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NOTICE 847 OF 1998
DEPARTMENT OF TRANSPORT

REQUIREMENTS AND FORMAT FOR PREPARATION OF CURRENT PUBLIC TRANSPORT RECORDS BY CORE CITIES

The document set out in the schedule hereto, being a shortened, adapted version of the document known as "Transitional information requirements for public transport", as approved by the Committee of Land Transport Officials, has been prepared at the request of the Department of Transport specifically to suit core cities in the interim, and is hereby published for general information.

K GORDHAN Director General

KENNISGEWING 847 VAN 1998 DEPARTEMENT VAN VERVOER

VEREISTES EN FORMAAT BY VOORBEREIDING VAN LOPENDE OPENBARE VERVOER REKORDS DEUR KERNSTEDE

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Die dokument in die bylae hierby uiteengesit, synde 'n verkorte, aangepaste weergawe van die dokument bekend as "Transitional information requirements for public transport", soos deur die Kommittee van Landvervoerbeamptes goedgekeur, is op versoek van die Departement van Vervoer opgestel om besonderlik in te pas by kernstede in die tussentyd en word hierby vir algemene kennisname gepubliseer.

K GORDHAN Direkteur-generaal

SCHEDULE/BYLAE

REQUIREMENTS AND FORMAT FOR PREPARATION OF CURRENT PUBLIC TRANSPORT RECORDS BY CORE CITIES

PREFACE

In as much as the National Land Transport Interim Arrangements Act, 1998 (Act ... of 1998) is designed to provide for new functions to be performed by core cities in respect of their metropolitan transport areas in the period immediately preceding the proposed new national land transport legislation, this document is an edited abridged version of the document known as TPR2 "Transitional information requirements for public transport" as necessitated by the Act referred to above. It stays within the principles and spirit as envisioned in that document which was published with the approval of COLTO. The changes made are of a mere editorial native necessitated by the circumstances of the National Land Transport Interim Arrangements Act.

ABBREVIATIONS

The following abbreviations are used throughout the text of this document:

CPTR

Current public transport record

LRTB

Local Road Transportation Board or equivalent body

SARCC

South African Rail Commuter Corporation

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1. PURPOSE OF THE DOCUMENT

The purpose of this document is to describe the information requirements and format for the current public transport record to be prepared by core cities for their metropolitan transport areas as contemplated in section 6(1) of the National Land Transport Interim Arrangements Act, 1998 (Act No of 1998).

The document provides a step by step process and a time frame for the preparation of current public transport records required in terms of section 6(2) of the Act.

2. STEP BY STEP PROCESS FOR DATA COLLECTION

2.1 DEFINITIONS

For the purpose hereof:

<u>a route</u> means the roads that are traversed by a vehicle from point of origin to point of final destination, consisting of one or more route sections.

a route section means the roads traversed between significant boarding and alighting points. The determination of route sections is of critical importance for the meaningful collection of demand information. In the case of a rail service a route section is that section of the line between one station and the next.

a terminal or rank means a facility at the end of a route or a group of routes where passengers can board and alight. It may include a vehicle holding area.

a stop means a facility within the road reserve where passengers can board and alight.

a holding area means a facility for parking buses and/or taxis between peak periods to avoid dead kilometres and empty return trips. It may be incorporated in a rank or terminal.

2.2 SUPPLY INFORMATION (QUANTIFYING THE STATUS QUO)

2.2.1 Minibus-taxi Services

INFORMATION REQUIRED

Taxi Associations
Operators per Association
Vehicles per operator
Routes per association
Routes per operator

SOURCE(S)

Provincial Taxi Registrar*

^{*} Where appointed in terms of any provincial law

INFORMATION REQUIRED

Ranks used per association (formal/informal)

 Number of bays and amenities available

Holding areas used per association (formal/informal)

 Number of bays and amenities available

Number of trips per route per operator Fares per route Permit details per operator

2.2.2 Bus Services

INFORMATION REQUIRED BY OPERATOR/CONTRACT

Depots Terminals

number of loading bays

- number of parking bays
- amenities available

INFORMATION REQUIRED BY OPERATOR/CONTRACT

Routes
Timetables
Fare tables
Holding Areas
Existing Park-and-ride sites
Permit details

SOURCE(S)

Provincial Taxi Registrar*

Municipality/Surveys Municipality/Surveys Municipality/Surveys

Municipality/Surveys
Taxi Association/Survey
Taxi Association
Local Road Transportation Board

SOURCE(S)

Operator Operator/Municipality

SOURCE(S)

Operator Municipality Operator/LRTB

2.2.3 Rail Services

Where rail services are important to the public transport system the lines and station locations should be obtained and recorded on a map. Timetables and faretables should be obtained and the passenger capacity on each line should be recorded for the morning and afternoon peak periods.

