

THE STATE OF TRANSPORT OPINION POLL: GAUTENG 2021

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ABSTRACT

Transport is a major concern for South Africans and remains a constraint to the livelihoods of many people. Concerns range from the state of road, rail and facility infrastructure and service levels of public transport to e-tolls and law enforcement. The Institute of Transport and Logistics Studies has revived its annual State of Transport Opinion Poll to provide a comprehensive perspective on the transport issues that are faced by Gauteng residents. A survey of 521 respondents was conducted to gauge their opinions on transport-related matters. Previous polls (2012-2015) were used as a base for comparison. The study found a major dampening of enthusiasm regarding the state of transport, both country-wide and in their local areas, with most people believing that improvements are unlikely in the near future. Major issues continue to be the poor state of public transport services, the worsening condition of road infrastructure, and weak law enforcement. Gauteng residents also indicated that the public transport service providers did not sufficiently adhere to COVID-19 protocols. By implication, the commuting public faces insufficient, poor-quality services, where people are left vulnerable to crime, accidents, and illness. This information could be of value to policymakers by expanding on household travel data to add to the database of opinions and concerns about a broad range of transport-related issues.

Keywords: Public transport, urban mobility, travel behaviour, opinion poll, South Africa.

1. BACKGROUND

Public opinion refers to a large population's general attitudes and opinions (Voxco, n.d.). In business, public opinion polls seek to capture stakeholder perceptions of firm performance, as individual stakeholders ultimately form expectations and make buying and selling decisions (Rindova, 2005). Similarly, in the political sphere, public opinions keep track of the popularity of political parties and their leaders (Lo, 2009). Public opinion is recognised as an important force in statecraft (American Historical Association, n.d.). "In a democracy... it is an important principle that public policies are decided upon by the people. Popular control over law-making bodies, government executives, and domestic and foreign policy is a basic idea in a political society. The people are the source of power. Hence their opinions should mould the action of government" (American Historical Association, n.d.). Therefore, governments should use polls to gather information to help make public services better (Wiley).

In South Africa, opinion polls are used regularly to gauge opinion on commercial and political matters, and were recognised by Mattes (2012, p. 175) as "a regular and important part of South Africa's new democratic system." Despite the valuable inputs to be derived from opinion polls, it is frequently asserted that South African citizens do not have a voice (Kekana, 2021; Magrobi, 2021; Ndaba, 2021; Somhlaba, 2020; Pointer, 2016) and are often disregarded in public policy and decision-making on a variety of issues.

Transport, in particular, is a fundamental requirement for well-being in any country. “Transport has an impact on people’s mental health and well-being. It allows people to connect and maintain relationships with others, access work opportunities, education, or leisure activities outside their homes, and be more autonomous. It enables older people to keep active lifestyles and be involved in their communities” (Cooper, et al., 2019). Despite the pivotal nature of transport in modern society, little is known about public opinion on transport matters in South Africa. To a large extent, public perceptions of transport are only realised when these are highlighted through alternative means such as protests, strikes or civil disobedience. Examples of these include: expressing opinions on conditions on taxis (Ntuli, 2020), unfair treatment on trains (Washinyira, 2020), unsafe and unreliable train services (Daniel, 2018; South African Press Association (SAPA), 2011), potential bus company closure (Brown, 2020), unfit buses (Chauke, 2017), refusal to pay toll fees (Cokayne, 2019), amongst others.

There are currently very few instruments to measure public opinion on transport matters. The National Household Travel Surveys (StatsSA, 2021; StatsSA, 2013; Department of Transport, 2003) have provided useful information about public transport modes, notably reasons for using / not using public transport modes, reasons for dissatisfaction with particular modes of transport, as well as service attributes that are taken into account in public transport mode selection. Similarly, the Gauteng Household Travel Surveys (Gauteng Province, 2020; Gauteng Province Roads and Transport, 2014) measure public transport modal service attributes and reasons for not using the modes. However, frequent news reports suggest that citizens have a broad range of transport concerns that are not covered by household travel surveys.

