



PUBLIC TRANSPORT SKILLS

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CONTENTS

Introduction	3
Integrated Rapid Transit (IRT) Systems	4
Characteristics of IRT systems	4
South Africa and IRT	5
The Skills Framework	6
Strategy	6
Planning	8
Design	9
Building	9
Operations	10
Maintenance	11
International Case Studies	13
Medellín: IRT contributing to socioeconomic development	13
Hong Kong Mass Transit Railway Corporation: integrating rail and land development	15
Conclusion	16
Annexure: NLTA 2009 Municipal Responsibilities	17

Introduction

South African cities are latecomers to integrated rapid transit (IRT). Chronic underinvestment in mass transit during Apartheid and the complex division of powers, functions and responsibilities across all three spheres of government have been major challenges to realising the vision of mass integrated rapid transit.

Government has recognised that IRT can contribute to urban spatial transformation and help redress the imbalances of the past. What is not clear is whether South Africa has the skills necessary for IRT. To date, there has been no thorough analysis or framing of the skills required to plan, operate and manage integrated transport effectively. This has resulted in unsubstantiated claims that South Africa lacks the necessary transport skills.

Therefore, the SA Cities Network has undertaken research into the skills and capacities required for IRT and developed a framework that can be used to assess the skills capacity of city transport authorities.

This research is the first step along a much longer journey of analysing and unpacking the skills and capacities required for IRT, which is a complex system. IRT is a multidisciplinary domain and is fundamentally linked to the urban built environment. The activities of a transit/transport authority are not linear, and identifying functional boundaries is difficult. Thus this report does not claim to provide any absolute answers. However, what is certain is that people make systems run efficiently and that rapid transit is as much a human system as it is a mechanical system.

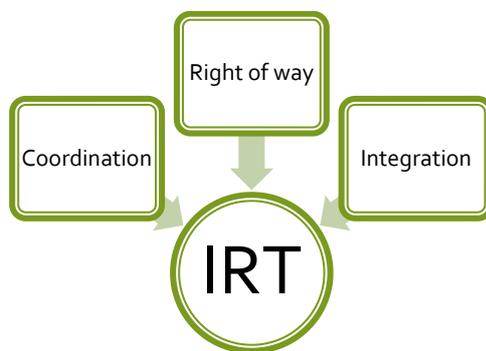
After explaining the characteristics of integrated rapid transit (IRT) systems, a framework is presented that incorporates six functional areas or responsibilities – the ‘pillars’ of the framework. To set the context, the success of two international IRT case studies (Medellín in Colombia and Hong Kong) are examined. The report concludes with some key questions to guide South Africa’s transit authorities in developing the skills and capacities necessary for the efficient management of IRT systems.

Integrated Rapid Transit (IRT) Systems

“People still catch trains, trains still run on tracks, and the main thing is still... taking people from point A to point B. But it’s not as simple as that: there’s a lot of work that goes into this. A lot of work that people don’t see; like the towermen in the tunnels and whatnot; the planning or the buying or the laying of tracks. That’s a mega-operation. (Whitfield Lee- A Railroad Clerk)

Before proceeding with the analysis, it is important to define IRT systems to gain a shared understanding of the concepts and terminology used. IRT systems operating at full capacity are complex. Some of the busiest transit systems are found in Beijing, Shanghai, Tokyo, Singapore, New York, Mexico, Hong Kong and London.

Characteristics of IRT systems



Coordination

A high level of institutional coordination is needed for implementation, contracting and regulating. The design of the overall system should be carried out in a comprehensive manner within the context of a city development strategy or transport strategy.

Right of way

An exclusive right of way allows for efficient movement of high volumes of passengers uninterrupted by the normal flow of road transport. IRT are physical infrastructure systems that intersect, but segregation is critical to providing a rapid service. The American Public Transit Association defines rapid transit as rail or ‘motorbus’ transit services operating completely separate from all modes of transportation on an exclusive right of way. For example, busways – segregated sections of roadways for Bus Rapid Transit (BRT) – usually involve the reallocation of existing road space, while metros are fully segregated, usually elevated or underground.

