Public Transport as a Social Good

1. Introduction

South Africa's transport system remains inequitable, since the population does not have equal access to safe, reliable, sustainable and cost-effective public transport. Partly, this is due to apartheid town-planning, which placed many residential areas, especially the 'townships', at the fringes of the city, where quality public transport was not always provided. The present administration has to some extent continued this trend by building RDP homes in urban areas located far from city centres. Nonetheless, government agencies are attempting to resolve this problem and a number of projects are underway to improve our public transport system. This paper will look at public transport problems and how they are being addressed in South Africa and, by way of comparison, abroad.

2. International Experience

2.1. Brazil

The Bus Rapid Transport (BRT) system in Curitiba, Brazil has significantly changed the city's public transport landscape; it is the spine of the transport system[1]. Minibuses operate in suburban areas and transport commuters to buses. Passengers can pay fares as they enter the bus station, reducing boarding time. Buses have extra-large doors and passengers wait for buses on special bus platforms; the buses are also equipped with wheelchair lifts. The bus stations provide protection from the weather and facilitate efficient loading and unloading of commuters. Curitiba has also employed effective land use planning, with development restricted in the central city and encouraged along transport channels which branch out from the city centre.

The town centre is partially closed to traffic and pedestrianised. In peak hour, traffic flows into the city core and away from it, rather than all in one direction. Property located within two blocks of transport arteries is zoned high-density, and new business development occurs along transport routes. Only limited parking is available in the city centre, and transport subsidies are provided to workers by most employers. A combination of all these factors has made the BRT very successful in Curitiba.

2.2. The United States, Canada and Western Europe

The Transportation Research Board claims that the invention of the automobile created decentralized urban neighbourhoods in the US, Western Europe and Canada[2]. In other words, city centres are located far from residential areas. This is problematic for public transport since people now travel longer distances to get to the city centre. Many cities in Western Europe have specific problems due to the presence of historic buildings and town plans that long predate mass transport. Although the Transportation Research Board claims that the US is similar to Canada, they note that the US has not created a countrywide, successful public transport system. The public transport systems in Canada and Western Europe can be summarized and compared to the US transport system under the following headings.

2.2.1. Reduced travel times

In Canada and Western Europe improved transport services are supported by innovative policies. In Germany, Austria, and Scandinavia increasing the spacing of bus stops has reduced travelling times. In comparison, the US has about five bus stops for each kilometre. Boarding and

alighting times have been reduced in Western Europe by using unique bus platforms and low-floor buses, with large doors and no entrance steps, which allow disabled and aged passengers to board buses easily. Fares can be paid before the passenger boards these transport systems. However, traffic congestion remains an issue. To remedy this, public transport vehicles in Canada and Western Europe are awarded right of way in traffic to discourage people from using cars. Zurich, for example, has had a transport priority system in place for more than 30 years now. The Transportation Research Board also reported that "Transit priority programs include traffic rules that give buses priority when re-entering traffic, staggered stop lines and special bus lanes and traffic signals that give transit vehicles a head start in traffic queues at intersections, and technologies that allow buses to activate green lights on traffic signals".

2.2.2. Convenient public transport
Information on public transport schedules and routes is made widely available. In Canada certain transport providers print bus timetables in newspapers, on the internet, and in leaflets which are posted to citizens. Others use colour co-ordination, with buses painted a colour which matches their specific route, and route maps provided inside the vehicles and in bus shelters. Shops are also located close to public transport stops and stations and along bus routes. Similarly, several Western European cities locate shops and restaurants close to stations and stops. Transport providers in these countries normally provide convenient ticket stations as well. Safe waiting spots, road crossings, and roads leading to transport stops are a common occurrence in both Canada and Western Europe.

2.2.3 Optimal land use
In Canada the Regional Municipality of Ottawa-Carleton, for example, ensures that its land use is guided by a district master plan. A few extracts from this plan include: that all possible construction areas are situated within 400 metres of public transport; that high- density areas are built near to current or projected public transport stations; and that safe walking and cycling paths are created between neighbourhoods and transport stops.