Many South Africans, for example, believe that transport, in general, is deteriorating. Data reflects that investment in infrastructure is lagging, particularly in roads, schools, and maintenance (BusinessTech, 2020; StatsSA, 2020). Inadequate road maintenance is a significant concern to commuters. Potholes are frequently highlighted as the biggest headache for motorists in South Africa (Roadsave, 2021), causing regular delays (Jones, 2021) and general physical and financial pain (Geldenhuys, 2021). Traffic lights also fail regularly, with an estimated 32 failures due to vandalism and 81 failures due to accidents each month in Johannesburg alone (Business Tech, 2016). An estimated 40-50 per cent of traffic light malfunctions are due to power failures (McKane, 2020). Insufficient numbers of technicians contribute to delays in traffic light repairs (Business Tech, 2016). These cause delays, congestion, and accidents, as do other infrastructure failures such as flooding because of stormwater blockages (Joburg Newsroom, n.d.) and non-functional streetlights (Joburg.org, 2018).

e-Tolls have also been an issue of concern, especially for Gauteng residents. e-Tolls were initially implemented to fund the upgrading of the Gauteng Freeway system, which was declared a toll road in 2008 (OUTA, 2019). The public outcry started in 2010, as the construction of gantries started (OUTA, 2019). e-Tolls went live in 2013 (fin24, 2013), however, non-compliance in paying e-tolls was prevalent from the beginning of the scheme (Kolver, 2013) and has remained problematic (Duvenage, 2018). Towards the end of 2019, the transport minister reiterated the need for a user-pay principle but announced that the e-toll task team would decide how to break the impasse in December 2019 (OUTA, 2019). The matter was unresolved and still remains a significant transport concern to residents, although non-compliance is at its highest level ever (Cokayne, 2021). This follows reporting in November 2021 that e-tolls were to be scrapped (Cokayne, Government to finally scrap e-tolls on GFIP, 2021b), followed by an immediate denial of e-toll scrapping (Department of Transport, 2021) and in December 2021, SANRAL

extended its contract with the e-toll collections group ETC by a further two months (Businessstech, 2021). e-Tolls, therefore, remain a major transport concern for Gauteng residents.

Congestion is a further impediment to the effective functioning of a city, with Gauteng city Johannesburg being South Africa's most congested city "where commuters sat in traffic roughly 119 hours a year – or nearly five days" (The INRIX 2018 Global Traffic Scorecard (cited in de Villiers, 2019)). Whilst congestion was dramatically reduced over the various lockdown periods, the INRIX 2021 Global Traffic Scorecard (Illidge, 2021) indicates that Johannesburg has moved from being the 139th most congested city in the world to 71st in 2021, suggesting that competition for road space and the accompanying issues such as time lost and increased accident rates are likely to continue and grow on the Gauteng roads.

Safety is also a significant issue for road users, whether motorists or other commuters. South Africa has one of the highest accident rates in the world (World Health Organisation, 2019), and Labuschagne, de Beer, Roux and Venter (2016) estimated that road traffic crashes cost the country approximately R142.95 billion per annum, equating to about 3.4 per cent of gross domestic product (GDP). Other than being a massive cost to the economy, it is also a major concern to society. Commuters are likely to base modal decisions on their perceptions of safety concerns. Commuters have indicated safety at taxi ranks, within bus and train stations and on the various modes of transport as influencing their decisions on whether to use or not use particular modes of transportation (StatsSA, 2021; StatsSA, 2013).

Law enforcement is a further concern for road users but is not covered by regular opinion polls. Du Plessis et al. (2020) assert that using an estimated number of infringements per self-propelled vehicle suggests a high incidence of violation of traffic laws in the country. This is accompanied by frequent reports of corruption amongst law enforcement officers (Bhengu, 2021; Raymond, 2021; Directorate for Priority Crimes Investigation (HAWKS) South African Police Service, 2020), as well as recognition at an institutional level (Arrive Alive, n.d.; Road Traffic Management Corporation, 2021).

Thus, many transport-related matters affect South Africa and Gauteng citizens, remaining under-researched. This research, therefore, aims at assessing opinions on a broad range of transport issues faced by the public. Broad-based transport opinion polls have been conducted by several institutions, such as the University of Sydney, which regularly performs a transport opinion poll to gauge community perceptions of transport issues (The University of Sydney Business School, 2021); Transportation for America (Transportation for America, n.d.), and the UK Department of Transport on Public Attitudes towards Transport (UK Department of Transport, 2021), amongst others. In South Africa, the State of Transport Opinion Poll (STOPSA) was conducted nationally by the University of Johannesburg between 2012 and 2015. This research seeks to extend previous opinion polls to gauge perceptions on a wide range of topical transport issues, with a specific emphasis on the Gauteng region.