Integration

Interchange is the key to an integrated public transport system, with rail systems and busways operating ‘trunk-and-feeder’ services requiring more interchange. The report developed for the French Development Agency (AFD) identifies three types of integration: *physical* (direct connections from one service to another, usually involving transfer facilities and terminals); *operational* (the coordination of schedules and frequencies so that the service is guaranteed and wait times are not excessive); and *fare integration* (free or reduced cost transfers, usually through advanced ticketing systems).

It should be noted that, while these characteristics are specifically focused on IRT, pedestrian mobility (walking and bicycling) must be considered and integrated into the overall network.

South Africa and IRT

Given the years of chronic public underinvestment in transit during the Apartheid era, South Africa has lagged international cities but is starting to make significant progress in developing IRT networks. One of the recent major policy shifts in South Africa is the devolution of transport-related powers and functions to municipalities. The Public Transport Strategy of 2007 defines three important roles for municipalities: integrated rapid public transport network implementation plans, municipal control over integrated networks and a maximum stake for existing bus/minibus sector in integrated networks.

Rapid trunk routes for some rail and bus services have been introduced into the public transport system. As network coverage is increased, physical integration with direct connections from BRT and rail involving transfer facilities and terminals will emerge. Operational integration through the coordination of schedules and frequencies are in the planning stages in the City of Cape Town and Johannesburg. Fare integration through advanced ticketing systems is also in the planning stages.

The National Land Transport Act (NLTA), No. 5 of 2009, includes the provision for the creation of transport authorities. The City of Cape Town is the first city in South Africa to have successfully established a transport authority: Transport for Cape Town (TCT), which was launched in October 2012.

Box 1: Defining Integration of mass public transit

From the point of view of the service user, this integration means, on the one hand, well-coordinated timetables, fares and information and on the other hand, the creation of station facilities which allow for easy interconnections between lines and modes of transport.

From the point of view of transport professionals, this integration is an essential part of ensuring that the costs of operating the transport system are met. Collective transport networks appeal to a wider public, whilst offering the possibility of collaborative projects and economies of scale.

When integration is absent, 'physically' (connections at stations), as well as 'systematically' (ticketing) or 'financially' (fare tables), transport modes may compete with each other. In this case, the operating result of each of the participating companies is directly threatened. Therefore, integrated networks are synonymous with economic efficiency.

Source: Codatu. 2012. Challenge of integrating transport networks. Proceedings of the seminar Management and Operation of Hanoi's Mass Transport System, Hanoi, 19 November 2013, page 10.

The Skills Framework

A skills framework provides a basis for industry players to assess skills capacity across a range of planning and operational areas. The purpose of the framework is to create a shared understanding of how transit agencies work, how they deliver services and how their business models work. By developing such a framework, municipalities are actively supported to develop the skills and capacity needed to plan, build, manage and operate mass public transit.

IRT is a multidisciplinary domain and is fundamentally linked to the urban built environment. As the activities of a transit/transport authority are not linear, identifying functional boundaries is difficult. Nevertheless, six functional areas or responsibilities – the ‘pillars’ of the framework – have been identified: strategy, planning, design, building, operations and maintenance. They are by no means exclusive as each pillar impacts on all of the others in some or other way

These pillars are the core planning activities of any transit agency and depict the breadth of processes required for mass public transit networks. From this basis, the type of skills required can be assessed. For example, strategy and planning require expert conceptual and interpersonal skills, whereas design and building need a set of built environment skills. Operations at the front end involve well-developed interpersonal skills to manage customer relations, while back-end operations require specialist information management skills, and specialist technical skills are necessary for maintenance.

Figure 1: Components of the skills framework



This framework is just the beginning and is intended to allow officials to think more comprehensively about the range and depth of skills required for mass transit in the South African context. Its aim is to help officials to design their own transit organisations by mapping the base skills and capacities that are both available and required.



Strategy

IRT needs to be developed as part of a larger comprehensive land use, urban form and transport strategy. Transit strategies, as part of broader city development plan, share a common process, which is not linear but rather a set of integrated activities. They have four distinct characteristics: diagnostic research, visioning, stakeholder participation, and strategy design and writing.

