

A BICYCLING RENAISSANCE IN SOUTH AFRICA? POLICIES, PROGRAMMES & TRENDS IN CAPE TOWN

G Jennings

Independent researcher/consultant, Cape Town, South Africa, +27 (0)83 658 5386;
www.gailjennings.co.za; gail@gailjennings.co.za

ABSTRACT

If social media, events calendars, procurement briefings and tenders issued are to be believed, South African cities are undergoing a bicycling revolution. ‘Bicycle-friendly’ is a phrase on the lips and in the speeches of political figures nationwide (CoCT 2012/02/17; *Business Day* 2014), at what seems to be an increasing number of Non-Motorised Transport (NMT) conferences, workshops and infrastructure launches. Curious to investigate the impact of this increased visibility of ‘NMT’ – whether online, on the podium, or on the ground – the author offers a brief view of the ‘bicycle transport’ aspect of NMT in Cape Town since 2003 (the year of the first National Household Travel Survey, and the Western Cape Province’s first Mobility Strategy). This overview looks at trends in bicycle policies and programmes, legislation, the development of bicycle facilities, promotional activities, and training and education. The question is, have these interventions led to an increase in bicycle transport (utility cycling)? In pursuit of an answer, the author poses further questions: what data exists to compare use or mode-share ‘then’ and ‘now’? How are ‘bicycle-friendly’ interventions evaluated and revised? And can we claim that a significant shift in utility cycling patterns is underway?

1. INTRODUCTION

“Friends who once would have laughed seeing me on my bike, now are more likely to ask where I bought it :)”ⁱⁱ

This paper represents an attempt to quantify the progress of bicycle transport (as utility cycling) in Cape Town. It is rooted in the author’s personal and research interest in whether there “really are” higher rates or more people riding bicycles as transport now than there were 12 years ago (the year of South Africa’s first National Household Travel Survey, and the publication of the Western Cape Province’s first Mobility Strategy). Personal observation suggests so: the author has cycled as transport in Cape Town since 1989, and has taken a keen interest in the changing patterns of bicycle use on the road. Social media suggests so (for e.g. @openstreets 2015; @easymotion 2015; @noltejaco 2015), as does traditional media (for e.g. IOL 2014), with its increased appetite for reporting on, lauding and encouraging cycling as a mode of transport. And the increasing number of Non-Motorised Transport (NMT)ⁱⁱⁱ engineering guidelines, policies, frameworks, plans, implemented infrastructure and consultants would surely suggest so.

But do we really know? According to Pucher, Dill & Handy ('Infrastructure, programs, and policies to increase bicycling: An international review', 2010), what will deliver an increased bicycle mode share is a combination of quality bicycle infrastructure and parking, bicycle integration with public transport, access to bicycles, bicycle promotion and marketing, legislation, and education and training programmes.

The paper therefore begins with an overview of the relevant policies, strategies and frameworks since 2003 in South Africa, and in Cape Town in particular. (This paper considers the "bicycle transport" aspect of NMT only.) It goes on to summarise the trends and changes in providing the above ingredients for increased bicycle use and mode share. While data includes peer-reviewed literature and public policy, it also includes anecdote, media statement, and online content. The purpose of the paper is not to delve into theories of behaviour or policy change, or to allocate causality, but to briefly chart the observed trends and begin to ask further questions: what data exists to compare either mode-share (rate) or numbers "then" and "now"? How are "bicycle-friendly" interventions evaluated and revised? Can we make the claim that a significant shift in utility cycling patterns is underway?

2. A (SHORT) HISTORY OF BICYCLE POLICY IN SOUTH AFRICA

In South Africa today, NMT has its own national policy (albeit it a 2008 draft); a national NMT engineering facility guideline has been recently updated (in 2014); and most major cities and many provinces have an NMT policy, framework, strategy or some form of guiding document (Western Cape Province, North West Province, Gauteng Province, Stellenbosch Municipality, Rustenburg Local Municipality, Ekurhuleni, Metro Municipality City of Joburg, City of Tshwane, City of eThekweni, City of Polokwane, City of Cape Town). In terms of the National Land Transport Act (2009), NMT plans are required to be developed and integrated into the Provincial Land Transport Frameworks (PLTFs), and municipal Integrated Transport Plans (ITPs).

