



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

CYCLING STRATEGY FOR THE CITY OF CAPE TOWN (POLICY NUMBER 55219)

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Cycling Strategy for the City of Cape Town

March 2017



TDA
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and Urban Development Authority*

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Glossary

Accessibility	The degree to which a site, building, service or environment is accessible to people, irrespective of who they are or how they move.
City of Cape Town/ City	“City” means the City of Cape Town, a municipality established by the City of Cape Town Establishment Notice No. 479 of 22 September 2000, issued in terms of the Local Government: Municipal Structures Act, 1998, or any structure or employee of the City acting in terms of delegated authority.
Cycle Facilities	Broad range of physical aspects that serve cycling – these include but are not limited to cycle paths.
Cycle Path	A dedicated cycle route identified either by road markings or physically separated from other road users.
Cycle Route	Route along which cyclists travel – may be unmarked and shared with other road users.
Cycle-able	A route that is capable of being ridden on a bicycle with relative ease.
Mobility	The ability to physically move between an origin and a destination.
Modal share of cycling	Commuter trips undertaken by bicycle as a percentage of all commuter trips undertaken in a specific area.
Recreational Cycling	Cycling for purely recreational purposes includes sports cycling.
Utility Cycling	Cycling for commuter and non-recreational purposes.

Abbreviations

IPTN	Integrated Public Transport Network Plan, 2032
NMT	Non-motorised transport - a form of transport that is dependent on human or animal power for movement and does not require a motor for propulsion.
TDA	Transport and Urban Development Authority of the City.
TOD	Transit Oriented Development - development which is focused on densification and intensification of land use in relation to the integrated transport network.

Executive Summary

Worldwide utility cycling is increasingly recognized as a vital contributor to cities which strive to be sustainable. The City of Cape Town recognizes that cycling is an important part of the City's transport system and developed the Cycling Strategy to improve access to bicycles and support the growth in utility cycling.

The City of Cape Town recognises the important role cycling can play in responding to a range of challenges that needs to be addressed City-wide:

- Cycling is a cost-effective form of transport that can help reduce delays on our road and public transport networks.
- Cycling supports economic growth and help generate jobs.
- Cycling contributes in creating better places to live by making it easy for people to move around their local communities.
- Cycling contributes to a healthier environment by helping to reduce air pollution, noise and greenhouse gas emissions.
- Cycling helps to reduce physical inactivity and improve the health of Capetonians.

Over the past 10 years recreational and sport cycling have grown tremendously and continue to do so. This growth is evident in the high numbers of recreational and sport cyclists observed on the roads and participating in events. While cycling is already a popular form of recreation and exercise, there is considerable room for growth in utility cycling. Overall only 1% of transport trips are made on a bicycle – few journeys to work and school are by bicycle. Cycling has the potential to grow even further, particularly for short local trips, for trips to road and rail based public transport services and for children riding to school.

The Cycling Strategy takes a holistic, co-ordinated and strategic approach to cycling by considering the needs of all cyclists and developing policies, programs and actions to address these needs. Currently, a number of barriers prevent the growth of cycling, including limited access to bicycles, concerns about road safety and personal security, gaps in cycling networks, limited data on cycling use, limited engagement with stakeholders and how people think about cycling. Addressing these barriers means that the Cycling Strategy must do more than support better cycling networks – it must build knowledge and processes that will grow and support cycling.

A comprehensive cycling development programme is required to effectively encourage and grow cycling. The six **key focus areas** prioritised during the development of the Cycling Strategy reflect this broader approach and are - improved access to bicycles, improved safety and security, provide and maintain cycling infrastructure, improve data capturing and monitoring, facilitate stakeholder collaboration and improve communication and education. The Cycling Strategy seeks to improve data on cycling. By building a better evidence base, the strategy will enable more informed decisions to be made.

The desired outcome of the Cycling Strategy is that cycling will become recognized and accepted as a safe, viable and attractive means of travel for all and that cycling's mode share will increase from the current 1% to 8% by 2030. The Cycling Strategy aims to make it easier for more people to cycle and to make it safer for people who already ride.

An Implementation Framework with actions is included in the Cycling Strategy. The Monitoring and Evaluation will focus on the monitoring of outcomes such as the increase in numbers of cyclists, improvement in cyclists safety and security, extent of cycling infrastructure and acceptance of cycling.

1. Problem Statement

Over the past 10 years recreational and sport cycling (road cycling and mountain biking) have grown and continue to do so. This growth is evident in the high numbers of recreational and sport cyclists observed on the roads and participating in events. While cycling is already a popular form of recreation and exercise, there is room for growth in utility cycling. Overall only 1% of transport trips are made on a bicycle – few journeys to work and school are by bicycle. While the average daily bicycle volumes on Cape Town cycle paths have been increasing, there is room for more people on our cycle networks. Key challenges in Cape Town include how to improve access to bicycles, increase utility cycling and accordingly the mode share of cycling.

2. Introduction

Worldwide utility cycling is increasingly recognized as a vital contributor to cities which strive to be sustainable. The City of Cape Town recognizes that cycling is an important part of the City's transport system and developed the Cycling Strategy to support the growth in utility cycling. An increase in cycling generates a range of benefits for the community, including transport, environmental, health, tourism and recreation. Cycling contributes to more lively and active cities and has the potential to free up congested road space. This can result in reduced traffic delays on the road network, which can make our cities and urban centres less congested and more productive.

The Cycling Strategy was developed with input from a broad range of cycling stakeholders and the comment received during the public participation process. The desired outcome of the Cycling Strategy is to increase cycling mode share from the current 1% to 8% by 2030 which will contribute to a reduction in congestion and greenhouse gas emissions. While the City has focused on the provision of cycling infrastructure, there is a realization that a broader approach is required to grow utility cycling. The Cycling Strategy identifies six Key Focus Areas to encourage more people to consider cycling and to increase utility cycling:

- Improve access to bicycles to provide more people with the opportunity to cycle.
- Improve safety and security to reduce conflicts and risks to make cycling safer.
- Provide and maintain cycling infrastructure to improve coordinated planning and maintenance of cycling infrastructure.
- Improve data capturing and monitoring to build a stronger evidence base and make more informed decisions.
- Facilitate stakeholder collaboration to improve coordination between cycling stakeholders.
- Improve communication and education to make cycling more attractive.

An Implementation Framework with actions is included in the Cycling Strategy. The Implementation Framework sets out priority actions for the short to medium term to deliver the strategy's objectives. Actions are aligned under the six Key Focus Areas.

As the Cycle Strategy is primarily about behavioural change, and the Monitoring and Evaluation will focus on the monitoring of outcomes such as the increase in numbers of cyclists, improvement in cyclists safety and security, extent of cycling infrastructure and acceptance of cycling.

The Cycling Strategy will be reviewed and updated every 5 years to be in line with the CIP and to stay abreast of changes in the transport and urban planning environment.