- Diagnostic research is about defining the cause of problems and recognising key data trends, for instance traffic demand modelling, or estimating user demand. A participatory diagnostic approach entails working with communities and stakeholders to define problems at a community user level.
- Visioning can be inclusive and participatory, or may originate from political leaders, such as a city's mayor. Community visioning builds active citizenry, ensures community oversight and creates commuter vigilance.
- Stakeholder participation involves a diverse range of stakeholders – taxpayers, citizens and customers, private companies that have invested in mass public transit projects, labour organisations, government departments, and private bus and train operators – and is important for building rapport with organised groups.
- Strategy design and writing.

Skills required for Strategy

The inclusive participatory approach necessary for IRT is different to the normative techno-bureaucratic approach to strategy making process. The skills required for the different aspects are as follows:

Diagnostic research requires an ability to work with complex statistics, to produce forecasts and scenarios, and to translate complex data into a story that the diverse range of stakeholders can understand. Key skills required:

- Research skills. While highly specialised research is often outsourced to consultants, the design of the research process is the responsibility of municipal staff.
- Analytical skills. The South African policy environment and intergovernmental system are complex, and so the ability to analyse policy and funding options is important.
- Statistics and research methods. Transit planning involves complex transport datasets.
- Forecasting, modelling and scenario planning skills.
- Highly developed writing skills.

Visioning requires being able to work with a range of stakeholders (especially communities), to translate visions into a set of actions, and to lead the vision process. Key skills required:

- Leadership skills, in particular the capacity and ability to lead political teams who are capable of designing outreach processes.
- Analytical and conceptual skills help when developing visioning exercises and facilitation processes to engage communities.
- Organisational skills are necessary for ensuring all stakeholders are engaged with and involved through (e.g.) community workshops and events.
- Facilitation skills, so that discussions during stakeholder engagements are managed as part of a process.

Stakeholder participation is about engaging and inviting contributions from all stakeholders, not simply placating certain groups, and requires the ability of communicate and to listen. Key skills required:

- Process design and analytical skills.
- Political and negotiating skills to analyse key stakeholder positions and create win-win solutions.
- Technical support skills such as speech writing, setting terms of reference and developing presentations.
- Facilitation and listening skills.

Strategy design and writing is fundamentally about solving problems, developing solutions and communicating complex information in a clear way. Key skills required:

- Conceptual problem solving skills and systems thinking.
- Writing and communication ability.
- Ability to edit and structure documents.
- Ability to develop a storyline and make use of various writing techniques.



Planning

Strategies are long-term plans, whereas planning refers to responses to more immediate problems, through five-year or one-year transport plans. Municipalities can address the legacy of apartheid-era planning by developing contextually driven solutions, using an integrated and coordinated approach across departments to align project implementation plans and budget spending. This involves:

- Developing business models that leverage land values for transit infrastructure development.
- Packaging and designing projects, including cost benefit analysis.
- Understanding property development and how to leverage integrated land use and transit planning.

Skills required for Planning

In addition to technical planning skills, the other two main critical skills sets required are:

Land-based financing skills. Land is an instrument for urban infrastructure finance. Most land financing generates upfront revenue for transit agencies, thereby reducing the dependence on debt and fiscal risks. It involves understanding financial management, property development and business development. Development finance skills is a term used to describe these skills and includes how institutional mechanisms for land financing work, e.g. public-private partnerships (PPPs).

Business modelling skills. Land is just one form of financing. The business of mass public transit provides other revenue opportunities, for instance through retail development that targets commuters at transport interchanges. Business modelling skills require a background in financial accounting, business management, strategy and innovation, as well as an understanding of the transit sector.



Design

Design equates to value. Good design is at the centre of successful IRT systems because IRT extends beyond transport planning to encompass placemaking. In other words, the quality of urban environments in and around mass public transit is as important as efficient operations. Design consists of detailed precinct plans, site plans, frameworks, engineering detail drawings and architectural drawings. The three elemental pillars of design are:

Image making. This involves creating a visual experience and providing information for the transit users, through the stations, bus stops, route maps and signs. Visual communication also enhances the brand of the transit agency to commuters.

Object making. This refers to the design of elements such as railway track gauges, digital signboards, turnstiles and buses.

Placemaking. In mass transit planning, placemaking, through urban design, land-use planning and architecture, takes centre stage. Integrated mass transit is part of a larger placemaking process, which is fundamental for improving cities for citizens and visitors.