As part of a 2010 FIFA World Cup legacy project, the Department of Environmental Affairs (DEA), in partnership with KfW (German Development Bank) launched its National Greening Programme in May 2010, to assist 11 cities promote walking and cycling through demonstration walking and cycling infrastructure projects.

Further, there is a wide range of potential projects that qualify for a Public Transport Infrastructure and Systems Grant (PTISG) (administered by the NDoT), among which are the development and implementation of NMT services that connect communities to rail services, road-based trunk services, and major local destinations. As a result, the roll-out of Integrated Rapid Public Transport Networks (IRPTNs) in major cities has paid dividends to local NMT policy and implementation, with Johannesburg, eThekweni, Ekurhuleni, Rustenburg, Tshwane, Polokwane and Cape Town preparing or updating NMT policy, strategy and design principles, as well as implementing pilot projects. In addition, both Johannesburg and Cape Town have prepared Feasibility Studies for bicycle-sharing systems (Jennings 2014).

2.1 Cape Town and the Western Cape

In the Western Cape, NMT policy gained importance on the transport agenda during 2003, when the City of Cape Town and the Provincial Government drafted a new vision for public transport (Frieslaar 2006). The aim of this new Mobility Strategy (PGWP 2003) was to place public transport, people and quality of life first, integrating all modes of public transport and pursuing sustainable transport (including cycling and walking).

Subsequently, the City and the Provincial Government each employed an NMT programme officer, and the City developed an NMT strategy, a bicycle master plan and regional network plans. These aimed to enable and increase cycling and walking as modes of transport. In 2005 the City published its vision that Cape Town would be a place where all people felt safe and secure to walk and cycle, with a goal to 'increase cycling and encourage walking by creating a safe and pleasant bicycle and pedestrian network of paths to serve all the citizens in the Cape Town area' (CoCT 2005). In 2009, Provincial Government Western Cape published its Non-Motorised Transport in the Western Cape (Draft Strategy) (in earlier draft phase since 2005).

Transport planning for the 2010 FIFA World Cup gave host cities such as Cape Town a further opportunity to gain 'global experience' about the importance of NMT and to consider the role of walking and cycling during the event. (Radebe 2007)

In 2010, the City of Cape Town updated its bicycle master plan and finalised its city-wide and regional NMT Plans (CoCT 2010abcd). Cape Town's winning bid for World Design Capital 2014 status, as well as its Low-Carbon Central City Strategy (CoCT 2014a) and Inner City Transport Plan (CoCT 2014b), all focus on the value of utility cycling. In April 2015, the City issued a tender for the Provision of Professional Services in respect of the Formulation of Cycling Strategy for the City of Cape Town. The chief objective of the strategy, according to the terms of reference, is to grow cycling in Cape Town.

3. CYCLING PROJECTS AND PROGRAMMES IN CAPE TOWN

3.1 Bicycle infrastructure

After the completion of 14 NMT projects along the Klipfontein Corridor in 2008, the City of Cape Town began to plan an NMT network for the whole metro area. Today, the City claims to have an existing bicycle network that covers approximately 450km (CoCT 2013f), although the majority of this is 'NMT infrastructure', in other words, facilities for pedestrians (sidewalks) but which cyclists are legally permitted to share; further, this infrastructure is inadequately linked, or part of a coherent route-based network. As Elias Tukashe, head of NMT for the City, puts it: 'the term [NMT] does not refer to cycling alone, and NMT infrastructure is not built for bicycles only' (CoCT 2011). In 2010, only 800m of the new NMT facilities constituted separate cycle ways; in early 2015, a further 21km now exists, mostly in association with the 2010 FIFA World Cup Fan Walk and the new MyCiTi bus (BRT) infrastructure – these, too, are shared with pedestrians.

3.2 Bicycle parking

Good bicycle parking prevents theft and vandalism, and encourages a positive modal split.

