRICT INTEGRATED TRANSPORT PLAN (DITP)			
CARRIED OUT BY: Ace Consulting Shop 6, La Savina The Island Club Century City 7441 Tel: +27 21 553 4167 Fax: +27 86 559 5327 Email: waseef@aceconsulting.co.za		COMMISSIONED BY: Eden District Municipality PO Box 12 George 6530 Tel: +27 44 803 1500 Email: hans@edendm.co.za	
SYNOPSIS: This report contains the transport plan for the Eden District Municipality, including six of the Local Municipalities in the area, excluding George Municipality, for the period 2016 to 2021. The plan integrates all transport planning with other sectors of municipal planning, as well as the operational and infrastructure requirements for all modes of transport.			

EXECUTIVE SUMMARY

INTRODUCTION

Ace Consulting was appointed by the Eden District Municipality (Eden) to review their District Integrated Transport Plan (DITP). Eden comprises of seven local municipalities, being Kannaland, Hessequa, Oudtshoorn, Mossel Bay, George, Knysna and Bitou municipalities.

The DITP reflects on the Local Integrated Transport Plans (LITPs) of 6 of the local municipalities within its area of jurisdiction. George Municipality produced a Comprehensive Integrated Transport Plan (CITP) due to having an Integrated Public Transport Network (IPTN), and is excluded from this DITP. However, the DITP considers relevant overlaps with the George CITP.

The transportation system consists of:

- A demand side – the people and goods that need to be transported; and
- A supply side – the transportation system that allows the movements to occur.

The demand side consists of the need for people and goods to be transported from a point of origin to a destination, mainly to achieve economic, institutional and social goals. The supply side consists of the infrastructure, operational elements as well as management and operational systems of the transportation system.

The legislated requirement in terms of the National Land Transport Act (NLTA), (Act 5 of 2009) requires all district municipalities to compile an Integrated Transport Plan (ITP). **The ITP is a specific sector plan that feeds into the Integrated Development Plan (IDP) of the relevant authority.** The ITP also supports and forms part of the development of the Provincial Land Transport Framework (PLTF).

The ITP gives a summary of the current transport situation, identifies specific needs, and assesses these in terms of the strategic informants with a view to identifying those amongst the many potential projects that best address the overall needs of the District. The result is an enabling plan and framework for the development and implementation of all transport related projects and strategies, at both the overarching and at the modal or sector level.

The Municipal Systems Act (Act 32 of 2000) requires that every municipality prepare an Integrated Development Plan (IDP) and that the plan be reviewed annually in accordance with an assessment of its performance measured in terms of Section 41 of the act. The ITP is a specific sector plan that feeds into the IDP and ultimately the ITP supports and forms part of the development of the Provincial Land Transport Framework (PLTF).

This review of the transport plan will serve for the period 2016 to 2021, and should be updated annually to reflect changing circumstances.

This 5-year review of the DITP aims to:

- Revisit the vision and objectives for transport planning in the area, as informed by changes in national and provincial legislation, policies and strategies;
- Determine the status of the transport system in terms of operations, infrastructure and systems;
- Solicit public input through a comprehensive stakeholder consultation process;
- Set the direction for the implementation of transport and related other plans for the following five years.

VISION AND OBJECTIVES

The Transport vision and objectives of the Eden District Municipality and the constituent Local Municipalities are based on the principles outlined by the National, Western Cape Provincial and Local Government. A number of important national government documents have been developed to provide the broad framework within which provincial and local government can implement these policies with important local emphasis and priorities. These documents contain a number of objectives and principles that are relevant to the District and Local Integrated Transport Plans. As a sector of the development planning process, Transport must, above all, contribute to the vision of the Eden Municipality.

The Integrated Development Plan for the Eden District Municipality (IDP 2012-2017) adopted the following Vision and Mission statement:

Vision

“Eden, a future empowered through excellence”

Mission

The Eden District Municipality, as a category C local authority, strives to deliver on our mandate through:

- Providing strategic leadership and coordination to B-municipalities in the district within our resources available;
- Executing integrated development planning in collaboration with sector departments and service organisations;
- Upholding the principles of good governance in pursuit of excellence as a regional leader in local government.

A number of Strategic Objectives were derived, which translated into direction for transport planning in the region. These focus on reducing the need for fossil fuels, improving access to jobs by extending the catchment area of potential candidates, improving community wellbeing through integrated communities, and providing bulk public transport and NMT infrastructure to facilitate mobility and accessibility.

The directive from the informant documents, including the Eden IDP, result in the following objectives for the Transport System.

Objective 1: Provide Integrated Public Transport Networks (IPTN) in rural regions

Objective 2: Prioritise the provision of public transport services among higher density settlements to improve viability of public transport subsidies

Objective 3: Provide public transport and non-motorised transport (NMT) infrastructure, particularly in larger urban centres

Objective 4: Ensure a safe public transport services

Objective 5: Ensure a well maintained road network

Objective 6: Shift contestable freight from road to rail and prioritise general freight over bulk freight

Objective 7: Create the institutional capacity and administrative environment to perform the functions required of the municipality by the NLTA

TRANSPORT REGISTER

The Transport Register provides a “snapshot” view of the current transport network and operations within Eden. It describes the existing state and quality of transport provision in Eden.

Socio-Economic assessment and Geography

Virtually all towns in Eden, with the exception of Knysna, are physically growing with the continual provision of new residential units at very low density on the periphery of towns. The existing minibus and bus services need to be supported, maintained and upgraded to ensure that public transport provides the key linkages between towns and communities in Eden district. However, the current trend to plan and develop low density housing, severely undermines the efficiency of public transport operations. This leads to the low levels of service typically found in rural areas, and result in the desperate need for subsidies. Subsidising a structurally inefficient transport system is not sustainable. This can only be addressed in the long term through integrated, higher density settlement planning with mixed land uses that reduces travel distances and increases passenger numbers per vehicle.

While the Human Development Index of the provincial and national average, the level of poverty is still very high. Since about 80% of households cannot or should not prioritise the purchase of a car above other expenses, transport planning should focus on non-motorised and public transport first.

The substantial growth rate of the area means that special attention should be given to the planning of service delivery, and especially appropriate transport infrastructure and services.

Transport infrastructure

While virtually all movement in the district is road-based, there is some freight moved by rail. In addition to the fairly extensive rail network, the district is home to the Port at Mossel Bay, and two commercial airports at George and Plettenberg Bay.

The N2 and R62 are two major corridors traversing Eden in an east-west direction. They are major distributors of people, goods and services from Eden to other regions in the Western Cape as well as the Eastern Cape and beyond. The N9 and N12 serve as the key routes from Eden to the north of the country.

Transport modes and demand

Walking plays a significant role in travelling to work in Eden. Interventions should aim to facilitate the ease of walking, introducing and enabling the much greater use of bicycles for commute trips. It is possible that many of the car trips are made over short distances that would be more sustainably made by walking or cycling, at very little increase in travel time, and to a great saving in cost and environmental damage.

The reasons for the very low use of bicycles should be interrogated. Barriers to a substantial increase in this mode of travel should be removed as a priority. Such interventions are likely to have benefits to household expenditure, municipal budgets and environmental impact.

Private transport accounts for less than a third of movement in the District, while NMT is the only viable mode for at least half the population.

Commercial buses play a significant role in long distance trips passing through the district, but there is no passenger rail service in the area. The local public transport services in most areas allow people to access destinations in their local area or settlement to which they travel regularly but which cannot be reached on foot or by other non-motorised means.

Western Cape Department of Education contracts about 61 operators to provide learner transport services to almost 7 000 learners along 81 routes in the Eden district.

Domestic flights are operated from both George and more recently, Plettenberg Bay Airports. Flights are currently limited to Cape Town and Johannesburg.

The GoGeorge integrated public transport system has, anecdotally as data is not yet available, already improved access for many residents and tourists in George. An investigation for a similar service in Mossel Bay revealed that it is unlikely to be viable or sustainable if implemented in the near future. However, the Provincial Public Transport Institutional Framework (PPTIF) is likely to enable innovative alternatives to improve public transport services beyond George in a shorter timeframe, once approved.

Road-based freight traffic is problematic in many towns in the district, especially as truck volumes are steadily increasing. Rail freight volumes are very low.

The main travel modes used by workers obtained from the National Household Travel Survey (NHTS) for Eden, which was undertaken in 2013 shows public transport mode share is high at 40.9%, while car use is relatively low at 26.3%. NMT trips accounted for about 33% of trips, according to the survey.

Minibus Taxi Industry

The minibus taxi industry appears stable. Demand appears to grow in line with population and economic growth in each town. However, the data collection methodology only allows for revealed demand to be assessed. It is recommended that a household travel survey be conducted as part of a future update of the Eden ITP.

The revealed demand for commuter type trips appears low between all towns. Wilderness to George and Dysselsdorp to Oudtshoorn are possible exceptions, and warrant more detailed assessment. A more detailed assessment of the demand for public transport services should be conducted along the N2 between George and Wilderness, to determine whether a higher frequency scheduled service should be supported by the municipality. The assessment should also determine whether the potential benefits could be achieved in a financially and economically viable manner.

While historically the acceptable way of developing the industry, increasing ranks with growing demand is becoming problematic in larger towns, where rank space now compete with more productive land uses. However, this is still more efficient than the space taken by parking or around buildings. It is recommended though, that public transport become route based with convenient pick-up and drop-off facilities in business areas, while vehicles hold on less valuable land.

It has become apparent that many operations occur outside the ranks, especially by illegal operators who do not have permits, or operating licences to enter ranks. The illegal operators are often acknowledged to play an important role in peak demand periods when the number of legal operators cannot cope with demand. However, the market is too quiet in the off peak to sustain the illegal operators within the industry.

Municipal traffic officials do not have a record of the Operating Licences issued in their areas of jurisdiction. This makes law enforcement and commenting on new applications very difficult.

Several road authorities operate within the district and the road network is categorised in terms of the relevant authorities responsible for their upgrade and maintenance. The road authorities are: the South African National Roads Agency Limited (SANRAL), the Road Infrastructure Branch of the Western Cape Government, and the relevant Local Municipalities (LM). The District Municipality is not a roads authority, despite having input into various road schemes. The road network can be classified according urban or

rural roads, surfaced or gravel roads, or according to its functional hierarchy or ownership.

OPERATING LICENSING STRATEGY

Each Local Municipality within the Eden District Municipality completed a substantive review of their Operating Licensing Strategies (OLS) during 2012. These documents should be read in conjunction with this DITP.

SUMMARY OF PPTIF

The primary aim with the development of a Provincial Public Transport Institutional Framework (PPTIF) is to address the key constraints to improving both public and non-motorised transport in the non-Metro areas of the Western Cape, through the development of a refined strategic approach for achieving progress. The document, which was in final draft form at the completion of this ITP, recommends that an incremental approach be applied to prioritising public transport and NMT improvements in non-metropolitan area.

TRANSPORT NEEDS ASSESSMENT

The transport needs for Eden stems from an assessment of where the status quo deviates from the objectives for the transport system. Issues include transport operations (safety, learner transport, levels of service, etc.), infrastructure, non-motorised transport and institutional matters.

The framework for evaluation of the need for transport in Eden is the nine objectives, which are; denser settlement patterns, Integrated Public Transport Networks (IPTN), public transport and NMT infrastructure, safe public transport services, well maintained road network, shift from road to rail, establish international standard port and logistics, efficient movement of freight and sound institutional and administrative environment.

SUMMARY OF LOCAL INTEGRATED TRANSPORT PLANS

This section provides a summary of the project proposals that address the specific needs identified in each of the six local municipalities that comprise Eden District.

Bitou Local Municipality

- A walkway is required from Kurland to the shops near the N2 due to narrow road and increasing traffic volumes to elephant, monkey and bird sanctuaries – however, private land separates houses from road – This needs a specific intervention.
- There is a need to improve taxi embayments/ stops at both access roads to Green Valley.
- A study should be conducted into the upgrading of the Plettenberg Bay rank with enough holding space for minibus taxis. Currently there is an illegal overflow onto neighbouring open space around the rank. A discussion took place around separating holding function from main rank, to a position where land is less valuable. However the taxi association have reservations about feasibility of this, and reliability of drivers to adhere to operational requirements.

- A request for embayments along Marine Way, preferably outside of trafficked lanes. This will require a separate study.
- A NMT link is urgently required between Green Valley and primary school at “Stofpad”; this was previously not built as Department of Education considered closing the school. The link requires a boardwalk and pedestrian bridge as some part of route is prone to flooding in the winter months.
- Recreational cyclists have identified a need for a cycling lane along R340 between Wittedrift and N2 (along Keurbooms River)
- Limited cycling out of Kwanokuthula – reportedly mostly by foreigners living in the area.
- NMT facility needed along Piesang Valley Road; also need to deal with shortcut routes over private land that will be blocked when these erven develop.
- A truck stop is been being made available by a landowner at the filling station in The Craggs. The aim is to attract trucks to the stop by providing safe overnight facilities and to avoid them making use of other open land nearer to Plettenberg Bay.

Knysna Local Municipality

- Extension of Cycle path along George Rex Drive towards The Heads. The existing path is commonly used by recreational cyclists but ends shortly after Vigilance Drive.
- The informal settlements of Hornlee and Concordia are within walking and cycling distance from Knysna city centre. Sidewalks should/ are been constructed to facilitate NMT.
- Currently there is a problem with trucks that overnight in Sedgefield. An overnight truck facility could be introduced at the Market area which is held west of the town. This will support the idea of introducing overnight facilities along the N2 for trucks to make use of as there is currently located at The Craggs in Bitou and Albertinia in Kannaland.
- The re-activation of the railway line between Knysna and George could help alleviate freight that is currently transported via road between the two towns. Investigations have been conducted but the cost to upgrade the line has been prohibitive to date.
- A lighter train technology, such as the Diaz Rail in Mossel Bay or a tram, which could operate a service between Knysna and Sedgefield for both tourists and locals.
- Due the steep incline on the way to Hornlee and Concordia it is suggested that the possibility of using the abandoned rail reserve as a cycle route be explored.

Mossel Bay Local Municipality

- Adequate NMT facilities should be required along Louis Fourie. This stretch of road is used regularly by users walking to and from shops between the informal locations and Mossel Bay CBD.
- Steep grades to harbour area cause trucks to make use of lower order/smaller roads. A road freight route study should be conducted to find the easiest way possible for trucks to arrive and depart from their locations.

- Long distance bus operators make use of the Voorbaai Shell as an official stop on their routes between Cape Town/ Port Elizabeth and Cape Town/ Durban. Upgrades to the filling station or surrounding area could see the area becoming more user friendly with dedicated embayments for various operators.
- An informal overnight truck stop is located at Kantey Hall near the petroleum depot. A suitable location should be established to provide a formal overnight facility to prevent trucks from staying overnight within the CBD.

Hessequa Local Municipality

- The new metered taxi operations, operates between towns. Some of these taxis are private and some are operating illegally.
- The speed bump strategy needs to be re-looked at using an aerial strategy in order to place the speed bumps at the correct places.
- Since the rail infrastructure connects to all the towns, a way to use the rail services in order to dispose of waste should be looked at, which would transport the waste to the waste disposal site in Mossel Bay.
- A truck stop facility is required to prevent the road damages and traffic congestions caused by the trucks parking in illegal bays and road sides which are not designed for truck loads.

Kannaland Local Municipality

Due to severe capacity constraints it was not possible to obtain a meeting or any indication of specific needs from the municipality.

Oudtshoorn Local Municipality

- Oudtshoorn taxi rank appears overcrowded and needs a more detailed assessment determine the causes of overcrowding.
- A bus facility pick-up point is needed to prevent the long distance buses from using the Pick 'n Pay parking lot as a pick up point.
- A truck stop facility is needed. Previously, small islands were built in parking areas to prevent trucks from stopping in the parking areas. These trucks cause damage to roads, kerbs and parking. The trucks stop opposite the Ford garage on the way to Dysselsdorp and opposite the KFC.

FUNDING STRATEGY AND SUMMARY OF PROPOSALS / PROGRAMMES

The District Municipality acts as an agent of the Western Cape Government to maintain its road network. Apart from this it has a limited, if not uncertain, mandate for transport planning. Revenue related to transport does not extend beyond the roads maintenance function. It is proposed that Eden District Municipality embark on the projects list over the five-year period of this plan.

The projects proposed for Eden District Municipality were chosen to minimise capital and operational costs. The projects should enjoy equal priority in the short term, with subsequent priority increasing with the ability to move forward on particular projects.

PUBLIC STAKEHOLDER CONSULTATION

The Local Municipalities within the Eden District underwent a public participation process towards the end of 2015 to review their Integrated Development Plan (IDP). This process included an opportunity for the public to comment on transport related matters. Instead of repeating a public consultation process for transport alone, discussions were held between the drafting team and the officials in each municipality responsible for transport. These meetings provided an efficient and fruitful platform to discuss transport matters in the context of the then just-completed IDP process.

The outcomes of these discussions are incorporated in the respective LITPs as well as in this document.

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LIST OF ABBREVIATIONS

CPTR	-	Current Public Transport Record
DM	-	District Municipality
DoT	-	Department of Transport
DSDF	-	District Spatial Development Framework
DITP	-	District Integrated Transport Plan
GIS	-	Geographic Information System
HGV	-	Heavy Goods Vehicle
IDP	-	Integrated Development Plan
IIP	-	Integrated Infrastructure Plan
ITP	-	Integrated Transport Plan
LDV	-	Light delivery vehicle (bakkies)
LITP	-	Local Integrated Transport Plan
LM	-	Local Municipality
LOS	-	Level of Service
MBT	-	Minibus taxi
NHTS	-	National Household Travel Survey
NLTIS	-	National Land Transport Information System
NLTA	-	National Land Transport Act (Act No 5 of 2009)
NMT	-	Non-motorised transport
OLS	-	Operating Licensing Strategy
PLTF	-	Provincial Land Transport Framework
PRASA	-	Passenger Rail Agency of South Africa
PRE	-	Provincial Regulatory Entity
PSP	-	Provincial Strategic Plan
RMS	-	Road Management System
SDF	-	Spatial Development Framework
TFR	-	Transnet Freight Rail
EDEN	-	Eden District Municipality
WCPG	-	Western Cape Provincial Government

1 INTRODUCTION

1.1 Background

Ace Consulting was appointed by the Eden District Municipality (Eden) to review their District Integrated Transport Plan (DITP). Eden comprises of seven local municipalities, being Kannaland, Hessequa, Oudtshoorn, Mossel Bay, George, Knysna and Bitou municipalities and shows the extent of Eden within the Western Cape. The district covers an area of approximately 23 331 km².

Transportation demand is derived from the need to travel in order to reach economic and social opportunities. It is therefore a support function within the development planning **process and not a goal in itself. Transportation planning does, however, have a crucial impact on the effectiveness of reaching various economic development goals.** In order to plan for a transportation system that will support the other development goals effectively, it is necessary to first understand what the various components of these, and how these interact.

The transportation system consists of:

- A demand side – the people and goods that need to be transported; and
- A supply side – the transportation system that allows the movements to occur.

The demand side consists of the need for people and goods to be transported from a point of origin to a destination, mainly to achieve economic, institutional and social goals. The supply side consists of the infrastructure, operational elements as well as management and operational systems of the transportation system. Integrated planning happen in various dimensions; institutional integration, land use, economic development and transport integration, multi-modal transport services, finance and funding, environmentally sustainable transport and finally coordinated data of high quality.

1.2 Study Area

The Eden municipal area is shown in **Figure 1**, and consists of the following seven local municipalities:

- Kannaland Local Municipality
- Hessequa Local Municipality
- Oudtshoorn Local Municipality
- Mossel Bay Local Municipality
- George Local Municipality
- Knysna Local Municipality
- Bitou Local Municipality

The study area is bound by the Overberg District in the west, Central Karoo in the north and the Eastern Cape to the east. The southern boundary is the coastline interface of approximately 370 km along the Atlantic Ocean.

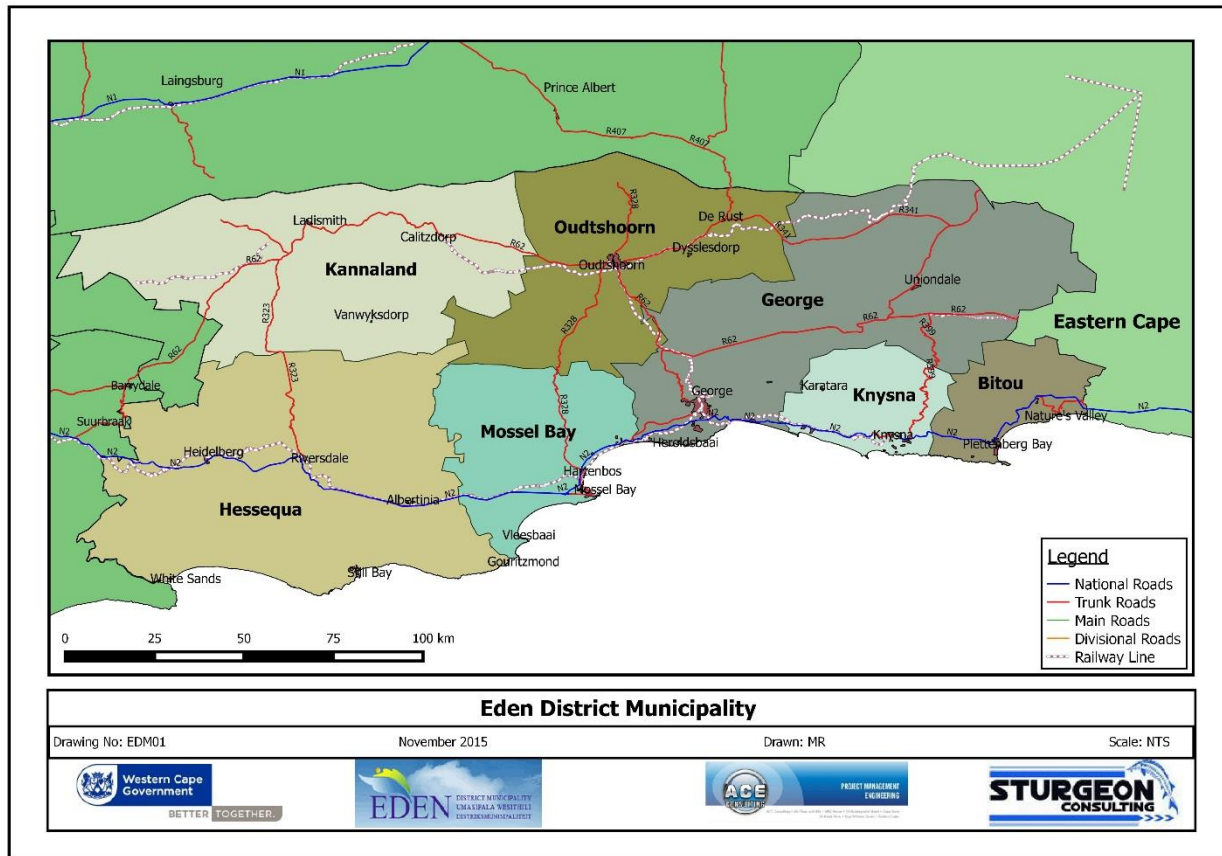


Figure 1: Eden District Municipality with Category B Municipalities

The distances along the N2 and R62 from the western to the eastern boundaries are approximately 310 and 275 km respectively. The distances from the coast to the Karoo boundary range between 110 km in the west (near Stilbaai) to under 80 km in the east (near Knysna). The N2 national road and R62 are important east-west links between the Local Municipalities as well as wit Cape Town in the west, and Port Elizabeth in the east.