Skills required for Design

Much of the design work, especially related to image and object making, is outsourced to (e.g.) brand and communication specialists, graphic designers or industrial engineers. Therefore, in addition to built-environment planning skills, municipalities need to have people with:

- Design literacy capacity, to be able to set the terms of reference and manage the quality of designs.
- Research and quality assurance skills, to ensure suppliers that produce high quality products.
- Procurement and contracting skills, to manage the outsourcing effectively.



Building

The prevention of accidental deaths and damage to infrastructure starts with good construction. Transit agencies do not have direct interaction with construction workforces, as the contracts are outsourced, but must still ensure that all building codes and rules are adhered to.

Skills required for Building

The role of transit agencies is to manage the contracting process, which requires these key skills:

- Procurement and contracting skills, including writing skills for the terms of reference and legal expertise for drafting tenders and limiting liability.

- Contract and construction management skills, which includes the ability to manage community participation and involvement.
- Project management skills, to ensure infrastructure is delivered on time and within budget.
- Administrative skills are needed for processing payments and exercising financial oversight and management.



Operations

Mass public transit is a customer-intensive business, and so operations are all about customer experience. As millions of commuters interact with the service, managing customer relationships is a vital aspect. Operations may be delivered through various channels, including using private operators, establishing PPPs or direct management. Operations consist of front-end and back-end systems. The front-end system is what the customer physically engages with (the 'customer interface'), whereas the back-end system is what ensures the entire system keeps moving (e.g. operations control room, website management, servicing of trains).

Skills required for Operations

The three clusters of skills are needed, for the front-end (customer interface) and back-end operations, and information technology.

- Front-end skills include interpersonal and communication skills. All personnel that interact with the customer (e.g. in the ticket office, security guards) need to be courteous, friendly and knowledgeable about the service and their role in the operations. Customer service excellence requires on-going training in standard operating procedures and service knowledge, so that customer queries can be responded to speedily.
- Back-end skills are technical and involve processing, monitoring and managing large volumes of information, so that call centres and control rooms are accessible, trains or buses are fit for use, and front-end IT systems keep working (i.e. online information, phone apps).
- IT skills, as technology is the backbone of mass public transit, controlling point of sales, and route planning and scheduling, among others. Computer literacy is a base skill, while systems and software knowledge is critical. Advanced computer programming skills and software engineering and development are required.

When the design and development of IT systems are outsourced, municipal staff must have sufficient technical knowledge (to set the terms of reference) and contract management skills (to ensure software and hardware systems are integrated).



Maintenance

Maintenance of mass public transit infrastructure is personnel-intensive and requires skilled artisans and technicians. In developing countries, maintenance offers an opportunity to use community labour, thereby creating local employment.

Skills required for Maintenance

Three clusters of skills are needed, for rail and bus fleets, station facilities and related infrastructure, and road and rail track infrastructure. Skills across these clusters range from general maintenance to specialised artisan skills and expert engineering. Key skills required:

- Conceptual problem-solving skills.
- Technical (often specialist) skills, including rail maintenance.
- Contract management skills, to ensure quality control and minimal service interruptions.
- Process planning, scheduling and budgeting skills, for managing routine and unplanned maintenance.

						
	Strategy	Planning	Design	Building	Operations	Maintenance
	Four distinct characteristics: diagnostic research, visioning, stakeholder participation, and strategy design and writing.	Coordinated , integrated approach that involves developing business models, packaging/ designing projects, and understanding property development.	Three elemental pillars of design: image making, object making and placemaking.	The role is to manage the contracting process, ensuring that service providers adhere to all relevant rules and regulations.	Operations consist of front-end and back-end systems, as well as the supporting IT systems.	Maintenance of mass public transit infrastructure is personnel-intensive.
Key skills required	<ul style="list-style-type: none"> • Analytical and conceptual skills • Facilitation and listening skills • Forecasting, modelling and scenario planning skills. • Writing skills • Leadership skills • Organisational skills • Political and negotiation skills • Process design skills • Research skills • Statistics and research methods 	<ul style="list-style-type: none"> • Business modelling skills • Development finance skills • Financial management skills • Land-based financing skills 	<ul style="list-style-type: none"> • Built-environment planning skills • Design literacy capacity • Procurement and contracting skills • Research and quality assurance skills 	<ul style="list-style-type: none"> • Administrative skills • Contract and construction management skills • Procurement and contracting skills • Project management skills 	<ul style="list-style-type: none"> • Contract management skills. • Information processing, monitoring and managing skills • Interpersonal and communication skills. • IT skills, from computer literacy to programming and software development skills 	<ul style="list-style-type: none"> • Conceptual problem-solving skills • Contract management skills • Process planning, scheduling and budgeting skills • Rail and bus maintenance skills

