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*Dreams Derailed: An investigation into the experiences of travel cost burdens for female commuters who are low-income earners*

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## ABSTRACT

South African national transport policies, legislation and frameworks, as guided by the 1996 White Paper on National Transport Policy, have committed to providing a public transport system that equitably enables citizens to affordably access the goods, services and opportunities that are essential for their well-being. However, two decades after the introduction of the White Paper, quantitative studies have found that in Cape Town, lower-income households continue to experience a negative commute experience and still spend a disproportionate amount of time and money on travel in relation to higher-income households.

Further, no studies have investigated what the user experience means in the lives of the commuters who are low-income earners and how these commuters must manage their travel times and travel costs in the South African context. This rich information is required as a critical input into policy evaluations and the design of appropriate user-focused policies that are founded on an authentic understanding of user needs and user experiences.

In this study, a qualitative approach was employed to investigate the commute experiences of seven Cape Town women who are low-income earners. The findings suggest that while commuter rail presents the most affordable mode of travel for respondents, the service is subject to significant disruptions which result in substantial, unexpected, and unplanned-for travel cost and travel time expenditure. This unexpected expenditure adversely impacts household travel and time budgets and respondents must adjust these budgets accordingly to the disadvantage of their household consumption and personal activities. Furthermore, while commuting, respondents have all experienced fear of crime, bearing witness to criminal activity or being the victim of criminal activity.

In general, all respondents reported a negative and frustrating commute experience that differs significantly from the user-focused, affordable and time-efficient public transport service that the 1996 White Paper on National Transport Policy had promised to deliver.

The study recommends renewed emphasis on integrated land-use and transport planning that reduces trip distances, prioritisation of investment in public transport infrastructure, fare and ticketing integration, restructuring of public transport subsidy frameworks and increased focus on security through visible law enforcement and lighting.

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## Chapter One: Introduction

### 1.1. Background

This study is undertaken in the context of the recently introduced Transport Development Index (TDI) by the City of Cape Town's Transport Development Authority (TDA).

The TDI was developed as a data-driven tool to assess the efficacy and success of transport service delivery interventions in delivering a user-focused commute experience. The TDI was initially developed to answer the question of why, over two decades into democratic urban planning, very limited progress has been made to transform the urban environment for socially equitable outcomes and why commuters are still not being offered a service that is effective and efficient (TDA, 2015).

Key findings of this analysis show that despite policy and legislative commitment to urban transformation and equitable access to reliable and affordable public transport, the pace of transformation has been slow. Key findings include the following (TDA, 2015):

- Most of the population in the low-income bracket reside in far-flung areas that are typically located between 45-70 kilometres from work opportunities;
- 95% of the public transport user group is in the low to low-medium income groups;
- The current quality of life and imbalance in the demands of the low-income user group, caused by the inefficiencies of the urban environment, has resulted in increased costs. The lack of integration also means that passengers must have a ticket per mode of transport, increasing the direct cost of travelling;
- There is a shortfall in the availability of public transport, especially in morning and afternoon peaks. Further, there is little to no choice for the user across public transport modes, a lack of interchangeability between the modes and a lack of an integrated ticket;
- The largest cost for the low-income user group is the direct monetary cost for public transport users who reside in far-flung areas; and
- The average direct transport cost for the low-income public transport user group is 45% of monthly household income, compared with the internationally accepted norm of between 5 and 10%.

The 2016 review of the City of Cape Town's Integrated Transport Plan (ITP) confirms the challenges faced by the South African urban poor:

*The poorest households – predominantly Black African – live on the outskirts of the city, located furthest away from potential employment and income-earning opportunities. They are the least able to afford the costs of urban sprawl, but have to commute long distances and at times use public transport modes that are currently not optimally integrated. Black African and Coloured commuters commonly travel between 50 minutes to 75 minutes to get from their homes to places of employment. In contrast, white commuters – who mostly travel by private car – are most likely to travel for less than 15 minutes up to a maximum of 30 minutes (CoCT, 2016: 117).*

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These quantitative insights are invaluable in designing policies that respond to user needs. They show that user needs are not being met and that commuters who are lower-income earners are particularly vulnerable to poor transit service levels and high transit costs.

There however exists a lack of in-depth qualitative insight into the commute experience of commuters who are low-income earners. This study responds to this gap by aiming understand how these high travel costs and lengthy travel times impact on the lives of the respondents.

## 1.2. Research Aims, Questions and Objectives

Considering the information contained the background (Section 1.1.) the research question to be answered is:

*What are the lived experiences of South African women who are low income earners in terms of their travel costs for commuting to and from their place of work?*

The study aims to describe the lived experiences of South African women who are low income earners in terms of their travel costs for commuting to their place of work and to provide recommendations for policy within the South African context. To do this, the following research objectives have been identified:

- a. To describe the commuter monetary cost and ascribed meaning in the lives of South African women who are low income earners;
- b. To describe the commuter travel time cost and ascribed meaning in the lives of South African women who are low income earners;

- c. To describe the commuter trip experience of South African women who are low income earners; and
- d. To use the synthesised findings in context of the 1996 White Paper on National Transport Policy and provide recommendations for policy within the South African context.

### 1.3. Outline of Dissertation

This dissertation begins with a review of current South African national transport policy and legislation as it relates to passenger experiences as well as a review of the literature on benchmarking and standards in terms of travel costs. The findings of key South African passenger experience studies are outlined in the context of what the policy has committed to and what the literature says about travel times and travel costs.

The results of qualitative interviews administered to selected female commuters who are low-income earners are then discussed.

Finally, the conclusion summarises the findings of the dissertation and puts forward suggestions for future research and for policy amendments.

### 1.4. Potential Use of Research Findings

It is the researcher's intention that the findings of the study may contribute to the understanding of the travel expenditure burden of the urban poor and that it may inform further studies on the topic. The findings of the research may also be used to inform transport policy formulation in respect of relief for the urban poor.

## Chapter Two: Literature Review

### 2.1. Introduction

As discussed in the background, quantitative studies have shown that in South Africa, lower-income households and households that live far from economic opportunity are particularly vulnerable to high transport costs and must spend a larger portion of their time and monetary budgets on travel than higher-income households. This suggests that policy and legislative objectives in respect of improving passenger experiences, particularly for the poor, have not yet been realised. This study aims to provide insight into the passenger travel experience with the intention of evaluating how the passenger experience compares with policy objectives.

To begin the investigation, this chapter will review the current South African national transport policies and legislation as they relate to passenger experiences. The literature on benchmarking and standards in terms of travel times and travel costs is then discussed. Finally, the findings of key South African passenger travel cost studies are outlined in the context of what the policy has committed to and what the literature says about travel times and travel costs. In summary, the literature review is broken up into the following sections:

- a. What do the main South African transport policies, legislation and frameworks say about what the passenger user experience should be like?
- b. What does the literature say about what the passenger user experience should be like?
- c. What do studies say about how the South African passenger experience compares with what policy says it should be and what the literature says it should be?

### 2.2. National Transport Policy and Legislation Relating to the Passenger Experience

Various policies and frameworks govern and guide transport planning in South Africa, the most influential of which are outlined below with specific reference to what they have committed to doing for passenger.

#### 2.2.1. 1996 White Paper on National Transport Policy

The 1996 White Paper on National Transport Policy (The White Paper) is currently the most important guide for transport policy in South Africa and represents the first major transport policy overhaul in the newly

democratic South Africa. The White Paper dictates that state funds allocated to transport planning must be:

*...mobilised to best meet the needs of those passengers and industries who need them most, and which are in the best interests of society. To meet basic accessibility needs the transport services offered must be affordable to the user, and this will be a goal of transport planning, subject to the constraints of the financial affordability of the provision of the services...Responsive to inputs from customers, key customer groups will be identified, and assessments made of their individual needs and how these can best be met... Special customer groups will include the poor, and the disabled. (DoT, 1996: 6)*

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The White Paper proceeds to specify various policy objectives relating to the passenger experience:

- ❖ To correct spatial imbalances and reduce travel distances and times for commuting to a limit of about 40 km or one hour in each direction;
- ❖ To ensure that passenger transport services address user needs;
- ❖ To limit walking distances to less than about one kilometre in urban areas;
- ❖ To provide an appropriate and affordable standard of accessibility to work, commercial and social services;
- ❖ To ensure that public transport is affordable, with commuters spending less than about 10 percent of disposable income on transport;
- ❖ To promote safe, secure, reliable and sustainable passenger transport;
- ❖ To provide readily-accessible information for the assistance of passenger transport users.

The White Paper's objectives are thus largely passenger-oriented, recognising the role of effective, accessible and affordable transport in enabling citizens to live their best lives and to participate in the economy.

### 2.2.2. Public Transport Strategy and Action Plan

The Public Transport Strategy and Action plan was introduced in 2007 ahead of the 2010 FIFA Soccer World Cup which was hosted in South Africa. The Strategy and Plan outlined the intention to roll out bus rapid

transit (BRT)-based Integrated Rapid Public Transport Networks in metropolitan areas to deliver a high quality public transport service to commuters and tourists. The Plan specified bold objectives including, among others, reducing journey times to a level competitive with the private vehicle (less than 60 minutes for door-to-door commuter travel time), peak frequencies of 10 minutes, and integrated ticketing and fare management systems (DoT, 2007).

Based on this strategy, BRT systems have been rolled out in Tshwane, Johannesburg and Cape Town to date. While the uptake of these services has been impressive, preliminary studies have found that the time and monetary savings derived from BRT have accrued mainly to middle and higher-income population groups (Vaz and Venter, 2012; CoCT, 2016).

### 2.2.3. National Land Transport Strategic Framework (2017 – 2022)

The National Land Transport Strategic Framework (NLTSF), prepared in response to the National Land Transport Act (NLTA) 5 of 2009, provides a guideline for integrated land-use and transport planning in the country. The NLTSF echoes the principles outlined in the NLTA and the White Paper; however, it recognises the limited progress that has been made thus far in terms of transport and suggests that the failure to realise the user-focused objectives is related to years of underinvestment in infrastructure, rapid urbanisation placing pressure on infrastructure and continued, deliberate failure to integrate land-use and transport planning efficiently (DoT, 2017). The NLTSF suggests that the funding backlog in public transport capital investment amounts to approximately R300bn from the lack of consistent investment between 1985 to 2006.

Furthermore, the exponentially increasing demand for motorised travel has been responded to by mass state investments in roads infrastructure instead of in more environmentally sustainable modes of travel. This has impacted directly on the public transport user experience; allowing it to deteriorate to unacceptable levels of service (DoT, 2017).

In support of the White Paper and the NLTA, the NLTSF specifies various user-focused objectives including, among other objectives:

- ❖ A transport system that is consistent with the real needs of people with different abilities to afford travel;
- ❖ Improved journey time reliability on all modes;

- ❖ Greater mobility options, particularly for those who do not own a car;
- ❖ An improved sustainable public transport system with better and safer access, more frequent and better-quality services and facilities to an agreed standard.

Furthermore, the NLTFS specifies the promotion of social inclusion and accessibility as one of its overarching goals and acknowledges the critical role that affordable and accessible transport plays in advancing the Department of Transport's equality and social justice agenda (DoT, 2017). To this end, the NLTFS stresses the need for institutional and management capacity that will adopt an integrated planning and funding approach for sustainable outcomes. The NLTFS also highlights the importance of land-use and transport planning integration and undertaking household travel surveys every five years to understand travel behaviour and travel experiences.

#### 2.2.4. National Transport Master Plan (NATMAP) 2050

The 2050 National Transport Master Plan's Chapter 8 focus on Passenger Transport specifies as one of its strategic themes a focus on the passenger through offering user-responsive safe, affordable and accessible modal options for passengers while supporting social inclusion. The NATMAP confirms the failure of the 1996 White Paper to deliver a user-focused passenger transport system because of disjointed institutional governance in passenger transport:

*Nearly two decades after the publication of the White Paper on National Transport Policy in 1996, passenger transport in South Africa still suffers from inefficiencies and is not adequately focused on the customer. The levels of reliability, predictability, comfort and safety are still poor in certain areas. Accessibility to services and universal access are also a challenge (DoT, 2015: 8-2).*

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The NATMAP highlights key challenges to achieving the world-class passenger transport system as committed to in the National Development Plan and puts forward proposals for improving the commute experience for passengers. The proposals center on integrated and coordinated service delivery and funding mechanisms, coupled with strategic densification along transport corridors, equitable distribution of public transport subsidies, feasibility and viability assessments and the development of public transport planning guidelines (DoT, 2015).

### 2.2.5. Summary of Policies, Legislation and Frameworks

All the strategies outlined in this section speak to the importance of placing the passenger at the centre of transport planning by constantly responding to passenger needs and ensuring that transportation options are safe, affordable and time efficient for the passenger. These strategic documents also highlight the role of customer consultation in evaluating performance.

What is evidently lacking from these strategic documents are measurable indicators that may be used to determine the extent to which the public transport offering is successfully responding to passenger needs. The documents merely specify the ideal principles for passenger-focused public transport service delivery, rendering their evaluation limited.

## 2.3. Benchmarking

The previous section outlined the influential transport policy strategies and frameworks that guide transport planning in South Africa and what these documents have committed to in terms of improving passenger experiences. The sections below discuss some of the important literature in terms of what the passenger experience should be, particularly as it relates to travel costs and travel times.

### 2.3.1. Monetary Travel Cost

In measuring how much money commuters spend on transport, the concept of 'transport affordability' is typically used and refers to a household or individual's ability to pay for necessary trips without forgoing other basic household necessities (Litman, 2017). Various methods have been developed to evaluate the affordability of transportation; of which the Affordability Index appears to be the most widely used (Serebrisky et al, 2007). The Affordability Index determines the proportion of household income spent on transportation and then compares this to a pre-determined transportation affordability benchmark before determining the proportion of households exceeding the affordability benchmark (Serebrisky et al, 2007).

Litman's (2017) review of affordability measures suggests that generally transportation is deemed affordable it accounts for ten to twenty percent of household income. Gomide, Leite and Rebelo (2004) however use an even lower six percent affordability target in a study in Brazil; while South African national

policy aims to ensure that transportation expenditure does not exceed ten percent of disposable household income (DoT, 1996). Chen and Mokhtarian, (1999) reference Zahavi and Ryan's (1980) theory of a constant travel cost budget and suggested that travellers spend a constant proportion of their income on travel, approximately 10 to 11% of income for car-owning households and 3 to 5% of income for carless households.

Criticisms of the conventional Affordability Index include the failure of the index to adapt to varying household circumstances (Venter and Behrens, 2005). Carruthers et al. (2005) point to a fault in its treatment of transport affordability for the urban poor. In cities where public transport is unaffordable for households, mandatory trips may either be suppressed or made by foot or by bicycle at no monetary cost to the user. This may lead to a false conclusion about the poor's expenditure on transportation. As such, a modified index is developed by Carruthers et al (2005) by determining which income groups can comfortably afford to make a fixed number of mandatory trips (sixty 10km trips) without forgoing other basic household goods and services.

More recent research accounts for the interaction of land-use and transportation by proposing a combined housing and transportation affordability index; suggesting that the combined housing and travel costs of a household should not exceed 45 percent of household income (CNT, 2015). This approach suggests that a key strategy in improving affordability would be to locate lower-income households closer to economic opportunity; thereby reducing the distance travelled to access jobs and other goods and services.

In summary, there are different ways to define and measure what is affordable for different households, each with its own merits and limitations; and each producing different results, yet the measurement of affordability remains important to obtain insight into the affordability and expenditure challenges of the poor.

### 2.3.2. Travel Time Costs

Travel time to and from work is an important component of travel costs since the demand for travel is derived and imposes an opportunity cost. While the commute to work is a non-discretionary trip for most commuters, rational commuters aim to minimize or manage their travel time appropriately.

Choi et al. (2013) suggests that excessive travel time, particularly during times of traffic congestion, appears to reduce subjective wellbeing. Mokhtarian and Salomon (2001) found that while many people appear to appreciate a certain amount of personal travel of approximately 30 minutes per day, they dislike spending in excess of 90 minutes per day on travel. This idea was first formalised by Zahavi (1974) which, using an exploratory study, provides indicative evidence for the notion that trip makers maintain a constant travel time budget and adjust their travel behaviour such that their travel time remains relatively constant at approximately 1 hour per day. The evidence presented in support of this notion was however derived mainly from developed countries and thus the notion may not be transferable in the context of developing countries. MIT's Senseable City Lab recently used mobile phone data to compare commute travel times on different continents and found commuting patterns around the world to be fairly constant within countries and that commuters adapt their travel behaviour to stabilize their travel time (MIT, 2014). The study however showed that commute times varied between countries; from an average of 50 to 65 minutes in Riyadh, Saudi Arabia and 40 to 60 minutes in Milan, Italy. The study thus supports a 'localised' version of the constant travel time budget theory in that while commute times varied between countries, they maintained regular patterns within those countries.

Some studies have however not found evidence of this phenomenon (Zhang et al., 2010) and other studies have found contradictory evidence of much longer commute times. Oviedo and Davila (2013), for example, find evidence of a 79.3 minutes travel time in Colombia; and Urban Resource Centre (2001) finds evidence of travel times of up to four hours per day in Karachi. A 2016 report by the Trades Union Congress (TUC, 2016) showed that the number of employees with daily commutes of two hours or longer has risen by 31% in the UK over the past five years and the City of Cape Town's TDI (2015) suggests that one-way travel distances may be as long as 75 minutes for those residing in peripheral areas. Chen and Mokhtarian (1999) conclude that the existence of "constant" travel time and money budgets in time and space is not

supported, instead, individual travel time and money expenditures are behavioural phenomena that can be modelled as a function of variables such as income, gender, employment and car ownership.

