



Navigating the challenges of public transport and urban mobility in Thohoyandou, South Africa



Authors:

Tracey J.M. McKay¹ Babra Duri² Ashley Gunter² 

Affiliations:

¹Department of Environmental Science, University of South Africa, Johannesburg, South Africa

²Department of Geography, University of South Africa, Johannesburg, South Africa

Corresponding author:

Babra Duri,
babsduri@outlook.com

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Background: Transport systems are an essential feature of functional urban settlements. Yet, almost all of South Africa's secondary cities and small towns lack a true public transportation system. Because of this, quasi-public, privately operated mini-bus taxis are the main form of transport for most urban residents. Thohoyandou, Limpopo, a town of over 70 000 people, is a typical South African town in this regard.

Objectives: The purpose of this research was to understand passenger experiences of mini-bus taxis in Thohoyandou, Limpopo province, South Africa.

Method: This study used semi-structured interviews to explore the mobility challenges faced by the residents of Thohoyandou.

Results: This study revealed several negative aspects impacting passenger experiences. Passengers consistently reported concerns regarding driver's behaviour that compromised safety and security. This included overloading of vehicles and disregard for traffic regulations. Passengers also highlighted the challenges posed by poor transport infrastructure and a lack of reliable service. Collectively, these factors contribute to limited mobility options, increased transportation costs and a reduced quality of life. Furthermore, the shortcomings of mini-bus taxi services disproportionately affect people with disability, who already face significant societal barriers, further marginalising them within the transportation system.

Conclusion: The government should increase investment in transport infrastructure, the enforcement of traffic laws and better driver training. However, a strong government combined with much political will is required if passengers and safety are to be the main priorities of the mini-bus taxi industry.

Contribution: This study highlights challenges faced by public transport users in Thohoyandou, where mini-bus taxis serve as the main mode of transport. The challenges experienced by transport users not only reduce their mobility but also contribute to marginalisation of vulnerable groups, especially people with disability.

Keywords: public transport; mini-bus taxi; Thohoyandou; transport infrastructure; drivers; safety

Introduction

Worldwide, public transport forms the backbone of urban mobility in cities, facilitating the daily movement of millions of people (Gómez-Ortega et al. 2024). Thus, nations need a good public transportation infrastructure to be economically successful, have rising living standards and social development (Walters & Pisa 2023). In the era of rapid environmental degradation and climate change, public transport also represents a more sustainable alternative to private vehicles carrying few or no passengers (Dell 'Olio et al. 2011; Montoro et al. 2018). Moreover, the strain of individual motorised vehicles on transport infrastructure is undeniable, such as the need to provide parking spaces, road building and road maintenance (Rojo, Gonzalo-Orden & Linares 2018).

Public transport is perceived as a key tool for achieving several city goals, including promoting urban sustainability, reducing air pollution, promoting social equity, enhancing economic development and improving urban quality of life (Saif, Zefreh & Torok 2019). However, financial viability of public transport often needs state subsidies and a high ridership. On the other side, passengers prioritise affordability, quality, efficiency in services and infrastructure (Biondi, Romanowska & Birr 2022; Dell 'Olio et al. 2011; Rojo et al. 2018; Soto, Cantillo & Arellana 2021). This creates a balancing act, where traditional evaluations of public transport services focussed on costs and efficiency need to consider the passenger perspective for a successful system (Govender 2016).

The objective of this research was to understand passenger experiences of mini-bus taxis in Thohoyandou in the Thulamela Local Municipality of the Limpopo province of South Africa. This municipality comprises approximately 575 000 people (in 2022) with a dependency ratio of 62, and 87.2 males per 100 females (because of outmigration) (Municipalities of South Africa 2024). The vast majority of the population are black African, speak Tshivenda and rely on government grants. Unemployment levels are high. Thohoyandou is characterised by a blend of urban and rural communities with steady population growth (Vermaak 2014). Thohoyandou is an administrative centre and home to the University of Venda. Since 1994, it has been controlled politically by the ruling party, the African National Congress (ANC). Thohoyandou is the fastest-growing town in Limpopo province. The local economy is centred on Community, Social and Personal Services, Government Services, Wholesale and Retail Trade, Financial Services and Agriculture (Louw & Flandorp 2017).