2. RESEARCH METHODOLOGY

This paper aims to reflect on the public's confidence and perceptions regarding transport-related matters in the Gauteng region. A quantitative research approach was used to obtain an informed understanding of public opinion on transport issues. The research

instrument, a structured self-administered online questionnaire, was developed after reviewing relevant literature and the previously conducted State of Transport opinion polls.

The research instrument consisted of four sections. In the first section, respondents were requested to provide demographical information, including gender, age group, highest qualification and employment status; the second section requested the respondents' opinions on the highest priority issues in South Africa, the general state of transport in South Africa, as well as in their local area; section three assessed the respondents' preferred modal choices, their perceptions of the service quality of various transport services and the condition of certain transport infrastructure facilities; and the last section considered the respondents' attitudes regarding topical issues including e-tolls, law enforcement and the adherence to Covid-19 health and safety regulations.

Different methodologies have been used to conduct opinion polls. The UK Department of Transport's Public Attitudes towards Transport (UK Department of Transport, 2021) uses a random probability omnibus survey. On the other hand, the University of Sydney's Transport Opinion Survey used an online panel for survey purposes (The University of Sydney Business School, 2021). Both these opinion polls used stratified sampling techniques, which are weighted to ensure the representivity of the population. In this survey, a non-probability, non-stratified sampling strategy was used to obtain sufficient research data. Convenience sampling (or availability sampling) is a common form of sampling in population research because it is not costly, is simplistic (Stratton, 2021), and was used due to the relative ease of collection, the geographical proximity, accessibility and the willingness of respondents to participate in the survey (Etikan, Musa & Sunu, 2016; Saunders, Lewis & Thornhill, 2019). Importantly, non-probability sampling tends to be biased (Saunders et al., 2019). Generalised interpretations of research results must be considered with caution (Zikmund, Babin, Carr & Griffen, 2013; Sedgwick, 2014; Saunders et al., 2019). A total of 521 usable responses were generated through the data collection phase, and the survey data were analysed using the Statistical Package for the Social Sciences (SPSS) for Windows version 27. The profile of the respondents is shown in Table 1. Although the sample size could be regarded as a limitation of the study and constrains generalisability, it is the authors' view that the sample size is sufficiently large to provide an essential contribution to gauging and better understanding the perceptions on transport-related issues of citizens in Gauteng, South Africa.

Table 1: Respondent profile

Characteristics	Respondents		Respondents	
Gender	Male	34.5%	Female	65.1%
	Other	0.4%		
Age	18 - 24 years	30.5%	45 - 54 years	9.4%
	25 - 34 years	39.3%	55 - 64 years	2.1%
	35 - 44 years	18.6%		
Highest qualification	School	24.6%	Advanced diploma	7.1%
	Certificate	8.4%	Degree	26.1%
	Diploma	20.7%	Post-graduate degree	13.1%
Employment status	Employed full-time	49.5%	Retired / homemaker	1.0%
	Employed part-time	6.5%	Student	25.5%
	Own business	6.3%	Unemployed	11.1%

3. RESULTS

SPSS for Windows version 27 was used to analyse the survey data. The reliability of the measurement scale was evaluated to determine the internal consistency of different

segments, specifically, the highest priority in South Africa, the state of transport and the conditions of transport services and infrastructure, indicating overall Cronbach's α values of 0.951, 0.831 and 0.839 respectively, which suggests that the survey is reliable (Field, 2018).

The research instrument required demographic information such as age, gender and employment status to ensure an appropriate representative social-demographic sampling. Of the sample population, 34.5% are males, and 65.1% are females. The majority of the respondents were between 25 – 34 years and represented 45% of the full-time employed respondents. The second-largest age cohort, the 18 – 24 years old, comprises mostly of students (66.7%) respondents. Most unemployed respondents (84.5%) are between 18 and 34 years. The important transport issues that were explored include whether transport is a national priority, the highest priority issues in transport, changes in the state of transport locally and nationally, perceptions on e-tolls, law enforcement and adherence to Covid-19 health and safety regulations. The research data indicate that health is currently the highest priority issue in South Africa, followed closely by education and the economy. This is somewhat expected given the current global Covid-19 pandemic and the economic impact thereof. Although previous STOPSA surveys (Heyns & Luke, 2016) primarily identified transport as the third-highest priority issue in South Africa, respondents still regarded it as crucial. They ranked it as the fourth-highest priority issue in Gauteng. This is shown in Table 2.