In spite of contradictory evidence, travel time remains an important component of total travel costs, particularly since it reduces time available for more productive and more desirable activities within the context of a fixed 24-hour day. The impact of having to endure lengthy travel times as part of the daily commute is discussed in the next section.

### 2.3.3. Travel Time Impacts

Lengthy travel distances contribute to what many studies have labelled 'time-poverty.' Kalenkoski et al. (2010), defines time poverty as occurring when individuals do not have sufficient discretionary time to engage in leisure, educational, and other activities that are important for their well-being. Bittman (2002) adds that lacking the time to participate in leisure activities contributes to social exclusion, which he defines as being 'shut out' of society.

As time trade-offs become more uncompromising, particularly for income-poor households with less assets and available labour, time poverty may become particularly debilitating (World Bank, 2006). Time-poverty is especially debilitating for low-income households since these households rely considerably on their members' time and economic activity to provide sustenance. Time poverty may also aggravate income poverty in that time poverty restricts the time an individual has available to gain skills and to improve their earnings potential (World Bank, 2006).

Using Australian household expenditure data, Bittman (2002) shows that the consumption of leisure goods and services is largely a function of income; such that lower-income households tend to consume relatively less leisure goods and services. These findings suggest that lengthy travel times, while adversely impacting all passengers, are particularly debilitating for lower-income passengers.

Aside from the vulnerability of lower-income households to the risks of time-poverty, much of the literature on time-poverty also focuses on the gender differences in time-use and the evidence indicates that women tend to be more time-poor in relation to men. Societal norms typically allocate reproductive and household labor functions, such as child care, cooking and cleaning to women, while men are typically traditionally assigned the role of the breadwinner in the productive labour sphere (World Bank, 2006). Various studies have referenced what is referred to as the 'double workday' of women when referring to the greater time constraints that women face in relation to men, particularly in more traditional and developing countries (World Bank, 2006). Ilahi (2000) adds that household composition further impacts on how women allocate their time. The presence of young children, for example, strongly influences the options available to women in terms of the labor market. Women with younger children may exit the labor market or cut back on the amount of time they spend working outside of the home.

Women, because of social, cultural and familial obligations, also tend to find work closer to home than men and thus are more likely to walk to work (Starkey and Hine, 2004), however, they tend to face more complex, chained trips due to their responsibilities such as shopping and taking children to school (Turner and Grieco, 2000). Bittman (2002) adds that women face a distinct disadvantage in that men have on average 3 hours, 17 minutes more leisure time per week than women. Parenthood was found to significantly reduce leisure time for both men and women. In line with the income poverty benchmark of 50 percent of the median, Bittman (2002) proposes a time poverty threshold of 50 percent of median leisure time, i.e. 19 hours, 15 minutes per week. Abdourahman (2010) analyses the social functions assigned to men and women and how these render women time-poor. The study reviews time-use surveys in different countries, including South Africa, and suggests that reducing women's burden of household and care activities can save time that can be allocated to more economically productive, remunerated work; which can assist them in alleviating poverty. The Asian Development Bank has used OECD time-use surveys to show that in most countries, women spend more time on household-related travel in relation to men while men tend to spend more time on work- and study-related travel in relation to women.

In South Africa, A 2010 time-use survey by Statistics South Africa found that in general, men spent more time on leisure activities than women (StatsSA, 2011) In terms of care-giving, the participation rate of women was more than three times than that of men, while in terms of household maintenance activity,

women spent 2,2 times what males spent. (StatsSA, 2011). The time spent by women on household maintenance and care-giving activities however declined as household expenditure increased. The time spent on household maintenance and care-giving increased for respondents who reported the presence of children in the home. Women with children aged under 7 years spent in excess of 4 hours doing household activities and 1 hour 25 minutes caring for children and other household members (StatsSA, 2011).

The table below confirms the division of time between market (SNA) activities and non-market or household (non-SNA) activities which are unpaid activities. After their non-SNA work is accounted for, women are revealed to be more time-poor than men. (Source: World Bank, 2006)

Table 1: Time Devoted to Economic Activity and to Work, By Gender in Benin, South Africa, Madagascar and Mauritius (Source: World Bank, 2006)

	Benin		South Africa		Madagascar		Mauritius	
	Women	Men	Women	Men	Women	Men	Women	Men
SNA production	235	235	115	190	175	290	116	296
Non-SNA production: care and domestic activities	208	67	228	75	221	47	277	73
Total work	443	302	343	265	396	337	393	369
% SNA in total work	53.0%	77.8%	33.5%	71.7%	44.2%	86.1%	29.5%	80.2%

The table below provides a view of time-use by gender in South Africa and confirms the household maintenance burdens placed on women.

Table 2: Participation Rates in Ten Major Activity Categories by Sex (*Source: StatsSA, 2011: 12*)

Activity	Male	Female
Work in establishments	35.9	23.3
Primary Production	14.4	13.8
Work in non-establishment	6.5	6.5
Household maintenance	72.0	90.8
Care of persons	6.0	27.1
Community service	3.6	3.9
Learning	22.9	21.0
Social and cultural activities	74.9	69.2
Mass media use	79.5	77.4
Personal care	100	100

These findings suggest that lengthy travel times, while adversely impacting all passengers, are particularly debilitating for women in relation to men.

Considering the findings of this section, this study focuses on the travel cost impacts on women who are low-income earners, given their status as the more time-constrained gender and income-group. The next section outlines South African data on travel costs.

## 2.4. South African Empirical Evidence and Current Realities

### 2.4.1. Introduction

The following section lists the findings of studies conducted in South Africa in terms of what passengers spend on travelling in terms of money and time. The section ends with a summary which relates these findings to the benchmarks discussed in section 2.3.

#### 2.4.2. Monetary Travel Cost

The South African National Household Travel Survey (NHTS) of 2013 shows that transport affordability is an important consideration for commuters with approximately 32, 9% of Western Cape households citing travel cost as the most important determinant when selecting their mode of travel (StatsSA, 2013).

In terms of public transport, an analysis of the 2013 NHTS data shows that nationally, more than 66% of households in the lowest income quintile have spent more than 20% of their monthly household income on public transport; while merely 2.9% of households from the highest income quintile spent more than 20 per cent of their monthly household income on transport (StatsSA, 2015). It was also found that the spatial distribution of the population in relation to economic nodes and public transport and roads infrastructure also impacts on the cost of travel; resulting in higher travel costs for commuters living in far-flung locations (StatsSA, 2015). Further, of the 5, 3 million households who used public transport and reported their household income and travel cost data, approximately 2, 2 million households spent under 10 per cent of their monthly household income per capita on public transport ridership. An equal number was identified for both households who spent more than 20% and between 10% and 20% (1, 5 million) respectively.

In terms of monthly household earnings, more than 60% of households earning R500 or less spend greater than 20% of their monthly household income per capita on public transport, while approximately 90% of households earning more than R6 000 reported that they spend less than 10 per cent of their monthly household income per capita on public transport (StatsSA, 2015).

The analysis of public transport expenditure also indicates that households in the lowest income quintile spent a higher percentage of their income on public transport in relation to households from the highest income quintile. More of two-thirds of households in the lowest income quintile spent more than 20% of their monthly household income per capita on public transport (66,6%), while less than 3% of households from the highest income quintile spent more than 20 per cent of their monthly household income per capita (2,9%). 30,9% of bus riders reported spending more than 20% of their monthly household income per capita on public transport, followed by taxi users (29,5%) and train users (25,5%) (StatsSA, 2015).

Nationally, 57, 7% of households spent in excess 10% of their monthly household income per capita on public transport. Further, although public transport operators receive substantial government subsidies, 60, 1% of bus users and 58, 6% of taxi users spent more than 10% of their monthly household income per capita on public transport, followed by train users (49, 2%)(StatsSA, 2015).

The findings of the 2010/2011 South African National Income and Expenditure Survey indicate that the mean South African household spent around R95183 during the survey period. The average total expenditure consisted mainly of housing costs, transportation costs, food and miscellaneous goods and services. Transport comprised the second biggest expenditure group and was estimated at R214 billion or 17, 1% of total household consumption expenditure (StatsSA, 2011).

The Transport Development Index (TDI), developed by the City's transport authority to assess transportation costs for different income groups and users, highlights the disproportionate cost burden placed on lower income households; suggesting that the average direct transport costs for lower-income public transport users is 45 percent of monthly household income (TDA, 2015). This differs significantly from the national policy target of 10 percent of disposable income spent on transportation (DoT, 1996). Other results include:

*Most of the population in the low-income group are located in remote areas; those with a monthly household income of R3 200 and less have to travel between 45 km to 70 km every day to get to work opportunities*

*Residents who fall within the low-income group either use public transport or walk to where they need to be*

*95% of the public transport users in Cape Town fall in the low and low to medium income group*

*The highest priority cost for public transport has been identified as flexibility, which means that there is not enough public transport and integration is poor. (TDI, 2015: 36)*

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Other notable studies include Venter's (2011) evaluation of evidence on transport expenditure and affordability in South Africa for low-income and mobility-challenged commuters. The study found that

public transport affordability and expenditure differ significantly between urban and rural areas, at times even by a factor of ten. Middle-income groups are particularly vulnerable and can spend up to 80% of income commuting to work, as are elderly travelers because they are typically ineligible for current available subsidies. Mokonyama (2008), in developing an argument for improved pro-poor transportation policies in South Africa, analysed South African expenditure data and found that expenditure on transportation had risen significantly in the recent past, particularly because of increased car ownership levels. Households in the lowest income quintile experienced an unexplained increase in transportation expenditure's proportion of total expenditure from 4% (1995) to 10.6 % (2006). This may be attributed to increased fuel prices, increased transit fares, low incomes, spatial mismatch, and long travel distances. Diaz-Olvera et al. (2008) analysed household expenditure on transport in 18 cities in Sub-Saharan Africa using 42 surveys. It was found that, while expenditure patterns varied among cities, households spent on average between 8% and 15% of total expenditure on transport.

The next section lists studies undertaken to measure passenger travel times in South Africa.

#### 2.4.3. Travel Times

Although data on South African commuter expenditure on travel is limited, data on commuter travel time expenditure is even more limited. The 2010 South African Time Use Survey is the most recent time use study. It found that in South Africa, on average, men spent 67 minutes per day in relation to 50 minutes per day spent by women on travel. Men spent the lengthiest time (85 minutes per day) travelling using private transport mode while women spent the longest time travelling using public transport (79 minutes per day) (StatsSA, 2011).

In general, approximately one-twentieth of the average respondent's day was reported to be spent on travelling. The highest proportion of minutes spent on travelling was found to be in respect of work for establishments and learning. In both these instances travel comprised approximately 16% of total time spent on the activity (StatsSA, 2011).

More recently, the 2013 National Household Travel Survey reported an average daily commute time:

Table 3: Mean Daily Commute Minutes (Source: StatsSA, 2013)

	Mean Daily Commute Minutes		
Mode	City of Cape Town	Western Cape Total	South Africa
Train	76	79	74
Bus	75	69	74
Taxi	53	49	50
Car Driver	43	40	38
Car Passenger	46	39	44
Walk All the Way	38	29	34

In concluding this section, it is clear that time is a valuable and limited resource to all individuals, however, poor households and women appear to be more vulnerable to time-poverty and this vulnerability may aggravate income poverty even further if not addressed through appropriate policies that assist women and poor households to alleviate time-poverty burdens.

## 2.5. Summary of Literature Review

In the literature review, the researcher set out to determine what the main South African transport policies, legislation and frameworks say about what the passenger user experience should be like, what the literature says about what the passenger user experience should be like, and what studies say about how the South African passenger experience compares with what policy says it should be and what the literature says it should be.

The literature review provides evidence that despite policy commitment to passenger-focused transport services that are reliable, affordable and accessible, these objectives have not been realised as yet. Lower-income households and households that live far from economic opportunity are still particularly vulnerable to access constraints and must spend a larger portion of their time and monetary budgets on travel; impacting on their ability to improve their wellbeing. Further, women tend to be more time-poor than men such that lengthy travel times are particularly debilitating for women.

It is concluded that there has been a lack of evaluation in terms of the extent to which the White Paper objectives are being met. Of the investigations that have been published, most employ quantitative research methods to compute income and expenditure data in numerical form and focus largely on observed transport costs as opposed to more overall travel cost burdens and impacts. There exists a lack of in-depth qualitative insight into the extent to which the passenger-focused objectives are being realised, particularly with reference to the White Paper's goal of being responsive to inputs from customers.

Considering the above, this study takes qualitative approach to understanding transportation experiences of commuters to inform policy evaluations.

## Chapter Three: Research Methodology

### 3.1. Introduction

This section outlines the way in which data was collected for the study. To enrich the data from the studies discussed in the literature review, this study analysed qualitative data from face-to-face, interviews with female commuters in the City of Cape Town who are low income earners to cultivate a description of their commute experience when travelling to and from work.

The research problem, aim, question and objectives are outlined after which Section 3.4. discusses the rationale for the research method selection. Section 3.5. provides a discussion on the researcher's reflective commentary after which Section 3.6. outlines steps taken to enhance the trustworthiness and transferability of the study. Section 3.7. outlines how data was collected for the study, and Section 3.8. specifies the steps taken to code and analyse the data. Section 3.9. outlines steps taken to comply with ethical considerations after which the research methodology is summarised in Section 3.10.

### 3.2. Research Problem

The literature review confirms that despite policy commitments to a public transit experience that is user-focused, the current public transport offering does not deliver what has been committed to. Further, a gap exists in terms of qualitative insight into the commute experiences of commuters who are low-income earners. This rich information is required as a critical input into policy evaluations and the design of appropriate user-focused policies that are founded on an authentic understanding of user needs and user experiences. No studies have investigated what the user experience means in the lives of the commuters and how these commuters must manage their travel times and travel costs in the South African context.

This rich information would be useful to policy makers as an input into transport, subsidy and welfare policies required to improve access to opportunity for the urban poor.

### 3.3. Aim, Questions and Objectives

Considering the research problem, this dissertation seeks to answer the following research question:

What are the lived experiences of South African women who are low income earners in terms of their travel costs for commuting to and from their place of work?

This study aims to describe the lived experiences of South African women who are low income earners in terms of their travel costs for commuting to and from their place of work and to provide recommendations for policy within the South African context. To do this, the following research objectives have been identified:

- a. To describe the commuter monetary cost and ascribed meaning in the lives of South African women who are low income earners;
- b. To describe the commuter travel time cost and ascribed meaning in the lives of South African women who are low income earners;
- c. To describe the commuter trip experience of South African women who are low income earners; and
- d. To use the synthesised findings in context of the 1996 White Paper on National Transport Policy and provide recommendations for policy within the South African context.

#### 3.4. Research Paradigm

In this study, the researcher has assumed a constructivist research paradigm which assumes that the nature of reality is not fixed, but is rather socially constructed (Crotty, 1998). As such, to understand a phenomenon, the researcher is required to investigate the phenomenon from the view and experiences of the research subjects.

A qualitative research approach has thus been selected due to its ability to extract in-depth, non-quantifiable data that gives insight into how a particular phenomenon is or has been experienced. In this study, the researcher aims to describe participants' lived experiences of their commute to and from work and aims to extract this information using face-to-face interviews.

While this study seeks to describe respondent travel cost burdens, it also seeks to add richness by understanding the ascribed meaning of these travel cost burdens on the lives of the respondents.

### 3.5. Reflective Commentary

*'The researcher as instrument can be the greatest threat to trustworthiness in qualitative research if considerable time is not spent on preparation of the field (and the) reflexivity of the researcher' (Poggenpoel and Myburgh, 2003: 320)*

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Because the researcher plays a significant role in the collection and interpretation of the data, qualitative studies are heavily influenced by the researcher's own worldview, beliefs, personal experiences and objectivity (Kincheloe & McLaren, 2008). Shacklock and Smyth (1998) thus suggest that the researcher consciously reveal their beliefs and values upfront.

As the researcher, it was thus important that I disclose that I have a personal interest in and passion for advocating for the rights of the poor; and poor women in particular. Through my formal studies in Economics and Politics I have developed an appreciation for the need for ethical distribution of resources for the benefit all citizens instead of minority accumulation of the means of production through the exploitation of marginalised citizens. Through my employment in the public sector, I can use my position to give a voice to the poor and I take this responsibility very seriously. I believe that without qualitative insight into how government policies and projects are experienced by the citizens that they are intended to serve, the impact of these policies and projects cannot be measured effectively. This belief has led me to the selection of this research topic. I believe that within a democratic society it is imperative that public funds and policies are directed by the will of the people and as such the voice of the people should form a critical input into policy and budgetary formulation.

- My personal standpoint is that transportation policies in Cape Town to date have failed to equitably distribute public funds allocated to transportation. Furthermore, I believe that spatial planning practices have failed to bring the poor closer to economic and social opportunity. While these

standpoints are largely founded on quantitative empirical data, they also have strong emotional significance to me and I channel this passion daily in my workplace.

- Through reflecting on this worldview that I hold, I have taken deliberate steps to ensure that this research authentically expresses the experiences of the respondents without being influenced by my bias. As the researcher aiming to understand meaning, it was important that I understood that despite my own feelings on the subject, the meanings expressed by the respondents are by no means fixed; rather they are constructed by the respondents' unique social location (Crotty, 1998).