3. Status Quo of Cycling in Cape Town

The 1960's era marked the start of major increases in private motor vehicle ownership in South Africa and Cape Town. In response, the transport strategy in Cape Town centered on the expansion of the road network with the aim of accommodating the mobility desires of private vehicle users, amid increasing sub-urbanization.

The road network expansion and increasing sub-urbanization resulted in the city severing communities and in many areas eliminating the option of cycling as a viable and safe means of transport. As a result, the modal share of cycling in Cape Town decreased since the 1980's and there has also been a steady decline in learner cycling for school trips.

Since 2008 the City of Cape Town initiated infrastructure programmes aimed at the provision of cycling, pedestrian and universal access network and facilities. The infrastructure focused approach has unfortunately not been enough to effectively increase the mode share and to make cycling an accepted utility mode of transport.

During the past 10 years recreational and sport cycling (road cycling and mountain biking) have grown and is still growing. This growth is evident through the high numbers of recreational and sport cyclists observed on the roads and participating in events. In contrast to the high levels of recreational cycling, utility cycling is generally very low. One of the challenges in Cape Town is how to increase utility cycling and accordingly the mode share.

A range of NGO's and advocacy groups promote utility cycling and manage bicycle distribution programmes in low income communities. The efforts by the City, NGO's and cycling advocacy groups require an improvement in coordination.

The Status Quo of cycling in Cape Town was determined through a range of actions which include the following:

- Surveys of NMT movements at 50 locations distributed geographically across the City.
- Review of incident data captured from the Accident Reports completed at the SAPS Stations.
- Review of cycling facilities.
- Engagements with external stakeholders and City Departments.

3.1 Cycling in Cape Town

Available cycling data indicates that **approximately 1%** of all commuter trips in Cape Town are made by bicycle. Set against global cities of both developed and developing countries, Cape Town's mode share by bicycle is low but has potential for growth. Cycling for recreational and sport purposes is a very popular activity mainly practiced by citizens from the higher income groups. Utility cycling, which includes short trips made for school, tertiary education and employment purposes and longer trips to access public transport, is very low.

Cape Town has an extremely active recreational and sport cycling sector – this includes both road cycling and mountain biking. Across the Western Cape region there is a calendar of regular events in addition to large numbers of cyclists taking to the roads and trails for recreation and training. The highlight of the cycling calendar is the Cape Town Cycle Tour held annually in March and which is the largest individually timed cycle race in the World.

In contrast to the high levels of recreational cycling, **rates of utility cycling are generally very low**. Various interactions and studies have indicated that a high level of latent demand does exist. However, although low in percentage terms, substantial volumes of cyclists have been observed and surveyed originating from low income residential areas.

3.2 Cycling Incidents

A review of cycling incidents recorded between 2006 and 2014 and summarized in Table 3.1 was conducted. Cycling incidents refer to all recorded crashes between cyclists and vehicles which result in minor, serious and severe injuries and death.

Table 3.1: Cycling Incidents recorded 2006 to 2014 in the City of Cape Town

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Incidents	48	134	500	813	858	795	862	742	769	5 521
Injuries										
None	14	32	215	347	358	388	479	381	335	2 549
Unknown	20	47	39	114	99	35	20	44	35	453
Slight	12	45	199	288	332	313	304	266	335	2 094
Serious	2	10	43	60	65	52	58	45	59	394
Death	0	0	4	4	4	7	1	6	5	31
Total	48	134	500	813	858	795	862	742	769	

31 Cyclist fatalities were recorded between 2006 and 2014 with the percentage of fatalities of all reported cycling incidents not exceeding 2% in any single year. There were **no significant correlations** between the 31 fatalities and the locations where they occurred.

3.3. Lessons Learnt

The engagement with external stakeholders and City Departments and the review of existing cycling facilities have provided valuable lessons learnt which informed the development of the Cycling Strategy:

- Affordability of bicycles is one of the main reasons that more people from low income communities do not cycle.
- There is a very active recreational and sport cycling community which provides an opportunity to grow utility cycling.
- Attracting people to take up cycling requires more than the provision of cycling infrastructure in the form of bicycle paths.
- Concerns regarding road safety and personal security must be addressed to grow utility cycling.
- Road user behavior must be addressed through education and awareness campaigns.
- A full project life cycle approach consisting of planning, design, implementation and maintenance must be followed to ensure the long term use of cycle facilities.
- Only by understanding the local area context can appropriate cycling facilities be planned, designed and implemented.
- Cycling data in Cape Town is limited. Improved data availability is required for effective monitoring and evaluation of NMT projects and NMT movements.
- There is a need for improved coordination and integration between the efforts of the public sector and NGO's, especially in relation to bicycle distribution and awareness programmes.
- Long term funding is important for the development of a comprehensive NMT network.

3.4 Opportunities to Grow Utility Cycling

In Cape Town there is great opportunity for cycling to be used more frequently for shorter trips to replace either a vehicle trip or even a public transport trip.

- High growth potential exists for local commuter trips below 10km, especially for trips made to employment areas. Undertaking such journeys by bicycle allows the commuter flexibility to plan their own journey and avoid lengthy waits for public transport.
- Growth potential exists for trips made as a feeder to road and rail based public transport services. Cycling provides a low cost and flexible solution compared to formal public transport feeder services.
- Longer distance trips can be cycled by experienced cyclists, especially if they have access to end-of-trip facilities, such as bicycle storage, personal lockers and showers.
- There is also an opportunity to increase the number of children cycling to school as many children are now being driven to school, adding to traffic congestion in the morning.

Given the widespread availability of bicycles in the middle to higher income group, a growing cycling network, an extensive road network, a relatively flat topography in many areas of the City and a mild climate, there is a strong potential for greater number of Capetonians to cycle.

3.5 Planning, Design and Implementation of NMT Facilities

The City-wide NMT Programme was initiated by the Transport Planning Department in 2009 to develop a comprehensive pedestrian and cycle network which improves accessibility to public transport, public facilities and places of employment and to encourage walking and cycling as modes of transport. Universal Access for people with special needs is addressed in the planning, design and implementation stages.

For the City-wide NMT Programme, a conceptual NMT Network Plan was developed for each of the four Regions (Central, North, South and East) by a multi-disciplinary team. The conceptual NMT Network Plan was informed by existing NMT movement patterns, public transport networks, NMT trip generators (public facilities and employment areas) and incident data. Following the completion of the four Network Plans, NMT projects were identified and prioritized for each of the four Regions. The City-wide NMT Programme is now in its third Phase and approximately 450km of NMT facilities have been completed City-wide.

4. Regulatory Context

The Cycling Strategy has been developed within the context of legislation, policies and strategies at national, provincial and local level which strongly support non-motorised transport, pedestrian and cycle improvements that promote access to opportunity and integration of transport and land-use.

Diagram 4.1 provides an overview of the most relevant City policies, strategies, planning and design guidelines that informed the development of the Cycling Strategy.