International Case Studies

The framework provided above is a useful conceptual tool to understanding skills but cannot serve as an analytical framework. It simply serves to guide key questions, given the lack of information explicitly detailing public transport system skills internationally. Nevertheless, two international case studies – Medellín in Colombia and Hong Kong – provide some useful lessons for South African cities on the successful implementation of IRT networks.

Medellín: IRT contributing to socioeconomic development

Medellín was selected as a case study because the conditions of informality, poverty, inequality and violence are similar to the South African urban experience. In just 15 years, Medellín has built social cohesion, through integrating its bus, rail and metrocable systems. Medellín transit system comprises the Metro (over-ground), the *Metrocables* and the *Metroplús* (BRT system of articulated buses with dedicated road lanes).

In Medellín, transit is viewed as more than just the movement of people but rather as a way of connecting communities to social services and amenities (e.g. libraries, clinics, schools, parks). In other words, IRT is considered an integral aspect of socioeconomic development. This focus on socioeconomic outcomes is the reason why Medellín stands out from other international best practice. Planning issues of housing, education, mobility and health are addressed as an integrated whole. Urban designers, town planners, engineers and architects are brought together as part of an integrated project design model with communities. Mayor Salazar, a former journalist who started the process, also included academia and the private sector in the decision-making process.

The success of Medellín can be attributed to the combination of skills set that produced innovative ideas and practical results. Elements that contributed to Medellín's success include:

- **Community involvement:** municipal staff engaged with organised communities and designed effective community participation processes (including site visits, mapping and problem identification). Communities that lived near the new projects were part of the design process and helped control the construction's quality. Out of these processes came the novel idea of cable car systems – *Metrocables* – that enabled communities living on steep mountainside slopes (where there was minimal road infrastructure) to access public transport networks. The use of local labour is a feature of all public contracts, while the introduction of participatory budgeting allows local communities to decide collectively on the use of 5% of the municipal budget allocated to these areas for investment. During the construction stages, local labour accounts for 92% of the labour force employed. Thereafter, local labour is used for maintenance work, through community compacts between the city and neighbourhood committees
- **Development finance:** the feeder systems (cable cars and BRT, which are relatively cheap and quick to construct) connected with a strong backbone of rail. Medellín's cable-car systems are a

public sector project, financed jointly by the municipality and the *Metro de Medellín*. The low construction costs make public sector capital borrowing feasible.

- **Urban design** ('the complete streets approach'): the Walkways and Emblematic Streets Programme physically integrates public walkways with rapid rail, cable car and BRT facilities. Expanded BRT trunk routes are planned together with pedestrian cycle and walkways that followed the length of the BRT trunk route. Pedestrian bridges span across mountain overpasses connecting neighbourhoods across valleys, while public squares carved into hillsides and concrete staircases allow for pedestrian access up and down slopes.
- **Architecture** ('to the poor the most beautiful'): architecture is used to create beauty in some of the poorest neighbourhoods. Community design workshops are held to empower communities. Architectural buildings are multifunctional creating a one-stop shop for social amenities including library parks, clinics and information centres. BRT trunk routes connect and stitch together these important social buildings. Medellín views transit as successful only if planned together with places of social significance and value.

Hong Kong Mass Transit Railway Corporation: integrating rail and land development

The vision of Hong Kong's Mass Transit Railway Corporation (MTRC) is to build and connect communities – users are at the centre of its business model. The MTRC is regarded as one of the world's leading companies for safety, reliability, customer service and cost efficiency. It stands out for its ability to operate at a profit: the percentage of operational costs covered by fares is the world's highest (at 185%) – Singapore has the next highest percentage, at 125%.