MANAGER OF THE SECTION

CONTRACTOR OF THE PARTY OF THE

and many that

2.2.4 Metered-taxi Services

INFORMATION REQUIREMENTS SOURCE(S)

Permits held by each operator LRTB

"MANAGER LOSE COLORS AS

CELT MARKING CONTROL OF THE CONTROL

tamati na kataopiani 7 paga 190 a.c.

Municipal taxi licences Municipality

Ranks per operator (formal/informal) Municipality/Operators

Number of vehicles per operator Operators

Areas of operation Permits/Operators

Fares/method of charging by operator Operators

2.2.5 Summary (0.08(0.086), 0.8(1)

All of the information collected in terms of this section and utilised in the manner suggested will effectively constitute the interim CPTR.

Note that the first the first the second

2.3 UTILISATION INFORMATION (QUANTIFYING THE STATUS QUO)

The document does not address latent demand. It is concerned with the collection of information about existing ridership volumes in relation to the supply of services quantified in the CPTR. The primary objective is to identify over-and under-supply by route and route section so that-

- the core city can make suitable recommendations to the LRTB with regard to applications for permissions.
- the LRTB can dispose of applications for permissions on the basis of sound information.
- the core city can develop the strategies for the short to medium term and prioritise projects for the rationalisation and improvement of services.
- the core city can plan the preparation of tenders in the knowledge of their potential impact on other services.

2.3.1 Minibus-taxi Services

INFORMATION REQUIREMENTS SOURCE(S) PER RANK

passenger volumes in the peak hour
 average passenger waiting times
 Surveys

passenger needs, requirements and

Surveys

Walley Paster and Albaha

INFORMATION REQUIREMENTS BY ROUTE SOURCE(S)

 passengers carried by route section, or route where information is difficult to obtain

Wilsaketh title

Estimates from number of trips Identified in 2.2.1 cordon/screen line counts.

2.3.2 Bus Services

| INF | ORMATION REQUIREMENT PER TERMINAL | SOURCE(S) |
|-----|---|---------------------|
| • | passenger volumes in the peak hour | Surveys |
| • | number of buses requiring loading bays | Surveys |
| • | number of buses requiring holding bays | Surveys |
| • | average passenger waiting times per route | Surveys |
| • | passenger needs, requirements and priorities | Surveys |
| | ■6.15 (1994) 474-4.55 (1994) ■ (1995) 475 (1994) 475 (1995) 475 (| |
| INF | DRMATION REQUIREMENTS PER ROUTE | SOURCE(S) |
| • | passengers carried per route section in the | |
| | peak hour | Surveys |
| • | passengers carried per route | Operator, waybills, |
| | | surveys |
| • | average waiting times at survey points | Surveys |

2.3.3 Rail services

INFORMATION REQUIREMENTS

SOURCE(S)

| • | passengers carried per route | SARCC/Metrorail |
|---|---|-----------------|
| • | passengers carried per route section | SARCC/Metrorail |
| • | passengers alighting pr station in the morning peak | Survey* |
| • | passengers boarding per station in the afternoon peak | Survey* |

^{*}desirable but not essential for the interim CPTR

2.3.4 Metered-taxi services

INFORMATION REQUIREMENTS PER RANK SOURCE(S)

| • | number of taxis requiring holding space | Surveys |
|-----|---|----------------------|
| 1.5 | most common destinations | Operators/Interviews |
| • | average standing time of taxis | Surveys |

2.3.5 Summary

It is not intended that the information collected should be at the level of detail required for service planning for contracts. Special surveys will be required for that purpose.

3. RECORDING THE STATUS QUO

Recording the status quo meaningfully in CPTR requires route descriptions in as much detail as possible together with relevant timetables and faretables in the case of bus services.

3.1 EXAMPLE OF A DETAILED ROUTE DESCRIPTION (URBAN) Saulsville to Rosslyn

FORWARD

Saulsville terminus, Masopha, L. Ramakgopa, L. Hlahla, R. Mareka, Seeiso, R. Moroe, R. Khoza (Mosalo) L. Kalafong, R. Church, L. Transoranje, Bremer, L. Van der Hoff, R (M17) Hornsnek Road, R (R566) Brits Road, R. Ernest Oppenheimer, L. Hendrik van Eck, L Hardie Muller, L (566) Brits Road, R. Piet Rautenbach, R. Kitshoff, R. Jobson to terminus in Sloan Street (near Second Avenue).