Thohoyandou, like many urban centres, attracts residents from surrounding rural areas who come in search of employment, education, and healthcare opportunities (Sinthumule & Netshisaulu 2022). The influx of new residents has spurred developments such as the Thavhani City Value Centre, a 12 254 m² mixed-use mega mall recently constructed on the outskirts of the city. This mall has contributed to the commercial landscape and serves as a significant pull factor, drawing residents and visitors to the area.

The urban layout of Thohoyandou's Central Business District (CBD) is structured in a traditional grid pattern, primarily characterised by single or double-storey buildings. The absence of green spaces and the anonymity of its unnamed streets give the CBD a utilitarian feel, focussed more on functionality than aesthetic appeal. This area serves as a hub for essential services, housing government buildings, a police station, a magistrate court and various commercial entities including wholesale and retail outlets. Essential transport nodes such as taxi ranks and a bus station are also situated here, emphasising the CBD's role as a transit gateway (Anyumba 2019).

Transportation in Thohoyandou is facilitated through a mix of privately owned buses, which receive partial public subsidies, and various other transport modes. These buses are vital for linking Thohoyandou with other urban centres across the Limpopo province, supporting the daily commutes of residents for work or school. For many, especially those without private vehicles, walking, cycling, ride-sharing services such as Bolt, and the mini-bus taxis are everyday transport options.

Figure 1 shows the locations of key transport nodes, including taxi ranks, which are crucial for understanding the transport dynamics in Thohoyandou. While these options exist, significant challenges and inefficiencies highlight gaps in the public transport system that could be better served with

more structured, reliable services. This preliminary exploration provides the groundwork for a comprehensive analysis of the specific mobility challenges faced by Thohoyandou residents. It delves into the impacts of these challenges on daily life and discusses targeted interventions that could substantially improve the urban transportation system in this rapidly expanding town.

Transport issues in South Africa

Historical urban planning decisions in South Africa were at odds with sustainable transportation. That is, historical policies of spatial segregation, unchecked urban sprawl and a lack of mixed land use practices means that most urban South Africans live in a state of transport poverty (Lucas 2011). Transport poverty inhibits the ability to seek or access work, community and social services and even educational institutions. In addition, under apartheid, public transportation for the majority was limited to trains and buses funnelling black Africans to the central cities (for work) and back to their peripheral dormitory residential areas. But a full public transport network was not in place, even for white people.

Overtime, white people ended up relying on private motor vehicles and black Africans on privately owned mini-bus taxis to meet their transport needs (McKay 2020). Post 1994, this divide is not so much around race, but class, with wealthier urbanites using private cars and poorer ones using mini-bus taxis (McKay, Simpson & Patel 2017). Notably, post 1994 the number of public buses and trains has drastically declined. In fact, public transport as a percentage of overall transport use is now small (Luke 2018). Aside from high costs, the typical commute is long (Stats SA 2017). Unfortunately, to date, little policy attention has been paid to fixing these transport issues (Lucas 2011).

A lack of public buses and trains gives a type of 'monopoly' to mini-bus taxis. Thus, the mini-bus taxi is the most common mode of quasi-public transport in South Africa (Stats SA 2021). The National Households Travel Survey 2020 indicated that at least 66% of households in South Africa make use of these mini-bus taxis (Stats SA 2021). The South African mini-bus taxi industry is a privately owned network of around 200 000 operators (Department of Transport 2003; Schalkwyk 2008; Vegter 2020). Mini-bus taxis are not directly subsidised by the State.

The taxi industry was estimated to be worth in excess of R90 billion in 2017. It is poorly regulated, resulting in overtrading, low profit margins, violence and a lack of safety (Bridge Taxi Finance 2024). The industry is notorious for poor driving such as speeding, ignoring road rules, a lack of vehicle maintenance, non-roadworthiness and overloading (Fourie & Pretorius 2005; Govender & Allopi 2006). Traffic accidents involving mini-bus taxis are common and their off-peak service is limited (Schalekamp & Klopp 2018; Sebola 2014). Exploitative business practices such as underpaying drivers and violent rivalry between operators is rife (Fobosi 2019; Govender 2016). Despite the higher cost, passengers often

