



# Lessons from building paratransit operators' capacity to be partners in Cape Town's public transport reform process



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## ABSTRACT

In 2013 the Cape Town municipality initiated planning for the second phase of its MyCiTi bus system. The first phase, on which preparations commenced in 2007, relied on incorporating existing road-based operators in a bus rapid transit (BRT) system. The municipality underestimated the cost and level of effort involved in the wholesale corporatisation of paratransit operators while concurrently equipping them to become BRT operators. Learning from this experience, it developed a more incremental transition approach in the second phase, the first fruit of which was a pilot express bus service launched in mid-2014. The pilot service contract also provided for a training programme for paratransit operators in the affected parts of the city to build their managerial and technical capacity. It was envisaged that programme participants would ultimately manage and run the long-term operating companies and contracts that would be established by the end of the three-year interim period. This article provides a critical review of the programme's context, content and participant experiences after the conclusion of its first year. In broad terms the programme has made a positive contribution to paratransit participants' understanding of the shortcomings of their current operations and why reform might be necessary, but much still remains to be done to enable them to fill their envisaged roles in future public transport operations. In view of growing interest in BRT installation in Sub-Saharan Africa lessons from Cape Town's reform process offer both cautionary evidence and a potential mechanism for drawing existing operators in as partners in reform.

## 1. Introduction

Across cities in Sub-Saharan Africa large fleets of privately owned buses, minibuses and smaller vehicles provide mass public transport to urban populations. These typically unscheduled services – variously referred to in the scholarly literature as paratransit, informal or artisanal public transport, or shared taxis – have over many decades come to fill the niche left by the collapse of colonial-era scheduled bus and rail services (Cervero, 2000; Gwilliam, 2008; Kumar and Barrett, 2008; International Association of Public Transport [UITP], 2008). Indeed, in the context of weak public sector capacity to regulate supply and enforce licensing regimes, barriers to market entry are low and the paratransit industry has grown to dominate the urban public transport offering (Kumar and Barrett, 2008; UITP, 2008, 2010).

Despite their resulting critical role in the lives of multitudes of city dwellers, Behrens et al. (2016), Cervero (2000), Joubert (2013) and others point to the many shortcomings of paratransit operations. Though total paratransit vehicle fleets might number in the thousands in a given city and owners may belong to representative organisations at area or region level, ownership is atomised and financial capital thus dispersed. It is indeed not uncommon for an individual business to comprise only a handful of vehicles.

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Unless the owner is also the driver, owners furthermore tend not to be directly involved in revenue generation. Drivers agree on a daily rental fee payable to the owner and take the risk of collecting sufficient fares to cover this fee.<sup>1</sup> Any resulting surplus is the driver's income. Alternatively the owner and driver might agree on a commission payable to the driver if a minimum number of fares are collected. In effect drivers manage the business at a day-to-day level, while owners provide the capital.

The core mediator between individual businesses is the route associations or similar collectives. Associations' main income derives from owners' membership fees for the mediation, support and general administrative roles that associations provide. This relationship incentivises market saturation as it is in the association's interest to have as many members as possible. In the context of weak public sector regulation and institutional capacity market entry is thus essentially controlled by route associations. The paratransit industry often constitutes one of the few employment and income sources in communities and a country where unemployment is commonplace, and where poor education effectively excludes many from formal employment and tertiary learning. This compounds atomisation and market saturation: in effect there is a continuous stream of individuals willing to become drivers or owners without insight into the diluting effect their entry to the market will have on a finite fare income pool.

Overall the paratransit operational model makes for a high level of responsiveness to demand, but it also results in strong (often destructive) competition on the road, little incentive for comprehensive record-keeping, and limited financial reserves to use towards vehicle maintenance and replacement. In turn, road and passenger safety suffer, environmental impacts are low priorities, and the business perspective is focussed largely on individual near-term concerns.

Ultimately the aforementioned issues with the paratransit operational model frustrate efforts at effecting systemic change from within the industry. It is thus not surprising that public authorities and international agencies have led programmes aimed at addressing the negative aspects of paratransit operations. Documented examples of in situ upgrade efforts in Africa include the vehicle renewal schemes instituted in Accra (Finn, 2012), Dakar (Kumar and Diou, 2010), and nationally in South Africa (Van Schalkwyk, 2009). In the cases of Dakar and Accra these schemes included ownership reorganisation.

Bus rapid transit (BRT) as a mechanism to revitalise public transport and displace or incorporate paratransit, as popularised in Bogota, has arguably received greater attention in the reform discourse. For instance, BRT or BRT-type systems are in operation in Cape Town (MyCiTi, 2016), Dar es Salaam (Mtulya and Matiko, 2016), Lagos (Mobereola, 2009), Johannesburg (McCaul and Ntuli, 2011) and Pretoria (City of Tshwane, 2016). BRT corridors or systems are furthermore at various stages of planning or completion, including in Accra (Jones et al., 2015), Addis Ababa (Embarq, 2013), Kampala (Hirsch, 2012), Nairobi (Institute for Transportation and Development Policy [ITDP], 2015), and in a number of cities in South Africa (Government of South Africa, 2016).

