A BENEVOLENT OR MALEVOLENT HIDING HAND? RETROSPECTION ON THE OUTCOMES OF THE PUBLIC TRANSPORT STRATEGY AND ACTION PLAN

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ABSTRACT

The Department of Transport initiated a Public Transport Strategy and Action Plan (PTSAP) in 2007 to install high-quality Integrated Public Transport Networks (IPTN) in up to 12 cities and six district municipalities by 2020. This paper reflects upon the outcomes of the PTSAP. The evaluation extends beyond simply measuring whether or not the stated objectives of the strategy were attained. It draws from Hirschman's 'principle of the hiding hand', to explore whether the PTSAP may have had unintended consequences. A 'benevolent hiding hand' refers to unexpected outcomes that are positive, while a 'malevolent hiding hand' refers to unexpected outcomes that are negative. Cape Town (*MyCiTi*), Tshwane (*A Re Yeng*) and Rustenburg (*Ya Rona*) were selected as case studies of IPTN projects. Case study data were assembled from government records and in-depth interviews with key stakeholders (including project consultants, project management personnel, and government officials). The case study analysis found that the PTSAP was too ambitious, and that its implementation was slow and encountered multiple challenges. The case cities only partially achieved intended outcomes, to varying degrees. However, it is argued that the establishment of treasury grants accessible to municipal governments for public transport systems improvements, and the staffing of municipal transport departments with officials capable of planning public transport networks and contracting companies to operate services and manage fare collection, amongst other capabilities, represents a 'benevolent hiding hand' that has enhanced the capacity of at least some local governments to confront subsequent public transport improvement challenges.

1. INTRODUCTION

March 2007, saw the South African Cabinet's approval of a Public Transport Strategy and Action Plan (PTSAP). The strategy had clearly defined objectives, intended outcomes and timelines (Pillay and Seedat, 2007). By 2020, some 18 cities and town were to have city-wide Bus Rapid Transit (BRT) networks, operated under gross cost contracts by corporatised bus companies formed from incumbent informal businesses. In the 17 years following its launch, implementation has been slow and plagued with many challenges. Existing literature has either discussed the strategy's progress (e.g., Browning 2013, 2017) or considered the outcomes of individual city programmes (e.g., Manuel and Behrens, 2018). There has been little *ex post* reflection of the PTSAP after the 2007-2020 planning horizon ended.

The aim of this paper is to reflect upon the outcomes of the strategy. It pursues this objective through three case study IPTN projects, implemented by the City of Cape Town (CoCT), Rustenburg Local Municipality (RLM), and City of Tshwane (CoT).

This paper is divided into five sections. The following section will introduce and discuss the theoretical framework guiding the study. Section 3 will explain the research method. Section 4 will present the research findings. In each of the three case studies, key events will be depicted on a timeline from project inception until mid-2024. Section 5 will draw conclusions, reflecting on the adopted theoretical framework.

2. THEORETICAL FRAMEWORK

The theoretical framework guiding this paper is an extension of Albert Hirschman's 'principle of the hiding hand'. Hirschman (1967) argued that if decision makers knew the real costs and difficulties of implementation, few projects would ever get started. A prevailing form of 'beneficial ignorance' means that, while the cost and difficulty of project implementation is greater than expected, this is offset by benefits that are generally higher than expected. This is known as the 'benevolent hiding hand'. Flyvbjerg (2016) and Flyvbjerg and Sunstein (2016) have countered, however, that there are instances where the unexpected greater benefits do not outweigh the unexpected greater costs. This is known as a 'malevolent hiding hand'.

So, the concept of a 'benevolent hiding hand' suggests that sometimes factors that were not planned for or easily seen at the project planning phase can bring about desirable results. There might be unforeseen positive consequences that are realised during the course of a project, which contribute to its success. In contrast, the concept of a 'malevolent hiding hand' suggests that in complex projects there is often an unforeseen or hidden aspect that can lead to negative outcomes. It is 'malevolent' because this hidden aspect produces adverse results. Even though a project can be well or carefully thought out, because we live in an unpredictable world, there are unforeseen factors that can negatively impact project efforts ultimately leading to undesirable results.

Ex post strategy evaluations that are limited to determining whether the stated objectives of projects have been achieved in outcome, within budget, and on time, are unable to detect whether unexpected outcomes have produced a benevolent or malevolent 'hiding hand'. This paper, therefore, considers more than simply the PTSAP's originally defined objectives, intended outcomes, and timelines. Both intended and unintended impacts will be considered.