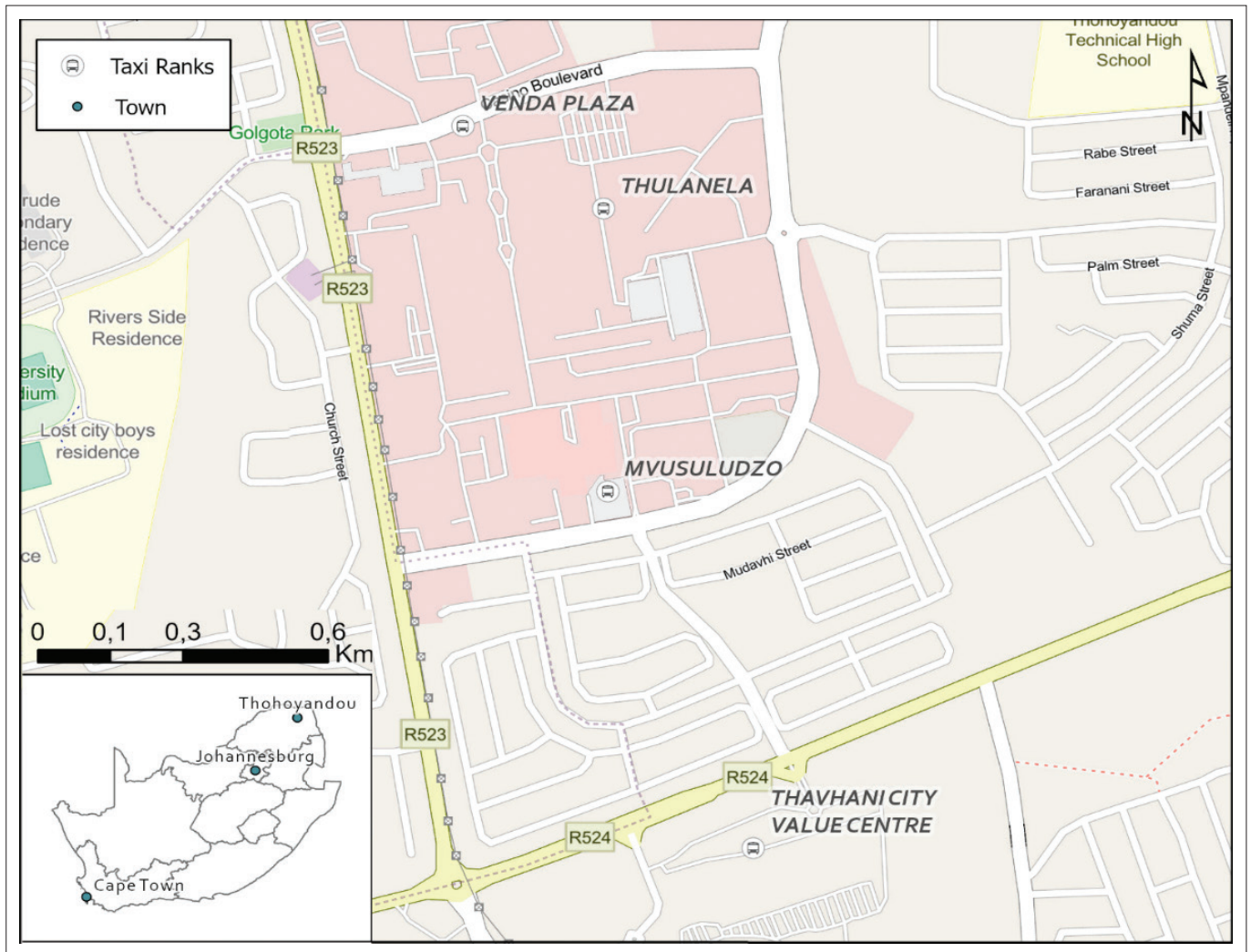


FIGURE 1: Map of Thohoyandou showing key transportation routes and urban layout.

choose mini-bus taxis over buses and trains because of several advantages (Venter & Badenhorst 2014). One reason for this is that mini-bus taxis tend to stop wherever a passenger wants them to.