RETURN

Sloan Street (near Second Avenue) L. Jobson, L. Piet Rautenbach, L (566) Brits Road, R. Hardie Muller, R. Hendrik van Eck, R. Ernest Oppenheimer, L (566) Brits Road, L (M17) Hornsnek Road, Van der Hoff, R. Bremer, Transoranje, R. Church, L. Kalafong, R. Khoza (Mosalo), L. Moroe, L. Seeiso, Mareka, L. Hlahla, R. Ramakgopa to Saulsville terminus.

3.2 EXAMPLE OF A DETAILED ROUTE DESCRIPTION IN TOWNSHIPS WITH NO STREET NAMES

Make use of Township Zone names or numbers and land marks, such as schools, churches, magistrates offices, filling stations, sports and recreation centres, even house numbers.

Example

From the terminus in Zone ZZ, R. past Caltex Station, R. to Tsapo school, R at Library, past cemetary Zone YY, Secondary school. L House No: 1083 Zone Xx, etc.

3.3 EXAMPLE OF A DETAILED ROUTE DESCRIPTION (RURAL)

Use the names of villages, places of interest, land marks to define the route as accurately as possible.

Example

From the settlement known as Kampusi, the road to Skelmwater, alongside the river Shisha, across the R524 past the turn-off to Cobalt mine, L towards Kalbank etc.

EXAMPLE OF A TIME TABLE (FROM A TENDERED BUS CONTRACT) 3.4

ELDORADOPARK TO WYNBERG/KRAMERVILLE/MARLBORO **MONDAY TO FRIDAY**

ar Arter Lat

| ROUTE NO. | 27 | 27A | 27 | 27B | 27 | 27 | 27 | 27A | 27 |
|-------------|-------|-------|-------|-------|-------|-------|-------|----------|---------------|
| Stop 6 | 05:25 | 05:30 | 05:35 | 05:40 | 05:45 | 05:50 | 06:00 | 06:10 | 06:20 |
| Ext. 9 | 05:35 | 05:40 | 05:45 | 05:50 | 05:55 | 05:00 | 06:10 | 06:20 | 06:30 |
| Klipspruit | 05:45 | 05:50 | 05:55 | 06:00 | 06:05 | 06:10 | 06:20 | 06:30 | 06:40 |
| Wynberg | 06:35 | 06:40 | 06:45 | 06:50 | 06:55 | 07:00 | 07:10 | 07:20 | 07:30 |
| Kramerville | _ | 06:50 | - | | - | - | | 07:30 | t unales |
| Marlboro | - | (· | 0. | 07:00 | | - | - | _ | |
| 30.40 | | | | | | | | 07 F0000 | in the second |

| ROUTE NO. | 27 | 27 | 27A | 27 | 27 | 27A | 27B | 27 | 27 |
|-------------|-------|-------|-------|-------|-------|-------|-----------------|-------|-------|
| Mariboro | | • | | | 2.5 | | 17:00 | 11.0 | |
| Kramerville | - | | 16:30 | | - | 17:00 | 15 5 | 77_ | - 1 |
| Wynberg | 16:20 | 16:30 | 16:40 | 16:40 | 17:05 | 17:10 | 17:10 | 17:20 | 18:15 |
| Klipspruit | 17:10 | 17:20 | 17:30 | 17:30 | 17:55 | 18:00 | 18:00 | 18:10 | 19:00 |
| Ext. 9 | 17:20 | 17:30 | 17:40 | 17:40 | 18:05 | 18:10 | 18:10 | 18:20 | 19:10 |
| Stop 6 | 17:30 | 17:40 | 17:50 | 17:50 | 18:15 | 18:20 | 18:20 | 18:30 | 19:20 |

3.5 **EXAMPLE OF A BASIC TIMETABLE**

The minimum information should be the scheduled departure time from the originating terminus and the operator's estimate of the arrival time at destination.

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J.K

STEP TO SELECTION AND INCLUDE

Sp. 1 . -

MONDAY TO FRIDAY

| Faerie Glen City Centre | | | etc. អាចម្ចាប់ ប្រជាពីប្រជាពីសម្រេច ស្ថាយមានប្រជាពីសម្រេច ប្រ សមានបានទៅមាន ការប្រជាពីសមានសមានប្រជាពីសមានបានសមាន |
|----------------------------|-------|-------|--|
| City Centre | 05:05 | 05:15 | THE REPORT OF THE PROPERTY OF A TRANSPORT OF THE PROPERTY OF T |
| Faerie Glen | 05:50 | 06:05 | |

It is essential that a timetable is recorded for every route and authorised deviation.