The success of the MTRC can be attributed to the company's ability to leverage local contextual conditions. The high urban densities of Hong Kong are conducive for high volume ridership, and high land values are used as a competitive strategic advantage. The MTRC's approach includes property (investment, management and development) and transit operations and commercial business around stations. The company's property model integrates rail and land development, using property development to finance the operations and construction costs of rail. Elements that contributed to Hong Kong's success include:

- **Land development finance:** government's property assets are leveraged, as strong collaboration and coordination with central government has enabled the MTRC to obtain access to government-owned land at railway stations and along routes.
- **Planning process:** the site planning process is aimed at ensuring the design of high-quality environments that provide the best user experience (through ensuring access between stations and surrounding land uses), improve the overall property value and minimise exposure to property market risks.
- **Project development:** project costs and benefits, as well as the revenue model are defined upfront, and then development packages are offered to private developers through public tenders. Successful bidders develop detailed site and engineering designs based on the specifications of the development agreement with the MTRC.
- **Multi-disciplinary, integrated teams** include property planners and transport planners. Just as real estate interests and transport considerations are not necessarily compatible, so too do property planners and transport planners have different objectives. Having transport and property planners collaborating means that they find a common ground.
- **In-house control of construction:** MTRC has direct control over construction works, insuring enforcement of technical control and design standards. In-house construction engineers, civil engineers, quantity surveyors and project managers oversee civil works and project manage the private contractors.

Conclusion

Without a doubt, IRT can contribute to the spatial transformation of South African cities and help redress the imbalances of the past. While the political, social and economic context in Medellín and Hong Kong may differ from that of South Africa, the two case studies nevertheless offer useful lessons and insights.

1. Public transport is as much a human system as it is a mechanical system.

While technical know-how is required to manage complex integrated transit systems, ultimately people make the systems run efficiently. Therefore, the people's skillsets, ethics and abilities underpin the performance of public transport systems.

2. The skills required for IRT go beyond transport systems

The six broad 'pillars' presented in this report provide a guide to the type of skills required for effective IRT systems. As the case studies show, the development of integrated public transport systems can generate benefits in other areas of urban society but, to achieve this, requires transport thinking to include areas such as communications, land, property, urban design, sociology and IT. For example, a core objective of public transport investment is the restructuring of spatial patterns, which requires skills in land use and property development.

3. There is a dearth of explicit information on IRPTN skills

The lack of available information makes it difficult to obtain guidance on setting targets for exact skill requirements. Without a sound understanding of what skills are desired, identifying gaps is exceptionally difficult. Cities should prioritise developing a list of desired skills across the pillars, although publishing (and sharing) their understanding of the desired skills is arguably more important.

4. Transport in the 21st century demands a multitude of stakeholders to work together

Public transport cannot be the domain solely of traffic engineers, transport planners and technicians. South African cities, supported by the National Department of Transport, National Treasury City Support Programme, Universities and existing operators need to work towards developing a broader range of skill sets required to deliver effective IRPTN solutions.

Although this report does not provide details of the specific skillsets or the training required to achieve them, it is the start of thinking more critically about what skillsets are needed to achieve effective IRPTNs in South Africa. The case studies highlight that building skills under each pillar is context specific and that public transport skills need to be looked at more broadly. What is clear is that successful transit authorities share the ability to look at the broader environment, involve communities in the design and planning stages, and draw on a complex array of skills.

It is recommended that each city develop a list of desired skills across the pillars, by asking what kind of skills are required that will enable their municipal transport system to have an impact that goes beyond merely transporting passengers from one point to another.