In 2004, the ANC Government launched a significant revision to its 1999 mini-bus taxi recapitalisation policy, a move that was implemented without extensive consultation with key stakeholders (Schalkwyk 2008). This policy was a hugely ambitious attempt by the State to address the myriad of issues plaguing the mini-bus taxi industry (Ingle 2009). The primary objectives of the recapitalisation programme were to enhance the overall quality of service within the industry, improve safety measures for travellers and reduce operational costs for service providers.

The recapitalisation policy sought to introduce several innovative practices within the mini-bus taxi industry. One of the most notable innovations was the introduction of a cashless fare payment system, designed to streamline payment processes and reduce the risks associated with cash transactions, thus enhancing security and convenience for both drivers and passengers (Baloyi 2013; Marsland 2011). In

addition, the implementation of these systems was expected to provide a more accurate and efficient means of collecting fares, thereby improving the financial accountability of taxi operators (McKay et al. 2017).

The introduction of advanced systems such as cashless payments was overly ambitious and forward-thinking (especially in 2003), and necessitated significant infrastructure and technology development (Schalekamp, McLaren & Behrens 2017). Without robust support and training programmes, such innovations risked widening the gap between policy intentions and actual on-the-ground practice, leading to resistance from operators and passengers accustomed to traditional methods (Luthuli 2020).

Stakeholder involvement is crucial, as transportation reforms directly affect the livelihoods of thousands of taxi operators and the daily commute of millions of passengers (Moyake 2006). The lack of stakeholder consultation highlighted by Schalkwyk (2008) raised concerns about the practical implementation and effectiveness of the recapitalisation effort. Engaging with drivers, owners and users could have provided valuable insights into the

challenges of the industry, fostering solutions that are more attuned to the realities on the ground. The recapitalisation, however, fell short of achieving its full potential (Fobosi 2023; Sebola 2014).

The recapitalisation programme remains a highpoint in the ANC-led South African government's attempt at transportation reform. The programme signified the importance of the country's public transport system, specifically the mini-bus taxi industry that forms the backbone of urban and rural mobility (Ingle 2009). The programme also recognised the industry's importance and was commendable for its attempt to modernise and improve the service delivery associated with mini-bus taxis. However, for future policies to be successful, comprehensive stakeholder engagement and support, coupled with realistic assessments of technological and infrastructural readiness are required.

Method

In this study, a qualitative research methodology was employed to explore the public transportation experiences of residents in Thohoyandou. This approach is supported by Velho (2019), who argues that qualitative methods provide profound insights into the dynamics of transport systems, particularly through the detailed exploration of user perspectives and behaviours. Following the recommendations of Dell'Olio et al. (2018), a semi-structured interview guide was utilised to facilitate the data collection process. This method is considered as the most prevalent and effective tool for gathering rich, qualitative data from transport service users, allowing for an in-depth understanding of their daily interactions with the transportation system.

The research engaged a purposefully selected sample of 10 participants to partake in in-depth interviews. The study sample of this study was based on the concept, 'information power', which focusses on the quality and relevance of data obtained from a sample rather than sample size when designing qualitative studies (Morse 2015). According to Morse (2015) 'information power' refers to the quality and usefulness of information available within a sample to answer the research question. Some of the factors that contribute to information power include the specificity of the research question, the richness of the data, the quality of the data and the analytical strategies used. The demographic composition of the participants consisted of four males and six females, with an average age of 25 years (ranging from 21 to 29 years). This self-declared demographic spread included five employed individuals and two students, reflecting a broad spectrum of the commuting public. In addition, the findings resonate with the literature, adding a measure of confidence in accuracy.

Data from the interviews were analysed using thematic analysis, which Bryman and Bell (2017) endorse as particularly suited for studies where deep exploratory insights into human experiences and societal issues are

required. The analysis adhered to a deductive approach, as described by Braun and Clarke (2006), where themes were predefined based on existing literature, thus allowing for a focussed investigation of specific aspects of transport experiences previously identified as significant in the academic field. This approach ensured that the analysis was systematically aligned with established research, enhancing the validity and reliability of the findings.