Table 4.1 provides an overview of key legislation, policy and strategy documents at national, provincial and local level which support the development of the Cycling Strategy.

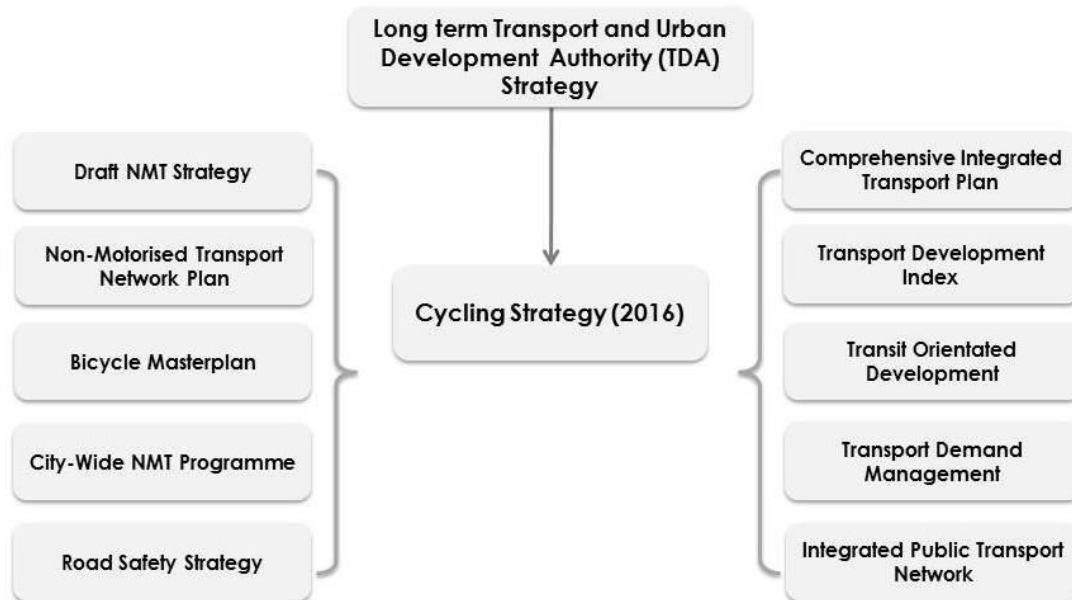


Diagram 4.1: Overview of relevant City policies, strategies, planning and design guidelines that inform the development of the Cycling Strategy

Table 4.1: Summary of relevant legislation, policies, strategies and other source documents

Informant	Relevance to Cycling Strategy
National	
Constitution of the Republic of South Africa, 1996 (Act No 108 of 1996)	One of the founding values applicable to the provision of Cycling is: <i>“Human dignity, the achievement of equality and the advancement of human rights and freedoms.”</i>
National Road Traffic Act, 1996 (Act No. 93 of 1996) and National Road Traffic Regulations, 2000	The National Road Traffic Act (NRTA) and National Road Traffic Regulations (NRTR) stipulate the rules and regulations for the movement of both motorised and non-motorised transport on public roads, sidewalks and pathways.
Public Transport Strategy and Action Plan, 2007	The Public Transport Strategy states that: <i>“Non-motorised transport (NMT), particularly walking and cycling, will serve as an important mode of transport in the Integrated Rapid Public Transport Network.”</i>
NMT Facilities Guidelines, 2014;	The NMT Facilities Guidelines provides guidelines for cycling facilities in the section: <i>Cycling Route Network Planning.</i>
Provincial	
Bicycle Distribution Framework, 2016	The Department of Roads and Public Works recently commissioned the preparation of a Bicycle Distribution Framework. As at June 2016 the project was still under development but will provide guidance into affordable access to bicycles.
City of Cape Town	
City of Cape Town NMT Policy and Strategy, 2005	The NMT Policy and Strategy was the first document to define a Vision, Goals and Objectives for NMT and sets out policies and strategies to grow NMT.
City of Cape Town Bicycle Masterplan Update, 2011	Completed in 2011, Masterplan is an update of the 2002 Bicycle Masterplan and primarily focussed on “higher order” cycling routes.

Informant	Relevance to Cycling Strategy
Cape Town's Energy and Climate Change Action Plan, 2011	Identifies the contribution that NMT and cycling should be making in shifting from the current approach by " <i>Developing a more sustainable transport system</i> ".
Spatial Development Framework, 2012	Requires that walking and cycling be attractive mode of choice and become essential components of land use planning in Cape Town.
Urban Design Policy, 2013	The Urban Design Policy was developed to "... make Cape Town safer, more economically prosperous, socially inclusive and environmentally sustainable, while also making it look and work better for all those who live in and visit the city." It establishes 9 objectives to achieve this. Objective 4 specifically requires that opportunities and amenities are accessible and that people can move about easily and efficiently and that NMT facilities be considered from the beginning of the design process. However, whilst cycling facilities should be considered their inclusion is actually optional not obligatory.
Constitution of the Transport and Urban Development Authority for Cape Town By-law, 2016	Cycling Strategy is one of the strategies that fall under the function of Transport Planning and is aligned to the objectives of the By-law which sets out the functional parameters to ensure that all standards and obligations including Universal Access and Non-Motorised Transport are met.
Road Safety Strategy, 2013	Road Safety Strategy vision: "a road system on which people feel safe and are safe". This will be realised by implementing focussed and effective programs and projects that target roads, road users and vehicles.
Integrated Public Transport Network (IPTN), 2014	The Integrated Public Transport Network Plan (IPTN), 2014 has been developed as the City's strategic long term network plan for the implementation of public transport.
Integrated Development Plan 2015/16 Review and Amendments, 2015	Transport is identified as one of the key Action Areas within the IDP. From a mobility perspective the IDP's reference to an Opportunity City requires that residents have affordable accessible to services, amenities, employment and recreation.
Comprehensive Integrated Transport Plan, 2013 as amended 2016	The City of Cape Town is working to develop its cycling infrastructure, and there are a growing number of safe cycling routes and places to ride in the city and surrounds. Bicycle lanes are provided as a part of IRT infrastructure as far as possible. There is a growing bicycle-friendly culture developing, and frequent community organised cycling events to promote cycling are held.
Transport Development Index, 2015 Generation I and TDI Generation II, 2016	The TDI is the mechanism against which TDA can evaluate the effectiveness of its transport service delivery interventions as it relates to the various user groups across different income brackets and in different areas of the City. NMT which includes walking and cycling is recognised as part of the People User Groups and lack of geographic data and income has been recognised as some of the key factors that the TDI need to address.
Transit Orientated Development, Strategic Framework, 2016	The TOD Standard recognises urban development projects that are located within walking distance of a high-capacity transit station and that present specific urban design and land use characteristics known to support, facilitate and prioritize the use of public transport, walking, cycling and other non-motorized modes.
Travel Demand Management Strategy, 2016	Draft TDM Strategy recognised the NMT Network as part of the TDM measure that contributes in the Congestion Management Programme. The Strategy also aims to shift the modal share towards public transport and NMT.