Bicycle parking should not be too far from the relevant destination, and clearly part of the bicycle network. Importantly, it should be identifiable as bicycle parking, through clear signage. Security, lighting and weather protection are essential (CoCT 2009). Although not all bicycle parking in Cape Town conforms to the above criteria, today there is significantly more parking available than in 2010 – a comparison between the Cape Town Bicycle Map 2011 (www.capetownbicyclemap.co.za) and 2015 shows an increase of 38 parking sites, with multiple parking racks each (not all of which were installed by the City of Cape Town). Bicycle parking at rail stations is particularly well used. (CoCT 2009)

3.3 Integration with public transport

Until recently, bicycles were permitted on Cape Town's rail system on one day of the year only, and by one sub-set of cyclists only: Cape Town Cycle Tour (until 2015 recently known as the Argus Pick 'n Pay Cycle Tour) entrants. Bicycles were not permitted on any other form of public transport (buses) or para-transit (minibus taxis) at any time (Jennings 2010). Since 2011, bicycles have been permitted, free, on MyCiTi buses, and since 2013 on the Metrorail southern rail line at an additional ticket cost. Eight rail stations across the city have unsecured parking racks to which users are able to lock bicycles (Monte Vista, Brackenfell, Kraaifontein, Retreat, Fish Hoek, Oosterzee, Lansdowne and Eerste River).

3.4 Training and education

In March 2006, bicycle policy and planning received a significant boost when Cape Town hosted the international bicycle planning conference, Velo Mondial. The conference closed with Cape Town being awarded Gold Status for its bicycle planning, and a declaration that Cape Town and the Western Cape Province would commit themselves to a 'course of action to address Non-Motorised Transport (NMT) planning'. (CoCT 2006)

The following year, South Africa's National Department of Transport hosted what it claimed to be the 'first-ever' Non Motorised and Intermediate Means of Transport Conference and Exhibition (22 to 23 February 2007), in Midrand, Gauteng. The theme of the conference was 'Expanding the boundaries of non-motorised and intermediate means of transport for sustainable livelihoods'. According to the media release (NDoT 2007), 'this gathering of local and international experts is an opportunity to ... firmly entrench non-motorised transport as a recognised and fully supported form of transport in South Africa.' In what has become a fairly typical conference 'activation', the event included an exhibition, and concluded with a bicycle ride (with media and officials in attendance) and the handing over of bicycles to learners or other recipients as part of a bicycle distribution or donation programme such as Shova Kalula.

The pace of NMT conferences and workshops has picked up subsequently, with the DEA and KfW hosting a two-day 'Green Cities: Promoting the NMT Agenda'

conference in August 2012 and a follow-up in November 2014; the United Nations Development Programme (UNDP) sponsored a series of NMT design skills workshops for local government in 2014; the Gauteng Cycling Indaba was convened in March 2014; and the emerging 'Developing Cycling Cities' series of workshops was held in Cape Town in June 2014 and in Johannesburg in March 2015 (as part of Cycle Jozi Week). The Southern African Transport Conference this year (2015), to which this paper is submitted, will field a greater number of papers on bicycle transport than in any earlier year.

The University of Cape Town launched its African Centre of Excellence for Studies in Public and Non-motorised Transport (ACET) in 2008, with the support of the Volvo Research and Educational Foundation (VREF) and in association with the universities of Nairobi and Dar es Salaam. ACET's objective is to 'produce and disseminate knowledge on the development and governance of public and NMT in African cities, and to serve as a hub of research and capacity building.' (www.acet-uct.org/about/) Further, for the past six years, the South African Roads Federation (SARF) has been providing accredited training in NMT infrastructure planning and design in Johannesburg, Cape Town, and Durban (personal communication De Waal 2015).

3.5. Advocacy and activism

Beyond South Africa, bicycle lobby and advocacy groups (both industry groupings and civil society) have been credited with dramatically increasing the rate of commuter and utility cycling, and contributing to improved bicycle facilities, such as in US cities San Francisco (California), Portland (Oregon) and New York City (Furness 2010, Mapes 2009, Blickstein 2001). In 2007, Sabelo Gwala – investigating the development of urban NMT policy and planning mechanisms in South Africa – suggested that while there had been to date a considerable non-governmental and private sector involvement in NMT lobbying, this is has not translated into policy advocacy: 'NMT advocates have not been able to influence planning and policy... it can be argued that NMT is yet to stimulate serious and wide-spread action from government.' (Gwala 2007)

In 2010, the author presented a paper on the visibility and purpose of cycling in Cape Town (Jennings 2010). At that point, formal, membership-based advocacy organisations did not yet exist, and when local and provincial government sought cycle-user groups for stakeholder consultation (CoCT 2009, 2010abd), they would turn to cycling clubs (with a focus on event organisation), individual consultants, or civil society organisations that focused largely on distributing donated bicycles to local beneficiaries (see above) (Jennings 2010).