2.2.4 Effective marketing
In the US a significant proportion of public transport users are poor, elderly, or disabled. Conversely, middle-class and even wealthy people in Canada and Western Europe routinely use public transport to get to work and school. Nonetheless, the majority of people in these countries prefer to use their cars when travelling for recreational purposes. Thus Western Europe uses clever marketing tactics to promote public transport. Fares are free to certain public events such as concerts and socializing venues such as museums. Students often receive a student discount, allowing transport operators to attract young people who often continue to use public transport once they start working. With heightened environmental awareness, public transport has also recently become fashionable in Western Europe

3. Vulnerable groups

3.1. The poor

It is undeniable that the poor in the developing world tend to live further from employment districts. This leads to them having to bear the burden of increased travel times and paying more to travel, as they live further from their destinations. In essence this is a major hurdle as they cannot easily access education, health, retail and employment centres, all of which are critical for development. Increased travel times limit the productivity of the poor as they could spend this time engaging in positive activities such as spending time with their families instead of travelling. Moreover, the poor have to spend a high proportion of their income on costly transport, and they are also more susceptible to traffic accidents as they are often forced to travel in poorly maintained, aged and overloaded vehicles. Crime whilst waiting for public transport and during the commute poses a risk, and women in particular are more vulnerable. All of these factors have a self-reinforcing effect: the poor are incapable of breaking free from poverty because they cannot easily access critical facilities[3].

3.2. The disabled

Levels of transport accessibility for persons with disabilities (PWD) in developing countries, in particular, remain low[4]. It is common knowledge that our public transport system excludes the disabled. For example, bus schedules are also not printed in Braille, and few, if any, workers in the public transport sector can communicate with a deaf person in sign language. In the Western Cape, Dial-a-Ride provides disabled citizens with public transport to and from work. This is a

promising programme, but it does not provide transport for disabled school children, and it uses current transport routes which are inequitable given our history. Users are fetched and dropped off at the closest bus stop or train station to their homes, but informal settlements often only have bus stops in busy main roads, and rural areas may not even have any public transport stops. The service also does not provide transport to the mentally disabled and may not be used to run errands or for recreational purposes. Some transport professionals argue that disabled passengers and able-bodied passengers should travel together as this can help reduce discrimination against disabled people. Thus, the installation of wheelchair ramps in BRT buses is a step in the right direction, but much more needs to be done to ensure that public transport becomes accessible for the disabled.

4. Resolutions

This section will look at South Africa's policy position and will highlight certain cases to show how we are trying to resolve public transport issues.

4.1. The National Development Plan

The improvement of public transport is one of the six pillars included in the National Development Plan (NDP). The NDP states that transport needs to be accessible to the disabled, and has to be planned taking into consideration our historic legacy; safety; environmental concerns; and business interests. Scholar transport is also specifically mentioned by the NPD as there is no streamlined policy which deals with this sector. In certain provinces scholar transport is the responsibility of the provincial government and in other provinces it is the responsibility of the department of basic education. The NDP identifies the fact that transport needs to include the excluded. In essence, our transport system needs to be upgraded in order to accommodate all South Africans, especially poor and disabled persons[5].

4.2. Transport policy and programmes

Various policies and programmes have been initiated to remedy public transport shortfalls. The Minister of Transport recently stated that the Transport White Paper aims to provide dependable, reasonably priced, safe and integrated transport which fulfils consumer needs. The Department of Transport also acknowledges that mainly the poor utilize public transport, and that consequently public transport must be developed in a manner that improves the lives of the poor. South Africa's public transport strategy aims to create an excellent "integrated Mass Rapid Public Transport Network which includes rail, taxi and bus services."[6] Investment in transport has increased: according to the Minister of Transport, R10 billion has been apportioned to public transport. Bus subsidies will consume R5 billion, and the rest will be used for programmes aligned with BRT and the taxi recapitalization programme. This investment has been criticised by certain transport professionals who argue that the funding needs to be divided more equally across the different modes of transport. In their opinion BRT is not the sole solution and should not receive such a large cash injection[7]. Despite the aforementioned investment, 60% of commuters still use taxis. Ndebele reports that this is because new public transport initiatives are still using old routes which exclude some citizens. In response to this issue, the Cities Support Programme was introduced in 2012. It seeks to improve spatial planning, public transport and infrastructure services management. As BRT systems have been allotted the lion's share of the transport budget, two such systems will be examined.