Table 2: Ranking of priority issues

Priority	Mean	Std. Deviation
Health	4.51	1.032
Education	4.39	1.034
Economy	4.32	1.140
Transport	4.30	1.095
Safety and Security	4.24	1.327
Housing	4.13	1.242
Law and Order	4.12	1.315
Infrastructure	4.11	1.187
Employment	4.10	1.474
Environment	4.10	1.170
Social Issues	3.86	1.286

Respondents were asked to provide their opinion on the current state of local transport and the outlook for transport in Gauteng during the next five years. Only 22% of the respondents believed transport in their local area was better than a year ago. The majority of the respondents felt that there was little change or that it was much worse (21.4%). Respondents that indicated that transport in their local area was worse than a year ago attributed this mainly to the declining conditions of transport infrastructure, the lack of public transport services, safety and security concerns and aspects related to taxi services and infrastructure.

The highest transport issues were tested through an open-ended question where respondents were asked to identify the most important transport-related issue that they faced. The results were grouped into broad themes and are illustrated in Figure 1, which shows the thematic issues with the highest number of mentions. Responses grouped under the term "*safety and security*" included generic mentions of the word "security" and "safety" and also included specific mentions of personal safety when using public

transport, crime, road safety and passenger vehicle conditions. “Infrastructure” includes any generic mentions of the term “quality of roads” and the specific mentions of road maintenance, high congestion levels on urban roads, potholes, transfer facilities, and rail infrastructure. Responses under the term “public transport” included generic mentions of the term “public transport” and specific responses associated with the quantity or quality of public transport, such as availability, reliability, accessibility, efficiency, and effective transport services. “Taxi issues” included any mentions of the generic term “taxis”, “taxi industry”, or “taxi services”, as well as other more specific terms such as quality of taxi equipment, reckless taxi drivers, taxi violence, and taxi safety. “Affordability” includes mentions that public transport fares are too expensive, high increases in transport costs, and also high fuel costs. Other priority aspects mentioned were poor leadership and management, poor adherence to Covid-19 restrictions, irresponsible drivers, a necessity for stricter law enforcement, the need for improved rail services, and unhappiness with e-tolls. Although the latter issues showed lower frequencies, these should still be regarded as some of the most pressing issues Gauteng residents face because of their inclusion on the list.

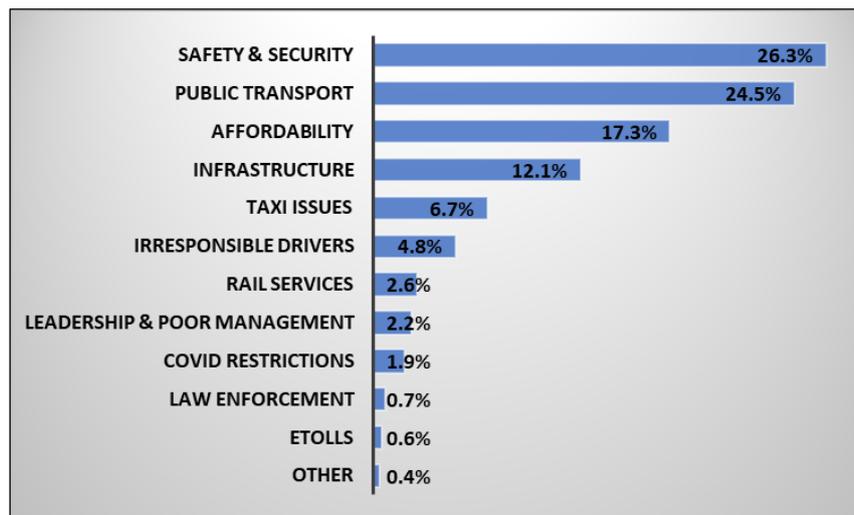


Figure 1: Highest transport issues

When tested on the outlook for transport in South Africa in the next five years, the majority (65.6%) of the respondents indicated that they believed it would be worse or they were neutral/undecided. Their view on the state of transport, specifically in Gauteng, in the next five years, is very similar, with the majority (65.3%) of respondents believing that transport would be worse (34.1%) or they were neutral/undecided (31.2%) in five years. In both cases, respondents generally did not indicate that they would see any significant improvements. This is depicted in Figure 2.