5. Strategic Intent

The Strategic Intent is that cycling will become recognized and accepted as a safe, viable and attractive means of travel for all.

This Cycling Strategy is in strategic alignment with the following higher order vision and strategies of the City:

- One Cape 2040, 2012
- Economic Growth and Social Development Strategy
- Integrated Development Plan (IDP), 2012 - 2017
- Cape Town Spatial Development Framework (SDF), 2012
- Comprehensive Integrated Transport Plan (CITP), 2013 – 2018

The Cycle Strategy is aligned with the **IDP and its five Strategic Focus Areas (SFA's)** through the following actions:

Opportunity City:	Support for improved cycling infrastructure and facilities as well as related job opportunities.
Safe City:	Support for cycling infrastructure and facilities that enable safe utility cycling.
Caring City:	Support for improved road safety and interventions at crime hotspots.
Inclusive City:	Enable bicycle distribution programmes in low income communities.
Well-run City:	Facilitate integrated and coordinated programme of actions.

6. Transversal Responsibility of Stakeholders

The realization of the Strategic Intent and Vision for Cycling is dependent on the contributions of a range of City Directorates and external stakeholders. These contributions must be coordinated and integrated to support the Vision.

TDA is responsible for the planning, design, construction, maintenance, management and operation of the City's transport network (including cycling facilities) and integration with the built environment. A range of NGO's, organisations and individuals are important stakeholders due to their roles in supporting utility and recreational cycling, bicycle distribution programs, cycling events and cycling activism.

Relevant TDA Departments and their respective responsibilities:

- Transport Planning: Manage NMT network planning.
- Built Environment Management: Manage design and implementation of new NMT infrastructure.
- Asset Management and Maintenance: Maintain existing NMT facilities and infrastructure.
- Network Management: Develop standards and enforcement framework.
- TDA Business Support: Manage communications, customer relations and change management.
- Urban Integration: Integrate key foundational aspects for urban development.
- Business Resource Management: Long term financial management of an integrated transport system.

Other City Departments as role players:

- Law Enforcement, Traffic and Coordination
- Recreation and Parks

NGO's and organizations as stakeholders:

NGO's and organizations such as the Pedal Power Association (PPA), Bicycle Empowerment Network (BEN), Bicycle Cape Town and Bicycle Cities facilitate bicycle distribution programmes, establishment of bicycle empowerment centres, awareness campaigns, educational programmes and events and play an active cycling advocacy role. The stakeholders play an important role in supporting utility and recreational cycling and provide a valuable contribution to increase the mode share of cycling.

6.1 Sustainable Mobility Charter and Action Plans

The concept for the Sustainable Mobility Charter and Action Plans was developed during the Mobility Indaba which was hosted from 6 October to 10 October 2016 at the Kenilworth Race Course as part of Transport Month 2016.

The Mobility Indaba was organized by the City of Cape Town, Dutch Consul General, WesGro and Accelerate Cape Town and facilitated by CoCreateSA. The Indaba was attended by a wide range of representatives from civil society. During the inter-active workshop five themes and three actions per theme were identified which must be addressed to improve transport and sustainable mobility in Cape Town. During the Indaba cycling was raised as mode of transport to improve sustainable mobility. The five themes identified are:

- Design and Infrastructure
- Economics and Entrepreneurship
- Behavioural Dynamics
- Advocacy and Political Will
- Health and Safety

The input received at the Mobility Indaba will be used to draft a more detailed Sustainable Mobility Charter and Action Plans. A proposed sub-committee will be established under the Inter-modal Planning Committee (IPC) to monitor the implementation of the Sustainable Mobility Charter.



Figure 6.1: Concept Sustainable Mobility Charter and Action Plans developed during the Mobility Indaba, October 2016

7. Vision to Grow Cycling

7.1 Vision for Cycling

The proposed **Vision for cycling in Cape Town** is:

“Cape Town is the premier Cycling City in South Africa where cycling is an accepted, accessible and popular mode of transport for all - residents and visitors alike.”

In order to achieve the Vision for Cycling, the City need to improve access to bicycles, improve the safety and security of cyclists, improve the conditions for cycling, improve cycling data, engage with cycling stakeholders and promote cycling as a way of life.

7.2 Goals

The Vision and following Goals support cycling to become recognized and accepted as a safe, viable and attractive means of travel for all in the City of Cape Town.

- Cycling is accessible and affordable for all.
- Cycling and cyclists are safe and secure.
- Cycling infrastructure and systems serve the needs of cyclists.
- Cycling is included in urban and transport planning initiatives and transport projects.
- Project monitoring and evaluation is an integral part of the project life cycle.
- Engagement with cycling stakeholders is ongoing.

8. Desired Outcomes

Based on the **Vision for Cycling** in Cape Town the Desired Outcomes are:

- An increased mode share of cycling from 1% to 8% by 2030.
- Cycling has significantly contributed to a substantial reduction in congestion and GHG emissions in the City by 2030.
- More people across all sectors of the population have access to affordable bicycles and are cycling as a mode of transport.
- A substantial shift to utility cycling.
- Cycling is substantially safer and secure.
- Cycling infrastructure and systems serve the needs of cyclists.
- Cycling is an accepted means of travel.

Six **Key Focus Areas** have been identified to support the vision for cycling and the goals and facilitate growth in utility cycling:

- Improve access to bicycles
- Improve safety and security
- Provide and maintain cycling infrastructure
- Improve data capturing and monitoring
- Facilitate stakeholder collaboration
- Improve communication and education

9. Actions Required to Grow Utility Cycling

A full range of actions are required to encourage more people to cycle and for this shift to be permanent. The range of actions that inform a successful cycling development programme is summarized in Figure 9.1 below. The priority actions to grow utility cycling are:

- **Access to bicycles and maintenance.** Cape Town requires innovative mechanisms to enable access to affordable bicycles for disadvantaged communities. Bicycle hire in the local and tourism should be strongly supported to improve local movement by bicycle.
- **Continuing development of safe and effective cycle networks and routes.** Continuing development of the cycle route network and related infrastructure and trip facilities such as bicycle parking.
- **Integration of cycle routes and facilities with public transport** is a key component of a successful system.
- **Travel plans and travel demand management (TDM)** programmes at the community level and for organisations (employers, educational institutions, etc.) are encouraged and developed and support cycling as a mode of transport.
- The **communication and promotion** of cycling through media campaigns, forums and public engagement and events is dynamic and ongoing.

The successful implementation of a cycling development programme is supported by enablers: organisational and institutional structures which oversee programme, regular Monitoring and Evaluation and funding programmes for roll out of actions.