1.3 Purpose of the ITP

The legislated requirement in terms of the National Land Transport Act (NLTA), (Act 5 of 2009) requires all district municipalities to compile an Integrated Transport Plan (ITP). **The ITP is a specific sector plan that feeds into the Integrated Development Plan (IDP) of the relevant authority.** The ITP also supports and forms part of the development of the Provincial Land Transport Framework (PLTF).

The planning cost for the preparation of the DITP was obtained from the PGWC. The DITP was prepared in accordance with the Minimum Requirements for the Preparation of an Integrated Transport Plans, as Gazetted.

The DITP reflects on the Local Integrated Transport Plans (LITPs) of 6 of the local municipalities within Eden's area of jurisdiction. George Municipality produced a Comprehensive Integrated Transport Plan (CITP) due to having an Integrated Public Transport Network (IPTN), and is excluded from this DITP. However, the DITP considers relevant overlaps with the George CITP.

An ITP Steering Committee (Steercom) was established to guide the preparation of the DITP and LITP's in the district. The Steercom consisted of representatives from the PGWC, the District Municipality and relevant Local Municipality within each area. The Steercom

also oversaw the preparation of the 6 LITPs, which were completed in parallel to this DITP. Liaison and communication were done during the preparation of each LITP with stakeholders, operators, commuters and the general public, to solicit the public's view on integrated transport throughout Eden district.

Transport infrastructure often takes many years to plan and implement, and once in place, becomes a permanent feature in the geographic, social and economic landscape. Given this permanence, the impacts of transport must be addressed prior to implementation in order to optimise the positive impacts and limiting negative impacts. Transportation is a key factor in serving economic development and population growth, and can act either as a link between or divider of communities. As such, the transport needs of communities must be considered in terms of land use and economic development, necessitating coordination between the different transport modes so that land use and development opportunities are exploited to the maximum.

The ITP is therefore a tool for the identification and prioritisation of transport projects that will promote the vision and goals of the District. The ITP gives a summary of the current transport situation, identifies specific needs, and assesses these in terms of the strategic informants with a view to identifying those amongst the many potential projects that best address the overall needs of the District. The result is an enabling plan and framework for the development and implementation of all transport related projects and strategies, at both the overarching and at the modal or sector level.

The Municipal Systems Act (Act 32 of 2000) requires that every municipality prepare an Integrated Development Plan (IDP) and that the plan be reviewed annually in accordance with an assessment of its performance measured in terms of Section 41 of the act. All projects within a District must be listed in the IDP. The IDP is supported by, and simultaneously gives direction to, the Spatial Development Framework (SDF) and Integrated Transport Plan (ITP) of the region. This means that the ITP proposals that require financial assistance must fall within the ambit of the IDP. The planning framework within which the DITP for Eden area is to work is shown in **Figure 2**.

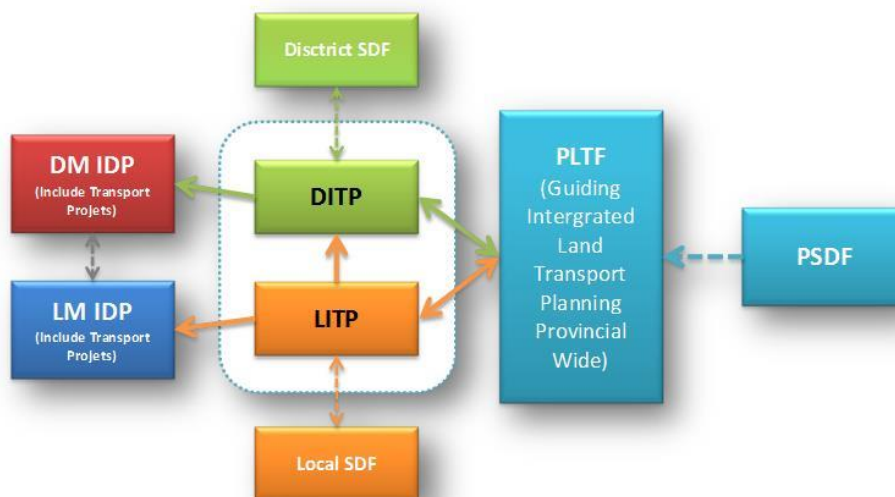


Figure 2: Role of ITP in Local Development Planning

1.3.1 ITP Principles

The following principles guide the development of an Integrated Transport Plan.

- Enhance the effective functioning of cities, towns and rural areas through integrated planning of transport infrastructure and facilities, transport operations, bulk services and public transport services.
- Direct employment opportunities and activities to increase the efficiency of the transport system
- Mixed land use and high-density residential development into high utilisation public transport corridors interconnected through development corridors.
- Plan for the role of appropriate non-motorised forms of transport such as walking and cycling.
- Give higher priority to public transport than private transport by ensuring the provision of adequate public transport services and applying travel demand management measures to discourage private transport.
- Enhance accessibility to public transport services and facilities and transport functionality in the case of persons with disabilities.
- Minimise adverse impacts on the environment.
- Plans must pay due attention to the development of rural areas, and transport for special categories of passengers must receive specific attention.
- Transport plans and programmes must be synchronised with other planning initiatives and must indicate how they are integrated into municipal integrated development plans (IDPs).
- Preparation of transport plan and programmes must include the consultation and participation of interested and affected parties.

1.4 Review and updates of Integrated Transport Plans

It is a requirement of NLTA that the Integrated Transport Plan is updated on an annual basis and substantially reviewed every five years. The previous ITP for Eden District Municipality was prepared in 2010. This substantial review of the transport plan will serve for the period 2016 to 2021, and should be updated annually to reflect changing circumstances.

This 5-year review of the DITP aimed to:

- Revisit the vision and objectives for transport planning in the area, as informed by changes in national and provincial legislation, policies and strategies;
- Determine the status of the transport system in terms of operations, infrastructure and systems;
- Solicit public input through a detailed consultation process with municipal officials charged with transport matters;
- Set the direction for the implementation of transport and related other projects for the following five years.

Annual updates of the ITP seek to ensure that:

- Transport project budgets are updated and aligned with the Districts overall budget;
- Goals, objectives and Key Performance Indicators (KPIs) are assessed and if necessary updated;
- The ITP is aligned with the Integrated Development Plan (IDP);
- Sector plans are coordinated and in line with the overall policies and strategies of the area.

1.5 Report Layout

This document seeks to fulfil the requirements for the DITP, as set out by National Department of Transport, and to provide a tool that is available for politicians, officials and the general public to assist in going forward towards a more prosperous future. This District Integrated Transport Plan review document comprises of the following sections:

- Chapter 1: An introduction to the ITP – its purpose, objectives and structure
- Chapter 2: Transport Visions and Objectives of the Nation, Province and District Municipality
- Chapter 3: Transport Register, a “snapshot” of the transportation system in the region
- Chapter 4: Operating License Strategy for the region, making use of the Current Public Transport Record, provided as a separate document, to identify and establish guidelines for the future issue of operating licenses for bus and minibuss taxi services in the region.
- Chapter 5: Summary of Provincial Public Transport Institutional Framework
- Chapter 6: Transport Needs Assessment, derived from an evaluation of the Transport Register, the vision of the Municipality, and the inputs received from the public participation process. This chapter seeks to parallel the Transport Register in summarising the identified needs.
- Chapter 7: Summary of Local Integrated Transport Plans – emphasis on projects, financial and budgetary issues.
- Chapter 8: Funding Strategy and Summary of Proposals/Programme – comprehensive list of projects with cost estimates, project prioritisation, sources of funding.
- Chapter 9: Summary of the Public and Stakeholder Consultation process

2 VISION AND OBJECTIVES

The Transport vision and objectives of Eden District Municipality (Eden) and the constituent Local Municipalities are based on the principles outlined by the National and Western Cape Government. This chapter also contains Eden's objectives and strategies that support the implementation of the vision.

The transport system should be managed in a sustainable way to remain affordable to its users and to act as an effective support to broader economic development in the region and country. The transport system should be responsive to customer needs and be operated reliably, efficiently and safely in order for users to have confidence in the system as a whole and promote its usage.

2.1 Review of Policies and Documents

An Integrated Transport Plan is the instrument to implement the transport policies of the national and provincial government. A number of important national government documents have been developed to provide the broad framework within which provincial and local government can implement these policies with important local emphasis and priorities. The National Land Transport Strategic Framework and Rural Transport Strategy are examples of national government policy statements. The Western Cape policy direction is expressed in the Provincial Land Transport Framework (PLTF).

The relevant policies and strategic documents which were obtained and reviewed for this update are listed in **Table 1**. These documents, together with the review of the existing conditions in the Eden District Municipality, have informed the transport vision and objectives for the region.

Table 1: Existing Policies and Documentation Relevant to Eden ITP

Report/ Document	Date	EDEN	LM	Province	National
Integrated Transport Plan					
Eden District Municipality ITP	2010	✓			
Eden District Municipality ITP Update	2012	✓			
Eden District Municipality ITP Update	2013	✓			
Technical Transport Planning Guidelines for DITPs	2009				✓
Current Public Transport Record					
Eden DM CPTR	2010	✓			
Operating License Strategy (OLS)	2010	✓			
Public Transport					
Public Transport Action Plan 2007-2010	2007				✓
Public Transport Strategy	2007				✓
Integrated Development Plan					
Eden IDP Review 2012-2016	2014	✓			
Kannaland IDP Review 2012-2017	2014		✓		
Hessequa IDP Review 2012-2017	2014		✓		
Oudtshoorn IDP Review 2012-2017	2014		✓		
Mossel Bay IDP Review 2014-2015	2013		✓		
Knysna IDP Review 2014/2015	2014		✓		
Bitou IDP Review 2012-2017					

Provincial Land Transport Framework Western Cape PLTF (2011/12-2015/16)	2013			✓	
Provincial Spatial Development Framework Western Cape Provincial Spatial Development Framework (PSDF)	2013			✓	
National Land Transport National Land Transport Strategic Framework 2015-2020 National Land Transport Act (5 of 2009)	2015 2009				✓ ✓
Strategic Plans Western Cape Strategy Framework for Growth and Development Transport Strategic Plan Revised 2011/12 – 2013/14 Moving South Africa: The Action Agenda PRASA Western Cape Strategic Plan Provincial Strategic Plan 2014 – 2019 OneCape 2040 Vision	2006 2012 2012 2014 2012			✓ ✓ ✓ ✓	✓ ✓
Transport Infrastructure WC Strategic Infrastructure Plan	2006			✓	
Rural Transport Rural Transport Strategy for South Africa Integrated Sustainable Rural Development Programme	2015 2000				✓ ✓
White Paper Transport for Sustainable Development WC National Transport Policy	2001 1996			✓	✓
Economic Development WC Local Economic Development Plan	1996			✓	
Spatial Development Framework Eden SDF	2009			✓	

These documents contain a number of objectives and principles that are relevant to the District and Local Integrated Transport Plans. The key statements are extracted and discussed for each document.

2.1.1 Provincial Strategic Plan (PSP)

The Provincial Strategic Plan (PSP) 2014 – 2019 constitutes the policy agenda and roadmap to execution of the Western Cape Government. The PSP substitutes the eleven “Provincial Strategic Objectives” (PSO) in the previous plan with five overarching Provincial Strategic Goals (PSGs).

It also confirms the Provincial Vision of “An Open, Opportunity Society for All”. This is a society in which everyone has the chance and the means to use their opportunities in life, and where everyone takes responsibility for using those opportunities. The goals are:

- Strategic Goal 1: Create opportunities for growth and jobs
- Strategic Goal 2: Improve education outcomes and opportunities for youth development
- Strategic Goal 3: Increase wellness, safety and tackle social ills
- Strategic Goal 4: Enable a resilient, sustainable, quality and inclusive living environment
- Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment

The Outcome Indicators of these Strategic Goals that are deemed specifically relevant to transport planning are listed below.

- Growth in GVA and jobs in Tourism, Agri-processing, Oil and Gas
- Retention of learners in schools and other education institutions
- Healthy Communities and workforce
- Improved sustainability, resilience and quality of settlements
- Spatial governance development model

Because of the inextricable link between spatial, land use and transport planning, an efficient transport system depends on effective land use and spatial plans. For example, efficient transport widens the catchment area of skills that are available for jobs. Similarly, education outcomes depend on ease of access for learners to education facilities, and reducing the time spend unproductively by travelling long distances.

Higher density and mixed use settlement development reduce the travel distances, which supports both examples listed here.

2.1.2 National Development Plan

The nine main challenges and approaches to address them, are identified in the National Development Plan (NDP), and shown in **Table 2**. The key objectives from the NDP, and which should be achieved by 2030, are the elimination of income poverty and reduction of inequality.

Table 2: National Development Challenges and Responses

National Development Challenges	Response
Unemployment	Create jobs and livelihoods
Infrastructure poorly located and inadequate	Expand infrastructure
Exclusive spatial patterns	Transform urban and rural spaces
Resource consumptive economy	Transition to a low carbon economy
Poor quality education	Improve education and training
Widespread disease burden and poor services	Provide quality health care
Poor quality public service	Build capable state
Corruption	Fight corruption and increase accountability
Divided society	Nation building

The core challenges relevant to transport are that South Africa's infrastructure is often poorly located, and that we have a very high resources consumption economy. The required response lies in expanding strategic infrastructure, while transitioning to a low-carbon economy.

One of the more efficient ways to achieve this is to reduce the dependence on fossil fuels in the transport system. This is best achieved through more compact settlements and greater mix of land uses to enable public transport, walking and cycling as attractive alternatives to the car.

2.1.3 Rural Transport Strategy for South Africa

The aim of this Strategy is to provide strategic guidance to all the three spheres of government in an ongoing effort to address mobility and access challenges experienced by our rural communities in an integrated, aligned and co-ordinated manner.

The Strategy has two main strategic thrusts:

- Promotion of co-ordinated nodal and linkage development
- Development of a demand responsive, balanced and sustainable rural transport system

It also proposes three programmes of direct relevance to this report:

- Programme B4: Facilitation of transport brokering and special contracting services
- Programme B5: Piloting of combined passenger and freight transport services
- Programme B7: Development of appropriate rural public transport and subsidisation options

2.1.4 OneCape 2040

The OneCape2040 report prioritises six transition areas for the Western Cape. The Ecological Transition (Green Cape) talks directly to transport, as it requires a transition from "Unsustainable, carbon-intensive resource use" to Sustainable, low-carbon resource use. The document further highlights the following role of different agencies:

Local government:

- Create integrated neighbourhoods and upgrade the built environment
- Integrate service planning and provision

Private sector:

- Design and produce settlement solutions that address resource scarcity
- Social value capture

It also promotes the following key transitions:

- Ecological transit in support of sustainable low carbon resource use
- Settlement transition in support of accessible, liveable environments that offer multiple opportunities

The transport system will not only benefit directly when these roles are fulfilled, it will arguably fail if they are not. The current state of the built environment excludes many residents from basic opportunities due to the difficulty of accessing these – either as motorised modes are not affordable to many, or distances are too great for "free" modes like walking and cycling.

2.1.5 Provincial Land Transport Framework (PLTF)

The 2013 Provincial Land Transport Framework (PLTF) contains the following relevant requirements:

- Integrated Public Transport Networks (IPTN) in rural regions
- Safe public transport
- A well maintained road network
- International standard ports and logistics
- Resilience to peak oil

In terms of the hierarchy of policies and plans, the requirements of the PLTF must be implemented through the DITP and LITPs.

2.1.6 Western Cape Green Economy Strategic Framework

This Framework was produced in 2013, and highlights six strategic objectives. The two directly relevant, and one indirectly relevant to transport planning is:

- Become the lowest carbon Province
- Increase usage of low-carbon mobility
- Emerging market leader in resilient, liveable and smart built environment

2.1.7 Provincial Spatial Development Framework (PSDF)

The Western Cape's Provincial Spatial Development Framework (PSDF) was adopted in March 2014. The key transition pertaining to transport planning from the Provincial spatial framework is to move from car dependent neighbourhoods and private mobility to public transport orientation and walkable neighbourhoods. As with other strategies, the move to more sustainable transport is inextricably linked with the move away from low density sprawling settlement that is characterised by carbon-intensive resource use.

The PSDF unambiguously states that the spatial implication of patterns of human settlement developments results in poor accessibility of especially the poor. It is therefore unsustainable and exacerbates inequality, which is what the vision for the Western Cape Province aims to remove.

The PSDF makes the case that it can no longer be business as usual, and accordingly introduces strategies and programmes for systematically changing where and how human settlements are configured and built.

Settlement patterns and the provision of transport infrastructure need to assist in "closing down space" across the Province and within municipalities to improve the affordability and viability of access to services and opportunities. The networks and systems of access (roads, paths and transport services) must always be designed to break down the spatial barriers created by apartheid and make settlements more convenient and pleasant to live in while creating economic opportunities close to where people live.

A priority is the establishment of an access system within and between functional regions. The strengthening of functional linkages and transport connections between rural settlements and regional service centres is also critical to ensure for spatial integration and associated economic resilience at all scales.

The PSDF specifically calls for the following interventions:

- Invest in public transport and non-motorised transport (NMT) infrastructure
- Shift freight from road to rail
- Expand port and industrial infrastructural requirements at Saldanha Bay
- Promote denser settlement patterns to support the transition to public transport, and mixed land use patterns to reduce the need for travel and create walkable neighbourhoods.

2.1.8 Western Cape Infrastructure Framework

This framework calls for a coordinated approach on the following aspects:

- Shift transport to reduce reliance on fossil fuels
- Invest in public transport and non-motorised transport (NMT) infrastructure, particularly in larger urban centres.
- Prioritise general freight rail over bulk freight.
- Shift freight traffic from road to rail along major routes.

2.1.9 Eden Mobility Strategy

The Eden Mobility Strategy was completed in June 2012. The conceptual strategy for improving the access to safe and efficient integrated public transport within Eden is to provide:

- A mixture of service types (routes and schedules) that can best suit the different passenger demand characteristics that are found within the rural and urban areas of Eden
- Appropriate vehicle type to cater for these demands
- Appropriate infrastructure (roads and facilities) and systems to support the services
- Institutional capacity at the appropriate sphere of government to administer the services

The following recommendations were made from the analysis of the available information and guidelines:

- Eden Mobility Strategy proceeds to the next stage of planning which should be a feasibility study utilising the concepts developed within this report applied to passenger demand data that is specifically collected for this purpose (and can then be presented in a manner that complies with the Minimum Requirements for CPTR's)
- The District and Provincial Road Maintenance Programme be prioritised to ensure that roads to be used for public transport are brought up to and kept in good condition and that this programme is included within the next Integrated Public Transport Plan.
- The responsibility for providing, monitoring and funding scholar transport is transferred from the Department of Education to the Department of Transport thereby allowing better use of vehicles
- The Department of Health continues to provide and fund health related transport services through its dedicated HealthNet network
- The Department of Transport be encouraged to continue its project to design an appropriate accessible vehicle for rural areas
- The Department of Energy be encouraged to finalise its review of the Petroleum Act, 1977 and ensure that refineries deliver extra low sulphur fuels by 2017 in accordance with its Discussion Document
- Further discussions are held with PRASA and Transnet to promote the provision and usage of passenger rail within Eden

- The Department of Transport is requested to revise the NLTA to also permit provincial government to become the contracting authority for integrated public transport networks
- The next step, as envisaged by the Department of Transport and Public Works, is to initiate Section 78 (MSA) investigations

Even more than the other strategic documents, this Mobility Strategy is deemed to give important direction to the ITP for Eden.

2.2 Eden Vision and Mission

The Integrated Development Plan for Eden District Municipality (IDP 2012-2016) adopted the following Vision and Mission statement, as well as Strategic Objectives:

Vision

“Eden, a future empowered through excellence”

Elements of vision:

- Eden: Represents the entire jurisdiction of the district, including the seven B-municipalities
- Future: Changed environment, wellbeing of citizens, growth & development
- Empowered: Training & development, education, economic growth, job creation, self-reliance, enabling environment, mentorship, working together, facilitate
- Excellence: Service delivery, customer care, innovation, political stability, integrated planning.

Mission

The Eden District Municipality as a category C local authority strives, to deliver on our mandate through:

- Providing strategic leadership and coordination to B-municipalities in the district within our resources available;
- Executing integrated development planning in collaboration with sector departments and service organisations;
- Upholding the principles of good governance in pursuit of excellence as a regional leader in local government.

Eden Values

Eden District Municipality also ascribe to the eight Batho Pele principles of:

Integrity, Excellence, Inspired, Caring (Ubuntu), Respect and Resourcefulness.

Strategic Goals

The IDP further lists the following 7 Strategic Goals, each with KPI, strategies, projects and joint stakeholders, to fulfil the mission and achieve the vision.

- Healthy and socially stable communities
- Build a capacitated workforce and communities
- Conduct regional bulk infrastructure planning & implement projects, roads maintenance and public transport; manage and develop council fixed assets
- Promote sustainable environmental management and public safety
- Ensure financial viability of the Eden District Municipality
- Promote good governance
- Grow the district economy

2.3 Transport Objectives

The legislative and policy direction provided by the strategic documents discussed above should guide the objectives for Transport in the Eden District in the short to medium term.

The guidance can be summarised as:

- reducing the need for fossil fuels,
- improving access to jobs by extending the catchment area of potential candidates,
- improving community wellbeing through integrated communities, and
- providing bulk public transport and NMT infrastructure to facilitate mobility and accessibility.

The directives from the informant documents are formulated as the following objectives for the Transport System in Eden.