4.2.1. Rustenburg's Integrated Rapid Public Transport Network
The proposed Integrated Rapid Public Transport Network will include a BRT system. Most of Rustenburg's residents work in the mining sector and most people make use of public transport, or walk or cycle to work. Rustenburg's mix of transport needs is unique. Mining workers need transport services at off-peak hours; informal trade is booming and traders target commuters at transport stops; the town is a key destination area as it is situated in a rural district and the influx of people on Friday shopping days therefore needs to be considered. The proposed project will integrate Rustenburg's landscape with the new bus transport service; for example, pedestrian and bicycle lanes will be included in the project to encourage walking and cycling.

4.2.1. Cape Town and BRT
For Lorita Maunganidze, BRT is a popular catchphrase in public transport circles, and is viewed by many as the key solution to upgrading public transport.[8] She lists the five main advantages of BRT: additional ridership; cost effectiveness; operating efficiencies; increases in

transit-supportive land development; and environmental quality. However, while BRT produces convenient and reliable transport, with reduced travel times, it will not necessarily benefit the poor in Cape Town because it will be too expensive for many of them to use. It will more likely be used by middle-income earners. Indeed, some experts and participants at a recent CPLO roundtable on this topic argued that the city's BRT system, as implemented thus far, is elitist as it serves the interests of rich people living in areas such as Tableview and Milnerton. City officials responded, however, that the system will be expanded and that the reason why these areas where chosen for the initial phase is because they have the necessary roads, and are not served by a railway line[9]. According to Gail Jennings, the mere presence of a bus service by itself will not encourage potential users to take advantage of it[10]. A range of urban design factors affect commuting behaviour, and public transport initiatives need to be supported by transformation in land use and effective marketing of transport services. Thus, every BRT system needs to be carefully planned to be successful.

4.5. The Gautrain

Transit Orientated Development (TOD) enables transport investment to aid urban regeneration and encourages public transport, plus mobility for the impoverished. Llewellyn van Wyk, a researcher from CSIR, indicates that the five core design principles for TOD are 'markedly absent' at Gautrain stations, such as Rhodesfield. "The Midrand Station depicts this oversight more starkly as the station has been conceived as a transport node, not as a TOD. The main reason is the distance between the transport node and the city centre."[11] He also says the Hatfield Station, despite being located in an existing urban centre, ignores the design principles of the TOD and 'does little to maximise the benefits on this transportation investment. At the CPLO's transport roundtable it was indicated that the Gautrain was never intended to serve the poor; instead, it was created in order to tackle congestion on the roads. Unfortunately, it seems the government did not communicate the aim of the project properly.

4.6. The Bicycling Empowerment Network (BEN)

BEN is a non-profit organization which "believes in the bicycle as a large part of the solution to mobility and poverty alleviation"[12]. BEN provides bicycles, some new and some used, to poor people living in rural and disadvantaged areas. They also participate in a number of other projects, for example, a tourism project which they launched in Masiphumelele, Cape Town, in partnership with a private touring company whose clients rent bikes from BEN and visit businesses in the township. This has resulted in significant profits being made by the community. BEN is also currently working with the City of Cape Town to aid its development of bike lanes. It also participated in a cycle tour with Helen Zille to promote the use of bicycles, and is active in many other programmes which help uplift the poor through attaining mobility via cycling.

5. Conclusion

South Africa still has many challenges to overcome in order to provide its citizens, especially its marginalized citizens, with effective public transport. One key point made at the CPLO transport roundtable was that different actors need to work together to resolve these issues. Government officials, transport experts, civil society, non-governmental organizations, religious organizations and ordinary citizens all need to discuss the way forward. Transport policy, like any other, can never be perfect; it must be continuously evaluated and based on such assessment, should be improved upon. Lastly, there is no 'one size fits all' policy. BRT may have been successful in Curitiba, Brazil but that system needs to be adapted to our context. Transporting ideas from one country to another will not necessarily be successful, given South Africa's unique context. What is very promising is that discussion around public transport and its impact on marginalized people continues. Hopefully this will lead to improved public transport for everyone.

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Nicolette Peters
Research Intern

Nicolette Peters is studying towards her Master's degree in Political Science at the University of the Western Cape, as part of which she is completing a six month internship at the CPLO.

(Endnotes overleaf)

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