and are to it is the product of the first or a contract of the area with the product of the first first and a transfer of the glass that is the contact and the contact of the detection for the contact as

EXAMPLE OF FARE TABLES (BUS SERVICES) 3.6

PROFORMA FARE CHART (Same format for cash or multi journey tickets)

Fare: R,cents

| Rosslyn 1.60 | Klipfontein | | | | | | |
|-----------------|-------------|--------------|---------|--------|----------|--|---|
| 2.10 | 1.20 | Kruisfontein | | | 10 0 00 | 10 - 1224 100 1244 10 10 10 | |
| 2.70 | 1.80 | 1.20 | Erasmus | | 2 1 | | |
| 3.40 | 2.50 | 1.90 | 1.20 | Hebron | Traba T. | | |
| 3.80 | 2.90 | 2.30 | 1.60 | 1.20 | ВТ | The of the control of the same | |
| 5.70 | 4.70 | 4.20 | 3.50 | 3.00 | 1.8 | 30 Mabopane |) |

Distance: kilometres

| Rosslyn | Klipfontein | | | | |
|---------|-------------|--------------|---------|----------|----------|
| 7.8 | E 200 | | | | y |
| 10.2 | 2.4 | Kruisfontein | | | 9,20 |
| 12.9 | 5.1 | 2.7 | Erasmus | | |
| 16.2 | 9.3 | 6.0 | 3.3 | Hebron | |
| 18.3 | 15.0 | 7.5 | 5.4 | 2.1 BTI | |
| 27.1 | 22.0 | 19.6 | 16.3 | 10.9 8.8 | Mabopane |

Fare: cents per kilometre

| | | | | . 5, 10, 3 | |
|-------------|----------------------|--|---|---|---|
| Klipfontein | 1 | | #100 AN 11.00+1 | | |
| 50.0 | 70,000 | | | | 44 |
| 35.3 | 44.4 | Erasmus | | | 12 42 |
| 26.9 | 31.7 | 36.4 | Hebron | * | |
| 21.4 | 21.4 | 29.6 | 57.1 | BTI | * * * |
| 21.4 | 21.4 | 21.5 | 27.5 | 20.5 | Mabopane |
| | 35.3 26.9 21.4 | 50.0 Kruisfontein 35.3 44.4 26.9 31.7 21.4 21.4 | Klipfontein 50.0 Kruisfontein 35.3 44.4 Erasmus 26.9 31.7 36.4 21.4 21.4 29.6 | Klipfontein 50.0 Kruisfontein 35.3 44.4 Erasmus 26.9 31.7 36.4 Hebron 21.4 21.4 29.6 57.1 | 50.0 Kruisfontein 35.3 44.4 Erasmus 26.9 31.7 36.4 Hebron 21.4 29.6 57.1 BTI |

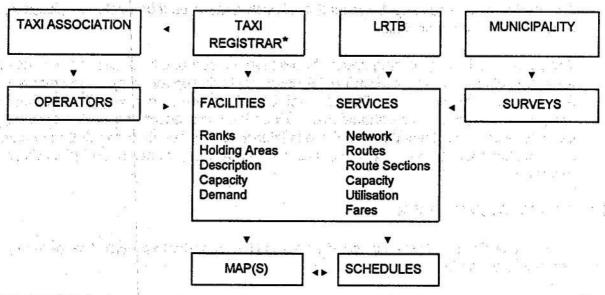
This information is important in situations where core cities intend to standardise fare systems and structures with a view to integrated ticketing.

4. STANDARD INFORMATION FORMAT

The end product should be a series of maps and schedules that will record the status quo as accurately as possible in terms of service supply and current utilisation. It is again emphasised that the information gathered will not, in many areas, be sufficiently detailed for the design of services for new contracts. However, it should provide the basis for establishing priorities and for planning further data collection in a meaningful way.

4.1 MINIBUS-TAXI SERVICES

The sources and applications of information described in paragraph 2.1.1 and 2.3.1 in respect of minibus-taxi services are summarised graphically in the figure below.



*Where appointed

FIGURE 4.1: INFORMATION FLOW FOR MINIBUS-TAXI SERVICES

As much as possible of the supply information should be collected from the Registrar (where appointed), the LRTB, the Associations and Operators. The utilisation information will require surveys which may also be used to plug gaps in the supply information and verify it.

The first step is to obtain information for the Taxi Registrar (where appointed) with regard to the Associations and then to elaborate on that information with the Associations themselves to record the following:

Association

- Name, address, contact details
- Area covered and routes operated
- Ranks and holding areas used
- Operator members, names, addresses, contact details

e for the end of the form of the form

Operators

- Vehicle details (number, type, capacity)
- Permits
- Routes
- Number of trips per route by time period
- Ranks and holding areas used
- Fares per route.