There is a well-developed international pool of resources to support BRT implementation. This includes: technical guidelines (e.g. ITDP and German International Cooperation Agency [GIZ], 2012 and subsequent revisions, GIZ and Embarq, 2013); scholarly analyses of systems and operations (for example: Hidalgo and Gutierrez, 2013; Mejía-Dugand et al., 2013; Pedro and Macario, 2017); and the outputs of the collaborative research centre, *Across Latitudes and Cultures – Bus Rapid Transit*, based in Santiago. Less well documented are processes of engaging with paratransit operators around their inclusion in or displacement by BRT systems, and the accompanying political and planning challenges. Such processes have been demonstrated to be complex, arduous and highly context-specific. In Latin America, where the BRT concept was refined, in-depth studies on these topics have centred on Bogota and Curitiba (Ardila-Gomez, 2004), and Mexico City and Santiago (Flores, 2013), while in Africa research has focussed on Cape Town (McLachlan, 2010; Schalekamp, 2015) and Johannesburg (Venter, 2013; Woolf and Joubert, 2013).

Within the public transport reform discourse in Africa the Cape Town case is particularly instructive. A review undertaken for the South African National Treasury in 2015 projected that revenue in Cape Town's completed first-phase BRT system, called MyCiTi, will cover only 25% of the full cost of running the system in the current financial year (Van Ryneveld, 2015).<sup>2</sup> This has been a sobering realisation; by comparison, paratransit operations receive no operational funding support from the state. Clearly there is a case for investigating alternative pathways to reform in the African context, since even in relatively well-resourced South Africa the BRT-led reform model is proving unaffordable. These pathways include in situ improvement and ownership reorganisation approaches as referred to above, as well as building operators' capacity to be better equipped to drive change from within their own industry. A shift away from the BRT model and towards a multi-pronged approach is emerging in Cape Town in the second phase of its public transport reform programme. The context and substance of this shift are the subjects of this article.

The next section of this article provides an overview of the first phase of the public transport reform process in Cape Town. Thereafter, Section 3 describes the development of the express bus services that are spearheading the second phase of MyCiTi project, as well as the origins of the capacity building programme for paratransit operators that forms part of this project phase. Section 4 highlights the aims and structure of the programme as it stood when the N2 Express agreement was finalised in 2014, while Sections 5 and 6 respectively discuss the content and participant experiences during the first year of the programme. In conclusion, Section 7 reflects on the future direction of the programme and concerns that will have to be addressed in the process.

The article draws on 11 semi-structured qualitative interviews that the author conducted with participants in the programme as well as with key individuals from agencies involved in planning and setting up the programme and in the express bus operations. These agencies were Transport for Cape Town (TCT, the municipal transport authority), ODA (a consulting agency), and the N2 Express operating entity. In addition to the interviews the author was party to meetings and exchanges with the lead reform process

<sup>1</sup> Fares are typically paid in cash on a per-trip basis. Depending on city and route the fares are charged either at a flat rate or have some correlation to distance, though empirical research on this topic is rare.

<sup>2</sup> Revenue sources comprise fares and some additional advertising income, while costs include operating the vehicles, stations and ancillary systems such as fare management.

facilitator and the operating entity's office manager around preparations and on-going arrangements for the programme, as well as their internal written reports on the programme. The author was also convenor and main facilitator in courses that formed part of the programme's first year (see Section 5). This afforded engagement with all programme participants around their learning processes and experiences of the courses, which supplemented the feedback garnered through the interviews. The author's resulting participant-observer role had the potential to introduce bias into responses particularly around the two courses that he presented; such methodological considerations are discussed further in Section 6.

## 2. The first phase of the MyCiTi system in Cape Town

In March 2007 the Cape Town municipality released a public transport implementation framework (City of Cape Town [CCT], 2007) that set out its plans to reform a deteriorating system clearly divided along modal lines. The implementation framework motivated for the installation of a BRT network to replace and absorb existing road-based operations and to fill gaps in the rail network. At the time the unscheduled minibuses of paratransit operators had a passenger market share estimated to be 63% of road-based public transport operations, while the remaining 37% of passengers were carried by contracted and scheduled bus services (CCT, 2007).

Cape Town's reform model in the 2007 implementation framework proposed not to deal with the aforementioned business model and operator/association relationship issues head-on, but rather to replace all existing paratransit services with BRT. This model drew heavily on Bogota's Transmilenio system in relation to, amongst other matters, infrastructure design, timeline expectations and the process of existing operator incorporation (see Wood (2014) for an analysis of the diffusion of the South American BRT model to South Africa).

Detailed preparations for the first project phase of Cape Town's MyCiTi system started after the 2007 framework was launched, with an expectation that first-phase trunk and feeder routes would be inaugurated late in 2009. In practice the first trunk route only became operational in May 2011, while the full suite of initially proposed trunk and feeder routes opened gradually from September 2013 to April 2014. Another unmet expectation was on system finances: rather than fully recovering operating costs from farebox revenue, MyCiTi would require operational subsidisation from municipal coffers as well as a reduction in hours and routes served (TCT, 2015).

A critical reason for the delayed completion of the first project phase of the MyCiTi system was that the process of corporatising paratransit operator groupings, negotiating 12-year gross-cost contracts with them, and educating them to become scheduled bus operators was significantly more complex than initially anticipated.<sup>3</sup> The industry transition process also had to overcome a long-standing adversarial relationship between government and paratransit operators that had created strong distrust of government "meddling" in paratransit affairs (Schalekamp, 2015). Transition processes of this type were also previously untested in the country. Thus, besides taking on the responsibility of planning, constructing, subsidising and managing a new public transport service, the municipality had to build its institutional capacity to manage the transition and to become acquainted with and guide paratransit operators and the route associations to which they belonged to form viable vehicle operating companies. In effect, in the first-phase industry transition process affected operators had to be rushed into forming MyCiTi vehicle operating companies (VOCs) so that they could start running buses on infrastructure that otherwise would run the risk of standing unused.