3. METHOD

3.1 Research Design

A multiple case study research design was used. Cities were selected based on an 'extreme' case study design method. The three case cities (*MyCiTi* in Cape Town, *Ya Rona* in Rustenburg, and *A Re Yeng* in Tshwane) all sought to install Bus Rapid Transit (BRT) operations as part of their IPTN plans, but their outcomes represent different extremes. Cape Town represents a case where services were introduced and remain in operation. Rustenburg represents a case where services were not introduced. Tshwane is a case located somewhere between these two extremes.

To gain an understanding of the intricacies of each case, the IPTN programmes were studied individually and in the context under which they were implemented. Studying each case under its own operating environment has allowed for each timeline to be analysed based on what was stated as the definition of success by each City from the outset.

3.2 Research Method

Data collection involved document analysis and semi-structured interviews. The data collected were subjected to thematic, timeline and outcome analysis.

3.2.1 Document Analysis

To begin the research process, a review of existing case documents was conducted. Where case documents were not accessible via a desktop search, the relevant provincial government departments served as a key source of data. Operational plans, annual project reports, scoping plans and project business plans for the Tshwane IPTN project were sourced from the Tshwane Rapid Transit (TRT) unit. Cape Town's IPTN plans were sourced from the City's website, online archives and from officials working in the City's Urban Transport Directorate. The CoCT publishes updated business plans bi-annually and other project related strategic documents are reviewed periodically, all of which were considered in the research process. Rustenburg's IPTN network plan and operational plans were sourced from the internet, *Ya Rona* project staff, and lessons learned presentations from the City's officials and project team.

The document analysis method involved extracting quotes from the literature and coding them into themes that related to planning, funding, political complexities, project challenges and successes, unintended consequences, BRT infrastructure and design, industry transition, public participation, project performance learnings and propositions for delay.

3.2.2 Qualitative Semi-Structured Interviews

Semi-structured qualitative interviews were carried out with twelve stakeholders involved in the three IPTN case studies. Persons interviewed included project consultants, senior project management and personnel, academics, operations managers, transport industry specialists, former and current government officials in the case study cities. Stakeholders were selected based on either their involvement in the different IPTN projects or knowledge and experience in public transport planning and related matters.

Due to geographic constraints, most of the interviews were conducted virtually. The interview questions were developed using the timeline analysis, and system outcomes evaluation. Supporting documents and the interview questions were sent to the interviewees beforehand. The interviews were video recorded, saved and transcribed and the transcriptions underwent thematic analysis.

3.2.3 Iterative Timeline Analysis

With each case study, a chronology of key decisions that had been made and recorded milestones throughout the course of the 17 years was created using timestamps. An understanding of the effect that certain actions and events have had on the status of the IPTN projects was made possible by this chronological sequencing. It also enabled the construction of IPTN project narratives.

3.2.4 System Outcomes Evaluation

The PTSAP document was used to determine the criteria by which to evaluate each IPTN project. The system outcome criteria were divided into the following: accessibility, service quality, operations, and infrastructure.

Each IPTN project was categorized according to the national Department of Transport's (DoT) criteria and then assessed based on the 'intended outcomes' that each City had established. Using the DoT criteria, the 'achieved outcome' was compared to the 'intended

outcome' to assess the performance of each IPTN project in the case study cities. This is consistent with Yin's (2009) approach to 'pattern matching' in case study research. The following three primary categories, 'fully achieved,' 'partially achieved,' and 'not achieved', were used to describe how each project has fared in comparison to the 'intended outcomes' and are defined as follows:

- Fully achieved – this category includes an IPTN project that has met all the 'intended outcomes' within the 'intended time frames' outlined in the City's initial planning documents and continues to make good progress.
- Partially achieved – an IPTN project that initially struggled with achieving the 'intended outcomes', within the 'intended time frames' that the City had planned in their initial planning documents, but over the years has made good strides in rectifying this and continues to pursue the implementation of the IPTN project.
- Not achieved – this is an IPTN project that has not achieved any of the 'intended outcomes', within the 'intended time frames' that the City had planned in their planning documents, has experienced numerous implementation challenges, struggled to overcome them and has had to obtain significant intervention from the DoT in order to keep the project afloat.

4. FINDINGS

4.1 Cape Town Case Study

In March 2007 the CoCT released a public transport implementation framework that set out its plans to reform a deteriorating fragmented system (Schalekamp, 2017). At implementation, the *MyCiTi* BRT system offered a potential solution to the city's congestion and access challenges.