Annexure: NLTA 2009 Municipal Responsibilities

#		Key Competencies	Responsible Business Departments
1	Develop land transport policy & strategy within its area – on national and provincial guidelines, includes: vision for the area, spatial development policies on (e.g.) densification, infilling & development corridors.	Planning & Strategy, Town & Regional Planning	Transport, Planning, Housing, Utilities – Water, Sanitation, Electricity, City Manager's Office
2	Promulgating municipal by-laws and concluding agreements.	Legal & Risk Management	Legal, Risk, Performance Management
3	Coordination between depts. & agencies in municipalities with responsibilities – impact on transport & land-use planning issues, brings together relevant officials.	Leadership & Management	Transport, Planning
4	As planning authority, preparing transport plans for area, ensuring implementation of plan & monitoring performance in achieving its goals and objectives.	Transport Planning, Urban & Regional Planning, Performance Management	Transport and Planning
5	Financial planning with regard to land transport in municipal area: transport planning, infrastructure, operations, services, maintenance, monitoring & administration; focus on rehabilitation & maintenance of infrastructure.	Financial Planning & Management, Public Finance, Infrastructure Finance	Transport, Finance, Infrastructure
6	Managing the movement of persons & goods on land within area by co-ordinating such movement.	Strategy	Transport
7	Encouraging & promoting optimal use of available travel modes to enhance effectiveness of transport system & reduce travelling time & costs.	Transport, Strategy, Planning, Traffic Planning	Transport and Planning
8	Developing, implementing & monitoring a strategy to prevent, minimise or reduce any adverse impacts of the land transport system environment in its area.	Strategy, Transport Planning	Transport
9	Developing, operating & maintaining land transport information system for its area.	Information Technology & Management	Transport/ and or Planning
10	Encouraging/promoting & facilitating public consultation & participation in planning, regulation & implementation of public transport, & applying requirements of the Systems Act.	Public Liaison, Community Development, Social Work,	Transport, Community Development, Ward Committees, Mayor's Office, Political Offices
11	Marketing & promoting public transport & promoting publicity, associated with the public transport system.	Marketing and Communications	Marketing & Communications Department, Transport

#		Key Competencies	Responsible Business Departments
			Department's own communications unit. Mayor's Office
12	Providing information to users or potential users of public transport.	Marketing and Communications	Marketing and Communications, Ward Committees
13	Promoting safety and security in public transport.	Policing, Traffic Management, Public Administration	Traffic Management
14	Ensuring provision needs of special categories of passengers (disabled, women, children) in planning & provision public transport infrastructure & facilities, services to meet their needs, in so far as possible by a system provided for mainstream public transport.	Planning and Operational Design	Planning, Community Development
15	Continuous liaison with South African Police Service, Road Traffic Management Corporation, relevant provincial & municipal law enforcement authorities/agencies. & inspectors appointed under the Cross-Border Act – ensure co-ordinated transport law enforcement within area.	Leadership and Executive Management	Transport
16	Applying traffic management techniques aimed at improving road traffic movement.	Traffic Planning and Management	Transport
17	Undertaking functions relating to municipal roads, as well as measures to limit damage to the road system.	Infrastructure Operations	Roads, Transport
18	Planning, implementation & management of modally integrated public transport networks & travel corridors for transport within municipal area & liaising in that regard with neighbouring municipalities.	Strategy, Leadership, Planning	Transport and Planning
19	In relation to planning functions include service level planning for passenger rail on a corridor network in consultation with South African Rail Commuter Corporation.	Leadership & Executive Management, Legal	Transport, City Managers Office

#		Key Competencies	Responsible Business Departments
20	Introducing, establish, assist establishment of integrated ticketing systems, managing through-ticketing and determining measures for the regulation & control of revenue-sharing among operators involved in those systems.	Operations Management, Finance, IT, Revenue Management	Transport
21	Subject to standards set by Minister under section 5(5) of Act, set standards for interoperability between fare collection & ticketing systems.	Strategy, Planning, IT	IT, Transport
22	Formulate & apply travel demand management measures for area.	Strategy, Planning, Traffic Planning	Transport and Planning
23	In case of gross cost contracts for subsidised services, determining fare structures and fare levels and periodically adjusting fares after publishing proposed adjustment for public comment.	Revenue Planning, Finance, Actuarial Science	Transport, Finance, Risk, Audit,
24	Determining concessionary fares for special categories of passengers in the prescribed manner	Strategy, Statistical Analysis, Actuarial Science	Finance, Transport,
25	Exercise control over service delivery through (i) setting of operational technical standards & monitoring compliance therewith; & (ii) monitoring contracts & concessions.	Risk Management, Revenue Management, Legal,	Risk, Finance, Performance Management, Legal
26	Concluding subsidised service contracts, commercial service contracts & negotiated contracts contemplated in section 41(l) with operators for services within their areas.	Risk Management, Revenue Management, Legal,	Risk, Finance, Legal, Contracting
27	Developing & managing intelligent transport systems for their areas in the prescribed manner.	IT, Planning, Transport	IT, Information Management