Objective 1: Provide Integrated Public Transport Networks (IPTN) in rural regions

Objective 2: Prioritise the provision of public transport services among higher density settlements to improve viability of public transport subsidies

Objective 3: Provide public transport and non-motorised transport (NMT) infrastructure, particularly in larger urban centres

Objective 4: Ensure a safe public transport services

Objective 5: Ensure a well maintained road network

Objective 6: Shift contestable freight from road to rail and prioritise general freight over bulk freight

Objective 7: Create the institutional capacity and administrative environment to perform the functions required of the municipality by the NLTA

3 TRANSPORT REGISTER

This chapter provides a “snapshot” view of the current transport network and operations within Eden District Municipality. It describes the existing state and quality of transport provision in Eden. The chapter opens with a description of the land use, demographic and economic background of the study area that informs the nature of the demand for travel.

This follows with a description of the current public transport supply and demand (revealed) and the infrastructure in place to facilitate the current demand. NMT is discussed separately from the public transport section as it serves both as feeder and stand-alone mode of transport.

The next section is a description of the demand and of freight movement in and through the area. Thereafter follows a description of the road network and prevailing traffic demand, including public transport, light vehicles and freight.

The chapter then contains a description of tourist demand, including air transport, as well as special categories of passengers. The chapter concludes with a description of the institutional structures governing transport, and the most recent budget allocations to various components of the transport system in the area.

3.1 Spatial, Demographic and Economic Context

Transport planning and spatial planning are like two sides of a coin, as changes in one has direct impact on the other. Understanding the spatial environment is therefore crucial to understanding the status of the transport environment. In addition, the demographic and socio-economic characteristics of the population have an impact on number and type of trips made in the area.

3.1.1 Spatial Context

The spatial context of the Eden municipal area is described in the Eden Spatial Development Framework (SDF), which was approved in 2009. In terms of the new SPLUMA legislation (Act 16 of 2013), the onus for spatial planning rests with the local authorities. This reduces the responsibility and power of the District Municipality to influence spatial planning in the region. Instead, guidance for spatial planning should be taken from the Provincial Spatial Development Framework (PSDF), which was adopted in March 2014, and was introduced in Chapter 2.

Many policy documents place a strong emphasis on infill development at higher density to reduce the demand for motorised transport. Globally, people find walking or cycling to their destination acceptable for distances up to around 1 and 4 kilometre respectively depending on incline grades, weather, etc. In the South African context, especially in rural areas, many people are willing to walk well in excess of 5 km to their destinations. Cycling would improve the condition for many of those walking these distances, but has proven an unpopular mode across the country.

The majority of Eden towns are still small enough for most people to walk and cycle for most of their daily trips. However, with the addition of new residential neighbourhoods on the periphery of towns, increasingly more people will be living outside of the 4km radius, which will discourage walking and cycling. These residents will become dependent on cars and taxis, which not only place a significant burden on poorer households, but it also prevents moving to a low-carbon economy. Another real problem with a car dependent town is the need for parking space, which is already beginning to threaten the larger towns in the District.

Virtually all towns in Eden are physically growing with the continual provision of new residential units at very low density on the periphery of towns. **Table 3** gives an indication of the distance from the centre of towns to the furthest houses at the moment. Krantshoek outside Plettenberg Bay is clearly an isolated community as it is not only outside walking range of the town centre, but the available road is not wide enough to provide for safe walking.

Other residential areas exceeding a comfortable walking distance to most residents include Knysna, Mossel Bay, Kwanokuthula in Plettenberg Bay and Oudtshoorn. An analysis of the distances to various directions from the town centres of main towns is expanded in the Local Integrated Transport Plan (LITP) of each Local Municipal area.

Table 3: Distances from Edge to Centre of Main Towns

Town		Distance "as crow flies" (km)	Distance by road (km)
Knysna Concordia		6.2	7.4
Sedgefield		2.7	3.9
Hornlee		1.7	2.7
Mossel Bay Kwanonqaba		7.2	8.0
Plettenberg Bay	Krantshoek	8.7	13
	Kwanokuthula	5.9	7.4
Kurland		<1.4	<1.4
Albertinia		<1.8	<1.8
Riversdale		2.2	2.6
Ladismith		1.9	2.3
Calitzdorp		2.1	2.3
Oudtshoorn		5.2	6.5

3.1.2 Demography of Eden

With a population of just under 575 000 persons, Eden is home to about 10% of the population in the Western Cape. **Table 4** shows the population in Eden per municipal area for 2001 and 2011 and the estimated population in 2013, as well as the proportion each municipality contributes to the total. **Table 5** shows the effective annual growth rates over the two periods.

Table 4: Population Growth of Local Municipalities in EDEN

Municipality	2001	% of Total	2011	% of Total	2013 Projection	% of Total
Kannaland	23 969	5,44%	24 767	4,31%	26 284	4,33%
Hessequa	44 120	10,02%	52 642	9,17%	55 862	9,20%
Mossel Bay	71 495	16,24%	89 430	15,57%	95 195	15,68%
George	135 405	30,75%	193 672	33,73%	206 751	34,05%
Oudtshoorn	84 694	19,23%	95 933	16,71%	99 602	16,40%
Knysna	51 466	11,69%	68 659	11,96%	70 925	11,68%
Bitou	29 183	6,63%	49 162	8,56%	52 541	8,65%
Eden DM	440 332	100,00%	574 265	100,00%	607 160	100,00%

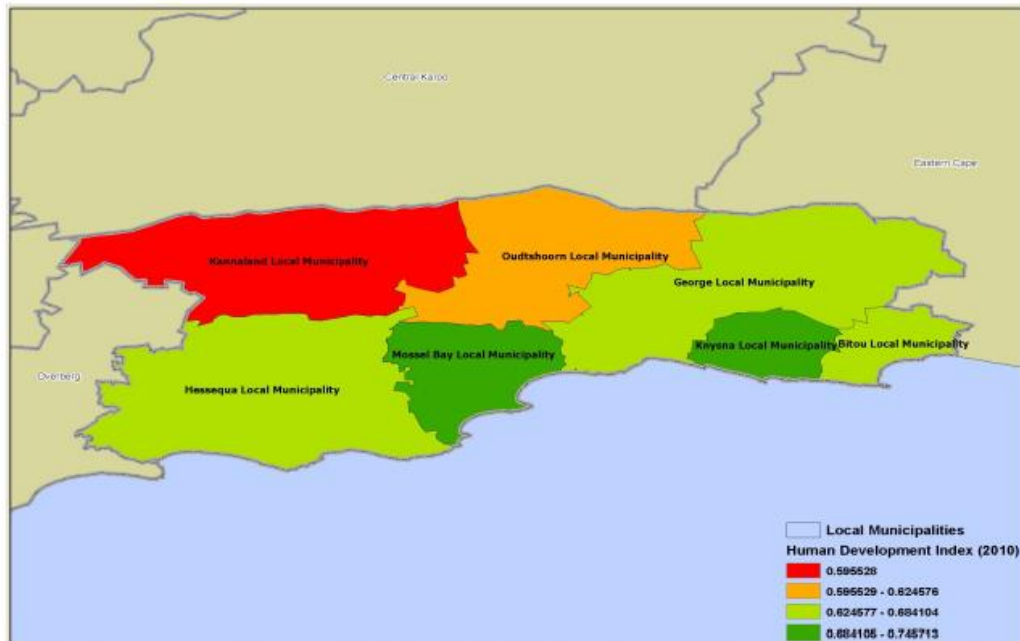
Source: Statistics South Africa (Regional Development Profile – Eden District, 2013)

Table 5: Annualised Growth Rate of Local Municipalities in EDEN

Municipality	Growth	
	(2001-2011)	(2011-2013)
Kannaland	1,11%	3,02%
Hessequa	1,78%	3,02%
Mossel Bay	2,30%	3,17%
George	3,65%	3,33%
Oudtshoorn	1,25%	1,89%
Knysna	2,92%	1,64%
Bitou	5,35%	3,38%
Eden DM	2,62%	2,78%

Kannaland's population has virtually stagnated, while Bitou added two thirds of its 2001 population over the same period. The overall growth of 30.4% is just higher than the provincial growth of 28.7%, and almost double the national growth of 15.5% over the same period.

The Human Development Index (HDI) of the Eden population (illustrated in **Figure 3**), which is a composite and relative index based on measures of life expectancy, literacy and income, is at 0.69. This is slightly higher than the other districts in the province, and slightly lower than that of Cape Town at 0.74. The HDI of Mossel Bay (0.75) and Knysna (0.73) are highest in the province, while Kannaland is lowest at 0.6.



Source: Global Insight Regional Explorer, 2011. Map Created by E-Innovations, WC Department of the Premier

Figure 3: Human Development Index in Eden in 2010

A continuation of this significant population growth puts pressure on resources and infrastructure in the majority of municipalities. As shown above, continuing with historic spatial patterns of single dwellings per erf, will place significant pressure on the demand for transport services. Meeting this demand by motorised modes will significantly increase consumption of fossil fuels and the associated emissions. Not meeting the demand for travel will exacerbate social exclusion, and the increase the negative impact this will have on society over time.

The population breakdown by race, gender and age within Eden in 2011 is shown in **Table 6**.

Table 6: Population Breakdown by Race, Gender & Age in EDEN

Race (Proportions)					Gender (proportions)		Age Group (Proportions)			
African	Coloured	Indian	White	Other	Male	Female	0-14	15-39	40-64	65+
16.4%	66.6%	0.6%	15.7%	0.8%	49.7%	50.3%	25.5%	42.2%	26.3%	6.0%

Statistics South Africa (Census 2011)

The age composition of the districts population one can see that Eden district has a fairly youthful population composition, with 67.7% of the district population below the age of 40. The youthful population of the district has long term development implications for the district in that the population growth, transport facilities will place increased pressure on facilities such as schools, health facilities, housing and sustainable job opportunities. The working age population (15-64) accounted for 68.5% of the district's population.

The high proportion of youth and young employable persons in the area highlight that access to both education and employment, especially skills development and vocational training, are of great importance. These should be prioritised in the provision of transport planning, but also in land use planning.

Table 7 shows the percentage trips by learners to travel to education facilities with different modes of transport. Walking is by far the predominant mode for learners to travel. Cycling is notoriously absent as a mode of travel.

Table 7: Main Mode of Travel by Learners in EDEN

Municipality	Percentage of trips							Approx. Number of Trips
	Train	Bus	Taxi	Car/Bakkie Driver	Car/Bakkie Passenger	Walk	Other	
Bitou	*	15,4	15,4	*	7,7	61,5	*	13 000
George	*	7,5	7,5	*	15,1	67,9	3,8	53 000
Hessequa	*	9,1	*	*	*	81,8	*	11 000
Kannaland	*	16,7	*	*	*	83,3	*	6 000
Knysna	*	15,8	10,5	*	10,5	63,2	*	19 000
Mossel Bay	*	20,0	6,7	*	16,7	53,3	*	30 000
Oudtshoorn	*	6,1	6,1	*	9,1	78,8	*	33 000
Eden	*	10,9	7,3	*	12,1	67,9	1,8	156 000

*Numbers too small to provide reliable estimates

Stats SA NHTS, 2013

3.1.3 Economic Context of Eden

An analysis of employment in the Eden District was compiled for 2007 based on national community surveys. It showed a labour force of about 229 000 people with an unemployment rate of 18.5%. This is below the Western Cape average of 22.2%, and even further below the national average of 25.5% at the same time. It is likely that the higher rate of employment drives some of the population growth. Unemployment was the highest in the 25 to 34 age group, at 34.5%, which is the age group with young families. The inability to afford motorised transport means that many people find it difficult to search for employment, but can also not reach basic services.

Table 8 shows the distribution of household income across the local municipalities. According to the information in the table, 55.3% of the Eden population lived below the poverty line (area marked in red). It is also significant that 87.9% of households earn below R12 800 per month (R153 600 per annum). This is important as these households should not need to prioritise buying a car for access, above other basic needs such as health and education.

There is a strong correlation between income and car use in South Africa, mainly due to the rapid growth of the car as popular mode in a time when the country's population experienced rapid expansion. The apartheid legacy ensured that

Table 8: Household Income of Eden Municipalities

	Eden	Hessequa	Mossel Bay	George	Oudtshoorn	Bitou	Knysna	Kannalnd
No income	4.1%	5.1%	4.2%	4.5%	1.9%	4.8%	5.1%	1.9%
R1-R4800	2.3%	1.5%	2.7%	2.6%	1.1%	2.5%	2.8%	1.3%
R4801-R9600	5.8%	3.3%	6.9%	7.1%	2.8%	7.1%	4.7%	4.6%
R9601-R19200	19.0%	17.3%	23.1%	16.6%	17.3%	25.9%	14.8%	20.7%
R19201-R38400	24.1%	22.3%	22.5%	20.9%	27.1%	24.8%	26.0%	31.7%
R38401-R76800	20.2%	25.9%	19.2%	19.8%	24.4%	19.6%	16.2%	15.1%
R76801-R153600	12.4%	11.3%	11.1%	15.3%	13.6%	5.1%	13.9%	7.5%
R153601-R307200	7.9%	7.9%	6.8%	8.5%	8.7%	4.0%	11.9%	2.2%
R307201-R614400	2.7%	3.7%	2.5%	3.3%	2.1%	2.2%	3.2%	0.1%
R614401-R1228800	0.8%	0.2%	0.3%	0.9%	0.4%	3.1%	0.7%	0.1%
R1228801-R2457600	0.5%	1.1%	0.7%	0.2%	0.5%	0.9%	0.0%	0.5%
R2457601 +	0.3%	0.4%	0.0%	0.4%	0.0%	0.0%	0.6%	

(Source: StatsSA, Community Survey data,2007)

Table 9 shows the percentage trips by workers to travel to place of work through different modes of transport and it shows that walking plays a significant role in travelling to work in Eden. Given the size and walkability of most towns in the area, walking plays a relatively small part as a main mode to work. The exception is Kannaland, and to some extent Oudtshoorn, where affordability probably prevents more trips by car and taxi. In Kannaland, more than 60% of households earn less than R3 200 per month, and more than 80% earn below R12 800.

It is presumed that "Other" trips include some cycling, but this need to be verified independently.

Table 9: Main Mode of Travel to Work in EDEN

Municipality	Percentage of trips							Approx. Number of Trips
	Train	Bus	Taxi	Car/Bakkie Driver	Car/Bakkie Passenger	Walk	Other	
Bitou	*	*	28,8	33,1	15,4	21,2	*	13 000
George	*	*	18,3	22	19,2	32,6	7,3	61 000
Hessequa	*	10,6	13,9	4,4	24,7	42,4	4,0	15 000
Kannaland	*	*	*	15	12,1	60,9	*	4 000
Knysna	*	*	18,4	37,1	16,4	27,3	*	27 000
Mossel Bay	*	*	39,1	15,1	25,3	19,9	*	34 000
Oudtshoorn	*	*	22,5	19,5	10,3	42,0	4,7	29 000
Eden	*	1,5	23,0	21,8	18,5	31,6	3,6	183 000

*Numbers too small to provide reliable estimates

Stats SA NHTS, 2013

3.1.4 Key Social, Spatial and Economic Issues

The following summary and analysis follows from the above data:

- While the average walking distance is not known, the size of most towns lends themselves to walking and cycling.
- While the Human Development Index of the provincial and national average, the level of poverty is still very high. Since about 80% of households cannot or should not prioritise the purchase of a car above other expenses, transport planning should focus on non-motorised and public transport first.
- The substantial growth rate of the area means that special attention should be given to the planning of service delivery, and especially appropriate transport infrastructure and services.
- The reasons for the very low use of bicycles should be interrogated. Barriers to a substantial increase in this mode of travel should be removed as a priority. Such interventions are likely to have benefits to household expenditure, municipal budgets and environmental impact.

3.2 Public Transport Services

3.2.1 Introduction

Public Transport plays an important role across the Eden Municipal Area (Eden). All services are road based, despite rail infrastructure that connects nearly all the larger towns in the area. As alluded to in the previous chapter, public transport should not necessarily be aimed at providing motorised transport for all without a car, at least not when non-motorised modes (NMT) like walking and cycling would be appropriate. In this context, there should rather be a drive to encourage more private trips to be made by NMT instead.

Public transport is not currently subsidised in the study area, with the GoGeorge services falling outside the scope of Eden ITP process. The exception is Learner Transport Service that is provided mostly in rural area.

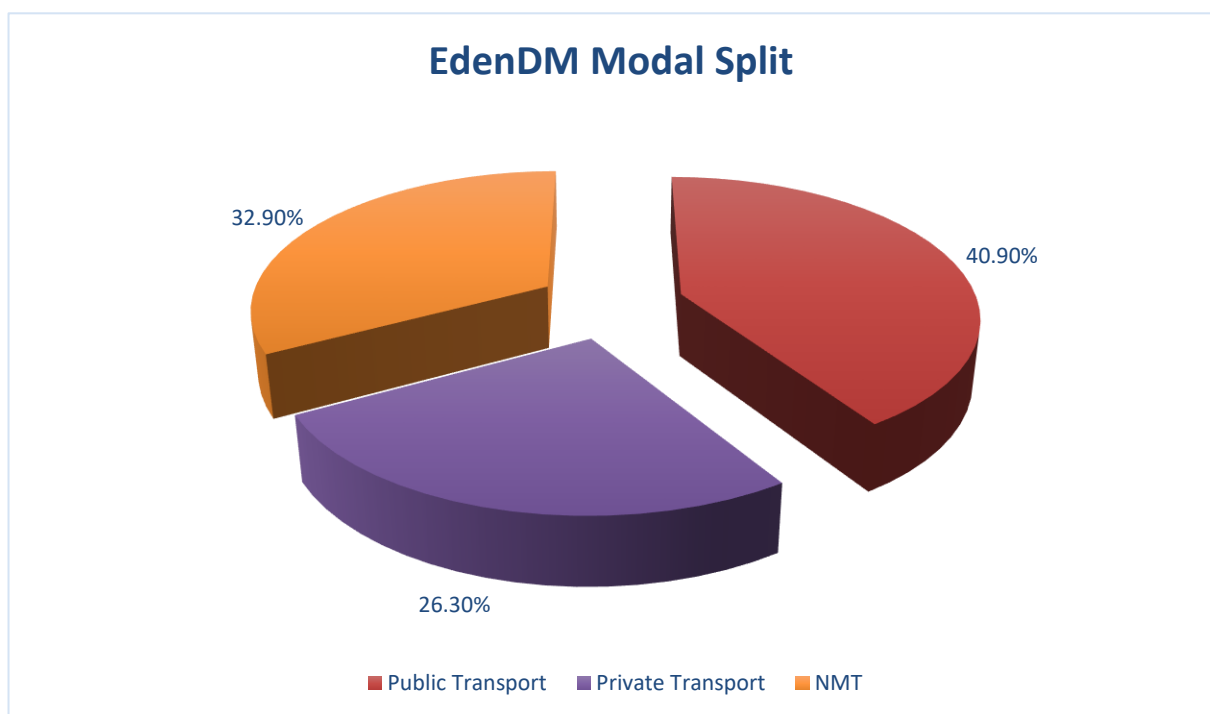
The objective of a transport plan should be to describe when and where public transport services should be encouraged, what regulation is required to ensure adequate levels of service to the public, while being economically and financially viable to the operators. In this context, the planning authority should aim to subsidise services where the social and economic value to be gained exceeds the subsidy amount. This unfortunately, still depends on financial affordability of subsidies, even when justified from a socio-economic point of view.

The CPTR provides a detailed assessment of routes, facilities, vehicles and passenger flows, as well as operational characteristics of the public transport system at present. The analysis of the information of the CPTR forms the basis for the Operating Licensing Strategy (OLS), which must be implemented to ensure that the public transport system develops in the desired manner. Both the CPTR and OLS documents must be read in conjunction with this DITP for Eden.

3.2.2 Overview of Demand

Generally speaking, most of the larger towns and settlements in Eden are self-sufficient, providing all of the necessary services and activities mentioned above. This in turn promotes the use of non-motorised transport (NMT) modes. As a result, daily movement between these destinations and the residential areas in or adjacent to the town occurs. The same cannot be said for the smaller settlements or outlying areas, as these destinations are not all located in the local settlement, but rather in larger settlements in the same local municipality.

Figure 4 summarises the main travel modes used by workers obtained from the National Household Travel Survey (NHTS) for Eden, which was undertaken in 2013. Public transport at **40.9%** was recorded to have the highest share of the transport market in Eden. NMT (and “other modes”) had the second highest usage at **32.9%** with private transport taking up the remaining **26.3%**.



Source: Data adapted from NHTS, 2013

Figure 4: Public Transport Modal Split for EDEN

Of the public transport trips, 86% are made in minibus taxis, with very few trips by bus. While the NHTS recorded that almost 3% of trips are made by train, this should be seen as circumspect since now passenger rail service operate at present.

3.2.3 Minibus Taxi Services

3.2.3.1 Minibus Taxi Industry

The predominance of the minibus taxi industry is primarily due to the flexibility of the taxi industry to adapt to passenger demand in rural areas and small towns. In addition, the short distances and low volume of demand result in formal scheduled services being

unaffordable. The minibus taxi services operate predominantly out of the larger towns, where formal ranks and services have been established.

Maps of all the known Minibus taxi routes are shown in the CPTR document and Local Area Transport Plans (LITPs). **Table 10** shows the Taxi Associations operating in Eden, together with the contact persona and number of registered vehicles in each association.

Table 10: Taxi Associations operating in Eden

Local Municipality	Taxi Association	Contact	No. of Registered Vehicles
Bitou	Plettenberg Bay Taxi Organisation	Mr A. Pika	24
	Uncedo Taxi Association	Mr M.E. Nocezo	122
	USTA	Mr E.N. Lose	
Knysna	Knysna Taxi Association	Mr Roy Petersen	65
	Garden Route Taxi Association	Mr Hennie Lawrence	32
	Uncedo Taxi Association	Mr Khulekani Ngubeni	111
Mossel Bay	Coastline Taxi Association	Mr S. Gankies Mrs V. Hendriks	13
	Uncedo Taxi Association	Mr B. Mahlathini Mr K. Nteta	75
	MOBTA	Mr Prince Mr T. Lethoba	152
Hessequa	Riversdale Taxi Association	Mr I. De Jager	
Oudtshoorn	Norwich Taxi Association	Mr Prince Mr T. Lethoba	25
	Protea Taxi Association	Mr Jones	34
	Uncedo Taxi Association	Mr Mayo	29
	Unity Taxi Association	Mr Stander	17
	Swartberg Taxi Association	Mr Parlee	19
Kannaland	Ladismith-Zoar Taxi Association	Mr B. Parson	29
		Mr A. Hekandien	

The municipal law enforcement departments do not have access to information about operating licenses in their areas. This makes both planning, but also effective enforcement of public transport, very difficult.