The permits should be obtained from the LRTB and reconciled with those held by the operators and recorded by the Registrar (where appointed).

Details of ranks and holding areas may be obtainable from the relevant municipality who may also have route information. Where there discrepancies, surveys will be required.

The next step is to develop a description of each route in as much detail as possible, by operator, linked to association.

The routes, ranks and holding areas should then be recorded on a map, colour coded for each Association, or a map showing the entire network, supported by a map for each Association. If the routes identified are self-contained and do not compete with bus or rail services, the route sections should also be identified and recorded on the map and on each detailed route description. If there is inter-model competition, the determination of route sections should wait until the entire multi-modal network has been identified and recorded.

4.1.1 INFORMATION BY RANK

For ranks and holding areas a schedule should be prepared to provide the following minimum information.

FXAMPI F

| -VAINL FF" | | | | | |
|--------------|--------------|--------------------|-------------------------|---------------------------------------|---|
| RANK NAME/N | IUMBER: CENT | URION STATIO | N TR25 | | |
| LOCATED AT: | CORNER STAT | TION AVENUE/E | OTHA AVENUE, | CENTURION | A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| ON OR OFF ST | REET: OFF ST | REET | E E | # # # # # # # # # # # # # # # # # # # | |
| FORMAL OR IN | NFORMAL: FOR | RMAL | The second | 1 1 10 10 ² | |
| ASSOCIATION | ROUTE NO. | NO. OF VEHICLES | NO. OF BAYS REQUIRED | NO. OF BAYS AVAILABLE | SURPLUS/ SHORTFALL |
| Centurion | 252 | 10 | 4 | 3 | -1 |
| Centurion | 253 | 14 | 5 | 4 | -1 |

TABLE 4.2: MINIBUS-TAXI INFORMATION BY RANK

A similar schedule should be completed for holding areas. Optional information would include a more detailed description of the facility including the availability of shelters, ablutions, destination displays, seats, waste disposal etc.

4.1.2 INFORMATION BY ROUTE SECTION

When the route sections have been determined a schedule should be prepared to provide the information as follows:

EXAMPLE:

| Route Section Number | Route Number | Operator or Association | No: of Vehicles | No: of Trips | No: of Seats | No: of Passengers | Surplus/ Shortfall |
|----------------------------|--------------------------|------------------------------|---------------------|---------------------|---------------------------|--------------------------|----------------------------|
| S151 | 252 253 254 263 | Name Name Name Name | 36 5 10 12 | 64 8 16 18 | 1024 128 256 188 | 832 126 264 246 | +192 + 2 - 8 + 42 |
| 2 7 €2 ± 2,475 ± | 264 | Name | 4 | 6 | 96 | 98 | - 2 |

TABLE 4.3: MINIBUS-TAXI INFORMATION BY ROUTE SECTION

The choice of time period will depend on local circumstances, particularly with regard to the extent of inter-modal competition. Where there is extensive competition, for example between bus and minibus-taxis, it may be necessary to select time periods at 15 minute intervals during peak periods. In less complex situations the time periods may be the morning and afternoon peaks in their entirety.

In situations where it is known that most passengers travel from origin rank to destination rank the appropriate surveys point would be the origin rank.

However, in situations where there is substantial picking up and setting down along the route it would be necessary to select screen lines to coincide with significant route sections. Passengers may be travelling in both directions on some route sections and separate tables would be required for each direction.

4.1.3 INFORMATION BY ROUTE

It is important that the route section information should be aggregated into route information to present a picture of capacity utilisation over the route as a whole. The following format is suggested.

EXAMPLE:

| TIME PERI | OD: 06:00 | 06:59 | #2 A 250 | | | |
|-----------------|----------------------------|--------------------|-----------------|-----------------|----------------------|---------------------------|
| ROUTE NUMBER | ROUTE SECTION NUMBER | NO: OF VEHICLES | NO: OF TRIPS | NO: OF SEATS | NO: OF PASSENGERS | SURPLUS/ SHORT- ALL |
| 252 | 365 S 364 | 5 12 | 5 12 | 80 192 | 80 180 | - + 12 |
| | S 247 | 21 | 26 | 416 | 416 | <u>=</u> |
| | S 246 S 151 | 28 | 40 64 | 640 1024 | 600 832 | + 40 +192 |

TABLE 4.4: MINIBUS-TAXI INFORMATION BY ROUTE

4.2 BUS SERVICES

The sources and applications of information described in Paragraphs 2.2.2 and 2.3.2 are summarised graphically in figure 4.5.