Despite the inherent limitations associated with a smaller sample size, the consistency of the findings with broader studies, such as those conducted in Johannesburg by Govender (2016), provides a robust validation of the results. Several strategies were considered to ensure the trustworthiness, dependability, credibility and transferability of findings. Trustworthiness was improved by member checking, where participants reviewed the summaries of findings to ensure accuracy in views presented. Dependability was supported through maintaining audit trail of the research process and engaging in peer review. Transferability was addressed by providing a comprehensive description of the study setting and participants, allowing readers to judge the applicability of the findings to similar contexts. In addition, biasness was minimised by the use of a structured interview guide, which collectively helped in reducing the influence of researcher biases on the data collection and analysis. To improve accuracy, it was explained to the participants that there were no correct answers, their responses were anonymous and confidential. This consistency underscores the representativeness of the sample despite its size and supports the generalisability of the conclusions drawn about the public transport conditions in Thohoyandou. This methodological framework, therefore, not only substantiates the depth and accuracy of the qualitative insights gathered but also solidifies the research's contribution to the academic discourse on urban mobility in smaller cities. The findings provide a nuanced understanding of the transport challenges faced by residents, framing a basis for policy recommendations and future research aimed at enhancing public transport systems to meet the needs of urban populations effectively.

Results

The results of this study highlight the pivotal role of mini-bus taxis and private ride-hailing services such as Bolt in fulfilling the transportation needs of Thohoyandou residents. This dependency mirrors the situation in many secondary cities and smaller urban areas across South Africa, where formal public transportation systems are often inadequate or absent. These results provide a comprehensive view of the transportation landscape in Thohoyandou, illustrating both the challenges and the dependencies that characterise public transport usage in the town.

Theme 1: Transport challenges

The challenges reported by respondents revolve around reliability, inadequate routes, poor service quality,

affordability and overloading and/or overcrowding of vehicles operating in Thohoyandou. Participant 1 complained about 'unreliability and lack of punctuality of transport services', which affect the ability to plan journeys. Participant 2 and Participant 8 mention 'overloading and [the] poor condition of taxis' highlighting safety concerns. Moreover, overloading of mini-bus taxis can lead to discomfort among passengers. Some participants reported the cost of using transport as a significant issue. Participant 4 pointed out the mismatch between cost of transport fares (high) and service quality (low). That is, mini-bus taxis charge a lot, yet the quality of service is still poor. Financial expenditure on transportation varied among participants, with an average monthly spend of R452, with a range from R180 to R680, highlighting the economic implications of transport accessibility and affordability. Notably, only two participants reported using Bolt, a ride-sharing service, indicating a reliance on more traditional forms of public transport. Other annoyances included taxis running late because they only depart when full or because they make many stops along the way, as mentioned by Participants 1 and 2.

Theme 2: Safety and security concerns

Safety and security concerns revolved around non-roadworthiness of vehicles, crime, a lack of safety protocols at taxi ranks, poor infrastructure and the lack of enforcement of traffic regulations. Participant 2 raised concerns about 'vehicles not being roadworthy and drivers [have] reckless driving habits'. Such concerns point to a failure to enforce traffic laws in Thohoyandou. Participant 6 was concerned about 'overcrowding and a lack of emergency exits' again reflecting on the lack of adherence to safety regulations.

Incidents of theft and harassment were few, but Participant 1 had been mugged in a mini-bus taxi and Participant 8 also had a bad experience because of a lack of taxi rank security personnel, which enables criminals to operate in and around taxi ranks. Participants 1 and 2 describe a situation where a 'lack of lighting at taxi ranks and stops' made passengers vulnerable at night.

In case of emergencies or accidents, another expressed concerns over:

'... the lack of first aid kits and trained drivers.' (Participant 10)

Participant 2 had been in a vehicle accident because of a mini-bus taxi driver. Overall, participants were concerned about the general lack of safety and security protocols and measures for passengers.

The cumulative experiences of the participants highlight a pervasive neglect of safety and security measures essential for public transport systems. These deficiencies not only compromise passenger welfare but also erode trust in the available transportation options. It is evident that the lack of stringent enforcement of traffic and safety regulations in Thohoyandou has led to conditions where risks to physical

safety and security are significantly heightened, resulting in a transport environment that is perceived as unsafe and unreliable. This situation calls for urgent interventions by authorities to improve oversight and enforcement, ensuring that the transport sector adheres to national safety standards designed to protect all users. Enhanced safety measures, coupled with rigorous enforcement of regulations, are crucial in fostering a safer, more reliable public transport system that can support the community's mobility needs effectively.