In order to capture the extent of operations, the guidelines for the preparation of an ITP requires that surveys be conducted to observe the revealed demand in an area. The data described in this ITP consists of rank counts performed during the preparation of the previous ITP, rank counts at three ranks during November 2015 and cordon counts along

major routes, and around larger towns. The extent and full analysis of the data is described in the Current Public Transport Record (CPTR), with a more concise description following here.

3.2.3.2 Rank Operations

The MBT industry operations are rank-based, so that vehicle trips are licensed to begin or end in ranks. However, it has become apparent that many operations occur outside the ranks, especially by illegal operators who do not have permits, or operating licenses to enter ranks. A complex relationship exists between legal and illegal operators, as the illegal operators are often acknowledged to play an important role in peak demand periods when the number of legal operators cannot cope with demand. However, the market is too quiet in the off peak to sustain the illegal operators within the industry. This, however, does not mean that legal and illegal operators live in constant harmony.

Manual surveys were undertaken in major towns at formal ranks in the district. Survey locations were selected based on the previous ITP and discussions with the local municipalities, taxi associations and the provincial traffic department. Telephonic discussions with the various taxi associations were held to inform them of the survey procedure and to obtain their support of the project.

The highest demand for minibus taxi (MBT) services happen on Friday afternoons and Saturdays, especially the last weekend of the month that coincides with people receiving monthly salary payments. Until recently the “All pay day” for pensioners attracted a significant demand for MBT services. However, with the payment of these funds through retail outlets, funds can be withdrawn at any time, so that the “All pay day” is no longer a major trip generator, at least not in larger towns. Most MBTs are not utilised productively during normal weekdays. While long distance taxi services are provided on an *ad hoc* basis, these have become fairly regular and operate daily on a number of routes.

Following from the interviews/discussions conducted with the taxi associations and the available information obtained from the Provincial Regulatory Entity (PRE), it was determined that 484 public transport vehicles are registered with the PRE and legally liable to provide public transport services within Eden.

There are currently 9 formal and operational taxi ranks located within Eden. Most ranks in the EDM are informal in nature and are not equipped with sufficient infrastructure such as benches, shelters and toilet facilities.

Generally, the urban centres attract the majority of taxi passenger movements throughout the week.

Substantial rank surveys were conducted in Eden over the preceding 5 years. It was decided to conduct new surveys at only the three ranks indicated in **Figure 5**.

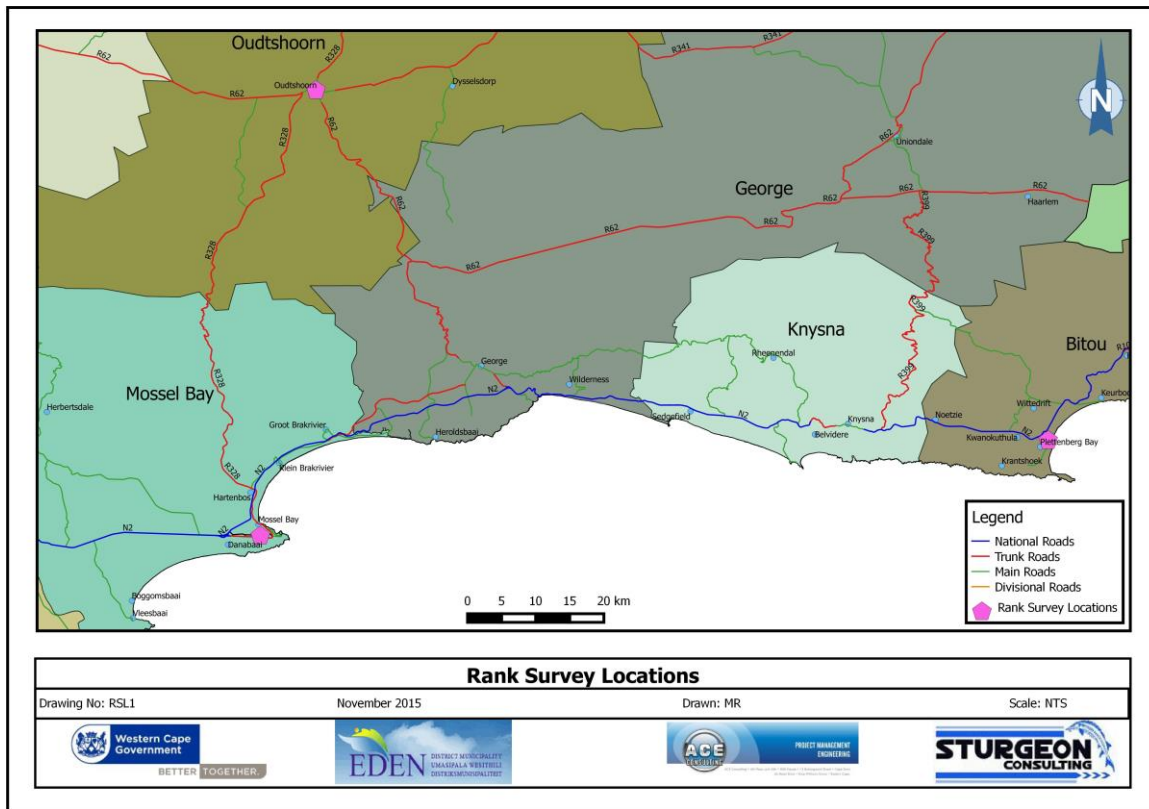


Figure 5: Taxi Ranks Surveyed in November 2015

The volumes from the rank surveys in Plettenberg Bay and Oudtshoorn in 2015 were compared to that from the 2011 surveys. **Table 11** shows that Plettenberg Bay Rank experienced an estimated annualised growth of between 14 and 17% over the 4 year period, while Oudtshoorn appeared to have experienced very little growth, if any. It must be considered that the sample for both 2011 and 2015 is very small and that this conclusion is not statistically verifiable. However, there appears to be a link between the population growth and rand demand. From the analysis of the census data it was seen that the coastal municipalities experienced higher population growth, and that the inland municipalities experienced very little growth between 2001 and 2011.

Table 11: Change in Vehicle Movement in Ranks Surveyed in 2015

	Friday			Saturday		
	2011	2015	% annual change	2011	2015	% annual change
Plettenberg Bay	445	740	14%	400	747	17%
Oudtshoorn	735	1 065	10%	908	750	-5%

3.2.3.3 Rank Operations per Municipal Area

The utilisation of each of the main facilities is shown in Annexure A, and is based on:

- The maximum number of vehicles observed and the time of such observation
- The capacity of the facility, based on the number of demarcated bays or the dimensions of the loading facility.

Data collection of operational information of minibus taxis for each destination/ route from each rank included the following:

- Rank surveys
 - Arrival and departure times of vehicles
 - Number plates of vehicles
 - Number of passengers in vehicle when leaving rank
 - Number of passengers alighting on arrival at rank
 - Number of passengers left in queue when vehicle leaves rank
 - Number of vehicles left in queue when vehicle leaves rank
 - Waiting times (only for larger and busier ranks)

Table 12 provides a summary of the number of registered taxis in each of the local municipalities. A summary of the salient characteristics of operations in each municipality follows.

Table 12: Registered Taxis per B-Municipality in Eden

Local Municipality	No. Registered Vehicles
Bitou	146
Knysna	208
Mossel Bay	240
Hessequa	na
Oudtshoorn	124
Kannaland	29
Total	747

The highest demand for taxis were recorded on a Saturday mid-morning, while the Friday afternoon peak is second largest, especially at the end of the month. Operations during the week are significantly less. Long distance taxi services are provided on an *ad hoc*, on demand basis.

The CPTR and Local Municipal Integrated Transport Plans (LITPs) contain details of the MBT operations in Eden, while a summary is provided here.

Bitou Local Municipality

A rank survey was conducted at the Plettenberg Bay rank during November 2015. There are three formal off-street minibus taxi ranks in the Bitou municipal area; **Plettenberg**

Bay Rank located in Park Lane within the town area, **New Horizons Rank** on Milkwood Road and the **Kwanokuthula Rank** on the corner of Skosana Street and Sishuba Street. The Plettenberg Bay rank has 46 bays, the New Horizons rank has 15 bays and the Kwanokuthula rank has 56 bays.

Kwanokuthula has the most number of routes operating from it, 10 routes. Plettenberg Bay has 9 and New Horizons has 2 routes operating from it.

The Plettenberg Bay rank currently has the highest demand within the LM, **60.1%** and **63.3%** of total passenger demand during the weekday and Saturday, respectively. The overall peak hour passenger demand for the Plettenberg rank as per the data collected is **16:45 to 17:45** on a Friday with a total of **740 passengers** and the peak hour on a Saturday for the rank is **14:00 to 15:00** with a total number of **747** passengers. The total passenger demand through the survey period was **3522** on a Friday (15:00 to 19:00) and **2475** on a Saturday (09:00 to 15:00).

There are currently no bus services for local commuters in the towns within the Bitou Municipality.

There are subsidised learner transport services operating in the Bitou Municipality. Information from the Western Cape Department of Education reports a total of 8 learner transport routes are operational in the LM.

Knysna Local Municipality

The ranks in Knysna were not surveyed during 2015 as no major changes have been observed. Data from the 2011 CPTR Update shows that Knysna LM had 20 POLB routes with 310 licences. Knysna has one formal rank located in the Knysna town on Nelson Street, which has 42 bays. There are three informal collection points at the Sanlam Mall, Hornlee and White Location.

The peak hour passenger demand for the Knysna rank as per the data collected is from **16:00 to 17:00** on a Friday with a total of **1 413 passengers** and the highest peak hour on a Saturday for the rank is **12:00 to 13:00** with a total number of **896** passengers. The route to Bongani (via Concordia) accommodates the largest passenger volumes, at **345** and **228** during the Friday and Saturday peaks, respectively.

There are subsidised learner transport services operating in the Knysna Municipality. Information from the Western Cape Department of Education reports a total of 10 learner transport routes are operational in the LM.

Mossel Bay Local Municipality

A number of changes in minibus taxi operations were observed in Mossel Bay, including: i) a new Shoprite store along Louis Fourie Road that reduced the number of shopping trips into the town centre; ii) new taxi operations behind the new Mikeva store also along Louis Fourie Rd, and iii) a new rank which is nearing completion towards the western edge of the town.

A survey was undertaken behind Mikeva centre opposite the Caltex garage on Waterkant Crescent on Friday 30 October 2015 between 15:00 and 19:00 and Saturday 31 October 2015 between 09:00 and 15:00. Taxi's arriving and departing were recorded along with vehicle registrations. No passenger information was recorded.

During the Friday period, 26 MBTs were recorded and during the Saturday period a total of 99 MBTs were recorded. It appears that this area is only used as a holding location rather than a ranking facility.

While the main rank in Mossel Bay town centre is still the busiest rank, it is possible that the operations may be declining. It is recommended that this be monitored through a survey within the next 2 years.

The peak hour for the Mossel Bay rank was **16:30 to 17:30** on a Friday with a total of **404 passengers** and the peak hour on a Saturday for the rank was **13:00 to 14:00** with a total number of **300** passengers. The Kwanonqaba route accommodated the largest passenger volume, transporting over 85% of the total number of passengers moving through the rank on a Friday and Saturday.

There are subsidised learner transport services operating in the Mossel Bay Municipality. Information from the Western Cape Department of Education reports a total of 9 learner transport routes are operational in the LM.

Hessequa Local Municipality

According to the 2011 CPTR Update, Hessequa LM had 26 POLB routes in total with 114 licences. Hessequa LM has two formal ranks, one located in Riversdale (7 bays) and the other in Heidelberg (4 bays). There are other ranking facilities in Hessequa that are informal with no proper or limited infrastructure. Three informal collection points were located in Melkhoutfontein, Slangrivier and Stillbaai.

The peak hour for the Heidelberg rank was **14:30 to 15:30** on a Friday with a total of **30 passengers per hour** and the peak hour on a Saturday for the rank is around **12:00** with a total number of **90 passengers per hour**. The Heidelberg local routes accommodate the largest passenger volume on a Friday weekday, transporting 70% of the total passengers moving through the rank.

The peak hour for the Riversdale rank as per the data collected is **15:30 to 16:30** on a Friday Weekday with a total of **15 passengers per hour** and the peak hour on a Saturday for the rank is from **10:00 to 11:00** with a total number of **53 passengers per hour**.

There are subsidised learner transport services operating in the Hessequa Municipality. Information from the Western Cape Department of Education reports a total of 24 learner transport routes are operational in the LM.

Oudtshoorn Local Municipality

A rank survey was conducted at the Oudtshoorn rank during November 2015. According to the 2011 CPTR Update, Oudtshoorn LM had 27 POLB routes with an exceptionally large number of 452 licences for local routes and 208 licences for long distance routes. There is only the one formal rank in Oudtshoorn. There are other ranking facilities in Oudtshoorn that are informal with no proper or limited infrastructure. One informal collection point is located in Dysselsdorp.

The peak hour for the Oudtshoorn rank as per the data collected was **17:00 to 18:00** on a Friday with a total of **1 065 passengers per hour** and the peak hour on a Saturday for the rank was between **12:15 to 13:15** with a total number of **690 passengers per hour**. The Bridgeton route accommodate the largest passenger volume on a Friday, transporting 80% of the total passengers moving through the rank and 65% of the total passengers moving through the rank on a Saturday.

There are subsidised learner transport services operating in the Oudtshoorn Municipality. Information from the Western Cape Department of Education reports a total of 17 learner transport routes are operational in the LM and served by 13 learner contracts

Kannaland Local Municipality

According to the 2011 CPTR Update, Kannaland LM had 20 POLB routes in total with 13 licences for local routes. Kannaland LM has one formal rank in Ladismith. There are other ranking facilities in Kannaland that are informal with no proper or limited infrastructure. Three informal collection points are located in Ladismith, Zoar and Calitzdorp.

The peak hourly passenger demand for the Ladismith rank as per the data collected was a total of **96 passengers per hour** on a Saturday. The Zoar informal collection point has the highest peak hour passenger demand on a Saturday (11:00-12:00) with a total of **80 passengers per hour** travelling to Ladismith.

There are subsidised learner transport services operating in the Kannaland Municipality. Information from the Western Cape Department of Education reports a total of 13 learner transport routes are operational in the LM and served by 7 learner contracts. The towns and settlements that use learner transport include Ladismith, Algernynskraal, Dankoord, Hoeko and Van Wyksdorp.

3.2.4 Public Transport operations outside towns

Figure 6 shows the locations where surveys were conducted along major routes between towns. The objectives with selecting these locations were:

1. To determine the extent of longer distance services when compared to the local services in large towns;
2. To determine the demand for more formal schedules along the N2 route, especially as an extension of the GoGeorge service;
3. To determine the extent of illegal operations by comparing the registration numbers to that in the PRE licensing record;

Figure 6, Table 13 and **Table 14** details of the number of Public Transport vehicles observed during the survey, which happened on Thursday, 29 October 2015 from 06:00 to 19:00. It shows the number of public transport vehicles, including both MBTs and buses, commercial and other, but excludes all sedan vehicles.

- On the N2, the lowest volumes were observed at the Vleesbaai intersection west of Mossel Bay. Of these, about half were minibus taxis and half buses. It is presumed that the majority of these vehicles travel to or from Cape Town.
- The number of public transport vehicles was slightly higher at the Groot Brak Interchange, indicating some, but very few trips between Mossel Bay and George.
- The highest number occurred just east of George, which could indicate a reasonable demand towards Wilderness.
- From Wilderness the volume remains more stable up to Plettenberg Bay, and possibly includes more localised trips around towns.
- The data shows clearly that movements were bunched in the peak periods, with fewer vehicles observed during the middle of the day.
- Volumes of public transport vehicles west of Oudtshoorn and to the larger towns of Mossel Bay and George are significantly lower than between towns along the N2.
- The high volume west of Oudtshoorn reflects the movement towards Dysselsdorp and De Rust.

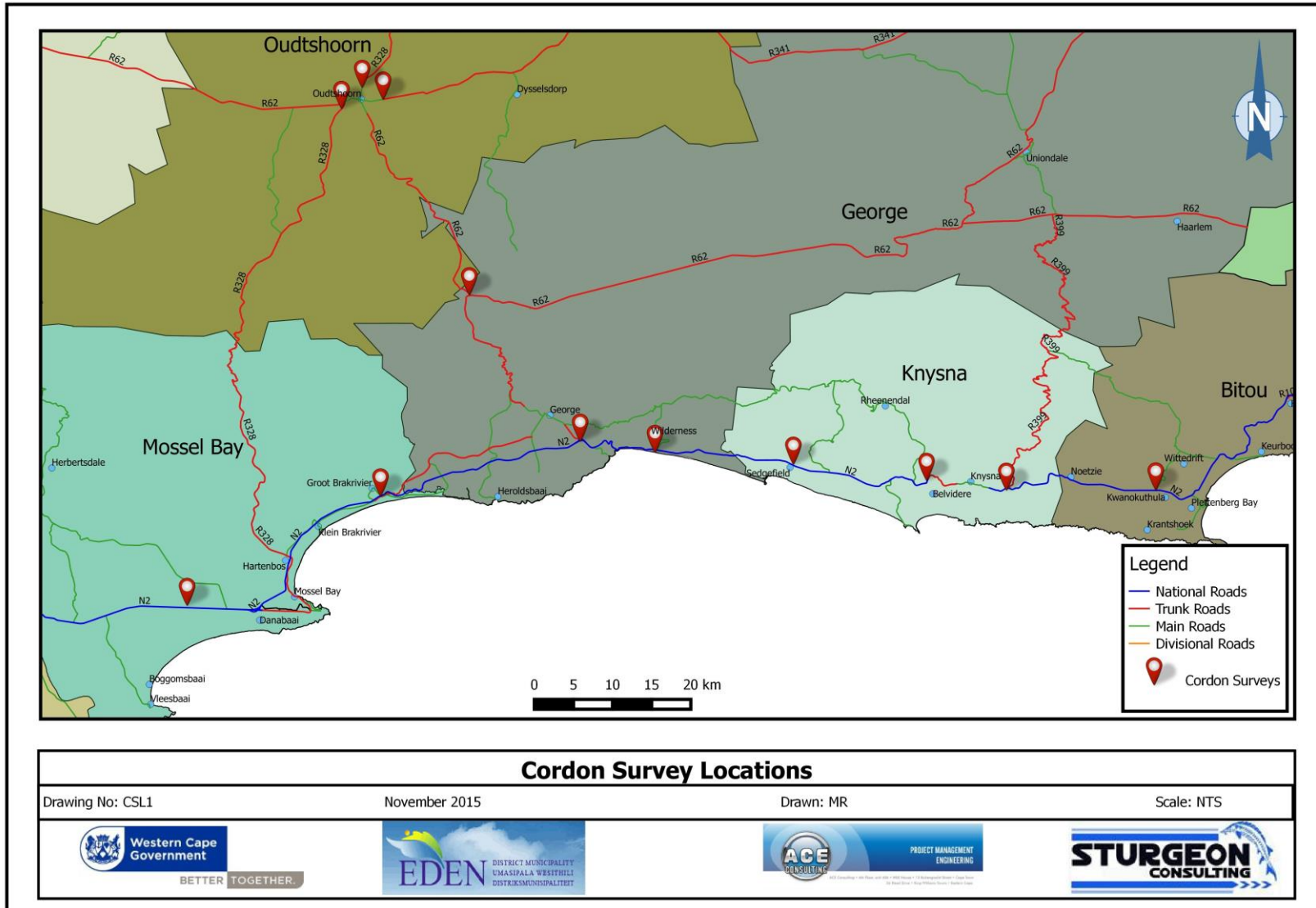


Figure 6: Public Transport Cordon Survey Location

Figure 7: Public Transport Vehicle Volumes along N2 and around Oudtshoorn

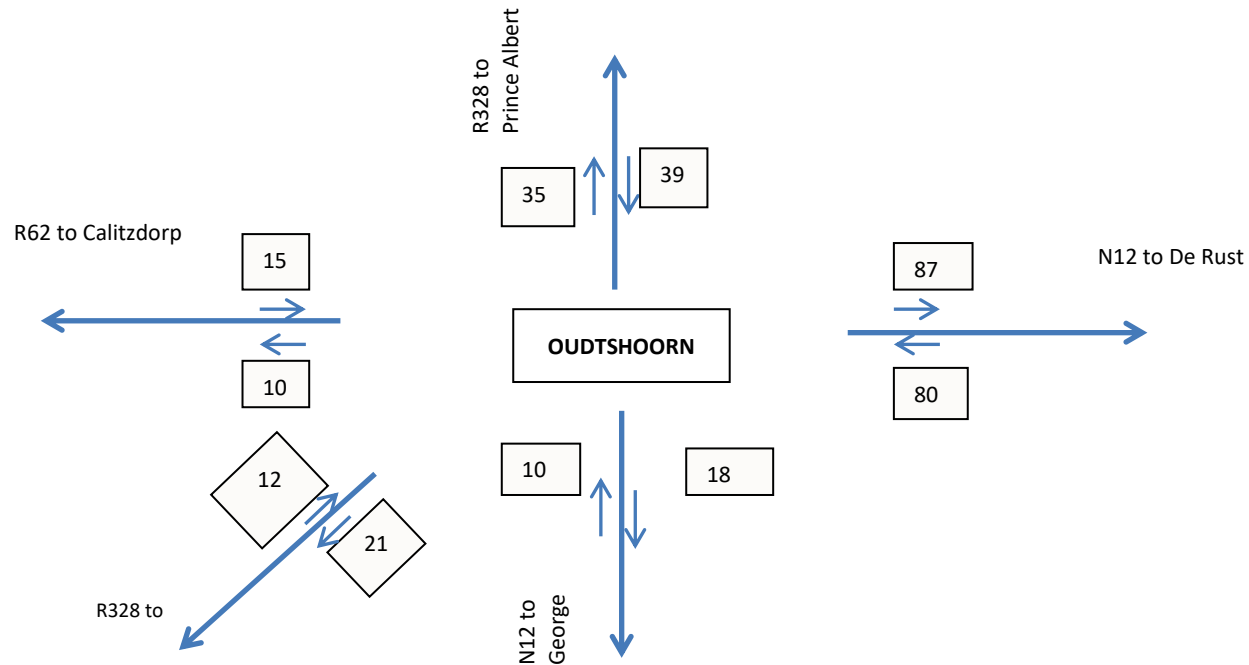
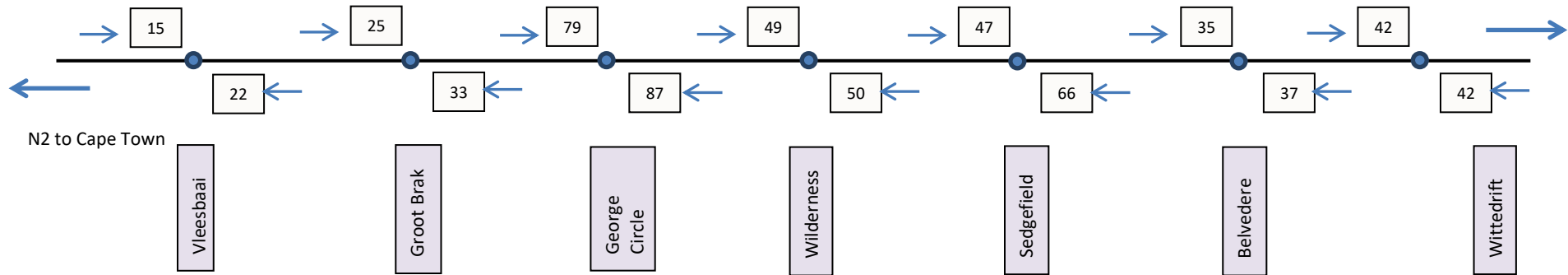