Consultation with an external research advisor assisted me with ensuring that the research questions did not limit what could be found in terms of the data and that no pre-determined assumptions influenced what I was looking for during the data collection and analysis phases. During the first consultation, it was determined that the research questions contained leading elements which suggested that a pre-determined outcome would be sought or found. As such, the research objectives, research questions and interview questions were amended accordingly. The amended questions were phrased in an open-ended manner instead of in a leading manner. In this way, responses are not confined; instead they are uninhibited; allowing for authenticity that truly reflects respondents' experiences.

The following steps were also taken to ensure that an impartial analysis was undertaken:

1. A pilot interview was conducted after which the audio recording, transcribed interview and interview notes were reviewed by the research advisor to obtain feedback on objectivity of the researcher in conducting the interview.
2. Ongoing discussions with the researcher's supervisor and research advisor assisted in designing the research process to maximise authenticity and legitimacy.
3. Ongoing reflection during the write up of the research report took place.

### 3.6. Trustworthiness and Transferability

This dissertation employs concepts from Guba's Constructs (Guba, 1981) to address the limitation of qualitative research in terms of trustworthiness by seeking to satisfy four criteria, namely: credibility, transferability, dependability, and confirmability (Shenton, 2004).

### 3.6.1. Credibility

#### *a. The use of well-established research methods*

The aim of this dissertation is to describe and understand the experience of respondents when commuting to and from work to assist in the practical evaluation of public transport policy and service provision. The researcher places emphasis on the critical role of human experience and the meaning ascribed to these experiences in understanding human phenomena and in generating credible knowledge about the world.

As such, given the ability of qualitative research methods to extract in-depth information on lived experiences, a qualitative research method was selected (Creswell, 1998) since the accounts of the respondents' lived experiences could not be expressed statistically. Further, this dissertation is underpinned by principles of Phenomenology in that the researcher sought to address, identify, describe and interpret the experiences respondents have in their daily lives; just as those people have the experiences and understand them (Crotty, 1998).

#### *b. The Use of Qualitative Interviews*

Qualitative interviews have been selected as the research instrument because of the in-depth, rich data that they are able to extract. Most previous research on the subject matter centers on quantitative analysis of transportation costs using surveys; while less attention has been paid to in-depth insight into how travel expenditure burdens are experienced and managed by low-income households and the trade-offs that these households must make.

Clifton and Handy (2001) add that personal interviews allow for a more intimate environment for a dialogue around delicate and personal matters that call for the sharing of detailed information. Since the respondent is face-to-face with the interviewer, the interviewer can ask the respondent to elaborate on responses, to provide clarity, and to explain their responses. Qualitative interviews can determine the opinions, experiences, motivations and thought processes that underlie the responses. The open-ended questions in the qualitative interview will allow the interviewers to ask probing questions which cannot be done when using quantitative surveys.

*c. Ensuring Honesty and Authenticity from Respondents*

Respondents were given the opportunity to decide whether they want to be part of the study as well as to refuse or withdraw their participation at any time without explanation to ensure that only participants willing to truly engage formed part of the sample (Shenton, 2004). Participants were encouraged to be open and honest from the start of each session, with the researcher establishing a connection with the respondent at the very start of the interview session (Shenton, 2004). The researcher encouraged open discussion by stressing that there are no right or preferred answers. The confidentiality of the responses was emphasised to encourage open dialogue in which the respondent did not fear their responses being disclosed to a third party. Probes were used as part of the interview questioning to draw out in-depth data while iterative questioning was used to extract associated data through rephrased questions (Shenton, 2004). In this way, as inconsistencies arose, potential dishonesty could be identified and the researcher could decide about whether to make use of suspicious data.

*d. Frequent Debriefing Sessions*

Regular debriefing sessions took place between the researcher and the supervisor and between the researcher and the research advisor so that their inputs, opinions and insights could serve as input into the research process. This collaborative approach was used extensively when the researcher struggled with the data collection and analysis processes. The debriefing sessions allowed the supervisor and research advisor to determine instances of bias and issues with trustworthiness so that these could be addressed accordingly.

*e. Member Checks*

After the data elicitation was completed, respondents were provided with an opportunity to review an infographic fact sheet that summarised the main findings. Respondents were granted the opportunity for further discussion with the researcher or to provide comments on the findings.

### 3.6.2. Confirmability

One of the limitations of qualitative research is the use of the researcher as a research instrument; since researchers inevitably hold personal perceptions and bias which may impact on the validity of the results

(Shenton, 2004). To develop objectivity, steps should be taken to ensure that as far as possible, the research findings do not reflect the characteristics and preferences of the researcher but rather the authentic experiences of the respondents (Shenton, 2004). Since there are limited studies that have previously qualitatively examined the commuter experiences of travel cost burdens, this study has been developed to fill that research gap. To address this, the section on reflexivity discusses the predispositions of the researcher and the steps to be taken to eliminate researcher bias.

### 3.6.3. Transferability

In qualitative research, it is accepted that generalisation of findings is not possible given that findings are specific to the context in which the study was undertaken (Shenton, 2004). Following Lincoln and Guba's (1985) suggestion, sufficient contextual information in terms of the fieldwork sites was provided to allow readers and future researchers to make informed decisions in terms of the extent to which the findings may be transferred to other situations.

### 3.6.4. Dependability

Another limitation of qualitative research is the limited extent to which the research may be repeated with similar results (Shenton, 2004). Florio-Ruane (1991) suggests that descriptions are 'static and frozen in the ethnographic present' such that findings are highly specific to the context of the study. Shenton (2004) notes that in addressing the limitation of dependability, care should be taken to outline in depth the processes used within the study. In this way, future researchers can replicate the study even if the same results are not obtained. As such, the researcher outlined in Chapter 3 the research design and how it would be implemented, the operational plan for data collection, and a reflective appraisal of the research project.

## 3.7. Data Collection Method

This section outlines the steps taken to ensure that the interviews generated findings that answer the research questions.

### 3.7.1. Sample Selection and Identification

#### *a. Sampling Strategy*

Respondents were selected by choosing those who ‘have had experiences relating to the phenomenon to be researched’ (Kruger, 1988) and they formed the primary unit of analysis. Quota sampling was selected given the time and resource constraints of the researcher; since it allowed for the collection of data using less time than other sampling methods. The snowballing technique was then used to identify additional respondents by requesting that one or more respondents recommend others for interviewing (Babbie, 1995).

Snowball sampling had been selected for its various strengths, particularly cost efficiency - it allowed the researcher to access participants who were unknown to the researcher in a very short period of time. The researcher was not familiar with many individuals who met the criteria for the study and thus began with two known individuals who referred the rest of the respondents. If the researcher had sought participants in an alternative manner it would have cost a considerable amount of time away from work, exposure to unknown situations and would have required research funding. Having said this, the researcher acknowledges that the study would have benefitted from a more diverse sample and this is noted in the dissertation’s section on research limitations. Since the study aimed to merely gain an exploratory understanding of some of the issues, the researcher did not consider this lack of diversity as too big a risk.

#### *b. Respondent Eligibility*

The following eligibility criteria were used to select respondents:

Gender and Life Cycle Stage:	Female mothers, aged 18 and older
Residential location:	20+ km from the central business district of Cape Town
Employment type:	Proxy for lower-income earners
Mode of Commute:	Public Transport

### *c. Rationale for Respondent Eligibility*

Since the study aims to describe transportation expenditure burdens, it follows that the most burdened commuters should be interviewed. The material reviewed in the literature review suggests that lower-income households and households that reside in peripheral areas face disproportionate travel time and expenditure burdens in relation to households in higher income quintiles and households residing in closer proximity to economic nodes. Further, the literature shows that in South Africa, women tend to spend more time on household and care-related duties in relation to men such that they are more vulnerable to time-poverty than men. As a proxy for income, employment type was used to determine eligibility. Subject recruitment focused on lower-paying occupations including cleaning staff, security staff, and messengers. Since the respondent may belong to a household in which there reside other higher income earners, respondent selection was restricted to respondents from non-vehicle-owning households to avoid skewing of the data. Subject recruitment was further confined to respondents economically active in the central business district of Cape Town to include respondents that typically face long travel distances as part of their daily commute.

### *d. Sample Size*

When conducting a study based on Phenomenological principles, Boyd (2001) suggests that two to ten respondents are regarded as sufficient to obtain data saturation. This view is supported by Creswell's (1998) suggestion of "long interviews with up to 10 people" for a phenomenological study. Given the time and resource constraints of the researcher, the sample size for this study was limited to 6 – 8 participants.

## 3.7.2. Research Instrument

The research instrument took the form of in-depth qualitative interviews designed to elicit information about respondent experiences, feelings and beliefs surrounding the phenomena being studied (Welman & Kruger, 1999). Following Crabtree and Miller (1992), the open-ended style of the questions was used deliberately to allow the researcher to enter the respondents' world without preconceptions. Interview questions were designed to abstract information about the respondents' reflections of their lived experience of the phenomenon (Bentz and Shapiro, 1998). The interview questionnaire is attached as Annexure C.

In designing the interview questionnaire, the researcher undertook a process of designing questions that would assist in answering the research questions. The overarching research aim was to understand lived experiences of commuting and the questionnaire thus contained questions that asked the respondents about their commute experiences with specific focus on how much money they spend on commuting, how much time they spend on commuting, how they feel about spending this amount of time and money commuting, how the amount of time and money spent on commuting impacts on their budgets, their families and their daily time use as well as their general feelings about their commute experiences. The questions were open-ended, which allowed the respondents to speak freely about all aspects of their commute experiences.

### 3.7.3. Interview Process

The researcher conducted face-to-face interviews with the respondents, limited to 60 minutes per interview. Interviews took on an informal nature following Bailey's (1996) suggestion that this would allow for free and active participation from both the respondent and the researcher. The interviewer explained the purpose and value of the study and presented the respondent with a consent form. The interviewer also explained issues of confidentiality and anonymity to ensure that the respondent was comfortable with answering the questions as extensively and authentically as possible. Respondents were asked to sign the consent form before the interview began. Interviews were recorded using a digital voice recorder and the interviewer took written notes where necessary during the interview. Once the interview was over and the respondent had left, the interviewer made final notes about non-verbal aspects that were not captured on the recording.

## 3.8. Data Coding and Analysis

This section outlines the steps that taken to ensure that the interviews generated findings that answer the research questions.

### 3.8.1. Data Storage

Each interview was assigned an identification code, for example "Respondent A, 1 September 2017." An electronic file was opened for each respondent to store signed consent forms, audio recording files, notes made during the interview, notes made during the data analysis process and the transcribed interviews.

### 3.8.2. The Six Steps of Thematic Analysis

#### a. Thematic Analysis Introduction

Thematic Analysis (TA) is a widely used method for analyzing qualitative data (Braun and Clarke, 2006). The method provides guidance in seeking for themes, and their underlying meanings, that are useful in terms of answering the research questions. TA specifies a particular process of data familiarisation (active reading and re-reading with the research questions in mind), coding, grouping codes into themes, and revision (Braun and Clarke, 2006).

This method of data analysis was selected due to its flexibility across a variety of research questions (Braun and Clarke, 2006).

#### b. How Thematic Analysis Works

Once the researcher has the final dataset available, in the form of transcripts, the scripts are read and re-read to search for themes and meanings that relate to the research questions. Each initial point of interest is highlighted and given a short-hand term, e.g. 'expensive fares.' All short-hand terms are then listed, along with their transcript references, so that the researcher ends up with a very long list of initial short-hand codes. This long list is reviewed extensively to remove duplication and to group together short-hand codes that are similar and that relate to the same issue, as determined by the researcher. The groups of codes then become themes which are name appropriately to describe the theme. There will be much fewer themes than there are codes, yet the themes are still substantiated by the codes.

Similar themes may also be grouped together such that themes are broken down into sub-themes for ease of reference and for ease of understanding. In writing up the final report, the researcher will not necessarily list the extensive initial code list, but may highlight the overarching themes and their respective sub-themes. Direct quotes may be used to substantiate and provide clarity to the themes and sub-themes to give the reader a better understanding of the meaning of the themes.

#### c. The use of Thematic Analysis in this Dissertation

In this paper, the six steps of thematic analysis, as outlined by Braun and Clarke (2006) were used to analyse the interview transcripts. Once the interviews were concluded, the researcher transcribed the verbal data into written form. Following Braun and Clarke's (2006) proposal, a rigorous and thorough verbatim account of verbal and non-verbal utterances was recorded while the researcher ensured that the transcripts

retained all the necessary information from the verbal account in a way that is authentic to its original nature. Following Braun and Clarke's (2006) paper, the researcher familiarised herself with the data through repeated reading in an active manner; searching for meanings and patterns; after which initial codes were generated by identifying features of the data that seem interesting to the researcher and relevant to the phenomenon and the study. Next, the researcher sorted the different codes into potential overarching themes, after which these themes were refined and named. In conclusion, the final report was drawn up.

### 3.9. Ethical Considerations

#### 3.9.1. Ethics Committee Approval

Ethics approval for the study was obtained from the Research Ethics Committee of the Faculty of Engineering and the Built Environment at the University of Cape Town since the qualitative questionnaire was administered to human subjects. The approval documentation can be found in Annexure A.

#### 3.9.2. Informed Consent

Permission from respondents was sought by requesting that the respondents read, understand and sign a form of consent. The consent form can be found in Annexure B.

#### 3.9.3. Confidentiality

Strict measures were taken to ensure that all interview recordings and field notes were kept safe in a file that could not be accessed by any third party. Anonymity of respondents was preserved by not requesting identifying information from the respondents.

### 3.10. Summary of Research Methodology

This section has outlined the rationale for the selection of the research method and the steps that were taken to collect and analyse the data. As a researcher, I have disclosed my ontological and epistemological beliefs and assumptions. I have provided a reflective commentary to discuss ways in which I will ensure the

trustworthiness of the study. I have provided a rationale for my decision to make use of a qualitative research method which allowed for exploration into the lived experiences of the participants. The next chapter will outline the findings of the study, after which the research findings are discussed, conclusions are drawn and recommendations are made.

## Chapter Four: Findings

### 4.1. Introduction

This chapter outlines the findings of the qualitative interviews which are meant to provide a rich description of respondent commute experiences, particularly in terms of the monetary and time costs that they face and in terms of the time and monetary tradeoffs that must be made.

The chapter begins with demographic overviews of the respondents in Section 4.2. The six steps of thematic analysis, as outlined by Braun and Clarke (2006) were used to analyse the interview transcripts. After the qualitative interviews were conducted by the researcher, the researcher transcribed the verbal data to produce a written form of data. Following Braun and Clarke's (2006) proposal, a rigorous and thorough verbatim account of verbal and non-verbal utterances was recorded while the researcher ensured that the transcripts retained all the necessary information from the verbal account in a way that is authentic to its original nature. Section 4.3. then outlines the initial code list that was developed and shows the process of the development of themes. These themes are then discussed in Section 4.4. and the findings are summarised in Section 4.6.

### 4.2. Respondent Profiles

Respondents consisted of women employed in the central business district of Cape Town who are aged 18 and over. The respondents all travel to and from work daily from peripheral locations in the city, including Kraaifontein, Eerste Rivier, Philippi, and Elsies Rivier, using public transportation. All respondents reported using commuter rail services as their main commute mode due to its monetary cost-effectiveness.

Brief profiles of the respondents are outlined below.