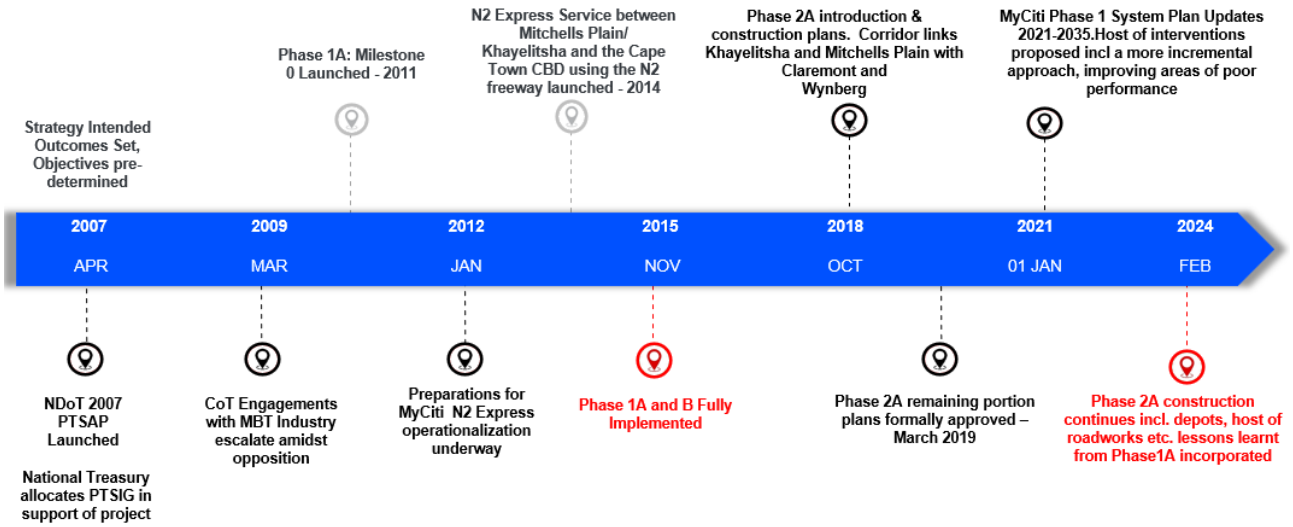


Figure 1: *MyCiTi* project timeline

When the 2007 PTSAP was formulated, the BRT concept was not new, as the Western Cape government had already formulated a BRT plan following a study tour to Bogota in 2003 by key officials, technical staff and some political office bearers.

The intended outcomes of the strategy included creating better public transport accessibility by ensuring a walking distance of 500m to trunk/feeder stops, having peak headways of 7 minutes on trunk routes and 10 minutes on feeder routes, maintaining daily

service operating ours of 18 hours, having safe, clean, modern and universally accessible stations and vehicles, as well as maps which display real-time information.

Source: *MyCiTi* website

Figure 2: *MyCiTi* network of implemented routes

The CoCT received financial support from the National Treasury's Public Transport Infrastructure and Systems Grant (PTISG) to improve public transport for the 2010 FIFA World Cup (CoCT, 2010). One of the critical building blocks of the BRT project involved gaining buy-in from the long established and dominant minibus-taxi industry in the city. Engagements with the minibus-taxi industry began as early as 2007 with the leadership of 14 taxi associations (Manuel and Behrens, 2018). Between 2008 and 2010, a series of events took place including opposition from the industry, protest action, BRT-taxi meeting disruptions and fallouts as well as incidents of violence. Contract negotiations between the City and the minibus-taxi industry finally took place in 2011.

Post the negotiations, the project began to gain traction with the launching of Phase 1A: Milestone 0 in 2011 and preparations for *MyCiTi* N2 Express operationalization were underway in 2012. The introduction of Phase 2A in 2018 was intended to address the substantial public transport needs of the metro south-east which comprises of a corridor that links Khayelitsha and Mitchells Plain with Claremont and Wynberg. Project plans that were not initially approved for Phase 2A were approved in March 2019. Phase 2A of *MyCiTi* services saw an acceleration of its implementation and construction plans between 2022 and 2024.

What was achieved?