Table 13: Composition of Public Transport Vehicles Counted along N2

	From CT (EB)				To CT (WB)			
	MBT	Bus	All	> Half	MBT	Bus	All	> Half
Vleesbaai	7	8	15	50%	11	11	22	71%
Groot Brak	8	16	24	53%	13	20	33	56%
George Circle	56	23	79	60%	57	23	80	39%
Wilderness	35	14	49	63%	38	12	50	73%
Sedgefield	21	26	47	58%	37	28	65	32%
Belvedere	18	17	35	91%	22	15	37	88%
Wittedrift	24	17	41	54%	20	22	42	44%

	% Bus		Pax Cap		Pax Vol	
	From CT	To CT	From CT	To CT	From CT	To CT
Vleesbaai	53%	50%	585	825	312	413
Groot Brak	67%	61%	1080	1395	720	845
George Circle	29%	29%	2220	2235	646	643
Wilderness	29%	24%	1365	1290	390	310
Sedgefield	55%	43%	1875	2235	1037	963
Belvedere	49%	41%	1290	1230	627	499
Wittedrift	41%	52%	1380	1620	572	849

Table 14: Composition of Public Transport Vehicles Counted around Oudtshoorn

	Towards Oudtshoorn				Away from Oudtshoorn			
	MBT	Bus	All	> Half	MBT	Bus	All	> Half
Calitzdorp	13	2	15	73%	6	4	10	80%
Mossel Bay	7	5	12	67%	11	10	21	67%
Prince Albert	22	17	39	61%	21	14	35	56%
De Rust	67	13	80	43%	79	8	87	73%
George N9/N12	8	2	10	64%	12	6	18	74%

	% Bus		Pax Cap		Pax Vol	
	From Oudts	To Oudts	From Oudts	To Oudts	From Oudts	To Oudts
Calitzdorp	13%	40%	315	330	42	132
Mossel Bay	42%	48%	405	765	169	364
Prince Albert	44%	40%	1350	1155	588	462
De Rust	16%	9%	1785	1665	290	153
George N9/N12	20%	33%	240	540	48	180

3.2.5 Other Transport Services

The long distance bus services that operate through the coastal municipalities are Greyhound, Citiliner, Translux, City to City and Intercape. These services operate between Cape Town and East London, Cape Town and Durban, Cape Town and Port Elizabeth. Buses stop at the modern filling / service stations where there is parking, convenience stores, take away meals, public toilets and public telephones.

During the peak holiday season the buses are reasonably full and during the off-peak season they are approximately 50% utilised. There are no passenger/commuter rail services in the District.

The Diaz Express is a tourist attraction in Mossel Bay which is run on existing Transnet rail network between the seaside resorts of Great Brak River and Mossel Bay. Hartenbos in Mossel Bay serves as the main point of departure with excursions to a variety of attractions including Santos Beach, Little Brak River and Great Brak River.

The route between Hartenbos and Mossel Bay run on a Wednesday and Friday with one trip in each direction departing from Hartenbos at 11:00 and at 15:00 from Mossel Bay on the return trip. Tickets cost R40 per person (one way).

The route between Hartenbos and Maalgate run three times a week (Tuesday, Thursday and Saturday) and departs from Hartenbos station at 10:00 and arrives back at Hartenbos station at 16:00. The cost was R120 per person at the end of 2015.

3.2.6 Summary of key issues

The following key issues were identified and need to be addressed.

- Private transport account for less than a third of movement in the District, while NMT is the only viable mode for at least half the population.
- The minibus taxi industry appears stable. Demand appears to grow in line with population and economic growth in each town.
- Public transport along the N2 has a very high contingent of long-distance and chartered buses.
- The data collection methodology only allows for revealed demand to be assessed. It is recommended that a household travel survey be conducted as part of a future update of the EDEN ITP.
- Municipal traffic officials do not have a record of the Operating Licences issued in their areas of jurisdiction. This makes law enforcement and commenting on new applications very difficult.
- The revealed demand for commuter type trips appears low between all towns. Wilderness to George and Dysselsdorp to Oudtshoorn are possible exceptions, and warrant more detailed assessment.
- A more detailed assessment of the demand for public transport services should be conducted along the N2 between George and Wilderness, to determine whether a higher frequency scheduled service should be supported by the municipality. The assessment should also determine whether the potential benefits could be achieved in a financially and economically viable manner.

3.3 Public Transport Infrastructure

3.3.1 Infrastructure per Local Municipality

This section provides a summary of the infrastructure available public transport users in Eden. More detail is available in the CPTR and LITP reports.

Bitou Local Municipality

The public transport infrastructure is limited to the minibus taxi operations. The maintenance and upgrading of all public transport facilities is the responsibility of the Bitou Municipality. The result of a comprehensive facility audit survey, undertaken in 2011, is shown in the CPTR.

The challenge facing the LMs is mainly the availability of funds to address the priority needs at the public transport facilities. An assessment of the operational requirements at each facility will provide a basis for the consolidation of various facilities, as well as for funding applications for the construction of required facilities and upgrades.

In addition to the formal facilities, Bitou has a number of informal facilities and stopping points that may require upgrades. It remains a challenge to provide adequate shelter at the informal facilities.

The three formally developed minibus taxi facilities in the Bitou Municipality are in Plettenberg Bay, New Horizons and Kwanonkuthula. The **Plettenberg Bay rank** is paved and in a good condition, with toilets in a reasonable condition and a steel roof over a small portion of the rank, there are bays for 46 MBTs. However the rank is running out of holding capacity for vehicles during the off-peak. The Taxi Industry proposed that the rank be upgraded to accommodate more vehicles. Agreement has not been reached with the Council to date. In discussions with some members of the industry, it was proposed that the rank be used primarily as a pick-up and drop-off point, and that holding be done on land with lower value. This would require the implementation of a communication system so the drivers can leave the holding area when the rank demands it.

The **Kwanonkuthula rank** has 56 bays, is in a good condition with a steel roof structure, hawkers facilities, and toilets in a reasonable condition and is fenced with a lockable gate.

The **New Horizons rank** has 15 bays, is paved in a good condition, steel roof structure, offices, toilet facilities in a good condition and electricity.

The long distance bus services that operate through the Bitou Municipality stop in Plettenberg Bay at the Shell Ultra City on Marine Way where there is parking, a convenience store, take a-way, public toilets and public telephones.

Knysna Local Municipality

The public transport infrastructure is mostly confined to that needed for minibus taxi operations, but also includes a rail station. The maintenance and upgrading of MBT facilities is the responsibility of the Knysna Municipality, while the rail station belongs to Transnet. The result of a comprehensive facility audit survey, undertaken in 2011, is shown in the CPTR.

The challenge facing the LMs is mainly the availability of funds to address the priority needs at the public transport facilities. An assessment of the operational requirements at each facility will provide a basis for the consolidation of various facilities, as well as for funding applications for the construction of required facilities and upgrades.

In addition to the formal facilities, Knysna LM has a number of informal facilities and stopping points that may require upgrades. It remains a challenge to provide adequate shelter at the informal facilities. Details of the informal ranks located in the Knysna LM during the site audit are contained in the CPTR.

There is one formally developed minibus taxi facility in the Knysna Municipality located in Knysna. The **Knysna rank** is paved and in a good condition, hawker facilities with toilets in a reasonable condition and a steel roof structure, fenced with lockable gate, electricity and there are bays for 42 MBTs.

The long distance bus services that operate through the Knysna Municipality stop in Knysna at the Toyota Engen Garage on Main Road and at the Waterfront Station on Waterfront Drive where there is parking, a convenience store, public toilets and public telephones.

Mossel Bay Local Municipality

Road-based public transport infrastructure is limited to the minibus taxi operations, while a number of rail stations exist along the currently disused passenger rail line. The maintenance and upgrading of road-based public transport facilities is the responsibility of the Mossel Bay Municipality. The result of a comprehensive facility audit survey, undertaken in 2011, is shown in the CPTR.

The main challenge facing Mossel Bay LM is the availability of funds to address the priority needs at the public transport facilities. In addition to the formal facilities, each LM has a number of informal facilities and stopping points that may require upgrades. It remains a challenge to provide adequate shelter at the informal facilities. Details of the informal ranks located in the Knysna LM during the site audit are contained in the CPTR.

The main formally developed minibus taxi facility in the Mossel Bay Municipality is located in Mossel Bay on Zietsman Street. The **Mossel Bay rank** is paved and in a good condition, with toilets in a reasonable condition and a steel roof structure, electricity and there are bays for 40 MBTs. The Kwanonoqaba informal rank location on Adriaans Avenue has been replaced with a newly constructed formal facility. This is still under construction and is not currently operational but will be a paved rank, with toilets, steel roof structure, electricity and bays for 28 MBTs.

Informal taxi activity was observed at the corner of Mossel Street and Waterkant Crescent.

An informal taxi facility off Dyabaza Street in Kwanonqaba is serves as a long distance rank for taxis. The long distance bus services that operate through the Mossel Bay Municipality stop in Mossel Bay at the Shell Voorbaai Truckport on Louis Fourie Road where there is parking, a convenience store, public toilets and public telephones.

Hessequa Local Municipality

The public transport infrastructure is limited to the minibus taxi operations. The maintenance and upgrading of all public transport facilities is the responsibility of the Hessequa Municipality. The result of a comprehensive facility audit survey, undertaken in 2011, is shown in the CPTR.

The main challenge facing Hessequa LM is the availability of funds to address the priority needs at the public transport facilities. An assessment of the operational requirements at each facility will provide a basis for the consolidation of various facilities, as well as for funding applications for the construction of required facilities and upgrades. In addition to the formal facilities, each LM has a number of informal facilities and stopping points that

may require upgrades. It remains a challenge to provide adequate shelter at the informal facilities.

There are two formally developed minibus taxi ranks in the Hessequa Municipality located in Heidelberg on Niekerk Street and in Riversdale on Mitchell Street. The **Heidelberg rank** is paved and in a good condition, facilities for traders, with toilets in a reasonable condition and sheltered waiting areas, electricity and there are bays for 4 MBTs. The **Riversdale rank** is an on-street facility with sheltered waiting areas and ablutions with marked bays for 7 MBTs

The long distance bus services that operate through the Hessequa Municipality stop in Heidelberg at the Engen One Stop on Eksteen Street where there is parking, a convenience store, take a-way, public toilets and public telephones and another stop at the Siesta Café. There is also a stop in Riversdale at the Shell Motors & Tractors on the N2 as well as at the Saddle's Restaurant. Albertinia also has a stop at the Shell Service Station with all amenities.

Oudtshoorn Local Municipality

The public transport infrastructure is limited to the minibus taxi operations. The maintenance and upgrading of all public transport facilities is the responsibility of the Oudtshoorn Municipality. The result of a comprehensive facility audit survey, undertaken in 2011, is shown in the CPTR.

The main challenge facing Oudtshoorn LM is the availability of funds to address the priority needs at the public transport facilities. An assessment of the operational requirements at each facility will provide a basis for the consolidation of various facilities, as well as for funding applications for the construction of required facilities and upgrades. In addition to the formal facilities, each LM has a number of informal facilities and stopping points that may require upgrades. It remains a challenge to provide adequate shelter at the informal facilities.

In addition to the formal facilities, each LM has a number of informal facilities and stopping points that may require upgrades. It remains a challenge to provide adequate shelter at the informal facilities.

The only formally developed minibus taxi rank in the Municipality is located in Oudtshoorn on Unie Street. The Oudtshoorn long distance rank also operates from this location. The **Oudtshoorn rank** is paved and in a good condition, with toilets in a reasonable condition, public telephones, offices, electricity and sheltered waiting and loading areas and there are bays for 40 MBTs.

The long distance bus services that operate through the Oudtshoorn Municipality stop in Oudtshoorn at the Queen's Riverside Mall on Voortrekker Street (R62) where there is parking, a retail, restaurants, public toilets and public telephones.

Kannaland Local Municipality

The public transport infrastructure is limited to the minibus taxi operations. The maintenance and upgrading of all public transport facilities is the responsibility of the Kannaland Municipality. The result of a comprehensive facility audit survey, undertaken in 2011, is shown in the CPTR.

The main challenge facing Kannaland LM is the availability of funds to address the priority needs at the public transport facilities. An assessment of the operational requirements at each facility will provide a basis for the consolidation of various facilities, as well as for funding applications for the construction of required facilities and upgrades. In addition to the formal facilities, each LM has a number of informal facilities and stopping points that

may require upgrades. It remains a challenge to provide adequate shelter at the informal facilities.

In addition to the formal facility, Kannaland has a number of informal facilities and stopping points that may require upgrades. It remains a challenge to provide adequate shelter at the informal facilities.

The only formally developed minibus taxi rank in the Kannaland Municipality is located in Ladismith on Queen Street. The **Ladismith rank** is paved and in a good condition, with a steel roof structure, public toilets in a reasonable condition, offices and electricity and there are bays for 8 MBTs

There is no facility for long distance commercial buses in the municipal area.

3.3.2 Summary of key issues

The following key issues were identified and need to be addressed.

- Public transport is characterised by rank-based minibus taxi services. While historically the acceptable way of developing the industry, increasing ranks with growing demand is becoming problematic in larger towns, where rank space now compete with more productive land uses. However, this is still more efficient than the space taken by parking or around buildings. It is recommended though, that public transport become route based with convenient pick-up and drop-off facilities in business areas, while vehicles hold on less valuable land.

3.4 Non-motorised Transport

3.4.1 Introduction

The *Non-motorised Transport (NMT) in the Western Cape Draft Strategy, March 2009* defines NMT that “includes all forms of transport that are human- or animal- powered. Examples of NMT for personal mobility include walking, cycling, per-ambulating, rollerblading, skateboarding, bicycle taxiing rickshaw riding and horse riding. There are also NMT modes for transport of goods, including wheel barrows and carts drawn by donkeys, horses or humans. Importantly, NMT modes include wheelchairs, and hence must be a consideration when planning and designing transport related facilities for special needs persons.”

Some examples of NMT for personal mobility within the EDM include:

- Walking;
- Wheelchairs;
- Cycling;
- Skateboarding.

There are also NMT modes for transport of goods which include:

- Wheelbarrows; and
- Carts drawn by horses or donkeys.

NMT is both a mode in its own right and a feeder mode for public transport. The use of NMT as a primary mode depends largely on the affordability and accessibility of public transport as well as travel distance, and therefore should not be seen as a ‘second prize’

mode but rather something to be supported in the right circumstances to create a sustainable system.

In areas where public transport struggles to be viable, alternatives such as NMT should be encouraged, or viability should be improved through land development patterns and a regulatory framework that provides operators more flexible operating conditions.

As part of the 2012 Update of the Eden ITP NMT surveys were undertaken at various locations in each local municipality (as agreed by the LM representatives) over a 12-hour period on a typical weekday. The Eden NMT Master Plan included some suggestions where the need for NMT infrastructure has been identified:

- Along key business routes
- Along main routes
- Along key pedestrian routes
- Links between certain towns

Design should consider whether the intention is to improve comfort underfoot during rainy seasons, reduce heat during summer, reduce conflict with motorised transport, or achieve other objectives. In some cases, it may help simply to convert road cross-sections from rural to urban standards, by adding a paved shoulder or kerb and channel.

There is a real need to provide NMT facilities with universal access, more specifically in the rural areas where the necessity for mobility is high. Across the district there is a lack of facilities, the need to separate NMT facilities from vehicular facilities because of the higher speeds, lack of access to public transport, and isolation of communities from economic and social opportunities. In particular, are those learners that don't 'qualify' for learner transport (live within 5km of a school) and are having to walk or cycle to school. A combination of NMT and infrastructure with dedicated learner transport services should be supplied in accordance with the local needs.

Adequate pedestrian crossings and dedicated pick-up/drop-off facilities at schools is a high priority across the district.

Currently, the surveys do not take cognisance of NMT and there is an obvious lack of information and it is recommended that a detailed NMT study across the district is undertaken to firstly develop a policy, accompanied by a set of objectives and strategies to realise an improved NMT environment and culture in the EDM, and secondly; to develop a strategic NMT network plan which would identify areas/towns and routes within these towns that should be considered as key NMT routes and places within the EDM.

3.4.2 NMT Environment & Infrastructure

Walking is the main mode of travel in Eden district (54%) as reported by the National Household Travel Survey (NHTS). Walking is a major form of transport for rural communities as a primary mode of transport to schools, to and from taxi ranks, and within towns.

Much like infrastructure required for vehicles, the infrastructure required for NMT consists of a network of routes or "ways" (roads, streets, or any structure which permits movement or flow of non-motorised transport), safe crossings and amenities for the applicable mode.

In order to fully grasp and understand the extent of the NMT Network and Amenities register for key nodes in Eden District Municipality the principles, descriptions and unpacking of the meanings of the different elements of the NMT Network and Amenities need to be fully explained.

The five guiding principles of NMT infrastructure planning required for providing effective NMT facilities are:

Safety – Maximise the safety of NMT users in relation to other road users as NMT users have a high degree of vulnerability due to nature of the way they travel.

Coherence – A coherent and continuous NMT network, linking all origin and destination points such as settlements and public transport routes with/or public amenities for the user and not just an ad hoc facility that end abruptly in the middle of nowhere, need to be created.

Directness – Create a direct route from origin to destination without significant detour to cause the user to ignore the facility. A good guide for these routes is what is referred to as ‘desire lines’ in transport terms. A desire line is an informal track/walk or cycleway next to a road or over a vacant piece of land between a specific origin and destination – normally the shortest distance between the two and in most instances diagonal.

Attractiveness – Plan and execute NMT facilities in such a way so as to make NMT travel attractive and safe from criminal elements or other road users during both day and night.

Comfort – Ensure a smooth, quick and comfortable flow of NMT routes and traffic without excessive gradients or uneven surfacing and with adequate and appropriate amenities.

These principles are supported and expanded upon in the Provincial Public Transport Institutional Framework (PPTIF). Once approved, the provisions of the PPTIF will apply and, where applicable, supersede this section of the ITP.

Specific needs that have been identified with regard to NMT facilities are discussed per relevant Municipality.

Eden

- SANRAL is busy with upgrading of NMT facilities along N2 near the interchange to the Garden Route Mall in George.

Bitou

- An NMT link is urgently required between Green Valley and the primary school at “Stofpad”; this was previously not built as Department of Education considered closing the school; link requires a boardwalk and pedestrian bridge as some part of route is prone to flooding
- Need to improve walkways from Green Valley to main road
- Recreational cyclists have identified a need for a cycling lane along R340 between Wittedrift and N2 (along Keurbooms River)
- Many people walk from Kwanokuthula despite it being more than 7km from the town centre
- Limited cycling out of Kwanokuthula – reportedly mostly by foreigners living in the area
- NMT facility needed along Piesang Valley Road; also need to deal with shortcut routes over private land that will be blocked when these erven develop

Knysna

- The CBD is very walkable with ample sidewalks
- All developments south of main road are “open” to allow walking through in all directions
- Walkways are being constructed to Concordia and Hornlee to facilitate walking and cycling
- Steep gradients to Concordia and Hornlee a barrier to more cycling
- Recreational cycling very popular with a growing demand for improved facilities
- The Walk / Cycle way along George Rex will be extended to The Heads as soon as funding allows
- All bicycle shops rent bicycles out
- The municipality identified that it could promote commuter cycling further

Mossel Bay

- Limited or no taxis from Sonskyn Valley to retail areas, and needs NMT improvements
- Adequate NMT facility needed along Louis Fourie Road; however, the Provincial Roads Branch did not budget for it, and the Municipality is not allowed to provide infrastructure in the Provincial road reserve.

Hessequa

- Dangerous N2 pedestrian crossing from the low cost housing on the other side of the town across the N2

3.5 Freight Transport

Freight movement ranges from the raw material transported in bulk or break bulk to the distribution of final products and services to where they are consumed. The DITP concerns itself with the movement of freight in the early part of the supply chain cycle, while the movement of local goods are dealt with at the LITP level.

Specific needs that have been identified with regard to Freight operations and facilities are discussed per relevant Municipality.

Bitou

- A truck stop is being upgraded by the land owner of the filling station in The Craggs

Knysna

- Problems with trucks stopping over in Sedgfield parallel to N2
- Should look at facility where the market is held west of the town
- Should encourage freight hauliers to depart at times to not arrive in Knysna during the peak periods
- Abnormal loads are accommodated along Waterfront Drive, not through CBD
- There is awareness of importance of incident management, and that response time is critical

Mossel Bay

- An informal truck stop is situated at Kantey Hall near the Petroleum depot
- Steep grades to harbour area cause trucks to rat-run along smaller roads
- There is a need for freight routes in Mossel Bay
- Tour buses have a regular stop at Voorbaai Shell – facility layout not optimal and poses potential risk to passengers

Hessequa

- The municipality is contemplating changes to the transport of municipal waste
- Truck stops are causing major problems within towns, and an overnight truck stop facility is required to prevent these

Oudtshoorn

- Truck stop facility needs to be provided. Small islands were built in parking areas to prevent trucks from stopping there.
- Truck traffic loading damages the roads, kerbs and parking, opposite the Ford garage on the way to Dysseisdorp and also opposite the KFC.