## 4.2.1. Respondent 1



*“For this year (my travel cost) changed a lot because of the trains – you have your train ticket but there are times when they send you a message that you must make use of your own transport... [It’s an extra] R27 and the extra R10, or if it’s a taxi it’s an extra R20...if it’s not in your budget its bad...then I feel, ‘Why did I buy a monthly?’”*

Age: 41

Status: Married, 3 Children

Employment: Messenger (Full-Time; Permanent)

Gross Personal Monthly Income Band: R5000 – R6000

Residential Area: Eerste Rivier

Distance to Work: +-40 km

Main Commute Mode: Train

Secondary Commute Modes: Minibus Taxi, Walk

Daily Waking Time: 04h00

Total Travel Time to and from work (per direction): 1 hr 40 min

Expected Monthly Travel Cost to Work: R510.00 (Roughly 10 % of gross personal monthly income)

## 4.2.2. Respondent 2



*“(The train is) too much delayed or cancelled. And if it is cancelled, I have to take another taxi to Nyanga terminus where I can get the big taxi... but the taxi from Nyanga to Cape Town is R16 – that’s more money... It’s very expensive, because I have a ticket, and then I take the taxi to the station, from the station to the terminus and from the terminus to Cape Town... That’s bad my dear because it’s not in my budget...”*

Age: 47

Status: Married, 3 Children

Employment: Access Control (Full-Time; Contract)

Gross Monthly Income Band: R4000 – R5000 per month

Residential Area: Philippi

Distance to Work: +- 25km

Main Commute Mode: Train

Secondary Commute Modes: Minibus Taxi, Walk

Daily Waking Time: 03h00

Total Travel Time to and From Work (per direction): 1.5hr+

Expected Monthly Travel Cost to Work: R505 (Roughly 10 % of gross personal monthly income)

## 4.2.3. Respondent 3



*“...most of the time the train is cancelled, cancelled, cancelled... From the station – they’re announcing there – Khayelitsha Cape Town is cancelled, Mitchell’s Plan, Kapteinsklip, cancelled – we must leave the station and go get the taxis, 7 o’clock already... I’m feeling bad meisie, I don’t want to lie, because I do have the ticket train in my pocket but I can’t use the ticket because there are no trains...”*

Age: 29

Status: Married, 2 Children

Employment: Access Control (Full-Time; Contract)

Income Band: R4000 – R5000 per month

Residential Area: Nyanga Crossroads

Distance to Work: +-23km

Main Commute Mode: Train

Secondary Commute Modes: Minibus Taxi, Walk

Daily Waking Time: 03h30

Total Travel Time to and from Work (per direction): 1.5hr

Expected Monthly Travel Cost to Work: +-R405 (Roughly 10 % of gross personal monthly income)

## 4.2.4. Respondent 4



*"I want a car because I see the people in the car and everything is easy – if I want to go to Shoprite, I start the car, if you want to visit your family, you take your car, you're not stressed...I wait there (at my family), I don't want to sleep there but the taxis are finished...if my neighbour is sick I want to take my car and help my neighbour, if my child is sick, I take my car, see?"*

Age: 43

Status: Married, 4 Children

Employment: Cleaner (Full-Time; Contract)

Income Band: R4000 – R5000 per month

Residential Area: Kraaifontein

Distance to work: +- 32.2km

Main Commute Mode: Train

Secondary Commute Modes: Minibus Taxi, Walk

Daily Waking Time: 03h30

Total Travel Time to and From Work Per Direction: 1hr, 45min

Expected Monthly Travel Cost to Work: +-R410 (Roughly 10 % of gross personal monthly income)

## 4.2.5. Respondent 5



*"...the one time I get into a taxi twenty past seven and I get home about almost 8 o'clock and there was no taxis for us, we had to walk to the Golden Acre and the taxis come stopping there, people were like baboons and there's not a nice queue, we get home that night about half past eight. And not home – just to Elsie's station and then we had to walk...There's no taxis that time. We had to walk through all that dangers..."*

Age: 50

Status: Married, 4 Children

Employment: Cleaner (Full-Time; Permanent)

Income Band: R4000 – R5000 per month

Residential Area: Elsie's River

Distance to work: 20km

Main Commute Mode: Train

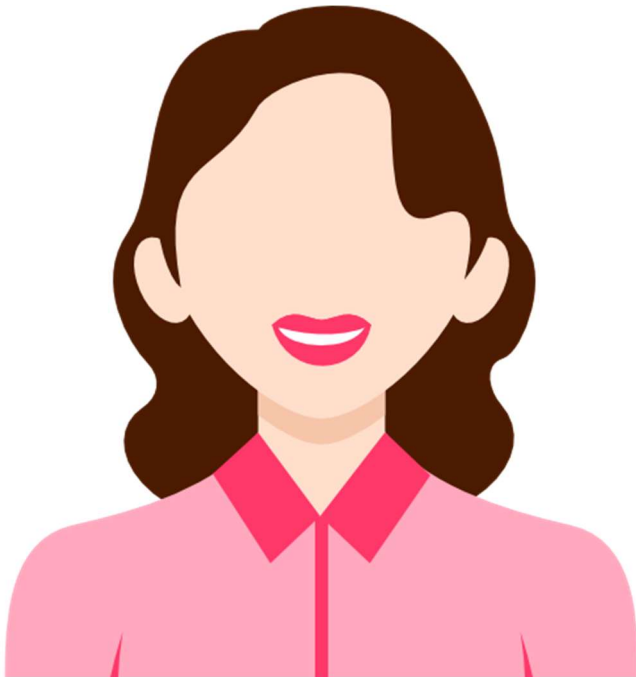
Secondary Commute Modes: Minibus Taxi, Walk

Daily Waking Time: 4h30

Total Travel Time to Work: +- 2 hours

Expected Monthly Travel Cost to Work: +-R470 (Roughly 10 % of gross personal monthly income)

## 4.2.6. Respondent 6



2

*"Daar was a tyd wanneer die treine baie mooi gery het – maar toe begin die trein mos al hoe swakker, swakker gery, dan kom jy by jou werk dan lus jy nie om te werk nie, jy's klaar moeg gesit op die trein, maar wat kan jy doen? Jy moet maar aangaan"*

Age: 59

Status: Single, No dependents

Employment: Cleaner (Full-Time; Permanent)

Income Band: R4000 – R5000 per month

Residential Area: Eerste River; Distance to work: +-40km

Main Commute Mode: Train

Secondary Commute Modes: Minibus Taxi, Walk

Daily Waking Time: unidentified

Total Travel Time to Work: unidentified

Expected Monthly Travel Cost to Work: R550 (Roughly 10 % of gross personal monthly income)

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<sup>2</sup> There was a time when the trains operated well but then the service got worse and worse; when you get to work you don't feel like working because you're tired from sitting on the train...but what can you do? You must go on.

## 4.2.7. Respondent 7



*"Today I don't have money to buy my lunch because I only brought four breads in the morning. I don't have money. I must keep money for the taxi if I didn't find the train straight train to Kraaifontein. So, I must always have money for a taxi"*

Age: 26

Status: Single, 2 Children

Employment: Access Control (Full-Time; Contract)

Income Band: R4000 – R5000 per month

Residential Area: Kraaifontein

Distance to work: +-40km

Main Commute Mode: Train

Secondary Commute Modes: Minibus Taxi, Walk

Daily Waking Time: 3h20

Total Travel Time to Work Per Direction: 1.5 hours

Expected Monthly Travel Cost to Work: +-R650 (Roughly 10 % - 15% of gross personal monthly income)

#### 4.2.8. Respondent Geographical Location

In addition to the respondent profiles as depicted above, the following map, sourced from the City of Cape Town's Transport Development Index, assists in illustrating where respondents are residentially located in relation to their place of employment. All respondents reported being employed in Travel Analysis Zone (TAZ) 10, which is Central Cape Town.

Figure 1: Geographical Transport Analysis Zones of the City of Cape Town

#### TDI is based on Transport Analysis Zones (TAZs)

1	Northern Corridor	10	Central Cape Town
2	Kraaifontein	11	Kuilsrivier
3	Parow/Bellville	12	Durbanville
4	Blue Downs	13	Oostenberg
5	Belgravia	14	Langa/Bishop Lavis
6	Grassy Park	15	Strand
7	Mitchells Plain/Gugulethu	16	Simonstown
8	Khayelitsha	17	Wynberg
9	Somerset West	18	Sea Point

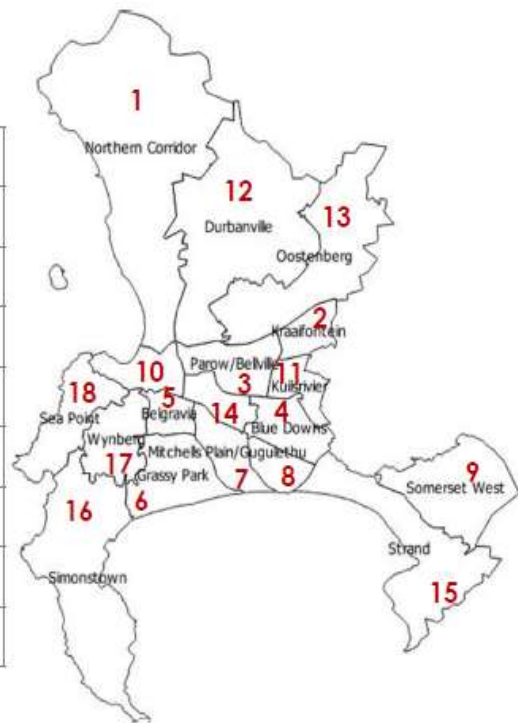


Table 4: Residential Location of Respondents

Respondent	Suburb	Travel Analysis Zone
1	Eerste Rivier	11
2	Philippi	7
3	Nyanga Crossroads	7
4	Kraaifontein	2
5	Elsies River	14
6	Eerste Rivier	11
7	Kraaifontein	2

### 4.3. Initial Code List and Theme Construction

After thoroughly reading through each of the transcripts, the following initial codes were identified. A master code list was developed and comprised of 67 initial codes in no particular order. Following the identification of codes from the interview transcripts, the master code list was analysed to group codes under potential themes that the researcher found important to the study, as well as additional themes that came across strongly in the interviews (Braun and Clarke, 2006).

At this stage, a thread was drawn between the research objectives, the interview questions and the themes emanating from the data. The themes and sub-themes have been listed below:

#### 4.3.1. Theme 1: Unexpected Expenditure

Theme 1: Unexpected Expenditure: Although respondents plan their monthly expenditure for commuting, irregular train services result in respondents experiencing additional, unexpected and unplanned for monetary travel expenditure.

#### 4.3.2. Theme 2: Household Cutbacks

Theme 2: Household Cutbacks: Although respondents plan their monthly expenditure for commuting, irregular train services result in unexpected and unplanned for travel time and cost burdens have an adverse impact on household budget and consumption.

Sub-Theme 2.1 Household Cutbacks: Household consumption goods may be cut back on to pay for alternative transport in the case of disruptions to commuter rail services.

Sub-Theme 2.2: Cutback Difficulties: Cutting back on household goods to pay for travelling described as “difficult” and making respondent feel “bad.”

#### 4.3.3. Theme 3: Unexpected Time

Theme 3: Unexpected Time: Although respondents plan their monthly time budget for commuting, disruptions to regular train services result in respondents experiencing additional, unexpected and unplanned for travel time expenditure.

Sub-Theme 3.1 Travel Time: Respondents report commute times in excess of 1 hour, 40 minutes per direction. This may increase to more than 2 hours per direction when commuter rail disruptions are experienced.

Sub-Theme 3.2 Increasing Commute Time: Commute travel times are increasing.

Sub-Theme 3.2 Increasing Commute Time: Long waiting times for minibus taxis were reported.

#### 4.3.4. Theme 4: Personal Obligations Impacted

Theme 4: Personal Obligations: Although respondents plan their daily time budget for commuting and other activities, irregular train services result in unexpected and unplanned for travel time burdens which have an adverse impact on family, household and social obligations.

Sub-Theme 4.1 Familial, Household and Religious Obligations: Respondents report being unable to assist children with homework and eating/cleaning when coming home late due to commute delays.

Sub-Theme 4.1 Familial, Household and Religious Obligations: Respondents report having missed out on children's' school meetings or other social or religious events due to commuter rail service disruptions.

Sub-Theme 4.1 Familial, Household and Religious Obligations: Familial / social/ household duties adversely impacted by commute delays described as making the respondent feel 'sad' and 'bad' "not okay" or 'not right.'

Sub-Theme 4.1 Familial, Household and Religious Obligations: Respondents report that leaving home early or arriving home late requires asking someone for assistance with family and household duties.

Sub-Theme 4.2 Social and Recreational Activities Respondents report limited time for recreational and social activities after commuting home from work due to lengthy travel times.

#### 4.3.5. Theme 5: Employment and Earnings

Theme 5: Employment and Earnings: Irregular commuter rail services result in unexpected and unplanned for travel times and thereby adverse impacts on employment and earnings.

Sub-Theme 5.1 Time Transgression: Train delays cause commuters to be late for work.

Sub-Theme 5.2 Forfeited Incomes: Train delays and cancellations may result in absence from work. The respondent will not be paid for that day.

#### 4.3.6. Theme 6: Exposure to Criminal Activity

Theme 6: Exposure to Criminal Activity: Respondents have experienced being a victim of crime, being witness to criminal activity or being fearful of crime on their commute to and from work.

Sub-Theme 6.1 Fear of Crime: It is dangerous / unsafe to walk to first mode of travel.

Sub-Theme 6.1 Fear of Crime: Respondent feels fearful of crime on commute to and from work.

Sub-Theme 6.1 Fear of Crime: Not feeling safe and fear of crime on commute described as making respondents feel 'bad.'

Sub-Theme 6.2 Experience of Crime: Respondent has witnessed criminal activity on commute to and from work.

Sub-Theme 6.2 Experience of Crime: Respondent has previously been robbed on commute to or from work.

Sub-Theme 6.3 Protection from Crime: Respondent travels with a group of people to increase safety on commute.

Sub-Theme 6.3 Protection from Crime: Respondent forced to pay for taxi to the rail station instead of walking due to fear of crime.

#### 4.3.7. Theme 7: Poor Commuter Rail Service

Theme 7: Poor Commuter Rail Service: Although commuter rail is the most cost-effective means of commuting, respondents experience grossly inadequate commuter rail services on their commute to and from work.

Sub-Theme 7.1 Deteriorating Service: The experience of commuting on commuter rail services used to be better and is getting worse.

Sub-Theme 7.2 Service Cancellation: Certain important trains have been permanently removed or discontinued from the schedule.

Sub-Theme 7.2 Service Cancellation: Respondents reported that incidences of commuter rail cancellations are increasing.

Sub-Theme 7.3 Alternative Transport: Respondents are no longer offered alternative transport by bus when trains are cancelled.

Sub-Theme 7.4 Service Delays: Respondents report that incidences of commuter rail delays are increasing.

Sub-Theme 7.5 Poor Communication: Respondents are not informed timeously of train delays and cancellations.

Sub-Theme 7.6 Inadequate Infrastructure: There are more first-class carriages than third class carriages and this is problematic since most low-income earners can only afford third class tickets and are thus subject to the safety hazards of overcrowding.

#### 4.3.8. Thematic Map

The following figure summarises the final list of themes and sub-themes emanating from the research findings.

Figure 2: Thematic Map: Consolidated view of all resulting themes and sub-themes



#### 4.4. Discussion of Themes

In beginning this study, the researcher sought to gain an understanding of commuter experiences of public transport in Cape Town in general. As the study progressed, it became evident that a major factor in the commute of the respondent is the failure of the commuter rail service operated by the Passenger Rail Association of South Africa (PRASA).

As such, the experience of the commute centred overwhelmingly on the quality of the service offered by PRASA, particularly because the rail service was reported by all respondents as the most financially viable mode of commuting.

Furthermore, another theme that came across strongly was the fear from crime experienced by the respondents when commuting to and from work. The emerging themes are discussed in detail below.

Afrikaans quotes have been used to preserve the authenticity of the responses. Allowing the participant to respond in Afrikaans improved the quality and authenticity of the data since the respondents could describe their experiences more extensively. In all of these instances, footnotes have been used to translate the Afrikaans quote into English for the benefit of the reader.

##### 4.4.1. Unexpected Expenditure

This theme came across strongly during the data collection phase. All respondents reported that disruptions to commuter rail services resulted in respondents experiencing additional, unexpected and unplanned-for monetary travel expenditure. Train cancellations were reported as a concern by all respondents. When a train is cancelled, commuters are notified that they must make use of alternative transportation. Respondents reported that in these instances, either a bus or minibus taxi must be used, both of which are significantly more expensive than commuter rail. While the cost of a commuter rail trip may average of R5.00 per trip, the bus or minibus taxi trip can cost up to five times this amount.

*"...if the trains are a mix up...then we'd rather take the bus, then its R27 just to get home, for a 2.5-hour drive, and that's very long for us...I don't really like the bus because it takes too long to get home... when the trains are a mix up then you have to have extra money, you see? Because if I take a taxi out of Cape Town, I have to take a taxi to Bellville, from Bellville to Eerste River, from Eerste River station to my house. Its R10 to Bellville, R10 to Eerste River and R8 home..." (Respondent 1, Travels 40km to work)*

Another respondent confirmed this phenomenon:

*"It's R11 to Bellville, from Bellville to Cape Town its R18. So, it's R29 per day, it's not even a return."  
(Respondent 7, 26-year-old mother of 3)*

This is not an uncommon experience for these respondents who reported that train schedule cancellations have become commonplace of late. One mother who works a twelve-hour shift stated that as of the day of the interview (Thursday), she had had to make alternative travel arrangements since the Monday:

*"Whoo - too much delayed or cancelled. And if it's cancelled I have to take another taxi to Nyanga terminus where I can get the big taxi...it's another R8...and the taxi from Nyanga to Cape Town is R16 - that's another money... (it happens) mostly...as now, I take a taxi from Monday till today because of the trains...it's very expensive...that's bad my dear because it's not in my budget ...it's the same story when you go home, there's a delay, there's a cancellation, if there's no train at Cape Town station you take a taxi on the deck...it's the same R16 like in the morning..." (Respondent 2, works 12 hours per day)*

Another respondent echoed this concern:

*"Let's say the train's supposed to be there to go 18h20 but most of the time the train is cancelled, cancelled, cancelled...from the station they're announcing there - Khayelitsha Cape Town is cancelled, Mitchell's Plain, Kapteinsklip cancelled - we must leave the station and go get a taxi, 7pm already"(Respondent 2, Mother of 3)*

Importantly, the respondent noted that the additional cost of finding alternative transport was not in her budget:

*"I feel bad because it's out of my budget and I don't save. Because I keep money so that I can have money till the end of the month but I can't keep it because I'm gonna have to take it mos for transport"  
(Respondent 2, Mother of 3, works 12 hours per day)*

Another respondent stated that it made her feel bad and unhappy when she is required to unexpectedly use pre-allocated funds to fund her commute to work. She shared her frustration at the fact that things should not be this way because she had done the right thing by purchasing her monthly train ticket but could not use it.

*"I'm feeling bad! I'm not happy if I'm using the money that I didn't expect to use...I needed the money for other things...I'm feeling bad meisie<sup>3</sup>, I don't want to lie, because I do have my train ticket in my pocket but I can't use it because there are no trains." (Respondent 3, 29-year-old mother of 2)*

Another unexpected expense relating to public transport service disruptions was highlighted by a respondent who has a child in crèche. She noted that if she is late to collect her child from crèche in the afternoons, she is faced with a monetary penalty:

*"...and if I miss crèche, if I'm like 15 minutes late to get my child at crèche, then I have to pay R50..." (Respondent 1, 41-year old mother of 3)*

All respondents reported that over time, commute costs appear to be increasing:

*"it's going up yes because just imagine I must have the R175 for the ticket, I must have the money for the taxi to take me to the station, only to find out I'm not gonna take the train, I'm gonna use the taxi... Most of the time I'm always having money in my pocket because I know the train is going bad...because the company can tell me you must have a way to go to work so I must have"* (Respondent 3, 29-year-old mother of 2)

Because of unexpected expenditure caused by disruptions to commuter rail services, most respondents reported having to borrow money to commute to work.