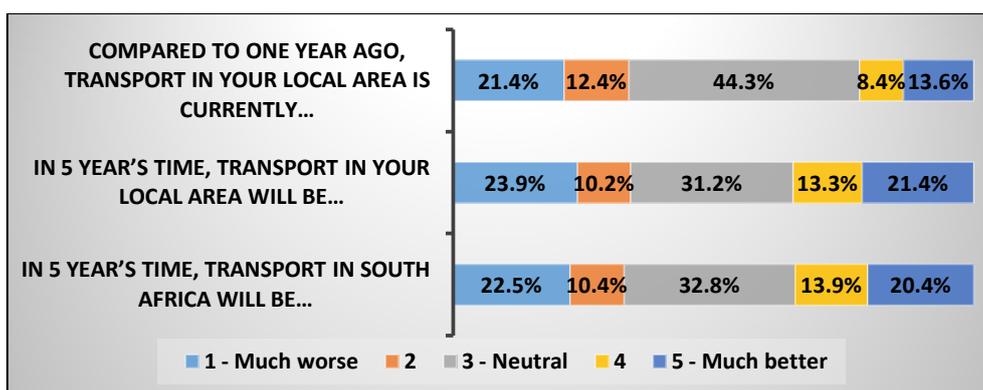


Figure 2: Current and future outlook of transport

3.1 Transport Service Quality

Respondents were asked to provide a general impression of the various services available. They could select “don’t know” for services they were unfamiliar with. In a separate question, most respondents indicated that they had some experience with most of the modes under review. The results show that respondents generally believe that the Gautrain is a good/excellent service, as there seems to be a generally positive attitude to this service. As expected, ride-hailing services such as Uber or Bolt provide flexible, fast mobility and are therefore regarded as good/ excellent. Respondents were more muted about services such as minibus-taxis, and city bus services such as Metrobus and Rea Vaya (BRT), with a relatively neutral level of response, suggesting that, although there is room for improvement, the services provided are sufficient to respond to commuters’ requirements. On the other hand, there was a generally negative perception of the low-cost services, namely Metrorail and PUTCO, where respondents generally believed the level of service provision was not satisfactory despite the low expectation of service quality.

Respondents were also asked to rate the service quality dimensions (i.e., reliability, the extent of service, safety, comfort, and affordability) of their main mode of transport. The majority of respondents indicated that their main mode of transportation was either minibus taxis or cars (drivers, passengers, or ride-hailing customers on services such as Uber or Bolt). The results indicate that the Gautrain and private car usage are seen to provide the most reliable, comfortable, convenient, and safest transport options to the respondents. However, Gautrain is also seen as the least affordable service, along with coverage issues, could explain the relatively low service utilisation. The various bus services are perceived to be the most unreliable option for commuters, with minibus taxis, Metrobus and PUTCO services further identified as the least safe and comfortable transport options. Although PUTCO may be perceived as an affordable service, all other service dimensions are rated particularly low amongst commuters, and the service is seen to have a captive nature. Although there were insufficient responses to draw meaningful conclusions regarding the Metrorail service, in a separate question, over 80% of respondents indicated that they had never used the service, suggesting that most respondents did not view Metrorail as a viable transport alternative in terms of one or more of the service elements.

3.2 Infrastructure

Respondents were asked to rate the condition of various forms of transport infrastructure that they are familiar with or may have encountered. Most respondents believed that the Gautrain infrastructure was good or excellent, reinforcing users’ positive perception of this service. Respondents were generally relatively neutral in their responses to rating the state of traffic lights, bus stations and Rea Vaya stations, indicating the acceptability of the condition of the infrastructure. The infrastructures that respondents were most concerned about or were most dissatisfied with were taxi ranks, with less than 8% rating these as good or very good, and roads, where less than 15% believed these to be good or very good. In another question related to road conditions, respondents also indicated that they sometimes experienced roads that were challenging to use as there were unclear road markings and missing road signs. As the majority of respondents stated that they used cars or minibus taxis as their main form of transport, this indicates that the poor state of infrastructure had a significant impact on the majority of the Gauteng residents.

3.3 e-Tolls

The results show that respondents believe that the purpose of e-tolls is primarily for revenue collection purposes, with more than 50% indicating this. On the other hand, it appears that respondents do not really believe that e-tolls fees are used extensively for infrastructure purposes, with less than 25% believing that the income is used for infrastructure/road provision and less than 50% believing that the funds are used for maintenance. In another question, a majority of respondents reinforced this by indicating that they disagreed with the statement that e-tolls will enable the government to improve conditions and repair damages. Respondents furthermore stated that they did not believe that e-tolls contributed to safety and security on the route. On the contrary, they did indicate general agreement that the system served no purpose, was too expensive and was unfair to low-cost users. These results suggest that Gauteng residents generally do not support the e-toll system.