Eden

- A weighbridge is needed in the Eden Municipal area, especially along R62 – west and south of Oudtshoorn – possibly near the R62 / N9 intersection
- Freight facilities are required along the N2 at regular intervals; The district municipality must play a facilitating role between the Provincial Freight Branch, relevant local municipalities and private land owners
- An example to approach a freight management system is: From Sedgefield market area to Knysna is approximately 26km; at 60km/h it takes a truck roughly half hour to reach Knysna; therefore trucks should be managed to either depart before 06:30 or after 08:30 to avoid the morning peak traffic

Policy measures are required to balance the “generalised cost” between road and rail transport. The measures could include:

- incorporate true cost of roads, similar to rail having to factor in true cost of rail tracks and system
- Do not proactively upgrade the road network in anticipation of growth in road freight volumes
- Plan for and provide well-located and operationally efficient (subsidised) facilities for road / rail transfers
- Support the environmentally based “carbon tax” on fuel usage
- Peak period freight ban from freeways

The policy measures lies outside the Transnet mandate, and largely with National and Provincial authorities. Eden District Municipality supports these measures for the longer term benefit of the entire community.

3.6 Roads and Traffic

The road network plays an integral part of the socio-economic functioning and development of Eden as all but a very small number of passengers and goods are transported by rail. The planning for new roads and maintenance of the existing road network is therefore of critical importance to Eden District.

3.6.1 Road Classification

Several road authorities operate within the district and the road network is categorised in terms of the relevant authorities responsible for their upgrade and maintenance. The road authorities are: the South African National Roads Agency Limited (SANRAL), the Road Infrastructure Branch of the Western Cape Government, and the relevant Local Municipalities (LM). The District Municipality is not a roads authority, despite having input into various road schemes.

The WCG is the primary custodian of the rural road network in Eden, while the LMs are responsible for urban roads. The road network is divided primarily between rural and urban roads. Rural roads are further divided in terms of the following classes:

- National Roads;
- Trunk Roads;
- Main Roads;
- Divisional Roads;
- Municipal Main Roads; and
- Minor Roads.

Urban Streets are classified in terms of the Department of Housing's "Guidelines for Urban Settlements" as:

- Arterials: Higher or Lower order;
- Distributors: Major or Minor
- Local Residential Street;
- Access Ways.

Roads Coordinating Body (RCB) of the Committee of Transport Officials (COTO) compiled a Draft of the proposed TRH 26, South African Road Classification and Access Management Manual (SARCAMM).

TRH 26 will provide guidance to all road authorities on the following:

- The benefits of functional road classification and access management;
- The functional classification system according to which roads are classified;
- The methodology according to which such classification must be undertaken;
- Management requirements (access management) to ensure that the roads can function as intended;
- The methodology of applying access management; and
- Retrofit measures that can be implemented in situations where roads are not serving their intended function.

The classification system is based on the six functional classes of the Road Infrastructure Strategic Framework for South Africa (RISFSA) (DOT, 2006) as well as the National Guidelines for Road Access Management in South Africa (COTO, 2005). This system acknowledges that individual roads and streets cannot serve all travel functions, but that travelling is characterised by movement through networks with different functions along the route. TRH26 therefore proposes the following 6 classes:

- Class 1: Principal arterial
- Class 2: Major arterial
- Class 3: Minor arterial
- Class 4: Collector street
- Class 5: Local street
- Class 6: Walkway

Figure 8 presents the existing National and Provincial road network in Eden by differentiating between national, trunk, main and district roads.

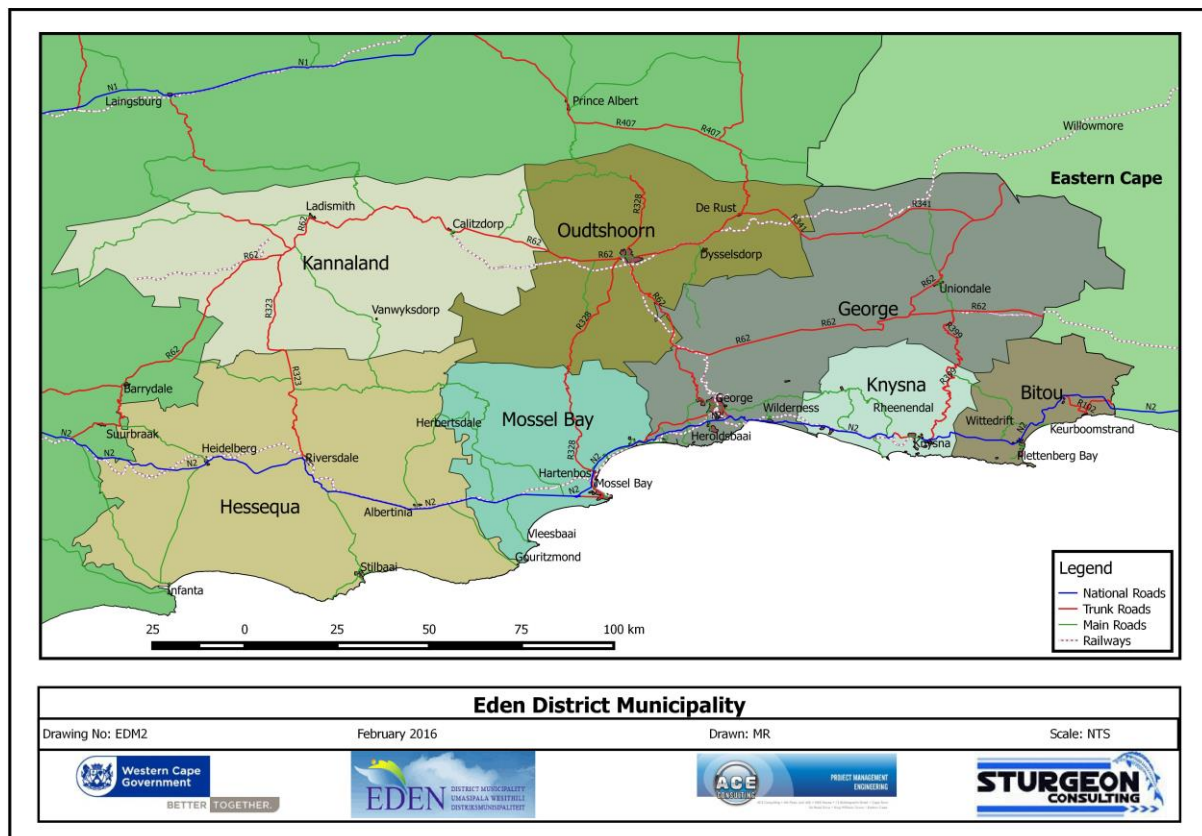


Figure 8: Provincial Road Network in EDEN

3.6.2 Extent of Road Network

The district and towns are well connected to each other and to nearby districts by means of an extensive road network. However, road maintenance and upgrades are continuously required to ensure that the road network is in good condition, safe and accessible.

The total distance of national and provincial roads in the Eden area is ±7 200 km. The higher order road system within Eden District Municipality consists of the National Road N2, various major Provincial roads as well as District roads linking the various towns with each other. The main focus of the district municipality is the maintenance of gravel roads, and the largest portion of the available budget is allocated to this. The lengths of surfaced and gravel roads in Eden is provided in **Table 15**.

Table 15: Higher Order Road Network within Eden District Municipality

Road Type	Surfaced (km)	Gravel (km)	Total Length (km)
National Road N7	305.65	-	305.65
Provincial Trunk Roads	765.52	63.17	828.69
Provincial Main Roads	465.34	455.47	920.81
Provincial Divisional Roads	258.66	2 498.77	2 757.43
Provincial Minor Roads	46.16	2 338.71	2 384.87
TOTAL	1841.33	5356.12	7197.45

RNIS Report: Surfaced & Gravel Distribution by Authority, Nov 2014

The Provincial Road Network consists of approximately 26% surfaced and 74% gravel roads. Provincial Minor Roads account for approximately 33% of the road network.

3.6.3 Public Transport Corridors

The N2 that passes through 5 of the 7 local municipalities is the main public transport corridor in the District. The road carries a high frequency of scheduled long distance bus services between Cape Town, Port Elizabeth and Durban. The area is also a prime tourist hub in the country, with a significant number of chartered tourist coaches frequenting this route.

In addition, daily long distance minibus taxis services connect out all the major towns along the N2, especially east of George, to Port Elizabeth.

3.7 Rail Network

Figure 9 shows the extent of the rail network in the Eden Municipal area. While regular freight services run between Cape Town and Mossel Bay, there are no passenger services at present. Passenger services ceased to operate when the rail line was damaged between George and Knysna. Several attempts to obtain funding for the repair of the rail line have failed in recent years.

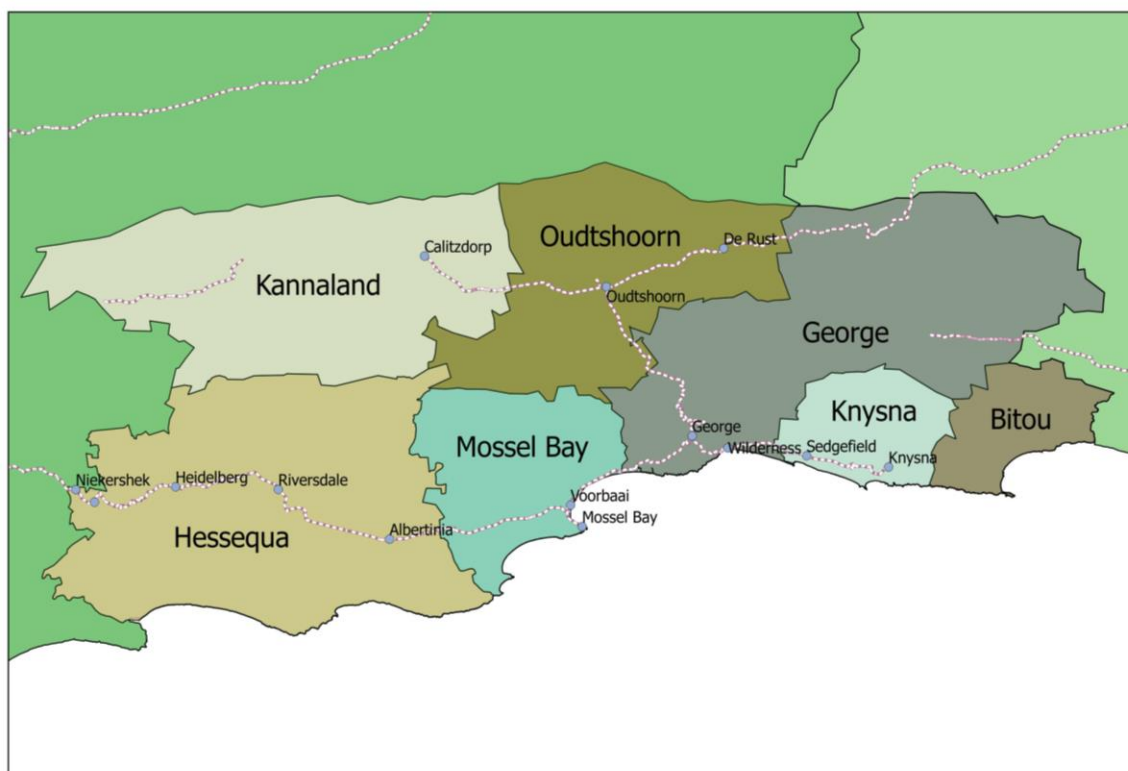


Figure 9: Railway Network in EDEN

3.8 Air Transport

There are currently two commercial airports within Eden district. George airport was served by regular daily flight connections to Johannesburg and Cape Town, with limited services offered to Bloemfontein and Durban, in 2016. The airport accommodated in excess of half a million passengers in 2013. The Plettenberg Bay airport opened again in 2014 after a decade of being mothballed. It is served by limited scheduled flights from Johannesburg and Cape Town.

3.9 Transportation Planning for Tourism

Tourism in South Africa and the Western Cape is reliant on private cars for domestic, and the car rental industry for foreign self-drive tours. The alternative is package tours where visitors are driven by chartered services to various tourist destinations. The public transport system is not friendly to infrequent users, especially tourists, at present.

An ideal to aspire to and plan for is to create licensed public transport routes that serve tourist attractions at regular intervals. These should be promoted through adequate marketing to raise awareness amongst both domestic and international visitors before planning their trips.

3.10 Health

George houses the major Regional-level Hospital that serves Eden and the Karoo. In addition there are District-level Hospitals in Knysna, Ladismith, Mossel Bay, Oudtshoorn, Riversdale and Uniondale (George Municipality). Primary healthcare is provided through clinics, which are situated in most towns.

Rural towns should be developed in a compact manner to ensure that primary healthcare facilities remain within walking distance to the majority of people in a community. The minibus taxi industry is geared to provide transport for ad hoc trips to District and the Regional hospitals for those residing outside of the towns where these are situated.

3.11 Special Categories of Passengers

Special categories for passengers can be defined as persons with disabilities, the aged, pregnant woman and those who are limited in their movements by children. Provisions for special categories for passengers should be included in transport planning, example: dropped kerbs on sidewalks, orientation blocks for sight impaired pedestrians as well as audible traffic signals. Universal access design principles should be incorporated in the planning that will assist passengers to move from one place to another comfortably. People with physical disabilities are the most affected by access to transportation and are therefore limited in their use of public transport.

The European Conference of Ministers of Transport (ECMT), 2004, set out principles of universal access in the development of and linkage to public transport and NMT infrastructure that should be considered when improving access to public transport. These principles include:

- Design standards for bus stops
- Provide safety lines around the bus stop with colour contrast to assist partially sighted people to keep clear of the bus rear view mirror, which overrides the edge of the platform.
- Provide tactile surface paving where the door of the bus is positioned.
- Provide ramp access for wheelchair users at the centre of the door.
- Align the height of the bus facility to the bus boarding ramp.
- Provide suitable drainage channels to fit the type of public transport vehicle.
- Provide dropped kerbs that align with NMT facilities and do not place impediments.
- Provide tow-away policies to restrict vehicles from parking in public transport zones.

An audit should be undertaken to establish the numbers of people with disabilities and disability types within the District in order to provide the necessary public transport and facilities for them.

3.12 Institutional Capacity for Transport

Eden District Municipality, like many of the Local Municipalities have roads and storm water engineering officials, who also deal with transport planning matters. The exception is Kannaland where all technical capacity has been lacking for some time.

3.12.1 Road Authorities

Table 16 shows the different authority types that are identified on the Provincial Road Network Information System (RNIS) website, together with the seat(s) from which each

authority operates. The significance of each of these authorities will be discussed during the description of the different functions.

Table 16: Relevant Road Authorities and Location

AUTHORITY TYPE	ADMINISTRATIVE HEADQUARTERS
SANRAL Regional Office: Western Region	Bellville
WCG Regional Office: District Roads Engineer	Oudtshoorn
Eden District Municipality (DC4, Type 2 Planning Authority)	George
Local Municipalities	
Kannaland Municipality (WC041)	Ladismith
Hessequa Municipality (WC042)	Riversdale
Mossel Bay Municipality (WC043)	Mossel Bay
Oudtshoorn Municipality (WC045)	Oudtshoorn
Bitou Municipality (WC047)	Plettenberg Bay
Knysna Municipality (WC048)	Knysna
Road Maintenance Authority: EDEN (Agent to WCG)	Oudtshoorn

3.13 Funding of Transport

The Provincial budget for the maintenance and upgrade of roads in the Eden District is attached as Annexure B.

4 OPERATING LICENSING STRATEGY

4.1 Background

The relatively low barrier to entry into the public transport system for informal passenger transport services resulted in destructive competition between operators, with a history of turning violent at times. This typically occurs due to the contestation of lucrative routes by a variety of operators. The mechanism to address the problems in the informal public transport sector is through the state issuing operating licences, or permits, in an attempt to balance supply and demand, hence establishing viable businesses for prevailing operators, while ensuring the supply provides an adequate level of service to users.

Each Local Authority should prepare an Operating Licensing Strategy (OLS) with the primary purpose of setting out the Planning Authority's policies and strategies in relation to:

- The role of each mode for different areas, routes and corridors;
- The circumstances under which the operation of the preferred mode of public transport should be allowed;
- The number of operating licences that should be allowed for each area or route;
- The adequacy of public transport facilities within the area; and
- The conditions which should be imposed in respect of operating licences.

The preparation of the OLS should be done in close consultation with the National Public Transport Regulator and Provincial Regulatory Entity (PRE) through the establishment of a joint working group. Operator associations and non-members should be consulted to confirm route descriptions and registered vehicles on a route-by-route basis.

The OLS, as described in the National Land Transport Act, 5 of 2009, is to ensure that Eden recommendations to the Western Cape Operating Licences Board will enable the board, in disposing of applications regarding operating licences, to achieve a balance between public transport supply and utilisation that is effective and efficient.

Each Local Authority within the Eden District adopted an Operating Licensing Strategy (OLS) in 2012, which is still relevant for the planning period of this DITP. Each OLS describes how applications for new licences should be dealt with, while also regulating the renewal of existing licenses. This chapter provides a brief summary of the principles and procedures of the approved OLS documents.

4.2 Policy Framework

A basic policy framework guides the disposal of operating licences in Eden. The National and Provincial policies guiding the disposal of operating licenses are presented together with an overview of relevant legislation. The policy framework is to act as a guide of operating authorities when responding to an Operating License Board request for comment upon applications.

It is intended that the framework which follows the discretion of the existing documentation is specific and concise and deals with the practical issues relating to the disposal of operating licences in Eden.

The policy framework for the OLS considers the following:

- Types of public transport services that require operating licenses.
- Types of vehicles which may be used for public transport services.
- Conversion of permits to operating licenses.
- Operating licenses for contracted services.
- Operating licenses for non-contracted services.
- Validity period for operating licenses.
- Cancellation of operating licenses not brought into use.
- Withdrawal of operating license or permit in rationalisation of public transport services.
- Passengers with Special Requirements.
- The provision of public transport in South Africa is governed by the NLTA (National Land Transport Act, Act 5 of 2009). The Act provides the measures necessary to transform and restructure the country's land transport system.

One such measure is the conversion of public transport permits to operating licences. The conversion includes the shift from radius to route-based permits to ensure that operators confine their operations to specific routes. The Minister of Transport in consultation with all Transport Members of Executive Councils initially indicated that this permit conversion process should be completed by 30 November 2005, but the date has been extended as requested by OLBs that required more time to finalise the conversion process. This date has not been finalised yet. Many operators still require operating licences for the following reasons:

- A backlog remains due to capacity constraints at the OLB and Transport Registrar, which has resulted in a number of applications still to be reviewed.
- Some operators have been operating prior to October 2007 and must still apply for operating licences. At national level, a decision was made to not exclude any members operating prior to October 2007.
- Although many taxi associations and operators have route-based operating licenses, these licences are most likely only compliant in the large towns where there is sufficient passenger demand on the routes. In smaller towns and remote areas, where passenger demand is low, operators involuntarily deviate from the route in an attempt to source more passengers. On-board surveys and interviews with taxi operators are supportive of this statement.

Although the conversion of area-based permits to route-based operating licenses is a legislative requirement, it is recommended that the local authorities engage with the relevant role players regarding this matter. Route-based operating licenses in areas where passenger demand is low encourage non-compliance.

Apart from enforcement, commenting on the approval of operating licenses is one of the functions of the Local Municipalities and the Eden DM. When applications for operating licenses are submitted to the OLB, they request comment from both these authorities. The OLS attempts to identify the routes where over-trading is taking place. It is recommended that the OLB, the Eden DM and the Local Municipalities consider the recommendations with respect to this.

4.3 OLS Process

A long-term plan for restructuring the public transport network is required to modify the existing minibus taxi operations and to plan public transport in an integrated manner. Each local municipality will require an Integrated Public Transport Network (IPTN) to be prepared which will take into account the demand and the changing travel patterns. The IPTN will enable the local municipalities to identify the required routes and corridors and manage the issuing of associated operating licenses. It was recommended that the EDM develop a framework that will guide future IPTN developments in each of the local municipalities, where relevant.

The most relevant guiding principles that need to underlie the planning process for the proposed for restructuring of the public transport are as follows:

- Passenger demand driven
- Improved enforcement
- Development of an Integrated Public Transport Network (IPTN)
- Car-competitiveness
- Access to opportunity
- Increased Mobility
- Appropriate frequency
- Special Needs Users
- Public Transport Image
- Vehicle Quality
- Multi-modal Integration

In addition, the Province places a priority on the following aspects:

- No job loss during transformation: The intention is that all persons currently engaged in public transport services delivery will be provided with employment opportunities within the newly formed business entities that will enter into negotiated contracts with the Contracting Authorities.
- Intergovernmental Agreements: That there will follow debates with all affected local and district municipalities in order to seek agreement on the most suitable institutional arrangements that should be put in place in order that each authority can fulfil its mandatory role in the most cost effective manner.

Based upon these underlying strategies, the conceptual strategy for improving the access to safe and efficient integrated public transport within Eden is provision of:

- A mixture of service types (routes and schedules) that can best suit the different passenger demand characteristics that are found within the rural and urban areas of Eden
- Appropriate vehicle type to cater for these demands
- Approximate infrastructure (roads and facilities) and systems to support the services
- Institutional capacity at the appropriate sphere of government to administer the services

4.4 OLS Recommendations

The recommendations focuses on current capacity, whether or not additional licences can be issues and the enforcement of legal operations. The recommendations in the relevant tables show the following:

- When there is an under-supply of service/capacity on a route, it is recommended that additional operating licences be investigated;
- Where there is sufficient existing capacity, it is recommended that no additional operating licences be considered. Alternatively, such licences can be considered following a thorough investigation into the overall available capacity,
- When more than 50% of vehicles observed during the survey were found to be illegal, special attention is recommended in terms of enforcement.

The steps envisaged to align the operating licences available with licences required for implementation of the proposed public transport strategy will need to be discussed between the local municipalities and the taxi association upon acceptance and approval of the OLS. This action ought to include regular liaison with the taxi industry to ensure improved co-ordination between the operator and the authority.

4.5 Implementation and Financial Implications

The following actions are required for implementation of the proposed public transport strategies:

- Assistance from the local authorities in managing operating license applications. The EDM should provide assistance in improving communication between taxi operators and the OLB.
- Identification of routes with significantly high numbers of illegal operators in order to utilise law enforcement services effectively
- The calculation of utilisation and capacity for all operational routes is required to complete the process of issuing operating licenses in the Eden District Municipality
- The implementation of an IPTN for the Eden District Municipality

In an attempt to address restructuring of the Minibus taxi transport system in the Local Municipalities, various action, focussing on the sphere of influence of the local municipality, are proposed. These include:

- Improved communication between the EDM, Local Municipalities, the OLB and the taxi associations
- Identification of routes with significant numbers of illegal operators to utilise law enforcement services effectively
- The calculation of utilisation and capacity levels for all operational routes in order to efficiently manage the issuing operating licenses
- Integration with Eden IPTN

The implication actions and financial implications of the OLS is not clear at this stage as it is subject to the implementation of the IPTN for the EDM.