*"Yoh, it's not nice to do that, but I don't have a choice, I have to be at my work, I can't phone in and say to my supervisor I don't have a taxi fare that's why I'm not in work today, that's stupid, you know, you can't do that, I don't have a choice but I have to do that, and here I am still, I don't worry if you gossip afterwards, I don't care, as long as you helped, me, you were there for me when I was in need."* (Respondent 5, 50-year-old mother, commutes to work from a suburb plagued by gangsterism)

Borrowing of money typically happens informally from someone the respondent is acquainted with.

*"...they (neighbours) are mostly the people that will help me out with a taxi fare and I can come home with that R7, R8, you too scared to ask for more because are they going to tell you they don't have... 'Don't you have a R8 for me just for the taxi please?' 'You know mos I can't walk to the station, its dark and it's so early in the morning. 'Okay just have a R8' – when I got here, must ask one of my colleagues for a R8 to go back and what if the trains have like got this problematic and I don't have a*

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<sup>3</sup> Girl

*taxi fare – I just got my ticket – I have to be stuck with that 80 to 120 minute delay, and when I got to the station at what time, then I have to walk from Elsies because there's no taxis anymore – that is the thing I'm dealing with personally"*(Respondent 5, 50 year old mother, commutes to work from a suburb plagued by gangsterism)

Another respondent confirmed being forced to borrow money to travel to work:

*"...you have to give out money that's not included in your budget, and then you have to go borrow money. That's not in your budget but you have no choice, you must go borrow. You can't walk to work. And you can't just ask anyone for money or a lift"* (Respondent 1, 41-year old mother of 3)

*"Daar was een keer toe dink ek yoh daar ry buste kaap toe maar ek het mos nou nie geld gehad om die bus kaap toe to vat want ek het mos my ticket, toe gaan ek met die taxi Eerste Rivier stasie toe to vra ek iemand will hulle nie miskien vir my n R50 wil leen nie net tot payday so dat ek by die werk uit kan kom ja en in die middag toe ry die treine weer"* (Respondent 6, 59-year-old, travels 40km to work)<sup>4</sup>

Respondents who borrow money to travel to work reported that having to borrow money is difficult for them.

*"Yoo it's really boring because you look like someone, I don't know. But I have no choice I must travel. I don't always keep the money because I must use it, I have kids, I must buy them chips and yoghurt and stuff and we don't get paid much money you see."* (Respondent 7, 26-year-old Single Mother of 2)

Another respondent added that while she does borrow money from her neighbour for her commuting costs, sometimes she'd rather call in sick and forfeit her income for the day than borrow money from people because of what people would say about her.

*"I'm not feel right because you know I'm work but why you borrow money? I tell my money's finished mos and you know my money's little. I'm not paying R5000 mos... Sometimes I'm scared the people*

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<sup>4</sup> There was one time (when the rail service was disrupted), I knew there were buses going into the CBD but I did not have money to purchase a bus ticket, since I had already purchased my monthly rail ticket, so I took the minibus taxi to Eerste Rivier station and I asked someone to lend me R50 until payday so that I could get to work. In the afternoon when coming home from work the train was operating fine.

*say every time you borrow, borrow, and borrow so now I say I'm not feeling well"* (Respondent 4, Mother of 4, Kraaifontein)

One respondent offered that her reluctance to borrow money from her colleagues sometimes led her to reversing debit orders. She emphasised that while her regular commute costs are on the increase, she is most concerned about the high cost of the alternative transport that she must rely on. Her alternative transport typically takes the form of the bus which, as mentioned above, can cost up to five times per trip in relation to the train.

*"You know sometimes I had to; I don't like to ask money from colleagues and so on ne, I used to check on some of my debit orders and go find it I can't reverse it, I had to do sometimes that...Ja, because my travelling is now more and ja, and I don't have, especially, my budget is worked out, I got my monthly ticket, ne, I got my travelling for my taxi fare, its 8 x 5 days per week, its R16 per day, its 16 times 5, and if you got that amount, then you take that amount and you multiply it by 4, then how much do you get, you know. Now you got your round total ne, and my other money I used to keep, it's always for bread, milk, you know, electricity – I don't buy too much electricity, I usually buy R300 for a month because I got that free electricity, but I don't get that free electricity anymore because the electricity is now higher, there's an increase in that, if that R300 is finished I had to buy, for instance if I buy R50 electricity I receive 18 units, you see, 18 or 19 units, you know now if I buy R100, because that R50 units won't last, especially if the shower, the geyser, I had to put it off, you know, I had to buy extra, maybe R200 electricity, you know, and that's why I keep always money, you know, especially for Zaid for school, every Friday they have to have maybe a R10 because there's something on there at school and that's why I had to have that extras – and now I have to take that extras to put by my travelling. **Sometimes I have to take an alternative route by not using my ticket**, it's not always that they say, there's maybe emails that come telling us that we can take the bus with our ticket, you know, it's not always like that, most of the times we had to take that bus for, I don't know for how long, I forget to tell you that, it's not just about the trains that's being late and the long taxi queues and how long it takes me to go home, it's not just about that, it's about **sometimes, most of the times I have to take a bus also and I had to pay for the bus.**"* (Respondent 5, 50-year old mother, Elsies River)

#### 4.4.2. Household Cutbacks

Having to find alternative transportation when commuter rail services are disrupted has been difficult for the respondents. Most respondents suggested that the monthly rail ticket for commuting is easily budgeted for, however, the unexpected expenditure, as outlined in Theme 4.6.1, requires respondents to make economic trade-offs. Many respondents reported that the unexpected expenditure on alternative transportation makes household cutbacks necessary.

*"...the other day, oh shame, my child is 2 years now, that time she was still using nappies ne, and the other day I was carrying my R300 here (points to pocket) to buy the nappies and the wipes ne, when I'm in the train station, they announce that the train is cancelled, I had to take from the money that I'm supposed to buy the nappies and use it for the taxi – I'm not gonna get the wipes mos, I only bought the nappies. When I'm going home, the message came in my phone, telling that the train is delayed for 40 to 60 minutes, which means there is no trains, I had to use that money, and I had to do something else to get the nappies because I can see mos the train is not going right"* (Respondent 7, Travels 35 km to work).

Another respondent reported having to reduce her expenditure on basic household consumption goods to pay for alternative transportation:

*"...A woman normally keeps money for the month for bread and milk and stuff like that, then I have to take from that money"* (Respondent 1, 41-year old mother of 3)

One respondent added that since encountering increased instances of unexpected expenditure on alternative transportation, she has been unable to manage her budget as efficiently as she used to. She previously tried to save money by purchasing products in bulk at a lower cost but she is now forced to purchase smaller quantities at convenience store prices.

*"...[I cut back] sometimes on my food...Like I used to buy a 10kg of sugar for the month, I used to buy maybe 2, that big coffees, or 10kg rice, it's because I like when I go to shopping, I like to have a lot so I just pay once a month, I like to buy big so that I don't have to buy the same needs maybe at the end of the day when I get paid again then I just buy the little needs I need, but for now it's been a long time, I can't even buy that 10kg"*(Respondent 5, commutes to work from a suburb plagued by gangsterism)

*"Yes, because I need to limit some...like if I used to buy electricity for R200, I must buy it R150 mos so that I can save...I feel bad because maybe before the end of the month the electricity is going to be finished, so I have to ask someone, you see...to borrow money." (Respondent 2, Mother of 3, Philippi)*

When asked how respondents make decisions about household cutbacks, most noted that they first ensure that their children are taken care of. One mother suggested that she would rather cut back on things that she needed than cut back on things that her children would need.

*"The kids are more important, but for my things, the things that are going to help me, I can cancel... I have to have nappies yes. I can say the veg, I can cancel the veg, but their stuff, I can't just leave the kids' stuff, I must have" (Respondent 3)*

*"No, I don't let my children suffer or get hungry" (Respondent 3)*

*"I cancel to buy my lunch because electricity I must have – I have kids – I have to have electricity because they can't stay in the dark. So, I must buy the electricity. So, I will cancel my lunch. Even my hair, see... I didn't do my hair. I have to cancel my hair because I have to pay the taxi...Today I don't have money to buy my lunch because I only brought four breads in the morning. I don't have money. I must keep money for the taxi if I didn't find the train straight train to Kraaifontein. So, I must always have money for a taxi" (Respondent 7, single mother)*

Another respondent noted that she would cut back on items that were deemed non-essential to her.

*"You never know you see. You can go without milk. You don't need to drink milk every day. So, there was a time that I did not buy milk because I must use that milk money...it's difficult you know because my kids, they eat porridge so I have to think twice before I don't buy it...the kids moan and complain then I have to hear all that stuff, 'Mommy but why?' and they don't understand when you say there isn't" (Respondent 1, 41-year old mother of 3)*

#### 4.4.3. Unexpected Time

Commute times were reported to be on the increase, largely because of disruptions to commuter rail services. While transportation policy guidelines suggest average commute times of one hour in each direction, the average commute time for respondents was reported as 1 hour and 40 minutes in each direction, totaling over 3 hours of travelling per day. Strikingly, the average waking time for respondents

was reported at 3h30a.m. Respondents stated that it is important that they reach the rail station as early as possible to board the first train of the morning.

*"There are always trains because I use the train early in the morning. So, it's okay. Then after us they gonna call no trains."*(Respondent 4, Kraaifontein)

Another common issue noted was that although the train may depart from the station on time, service disruptions result in the train stopping for long periods of time between stations.

*"It's because the train mos maybe stand on the road on the way you see, not even on the station...it's the same story when you go home, there's a delay, there's a cancellation, or maybe you take a train and you stand an hour at Langa...every day."* (Respondent 2, Philippi)

*"I always get to work on time, but on other days maybe half way to Cape Town the train just stuck, and I'm inside the train, I can't jump, so on those days I can be late...It's doing that when we go home also...you won't know, because the train is going on time when it starts from the station, it stuck in the middle"*(Respondent3, mother of 2)

These lengthy commute times are not easy for the respondents.

*"I'm feeling bad meisie, I'm always angry, angry, angry... [about getting home that time] ...and I know that I still have lots of work to do at home"*(29-year-old mother of 2)

One respondent reported that unexpected rail service delays imposed a financial cost on her since she is not able to walk home when arriving at the train station too late. Instead she is forced to spend R8-00 on a minibus taxi to take her home when she could have saved this money.

*"...when the trains were on time, in the morning I took a taxi and in the afternoon, I could walk if it's not raining, but nowadays you must take a taxi because the train is always late..."* (Mother of 3, Travels 40km to work)

Another respondent also reported a monetary cost linked to unexpected time delays in that once she arrives at Cape Town rail station, she was previously able to walk the 1km distance to work, however now she is forced to pay for a minibus taxi to take her to work.

*"Because of the trains that make me already late, for these couple of months I had to pay R6 for a taxi, what is that taxi, Kloof street taxi, you are getting there by the Parade, then he brings me to Dorp*

*street...almost for most of the time while the trains was now problematic...I then rather give out the R6 to come a little earlier, you know?" (Respondent 5, Elsie's River)*

Aside from the monetary cost that unexpected time delays incur, respondents highlighted the cost of time spent away from their families. One respondent reported feeling bad when arriving home to a sleeping child while another respondent reported that it felt painful that her children were impacted by her late arrival.

*"It's bad because sometimes the little one is sleeping already." (Respondent 2)*

*"Yoh, lots of days, I can't count – If I'm getting home sometimes my husband get home earlier than me, when I get home they're sleeping already, they can't even see me...They feeling bad because mos I remember the other day I came late, they sleeping already, I'm not gonna see them, I must sleep and I must wake up in the morning, in the morning it's just to prepare them and take them to the neighbour and they said yoh, 'When did you come home?' can you see? My child said yoh mamma I thought they took you, I said no I came late – that is painful." (Respondent 3, 29-year old mother of 2)*

Another respondent relays her disappointment at the how the commuter rail disruptions impact on the time she has available for her son.

*"Ag yinne it affect really because uhm the other day he said to my yoh mommy he always give me a lekker hug when I get home at night but sometimes when I got too late at home he's lying in his room watching TV up till he sleep or whatever then he usually said to me, 'mommy what are you doing at work? Why you coming so late? Why you not coming early anymore?' It's because of the trains, people is vandalising our trains, our stations, sometimes, and it's because of a lot of things that are going on in our country. People, especially these druggies, they are stealing the cables, they are stealing the globes, the stealing the electricity stuff and then it needs to be fixed and now the people is dealing with all these things and it affects us all. It affects us." (Respondent 5, 50-year-old mother, Elsie's River)*

Furthermore, unexpected travel time delays also impose a safety cost in that when respondents arrive in their home suburb too late, they are exposed to security risks because there are no longer minibus taxis operating at that time. One respondent reported having to walk through a dangerous area late at night and mitigated the risk by staying in a crowd.

*"it was three times, the one time I get into a taxi twenty past seven and I get home about almost 8 o'clock and the other, the one was very hectic there was no taxis for us, we had to walk to the Golden Acre and the taxis come stopping there, people were like baboons and there's not a nice queue they were like*

*ooooo huhuh, we get home that night about half past eight. And not home – just to Elsie's station and then we had to walk...There's no taxis that time. We had to walk through all that dangers...Me and other commuters...No and some, if you stay in Leonsdale you drop off at your place, if you stay in Clark you have to go that extra mile you know, and as we walk you go to your street, ja we walk in a crowd."*  
(Respondent 5, 50-year-old mother, Elsie's River)

#### 4.4.4. Personal Obligations Impacted

Respondents have reported that disruptions to commuter rail services extend their commute travel time such that personal obligations may be impacted.

*"Woo, it's very hurting because I'm not gonna see my children and I have to do all that work, so I'm gonna sleep past ten and I have to wake up at three o'clock again you see. So it's really hurt...sometimes I miss cooking because it's too late to cook and my kids have to eat instant porridge or corn flakes, or they have to sleep with bread."* (Respondent 7, 26-year-old single mother)

Some respondents reported not being able to attend their children's school meetings because of disruptions to public transport services. One respondent relayed an incident in which the train she was travelling home on stopped for a long period of time resulting in the respondent being missing out on the school meeting. She recalls that her children felt upset and concerned about the impression that this would leave on their teacher.

*"...my kids, when there's school meetings, there was two times that the train was standing between the lines and I did miss the kids school meetings...the kids was upset because they were thinking that the teacher would say 'your parents don't even take an interest in your school work.'" (Respondent 1, 41-year old mother of 3)*

Other respondents reported missing out on religious meetings during the week:

*"...everything starts maybe at 7 o'clock, but 7 o'clock I'm still on the road...like church meeting...if there is a possibility I would like to go in the week, because maybe we got meetings on a week day, the women's you see, but I don't get a chance because I come home too late" (Respondent 2)*

*"...especially my church, because I'm in the missionary, and we come together on a Wednesday night and on a Thursday night at church and mostly on a Friday we go to Wolseley and or if it's not Wolseley*

*it's we go out to that people there who are doing missionary and I can't even get, as I said, they pick me up about 7h30, 6h30, whenever they come to my house I'm not there, it's been a long time, Sister Daphne said to me Sunday, She said to me, yoh I don't know if you're still at this church because whenever we go to your place on a Tuesday or a Wednesday you're never there, your children keep on saying, 'mommy's not back yet from work' you know" it's doing a thing about my spiritual life man, because I wanted to be there but I can't"* (Respondent 5, commutes to work from a suburb plagued by gangsterism)

*"I do go to church, but I can't go to church in the week because when church starts I am still on my way home from work. In the evening, my church starts at 6 o'clock until 8, so by that 20h00 I'm still on my way home."* (Respondent 7, 26-year-old single mother)

*"Somtyds wil jy kerk toe gaan want jy woel jy wil daar wees – een dag het ek gekom van die werk af, dit was op n Woensdag middag toe kan ek dit nie maak nie want die trein was nou laat, nou wat kan jy doen? ... toe het ek eintlik nie lekker gevoel want ek dink, 'yoh die treine,' maar jy kan niks doen nie, jy kan nie die trein stoot en se jy moet nou ry nie, jy moet maar nou wag, dan se ek vir die een wat langsaan my sit, yoh ek wil vanaan graag in die kerk is maar kyk waar staan ons met die trein"* (Respondent 6, 59-year old, Eerste Rivier)<sup>5</sup>

Some respondents also reported often not getting home in time to assist their children with homework. One 26-year old mother noted that she is only able to assist her daughter with homework on the days that she is off from work:

*"Yes, only when I'm off because when I reach home past eight, she doesn't wanna talk. Sometimes I get them sleeping already... It's very irritating. She has homework every single day. They are giving them those books from government, Mathematics, English, you see? So, I always ask her teacher, can we make the four pages today for the whole week because if I didn't do that she's not gonna have the homework... I can't be happy sissie, I can't, I really don't enjoy that life, it's boring, but we have kids to take care of so you must work."* (Respondent 7, 26-year old single mother)

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<sup>5</sup> Sometimes you want to go to church because you feel you want to be there. One day I got home from work on a Wednesday afternoon and I could not make it because the train was late, but what can you do? I didn't feel good because I thought, 'Oh, the trains,' but you can't do anything, you can't push the train and tell it to ride, you just must wait. I said to the person sitting next to me, 'I really wanted to be in church but look where we're standing with the train.'