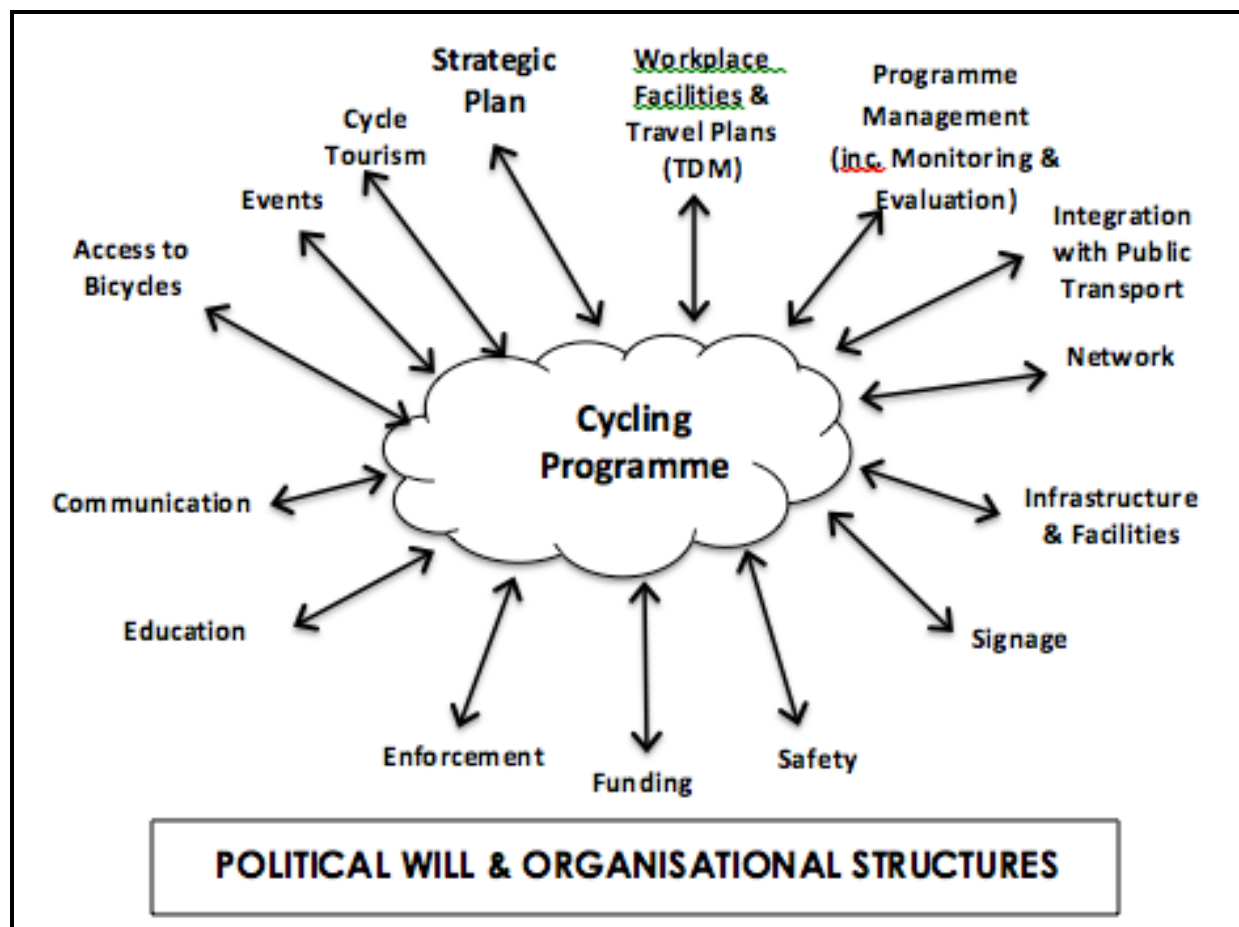


Figure 9.1: Activities that inform a successful Cycling Development Programme

10. Key Focus Areas of the Cycling Strategy

Six **Key Focus Areas** were identified to encourage more people to consider utility cycling and to increase cycling mode share to at least 8% by 2030. The six areas were identified through input from cycling stakeholders during the development of the Cycling Strategy, input received at the Mobility Indaba 2016 and the cycling strategies of global cities. The six Key Focus Areas are:

- Improve access to bicycles to provide more people with the opportunity to cycle.
- Improve safety and security to reduce conflicts and risks to make cycling safer.
- Provide and maintain cycling infrastructure to improve coordinated planning and maintenance of cycling infrastructure.
- Improve data capturing and monitoring to build a stronger evidence base and make more informed decisions.
- Facilitate stakeholder collaboration to improve coordination between cycling stakeholders.
- Improve communication and education to make cycling more attractive.

A brief overview is provided for each of the Key Focus Areas and the related Sub-focus areas and Actions are outlined in a table format.

10.1 Focus Area 1: Improve Access to Bicycles

Any trip by bicycle requires a trip desire, access to a bicycle (availability of and sourcing) and completing the trip. For a cycling strategy to be successful citizens, visitors and tourists must be able to access and use bicycles. The Actions required to *Improve Access to Bicycles* is summarized in the Table 10.1 below.

Bicycles are accessed through ownership or sharing. Bicycle ownership options include direct purchase, received as a donation and earning e.g. through community service. Bicycle sharing implies use of bicycles owned by another person or entity on a temporary basis. Bicycle sharing options include borrowing, pooling, leasing, rental and formal public bike share systems.

Formal Bike Share schemes available in many international cities are a growing means of accessing bicycles. Bike Share systems take the form of bicycles located at key locations (stations) across a city/ town which are accessed/ unlocked via a transaction (cash, credit card, smart payment). The user can then drop the bicycle off at any other bike station within the network once at the trip destination.

Affordability of bicycles is the greatest barrier for low income communities who want to cycle for trip purposes but cannot purchase a bicycle due to the cost thereof. Bicycle ownership in low income communities can occur through some form of assistance:

- Local manufacturing of low cost bicycles to improve affordability of bicycles to low income communities.
- Bicycle distribution programmes along the lines of current NGO initiatives.
- Financial assistance for outright bicycle purchase.
- Employer programs to purchase and maintain bicycles for workers commuting short to medium distances provide high short term potential.
- Bicycle donation via social projects.
- Some form of low income bicycle share/ lease scheme for local area travel and student campus area travel.