5 SUMMARY OF PPTIF

5.1 Introduction

The Western Cape Government initiated the development of a Provincial Public Transport Institutional Framework (PPTIF) with the primary aim of addressing the key constraints to improving both public and non-motorised transport in the non-Metro areas of the Western Cape, through the development of a refined strategic approach for achieving progress.

The primary aim with the development of a Provincial Public Transport Institutional Framework (PPTIF) is to address the key constraints to improving both public and non-motorised transport in the non-Metro areas of the Western Cape, through the development of a refined strategic approach for achieving progress.

This refined approach aims to incorporate lessons learnt through the implementation of public transport improvement initiatives in South Africa, particularly in George and Cape Town. The PPTIF sought to answer the core questions listed in **Table 17**.

Table 17: PPTIF Core Questions

Core Questions	PPTIF Response
What technical interventions should be implemented to improve public transport and non-motorised transport in the province?	<ul style="list-style-type: none"> Develop a flexible and context specific approach to public and non-motorised transport improvement.
What institutional and organisational structures need to be implemented to drive and manage these improvements?	<ul style="list-style-type: none"> Develop enhanced institutional and organisational models.
What will these interventions cost, and how could they be funded?	<ul style="list-style-type: none"> Develop a cost model and funding strategy.

5.2 Constraints to progress

This section provides an overview of the key constraints to progress that the PPTIF aims to address, including:

- Capacity at the municipal level:** Outside of Cape Town and George, municipalities in the Western Cape have limited capacity to perform municipal land transport functions (NLTA s11(c)), including the planning, implementation and management of integrated public transport networks. In addition, national legislation fails to take into account the difference in capacity and resources between metropolitan, local and district municipalities.
- A lack of dedicated funding streams for local public and non-motorised transport improvement:** There are limited funding streams available for public and non-motorised transport improvement and transformation in non-metropolitan areas. National funding is currently directed toward 13 priority cities. This includes both funding for execution of the new transport functions required of local government by the NLTA, and funding to put in place the requisite infrastructure and systems

for improved public transport systems. Due to the spatial and economic dynamics of South African settlements, significant operational shortfalls are experienced in public transport improvement initiatives. The ability of local government, and of the provincial government, to fund these operational shortfalls is very limited to non-existent.

- **The lack of well-defined or developed approaches to public and non-motorised transport in non-metropolitan contexts:** National legislation and policy has focussed on the development and implementation of urban Integrated (Rapid) Public Transport Networks in 13 cities. The model which has emerged incorporates high-specification technology, large-scale infrastructure development and full-scale formalisation of the minibus taxi (MBT) industry. An appropriate public transport response for non-metropolitan areas, such as emerging cities, towns, villages and rural areas, has not reached a similar stage of development, with limited clarity on the appropriate way forward in these contexts. The George Integrated Public Transport Network (GIPTN) has been promoted as an example of public transport improvement outside the major urban centres in South Africa. However, the costs of the GIPTN and the implementation and transformation challenges the project has faced suggest that, while this is a useful model in certain locations, it is not viable to roll-out similar initiatives across the country.
- **The complexity of industry transition:** The implementation of IPTNs in South Africa has involved a significant transformation of the taxi industry business model. Under the IPTN model, new services are operated by Vehicle Operating Companies (VOCs) made up of former bus and taxi operators. These companies are contracted to Government to provide new services to a higher standard. The legislation limits the duration of these operating contracts to a maximum of twelve years. This transition process is fraught with risk for existing operators and significant resistance has been experienced from the industry. The current taxi industry business model is a reliable way of earning an income for operators, albeit fraught with sustainability challenges for the operators. As a result, it takes a lot of time to get the existing operators to become comfortable with the risks of the new system. It also requires the introduction of significant financial incentives through high compensation packages.

The PPTIF aims to address these constraints to progress through the development of appropriate technical, institutional, organisational and financial models.

5.3 Legislative mandate


The proposals of the PPTIF are supported by the legal mandate extended to the Western Cape Government through the National Land Transport Act (NLTA, No. 5 of 2009). The NLTA devolved the majority of land transport functions to local government (see Section 11(c)), including responsibility for planning, managing and implementing local integrated public transport networks.

However, the provincial sphere of government has a mandate to support under-capacitated municipalities (NLTA s11(b)(v); IRFA s35(2)(d)) to perform their land transport functions and is permitted to jointly exercise or perform any municipal land transport function (NLTA s12(1)). Given the lack of capacity of non-Metro municipalities to perform their land transport functions, the Western Cape Government has a legal mandate to


support local governments in the implementation of their public transport functions and the rollout of improved public transport initiatives.

5.4 PPTIF Categorisation


The PPTIF is built on a thorough understanding of the status quo, issues and needs for public and non-motorised transport in the Western Cape, which vary across the province based on socio-economic and spatial dynamics. Through an extensive status quo analysis five categories were developed to describe the differing contextual dynamics in the Western Cape. The five categories are:




Urban Growth Areas: These are the economic centres of the Province, with very high growth potential, dynamic economies, relatively high population density and the greatest volume of local public transport movement in the Province. This includes the Cape Metro Functional Region and the George-Mossel Bay region.




Industrial Development Area: Including parts of the Saldanha Bay Local Municipality and the Industrial Development Zone (IDZ) that is currently being developed there. This is an area of both National and Provincial importance, with high growth potential.



High Value Agriculture: High intensity agricultural areas, often including groups of smaller urban centres of medium growth potential. Amongst others this includes the Robertson-Ashton region, the Malmesbury-Moorreesburg region and the Caledon-Bredasdorp-Swellendam region.



Extensive Agriculture: Low intensity agricultural areas with low population and density levels, few significant urban centres and low to very low growth potential. This includes most of the Central Karoo and part of the northern West Coast District Municipality.



Coastal Tourism Towns: Urban coastal towns with significant tourism activity, coastal transport corridors connecting a string of closely located towns and villages and very high growth potential.

These categories can be used to understand the different types of interventions required to address the specific issues and competencies of different areas of the Western Cape. The Incremental Approach, described below, is a core facet of the PPTIF and can be adapted to different contexts.

5.5 The Incremental Approach

The Incremental Approach to public and non-motorised transport improvement was developed in response to the key constraints described above. The approach proposes the staged implementation of improvement initiatives which result in real improvements to the user experience, but in a fashion that reduces the capacity burden on government,

lowers the cost of improvement and reduces the risk of transformation to the public transport industry. The manner in which this is achieved is described in **Table 18**.

Table 18: The Incremental Approach

Impact	Description
Demonstrable improvement to public transport user experience	<ul style="list-style-type: none"> The Incremental Approach focuses on the “low hanging fruit” first in achieving rapid and demonstrable improvement in the transport experience of public transport users. Thus real improvements are achieved in the short term, whilst moving towards a broader, fully integrated network solution over the longer term.
Limits the capacity burden on government	<ul style="list-style-type: none"> Incremental implementation of improvement initiatives over time provides government with the time to progressively increase capacity and learn through experience, rather than being required to take on full responsibility for managing an IPTN all at once.
Lowers the cost of improvement	<ul style="list-style-type: none"> The Incremental Approach does not advocate for the rapid and full scale formalisation of public transport. Rather, the focus is on improving the condition for NMT, limited formalization on priority public transport routes, with the network being built up over time as and when the necessary resources become available. In addition, the phased approach aims to limit the need for costly compensation of public transport operators, contributing toward an overall reduction in the cost of system improvement.
Reduces the risk of transformation to the public transport industry	<ul style="list-style-type: none"> The Incremental Approach lowers the risk to the public transport industry by reducing the risk of each step in the process. The industry’s business model is gradually adjusted over time, rather than being fully subsumed. This process inherently lowers risk and enhances the potential of successful engagement and transformation.

The Incremental Approach includes three stages. It is important to note that this approach is not prescriptive. It provides a framework which can be applied to different contexts (different PPTIF categories described above) and adapted accordingly and it provides strategic guidance on what aspects of the transport system should be addressed or improved at what stage.

- Stage 1:** The aim of Stage 1 is to begin to address some of the critical public and non-motorised transport issues in Western Cape municipalities. To an extent, this approach builds on existing expertise and capacity within local government and begins a process of enhanced capacity development to manage increasingly complex transport networks. At the same time, Stage 1 does not impose a dramatic change to the business model of existing public transport operators and, overall, it allows for shorter term, lower impact, affordable responses which are suited to the specific local areas being addressed.

More specifically, Stage 1 includes a strong focus on non-motorised transport, basic infrastructure improvements and the regulation and enforcement of existing public transport operators, in conjunction with strengthened industry

engagement. The aim here is to ‘get the basics rights’ before moving toward the implementation of expensive and complex integrated public transport networks.

- **Stage 2:** In Stage 2, government begins to introduce small subsidised service contracts with existing operators for the provision of higher quality public transport services. Through the use of contracting, government begins to incentivise self-organisation and consolidation within the industry. In Stage 2, the work streams established in Stage 1 are continued. Additional areas of focus include introducing and managing subsidised contracts for public transport operators, small-scale ITS and AFC systems and managing data from these systems. Monitoring public transport operators becomes a priority.
- **Stage 3:** In Stage 3, the public transport priorities established in the previous two stages are consolidated and extended. Where appropriate and financially viable, the municipality moves towards progressively implementing a context-appropriate IPTN network with gross contracts between government and private operators. The nature of this network will differ markedly by context and area typology.

5.6 Proposed institutional arrangements for public transport improvement

Outside of the City of Cape Town and the Municipality of George, there is very little capacity to pursue public and non-motorised transport improvement at the Western Cape municipal level. Therefore, in order to make progress, it is proposed that the Western Cape Government execute its NLTA s12(1) mandate to work with municipalities to jointly perform or execute municipal land transport functions, while progressively building municipal capacity. In order to limit the burden of this arrangement on the Western Cape Government, only a limited number of targeted municipalities will be actively supported at any given time.

In the longer term, capacity will be developed at the local level so that municipalities can perform their land transport functions either independently or jointly with adjacent municipalities, potentially through the establishment of municipal entities.

Support from the Western Cape Government (the Department of Transport and Public Works) will be split into two overarching functions with different purposes:

1. **The Western Cape Government will act as an incubator:** A newly established provincial incubation unit will work to establish local transport units in priority areas of implementation. Together, these provincial units will plan, implement and manage local public and non-motorised transport improvement, working jointly with municipalities. Once sufficiently developed, the units will be transferred to municipal ownership. In effect, the Western Cape Government acts as an ‘incubator’, actively developing local units which can be transferred to local government at the appropriate time. Therefore, the incubator role in support of a particular municipality will initially be intensive as capacity is being developed, and will taper off and cease over time once the municipality has sufficient capacity internally.
2. **The Western Cape Government will perform platform functions:** Which are those functions that it makes sense to be performed indefinitely on a province-wide basis. This includes developing centralised technology platforms and systems

which will support province-wide public and non-motorised transport improvement, such as intelligent transport systems, integrated fare management and a call centre. The Western Cape Government will perform these functions indefinitely on behalf of LMs to leverage economies of scale and the concentration of specific expertise. Platform functions also allow for the strategic management of data that has significance for province-wide analysis of progress and trends, and for the specific management of operational contracts that the Western Cape Government has a direct financial responsibility for.

These arrangements are illustrated in **Figure 10**.

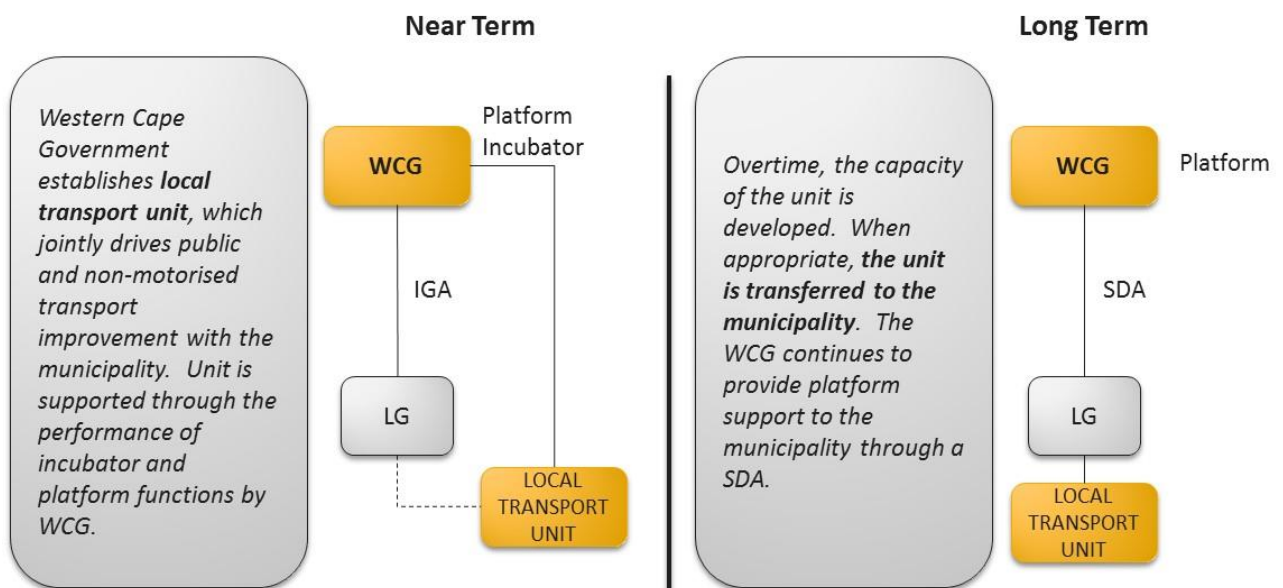


Figure 10: Proposed Institutional Arrangements

The Intergovernmental relationship between the Western Cape Government and targeted municipalities will be supported by the establishment of Joint Planning and Implementation Committees/Forums, to guide improvement initiatives.

It is also important to note that although it is proposed that the Western Cape Government play a central role in the performance/support of functions and flow of funds, a local municipality can take on these roles at any point according to current legislation.

5.7 Funding

The Western Cape Government will drive an effort to source the necessary funding for the proposed improvements, both from internal sources and from other sources such as National Government and international donors.

5.8 Implementation Plan

The implementation plan covers 5 years and includes the necessary steps in the implementation process, including the technical, institutional, organisational and funding components.

The basis of the implementation plan is the piloting of the PPTIF in 3 priority municipalities over a 5 year period. After the 5 year period, the pilot projects will be reviewed and successful elements will be rolled-out to other municipalities in the Western Cape.

The high level implementation plan is summarised in **Figure 11**. The proposed detailed planning and local establishment processes are for targeted or priority municipalities only.

	Year 1	Year 2	Year 3	Year 4	Year 5
WCG	Provincial Establishment	Provincial Establishment			
Priority Municipality 1	Detailed Planning Local Establishment	Local Establishment	Stage 1 Implementation	Stage 1 Implementation	Stage 2 Implementation
Priority Municipality 2		Detailed Planning Local Establishment	Local Establishment	Stage 1 Implementation	Stage 1 Implementation
Priority Municipality 3			Detailed Planning Local Establishment	Local Establishment	Stage 1 Implementation

Figure 11: High Level Implementation Plan

Through the PPTIF, a prioritisation mechanism was developed to support the Department’s decision-making process. This mechanism incorporated four criteria including population, size of economy, growth potential and public transport mode share. The use of this mechanism in conjunction with strategic considerations has resulted in the emergence of the following priority areas. These areas will be the focus of investment and activity over the next five years:

- Saldanha Bay Municipality
- Overstrand Municipality
- The municipalities of the Cape Metropolitan Functional Region including Stellenbosch, Drakenstein, Swartland and Theewaterskloof.

6 TRANSPORT NEEDS ASSESSMENT

6.1 Methodology for Assessing Transport Needs

The transport needs for Eden stems from an assessment of where the status quo deviates from the objectives for the transport system, as described in Chapter 2 of this document. The status quo is informed by a quantitative assessment of the data, as well as of a qualitative assessment of information obtained through the stakeholder participation process. Issues include transport operations (safety, learner transport, levels of service, etc.), infrastructure, non-motorised transport and institutional matters.

6.2 Strategic Framework

The framework for evaluation is the nine objectives of the DITP, which are:

- Objective 1: Provide Integrated Public Transport Networks (IPTN) in rural regions
- Objective 2: Prioritise the provision of public transport services among higher density settlements to improve viability of public transport subsidies
- Objective 3: Provide public transport and non-motorised transport (NMT) infrastructure, particularly in larger urban centres
- Objective 4: Ensure a safe public transport services
- Objective 5: Ensure a well maintained road network
- Objective 6: Shift contestable freight from road to rail and prioritise general freight over bulk freight
- Objective 7: Create the institutional capacity and administrative environment to perform the functions required of the municipality by the NLTA

6.3 Eden Transport Needs

The need for transport is described in terms of the 9 objectives.

6.3.1 Integrated Public Transport Networks (IPTN)

- The George IPTN, through the GoGeorge BRT system, has only been rolled out to about 50% in early 2016. An investigation into a similar IPTN for Mossel Bay revealed that the cost of rolling it out is prohibitive at present.
- Demand for Public Transport between George and surrounding towns appear low at present, and do not currently warrant an extension of services to any of these towns. The exception could be to Wilderness, and a more detailed assessment of potential demand should be done in the next update of this or the George ITP.
- Rather than creating a full IPTN, the PPTIF could be used as a mechanism to formalise public transport services between towns in order to both test and stimulate demand, at a lower cost and with more flexibility to adapt as travel patterns are revealed.

6.3.2 Denser settlement patterns

- The prevailing trends in land use planning results in a reliance on cars and motorised transport for increasing portions of the population. There is an urgent need to revise the relevant SDFs, especially for the larger towns, to develop at higher residential densities that are better integrated with commercial and office environments. This would enable and support more walking, cycling and more efficient public transport services.
- The notable exception, and example to others, is the Knysna Municipality which already adopted a policy to encourage three storey, mixed use re-development of land to achieve higher densities and greater mix in land use.

6.3.3 Public transport and NMT infrastructure

- There is a need to understand the opportunities for land development brought about by the large congregation of people at taxi ranking facilities. It may be beneficial to current and potential public transport users, as well as businesses in the respective town centres to create high quality transport hubs within transport precincts. This should employ urban design principles to integrate the space with the main activities in a town.
- As more than half the populations of Eden municipalities are largely reliant on walking at present, the need for quality NMT facilities is very high. This may require the production of an NMT strategy or master plan for the district and / or each municipality.

6.3.4 Safe public transport services

- Well designed public transport facilities that are spacious and well lit are more conducive to safe operations than highly congested spaces. This can be further enhanced by providing pick-up and drop-off spaces along routes where surveillance is high from surrounding land uses.
- There is a need to provide and train adequate law enforcement units to regulate the road worthiness of vehicles, and to inspect driver behaviour.
- Average speed-over-distance traffic control, which has been implemented with great success along the N1 and R27 routes, should be considered in the Eden area

6.3.5 Well maintained road network

- Budgets for road maintenance have always been notoriously low. The district should therefore continue to lobby for more road maintenance funds from the provincial government.
- There is therefore a great need to minimise overloaded vehicles, which is one of the primary causes for early road failures. A successful programme to move contestable freight from road to rail would contribute to reduced road maintenance needs over the long term.
- Higher density development patterns further requires fewer kilometres of road per person than the current sprawling development patterns.

6.3.6 Efficient movement of freight

- The district should engage in discussions with both Transnet and the Provincial Roads Department to attract as much of the expected growth in freight volumes to rail.
- In line with the above, the port could be an asset to the District, and especially to the Mossel Bay Municipality, if the back of port operations could be expanded. This would result in sustainable employment opportunities to local communities.
- As an end destination, there is a need for adequate facilities for the road freight industry in the Mossel Bay area.
- Given the duration of travelling along the N2, there is a need for frequent and adequate road freight facilities throughout the District. Eden DM should participate with the Provincial Freight Planning branch to design such a system. It should then engage private land owners and the freight industry to implement a freight management system to the benefit of the industry and local communities.

6.3.7 Sound institutional and administrative environment

- There is a need for additional transport planning capacity in Eden district at the district level.
- The planning for and provision of public transport requires substantial institutional reform to enable the District and Local Municipalities to deliver the mandate and functions assigned to it by the NLTA (Act 5 of 2009).

7 SUMMARY OF LOCAL INTEGRATED TRANSPORT PLANS

This chapter provides a summary of the needs and project proposals identified in each of the six local municipalities (excluding George) that comprise Eden District.

7.1 Bitou Local Municipality

- A walkway is required from Kurland to the shops near the N2 due to narrow road and increasing traffic volumes to elephant, monkey and bird sanctuaries – however, private land separates houses from road – This needs a specific intervention.
- There is a need to improve taxi embayments/ stops at both access roads to Green Valley.
- A study should be conducted into the upgrading of the Plettenberg Bay rank with enough holding space for minibus taxis. Currently there is an illegal overflow onto neighbouring open space around the rank. A discussion took place around separating holding function from main rank, to a position where land is less valuable. However the taxi association have reservations about feasibility of this, and reliability of drivers to adhere to operational requirements.
- A request for embayments along Marine Way, preferably outside of trafficked lanes. This will require a separate study.
- A NMT link is urgently required between Green Valley and primary school at “Stofpad”; this was previously not built as Department of Education considered closing the school. The link requires a boardwalk and pedestrian bridge as some part of route is prone to flooding in the winter months.
- Recreational cyclists have identified a need for a cycling lane along R340 between Wittedrift and N2 (along Keurbooms River)
- Limited cycling out of Kwanokuthula – reportedly mostly by foreigners living in the area.
- NMT facility needed along Piesang Valley Road; also need to deal with shortcut routes over private land that will be blocked when these erven develop.
- A truck stop is being made available by a landowner at the filling station in The Craggs. The aim is to attract trucks to the stop by providing safe overnight facilities and to avoid them making use of other open land nearer to Plettenberg Bay.

7.2 Knysna Local Municipality

- Extension of Cycle path along George Rex Drive towards The Heads. The existing path is commonly used by recreational cyclists but ends shortly after Vigilance Drive.
- The informal settlements of Hornlee and Concordia are within walking and cycling distance from Knysna city centre. Sidewalks should/ are been constructed to facilitate NMT.
- Currently there is a problem with trucks that overnight in Sedgefield. An overnight truck facility could be introduced at the Market area which is held west of the

town. This will support the idea of introducing overnight facilities along the N2 for trucks to make use of as there is currently located at The Craggs in Bitou and Albertinia in Kannaland.