As of 2024, the BRT system had wide coverage and had implemented trunk routes in Dunoon, along the Atlantis Seaboard and the Century City area. Direct routes provide connections between Khayelitsha East, the city centre, Mitchells Plain, and the V&A Waterfront. Area routes include, but are not limited, to Vredehoek, Gardens, Civic Centre, Salt River Rail, Walmer Estate, Hout Bay Beach, Imizamoyethu, Robinvale, Sherwood and Pella. In Phase 2A of the project, construction has started in Lansdowne along Turfhall Road, between the Benona/Castor Road and the M5 Kroomboom Parkway.

The local context being an important consideration in ensuring project success, the CoCT had to implement a BRT system that it had little knowledge of, and experienced resistance from the minibus-taxi industry during negotiations which contributed to project delays. Some good unintended consequences were realized such as municipal capacity creation and others, not so good, such as spiralling project costs which were unanticipated.

The implementation of Phase 1A and B as well as Phase 2A, which is currently underway since 2024, has brought with it a better way of implementing the *MyCiTi* project and lessons learnt from Phase 1 can certainly be incorporated. Overall, the project is considered to be partially achieved. Far less than was envisaged in 2007 has been achieved and the project has ongoing efforts to pursue its intended objectives as set out in the 2007 PTSAP.

4.2 Tshwane Case Study

Prior to 2007, the CoT faced challenges with improving the quality of public transport. The introduction of the 2007 PTSAP provided a window of opportunity to improve public transport, reduce congestion, and integrate modes.

The Tshwane BRT system, known as *A Re Yeng*, forms part of the CoT's 2055 growth and development strategy. The CoT had established a set of objectives aimed at transforming the public transport system by providing high-quality, affordable public transport. At its inception, the 56 km of trunk route featured BRT buses in dedicated lanes stopping at dedicated stations, and would run from Wonderboom to Denneboom, with passengers transported to trunk route stations using complementary or feeder routes. The entire BRT system was planned to link Kopanong, in the north-west of Tshwane, to Denneboom, in the north-east, following a U-shaped route traversing the inner city.

The BRT system was to be used as a reform measure to improve levels of congestion, curb the high cost of public transport, improve safety from crashes, reduce travel time and improve overall public transport satisfaction levels.