In that paper (Jennings 2010), the author wrote that:

'The start of civil society bicycle activism in South Africa could be regarded as 1977, when two middle-class commuters organised a Big Ride-In to draw attention to the need for cycle infrastructure in Cape Town. The event attracted more than 300 cyclists, including the then Mayor of Cape Town. Thirty years later, one of the founders conceded that the Ride-In was a "dismal failure": the pace of cycle lane construction has been slow. Unintentionally, however, the Ride-In rapidly changed form and became the annual, spectacularly successful sports extravaganza of "The Argus" (Wills

2008. While no “activist” ride since had garnered as much support as that 1977 Ride-In, there were signs that bicycle activism was starting again. In July 2010, for example, Cape Town’s Critical Mass celebrated its second anniversary (with 24 riders, the largest turnout yet). In March 2009, 80 or so riders cycled 25km to the local government administrative centre to demand safer cycling policies and legislation. In May 2010 Cape Town cyclists participated for the first time in the international requiem ride for road crash fatalities, the Ride of Silence (with around 130 riders). Local social networking groups (with between 20-100 “likes”) also mostly focused on road safety, are increasingly providing a forum for debate and discussion.’ (Jennings 2010)

In the paper’s revision a mere six months later:

‘Monthly Critical Mass rides now attract around 40 participants (when the weather is good and the wind stays away). On 12 March 2011 Cape Town participated in the World Naked Bike Ride for the first time. Attracting a benevolent police presence, gaping pedestrians and motorists, and in the region of 150 recreational riders, first-time activists and old campaigners, the Ride took to the Fan Walk to “highlight the vulnerability of cyclists in traffic and the negative environmental impact of fossil fuels”. And a second Big-Ride-In took place on 14 May, with around 300 participants.’ (Jennings 2010 [updated 2011])

By 2015, the landscape of bicycle “culture” and advocacy had changed dramatically. Cape Town-based cycling event organisers Pedal Power Association (PPA) have emerged as a powerful and well-resourced advocacy grouping (with a paid-up membership of more than 20 000). Disparate NMT activists and NGOs had to some extent organised themselves to offer official oversight on bicycle developments in the City (with the help of social media). Cape Town’s World Design Capital 2014 programme featured an Active Mobility cluster, a collaboration of 10 or so bicycle-focused project submissions, which ‘aimed to encourage citizens to co-create a more sustainable city through well-designed non-motorised transport forms’ (CoCT 2014c). Social bicycle rides now take place monthly, from bike polo, to Critical Mass, to Cycle the City. #moonlightmass (www.moonlightmass.co.za), which launched in 2012 and takes place every full moon in Cape Town, attracts as many as 3 000 riders, and the Facebook group of the organisation Bicycle Cape Town (one of a number of bicycle activism online mouthpieces) in February 2015 had 2 579 “likes”. The Bicycle Cape Town website, launched in 2012 (www.bicyclecapetown.org), lists a full calendar of events (from planning discussions to maintenance workshops to crowd-commuting groups), bicycle-friendly campaigns, and even a “cycle chic” guide to the proliferation of bicycle fashion, clothing and accessories. The traditional media has followed suit, with consistent and regular coverage about cycling as a legitimate mode of transport. And even the Cape Town Cycle Tour annual magazine, once the domain of training tips and race nutrition, in 2015 featured three pages on Cyclists of Cape Town, photographed in ‘ordinary’ clothing with their commuter bikes...

3.6 Legislation

In November 2013, after a sustained campaign by PPA, the Safety of Cyclists regulations (mandating a 1m passing gap) were passed into law in the Western Cape (PGWP 2013) – a regulation greeted with applause by some, but with concern by PPA, which had called for international best practice of a 1.5 passing distance.