Theme 3: Attitudes of drivers towards passengers

The experiences of passengers with drivers vary widely. Some passengers felt respected and well-treated while most reported negative interactions with drivers, citing drivers as rude and insensitive, especially with respect to safety issues. Participant 1 reports how rude and inconsiderate a driver was when she wanted to alight a vehicle that was overloaded. In another incident, Participant 6 describes how a driver refused to stop at a designated area, compromising the safety of passengers. Participant 3 reported verbal abuse. Yet Participant 5 shared a positive experience, stating that their regular driver was always friendly and helpful.

The dichotomy in passenger experiences underlines the significant impact that driver conduct has on the overall quality of public transport services. While some drivers maintain a professional demeanour that enhances passenger comfort and trust, the prevalent reports of rudeness and insensitivity, particularly in situations involving safety, indicate a broader issue of inadequate training and oversight. The inconsistencies in driver behaviour not only affect service perception but also highlight the need for comprehensive training programmes that emphasise customer service, safety awareness and respect for passengers. Instituting such programmes, alongside regular assessments of driver performance, could bridge the gap in service quality and ensure a uniformly positive experience for all passengers.

Theme 4: Accessibility concerns for passengers with disability

Transport accessibility for passengers with a disability was deemed inadequate, posing barriers to mobility for such individuals. Participants found that vehicles could not accommodate wheelchairs, there was a lack of priority seating and they endured insensitive treatment from drivers and fellow passengers:

'people with disability hardly have access to transport services [other than a private vehicle].' (Participant 7)

In addition, long distances to stops in Thohoyandou only worsened the problem. Participant 9 expressed that wheelchair users suffer transport poverty. One participant highlighted an important issue regarding boarding and alighting of those in wheelchairs:

'... it is hard for people with disability to come in and out of transport vehicles.' (Participant 3)

Concerns were also raised towards passengers with a disability, over the:

'... lack of empathy from drivers and passengers.' (Participant 10)

Another highlighted how it may not be practical for someone in a wheelchair or blind, as:

'... drivers are always in a hurry.' (Participant 8)

Overall, the transport services in Thohoyandou do not accommodate the needs of passengers with disabilities.

The observations detailed in this section show the systemic shortcomings in accommodating passengers with disabilities within Thohoyandou's transport framework. The lack of properly equipped vehicles, insufficient priority seating and the insensitive treatment from drivers and fellow passengers create substantial barriers that hinder the independence and mobility of disabled individuals. These challenges are further compounded by the physical layout of transport stops, which are often too far for easy access, exacerbating what is known as 'transport poverty' among disabled populations – a condition where transportation options are not just limited but are also structurally unsupportive and unaffordable.

As Participant 3's experience indicates, even basic tasks such as boarding and alighting are fraught with difficulty because of these systemic inadequacies. This issue is not isolated to Thohoyandou, as similar concerns have been documented globally, indicating a widespread need for enhancements in public transport systems to better serve passengers with disability (Ajayi et al. 2020). To rectify these issues, there is an urgent need for local authorities and transport providers to implement more inclusive practices and infrastructure improvements that ensure safe, accessible and empathetic transportation options for all users, particularly people with disability.

Theme 5: Suggested improvements

Recommendations from the participants included the enforcement of traffic laws (especially around speeding, reckless driving and unroadworthy vehicles), better driver training, vehicles designed for people with disability and infrastructural upgrades. The community desires for a safer, affordable and accessible public transport services catering for the needs of all, as stated by Participants 8 and 10. Participant 1 suggested enforcement of traffic regulations to manage overloading and speeding, as well as removal of unroadworthy vehicles from the road. Recommendations were made for better driver training – participants who had bad experiences with drivers were especially adamant about this. Participant 8 is of the belief that more frequent and reliable services can reduce wait times and overcrowding especially during peak hours. Another called for the state to invest into transport infrastructure, for example:

'... installation of street lights and lights in and round taxi ranks.' (Participant 2)

Visible policing and patrolling security guards was greatly desired. Participant 9 suggested the provision of security guards, taxi rank marshals and an office to report issues to, would improve safety.