A key lesson emerging from first phase of the project is that it is crucial to include reform elements that motivate operators to become willing partners, while also equipping them to run better businesses irrespective of the type of vehicle that they might ultimately operate. This is a core driver of the capacity building programme. It is a socially oriented reform element that prepares operators to better understand how their current businesses could become part of an upgraded public transport system *prior* to long-term contractual commitments on the part of operators, or costly infrastructural and modal technology investments on the part of public authorities.

## 3. The emergence of a more nuanced reform process in MyCiTi phase 2

After a public call to action by Cape Town's executive mayor in the last week of 2012, in 2013 planning started on the second phase of the municipality's MyCiTi public transport reform project (Coetzee, 2012). The core aim of the project has been the installation of a new road-based public transport system that would cover the city in a geographically phased manner and incorporate existing public transport operators. Besides being aimed at the south-eastern sector of the city, which holds the highest concentration of Cape Town's poor households, in this second project phase there was a concerted attempt to include the first phase's lessons around operator corporatisation and inclusion in the new system, locally referred to as "industry transition" (TCT, 2015). In the first project phase the municipality underestimated the level of effort involved in corporatising paratransit operators while at the same time equipping them to become scheduled bus operators, concluding 12-year gross-cost operating contracts with them, and constructing extensive busway and station infrastructure. Ultimately these efforts were centred on creating a BRT system covering the entire city. In the second phase the municipality changed its approach, shifting away from "big bang" BRT implementation towards a more incremental reform process.

The incremental approach introduced stepped changes to operations as well as to the industry transition aspects of the reform

<sup>3</sup> In 2014 McLachlan and Schalekamp prepared an unpublished review report for TCT entitled *MyCiTi Phase 1 industry transition: Context, development, implementation and lessons learnt*.

process. To pave the way for the permanent second-phase services that would follow in later years, in July 2014 a three-year interim pilot service known as the MyCiTi N2 Express was launched. It provides freeway-aligned scheduled bus connections between Mitchells Plain and Khayelitsha and the main MyCiTi station in the city centre. Both Mitchells Plain and Khayelitsha are large settlements located on the outskirts of the urban area and the result of apartheid-era urban planning. Under the interim agreement the two N2 Express routes serving these areas are being managed by a joint venture between existing operator entities whose routes have been affected by the new service. The joint venture (JV) partners are: the scheduled bus operator in the area (Golden Arrow Bus Services, or GABS); the paratransit route association (Route 6) operating the Mitchells Plain to central Cape Town route; and the collective of all the paratransit route associations in Khayelitsha on behalf of its member route association that operates the Khayelitsha to central Cape Town route. The Khayelitsha collective, or “mother body”, is known as the Congress of Democratic Taxi Associations (CODETA).

An industry transition facilitator from Organisation Development Africa (ODA) guided the N2 Express negotiations. The facilitator led the establishment of one of the three vehicle operating entities in the first MyCiTi project phase, and was thus intimately familiar with the complexities of industry transition. As part of the negotiations in 2013 and 2014 leading to the three-year N2 Express service contract, TCT (the municipal transport authority) and the JV agreed that a capacity building programme form part of industry transition in the second project phase. This programme is intended to equip paratransit operators in Mitchells Plain and Khayelitsha with the skills to run and take ownership of MyCiTi vehicle operating companies (VOCs) that the municipality would help them to set up and which in time would replace and absorb their paratransit businesses. The inclusion of a training programme in the second project phase marks an important policy-level shift for Cape Town: from initially expecting operators to be willing partners in a new mode of transport, to a currently less modally-focussed process that recognises the importance of developing a cohort of existing operators who can run more effective public transport businesses.

#### 4. Initial aims and structure of the capacity building programme

The capacity building programme and the N2 Express pilot operations have been closely linked since planning on the programme started in January 2014. By the time that the three-year pilot operating contract will terminate in July 2017 it was the intention that the programme will have equipped existing paratransit stakeholders with the skills to run and manage scheduled vehicle operating companies over a longer-term period. A reason why this timing is important is that under the [Municipal Finance Management Act \(Act no. 56 of 2003, sec. 33\)](#) the municipality is subject to a number of limitations if it wants to enter into a service contract with a duration of more than three years. At the end of the three-year period the municipality could lose a large degree of flexibility: it would have to shift to a contract and funding regime overseen by the National Department of Transport and governed by the [National Land Transport Act \(Act no. 5 of 2009, sec. 41\)](#), and the resulting time horizon of up to 12 years would involve uncertainty and risk not inherent in the much shorter interim contract.

It was initially planned that the result of the industry transition negotiation process taking place during the interim contract period would be two MyCiTi VOCs – one in each area. The expectation was that each of these companies would enter into a 12-year MyCiTi bus operating contract at the termination of the interim contract. In order for paratransit operators to be able to do so the programme was targeted at training and developing three streams of competence in running a transport business: general management; technical management; and technicians. The start date of the programme’s activities was to be the same as that of the interim operating contract, at the beginning of July 2014.

The general and technical management streams would participate in structured training courses in their first two years – a larger group in the first year, out of which a smaller group would be selected for more in-depth courses in the second and third years. The courses had to build participants’ understanding and knowledge of the corporate environment, the public transport system in Cape Town, and scheduled bus service provision. From the middle of their second year, the management stream candidates would also be placed in trainee positions (“job shadowing”) and be mentored in general or technical management by the appropriate GABS personnel. The management trainee positions would be with GABS as well as with MyCiTi phase 1 VOCs. Participants in the technician stream would from their first year be placed in apprenticeship positions in GABS and sent on the training courses that GABS already had in place for the own employees in the areas of mechanical, electrical, and vehicle body repairs for buses. (GABS’s courses are officially accredited by a national transport-sector education and training authority, and course graduates would be able to register with a trade body as qualified artisans.)