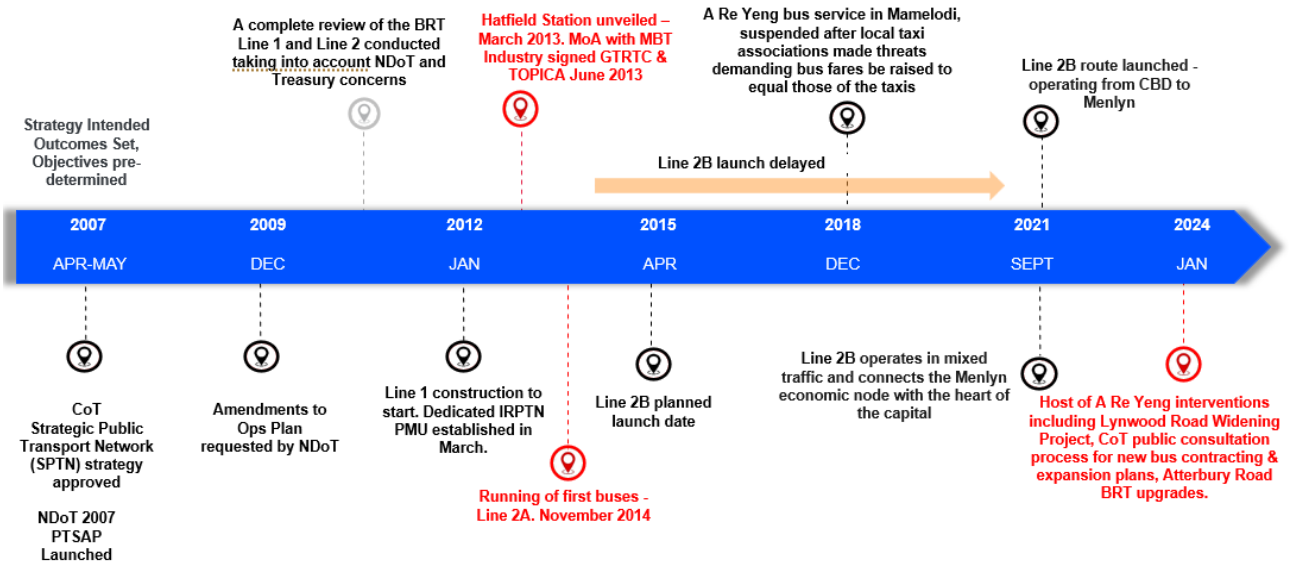


Figure 3: *A Re Yeng* project timeline

By the time that the 2007 PTSAP had been formulated, the CoT had already put measures in place to reform public transport in Tshwane. The CoT developed a Strategic Public Transport Network (SPTN) in 2005, within the overall framework of the SPTN developed by the Gauteng Province (RHDHV, 2012a). The proposed BRT system consisted of eight routes, all accessing the Pretoria CBD (RHDHV, 2012a). *A Re Yeng* sought to achieve accessibility by ensuring a walking distance of less than 1km to trunk/feeder stops, having peak headways of 3-5 minutes on trunk routes and 15 minutes on feeder routes, maintaining daily service operating ours of 16 hours, universally accessible stations, and low floor vehicles with level boarding (which were 18m articulated buses and 12m rigid buses).

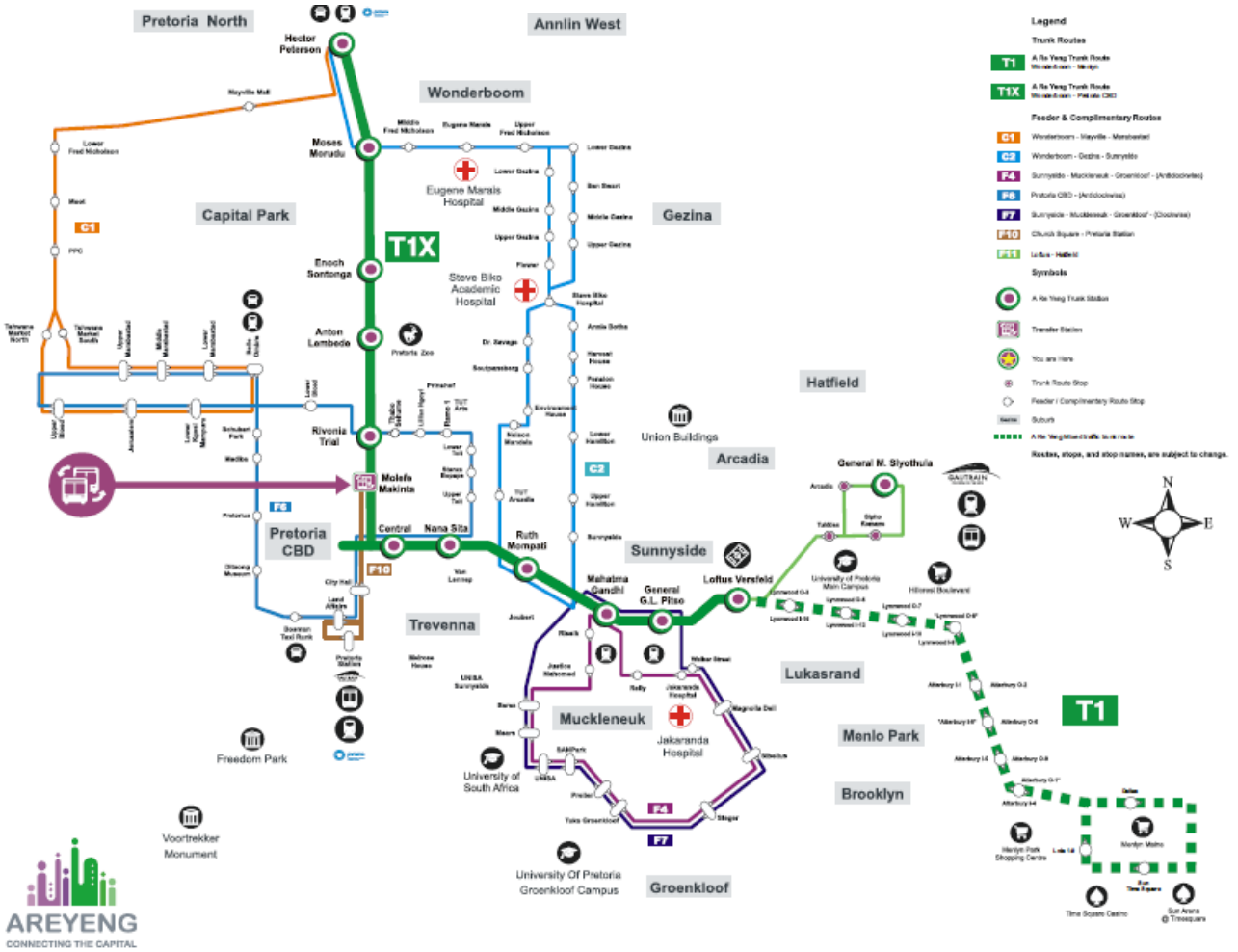
The CoT received grant funding from the National Treasury in support of the project. With *A Re Yeng* services planned to run in time for the FIFA 2012 World Cup, the project hit a snag when preliminary design concerns were raised by the DoT in December 2009, leading to a review of BRT Line 1 and 2 designs (RHDHV, 2012b). Line 1 construction was scheduled to start in January 2012 and a dedicated project management office was established (CoT, 2012b). A date of 28 June 2012 had been set for opening a station in Hatfield, but this date was delayed with construction only starting in July 2012 and the unveiling taking place almost a year later in March 2013.