Another reported feeling sad about being unable to assist her children with their homework:

*"Yes, then I have to ask them, Guys please do your own work, I'm tired and late. And they don't understand this...it's sad because you think to yourself, did the child do the right job? Then you don't know as a parent"* (Respondent 1, Mother of 3)

One respondent relayed an instance in which she was unable to get to her family in a medical emergency due to the commuter rail disruptions in the afternoon. She had been at work when she received an urgent phone call from a relative

*"The other day I was at work ne, my cousin sister just phoned me and tell me to go to her house, she's not married mos, her child was not right, and she wanted me to go there just to give some help ne, and I told her I'll come to you after work because now I'm at work. I left here early and when I got to the station and the train was going wrong, and that day I don't want to lie I didn't even have money to get the taxi so I had to tell her no I will just check on my off days because I'm not gonna...you see...Yes, so I had to cancel that, and she's younger than me, so she wanted me to go to help but I didn't because its off, the transport...I was feeling bad man, bad, bad, because maybe I was the only person she could call"* (Respondent 3)

Respondents typically reported having to ask others for assistance due to the times that they leave for work and return home from work. One mother reports having to take her children to the neighbour's house at 4h30am while they are still asleep:

*"the first thing is to bath myself and then I must prepare the lunches for the kids and I must take them to the neighbour so that she can take them to school, you see, because I'm leaving the house half past 4 and that time they still need to sleep."* (Respondent 3, 29-year old mother of 2)

Another mother wakes her baby at 3h30 a.m. to dress him and then puts him back to sleep. Her husband then wakes up to take the baby to crèche later in the morning.

*"Half past three I wake up my baby and then I put again sleep. And I put blanket. Then my husband is wake up, he washes (himself) and he takes the baby to crèche."* (Respondent 4, 43-year old mother of 4, Kraaifontein)

Another respondent reported relying on her neighbour to assist her with her children:

*"The old one, before he goes to school, he takes the baby to the neighbour and the neighbour takes the baby to crèche, sometimes I didn't have a chance to wash my little one, the other two are used to wash themselves, my neighbour have to wash the little one...it feels bad but I have to wash him when I'm off, I do as much as I can when I'm off"* (Respondent 2, Philippi)

When it comes to parents' obligations at their children's schools, one respondent reported that where possible they would ask a neighbour to fill in for her at school meetings, however, she noted that she did not feel good about having to transfer the responsibility that is ultimately hers as a parent.

*"...If there is a school meeting and I'm not off I ask my neighbour to go, I feel bad because that's my baby, that's my kids you see? That's my responsibility"* (Respondent 2, Philippi)

Another respondent noted that she had previously been able to reschedule school meetings to a time that suited her better; however, she acknowledged that it is not mandatory for the school to especially accommodate parents' schedules.

*"Yoh, that's a very irritating part cause their meetings always start at 7o'clock. On that time, I'm still ronde-ronde in a train, but I ask their father to attend. I don't want to lie to you I never attend meetings. That one starts 7 o'clock. I only arrange for the older one's teacher to make an appointment for me if I want to go and ask how she's doing and I want to check their books and then she can make the time for me. And I must ask her nicely because it's not her business that I'm working security, you see?"* (Respondent 7, 26-year-old single mother)

#### 4.4.5. Employment and Earnings

Respondents, particularly those employed on a contract basis, have stated that disruptions to public transport services impact on their work by causing them to arrive late for work or by causing them to forfeit income.

*"...it affects me badly my dear, because I don't like to be late at work, because when I'm coming to work, I'm coming to relieve the night shift, those people expect to go home so they can get rest, you see?"* (Respondent 2, Mother of 3, Philippi)

This respondent noted her frustration at having to offer the same excuse every day to her supervisor and noted that continually arriving late for work puts her in danger of receiving a written warning from her employer.

*"It's a notice, a signed notice, because I can't be late every day. The excuse is late, late, and late, it's the train, it's the train, and it's the train. I can't."* (Respondent 4, travels 35 km to work)

To avoid receiving a written warning, this respondent added that she would rather call in sick and forfeit her income for that day if she is unable to use her train ticket and is required to pay extra money for alternative transport. She reported feeling anxious at home when having to call in sick due to the forfeited income.

*"I'm lie to job if I don't have the money, example if there's no train and I don't have the money to go back, I'm lie I say I'm sick. My supervisor call someone relieve me...I'm not feel okay because if I stay at home my tummy's running, I see now yoooh the people at work is coming, I'm stress about that day short money because they deduct that money from me...I'm not pay my darling"*(Respondent 4)

Another respondent reported that her supervisor had noticed her tardiness at work and drew her attention to the employer's policy on working hours. The employer allowed employees to select from a range of staggered work hours such that the later one arrives at work the later one would finish one's shift. She responded to her supervisor that she did not find it fair that she begins travelling work timeously, after 5 a.m., but her commute is sabotaged by disruptions to the commuter rail service causing her to arrive at work late.

*"...it does affect my work because every day gets worse, because every day I get later at work and my supervisor said to me one morning, 'Hey', she showed me a timetable, people who start at 7 must go home that time and people who start 7h30 must go home that time, people who start working 8 o'clock must go that time...I said to her...I'm not going to sign any papers for 7h30 because I think the whole world know the problem about the trains, and I'm not going to leave here later than 3h30 because I'm on my way to work past five and I'm on time, the trains is there but I can't get in there, it's not my fault, I'm there, but it's not my fault, it's because of the trains and everybody know about the problem with the train, and that's why I come the one morning 7 o'clock, one morning twenty five past seven, the other morning half past seven and next 8 o'clock, quarter past 8, sometimes it's so worse that we got here half past 9...She was understanding when I explained that to her..."*(Respondent 5, commutes to work from a suburb plagued by gangsterism)

"Yooh, it's bad, and very painful, but I don't have any choice. I have to come to work and I have to be early. Because if I take the late train then I'm gonna be late and when we are late here, they're gonna tell you it's closed, they are full already. So, you can go back home. You see, so it's useless...Here in work. We are a lot. We are a lot here in our company. You have to run so that you can be here first or second or else until the points are full. If they are full you have to go back home and sleep, you gonna come tomorrow...You not gonna get paid that day." (Respondent 7, 26-year-old single mother)

One respondent relayed an instance in which she and her daughter arrived at work at 11h50 a.m. due to disruptions to commuter rail services. Because she does not enjoy staying out of work, the respondent continued her commute to work despite the disruptions, however on arriving at work she requested that she be granted leave for the day.

"Die laatste wat ek by my werk aangekom het dit was, ek en Zelda het een dag hier by die werk aangekom ten to twelve...Ja, toe ry die treine net van Eerste Rivier af ne tot by Kuilsrivier en dan ry die trein van Kuils Rivier miskien om by Stellenbosch om Kaap toe, toe kom ons daai tyd by die werk aan tien to twaalf...omdat ek hou nie om uit die werk uit bly nie, maar ons het gekom, toe vra ek vir hulle, hulle mag vir my n dag se verlof insit, want jys klaar laat, wat maak jy nou daai tyd by die werk?"(Respondent 6, 59-year old, travels 40 km to work)<sup>6</sup>

#### 4.4.6. Exposure to Criminal Activity

All respondents reported experiencing fear of crime on their commute to or from work, or being the victim of, or witness to, criminal activity. This highlights a serious issue in terms of the safety of women in society.

Safety concerns were reported as most prominent in the early morning hours when respondents must leave their homes while it is still dark and walk to their connecting mode of travel. Respondents reported feeling exposed and vulnerable to criminal activity as pedestrians. One respondent who resides in a suburb plagued by gangsterism reported having to plan her pedestrian route carefully to avoid the more dangerous

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<sup>6</sup> The latest that I've ever arrived at work was 11h50 a.m. At the time, the train was only operating from Eerste Rivier to Kuilsrivier, and then via Stellenbosch to Cape Town. I came to work that time because I do not like to stay out of work. I asked to apply for a day's leave because I was already late and what can you do at work at that time?

locations. She reported that although she feels fearful, she relies on her faith and prays while walking to the minibus rank.

*"...It's dark ja, I usually walk to the main road in the summer time when it's not like dark because it's very dangerous for me to walk to the main road that time in winter because you heard about Elsie, all the gun shoots and the gangsters and all that...It's very dangerous for me to walk to the main road that's why I prefer to walk from my house to the nearest point...Oh I just pray and ask God to keep me safe because the way I'm walking from my house to the taxi rank, there's a shop in front of the taxi rank and behind the shop is flats, range, it's the gunmen who stay there, most of the shooting comes from that side, it's very dangerous for us, but we don't have a choice we have to...I feel okay because I'm praying. (Respondent 5, 50-year old mother)*

Respondents told their stories of being robbed and verbally assaulted while commuting to work.

*"...They take a phone and a ticket and a lunch box. They throw it, they didn't even eat it...they just swear at me...I'm not feel safe. But I must be. Because I want to work mos, I want the money." (Respondent 4, 43-year old mother of 4)*

Another respondent reported being particularly traumatised after being robbed by a man during her commute. She added that the thought of it still made her angry. Her train ticket was stolen in the process and she was unable to purchase another one. In a fortunate turn of events she was offered a ride to work during that difficult time.

*"Daai tyd het ek gevoel ek kan van my kop af raak so groot het ek geskrik...en ek het nie geld gehad om weer 'n ticket te koop nie want dit was my monthly gewees" (Respondent 6, 59-year-old, travels 40km to work)<sup>7</sup>*

One respondent reported being robbed by a man yielding a knife. She stated that it took her a very long time to deal with what had happened. She described the experience as the worst experience she had ever had.

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<sup>7</sup> When that happened, I felt as if I could lose my mind; that's how big the shock was. And then I didn't have money to buy another ticket because that was my monthly.

*"That was the baddest feeling I ever had...he came straight to me with a knife and he said, 'give me your bag and your phone,' I didn't think twice, I just gave it...that was the baddest feeling, I never was afraid like that...I was so scared. It took time to get over that..." (Mother of 3, Travels 40km to work)*

One respondent reported even having her shoes and work name tag stolen from her when she robbed while commuting to work. She relayed having to walk home barefoot and then having to report the incident at the police station. Not only did she forfeit her income that day, she had to pay to replace her work name tag and her cell phone.

*"Yes, they did, robbed me last month. They even take my shoes, my uniform shoes...they didn't hurt me because I give them my stuff. They hurt you if you don't wanna give them your stuff. I give them my stuff and I have to go back home with my feet because there's no transport by that time. I went from the station until past five o'clock when it's earlier, I went back home and to the police station to open a case... I was hurt because they took my shoes and my phone; they even took my work name tag. I had to get a new one and this one costs R75.00...I had to pay for it...its very painful my dear...I had to get new shoes but I was lucky, somebody gave me shoes for free." (Respondent 7, single mother)*

Because of their previous experiences and the environments through which they commute, all respondents reported being fearful or feeling scared at some point on their commute. A 26-year old mother of two stated that she commutes daily with fear of being the victim of violent crime. She highlighted that she perceived being a woman to allow criminals to take chances.

*"Just every day you have that fear, you can get robbed, you can get raped, you can get killed, you don't know mos. Because you don't know who's gonna come and rob you. You see sometimes you tell them you have nothing and they thought you hide something somewhere, you see? Anyone can rob me even if there's not skollie<sup>8</sup>, people they take chances if you are a lady." (Respondent 7, 26-year-old single mother)*

To reduce their chance of being exposed to criminal activity, respondents reported that 'safety in numbers' is typically used as a defense strategy. One respondent who had previously been the victim of a robbery noted that after the incident she ensures that she travels with a group of people.

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<sup>8</sup> Gangster, or someone who breaks the law

*"I will never walk alone...because they like to rob people...in the train I sit where there's a lot of people...we always make sure that we are a lot of people..." (Mother of 3, Travels 40km to work)*

Some respondents wait until they are able to see other commuters before leaving their homes.

*"I'm not safe, I'm not safe, I check the people, if the people are not there, I come back to my house...I'm scared...Because it's dark...I'm scared of skollies mos. That come to rob me...I look someone, if I see them, people who go station or whatever I go... "I'm scared. I'm scared. Because if I go to the taxi, I'm not see anyone, I'm not go to the bus stop exacle. I wait to the circle, because there is a lot of car passing the circle, so I'm scared to go bus stop. I see the people. Okay. I go now. I see three or two people." (Respondent 4, 43-year old mother, Kraaifontein)*

One respondent reported that in the morning her husband wakes up to escort her to the minibus taxi stop while another respondent added that when she arrives home too late, she contacts her husband to escort her home from the public transport stop.

*"...there by us the corruption [crime] is too high there, when I'm getting home past 8, to 9, I must phone my husband to come fetch me because I can't get off the taxi alone" (Respondent 3, 29-year-old mother of 2)*

*"...die plek waar ek bly, daar is ek baie versigtig om te loop...daar is baie mense wat tik en hulle is gewoond aan die mense te rob daai is wat vir my bang ook maak." (Respondent 6, 59 years old, travels 40km to work)<sup>9</sup>*

#### 4.4.7. Poor Commuter Rail Services

Most of the difficulties experienced by respondents on the commute to and from work appear to stem from disruptions to commuter rail services and thus telling the story of the respondents' commute experience is, in essence, telling the story of the failure of the commuter rail service, hailed in policy documents as the backbone of transportation, to meet the needs of low income earners. All respondents reported that commuter rail offered the most affordable transportation service for travelling to work and many reported that commuter rail is the only available mode of transportation offered in their suburb of

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<sup>9</sup> The area that I live in, I'm very cautious to walk there, there are many people that do drugs and they are used to robbing people, that makes me scared.

residence. As such, commuter rail is a critical mode of transportation in the lives of many low-income earners.

*"There is no other way man sissie because we depend on a train, that's the problem. If we had another transport, I'd go to another transport. But we just have to deal with it. The only transport we have is the trains. That time leaving, there's no taxi at that time, so we have to take the train – even if we want or we don't want to take the train."* (Respondent 7, 26-year-old single mother)

Most respondents noted deterioration in the service offered by the commuter rail operator and point to a time when commuting on the train was not as bad as it is now.

*"Daar was a tyd wanneer die treine baie mooi gery het – maar toe begin die trein mos al hoe swakker – swakker gery, dan kom jy by jou werk dan lus jy nie om te werk nie, jy's klaar moeg gesit op die trein, maar wat kan jy doen? Jy moet maar aangaan"* (Respondent 6, 59-year old, commutes 40 km to work)<sup>10</sup>

One respondent details her experience stating that while she had previously enjoyed travelling to work on the train, recent incidences of overcrowding, delays and cancellations have made the experience an unpleasant and unsafe one that causes her to arrive late for work. She describes waiting over an hour for a train only for the train to arrive over-crowded and she was unable to get in. She stated that she would not consider boarding an over-crowded train because her friend had previously been injured after trying to board an over-crowded train in her desperation to get to work on time. This respondent also reported witnessing men smoking marijuana while the train was in transit.

*"You know, at first, the train was on time, it was in somewhere last year when it was on time and it was like manageable, not overcrowded and that, but it was in the middle of last year, I think, this problem start, now it's becomes a disaster because the trains are so full in the morning when it gets there by Elsie's River station, you know sometimes I had to let six trains go because the station is full, I come to the station about quarter to six in the morning, usually in the past when that train comes it was empty but since last year we've been battling with that problem, that the trains come, not on time, there's no train quarter to six, there's no train 6 o'clock, there's no train twenty five past six, there's no train half past six, and you know the people keep on coming and you can imagine how many is on*

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<sup>10</sup> There was a time when the trains operated well, but then the services started getting worse and worse. When you get to work you don't even feel like working because you're tired from sitting on the train. But what can you do? You must go on.

*the station now waiting on the train, and if that train come about ten past seven, it's a full, full train, people is hanging out by the doors ... but I just decided I don't care what whoever says at work, I'm not going to put my life in danger because one of one of my colleagues here, we jumped a train because of five, six trains let go, and we tried to get in, I think we were at Goodwood or Vasco, people come from the inside, they trying to get out and they throw her out, she fall on her back on the outside of the train and I don't know what happened, because the train went on, I see her the next day and I ask her how she is doing and she said no she is fine, she was waiting for the third train because she let all the others pass. We've been battling with these things and you know what the train is so crowded there's a lot of plus carriages and just one third class, now you can imagine, the plus is also full, and it was Tuesday morning, Rasta's were sitting lekker comfortable smoking their dagga in the carriage with that full train, and the smoke was going up in the air – some people got sick,"* (Respondent 5, Elsies River)

*"For this year it changed a lot because the trains - you have your train ticket but then there come times when they send you a message that you must make use of your own transport."* (Mother of 3, Travels 40km to work)

A sub-theme that emerged strongly under this theme is that increased incidences of train cancellations and train delays are being experienced. While these incidences have become a norm for news and traffic reporters, the frustration and stress that it places on commuters is rarely reported. One respondent noted the anger that she and fellow commuters feel when informed that their transport home has been cancelled and that they are left to find their own way home:

*"We're getting angry, we really are. But there's nothing we can do. We must wait until the train comes. And you know what the other thing that's bad? Its better when I'm at Kraaifontein cos I can just go back home and tell the office that I'm not coming, they can just not pay me its fine. The thing that is boring me is when I am here and going home from work and there is no train and they are telling us there is no train and we must get our own transport – that's where I get mad – because at that time its late already, where are you going to get the transport? They tell us on the big speakers 'You must use your own transport.'" (Respondent 7, 26-year-old, mother of 2)*

Respondents also reported experiencing severe overcrowding on trains.