The JV was assigned the responsibility for selecting candidates for the programme, prioritising those who showed interest and potential in becoming the future operators of the city’s reformed public transport system. After their initial identification the candidates would undertake psychometric assessments to assist the JV in gauging their learning potential and suitability for placement in a corporatised public transport operations structure. Upon completion of the programme the JV also had to support successful participants in finding employment positions in the VOCs, but it was not under an unrealistic obligation to guarantee such placement. Though only two of the 28 existing route associations were affected by the interim service, the programme had from the outset to include candidates from all paratransit operations in the two areas that would be affected by MyCiTi in the longer term.

Guided by the transition facilitator the JV aimed to identify 90 candidates for the first year’s structured management stream training. The number was derived so as to include at least three participants in leadership positions from each of the 28 route associations, thus ensuring a balance between the two areas geographically. Other pre-requisites for entry to the programme were that candidates: had completed secondary schooling or equivalent prior learning; had to be between the ages of 30 and 55; were recognised by their industry colleagues as leaders or managers; and had a stake in the transport industry. In the second year 30 candidates would be selected out of the first year’s group to continue with structured training. From the middle of the second year

nine of these candidates would also be placed as general management trainees, and a further six as technical management trainees.

In relation to the three-year technical apprenticeship stream the JV had to identify 12 potential candidates, divided equally amongst the mechanical, electrical, and bus body repair specialisation areas. Candidates had to be resident in either Mitchells Plain or Khayelitsha and had to have finished their secondary schooling with mathematics and science as subjects.

## 5. Content of the first year of the programme

Two of the programme activities discussed in Section 4 were scheduled to take place in the first year: structured training for the  $\pm$  90 participants in the management stream, and the identification and placement of the 12 technicians for their three-year-long apprenticeships. In practice there were delays in initiating both of these activities, core to which was that the JV was still in the process of being set up and short on human resources. It lacked a day-to-day manager who could prepare and oversee the programme at the planned start in July 2014. A core person was needed to, amongst others, identify and interact with training services providers, assist the JV directors to identify and communicate with candidates, and provide orientation for the candidates. An office manager was finally appointed in February 2015. This appointment was in itself a capacity building activity, and the office manager was mentored and supported by staff at ODA to successfully handle the many tasks at hand.

In the months prior to the office manager's appointment the transition facilitator outlined four structured courses for the management streams. The topics were informed by his experience in guiding the formation of a first-phase MyCiTi VOC. The resulting courses were on: (i) South African company law and corporate governance; (ii) an introduction to management and leadership; (iii) public transport planning and management; and (iv) scheduled bus regulation and operations. From February 2015 detailed preparations ensued, the learning potential psychometric assessments were completed, and three service providers were appointed to undertake the structured training. Two private sector training firms accredited by the public education and training authority offered the first two courses; the University of Cape Town's Centre for Transport Studies offered the latter two courses as continuous professional development qualifications.

The four courses ran from April to July 2015. The first was on company law and corporate governance, which 97 participants completed. It spanned two days and was repeated to enable the overall pool of management candidates to be split into groups of around 15 at a time, with two sessions running concurrently. This course presented participants with the details of what a company is, how it is constituted, financial reporting responsibilities, shareholding, and governance structures. The second course was on management and leadership. There was some attrition in course attendance, with 87 participants completing this course. This course took place over three days and was again offered to groups of approximately 15 people at a time in two concurrent sessions. It covered topics such as interpersonal relationships, emotional intelligence, planning, and workload management.

The third and fourth courses had 86 and 80 participants, respectively. Each of these courses spanned two days and was repeated successively to groups of 20–25 participants at a time. The public transport planning course engaged participants on the concepts of public transport supply and demand. The course included sessions on choice and captive public transport users, the characteristic of public transport modes (including paratransit), differences between trunk, feeder and direct services, and a reflection on key stakeholders in the public transport arena. The last course, on scheduled bus services, guided participants through a simplified bus fleet operations and financial planning process on a hypothetical route. Participants were then tasked with determining the profitability of their own paratransit routes. The course closed with brief distinctions being drawn between different sizes and structures of public transport enterprises, and between various forms of competition regulation.

There were broadly three categories of participants in the courses: paratransit vehicle owners, vehicle owners who were also route associations' executive members, and association administrators (i.e. those who managed the day-to-day activities of associations). All courses were run in the off-peak paratransit operating hours ( $\pm$  10 am to 3 pm) so as not to impact too heavily on any of the aforementioned participants' day-to-day responsibilities. This was particularly pertinent in the case of participants who were owner-drivers, as their businesses and related income were in effect suspended during the hours that they attend the courses. Though participants' home languages could be English, isiXhosa or Afrikaans, by agreement amongst the course planners the language of instruction was English as it is South Africa's main business language. Besides English, course facilitators were also generally conversant in Afrikaans, while an isiXhosa translator was attendant during the first two courses and during the first sessions of the latter two courses.

Participants were assessed in two ways: through a short multiple choice assignment on the course content administered at the end of each course, and more informally by course facilitators to identify participants who actively engaged with the content, programme staff and/or other participants. In August 2015 a formal graduation ceremony was held at the municipal council chambers, presided over by the TCT Commissioner as well as the Mayoral Committee Member for TCT. Participants received certificates for each course, whether for successful completion, or for attendance in cases where the mark for the assignment was below a passing grade. The names of the candidates who would go through to the second year of the programme were also announced at the event.