Discussion

This study underscores the predominance of mini-bus taxis as the primary mode of transportation in Thohoyandou, a characteristic common in urban areas lacking robust public transport systems. This condition allows mini-bus taxi operators to dominate the market, often placing profit above passenger needs (Ndlovu 2023). The research corroborates Van Ryneveld's (2018) findings, which highlight key passenger concerns including high fares, safety issues, vehicle roadworthiness and driver conduct, all critical factors affecting user satisfaction. These concerns are paralleled by the National Household Travel Survey of 2020, which indicates that poor service attributes deter approximately one-third of potential mini-bus taxi users (Stats SA 2021).

The study highlights the issue of overloading or 'crowding', as described by Tirachini et al. (2017), which shows its negative impact on travel quality and passenger well-being, increasing stress and safety risks (Tirachini, Hensher & Rose 2013). According to Tirachini et al. (2017:311), passenger overloading is 'crowding', which refers to 'a subjective perception of the physical phenomenon represented by a high density of passengers in vehicles and at stations, stops and access-ways'. The crowding of passengers affects 'quality and comfort of travel, waiting and riding times, travel time variability, passenger wellbeing' (Tirachini et al. 2013:49). Crowding can have adverse effects on health and well-being of passengers, leading to increased anxiety, stress and concerns for personal safety and security (Tirachini et al. 2013). This finding is in line with the National Household Travel Survey of 2020, which indicates a high degree of overloading (Stats SA 2021). Implementing scheduled services could mitigate these effects by decreasing overcrowding and enhancing comfort (Van Lierop, Badami & El-Geneidy 2018).

Commuters in Thohoyandou currently use four different ranks: The Venda Plaza Rank, The Thulamela Rank, The Thavhani Mall Rank and The Mvusuludzo Rank (Nduvheni 2024). In 2011, a Thohoyandou Intermodal Transport Facility costing somewhere between R275 and R450 million, was launched as a bus and taxi facility. The structural defects in the facility led to it never being opened for use. In 2024, another R16m was set aside for remedial work on the facility. The inadequate conditions at taxi ranks, particularly the lack of proper lighting and security measures, exacerbate safety concerns, especially at night (Nduvheni 2024).

Participants were concerned about poor to no lighting at these taxi ranks, which they felt compromised safety,

especially at night. Stjernborg (2024) concurs that visible policing around stations created feelings of security for some people. The lack of security guards or visible policing around taxi ranks also made the participants feel unsafe.

Participants in this study were also concerned with vehicle roadworthiness and personal security threats. These findings corroborate with the literature on transport safety (Eagle & Kwele 2021; Maroun et al. 2024; Van Lierop et al. 2018). Safety and security concerns are also supported by findings from Stjernborg (2024), who emphasised the importance of passengers feeling safe throughout their travel experience. Clearly in Thohoyandou, there is a need for comprehensive safety measures – underscoring the role of the governance, regulation and collaboration among different stakeholders – to safeguard passengers. The National Household Travel Survey of 2020 found many mini-bus taxi passengers were dissatisfied with taxi ranks (Stats SA 2021). This highlights the necessity for comprehensive national level reforms in governance, regulation and collaboration among stakeholders to improve passenger safety, echoing Stjernborg (2024).

Drivers are critical in the supply of transport, as they are entrusted with passenger safety. Thus, their importance and skill level cannot be overstated (Brunoro et al. 2015). This makes it a demanding job, with a great deal of service quality in the hands of a single person (Duri & Luke 2022a). In Sweden, Stjernborg (2024) found that drivers who drive aggressively and fast compromise the safety of transport users and pedestrians.

Public transport drivers work under demanding environment characterised by high mileage coupled with stress, anger and difficult operating conditions (Brunoro et al. 2015; Montoro et al. 2018). In South Africa, some mini-bus taxi drivers have risky behaviour, such as ignoring traffic signals, driving on the wrong side of the road, speeding, recklessly changing lanes, driving in the emergency lane or even driving on sidewalks (Behrens et al. 2018; Nkambule & Govender 2014; Van Niekerk et al. 2017; Vegter 2020). Such negative attitudes and behaviour can deter public transport use (Van Lierop et al. 2018). Importantly, this study found some passengers had positive experiences with drivers, an unexpected and unreported finding. Those passengers who had positive interactions with drivers had significantly better journey experiences compared to those with negative experiences.