"No, it's full, you stand...I feel like woo, somebody's push me, I tight, cause the train is full...I put my music. Yes, I put my earphones on. Then maybe is someone is see me, I'm big, and at Maitland station they get out, they call me sit, so I'm sit." (Respondent 4, travels 35 km to work)

"It's very full...we did try. You see when the train is full a lot of people they push you, you don't even remember when did you get in the train, you just find yourself in the train...you have to stand...you can't sleep when you stand, cause people they push you up and down, up and down...Yoo, its really boring, it's hurting but there's nothing we can do because it's only the train we can use on that side. And we can't even afford to use taxi every day, it's too expensive." (Respondent 7, Single mother of 2)

Aside from the safety hazards posed by over-crowded trains, over-crowding also creates time delays when it is caused by schedule cancellations.

"... today, ne, I wake up early because I wanted to get the train ten to five but the train doesn't come and the train just come ten past five and it was full because it was late, that was supposed to be the second train, so I had to leave the train and take the taxi because the train is full, I can't get into the train." (Respondent 3)

Some however brave the crowded trains and the related safety hazards for fear of arriving late for work.

"Its full meisie, full, full, full...but I can't let the train pass because I must come to relieve the night shift people and I must be early, I must be 15 minutes before 6 o clock" (Respondent 3)

Furthermore, aside from the safety hazards and time delays caused by over-crowding, respondents stated that the over-crowding results in a particularly unpleasant transit experience.

"Ek is al gewoon om se lank to staan in die trein, maar partykeur die mense skel en dis lelik in die trein vir die mense oor sitplek en daai, ...wanneer was dit, in die week toe hoor ek een skel die ander een so lelik uit, toe se iemand, "Die trein is vol, ons moet maar net verstaan as ons mekaar stamp", dis mos

*nie reg nie...dit voel nie lekker nie maar wat kan jy doen?" (Respondent 6, 59 years old, travels 40km to work)<sup>11</sup>*

Another frustrating occurrence reported by respondents is the tendency of trains to pause for long periods of time while undertaking a trip.

*"It's doing that when we go home also...you won't know, because the train is going on time when it starts from the station, it stuck in the middle" (Mother of 2, Nyanga Crossroads)*

*"As die treine sleg ry en ons staan miskien tussen die stasis staan, jy staan lang, en as jy in die kaap kom dan is jy moeg maar wat kan jy doen jy moet maar loop ek voel moeg aar ek stap op dan kom ek by die werk" (Respondent 6, 59-year-old, travels 40km to work)<sup>12</sup>*

Related to experiencing a deterioration of services, some respondents noted that in previous years, train cancellations were not as devastating since Metrorail arranged alternative transportation for its customers. Customers could use their valid rail ticket to access Golden Arrow bus services at no additional cost. This was highlighted by half of the respondents as a concern.

*"...years ago, if there are delays, we know that Golden Arrow is gonna come to help us but now that is not happening...Metrorail was doing that, PRASA is not doing that, they normally send us the messages ja, if the train is cancelled, you can use your own transport" (Respondent 3, 29-year old mother of 2)*

*"You see it was better before PRASA came. By the time it was Metrorail, Metrorail was very better, shame. If there are no trains or the trains are delayed, they sent the buses and we could use our train ticket for the bus. The train also wasn't so crowded then" (Respondent 7, 26-year-old mother, travels 40km to work)*

One respondent reported that in her time travelling with commuter rail, she could only recall one instance in which she was offered alternative transportation due to disruption of rail services.

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<sup>11</sup> I'm used to standing for long periods in the train, but sometimes people argue over seating in an ugly manner. In the week, I heard someone argue in an ugly manner with another person, then someone else said, "The train is full, we must just understand if we crowd each other," it's not right, it doesn't feel good, but what can you do?

<sup>12</sup> If the train service is disrupted and the train stands still between stations, you'll wait for a long time. Once you eventually get to Cape Town you're tired, but you don't have a choice but to walk to work. I feel tired but I walk to work.

*"They won't say you can use your train ticket on the bus. They said that once"* (Respondent 1, 41-year old mother of 3)

One respondent noted the poor timing of communication received from PRASA when notifying commuters of disruptions to the service. She added that if she is informed well ahead of time it would be easier for her to arrange an alternative way of commuting.

*"PRASA...they send me a SMS...they can't tell me 5 minutes before the train come that the train is delayed for an hour or 30 minutes, it's not right, they must let the people know before the time. It happens a lot."* (Respondent 1, 41-year old mother of 3)

#### 4.4.8. Miscellaneous

Some responses captured during the data collection process were not taken up under the theme construction process, however still warranted mentioning and are included in this section.

All respondents reported a negative commute experience which causes frustration and negative feelings. Despite this negative and frustrating experience, all respondents reported that they have resigned themselves to the fact that they have no control over their commute experience and that they have thus accepted the current state of transport, particularly due to the lack of affordable alternatives. This came across clearly in verbal and non-verbal responses. Respondents appeared despondent when answering the interview questions; many sighed heavily and some became angry when describing how they are required daily to assess the public transport situation and make the necessary adjustments to their commute, often taking on additional monetary and time costs. Aside from the non-verbal expressions of feeling despondent about the situation, most respondents also verbally expressed their discontent and mere acceptance of the situation. A phrase that sums up the feelings of the respondents was offered by a 47-year old mother who works a 12-hour shift daily:

*"I'm not happy but I accept it...it's not okay but I accept it"* (Respondent 2, 47-year old mother, Philippi)

Linked to accepting their reality, respondents noted that even if they could boycott the poor services offered by the commuter rail operator, their alternatives are limited mostly by affordability constraints. Most low-income earners do not own cars what they can commute with and for others the train presents the only viable public transport option in their suburbs.

*"If you have to wait from 5h15 to 6h00, or past 6 for a train, then you are thinking of changing your travelling ways, if you can. But then there are a lot of people who can't change it."* (Respondent 1, 41-year old mother of 3)

When asked what advice the respondents would give to other women in their situation, one respondent suggested that since private transport is not an affordable option, she suggested that women carry sufficient cash on them in case alternative transportation is required.

*"...the only advice I can give is to have your own transport it's just that we can't afford it, its compulsory for us to use public transport – so my advice is to always have money on you to get other transport..."* (Respondent 3, 29-year-old mother of 2)

Another respondent highlighted the appeal of the private vehicle due to her struggles with public transport. This respondent suggested that a car would make travelling much easier for her since it would allow her to travel on demand, particularly in the case of medical emergencies. This respondent added that when visiting relatives using public transport, one may be forced to sleep over because minibus taxi services end at a particular time.

*"I want a car, my darling, because I see the people in the car and everything is easy. If I want to go Shoprite, I start the car. If you want to go visit your family, you take your car. You not stressed, whoo hoo, I wait there I want to come today I'm not want to sleep there but I see the taxis finished. You see. If my neighbour is sick I want to take my car and help my neighbour. If my child is sick, I take my car. See?"* (Respondent 4, 43-year-old mother of 4)

Another respondent put forward a more modest desire. This 29-year old mother of two children said that she'd be happy if public transport merely operated efficiently instead of being subject to the disruptions that cause lengthy travel times and additional, unexpected monetary expenditure.

*"If they don't cancel the trains it will be faster for us to get home – I don't complain about the prices because monthly ticket is very cheap – R175 is cheap for the month, but if they can organise more trains and stop cancelling the trains, that will be the best for us, and if the train is delayed maybe they can organise other transport for us to go home, as long as we have the train tickets, they can organise something else."* (Respondent 3, 29-year-old mother of 2)

The eldest respondent suggested that what is needed is public action against the commuter rail operator in a bid to demand better services.

*"... We must stand together and go to the people of Metrorail, and then everything will be fine"*  
(Respondent 1, travels 40 km to work)

Ultimately the findings of this study highlight the struggles faced by women who are low income earners as well as their resilience and resourcefulness in the face of a very difficult situation. This resilience and resourcefulness was noted by respondents as stemming from a commitment to providing for their families.

*"You must have a positive attitude because at the end of the day, it's not just about you it's about those who need you, you know, those at home who need you, especially if you are a mom that's the only provider. I think you must put things in to receive something out. You can't just quit if a small problem comes your way, you know, I think we as women must be strong, we as parents, if I can put it in that way – we as parents must be strong for our kids so that they can be better parents also one day or citizens, you know"* (Respondent 5, 50-year-old mother, Elsie Rivier)

#### 4.5. Confirmation of Findings

To confirm the findings of the study, a diagram below was developed for presentation to the respondents to allow them an opportunity to comment on the findings. The diagram is attached as Annexure D.

Respondents were provided the opportunity to provide comment on the findings. None of the respondents took the opportunity to provide comment or to refute the findings.

#### 4.6. Summary of Findings

The findings ultimately show that the respondents do not feel that their commute experience is a negative and frustrating one that differs substantially from the customer-focused experience promised by the 1996 White Paper on National Transport Policy. The negative commuter experience is to a large extent a function of disruptions to the commuter rail service and of fear of crime and violence.

From the findings, if commuter rail services offered a higher level of service that responds to commuter needs, the respondents would be able to travel to and from work efficiently. However, the poor level of service offered by commuter rail services results in the respondents having to spend extra money and extra time on their commute. This additional expenditure is unplanned for and impacts adversely on respondent

time and money budgets. Respondents must thus adjust their household consumption and time expenditure accordingly to the detriment of their well-being.

Respondents all reported not being happy about this, describing it as a 'bad' experience that they regret but must endure due to the unavailability of alternatives.

In terms of fear of crime and violence, the respondents all reported having to adjust their behaviour by actively seeking people to commute with as a 'safety in numbers' measure. Respondents' reports of being victims of crime and witnessing criminal activity on their commute have resulted in fear and trauma that is difficult. Once again, respondents all report having to endure this fear because crime and violence is perceived as an inevitable occurrence that must merely be tolerated.

It may thus be concluded that respondents do not believe that they are being offered a safe, affordable and time-efficient commute experience yet they have resigned themselves to tolerate this reality because of the lack of alternatives and the inability to make a difference to the situation.

## Chapter Five: Conclusions and Recommendations

### 5.1. Introduction

This chapter will discuss the findings of the qualitative interview process as outlined in Chapter 4 in relation to the literature and in relation to the research questions and research objectives. The implication of the findings for public policy will be discussed, after which recommendations for future research are made.

At the outset of this dissertation, the researcher set out to understand travel cost burdens and their implications for the respondents. The respondents were selected based on their relative vulnerability to high travel cost burdens and their status as captive public transport users. It was envisaged that an authentic and in-depth understanding of what it means to be poor and have to travel lengthy, costly distances to and from work could prove invaluable in the evaluation and design of public transportation policies in South Africa.

In collecting the data, however, the findings overwhelmingly suggested that to understand the true travel cost burden of the respondents meant understanding what it means to be poor and captive to a mode of travel that is grossly unreliable. For example, in asking the respondents about the amount of money they spend on commuting per month, most reported that while rail offers the most affordable mode of commuting and many described the cost as reasonable, the true financial burden was reported to be felt when the rail service is disrupted and additional funds had to be sought to pay for alternative transport. This is where the need to trade off essential household goods takes place. In another example, in asking respondents about their time spent travelling, most reported that if the rail service operated according to its published schedules, they would be able to structure their days accordingly.

In reality, however, the rail service was reported to be subject to constant delays and cancellations that make forward-planning impossible. Being poor and captive to this unreliable service meant, for most respondents, waking up at three o'clock in the morning to be able to make the first train of the morning which is deemed the most reliable train. Furthermore, the service disruptions and the regular tendency of trains to stop between stations, sometimes for hours, make the probability of arriving late for work high.

In these instances, respondents may either be warned by their supervisors or may forfeit their wage for that particular day.

The real conclusion emanating from this study is thus that the true cost of being poor and captive to the rail service in Cape Town is strongly related to the fact that the rail service cannot be relied upon. Although the rail service is subsidised heavily to provide a service that, according to the White Paper, should be user-focused, affordable and time-efficient, in reality, the unreliability of the service deems it unaffordable, time-inefficient and not focused on the experience of the user. On the contrary, for those captive to the service, it leads to additional monetary and time costs that are distressing and felt in a real way, particularly by those who can least afford these additional costs.

## 5.2. Limitations of Study

In conducting this study, the researcher was clear from the outset that one of the main limitations of the study centered on the inability of qualitative studies to produce results that can be generalized across the population. The qualitative approach, despite this limitation, was selected due to its ability to extract in-depth insight that cannot be quantified. It was the intention of the researcher to provide a description of what it means to be poor and captive to public transportation so that this information could inform evaluations of and amendments to public policy, which, considering the findings of this study, are warranted.

The limited sample size is noted as a limitation of the research – particularly due to the time and resource constraints of the researcher, as well as the intention to uncover an initial understanding of some of the issues in an exploratory manner. Having said that, the key themes that emerged from the research came across overwhelmingly from all respondents, indicating that data saturation had likely taken place.

Another limitation of the study is that the sample only included respondents who reported their main mode of commute as commuter rail. This was not the intention of the researcher at the outset of the study. While this skewing of results may have resulted from the selection of respondents using the snowballing technique, all respondents reported that their main reason for selecting commuter rail as their main commute mode due to its cost-effectiveness in relation to other modes. Affordability is a key consideration

for commuters with income constraints and so it may not be surprising that all respondents, being low-income earners residing in peripheral locations, choose commuter rail as their main mode. It is suggested in Section 5.6 that future research should focus on other public transport modes in order to compare the findings of this study.

Due to the time and resource constraints of the researcher it was not possible to have the questionnaire professionally translated or to employ a Xhosa-speaking research assistant to assist with the interview process. Some of the respondents do not use English as their first language and though they tried to answer the interview questions with as much detail as they could, it was clear that they would be able to further elaborate on their answers if they were presented the opportunity to answer in their language of choice. This limitation was addressed by making the respondent feel as comfortable as possible and encouraging the respondent to respond either in broken English, using hand-gestures or using terms in their preferred language which the researcher later clarified.

### 5.3. Connection of Findings to the Literature Review

The literature review outlined the current policy, legislation and strategic directives that the South African government has adopted in terms of transportation policy. The documents reviewed all encourage the development of a transportation system that is responsive to and focused on the needs of the customer and specify the need for affordable and time-efficient services that connect users with the places and activities that they require to travel to for their economic and social well-being. The documents also stress the need for integrated land-use and transport planning that equitably brings users closer to the places they desire to travel to, thereby reducing travel times and travel costs. These documents also stress that the safety and security of the users must be prioritised.

It is not easy to compare the respondents' experience with the policy since the literature highlights the lack of measurable targets in terms of the travel experience. This renders a policy evaluation limited. This section thus compares the findings to the general principles encouraged by the strategic documents that

are outlined. The 1996 White Paper does however specify some measurable targets and these are discussed below in relation to the findings.

The findings have shown the respondents experience commutes that are in direct contrast to these strategic objectives even though 21 years have passed since the adoption of the most critical directive.

The findings show that until now it would appear that land-use and transport planning have not been efficiently integrated because respondents report residing in peripheral areas that are very far from economic and earning opportunities. Respondents must travel lengthy travel distances to work resulting in higher travel costs and longer travel times in relation to commuters living closer to economic nodes and employment opportunities. These lengthy travel times and higher travel costs are then further exacerbated by frequent disruptions to commuter rail services. Respondents reported experiencing increasing instances of delays, cancellations and over-crowding which impact on their employment and earnings by causing them to arrive late for work and in some instances causing them to forfeit income.

In terms of the White Paper's objective of limiting travel expenditure to ten percent of disposable income, the findings show that the commuter rail monthly tickets are affordable for the respondents and constitute less than ten percent of the respondents' income. What complicates the issue of affordability is that respondents typically do not reside in walking distance of the rail station and must then pay for a minibus taxi to take them to the rail station and from the rail station back to their home. Aside from the rail station not being in walking distance, respondents reported that it is also not advisable to walk to the rail station due to exposure to crime and violence and thus respondents opt to pay for a minibus taxi as their connecting mode of travel; increasing their travel cost. Furthermore, disruptions to commuter rail services often require respondents to seek alternative transport which typically takes the form of the significantly more expensive minibus taxi or commuter bus. This additional expenditure, when accounted for, renders commuting unaffordable for these respondents since it then exceeds ten percent of disposable income and causes respondents to cut back on household necessities.

In terms of travel times, the White Paper promotes the reduction of commute times to one hour in each direction. The findings however clearly show that respondent commute times range from one hour and

thirty minutes to over two hours in each direction. While the travel distance is lengthy to begin with, the travel times across these length distances are lengthened even further rail service delays.

The 1996 White Paper also specifies the delivery of safe, secure and reliable public transport systems. While these objectives are not quantifiably measurable, the findings of this study show that respondents experience an unsafe, unsecure and unreliable public transport services. Extreme overcrowding on trains has reduced the safety of commuting on the train while exposure to crime and violence has resulted in respondents feeling fearful and unsafe. Commuter rail services have been described as highly unreliable and subject to frequent delays and cancellations that have far-reaching effects on time and monetary budgets.

#### 5.4. Connection of Findings to the Research Question and Research Objectives

In relating the findings of the study to the research question and research objectives, the questions and objectives are listed below. The study sought to answer the following research question:

What are the lived experiences of South African women who are low income earners in terms of their trip burdens for commuting to and from their place of work?