The new regulation also came with what was regarded by PPA and others as an erosion of cyclists' rights. Said PPA chair Stephen Hayward: 'We will continue to campaign against the proviso that cyclists are required to ride as far left as possible at all times as this is against the advice of all authoritative texts on safe cycling.' (Pedal Power 2013)

3.7 Safety

In Cape Town, NMT users (the walking/cycling split is not easily available) account for 60% of all road fatalities. Although the fatality rate for cyclists – between 1-3 % of total road fatalities) might appear low, it is significant when related to the modal split. Nationally, the absolute number of fatal bicycle crashes (this figure does not necessarily refer to utility cyclists) is higher than that in the Netherlands, where approximately 27% of trips are made by bicycle. (Jopanputra 2013, WHO 2009)

4. A BICYCLE TRANSPORT RENAISSANCE?

The question, of course, is whether these interventions reviewed above – and which constitute many of Pucher's ingredients for a resurgence in cycling mobility – have led to an increase in people using bicycles for transport.

Before South Africa's first National Household Travel Survey of 2003 (NTS 2003), little was known about NMT in the country (Behrens 2009), and there was no regulatory requirement to collect such data (PGWC 2009). What data did exist suggested a low mode share of cycling, with bicycles 'seldom accounting for more than 1% of modal splits' (Behrens 2009). The NTS 2003 confirmed the early data, such as it was, that cycling was still 'quantitatively insignificant, with the highest usage of bicycles (at 2%) recorded amongst poorer commuters and ... amongst wealthier learners' (Behrens 2009). Nationally, 'travel by bicycle never accounted for more than 0.3% of modal split for any of the selected trip destination activities', and it was clear that the majority of bicycle owners did not use their bicycles regularly (i.e. as transport). Overall, the 2003 NTS indicated that bicycles made up approximately 0.5% of modal split in Cape Town. (NDoT 2007)

The findings of the second National Household Travel Survey, February to March 2013 are reported by province rather than by city, and routinely categorise bicycles as 'other', along with scooters and animal-drawn transport (SSA 2014). Although the Travel Survey does report 'numbers of bicycles in working order owned by households, by district municipality', it again cannot be assumed that these bicycles are used as a mode of transport. In the Western Cape Province as a whole, 'less than 2% cycled all the way to work (1,4%). More workers who were likely to have walked all the way were found in rural areas, while those who cycled all the way were found in urban areas.'

In 2013, the City conducted its own Integrated Public Transport Network Household Survey (CoCT 2013c). This report indicated that bicycles account for approximately 0.4% of trips per person (main mode). A figure of less than 1% is not uncommon in cities internationally but it is unexpected in a city claiming the title of "Cycle Town". (CTP 2011)

All income groups	Low income	Low-middle income	High Middle income	High income
0.4	0.3	0.4	0.3	0.5

Figure 1 Number of bicycle trips per person, by main mode and by income group in Cape Town. Source: adapted from Table 3-12, CoCT Comprehensive Integrated Transport Plan (CITP) 2013-2018,

To complicate matters, the City of Cape Town does not always separate walking and cycling data (whether by infrastructure type, trip purpose, or user), and reports on NMT as a single mode (Jennings 2014). The 2009 General Household Survey: Analysis for Cape Town (CoCT 2009) combined bicycle and motorcycle trips as a single mode, while the City’s Integrated Transport Plan (2013b) published combined data about NMT and Universal Access. The City’s Integrated Public Transport Network Plan for 2032 (2013e) reported ‘bicycle travel peak period modal split by income group’ in the category ‘other’, included in which was transport by ‘truck’. The available data is thus unable to support a claim that bicycle mode share has declined, but nor is it able to support a claim that it has increased, or that there are “more people” riding bicycles as transport.

5. DISCUSSION

Can 1000 social media commentators be wrong?

Could it be that the available data is incorrect, or inaccurate? There is little doubt that South African data is inadequate: in ‘Bicycling renaissance in North America? An update and re-appraisal of cycling trends and policies’ (2011), the authors were able to compare cycling levels, safety and policies in Canada and the US over 20 years, and show – with an impressive collection of data – by how much cycling levels had increased, by how much fatalities had fallen; they were able to show who cycles (by gender, age and neighbourhood) and compare these to other cities, countries and years. In addition, the authors were able to give a detailed critique of policies and programmes that did, or did not work, based on comprehensive monitoring and evaluation undertaken over the years.