The main source of supply information is the bus operator, with some facility information obtainable from the municipality, and corroborating permit information from the LRTB. Some utilisation information should be available from the operators. In some cases passengers per trip and per route may be available, but information by route section will require surveys.

For each operator there should be a file of route descriptions, supported by a timetable and a faretable for each route. The location of route sections should be added to the route descriptions when they have been finalised. The file should be subdivided so that routes subject to different interim contracts or tendered contracts are grouped in relevant sections. This will facilitate the planning of new contracts. A map or a series of maps should be prepared showing the routes relevant to each contract then aggregated by operator and subsequently a single map showing the entire network of bus routes. The network map should then be used to determine the route sections and for the development of an overall

coding and numbering system for all routes and route sections. Depots, holding areas, terminals should be recorded on the map, and if possible, the location of fare stage points and bus stops, which should also be numbered.

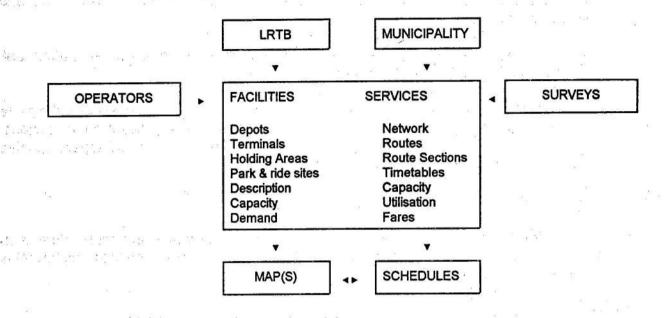


FIGURE 4.5: INFORMATION FLOW FOR BUS SERVICES

4.2.1 INFORMATION BY TERMINAL

For terminals and holding areas a schedule should be prepared to provide the following minimum information.

EXAMPLE:

| ./V util LL. | A60025 E. A1110455 | | The state of the s | | | | | | | |
|--------------|--------------------|----------------------|--|---|-----------------------|--|--|--|--|--|
| TERMINAL N | AME/NUMBER: | TOWN CENTR | TOWN CENTRE BS01 | | | | | | | |
| LOCATED AT | : | CORNER OF | CORNER OF MAIN STREET AND CENTRAL BOULEVARD | | | | | | | |
| ON OR OFF S | STREET: | OFF STREET | | 100000000000000000000000000000000000000 | | | | | | |
| SURFACE CO | ONDITION: | TARRED | | | | | | | | |
| OPERATOR | ROUTE NO: | NO: OF DEPARTURES | NO: OF BAYS REQUIRED | NO: OF BAYS AVAILABLE | SURPLUS/ SHORTFALL | | | | | |
| CMT' | 252 253 | 25 15 | 1 | 1 | | | | | | |

TABLE 4.6: BUS SERVICE INFORMATION BY TERMINAL

Optional information may be the availability of shelters, lighting, ablutions, destination displays, seats, waste disposal, etc.

A similar schedule should be prepared for holding areas. The column "no; of departures" should be replaced with number of vehicles.

4.2.2 INFORMATION BY PARK AND RIDE SITE

For each park and ride site there should be a schedule indicating the following:

EXAMPLE:

| PARK AND | RIDE SITE NAME/ | NUMBER: ZOO | LAKE PR 03 | - Pr | |
|------------------|-----------------|-------------------|-----------------|---------------------|-------------------|
| NUMBER O | F BUS LOADING B | AYS: 1 | | 34 | East 1 |
| NUMBER O | F CAR PARKING S | PACES: 350 | | | n en en en en |
| BUS ROUTE | ES SERVING OR A | VAILABLE TO | SERVE THE SITE | | 1,50 |
| ROUTE NO: | FREQUENCY | | | | |
| | Morning Peak | Morning Valley | Mid Day Peak | Afternoon Valley | Afternoon Peak |
| 252 | 10 min | 20 min. | 15 min. | 20 min. | 15 min. |

TABLE 4.7: BUS SERVICE INFORMATION BY PARK AND RIDE SITE

4.2.3 INFORMATION BY ROUTE SECTION

When the route sections have been determined a schedule should be prepared to provide the information as follows:

EXAMPLE:

| TIME PERIOD 06:45 – 06:59 | | | | | | | | | |
|----------------------------|-------------------|-------------------|-----------------|------------------|----------------------|----------------------------|--|--|--|
| ROUTE SECTION NUMBER | ROUTE NUMBER | OPERATOR | NO: OF TRIPS | NO. OF SEATS | NO: OF PASSENGERS | SURPLUS/ SHORT- FALL | | | |
| S.151 | 252 253 254 | CMT DMT EBS | 2 1 2 | 130 65 130 | 95 80 115 | +35 -15 +15 | | | |

TABLE 4.8: BUS SERVICE INFORMATION BY ROUTE SECTION

It is suggested that the advice of the operator be sought in selecting the survey points in relation to the determined route sections. Major trip generators and attractors are the most obvious locations, together with transfer points, and potential points of conflict with minibustaxis. Some route sections may have passengers travelling in both directions and separate tables would be required.