In June 2013, the signing of a memorandum of agreement with representatives of the minibus-taxi industry to ensure the peaceful implementation of the BRT project took place. The City signed the agreement with representatives of the Greater Tshwane Taxi Council (GTRTC) and the Transport Operators Peace Initiators Conglomerate Associations (TOPICA), making inroads into better stakeholder relations. In November 2014, a significant milestone in the project, the first A Re Yeng buses departed from the depot and headed to the station near the intersection of Nana Sita and Paul Kruger Streets in the city centre for a debut trip (Mudzuli, 2014).

What was achieved?

The *A Re Yeng* project has advanced in some instances, and important milestones have been reached over the years. The project had to recover numerous delays in Line 1, Line 2A and Line 2B implementation. Some good, intended consequences were realized, such as safer, more accessible and affordable public transport for commuters as well as faster

connectivity between a key route, CBD to Menlyn which is one of the biggest economic hubs in Tshwane. On the not so positive side, some unintended consequences included high project costs, businesses along the route getting affected by long project delays. The CoT's *A Re Yeng* project did not meet all the intended outcomes as set out in the 2007 PTSAP and can said to be partially achieved.



Source: *A Re Yeng* website

Figure 4: *A Re Yeng* network of implemented routes

4.3 Rustenburg Case Study

In 2007, the RLM's population was estimated at 244 000, with a growth rate of 4-5% per annum (RRT, 2016). The RLM falls under the Bojanala Platinum District.

The RLM contracted the services of consultants to develop an Integrated Public Transport Network (IPTN) for the city in 2009. The initial Rustenburg, Rapid Transit (RRT) planning envisaged a fully-fledged BRT system operating in December 2016. The initial system design comprised a trunk-feeder network with a dedicated lane along the higher demand corridor (R104) and feeder routes (Chetty *et al.,* 2024).

The RLM received PTISG funding from the National Treasury. During 2009 and 2010, the operational plan and operational costing modelling for the IPTN was completed (RRT, 2016). Detailed planning and design took place between 2009 and 2011.