- The re-activation of the railway line between Knysna and George could help alleviate freight that is currently transported via road between the two towns. Investigations have been conducted but the cost to upgrade the line has been prohibitive to date.
- A lighter train technology, such as the Diaz Rail in Mossel Bay or a tram, which could operate a service between Knysna and Sedgefield for both tourists and locals.
- Due the steep incline on the way to Hornlee and Concordia it is suggested that the possibility of using the abandoned rail reserve as a cycle route be explored.

7.3 Mossel Bay Local Municipality

- Adequate NMT facilities should be required along Louis Fourie. This stretch of road is used regularly by users walking to and from shops between the informal locations and Mossel Bay CBD.
- Steep grades to harbour area cause trucks to make use of lower order/smaller roads. A road freight route study should be conducted to find the easiest way possible for trucks to arrive and depart from their locations.
- Long distance bus operators make use of the Voorbaai Shell as an official stop on their routes between Cape Town/ Port Elizabeth and Cape Town/ Durban. Upgrades to the filling station or surrounding area could see the area becoming more user friendly with dedicated embayments for various operators.
- An informal overnight truck stop is located at Kantey Hall near the petroleum depot. A suitable location should be established to provide a formal overnight facility to prevent trucks from staying overnight within the CBD.

7.4 Hessequa Local Municipality

- The new metered taxi operations, operates between towns. Some of these taxis are private and some are operating illegally.
- The speed bump strategy needs to be re-looked at using an aerial strategy in order to place the speed bumps at the correct places.
- Since the rail infrastructure connects to all the towns, a way to use the rail services in order to dispose of waste should be looked at, which would transport the waste to the waste disposal site in Mossel Bay.
- A truck stop facility is required to prevent the road damages and traffic congestions caused by the trucks parking in illegal bays and road sides which are not designed for truck loads.

7.5 Kannaland Local Municipality

Due to severe capacity constraints it was not possible to obtain a meeting or any indication of specific needs from the municipality.

7.6 Oudtshoorn Local Municipality

- Oudtshoorn taxi rank appears overcrowded and needs a more detailed assessment determine the causes of overcrowding.
- A bus facility pick-up point is needed to prevent the long distance buses from using the Pick 'n Pay parking lot as a pick up point.
- A truck stop facility is needed. Previously, small islands were built in parking areas to prevent trucks from stopping in the parking areas. These trucks cause damage to roads, kerbs and parking. The trucks stop opposite the Ford garage on the way to Dysselsdorp and opposite the KFC.

8 FUNDING STRATEGY AND SUMMARY OF PROJECT PROPOSALS

8.1 District Budget and Funding Sources

The District Municipality acts as an agent of the Western Cape Government to maintain its road network. Apart from this it has a limited mandate for transport planning. Revenue related to transport does not extend beyond the roads maintenance function. The current capital budget for roads maintenance and upgrade in the district is shown in Annexure B.

Despite its mandate, the following issues have been identified to warrant further investigation or action by the relevant authorities.

8.2 Project Proposals

It is proposed that Eden District Municipality embark on the projects list below over the five-year period of this plan.

- Investigate and debate the need for higher density settlement patterns. Lobby the National and Provincial departments of Human Settlements to increase the subsidy allocation for a housing unit, as and when this will translate in significant savings for generations to come.
- Plan public transport hubs in larger towns, which could include centralised parking, from where people can walk or use feeder public transport services for onward journeys.
- Produce an NMT strategy or master plan for the district and / or each municipality.
- Require local municipalities to designed public transport facilities that are spacious and well lit, and therefore are more conducive to safe operations.
- Provide and train an adequate law enforcement unit to regulate the road worthiness of vehicles, and to inspect driver behaviour.
- The district should continue to lobby for more road maintenance funds from the provincial government.
- Improve the management and control of overloaded vehicles in the District in conjunction with the Provincial Department of Road and Transport.
- Engage in discussions with both Transnet and the Provincial Roads Department to attract as much of the expected growth in freight volumes to rail.
- Plan adequate facilities for the road freight industry at regular intervals along the N2.
- Commence with the process of institutional reform that will enable Eden Municipalities to fulfil the functions assigned to it under the NLTA.

8.3 Project Prioritisation Methodology

The projects proposed for Eden District Municipality were chosen to minimise capital and operational costs. The projects should therefore enjoy equal priority in the short term, with subsequent priority increasing with the ability to move forward on particular

projects. In this case, some projects would have longer lead times, or are dependent on budgets from other departments, and therefore do not need to be prioritised by the District Municipality.

8.4 Five Year Implementation Programme of Priority Projects

As discussed above, the District does not have a clear mandate to implement transport projects, and arguably have only a mandate to plan for a more sustainable transport system. This should include planning the form of urban settlements in a manner to be conducive to walking cycling and public transport, for internal and external trips, rather to continue reliance on the private car.

It is therefore recommended that the projects proposed in this chapter all be driven to fruition over the five year life of this plan.

9 PUBLIC AND STAKEHOLDER CONSULTATION

9.1 Introduction

Public Participation Processes (PPP) are guided by the provisions of the Constitution of the Republic of South Africa dated 1996; the National Land Transport Act (Act No. 5 of 2009); the Local Government: Municipal Systems Act, (Act No. 32 of 2000), as well as the Department of Transport's Technical Guidelines for DITP's dated February 2009.

The process of public participation, stakeholder consultation and engagement is a pre-condition for the final adoption and approval of Eden Integrated Transport Plan (ITP) by the various approval authorities. Over and above this statutory requirement, the process forms a key part of drafting the ITP to both obtain broad stakeholder buy-in and understanding of the principles of addressing transport planning in this area.

The experience with formal public participation in other districts in recent years showed that open houses to allow members of the public to engage are highly underutilised. It was therefore decided to engage with municipal officials who are aware of the transport related issues raised during the IDP public participation engagements. The outcomes of these engagements, which proved highly productive, are incorporated in the relevant LITPs, as well as in the Needs Assessment and other relevant chapters of this document.

ANNEXURE A

UTILISATION OF MINIBUS TAXI RANKS AND LOADING/HOLDING FACILITIES

LM	Town	Facility			No. of Bays	Utilisation			% Utilisation
		Facility Name	Type of Service	Loading/ Holding Area		Day of Max Utilisation	Max No. of Veh	Time of Max Utilisation	
Bitou	Plettenberg Bay	Plettenberg Rank	Commuter	Combined	46	Weekday	33	17:00	72%
	Plettenberg Bay	New Horizons Rank	Commuter	Combined	15	Weekday	3	07:15	20%
	Plettenberg Bay	Kwanonkuthula Rank	Commuter	Combined	56	Saturday	34	07:00	61%
Knysna	Knysna	Knysna Rank	Commuter	Combined	42	Saturday	43	11:15	98%
	Knysna	Sanlam Mall inform	Commuter	Combined	0	Weekday	21	10:15	0%
	Knysna	Hornlee inform	Commuter	Combined	0	Saturday	17	11:45	0%
	Knysna	White Location	Commuter	Combined	0	Weekday	17	16:30	0%
Mossel Bay	Mossel Bay	Mossel Bay Rank	Commuter	Combined	40	Saturday	39	09:15	103%
		Asla Informal	Commuter	Combined	10	Weekday	16	06:45	63%
	Knysna	D'Almeida Informal	Commuter	Combined	0	Saturday	1	08:00	0%
	Knysna	Great Brak River	Commuter	Combined	3	Weekday	17	06:45	18%

		Informal							
	Knysna	Shoprite Informal	Commuter	Combined	0	Weekday	20	07:00	0%
	Knysna	Langeberg Mall Informal	Commuter	Combined	20	Weekday	27	13:45	74%
Hessequa	Riversdale	Riversdale Rank	Commuter	Combined	7	Saturday	2	11:00	350%
	Heidelberg	Heidelberg Rank	Commuter	Combined	4	Saturday	8	10:45	50%
	Melkhoutfontein	Melkhoutfontein informal	Commuter	Loading	3	n/a	n/a	n/a	n/a
	Slangrivier	Slangrivier informal	Commuter	Loading	1	n/a	n/a	n/a	n/a
	Stilbaai	Stilbaai informal	Commuter	Loading	4	n/a	n/a	n/a	n/a
Oudtshoorn	Oudtshoorn	Oudtshoorn Main Rank	Commuter	Combined	40	Weekday	61	17:00	153%
		Oudtshoorn Long Distance	Commuter	Loading	8	Weekday	6	11:15	75%
		Dysselsdorp informal	Commuter	Loading	0	Weekday	6	11:15	0%
Kannaland	Ladismith	Ladismith Rank	Commuter	Combined	8	Saturday	1	13:30	13%
	Ladismith	Ladismith informal	Commuter	Loading	3	Weekday	2	13:00	67%
	Zoar	Zoar informal	Commuter	Combined	1	Saturday	3	08:15	300%
	Calitzdorp	Calitzdorp informal	Commuter	Combined	0	Saturday	n/a	n/a	0%

ANNEXURE B

5-YEAR CAPITAL BUDGET FOR PROVINCIAL ROADS IN EDEN DISTRICT

Provincial Roads Infrastructure (R mil)										
										as on 09/02/2016 14:00:15
Project	Description	Deliverables	State	'2016/17	'2017/18	2018/19	'2019/20	'2020/21	Period total	Project total
Bitou Local Municipality										
C0846.01:(Execution) Upgrade gravel road DR01770 from km 0 - 8.51 - Airport Road to N2	Upgrade gravel road DR01770 to surfaced from km 0 - 8.51 (from Airport Road to N2)	Upgrade Road, Gravel 8.3 km Upgrade Culvert 1	Under construction	61 883	2 085	-	-	-	63 968	90 843
Hessequa Local Municipality										
C0884.04: Upgrade DR1263 - Slangrivier/Heidelberg	Upgrading of the extension of the main road in Slangrivier, Heidelberg. This project will maximize employment and skills training to residents in the Heidelberg area.	Upgrade Road, Gravel 5.3 km	On Hold	-	-	-	4 166	8 668	13 150	13 150
C0989: Rehabilitation & Geometric improvements on MR00332 between N2 & Still Bay	Rehabilitation and minor geometric improvements of MR00332 between the N2 and Still Bay. Geometric improvements include a minor realignment (km 13.9 to km 15.7) and passing	Rehabilitate Road, Surfaced 26 km Widen Road, Surfaced 4 km Re-align Road, Surfaced 1.8 km Rehabilitate Bridge 1	Contract Awarded	72 910	65 564	3 586	-	-	142 060	155 398

	lanes as well as a sidewalk from Melkhoutfontein (km 21.5) to km 26 at Stillbay.	New Pathway, Bicycle 3.6 km								
		Upgrade Culvert 2								
		Widen Culvert 1								
C1052.03: Flood Damage Repairs in Heidelberg North Region - Eden/Hessequa (BERGSTAN)	Flood damage repairs in the Heidelberg area	Replace Culvert 8	Tender	12 977	1 608	315	-	-	14 900	14 900
		New Retaining structure 1 km								
		Repair Causeway/Viaduct 3								
C1052.04: Flood Damage Repairs in Riversdale East Area - Eden/Hessequa (BERGSTAN)	Flood Damage Repairs to structures in Riversdale/Albertinia Area - PHASE 2 - Eden/Hessequa	Replace Culvert 6	Design	11 109	7 091	400	-	-	18 600	18 600
		Repair Causeway/Viaduct 5								
C1054.04: Flood Damage Repairs of Gouritz River bridge - Eden/Hessequa (SMEC)	Flood Damage Repairs of Gouritz River low level bridge at Melkhoutfontein & Albertinia Area - Flood Damage Repairs - Eden/HessequaCK/Laingsburg (AURECON)	Repair Bridge 1	Under construction	444	260	-	-	-	704	11 328
EDM/2014/IMMS 4864 - Relocation of DR1488 (km 7.0 to km 7.86)	Relocation/Re-alignment of DR1488 (km 7 to km 7.86) Klipdrift.	New Road, Gravel .86 km	Approved	3 000	-	-	-	-	3 000	3 000
Kannaland Local Municipality										
C0847.01: Upgrade DR1661 km 39.86 - km 43,58 near Calitzdorp	Upgrade of DR1661 (km 39.86 - km 43.58 near Calitzdorp to a surfaced standard	Upgrade Road, Gravel 3.72 km	On Hold	-	-	-	17 944	8 931	27 500	27 500
C0960.01: Flood Damage Repairs - Van Wyksdorp Region	Repair of June 2011 flood damage to structures in the Van Wyksdorp Region	Repair Bridge 2	Under construction	686	-	-	-	-	686	38
		Replace Causeway/Viaduct 16								455

		Replace Culvert 1								
		Upgrade Culvert 1								
		Rehabilitate Culvert 1								
		Repair Road, Gravel 1 km								
		Repair Causeway/Viaduct 1								
C0960.02: Flood Damage Repairs - Ladismith Region	Repair of June 2011 flood damage to structures in the Ladismith Region	Replace Retaining structure 1 km	Retention	387	-	-	-	-	387	21 857
		Replace Culvert 2								
		Replace Causeway/Viaduct 4								
		Upgrade Culvert 2								
		New Causeway/Viaduct 1								
		Repair Culvert 1								
C0960.05: Flood Damage Repairs of Groot River Bridge	Repair of two bridges over the Groot River near Ladismith	Repair Bridge 2	Retention	246	-	-	-	-	246	13 245
		New Causeway/Viaduct 3								
C1053.01: Flood damage repairs in Ladismith West Area - Eden/Kannaland (HATCH)	Flood damage repairs in the Ladismith West Area	New Causeway/Viaduct 10	Contract Awarded	16 783	4 618	469	-	-	21 870	21 871
		Upgrade Culvert 1								
		Repair Culvert 1								
		Rehabilitate Causeway/Viaduct 1								
		Repair Causeway/Viaduct 1								
EDM/2015/IMMS 4862 - Rehabilitation of DR1699 (0.0 - 1.2)km Calitzdorp	Rehabilitation of DR1699 (0.0 - 1.2)km Calitzdorp	Rehabilitate Road, Surfaced 1.2 km	Under construction	-	-	-	-	-	-	8 000
Knysna Local Municipality										

C0958.02: Flood Damage Repairs in the George Region	Repair of June 2011 flood damage to structures in the George to Knysna Region.	Replace Culvert 9	Retention	490	-	-	-	-	490	23 135
		Repair Culvert 2								
		Replace Causeway/Viaduct 1								
		Repair Causeway/Viaduct 1								
EDM/2015/IMMS 4860 - Rehabilitation of DR1603 (0.0 - 2.37)km	Rehabilitation of DR1603 (0.0 - 2.37)km	Rehabilitate Road, Surfaced 2.37 km	Under construction	-	-	-	-	-	-	22 000
Mossel Bay Local Municipality										
C0642: Gourits River Bridge Protection Works	Construction of protection works at the Gouritz River crossing/lengthening of bridge	Repair Bridge 1	On Hold	-	-	-	1 816	8 491	10 554	10 553
C0822.02: Rehab MR348 and Upgrade DR1611 - Glentana	Rehabilitation of MR348 (km 3,02 - 11.0) at Glentana to Class 3 Cross-section. Upgrade of DR1611 to a surfaced standard. Portions of DR1599 between km 9.5 and km 11.1 to be upgraded to a surfaced standard. Sections on DR1599 between km 9.0 and km 9.4 as well as km 11.1 to km 11.5 to be resealed.	Rehabilitate Road, Surfaced 11.68 km	Retention	2 625	-	-	-	-	2 625	119 036
		Upgrade Road, Gravel 2.2 km								
		New Retaining structure 2 km								
		Rehabilitate Bridge 1								
		Reseal Road, Surfaced .77 km								
C0822.03: Upgrade of DR1578 at km 15.8 to km 23.3 & km 31.13 to 34.2 - Friemersheim	Upgrade of DR1578 from km 15.8 to km 23.3 (Friemersheim) as well as from km 31.13 to km 34.2 (near Tergniet/Quarry).	Upgrade Road, Gravel 10.59 km	Design	-	-	2 044	68 535	28 942	101 821	101 821

C0822.05: Flood Damage Repairs on DR1578 near Botlierskop (North) between km 7 and km 10.5	Flood damage repairs on DR1578 near Botlierskop (North) between km6.9 - km10.5	Repair Road, Surfaced 3.6 km	Approved	-	-	10 624	260	260	11 144	11 145
C0822: Rehab MR344 & DR1578 - Glentana	The rehabilitation of MR344 from Hartenbos (km 1.71) to Groot Brak (km14.84) and a portion of DR1578	Rehabilitate Road, Surfaced 7.75 km	Design	-	2 446	71 417	1 817	-	75 680	75 680
C0865.09: Flood Damage Repairs to Outeniquasdrift near Herberdsdale DR1572	Repair of flood damage to Outeniquasdrift over the Gouritz River (DR1572) near Herberdsdale on an alternative Route	New Causeway/Viaduct 1	Design	-	36 050	875	875	-	37 800	37 800
C0961.03: Flood Damage Repairs to Structures in the Eden Region: Herberdsdale Area	Repair of June 2011 flood damage to structures in Herberdsdale Area of Eden District Municipality	Repair Bridge 2	Retention	503	-	-	-	-	503	28 385
		Upgrade Bridge 1								
		Replace Retaining structure 1 km								
		Replace Culvert 3								
		Repair Culvert 4								
		Upgrade Culvert 1								
Repair Retaining structure 1 km										
C0964.01: Upgrade of TR33/1 - Phase I Intersection Upgrades	Design and construction of TSM improvements on Louis Fourie Road at Schoeman Street and Essenhout street intersections and upgrading ramps at the Marsh street intersection.	Widen Road, Surfaced 2.8 km	Contract Awarded	28 651	687	687	-	-	30 025	30 025

C0964: Upgrade of TR33/1 at Mossel Bay	Upgrade of TR03301 from the junction with the NR00206 - Mosselbay, to the junction with MR00344 in Hartenbos	Upgrade Road, Surfaced 16.08 km	Planning	-	-	13 926	69 661	69 661	220 001	220 000
C1035: Reseal of MR342 from km 7.72 - 38.63 between Mossgas and Herbertsdale	Reseal of MR00342 from km 7.72 to km 38.63 between Mossgas and Herbertsdale	Reseal Road, Surfaced 30.91 km	Design	-	-	9 981	41 288	1 236	52 505	52 505
Oudtshoorn Local Municipality										
C0794.02: Embankment Remediation on TR2/10	Repair of settlement on embankment next to Knysna Lagoon between km 57.00 and km 57.50 on TR2/10	Repair Gabion wall .5 km	Design	2 950	5 600	200	-	-	8 750	8 750
C0918: Rehab TR33/3 - Oudtshoorn/De Rust	Rehabilitation of TR33/3 between Oudtshoorn and De Rust.	Rehabilitate Road, Surfaced 32.56 km	Design	11 663	133 675	97 312	5 750	-	248 400	248 400
C0959.01: Flood Damage Repairs Calitzdorp and Oudtshoorn Regions	Repair of June 2011 flood damage to structures in the Calitzdorp & Oudtshoorn Regions	New Retaining structure 2 km	Retention	458	-	-	-	-	458	26 614
		Replace Bridge 1								
		Replace Culvert 7								
		Repair Causeway/Viaduct 4								
		Repair Culvert 3								
Replace Causeway/Viaduct 1										

C0998.01: Remediation of cutting on TR75/2 (R328) between Oudtshoorn and the Cango Caves	Assessment and remediation of the stability of roads cuttings on TR75/2 (R328) between Oudtshoorn and the Cango Caves	Repair Cutting Slopes 28.23 km	Design	-	-	-	-	12 075	12 350	12 350
C0998: Reseal TR07502 between Oudtshoorn & Cango Caves	Reseal of TR07502 between Oudtshoorn and Cango Caves	Reseal Road, Surfaced 25.38 km	Design	-	-	-	27 118	29 745	58 223	58 224
C1007.01: Construction of new Culvert on DR1694 at km 5.95 - Dysselsdorp	Construction of new Culvert on DR1694 at km 5.95	New Culvert 1	Under construction	18	-	-	-	-	18	909
C1007.02: Upgrade Gravel Road DR01694 from km 5.51 to km 6.41 - Dysselsdorp	Upgrade Gravel Road DR01694 from km 5.51 to km 6.41 - Dysselsdorp	Upgrade Road, Gravel .9 km	Under construction	16	-	-	-	-	16	794
C1007.03: Construction of new Culvert on OP6960 at km 1.53 - Dysselsdorp	Construction of a new culvert on OP6960 at km 1.53	New Culvert 1	Under construction	12	12	-	-	-	24	464
C1007.04: Upgrade Gravel Road DR01662 km 36.47 - km 37.32 & OP06960 km 1.44 to km 1.73 - Dysselsdorp	Upgrade of Gravel Road DR01662 from km 36.47 - km 37.32 & OP06960 from km 1.44 to km 1.73.	Upgrade Road, Gravel 1.14 km	Under construction	18	18	-	-	-	36	708
C1007.05: Upgrade Gravel Road DR01694 from km 5.51 to km 6.41 - Dysselsdorp	Upgrade Gravel Road DR01694 from km 5.51 to km 6.41 - Dysselsdorp	Upgrade Road, Gravel .9 km	Design	2 243	58	-	-	-	2 301	2 300

C1007.06: Upgrade Gravel Road DR01662 km 36.47 to km 37.13 - Dysseisdorp	Upgrade Gravel Road DR01662 km 36.47 to km 37.13 - Dysseisdorp	Upgrade Road, Gravel .66 km	Design	2 145	55	-	-	-	2 200	2 200
C1008: Upgrade concrete road DR01688 between Calitzdorp Spa turn-off and Oudtshoorn	Rehabilitation of the concrete road DR01688 between Calitzdorp Spa turn-off and Oudtshoorn.	Upgrade Road, Concrete 27.89 km	Design	-	-	-	3 005	118 810	124 733	124 733
C1008.01: Rehab of DR01688 from Calitzdorp to Spa & Upgrade DR01699	Rehabilitation of DR01688 from Calitzdorp to the Catitzdorp Spa turn-off and Upgrade of DR01699.	Rehabilitate Road, Surfaced 13.88 km	Design	-	-	20 563	58 008	1 963	80 534	80 534
		Upgrade Road, Gravel 1.2 km								
		New Retaining structure 1 km								
TOTAL						352 505	355 733	292 896	1 715 759	2 249 056