Again it must be emphasised that in the vast majority of cases, this information will not be adequate for the detailed design of bus services to be provided in new contracts. However, it will provide a good base for the planning of more detailed surveys to acquire the necessary information.

4.2.4 INFORMATION BY ROUTE

It is also necessary to aggregate the route section information into route information in order to present a picture of capacity utilisation over the route as a whole. The following format is suggested:

ATTOR RELIGIOUS FRANCES AND STREET

EXAMPLE:

| ROUTE NUMBER | ROUTE SECTION NUMBER | OPERATOR | NO: OF TRIPS | NO. OF SEATS | NO: OF PASSENGERS | SURPLUS/ SHORT- FALL |
|-----------------|----------------------------|----------|-----------------|-----------------|----------------------|----------------------------|
| 254 | 429 | EBS | 1 | 65 | 55 | +10 |
| | 428 | EBS | 2 | 130 | 85 | +55 |
| | 427 | EBS | 2 | 130 | 125 | + 5 |
| | 151 | EBS | 2 | 130 | 115 | +15 |

TABLE 4.9 BUS SERVICE INFORMATION BY ROUTE

4.3 RAIL SERVICES

From the information gathered from SARCC and/or Metro Rail the map should indicate the rail line, stations and halts. The line between two stations will be a route section. The routes, route sections, stations and halts should be numbered.

4.3.1 INFORMATION BY STATION

There should be a description of each station or halt indicating the facilities that are available e.g.

- Ticket office
- Number of platforms
- Shelter
- Ablutions
- Taxi ranks
- Bus bays
- Car parking spaces

4.3.2 INFORMATION BY ROUTE SECTION

Where more than one line operates over a route section the following information should be presented by route section.

เลยเลย เลยที่เลยเกิด เการาช ที่มี สูงเกละเลย มี เมละเสรียมเลื่องและได้ เลยเลื่อง กลุ่มกับและเลย และ เลยกลัง กร

EYAMPI E

| ROUTE SECTION NUMBER | ROUTE NUMBER | NUMBERS OF TRAINS | | ACITY | UTILISATION | | |
|----------------------------|-----------------|-------------------------|------------------|------------------|-----------------------|-----------------------|--|
| TOMBER | f. (4) | TTO WING | CLASS 1 SEATS | CLASS 2 SEATS | CLASS 1 PASSENGERS | CLASS 2 PASSENGERS | |
| S151 | 323 324 | 2 1 | 240 120 | 2400 1200 | 180 95 | 2800 1400 | |

TABLE 4.10: RAIL SERVICE: INFORMATION BY ROUTE SECTION

4.3.3 INFORMATION BY ROUTE

Information is also required by route as follows:

EXAMPLE:

| ROUTE N | JMBER 323 | 100 | | | | | | |
|----------------------------|------------------|------------------|------------------|--------------------------|--------------------------|-----------------------|---------|--|
| ROUTE SECTION NUMBER | NO: OF TRAINS | CAP | CAPACITY | | ON . | SURPLUS/SHORTFA LL | | |
| 14 | | CLASS 1 SEATS | CLASS 2 SEATS | CLASS 1 Passeng er | CLASS 2 Passeng er | CLASS 1 | CLASS 2 | |
| S 158 | 18 | 2160 | 21600 | 200 | 18000 | +1960 | +3600 | |
| S 157 | 18 | 2160 | 21600 | 400 | 19000 | +1760 | +2600 | |
| S 156 | 18 | 2160 | 21600 | 600 | 22000 | +1560 | - 400 | |
| S 155 | 18 | 2160 | 21600 | 800 | 24000 | +1360 | -2400 | |
| S 154 | 18 | 2160 | 21600 | 1000 | 25000 | +1160 | -3400 | |
| S 153 | :18 | 2160 | 21600 | 1200 | 22000 | + 960 | - 400 | |
| S 152 | 18 | 2160 | 21600 | 1500 | 21000 | + 660 | + 600 | |
| S 151 | 18 | 2160 | 21600 | 1800 | 20000 | + 360 | +1600 | |

TABLE 4.11 RAIL SERVICE: INFORMATION BY ROUTE

4.4 SUMMARY

4.4.1 INFORMATION BY ROUTE SECTION

In order to provide an overall picture of the capacity utilisation of the system as a whole the following summary information should be provided for the weekday morning and afternoon peak periods separately.