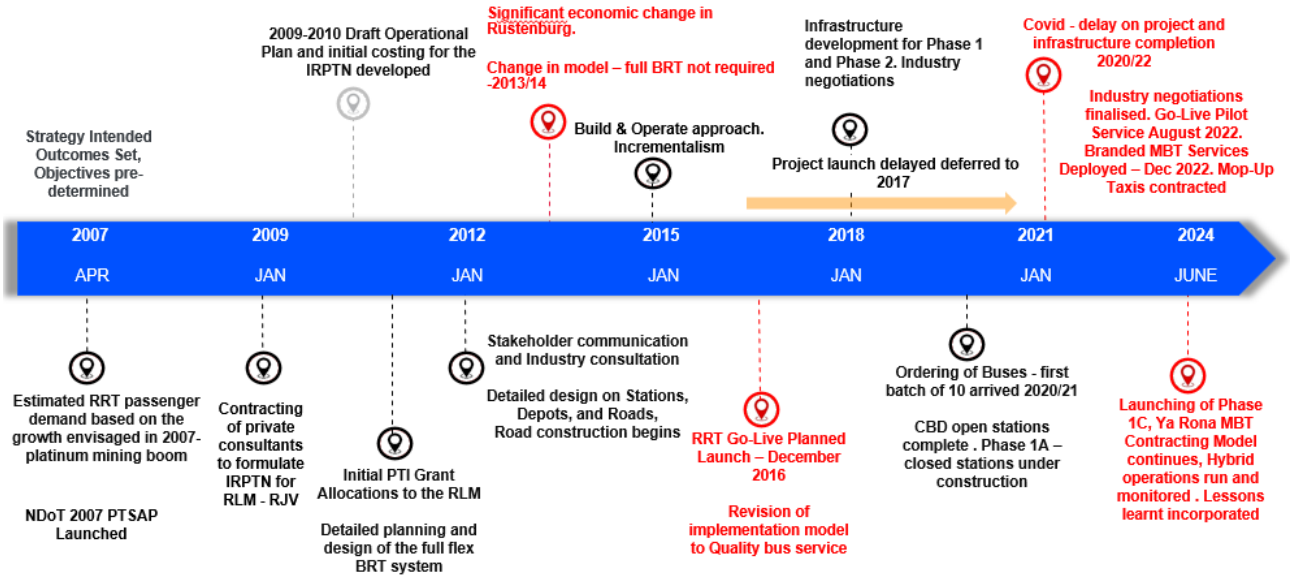


Figure 5: *Ya Rona* RRT project timeline

Since the original planning, there have been changes in the economy. In 2007, estimated passenger demand was based on a growing city caused by the platinum mining boom at the time. But 14 years later, the forecasted growth proved inaccurate, and all passenger demand figures had to be reviewed. The BRT system was reconceptualised with an implementation strategy centred on project 'scalability over time'. The two highest demand transport corridors are the R510 from Kanana to Rustenburg CBD and the R565/R104 from Phokeng/Tlhabane to Rustenburg CBD (RLM 2024).

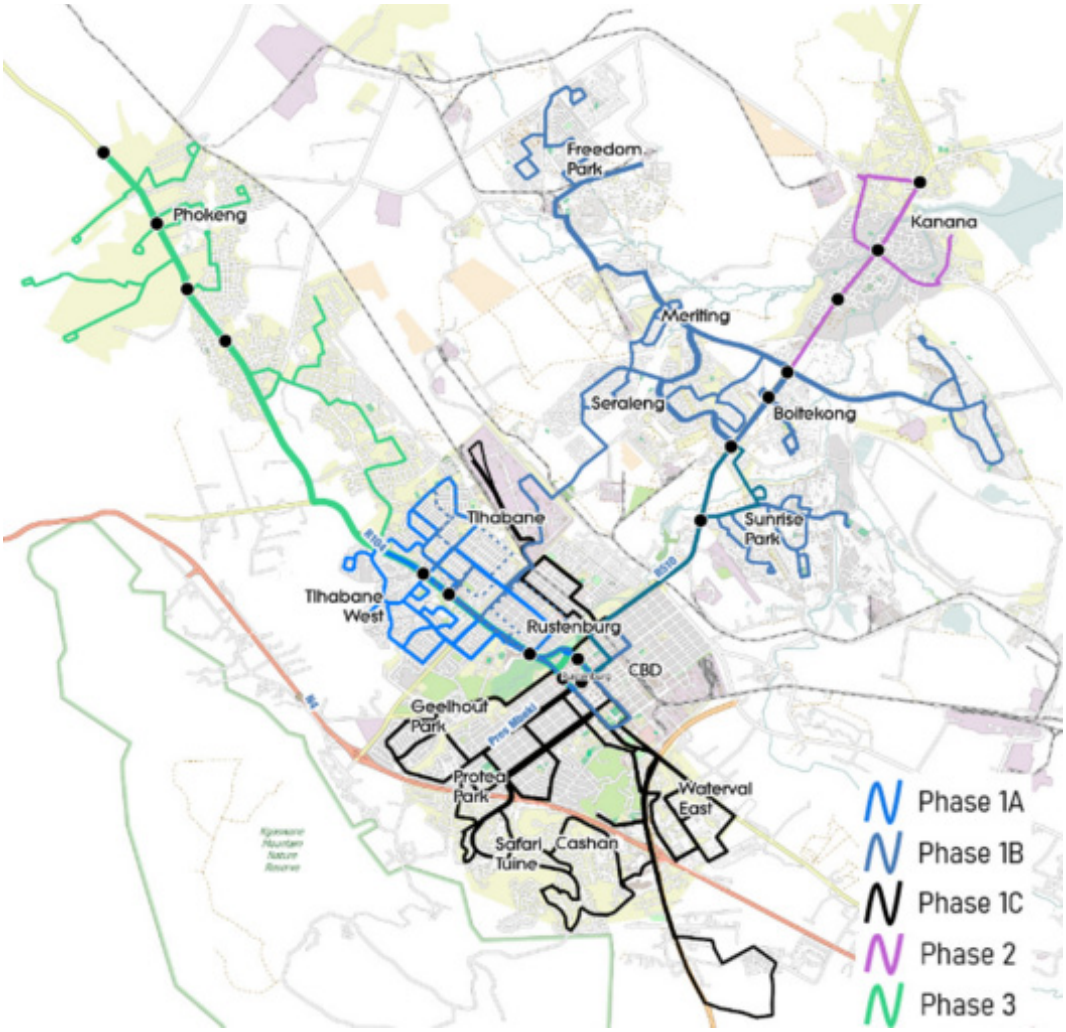
The ordering of RRT buses took place in 2017, but due to long procurement processes, the first batch of 10 buses only arrived between 2020 and 2021. With the country going under lockdown in 2020 due to the COVID-19 outbreak, this caused further project and infrastructure delays and had a negative impact on project progress. Project plans were only able to pick up again in 2022 with the completion of Phase 1A and 1B stations, the optimisation of closed station design, the finalisation of industry negotiations, corridor clearance and industry compensation. Pilot services began in August 2022, and contracted branded 'mop-up' minibus-taxi services were deployed in December 2022.