In answering that question, the following four research objectives were identified:

- To describe the commuter monetary cost and ascribed meaning in the lives of South African women who are low income earners
- To describe the commuter travel time and ascribed meaning in the lives of South African women who are low income earners
- To describe the commuter trip experience of South African women who are low income earners
- To use the synthesised findings in context of the 1996 South African White Paper on National Transport Policy and provide recommendations for policy within the South African context

In response to the research question, the findings provide a description of the experiences of the respondents in terms of their generalised travel and time costs when commuting to and from their place of work.

All respondents described their lived trip experiences when commuting to and from work as being a negative one; plagued by disruptions to commuter rail services which ultimately results in significant additional and unplanned monetary expenditure as well as significantly longer travel times. This phenomenon has been very difficult and frustrating for the respondents to endure and to manage; particularly since as low-income earners their budgets are already constrained and they typically reside in peripheral locations that are far from their place of employment. Furthermore, as women, their daily time-budgets are constrained by their role as care-givers for their children and their responsibility for undertaking various household duties.

In describing their monetary commute costs and the ascribed meaning of these costs, respondents reported that their personal monthly commute costs, in the instance of undisrupted and reliable rail services, accounted for approximately 10 to 15 percent of their gross personal monthly income. In reality, however, the rail service was reported to be subject to disruptions most of the time. In these instances, the commute cost was described to escalate significantly; resulting in the need to trade-off essential household goods to pay for alternative transportation.

In describing their lived experience of commute travel times, respondents reported that already lengthy commute times are further lengthened by rail service disruptions. These lengthy and unpredictable commute times make forward-planning and maintaining social, household and other responsibilities and activities difficult.

In summary, respondents described their lived experience of their commute as unpredictable, requiring constant changes, additional expenditure and additional time. In describing the ascribed meaning of this unpredictability, respondents reported having to cut back on household essentials and having to cut back on their time spent on their desired household, social and religious obligations. These cutbacks have adversely impacted respondent budgets and subjective happiness.

## 5.5. Implication of Findings for Public Policy

In turning to the matter of public policy, the findings in terms of the lived experiences of the respondents highlight that, 21 years after its adoption, the 1996 South African White Paper on National Transport Policy is yet to provide a user-centred travel experience that is affordable for low-income users. The findings point to the need for regular evaluations of commuter experiences and actual travel cost burdens to monitor the attainment of policy objectives; which is what this dissertation set out to contribute to.

Aside from the need to constantly monitor, evaluate and appropriately amend public policy on transportation based on an authentic understanding of the commuter user experience, the following additional considerations are suggested based on the findings of this study.

### 5.5.1. Land-use and Transport Planning Integration

Although all policies and frameworks discussed as part of the literature review have stressed the importance of integrated land-use and transport planning, sprawled, low-density developments are still encouraged. As discussed in the background, commuters who are low-income earners tend to reside further from economic and earnings opportunities; raising their travel times and travel costs.

If spatial transformation is to take place it is critical that land-use and transport planning is integrated to deliver strategically densified, mixed-use developments along transit-oriented corridors. This is a long-term vision that is not always cheap to implement and as such low-density developments on cheap, peripheral land continues.

A commitment to land-use and transport planning integration will require a long-term vision, political buy-in, and an understanding of the true costs of urban sprawl for the state and for the commuter. This understanding should inform decisions about urban planning and should be considered when applications for development construction are approved or denied. Legislation should be designed to enforce the principles of land-use and transport integration in urban planning.

### 5.5.2. Commuter Rail Investment and Institutional Overhaul

Constant investment in commuter rail infrastructure has been avoided for many years. Years of disinvestment, coupled with rapid urbanisation, has resulted in commuter rail infrastructure that is grossly inadequate and results in disruptions to commuter rail services. Studies have shown that the current rail infrastructure is outdated and inappropriate.

It is thus recommended that investments in commuter rail infrastructure are prioritised above investments in road infrastructure. State funding for transport should be directed at replacement of tracks, rolling stock and signaling systems.

Furthermore, and even more importantly, rail operations should be managed by competent and skilled staff that are incentivised to deliver a high-quality rail service. The operation of the service by a parastatal agency has long been blamed for poor service delivery, inefficient operations and irregular and fraudulent expenditure. It is thus recommended that the rail function be assigned to an independent agency that is driven by service delivery targets and economic efficiency.

### 5.5.3. Restructuring and Subsidising the Minibus Taxi Industry

The findings of the study highlight the importance of the role of the minibus taxi industry in providing a demand-responsive service where formal services have failed to deliver effective and efficient travel options for commuters. This role stems from the minibus taxi's role in the Apartheid era, connecting marginalised commuters with goods and services where the Apartheid government failed to provide adequate and affordable transport options for people of colour. In this post-democratic era, in which spatial fragmentation has been entrenched, the minibus taxi's role has remained critical. It connects commuters who live in peripheral locations and inaccessible locations to more formal transport services or to the locations they wish to access. Furthermore, as found in this study, the minibus taxi industry fills a critical gap caused by disruptions to the commuter rail service. When commuter rail users must seek alternative transport, this often takes the form of a minibus taxi. Despite the critical role played by the minibus taxi industry, the industry is plagued by violence, poor safety standards and unaffordable fares. These concerns stem from poor management of operating licences, poor enforcement of operating licences and safety standards, as well as a lack of financial assistance from the state.

Following the adoption of the 2007 Public Transport Strategy and Action Plan, billions of Rands are to be invested in bus rapid transit (BRT) services going forward with the minibus taxi industry ultimately being replaced over the long term. This long-term strategy however has proven to be controversial given the financially unsustainable financial allocations required by BRT and the long-term nature of the roll-out which does not respond to short-term transportation needs.

A more practical and financially viable approach may be to formalise and subsidise the minibus taxi industry and give it a complementary role to BRT services. In this way commuters may be offered a minibus taxi service that is safe, affordable and demand-responsive.

#### 5.5.4. Law Enforcement and Protection of Women

The findings of the study also highlight a gender safety concern in that women do not feel protected on their journeys to and from work. This is a cause for concern because it may present a hindrance to women who wish to participate in the economy. In seeking gender equality and equal opportunity it is critical that women are protected on their commute. The protection of women will require investments in visible law enforcement, a justice system that deals appropriately with offenders and a renewed focus on tackling the underlying social ills that give rise to criminal and violent activity.

#### 5.6. Recommendations for Research

One of the themes that emerged strongly from the findings is that there exists a planned monthly travel cost and an actual monthly travel cost and these differ substantially. It would thus be useful to quantify this difference to calculate a more realistic and accurate monthly travel expenditure index for a true indication of transport affordability.

Furthermore, it would be useful to quantify the monetary value or opportunity cost of time lost due to disruptions to commuter rail services since this has resulted in a significant waste of time that could be used more productively. This has economic and social consequences not only for the commuter, but also for the national economy.

Finally, since the study's sample contained only respondents using commuter rail as their main mode, it would be interesting to replicate the study using respondents who use other modes of commute in order to compare the results.

## 6. Annexures

## 6.1. Annexure A: Ethics Clearance Form

Application for Approval of Ethics in Research (EIR) Projects  
Faculty of Engineering and the Built Environment, University of Cape Town

**APPLICATION FORM**

**Please Note:**



Any person planning to undertake research in the Faculty of Engineering and the Built Environment (EBE) at the University of Cape Town is required to complete this form before collecting or analysing data. The objective of submitting this application prior to embarking on research is to ensure that the highest ethical standards in research, conducted under the auspices of the EBE Faculty, are met. Please ensure that you have read, and understood the EBE Ethics in Research Handbook (available from the UCT EBE, Research Ethics website) prior to completing this application form: <http://www.ebe.uct.ac.za/ucteberesearch/ethics.pdf>

APPLICANT'S DETAILS		
Name of student	Caryn Joy Feater	
Department	Civil Engineering	
Preferred email address of applicant:	Caryn.Mority@gmail.com	
If a Student	Your Degree: e.g., MSc, PhD, etc.,	M.Phil. Transportation Studies
	Name of Supervisor (if supervised):	Associate Professor Roger Behrens
If this is a research contract, indicate the source of funding/sponsorship	NA	
Project Title	An exploratory investigation into the impact of generalised transport costs on the lives of low-income commuters in Cape Town	

I hereby undertake to carry out my research in such a way that:

- there is no apparent legal objection to the nature or the method of research; and
- the research will not compromise staff or students or the other responsibilities of the University;
- the stated objective will be achieved, and the findings will have a high degree of validity;
- limitations and alternative interpretations will be considered;
- the findings could be subject to peer review and publicly available; and
- I will comply with the conventions of copyright and avoid any practice that would constitute plagiarism.

SIGNED BY	Full name	Signature	Date
Principal Student	Caryn Joy Feater		08 Jun 2017

APPLICATION APPROVED BY	Full name	Signature	Date
Supervisor (where applicable)	R. BEHRENS		09 JUN 2017
HOD (or delegated nominee) Final authority for all applicants who have answered NO to all questions in Section 1, and for all Undergraduate research (Including Honours).	M. Vanderschueren		29/6/17
Chair: Faculty EIR Committee For applicants other than undergraduate students who have answered YES to any of the above questions.			

## 6.2. Annexure B: Respondent Informed Consent Form



UNIVERSITY OF CAPE TOWN  
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Dear Respondent,

This interview is being administered by a student at the Centre for Transport Studies at the University of Cape Town. This interview is part of a study that aims to examine the experience of travel times and travel costs for female commuters.

During the interview, you will be asked questions about your travel experience to and from work, your time use and your monetary expenditure on travel.

This study is being undertaken because very little in-depth data exists about how female commuters with constrained incomes experience travel time and travel cost burdens. The aim is to use the findings of this study to input into evaluations of transport policy and to input to planning for future transport policy implementation.

All interviews are anonymous and at no time will your personal information be shared with a third party. To use your information in the study, it is required that you try and answer all questions honestly and with as much detail as you can. There are no right or wrong answers to the questions that will be posed to you. Please add as much information as you feel is relevant. The interview will be recorded using a digital voice recorder.

**Please note that your participation in this study is completely voluntary. You may, at any stage, withdraw your consent and participation without explanation from the study.**

If you would like to be a part of the study, please provide your consent for the answers that you have provided to be used only for this study by signing in the box below. Remember that the interview is completely anonymous. The records of this study will be kept strictly confidential.

Your signature below indicates that you have decided to participate in this study, that you have understood the information provided above and that you provide consent for your recorded answers to be used in the study.

Signature \_\_\_\_\_

Date: \_\_\_\_\_

## 6.3. Annexure C: Guiding Questions for Interviews



**UNIVERSITY OF CAPE TOWN**  
 IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Pseudonym:

Date:

## PART ONE: BACKGROUND INFORMATION ON THE RESPONDENT

PERSONAL AND HOUSEHOLD INFORMATION SHEET	
Year of Birth	
Marital Status	<input type="checkbox"/> Single <input type="checkbox"/> Married <input type="checkbox"/> Separated <input type="checkbox"/> Divorced <input type="checkbox"/> Remarried <input type="checkbox"/> Widowed <input type="checkbox"/> Living with Partner <input type="checkbox"/> Other
Highest Education Level	<input type="checkbox"/> Primary School <input type="checkbox"/> High School <input type="checkbox"/> Diploma <input type="checkbox"/> Degree
Main Occupation	
Employment Status (And how long?)	<input type="checkbox"/> Employed Full-Time (40+ hours per week) <input type="checkbox"/> Employed Part-Time (Less than 40 hours per week) <input type="checkbox"/> Self-Employed <input type="checkbox"/> Employed in the Informal Sector <input type="checkbox"/> Other _____
Number of dependents? Who are they?	Which of them are you personally responsible for taking care of?
How many people live in your household, including you? Who are they?	Adults _____ Children _____
How many adults (e.g. elderly or ill) are you personally responsible for taking care of?	

Are you considered as one of the primary household members responsible for household duties		Who contributes most of the money in the household?	
Which suburb do you live in?		Which suburb do you work in?	

Which block best describes your monthly income bracket?

A. R0 – R2000	B. R2001 – R4000	C. R4001 –R5000	D. R5001 – R6000	E. R6001+	F. Prefer not to say
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#### MOBILITY-RELATED INFORMATION

How many bicycles does your household own or have access to?		How many cars does your household own or have access to?	
Who owns and pays for the cars?		Who owns the bicycles?	
Do you hold a driver's licence?		Do you have access to a car or bicycle if you wish to use it?	

Now that we are talking about mobility and travel-related matters, let us turn our attention to travel time and travel costs:

How much money do you spend on travel to and from work per week? Do you pay in cash or using a pre-paid ticket?	
How did you make the decision to pay in cash or purchasing a pre-paid ticket?	

## PART TWO: TRAVEL TIMELINE

In part two of the interview, the researcher will discuss with the respondent an outline of their time-use starting from the time they wake up in the morning, their household responsibilities, their commute to and from work, their social, recreational and other activities, etc. until the time that they end their day. The exercise will be guided by the questions below.

### PART ONE GUIDING QUESTIONS: TRAVEL BEHAVIOUR AND TRAVEL EXPERIENCE

- Tell me about your experience on a typical work day:
- What time did you wake up this morning?
- Is this the normal time you wake up on a work day?
- Which household or family duties do you have to see to before you can get ready for work?
- How did you get to work today?
- Which travel modes did you use?
- In which order did you use these modes?
- How did you get to the first mode of travel?
- How long did it take you to get to the first mode of travel?
- How would you describe your experience of getting to your first mode of travel?
- How did you make the decision to use the modes that you have made use of?
- Why did you choose these modes instead of any other modes?
- How did you get to your first mode of travel?
- How did you get to your first mode of travel?
- How long did it take you?
- What was your experience like on this leg of your journey?
- How did you experience your next mode of travel?
- What was your experience of the interchange between the two modes?
- What was your experience like on this leg of your journey?
- Think about leaving work for your commute home:
- What time do you leave work?
- What do you have to do to ensure that you leave work on time?
- What are the main differences between your commute to and from work?

- Think about arriving home from work:
- What time do you generally arrive home from work?
- Which household responsibilities do you see to when you arrive home from work?
- Which child-related responsibilities do you take care of when you arrive home from work?
- Which other carer-related responsibilities do you take care of when you arrive home from work?
- Which recreational, social, religious or social activities are you able to enjoy in the evening?
- What time do you generally retire for the evening?

## PART TWO: MONETARY TRAVEL EXPENDITURE

Think about your monetary expenditure on transport:

- You mentioned that you spend Rx commuting to and from work per week. Have you always spent this amount of money on commuting?
- If no, has the amount of money you spend on commuting increased or decreased in the past year?
- Which factors do you think have contributed to the increase / decrease in commute times?
- How do you feel about the way in which your commuting costs have changed?
- Have you ever cut back on your necessary household expenses (e.g. food, rent, electricity...) to pay for transport to and from work?
- If yes, tell me about a time when you were had to cut back on necessary household goods and services to pay for transport to and from work?
- How did you make the decision about which item(s) to cut back on?
- How did you feel about cutting back on those items?
- Was there ever a time that you couldn't travel to work because you had to buy necessary household goods / services?
- If yes, tell me about such a time.
- How did it make you feel when you could not travel to work because you had no money?
- How do you decide on what to cut back on?

### PART THREE: TIME TRAVEL EXPENDITURE

Think about the time you spend commuting to and from work:

- Have you always spent (insert reported travel time) this amount of time commuting to work?
- If no, has it increased or decreased from the length of time you previously spent commuting within the past year?
- Which factors do you think have contributed to the increase / decrease in commute times?
- How do you feel about spending x amount of time travelling to and from work?
- Do you ever miss events (social, religious, recreational, etc.) because of the time it takes to travel to and from work?
- What types of events?
- Tell me about a specific time when this happened?
- What did it mean for you to have to miss that event?
- Have you ever been unable to care (e.g. help with homework, spending time together, feeding, bathing, supervising) for your dependents because you've arrived home too late from work?
- If yes, tell me about a specific time when this happened?
- What did it mean for you to be unable to provide this care?

### PART FOUR: CONCLUSION

- What are the main things that you feel would improve your commute experience?
- What advice would you give to women who have children who spend x hours to commute?
- What advice would you give to women who have children who spend x amount of money to commute?

To close off the interview, the respondent will be thanked for their time and their willingness to participate in the study. The respondent will also be reassured of the confidentiality of the responses.

The member-checking process will be discussed with the respondent. The respondent will be informed that after the full data analysis process has been undertaken; they will be contacted to provide them the opportunity to review an infographic sheet that summarises the information obtained from the interviews. If they wish to, they will be provided with an opportunity to discuss the results with the researcher.

## 6.4. Annexure D: Confirmation of Findings



Train cancellations and delays mean that I must spend more money to get alternative transport

Spending extra money on alternative transport means buying less food, electricity and other household items



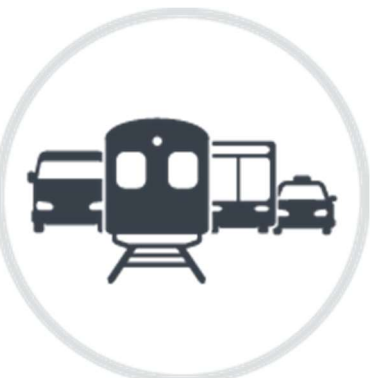
Train cancellations and delays mean I must spend more time travelling to and from work

Spending extra time on travelling to and from work means less time for personal activities, school meetings and religious meetings



I fear being robbed or hurt when travelling to and from work so I travel in a group of people

Train cancellations and delays can make me late for work or might make me lose that day's wage.



The train is my only option but the service is of a very poor quality.

Travelling to and from work is a negative and frustrating experience for me.



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