The second programme activity planned for the first year – the appointment of 12 technical apprentices – could not be completed as planned during the first year of the programme. In April 2015 the JV placed advertisements on local noticeboards and at businesses to attract candidates. General media could not be used as it would attract responses from outside the Mitchells Plain and Khayelitsha areas. Many of the responding applicants did not meet the minimum requirements, especially in relation to having mathematics as an exit subject at school. It took until August 2015 for a full complement of 12 qualifying candidates to be identified. The seven candidates resident in Khayelitsha and five from Mitchells Plain all signed their apprenticeship contracts in August and started their training at the end of the same month.

## 6. Feedback on the programme's first year

Interviews with participants (and with the programme planners) were conducted during the month-long period between the conclusion of the last course and the graduation ceremony. Programme participants who were interviewed thus did not yet know if they would continue in the programme. It was made clear that the interviewer did not control who would go through to the second year of the programme so as not to create false expectations that interviewees' responses or willingness to be interviewed would improve their chances for selection.

For programme participants the interviews offered the opportunity to evaluate the first year of the programme outside the group setting of the courses, and without the potential prospect of further participation. Participant interviewees included those both inside and outside the JV, as well as those who were operators and those who were administrators. Since the interviewer was the facilitator on two courses, interviewees may have been inclined to respond overly positively on these courses. In cognisance of this issue, during interviewee selection care was taken to include individuals who voiced opinions both in favour of and in opposition to the overall programme and the two courses that the interviewer led. During interviews concerted efforts were also made to draw out issues that presented obstacles to interviewees equally across all courses.

During the interviews the participant interviewees were prompted to reflect on: their expectations of the programme and motivations for agreeing to participate; the programme content and learning approach of the first year; and unmet expectations or other issues that the programme should address in future years. These comments were supplemented by observations made by the author while facilitating the third and fourth courses, and by participants' comments and input to the author during and after these course sessions.

In relation to expectations prior to the courses starting, due to the unprecedented nature of the programme there was uncertainty about the programme's purpose and about what the individual courses would entail. There was also some degree of scepticism about the motivations behind the programme due to its association with the MyCiTi project, which could be construed as a government-funded threat to the paratransit industry. However, there was also curiosity about the programme, with one interviewee saying: "let's go to school and learn." Another interviewee expected that the programme was only going to comprise short workshops for operators to learn more about how transport works, as opposed to the more in-depth nature of the courses in practice.

The first course – on company law and corporate governance – appeared to present some learning obstacles. A number of new concepts and a large quantity of information were being conveyed in a short space of time, which some found overwhelming. Prior to this course very few participants had experience of corporate practices, so the course content was unfamiliar. Furthermore, for many this would have been their first exposure to further education. A tertiary level lecture-type format would have been a new experience and participants could not be expected to have all the skills required to assimilate knowledge in such a setting. In the words of one interviewee: "we are used to working, not listening". This comment also applied to the presentation style of the management and leadership course, though this course did also involve group and self-completion activities. Despite apparent issues with the teaching format of the first two courses, one interviewee recounted that both helped her to recognise the importance of managing people. Another recognised the importance of becoming familiar with the corporate environment and suggested that the company law course be repeated but in a more accessible format. It seems that the first two courses' content was appropriate, but that attention should be given to the approach to learning to match the capabilities of participants.

A planner at TCT noted that it was a general problem that the mindset and needs of people in the paratransit industry was not well understood. He noted that this lack of understanding was common amongst civil servants and consultants, who rarely worked directly with paratransit operators. In the context of the programme this also explained participants' comments on the first two courses' training approach. These courses' facilitators would commonly work with corporate clients with very different educational backgrounds and day-to-day work environments compared to a paratransit audience. It would be a challenging task indeed to adapt existing courses' content and learning formats to such an unknown audience.

The reception of the third and fourth courses – respectively on public transport planning, and on scheduled bus operations – was more positive than that of the first two courses. (This was the case despite the efforts mentioned at the beginning of this section to manage bias due to the interviewer's participant-observer status on these courses.) Firstly, these courses were on topics that were more familiar to participants: the vast majority of them were directly involved in public transport operations on a daily basis and could engage more easily with the courses' content. Secondly, the courses were developed specifically for the programme and for these participants. Through the facilitator's prior research amongst and engagement with paratransit operators (see [Schalekamp, 2015](#)) it was an easier task to set the content and training format at an appropriate level, and, moreover, to develop a rapport with participants. As a result most of the sessions were highly interactive and rather resembled group discussions than lectures. Thirdly, these courses were presented on the University of Cape Town's campus, which elicited great pride amongst participants. Both during interviews and course sessions participants commented that they never would have expected to get the opportunity to be at a university, with one capturing it simply and powerfully: "I'm at UCT!" To people whose core business was commonly villainised, the legitimisation of their existence in this manner emerged strongly as a positive experience amongst participants.

The component of the transport-oriented courses that was commented on most frequently was the session during which the facilitator and participants collectively determined the profitability of a paratransit business. The facilitator drew up a spreadsheet using a laptop and projector, with participants providing the cost and income line items and debating the values that should be assigned to each. During the interviews and after the sessions many participants remarked that the exercise helped them to better understand their present businesses from a financial point of view and that financial record-keeping could be a great tool for them to improve their own businesses. Nonetheless, as reported during the interviews and from observations during sessions it was clear that many participants struggled with assimilating the knowledge necessary to be able to do comprehensive financial and fleet planning

unassisted after just one short course.