Table 10.1: Actions to Improve Access to Bicycles

Focus Area 1: Improve Access to Bicycles	
Sub-Focus Area	Action
1.1 Support the investigation and facilitation for the establishment of a local bicycle manufacturing plant.	<ul style="list-style-type: none"> Formalise a partnership to guide and support collaborative investigations, feasibility studies and due diligence by trade and investment agencies to establish a low cost bicycle production plant in the Cape Town metropolitan area. Assist with guiding multi-sphere policy, strategy and procedural alignment to facilitate the establishment of a low-cost bicycle manufacturing plant.
1.2 Facilitate mechanisms and tools to assist with access of bicycles to users (incentives, bike share options, bike donations and others).	<ul style="list-style-type: none"> Review and cite lessons learnt for bicycle distribution programs and what tools, incentives and innovative schemes are available to facilitate access to bicycles. Investigate and review the existing institutional framework to guide how the City could assist with bicycle distribution processes. Investigate the implementation of a public bike share system.
1.3 Enable bicycle NGO's and NPO's and other agencies with bicycle distribution programs to target markets.	<ul style="list-style-type: none"> Engage in a process to establish a bicycle distribution monitoring structure to monitor the various bicycle distribution programs. From the establishment phase ensure representation of relevant NGO's, NPO's and other stakeholders on the monitoring structure. Identify good practices and systems to guide the monitoring of bicycle distribution programs.

10.2 Focus Area 2: Improve Safety and Security

Being able to cycle safely and securely is a concern for many Capetonians that currently cycle or might consider cycling as a means of transport or recreation. Although the terms are used interchangeably, **safety** relates to the risk of collision (commonly referred to as “an accident”) and **security** relates to the risk of crime. The Actions related to *Improve Safety and Security* is summarized in the Table 10.2 below.

Being **able to ride safely** requires appropriate infrastructure as well as **responsible road user behavior and mutual respect**. All road users have a responsibility to follow the rules of the road. Both cyclists and motorists are legitimate road users and need to respect each other. If we are to reduce incidents, it is important that all road users **share the road safely** with each other.

Many of the issues that affect cycling safety are systemic issues that will require a broader approach to improve driver awareness and behaviour to improve road safety. While the Cycling Strategy can contribute to this, it will not be able to address the issues in isolation.

Security is a major concern for existing and potential cyclists and is detracting from the growth of utility and recreational cycling in Cape Town. Concerns regarding security take many forms including attacks, harassment and the degradation of cycle routes e.g. use of the R27 Cycle Route has been compromised due to security. A further concern particularly relevant in lower income communities is the secure storage of bicycles at home.

Table 10.2: Actions to Improve Safety and Security

Focus Area 2: Improve Safety and Security	
Sub-Focus Area	Action
2.1 Sub Focus Area Safety	
2.1.1 Facilitate improvement of compliance of “rules of the road” through programs which raises awareness, highlights respect of the rights of other users and safe user behaviour.	<ul style="list-style-type: none"> Engage in a process to develop a communication strategy and plan focussing on rules of the road/ traffic regulations, rights of all road users and safe road user behaviour and improve incident reporting systems.
2.2 Sub Focus Area Security	
2.2.1 Enable continuous improvements of management, operations and use of facilities in design approaches, use of technology, and information sharing to improve security of assets.	<ul style="list-style-type: none"> Develop a strategy and plan through transversal approaches and agreements to improve and develop reporting systems, observation methods, prioritised enforcement operations, interagency agreements and standard operating procedures.

10.3 Focus Area 3: Provide and Maintain Cycling Infrastructure

Although not the only requirement for cycling to become the norm a network of cycle routes and appropriate cycling infrastructure (e.g. end of trip facilities) are essential components in a cycling strategy. The Actions related to *Provide and Maintain Cycling Infrastructure* is summarized in the Table 10.3 below.

In the **planning and design of cycling networks and routes**, the requirements of cyclists must be taken into consideration. For cycling networks and routes to be used by cyclists it must be:

- **Safe** - cycle routes must limit conflict between cyclists and other road users.
- **Secure** - to attract high usage cycle routes must offer a high level of personal security, which implies that routes must be routed through well frequented and populated areas, be well lit and preferably be included in security patrolled zones.
- **Direct** - cycle routes must be based on desire lines and avoid excessive delays and detours.
- **Coherent** - cycle routes must be continuous, recognisable and link major origins and destinations.
- **Comfortable** - cycle routes must be well maintained, provide a comfortable riding surface, be non-slip and, where possible, have gentle curves and flat gradients.
- **Attractive** - cycle routes must complement their surroundings and look attractive thereby enhancing public safety and contributing to a positive cycling experience.

Cycling facility requirements include the **provision of trip start and end facilities**:

- **Bicycle parking** - long term storage and public bicycle parking on-street, parking at public transport interchanges and at parking buildings and in new developments.
- **Bike stations** typically provide secure and covered parking for bicycles and may include other facilities such as showers, lockers and repair facilities.
- Cyclists require additional **trip end facilities, specifically lockers, changing areas and showers** if they are commuting for long distances.
- **Signage, road markings and way finding** – the clear identification of cycle ways and route finding forms an essential part of a successful cycling strategy.

The regular **maintenance of cycling facilities** is necessary to ensure that the facilities are well maintained. Cyclists are far more susceptible to surface irregularities than motor vehicles and this affects both safety and riding comfort. A structured maintenance programme must be established to ensure the regular maintenance of the cycling facilities. A maintenance programme must include the repair of existing facilities, ensure that routes are rideable (free of thorns, broken glass and uneven paving), establish a reporting system and implement a regular program of route inspections.

Table 10.3: Actions to Provide and Maintain Cycling Infrastructure

Focus Area 3: Provide and Maintain Cycling Infrastructure	
Sub-Focus Area	Action
<p>3.1 Functional Cycle Route Networks</p> <p>3.1.1 Enable the continued expansion of the cycle network to achieve continuous, safe, secure, viable and attractive facilities.</p>	<ul style="list-style-type: none"> • Sustain the process and program of securing funding and the planned Medium Term Revenue and Expenditure Fund (MTREF) implementation and program. • Engage in a process to identify lessons learnt and improve design approaches for specific contexts for consideration and application in future projects.
<p>3.2 Maintenance of Cycling Facilities</p> <p>3.2.1 Enable the development a structured maintenance programme in order to encourage improve use and uphold required standards of facilities.</p>	<ul style="list-style-type: none"> • Development of a maintenance strategy and action plan which includes reporting systems, transversal agreements and standard operating procedures to ensure an improved management and maintenance regime and plan of the cycling facilities.
<p>3.3 Cycle facilities, signage and way finding</p> <p>3.3.1 Enable and facilitate cycle storage, parking, intermodal integration, provision of showers and lockers and way finding to improve the legibility and “identity” of the cycle network.</p>	<ul style="list-style-type: none"> • Engage in a project to develop cycle facility guidelines from a network perspective for the Cape Town context.
<p>3.4 Strategic statutory, policy and strategy alignment</p> <p>3.4.1 Facilitate and strategically identify and recommend bicycle related amendments and benefits in transport legislation, policy and development management regulations.</p>	<ul style="list-style-type: none"> • Initiate and oversee a process to interface with development of and review cycles of legislation, policy and regulations to motivate and recommend bicycle related changes and benefits, in the: <ul style="list-style-type: none"> ○ National Road Traffic Act, 1996 ○ South African Road Traffic Signs Manual (SARTISM) ○ Integrated Public Transport Network (IPTN) ○ TOD Strategy ○ Parking Policy ○ Traffic Calming Policy ○ Road Safety Strategy ○ Zoning Scheme ○ Parking Policy ○ Traffic By-law ○ TDM Strategy

10.4 Focus Area 4: Improve Data Capturing and Monitoring

Current data on cycling provides information on the number of trips that are occurring in the City and the number of people who commute by bicycle. While broad trends can be identified with existing data, the data is not sufficient to allow specific trends in particular locations or for particular types of cycling to be identified. Monitoring and evaluating the use and effectiveness of cycling infrastructure and facilities is critical for prioritizing investment, demonstrating the success of initiatives and addressing future demand and emerging needs. The Actions related to *Improve Data Capturing and Monitoring* is summarized in the Table 10.4 below.