EXAMPLE:

| TIME P | ERIOD: | 06:00 - 0 | 00:80 | 4 3 | 57 | | | | -7 | |
|-----------------------|--------------|-----------|-------|-------------|------|-----|-------------------|-------------|-----|-----|
| Route Sect. No: | Route No. | CAPACITY | Υ | UTILISATION | | | SURPLUS/SHORTFALL | | | |
| | | RAIL | BUS | MBT | RAIL | BUS | MBT | RAIL | BUS | MBT |
| 1 | | | | | | | | 5: 8: 6: | | 1 |

TABLE 4.12: MODAL INFORMATION BY ROUTE SECTION

4.4.2 INFORMATION BY ROUTE

Where there are significant origin and destination pairs served by two or more modes, the information available in tables in the category 4.12 should be aggregated into routes or combined route sections.

TRUCK TO MARKAGINA

EXAMPLE:

| Route Sect. No: | CAPACITY | | UTILISATION | | | SURPLUS/SHORTFALL | | | |
|--------------------|----------|-----|-------------|------|-----|-------------------|------|-----|-----|
| W. (80 C) - 2 DM | RAIL | BUS | MBT | RAIL | BUS | MBT | RAIL | BUS | MBT |

TABLE 4.13: MODAL INFORMATION BY ROUTE

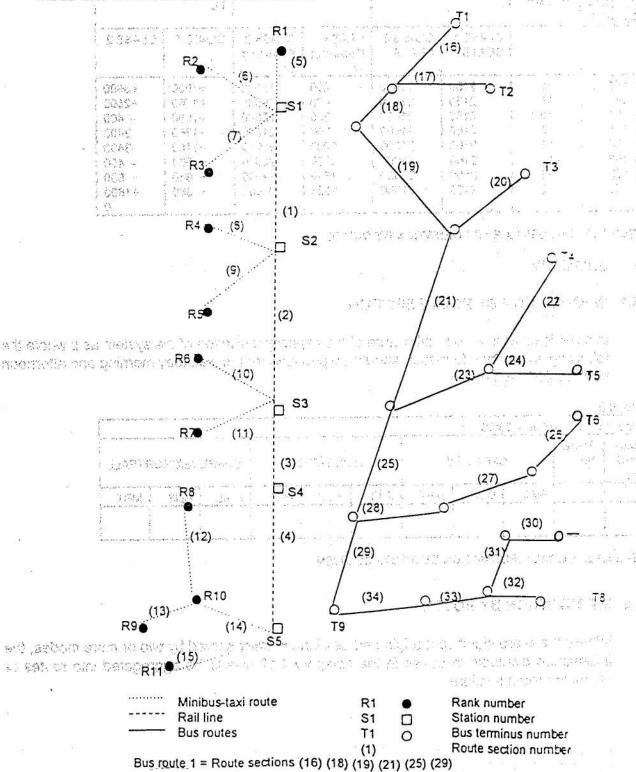


FIGURE 4.14: DIAGRAMMATIC MULTI-MODAL ROUTE NETWORK WITH ROUTE SECTIONS

4.5 METERED TAXI SERVICES

The following supply information should be recorded for metered taxi services, from the sources indicated in paragraphs 2.2.4 and 2.3.4

OPERATOR -

Vehicle details (number, type, capacity)

- Permits

Ranks used

- Area served

Fare structure

EXAMPLE:

| RANK NAME/NU | JMBER: CARLTON | HOTEL | | |
|--------------|--------------------|-------------------------------|--------------------------|----------------------------|
| LOCATED AT: | KRUIS/MAIN STRE | ETS, JOHANNESBUR | G | |
| ON OR OFF ST | REET: OFF-STRE | ET | a a cara o | |
| OPERATOR | NO: OF VEHICLES | MOST COMMON DESTINATIONS | NO: OF BAYS AVAILABLE | NO: OF BAYS REQUIRED |
| City Cab | 5 | CBD, Sandton City, Airport | 3 | 3 |
| Town Taxis | 5 | CBD, Sandton City, Airport | 3 | 3 |

| | 15 0007 | | | | | 7 | | | | |
|---------|--|----------------|-------------|----------------|-----------------------|--|---------------|----------------|--|--|
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