The interviews suggested that the first year's courses were too theoretical and limited in duration and depth to make a direct impact on the way that participants conducted business, but importantly also that to date the programme has succeeded in creating consciousness of the broader transport and business environments in which participants operated. One participant interviewee captured the sentiment by remarking that the courses opened his eyes to the complexity of doing business in a "formal" (i.e. corporate) environment, while another stated that the programme provided "psychological preparation" for reform. These are significant steps forward when viewed against the initial scepticism with which participants entered into the courses.

## 7. Programme continuation

On 1 September 2015, a week after the graduation ceremony, the Mayoral Committee Member for TCT announced a fundamental shift in the municipality's approach to public transport reform ("[Game-changing policy ...](#)", 2015). Rather than consolidating all paratransit operations in Khayelitsha and Mitchells Plain into BRT operating companies to run MyCiTi services, the municipality would focus on assisting associations and operators to form transport operating companies (TOCs) to run minibuses as an integral part of the MyCiTi system. Existing paratransit operating license-holders would exchange their licenses for shares in a TOC, with the potential for the municipality to help fund the capitalisation of the TOC as its financial contribution to industry transition. This move could also allow TOCs to adjust vehicle and fleet sizes to be more appropriate to passenger demand. Where TOCs operate from the same public transport interchange facility the municipality could also assist such TOCs to collectively form a regional transport company (RTC). This joint company could manage the interchange facility as well as related depot, security, advertising and other services.

It might be the case that some route associations will have to be combined into a TOC to make it a financially viable entity. The municipality will have to conduct surveys to assess such viability, but a likely result is that there will be fewer companies than the current number of 28 route associations in the two areas. As part of the preparations for the second year of the programme the planners identified particular management positions that would have to be filled in the resulting TOCs and RTCs, as well as the knowledge areas in which such candidates' skills should be developed. The planners also conducted a skills audit amongst the initial year's group of  $\pm$  90 programme participants. From this audit (see summary of results in [Table 1](#)), as well as the course and learning potential assessments, the planners identified individual participants who showed promise to take up management positions in the new companies in due course. Rather than the initially proposed number of 30 candidates, due to budget savings on the programme in the first year a total of 46 such candidates continued into the second year.

The topics that underpin the programme's second year courses include public transport operations and company set-up in greater detail than in the first year, as well as human resource management, business planning, financial management, and contractual agreements and related negotiation skills. These courses will take into account participant feedback, paying particular attention to making strong connections between the presented content, candidates' own experiences, and the operations of the envisaged

**Table 1**  
Summary of skills audit amongst year 1 programme participants.

	All participants in year 1	Participants in year 1 who did not continue to year 2	Participants in year 1 who continued to year 2
<i>Total number of participants</i>	<b>89</b>	43	46
Female	<b>26</b>	9	17
Male	<b>63</b>	34	29
<i>Basic education</i>			
Finished high school (grade 12)	<b>41</b>	13	28
Finished grade 9–11	<b>24</b>	12	12
Computer literate	<b>27</b>	12	15
<i>Other education</i>			
Certificate	<b>21</b>	10	11
Diploma	<b>13</b>	3	10
Degree	<b>1</b>	0	1
<i>Professional qualifications</i>			
Driver's license	<b>66</b>	32	34
Professional driving permit <sup>a</sup>	<b>15</b>	6	9
<i>Industry positions</i>			
Association chairperson	<b>5</b>	2	3
Association secretary	<b>6</b>	1	5
Association treasurer	–	<sup>b</sup>	2
Association office management	–	<sup>b</sup>	6
Vehicle owner	–	<sup>b</sup>	14
Vehicle driver	–	<sup>b</sup>	2

<sup>a</sup> A legal requirement for transporting passengers or goods for reward.

<sup>b</sup> Data not collected for this group of participants.

companies and vehicle fleets.

There are some concerns from a reform management point of view that span well beyond those who will have successfully concluded the programme. A first concern is that the three years that have been set aside for the programme and for the interim vehicle operating contract will likely be insufficient to adequately capacitate candidates who might run the new companies. This applies equally to the management positions and to the technical apprenticeships. Should the three years be inadequate then there is the real risk of mismanagement within the new companies due to a lack of practical experience amongst the new corps of managers. This will have to be assessed on an on-going basis once such companies are formed, but the looming conversion of the three-year interim contract to 12-year vehicle operating contracts concluded with each of the TOCs is a constant factor placing pressure on the industry transition team. A second key concern is around managing the social and employment aspects of the reform process. A possibility that the programme planners are aware of is that too few people will have been capacitated at the end of the programme to populate the new companies. A register has been created of the participants in the first year of the programme who are not part of the 46 continuing candidates. They will be prioritised for employment within the new companies should opportunities present themselves, though they will not have had the benefit of the on-going training that the continuing candidates will be party to. A third concern is that three years might not be enough to establish the new companies and/or for the 12-year contracts to be in place. The candidates successfully completing the capacity building programme would thus stand idle, with neither a certain prospect of further training or of employment outside their current positions in the paratransit industry.

There is, however, also the much larger group of people who have had little or no exposure to the reform process except by word of mouth through colleagues participating in the programme. This group includes the majority of the 28 associations' operator members and administrators, as well as the rank staff and vehicle drivers who are part of the paratransit industry in the two areas. There is a clear need for an industry-wide information and education campaign to manage the expectations of those who could not be accommodated in the programme. This is something that ODA proposed initially, but it fell outside the scope of what could be included in the three-year interim contract.