A set of **baseline information** must be established and include the following:

- **Mapping and assessment of cycling facilities.** A review of all cycling facilities built to date is required. Once the review is completed, a programme for the repair/ refurbishment/ upgrade of the existing facilities must be prepared and implemented.
- **Facility monitoring.** The status and quality of cycling facilities must be monitored on a frequent basis. This would guide the repair and maintenance programmes required to keep cycle routes safe and functional for cyclists.
- **Numbers of cyclists.** The Cycling Strategy is about growing cycling in Cape Town and supporting a data driven approach is fundamental. Baseline cycle counts are required City-wide and cyclical updates are required for utility and recreational cyclists.
- **Incidents:** A structured approach to reporting, recording and analysing cycling related incidents must be developed and implemented. A register of crime incidents involving cyclists must be developed and the locations monitored.
- **Behaviour shifts.** Measuring behaviour shift towards acceptance of cycling through surveys must be done as part of an ongoing process. This must be undertaken through surveys that could be both online and manual.
- **Social, Economic and Environmental Metrics.** The broader social, economic and environmental benefits of cycling are extensive. Given the need to consider these as part of Cape Town's overarching strategies and commitments, a set of metrics to measure and report on the social, economic and environmental impacts of growing cycling in Cape Town must be developed in conjunction with the relevant role players.

Table 10.4: Actions to Improve Data Capturing and Monitoring

Focus Area 4: Monitoring and Evaluation	
Sub-Focus Area	Action
4.1 Project life cycle approach	
4.1.1 Enable and encourage a continual review and monitoring of projects and programs, as per the project cycle approach and process.	<ul style="list-style-type: none"> • Initiate a process to apply the project life cycle review methodology to cite lessons learnt and identify improved design approaches for consideration and application in future projects.
4.2 Cycle database development	
4.2.1 Enable the development of a credible cycle database and cycle baseline information.	<ul style="list-style-type: none"> • Engage in a process to substantially expand the cycling data sourcing scope, survey methodologies, hot spot identification and analysis, explore technology efficient options and ensure that the processes align with the architecture and systems of the Integrated Information Management System (IMS).

10.5 Focus Area 5: Facilitate Stakeholder Collaboration

The realization of the Vision for Cycling is dependent on the contributions of a range of City Departments as role players and the roles of external stakeholders. These contributions must be coordinated and integrated to avoid duplication of initiatives and efforts. The Actions related to *Facilitate Stakeholder Collaboration* is summarized in the Table 10.5 below.

A Sustainable Mobility Sub-committee will be established under the Inter-modal Planning Committee (IPC) to monitor the implementation of the Sustainable Mobility Charter. The Sustainable Mobility Sub-committee must:

- Be a platform where cycling is represented.
- Be a platform to share information, coordinate activities and monitor progress in the mode share of Utility Cycling.

Table 10.5: Actions to Facilitate Stakeholder Collaboration

Focus Area 5: Facilitate Stakeholder Collaboration	
Sub-Focus Area	Action
5.1 Establish a proposed stakeholder sub-committee which reports to the IPC.	<ul style="list-style-type: none"> • Engage in a process to draft and finalize the Terms of Reference, representation, schedule of meetings and agreed work streams.

10.6 Improve Communication and Education

Any long run initiative looking to create an on-going shift in culture requires a strong communications programme encompassing both education and promotion. For cycling it is about educating users in the safe and responsible road use and promoting cycling so that it becomes accepted as part of the “way of life”. The Actions related to *Improve Communications and Education* is summarized in the Table 10.6 below.

The purpose of communication will be to educate people about cycling and promote it as a viable and attractive means of transport. It is about improving the knowledge why a person decides to start cycling, how to improve the status of cycling and to devise and run cost efficient communications and marketing campaigns that get more people cycling. Part of this shift is also getting other road users to respect cyclists and cycling as an accepted means of transport. In order to increase cycling, it is vital to position the cyclist in a broader perspective, show the positive aspects of cycling and improve the image of cycling as a sustainable, healthy and desirable mode of transport.

Table 10.6: Actions to Improve Communication and Education

Focus Area 6: Improve Communication and Education	
Sub-Focus Area	Action
6.1 Facilitate improvement of compliance of the “rules of the road” and create awareness of cycling as a means of transport.	<ul style="list-style-type: none"> • Engage in a process to develop a communications strategy and plan focussing on safe and responsible driver behaviour and promotion of cycling as an accepted means of transport.

11. Implementation Programme

The Implementation Programme in Table 11.1 provides an overview of the actions to be undertaken over the short, medium and longer term timeframes to implement the Key Focus Areas and Actions of this Cycling Strategy and the responsible City Departments.

TDA has established a Long Term Strategy to meet its ultimate goal of halving user groups Access Priority Costs. The Long Term Strategy comprises four strategies (A, B, C and D), each with a particular “timeline”:

- Strategy A 1-3 years – short term
- Strategy B 3-5 – medium term
- Strategy C 5-10 – medium to longer term
- Strategy C 15 long term

Figure 11.1 shows a graphical description of TDA's Long Term Strategy and timelines as described in the CITP. The timeframes for the Draft Cycle Strategy are aligned with the timelines for the TDA Long Term Strategy.