In 2009, Behrens suggested that the findings of the NHTS indicated a need to evaluate the impact of bicycle initiatives [then, particularly Shova Kalula] – ‘at some point it may prove necessary to critically appraise the efficacy of current initiatives, and potentially refocus or revise them.’ Perhaps it is telling that little monitoring and evaluation seems to have been forthcoming, and bicycle policies and strategies do not necessarily set out objectives in terms of mode share increases. The project leader for Shova Kalula is on record (2014) as saying that a hindrance to the success of the intervention is ‘a lack of monitoring ... in terms of the impact of the programme.’

“Commuting” trips are the focus of the City monitoring and data collection programme: for example, the terms of reference of the new Cycle Strategy requires that baseline information (location surveys) are undertaken during the morning

period, week-days 05:30-09:00; in other words, data is likely to reflect commuter cycling/home-to-work trips only, not weekend or off-peak utility movement such as shopping, visiting friends or places of recreation, bicycle deliveries, or work-related day-time travel (it is these trips to which much of the anecdotal evidence refers).

At the same time, the Draft National NMT Policy, for example, does not state that increasing the numbers or rate of utility cyclists is, in fact, one of its goals or objectives at all (NDoT 2009). While the City of Cape Town's NMT strategy does explicitly list a primary objective to 'increase cycling', evaluation seems limited largely to adding up the collective length of bicycle lanes. And in the Provincial Land Transport Framework (PLTF), a key objective is that dedicated cycle lanes in the Western Cape 'must be doubled by 2014' (CoCT 2012-2013). Rarely measured are whether the bicycle lanes are used, and for what purpose (transport, recreation or training?).

Evaluating output alone is not specific to the Western Cape Province: the NDoT's Strategic Plan (2011/2012 – 2013-2014) offers, as indicators of success, that three cities and three district municipalities had developed NMT master plans and completed phase one of pedestrian and bicycle tracks (constructed 10km of bicycle lanes). As Mashiri and Maphakela (2013) note, 'while funding for NMT infrastructure principally for cycling and walking as part of the rapid transit networks in the metros is recognised, it does not include funding for promotional activities and the provision of NMT modes – the assumption, which is necessarily not true, is that once the infrastructure is provided, it will be used.'

Yet even promotional activities do not necessarily lead to increased utility cycling: in a survey the author conducted in late 2014 (of 384 respondents active in the online arena), cyclists were asked whether they participated in specific rides (of the type billed as bicycle promotion events). 65% of respondents indicated that they did participate in these events, and of these, slightly more than half indicated that they were already utility cyclists (i.e. these rides had not persuaded them to ride as transport). Of the remaining respondents, just over half indicated that they had no intention of using a bicycle as transport.

6. CONCLUDING THOUGHTS

In Cape Town, the available data does not permit a confident claim that a significant shift in utility cycling patterns is underway. There may well be a "bicycle renaissance" of more dedicated cycling infrastructure, bicycle parking, and bicycle policies and programmes – even a growing bicycle "culture" that mirrors those of cities in Europe and the US – but there is little evidence of increased cycling rates. Pucher *et al* are able to show that a comprehensive, integrated package of high-quality, networked infrastructure (rather than a few showpiece projects) (Van der Westhuizen 2007), supported by lower speed limits, safe parking, legislation that protects cyclists, driver education, public transport alternatives, and adequate financing, is able to increase bicycle mode share. Yet South African cities differ significantly from the emerging bicycle cities internationally: urban sprawl and long travel distances; low levels of compliance with traffic regulations; a poor record of road safety and personal safety (Jopanputra 2013); politics, poverty and an emerging market status (Jennings 2010);

and in Cape Town, winds with a maximum hourly average speed of 75 km/hr that can challenge even the most committed of bicycle commuters (SA Weather Service 2015). Each of these matters complicates any approach to increasing bicycle use. Could it be too soon after policy change to expect a change in cycling behaviour? Could it be that international best practice is not applicable to South African transport users? It may also be that the bicycle interventions in Cape Town are, quite simply, inadequate – planned without understanding the subtleties of user needs and behaviour, inappropriately prioritised, insufficiently integrated, and poorly funded. But without the ongoing collection of evidence, and regular programmes that monitor, evaluate and review outcomes and impact in addition to output, we may never have the answer.

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ⁱⁱ Lisa Kane, personal conversation, February 2015

ⁱⁱⁱ Defined as walking, cycling, skateboarding and other human-powered forms of transport.