## 8. General reflection and conclusions

Though there is a variety of training courses in existence in the open market that might target aspects of existing paratransit operations, there is a dearth of programmes aimed at the paratransit sector that are directly connected with building operators' capacity to participate in conversations around reshaping public transport services. When it was initiated the capacity building programme in Cape Town was unique in South Africa in that it was a pre-emptive attempt to support and train paratransit operators prior to their involvement in full-scale reform and negotiation processes. Since 2016 there have been indications that other cities and regions in South Africa have set out to plan and run similar programmes. Notable examples are the City of Johannesburg, which has partnered with the University of the Witwatersrand, and the City of Polokwane with the University of Limpopo - both targeting similar groups of operators as those in Cape Town. Should the process and progress of these programmes be systematically researched it could serve as a grounds for comparison with the Cape Town programme and broader reform effort in South Africa. It could also provide motivation for other cities and higher education institutions in and beyond this country to engage in similar endeavours. Thus, the scholars involved in such existing and future programmes beyond Cape Town should be urged to document their efforts and outcomes.

Monitoring the impacts of such programmes in practice on an ongoing basis should also be flagged as a worthwhile undertaking. This is difficult to measure in a quantitative manner, but the programme evaluation to date in Cape Town suggests that important impacts include positive shifts in the business practices of paratransit operators within their existing paratransit business context, and in their attitude towards participation in government-led reform programmes. As discussed in the third section of this article, the Cape Town programme was conceived to align with a refocused policy vision; that is, away from comprehensive BRT installation and towards a more inclusive approach relying on upgraded paratransit services and only selective investment in new infrastructure and services. Cities in South Africa and indeed elsewhere in Sub-Saharan Africa are attempting to overhaul public transport systems dominated by paratransit operations by replacing them with and/or incorporating them in BRT systems, with numerous risks. Evidence suggests that in many of these cities there has been resistance from paratransit operators to participate in reform, proposed implementation timeframes had to be extended in practice, or the scope of reform projects had to be scaled back due to capital and/or operating funding challenges. The potential of securing participation from the paratransit sector in public transport reform through targeted capacity building is a topic worthy of exploration, especially if such training could lead to their informed and voluntary participation in reform processes and, crucially, to stimulate self-driven improvements in existing paratransit operations.

Understanding and documenting the impacts of capacity building programmes amongst paratransit operators is also relevant in view of the limited scholarly literature on practical experiences with, and alternative approaches to, public transport reform in Sub-Saharan African cities. Such alternatives include working with paratransit operators to understand their attitudes to reform and to develop their professional skills to manage their businesses more effectively. As discussed in the introductory section of this article, the discourse in the public transport reform arena in this region is dominated by discussions and literature on the benefits and technical considerations of installing BRT as the main means of bringing about positive change in the public transport sector, with little voice given to the complexities, costs and failures of getting this approach to work effectively in cooperation with the dominant existing service providers. That urban public transport systems in the entire region are in need of improvement is unlikely to be questioned; what is still a necessity, however, is to expand the existing discourse with accounts from across the region of both the successes and failures of processes that aim to reform these systems in practice.

A last point is that there is a social equity aspect to paratransit capacity building programmes, and one in which higher education



institutions might play a role. Paratransit operators across Sub-Saharan Africa provide a critical urban service, yet this contribution to society is often overshadowed by the shortcomings of their operational model. Operators are certainly not without blame for competing violently on the road or for insufficient fleet maintenance, yet the lack of decisive action on the part of government agencies to bring public resources to bear on these and related problems could well be an equally important contributing factor. With the paratransit sector being highly atomised there is much scope for perceived power imbalances and distrust to emerge in this sector's relationship with government. Capacity building programmes such as that referred to in this article could contribute in a meaningful way to levelling the playing field and opening constructive channels of communication between operators and government. This could, amongst others, be spurred on by equipping operators to reflect critically on their business practices, understand their role in the transport ecosystem, and be exposed to constructive ways in which to manage conflict and engage with authorities. What the Cape Town programme has also demonstrated is that a university can provide a space and guidance for these crucial discussions to take place, and as such become a direct role-player in transformative action.