What was achieved?

Unforeseen changing economic conditions, lack of institutional capacity and having to revise project plans, are some of the major contributors to project delays. The RLM however experienced less challenges with the industry transition and negotiation process. This could be attributed to the extensive consultative sessions and ongoing engagements that took place. Some good unintended consequences were realized such as municipal capacity creation, and others not so good such as station over-engineering, redundant stations and high project costs.

Compared and set against the 2007 PTSAP, one would be quick to say that the RRT project has not fully achieved the intended outcomes. However, the analysis found that the RLM found a way to revise and retrofit its plans, turning what was initially meant to be a full BRT system into a public transport offering that would be more context specific to the local operating environment. The implementation of Phase 1C, with works currently in progress

in the 2024/25 financial year, has perhaps brought about a more sustainable way of implementing the RRT project and lessons learnt from Phase 1A continue to be incorporated.



Source: Rustenburg Local Municipality, 2024

Figure 6: *Ya Rona* network of phased planned routes

5. CONCLUSION

The aim of this paper was to reflect upon the outcomes of the PTSAP, considering both intended and unintended impacts.

The intended outcomes of the PTSAP centred on the phased implementation of BRT networks in South African cities, town and districts. Universally accessible services were to be frequent, with consistent service spans covering the entire day. All three case studies achieved varying levels of the intended outcomes, particularly with respect to service headways and spans.

There are also intended outcomes that have not been achieved in all three cases, particularly with respect to service coverage. Similarities were found in terms of the challenges experienced and factors that caused the IPTN projects to have longer than expected implementation timelines. These factors stemmed from inadequate industry transition, municipal capacity, and resources. Only a fraction of the intended full BRT

network coverage in all major towns and cities has been implemented, and only a fraction of incumbent informal businesses has been corporatised into bus companies.

With respect to the 'hiding hand' theoretical framework described earlier, all three cases have experienced unintended consequences. 'Malevolent hiding hand' outcomes took the form of disruptions in the form of noise pollution and traffic congestion for businesses operating near project construction sites. What was unforeseen was the large negative impact that these disruptions would have on these businesses due to longer than anticipated project delays. Underestimated project costs led to unanticipated project overspending and underutilised stations formed part of redundant infrastructure. Constant opposition from the minibus-taxi industry, and the impact that this would have on project timelines, was not anticipated.

'Benevolent hiding hand' outcomes took the form of enduring National Treasury grants for public transport improvement that are accessible to the municipal sphere of government. Municipal officials were upskilled in the field of public transport service design and operations planning. In addition to developing such system design and service planning capacity, the municipalities that managed to launch IPTN services also developed expertise in the contracting of, amongst others, bus operation, fare collection, and station management service providers. As a result of the PTSAP, public transport planning and related issues now receive greater priority in local government, and, in at least some local governments, the capacity to confront future public transport improvement challenges has been enhanced.

6. ACKNOWLEDGMENTS

The first author would like to express her gratitude to the national Department of Transport for the scholarship funding that enabled her postgraduate studies at the University of Cape Town. This support made the master dissertation research, upon which this paper is based, possible. The authors are also appreciative of the research participants who generously shared their time and contributed valuable insights to this study.

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