Accessible public transport is crucial for people with disability if they are to access work, education, access health care and social services. The lack of access to transport among people with disability can lead to unemployment, inequality and poverty (Bjerkan & Øvstedal 2020; Cepeda, Galilea & Raveau 2018). However, the transport service alone is insufficient. Several key features such as design of vehicles, driver training and infrastructure such as ramps, elevators and signage are essential for passengers with disability. This study found that in Thohoyandou, the public transport

vehicles available are not designed for passengers with disability, especially those in wheelchairs. This finding is consistent with the research performed by Duri and Luke (2022b) revealing that people with mobility disability are severely affected by vehicle design.

People with mobility disability are severely disadvantaged, with mini-bus taxis and conventional buses not designed for passengers in wheelchairs (Ncube 2020). Many other studies have found the same (Ajayi et al. 2020; Kabia et al. 2018; Lister & Dhunpath 2016; Owusu-Ansah, Baisie & Oduro-Ofori 2019; Rivasplata & Le Roux 2018). However, infrastructure design is not the only factor affecting passengers with disability, drivers matter as well. In Thohoyandou, participants said drivers were always in a hurry and lacked empathy for passengers with disability. This finding is in line with studies performed in Kenya where Kabia et al. (2018) noticed that drivers often leave women with mobility issues or visual disability at bus stops or charge higher transport fares. Similarly, in Nigeria, Ajayi et al. (2020) found that many drivers in the Oyo State discriminate and there is a lack empathy for passengers with disability which may lead to socio-economic exclusion of people with disability.

Conclusion

The exploration on transportation issues in Thohoyandou has illuminated the multifaceted aspects of public transport systems within the context of urban development and social equity. The findings echo that of Rivasplata and Le Roux (2018) and Aivinhenyo, Zuidgeest and Van Ryneveld (2016), highlighting persistent concerns regarding cost, safety and service quality that deter a substantial number of potential users. Dependence on mini-bus taxis is amplified by the lack of alternatives, thereby granting these operators significant market control that often leads to prioritising profit over passenger needs (Ndlovu 2023).

Mini-bus taxis pose a serious threat to passenger safety and necessitates stricter regulations and enforcement to improve comfort and safety. This study has shown that the absence of an adequate public transportation infrastructure reduces quality of life as safety and security is lacking. The structural defects and operational challenges of facilities such as the Thohoyandou Intermodal Transport Facility highlight a severe oversight and underinvestment in essential public infrastructure (Nduvheni 2024). That said, there are indications that ride-hailing services are challenging the status quo by competing on convenience, reliability and enhanced safety issues. The adoption of such services suggests a gradual shift towards more accountable transportation options.

This research also sheds light on the experiences of passengers with disability, revealing a lack of universally accessible transport. Transport inequalities not only limit mobility but also contribute to broader social and economic exclusion, underscoring an urgent need for inclusive transport solutions

that accommodate all users, in line with global Sustainable Development Goals (Gore 2015).

Therefore, a multipronged approach to reforming the public transport sector in Thohoyandou and similar urban settings is advocated. The collective insights from this research not only reflect the localised context of Thohoyandou but also resonate with broader national and international discourse on urban mobility and sustainability. There is an urgent need for strong governance and regulatory frameworks that prioritise passenger safety, service quality and economic efficiency. Enforcing traffic laws, improving driver training and ensuring vehicle roadworthiness are immediate steps that can significantly improve service delivery and passenger safety.

Furthermore, investing in robust transport infrastructure and integrating technological innovations can provide long-term solutions to the challenges identified. By addressing the specific transport needs highlighted here, a more inclusive and sustainable urban environment, with improved quality of life, greater economic opportunities and better social integration can evolve. While this small-scale study has provided valuable insights into the transport dynamics of Thohoyandou, it has broader implications for policy, planning and investment in public transport systems for South Africa. We suggest a concerted effort from all levels of government, coupled with active community engagement and stakeholder collaboration, should drive the reforms needed to transform the South African public transport landscape into a model of efficiency, safety and inclusivity.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

T.J.M.M. reviewed and edited the manuscript. B.D. contributed to the conceptualisation and writing up of the original draft. A.G. reviewed and edited the manuscript.

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This article followed all ethical standards for research.

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Data availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

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