## References

- Ardila-Gomez, A., 2004. Transit Planning in Curitiba and Bogota – Roles in Interaction, Risk, and Change. (Ph.D. Thesis) Massachusetts Institute of Technology.
- Behrens, R., et al., 2016. An introduction to paratransit in Sub-Saharan African cities. In: Behrens, R. (Ed.), *Paratransit in African Cities: Operations, Regulation and Reform*. Earthscan Routledge, Oxford, pp. 1–25.
- Cervero, R., 2000. *Informal Transport in the Developing World*. United Nations Human Settlements Programme, Nairobi.
- City of Cape Town, 2007. *Public Transport Implementation Framework – Integrated Public Transport Network*. City of Cape Town, Cape Town.
- City of Tshwane, 2016. < <http://www.tshwane.gov.za/sites/areyeng> > (accessed 14 December 2016).
- Coetzee, C., 2012. De Lille Has Big Plans for MyCiTi Buses. *Cape Times* (31 December).
- Embarq, 2013. *Social, Environmental and Economic Impacts of BRT Systems: Bus Rapid Transit Case Studies From Around the World*. World Resources Institute, Washington DC.
- Finn, B., 2012. Towards large-scale flexible transport services: a practical perspective from the domain of paratransit. *Res. Transp. Econ.* 3 (2012), 39–49.
- Flores, O., 2013. *Expanding Transportation Planning Capacity in Cities of the Global South: Public-private Collaboration and Conflict in Chile and Mexico*. (Ph.D. Thesis) Massachusetts Institute of Technology.
- Game-changing policy for minibus-taxi industry to serve before Council, 2015. City of Cape Town Media Release, 1 September.
- GIZ and Embarq, 2013. *Sustainable Urban Transport – International Review of National Urban Transport Policies and Programmes*. GIZ and Embarq, Beijing.
- Government of South Africa, 2016. < <http://www.gov.za/about-government/government-programmes/bus-rapid-transit-system-brt> > (accessed 14 December 2016).
- Gwilliam, K., 2008. Bus transport – Is there a regulatory cycle? *Transp. Res. Part A* 42 (2008), 1183–1194.
- Hidalgo, D., Gutierrez, L., 2013. BRT and BHLS around the world: explosive growth, large positive impacts and many issues outstanding. *Res. Transp. Econ.* 39 (2013), 8–13.
- Hirsch, M., 2012. BRT for Kampala – the road for poverty reduction and urban survival. In: *Presentation at the 2nd African Public Transport Congress and Exhibition*. Johannesburg.
- ITDP, 2015. *Nairobi Ndovu/A104 BRT Service Plan*. ITDP, Washington DC.
- ITDP and GIZ, 2012. *The BRT Standard*. Version 1.0. ITDP, New York.
- Jones, S., Tefe, M., Appiah-Opoku, S., 2015. Incorporating stakeholder input into transport project selection – a step towards urban prosperity in developing countries? *Habitat Int.* 45 (2015), 20–28.
- Joubert, J., 2013. *Gauteng: Paratransit – Perpetual Pain of Potent Potential? Megacity Mobility Culture: How Cities Move on in a Diverse World* Ed Institute for Mobility Research (Ifmo). Springer, Berlin, pp. 107–126.
- Kumar, A., Barrett, F., 2008. *Stuck in Traffic: Urban Transport in Africa*. Africa Infrastructure Country Diagnostic and The World Bank, Washington DC.
- Kumar, A., Diou, C., 2010. *The Dakar bus renewal scheme – Before and after*. Sub-Saharan Africa Transport Policy Programme Urban Transport Series: Discussion Paper No. 11. The World Bank, Washington DC.
- McCaull, P., Ntuli, S., 2011. Negotiating the deal to enable the first Rea Vaya bus operating company: agreements, experiences and lessons. In: *Proceedings of the 30th Southern African Transport Conference*. Pretoria.
- McLachlan, N., 2010. The introduction of bus rapid transit systems in South African Cities – participation of the minibus taxi industry – a model for sustainability or a recipe for failure? In: *Proceedings of the CODATU XIV Conference*. Buenos Aires.
- Mejía-Dugand, S., Hjelm, O., Baas, L., Rios, A., 2013. Lessons from the spread of bus rapid transit in Latin America. *J. Clean. Prod.* 50 (2013), 82–90.
- Mobereola, D., 2009. *Lagos bus rapid transit – Africa's first BRT scheme*. Sub-Saharan Africa Transport Policy Programme Urban Transport Series: Discussion Paper No. 9. The World Bank, Washington DC.
- Mtulya, A., Matiko, D., 2016. Tanzania: New Dawn as Tanzania Launches Rapid Transit Bus Service. *The East African*. < <https://goo.gl/twPSzo> > (accessed 14 December 2016).
- Municipal Finance Management Act, No. 56 of 2003, 2004. *Government Gazette 464(26019)*. Republic of South Africa, Pretoria.
- MyCiTi, 2016. < <http://myciti.org.za/en/home/> > (accessed 14 December 2016).
- National Land Transport Act, No. 5 of 2009, 2009. *Government Gazette 526(413)*. Republic of South Africa, Pretoria.
- Pedro, M., Macario, R., 2016. Pedro and Macario, in press. A review of general practice in contracting public transport services and transfer to BRT systems. *Res. Transp. Econ.* 59 (2016), 94–106. <http://dx.doi.org/10.1016/j.retrec.2016.07.010>.
- Schalekamp, H., 2015. *Paratransit Operators' Participation in Public Transport Reform in Cape Town: A Qualitative Investigation of their Business Aspirations and Attitudes to Reform*. (Ph.D. Thesis) University of Cape Town.
- Transport for Cape Town, 2015. *MyCiTi Business Plan Update: Phase 1 and N2 Express*. City of Cape Town, Cape Town.
- UITP, 2008. *Overview of Public Transport in Sub-Saharan Africa*. UITP, Brussels.
- UITP, 2010. *Public Transport in Sub-Saharan Africa – Major Trends and Case Studies*. UITP, Brussels.
- Van Ryneveld, P., 2015. *Funding Frameworks for Public Transport Capital and Operating Expenditure in South African cities*. Lecture, University of Cape Town course, Public Transport Policy and Regulation.
- Van Schalkwyk, D., 2009. *A Troubled Journey: The South African Government and the Taxi Recapitalisation Policy, 1998–2008*. (D.Lit et Phil Thesis) University of Johannesburg.
- Venter, C., 2013. The lurch towards formalisation: lessons from the implementation of BRT in Johannesburg, South Africa. *Res. Transp. Econ.* 39 (2013), 114–120.
- Wood, A., 2014. The politics of policy circulation: unpacking the relationship between South African and South American cities in the adoption of bus rapid transit. *Antipode* 47 (4), 1–18. <http://dx.doi.org/10.1111/anti.12135>.
- Woolf, S., Joubert, J., 2013. A people-centred view on paratransit in South Africa. *Cities* 35 (2013), 284–293.