3.4 Law-Enforcement

Respondents indicated that they generally believed that South Africans did not obey traffic rules, traffic signs and road markings. This could primarily be associated with the strong indication that traffic officers are not doing a good job of enforcing South African traffic laws. The respondents also provided a strong indication that they believed law enforcement officers were not helpful to the public, implying that they did not assist in protecting the public from other road users that may be transgressing traffic laws and regulations. The majority of respondents reinforced this by strongly agreeing that they believed traffic officers to be corrupt. In another question related to road conditions, respondents indicated that they did not often encounter roadblocks, regularly placed speed cameras and regular traffic control, illustrating low levels of law enforcement. When asked what traffic officers did check when drivers were stopped, respondents agreed that drivers were asked for driver's licences or vehicle licences. Still, few were asked about vehicle conditions, warned about speed transgressions, or checked if they were intoxicated. Some respondents had never experienced a situation where traffic officers stopped a vehicle. The results indicate that Gauteng residents do not believe that they can rely on traffic officers to look after their best interests on the road and do not generally experience any positive law enforcement interventions.

3.5 COVID-19

Under COVID-19 conditions, public transport was subjected to several regulations, such as the compulsory wearing of masks and the limitation of passengers to 50-70 per cent of the vehicle's capacity, depending on the transport mode. When asked whether the various modes had adhered to these regulations, respondents indicated that they believed all the bus systems (Rea Vaya, Metrobus and PUTCO), as well as the Gautrain, to be fair, good, or excellent in adhering to regulations. On the other hand, there was a strong indication that minibus taxis and Metrorail did not fare well in this regard, reinforcing the finding that users of these modes did not believe that their personal safety was a priority on these modes.

4. CONCLUSION

This research has aimed to highlight some of the key transport issues facing Gauteng residents. Whilst household travel surveys have highlighted some of the issues facing public transport users in the province, a broader set of issues is likely to face the

commuting public. Transport remains one of the most pressing concerns to residents, suggesting that this is still a factor that negatively impacts daily mobility. Safety and security were the most mentioned concerns for both public transport users as well as private car users, indicating an urgent need to address this across all modes of transport modes and spaces. Public transport is a major issue, generally, and there are specific issues related to taxi and bus services. The issues remain similar to those highlighted in the past is highlighted by the view that transport appears to be declining and there is a general pessimism about the future prospect of improvement. Issues that were highlighted amongst public transport users related to service elements such as the availability of the service (whether the service ran in their area, as well as the frequency), affordability (fuel was highlighted as expensive, as were fares), safety, comfort, and reliability. Respondents also indicated that transport infrastructure was a major concern in Gauteng, with road users highlighting issues such as potholes, traffic lights, missing road signs and poor road markings. Public transport users indicated their dissatisfaction with the state of facilities, such as taxi ranks. E-Tolls, although not as serious a concern as in the past, did not meet with public approval, with respondents indicating that there was little value to the system, as it did not contribute to the maintenance of the roads or safety of the users and further that they strongly believed its purpose was revenue collection. Poor perceptions of services were also extended to law enforcement, with a broad view that law enforcement was ineffective, traffic officers were corrupt, and not assisting the public, reinforcing the earlier perspective that safety and security are the foremost transport concern amongst Gauteng transport users. The respondents also indicated that the lowest level of adherence to COVID-10 regulations was on taxi and Metrorail services. Despite general dissatisfaction with taxi services and facilities, taxis remain the most used form of public transport in the province. Overall, the preferred mode of travel is by private car. This suggests that, despite the subsidisation of other forms of public transport, this is not sufficient to provide viable alternatives to cars and taxis. From a policy perspective, safety and security require the most attention. Subsidisation needs to be focused on delivering a better quality of service, as users have indicated that affordability is insufficient to drive modal choice. Infrastructure is also a major concern to public and private transport users.

Although this research highlighted some of the key transport issues facing commuters in Gauteng, it has some limitations, such as the sample size and the limited geographic area which was investigated. Future research should be expanded to the rest of South Africa, using a random stratified sampling technique, to gain a representative, comprehensive and detailed description of the priority transport issues, not only in the major metropolitan areas but also in other cities and rural areas, to inform and guide integrated transport strategies and plans.

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