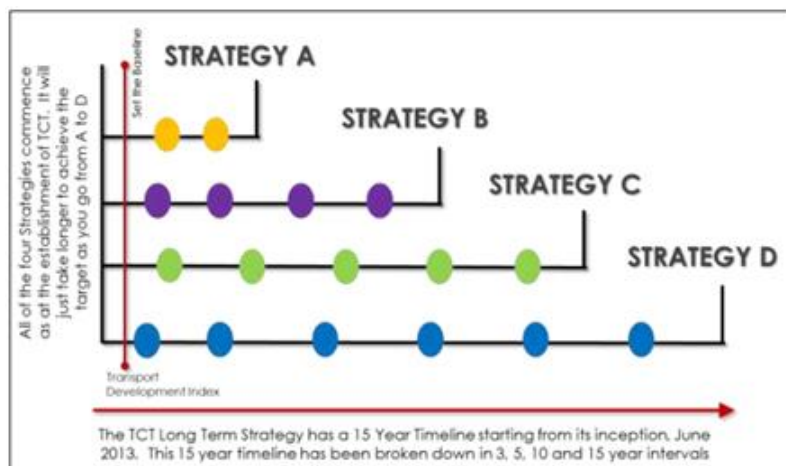


Figure 11.1 TDA's Long Term Strategy and Timelines

Implementation of the identified Actions will be led by a Lead Department with support provided from other City Departments:

TDA Departments:

- Transport Planning
- Business Resource Management
- Built Environment Management
- Asset Management and Maintenance
- Network Management
- TDA Business Support

Other City Departments:

- Enterprise and Investment

Table 11.1 Implementation Programme and Action Plans

Key Actions	Timeline	Lead Dept	Support Dept
Focus Area 1: Improve Access to Bicycles			
<ul style="list-style-type: none"> Formalise a partnership to guide and support collaborative investigations, feasibility studies and due diligence by trade and investment agencies to establish a low cost bicycle production plant in the Cape Town metropolitan area. 	A	Enterprise & Investment	Transport Planning
<ul style="list-style-type: none"> Assist with guiding multi-sphere policy, strategy and procedural alignment to facilitate the establishment of a low cost bicycle production plant. 	A	Enterprise & Investment	Transport Planning
<ul style="list-style-type: none"> Review and cite lessons learnt for bicycle distribution programs and what tools, incentives and innovative schemes are available to facilitate access to bicycles. 	B	Transport Planning	Business Support
<ul style="list-style-type: none"> Investigate and review the existing institutional framework to guide how the City could assist with distribution of bicycles processes. 	B	Transport Planning	Business Support
<ul style="list-style-type: none"> Investigate the implementation of a public bike share system. 	A	Enterprise & Investment	Transport Planning
<ul style="list-style-type: none"> Engage in a process to establish a bicycle distribution monitoring structure to monitor the various bicycle distribution programs. 	C	Transport Planning	Business Support
<ul style="list-style-type: none"> From the establishment phase, ensure representation of relevant NGO's, NPO's and other stakeholders on the monitoring structure. 	C	Transport Planning	Business Support
<ul style="list-style-type: none"> Through a study, identify good practice and systems to guide the monitoring of bicycle distribution programs. 	C	Transport Planning	Business Support
Focus Area 2: Improve Safety and Security			
<ul style="list-style-type: none"> Engage in a process to develop a communication strategy and plan on focussing on the rules of the road/ traffic regulations, the rights of all road users and safe road user behaviour and improve incident reporting systems. 	A	Business Support	Network Management
<ul style="list-style-type: none"> Develop a strategy and plan through transversal approaches and agreements to improve and develop reporting systems, observation methods, prioritised enforcement operations, interagency agreements and standard operating procedures. 	A	Network Management	Transport Planning
Focus Area 3: Provide and Maintain Cycling Infrastructure			
<ul style="list-style-type: none"> Sustain the process and program of securing funding and the planned Medium Term Revenue and Expenditure Fund (MTREF) implementation and program. 	A	Transport Planning	Business Resource Management

Key Actions	Timeline	Lead Dept	Support Dept
<ul style="list-style-type: none"> Engage in a process to identify lessons learnt and improve design approaches for specific contexts for consideration and application in future projects 	A	Transport Planning	Built Environment Management
<ul style="list-style-type: none"> Development of a maintenance strategy and action plan which includes reporting systems, transversal agreements and standard operating procedures to ensure an improved management and maintenance regime and plan of the cycling facilities 	A	Asset Management Maintenance	Transport Planning
<ul style="list-style-type: none"> Engage in a project to develop cycle facility guidelines from a network perspective for the Cape Town context 	B	Built Environment Management	Transport Planning
<ul style="list-style-type: none"> Initiate and oversee a process to interface with development of and review cycles of legislation, policy and regulations to motivate and recommend bicycle related changes and benefits 	C	Transport Planning	Network Management/ Built Environment Management
Focus Area 4: Improve Monitoring and Evaluation			
<ul style="list-style-type: none"> Initiate a process to apply the project life cycle review methodology to cite lessons learnt and identify improved design approaches for consideration and application in future projects 	B	Transport Planning	Built Environment Management
<ul style="list-style-type: none"> Engage in a process to substantially expand the cycling data sourcing scope, survey methodologies, hot spot identification and analysis, explore technology efficient options and ensure that the processes align with the architecture and systems of the Integrated Information Management System (IIMS) 	C	Transport Planning	Network Management
Focus Area 5: Facilitate Stakeholder Collaboration			
<ul style="list-style-type: none"> Engage in a process to draft and finalize the Terms of Reference, representation, schedule of meetings and agreed work streams. 	A	Transport Planning	Business Support
Focus Area 6: Improve Communication and Education			
<ul style="list-style-type: none"> Engage in a process to develop a communications strategy and plan focussing on safe and responsible driver behaviour and promotion of cycling as an accepted means of transport. 	A	Business Support	Network Management

12. Monitoring and Evaluation

Monitoring, evaluation and review processes need to be undertaken regularly to determine whether the Cycling Strategy is successful and to address any necessary changes in direction, resources etc.

The TDI has been developed by TDA to monitor its success in achieving its Long Term Strategy objective of halving User Access Costs within 15 years (Strategy D timeframe) as stated in the CIP. In order to achieve this objective, TDA is developing a number of strategies including the review and update of the NMT Strategy. There are, however, Desired Outcomes that need to be accomplished over the longer term as part of achieving the Vision for Cycling in Cape Town.

These long term Desired Outcomes are:

- An increased mode share of cycling from 1% to 8% by 2030.
- Cycling has significantly contributed to a substantial reduction in congestion and GHG emissions in the City by 2030.
- More people across all sectors of the population have access to affordable bicycles and are cycling as a mode of transport.
- There has been a substantial shift to utility cycling.
- Cycling is substantially safer and secure.
- Cycling infrastructure and systems serve the needs of cyclists.
- Cycling is an accepted means of travel.

As the Cycle Strategy is primarily about behavioural change the Monitoring and Evaluation must focus on the monitoring of outcomes rather than outputs. The overarching considerations must be:

- Growth in numbers of cyclists – measuring the growth of cycling both by numbers and as a percentage of mode share.
- Improvement in cyclists' safety and security – analysis of the number of incidents reported.
- Extent of cycling infrastructure – measuring cycle routes and facilities implemented throughout the City.
- Acceptance of cycling – measuring the shift towards an acceptance of cycling as a day to day means of transport by cyclists themselves and other road users.

Monitoring of the shift in behaviour must include both cyclists and motorists. Information required must include the following:

- Perceptions of both driver and cyclist behaviour.
- Benefits of cycling – of particular importance is the input of cyclists from low income communities.
- Key issues for cyclists.
- Barriers to cycling.

The Cycling Strategy must be reviewed and updated at least every 5 years to be in line with the CIP and to stay abreast of changes in the planning environment and the needs of its users.