

2015-2036

MMM – City Wide Integrated Public Transport Plan



VOLUME 2B



INTEGRATED
PUBLIC
TRANSPORT
NETWORK

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ABBREVIATIONS

| Abbreviation | Full Description |
|--------------|--|
| ACSA | Airports Company South Africa |
| ADN | Airport Development Node |
| ADP | Airport Development Plan |
| AFC | Automated Fare Collection |
| AFCA | Automated Fare Collection Agent |
| APTMS | Advanced Public Transport Management System |
| ATC | Adaptive Traffic Control |
| BATHA | Botshabelo Amalgamated Taxi Association |
| BEPP | Built Environment Performance Plan |
| BOC | Bus Operating Company |
| BRT | Bus Rapid Transit |
| CBD | Central Business District |
| CBO | Community-based Organization |
| CCC | Centralized Control Centre |
| CCTV | Closed-circuit Television |
| CITP | Comprehensive Integrated Transport Plan |
| CM | Carbon Monoxide |
| CNG | Compressed Natural Gas |
| COGTA | Cooperative Governance and Traditional Affairs |
| CPI | Consumer Price Index |
| CPTR | Current Public Transport Record |
| CRM | Customer Relationship Management |
| DETEA | Department of Environmental Tourism Economic Affairs |
| ECE | Economic Commission of Europe |
| EM | Executive Mayor |
| EMF | Environmental Management Framework |
| EMV | Euro-Mastercard-VISA |
| FINMOD | Financial Model |
| GBTA | Greater Bloemfontein Taxi Association |
| GIS | Geographic Information System |
| GPRS | General Packet Radio Service |
| GPS | Global Positioning System |
| ha | Hectare |
| HC | Hydrocarbons |
| HHS | Household Survey |
| HOD | Head of Department |
| HR | Human Resources |
| ICE | Internal Combustion Engine |
| IDP | Integrated Development Plan |
| IEM | Integrated Environmental Management |
| IMC | Integrated Marketing and Communication |
| IPTN | Integrated Public Transport Network |
| IRPTN | Integrated Rapid Public Transport Network |
| ITP | Integrated Transport Plan |
| ITS | Intelligent Transport System |
| IVT | In-Vehicle Time (IVT) (in Minutes) |
| JOC | Joint Organizing Committee |
| JSC | Joint Steering Committee |
| km | Kilometre |
| LAN | Local Area Network |
| LED | Light Emitting Diode |
| LIM | Linear Induction Motor |

ABBREVIATIONS

| Abbreviation | Full Description |
|--------------|---|
| MFMA | Municipal Financial Management Act |
| MITP | Mangaung Integrated Transport Plans |
| MMC | Member of Mayoral Committee |
| MMM | Mangaung Metropolitan Municipality |
| MOU | Memorandum of Understanding |
| MRE | Municipal Regulatory Entity |
| MSA | Municipal Systems Act |
| NATMAP | National Transport Master Plan |
| NDOT | National Department of Transport |
| NDP | National Development Plan |
| NEMA | National Environmental Management Act |
| NGO | Non-governmental Organization |
| NLTA | National Land Transport Act |
| NLTTA | National Land Transport Transition Act |
| NMT | Non-Motorised Transport |
| NOX | Nitrogen Oxide |
| NT | Number of Transfers (NT) |
| OCR | Optical Character Recognition |
| OD | Origin-Destination |
| OLS | Operating Licenses Strategy |
| OOP | Office of the Premier |
| PDM | Patronage Demand Model |
| PDOT | Provincial Department Of Transport |
| PDP | Professional Driver Permit |
| PLTF | Provincial Land Transport Framework |
| PM | Particulate Matter |
| PMU | Project Management Unit |
| POS | Point of Sale |
| PRASA | Passenger Rail Agency of South Africa |
| PT | Public Transport |
| PTIG | Public Transport Infrastructure Grant |
| PTIS | Public Transport Infrastructure and Systems Grant |
| PTNOG | Public Transport Network Operational Grant |
| PTOG | Public Transport Operational Grant |
| PTZ | Pan-Tilt-Zoom |
| PvT | Private Transport |
| RoW | Right of Way |
| RTPI | Real-time Passenger Information |
| SABS | South African Bureau of Standards |
| SAC | Schedule Adherence and Controlling |
| SANRAL | South African National Road Agency Limited |
| SANS | South African National Standards |
| SANTACO | South Africa National Taxi Council |
| SDA | Service Delivery Agreement |
| SDF | Spatial Development Framework |
| SIP | Strategic Integrated Projects |
| SMME | Small Medium and Micro Enterprise |
| SP | Stated Preference |
| SVMS | Strategic Variable Message Signs |
| SWOT | Strength Weakness Opportunity Threat |
| THALSDTA | Thaba Nchu Long and Short Distance Taxi Association |

ABBREVIATIONS

| Abbreviation | Full Description |
|--------------|--|
| TIMS | Traffic Management and Information System |
| TIS | Traveller Information System |
| TOM | Ticket Operating Machines |
| TSP | Traffic Signal Priority |
| ULSD | Ultra Low Sulphur Diesel |
| UTC | Urban Traffic Control |
| VDM | Vehicle Docking Manager |
| VMS | Variable Message Sign |
| VOC | Vehicle Operating Company |
| VOIP | Voice Over Internet Protocol |
| VTTS | Value of Travel Time Savings (VTTS) (in Rand/hour) |
| VWTS | Value of Waiting Time Savings (VWTS) (Rand/hour) |
| WAN | Wide Area Network |
| WP | Work Package |
| WT | Waiting Time (WT) (in Minutes) |
| WULA | Water Use License Application |

4 Traffic Data

A substantial number of traffic surveys were completed during 2016 and 2017 throughout MMM, in order to attain existing traffic flow patterns, a directional split of traffic and to determine the peak periods (AM and PM) of all vehicular movement at particular locations. It should, however, be noted that the surveys were focussed on areas where the implementation of the IPTN is envisaged.

During 2018 detail traffic counts were completed to validate the 2016 and 2017 counts and focused on obtaining data for detailed traffic and transportation studies for IPTN implementation in the Bloemfontein CBD, along with OR Tambo Drive and along Maphisa- and Moshoeshoe Road. The detail of these traffic studies is provided in the traffic impact studies completed for the IPTN along the mentioned roads (Refer to Annexure I). The raw data collected as part of the transport surveys form part of the electronic transport register and can be obtained on request from the city.

The mentioned surveys comprise of:

- Manual Link Counts (continuous 14-hour period),
- Electronic Link Counts (7 consecutive days),
- Manual Intersection Counts (continuous 12-hour period),
- Vehicle Occupancy Counts (continuous 12-hour period),
- Pedestrian surveys (14 –hour period-specific locations).

This chapter provides information relating to the geographical position of each survey, a description of the position of the survey point and a summary of the data collected. The purpose of this chapter and volume is to provide an overview of data collected and the detail level per survey type. The detailed analysis to obtain existing passenger volumes and to calibrate the public transport demand estimation is provided in Volume 3 of the IPTN plan.

4.1 Manual Link and Intersection Survey Results(2016)

The localities of surveys executed during 2016 are presented in Figure 4-1 and Table 4-1. The surveys are summarised in:

- Table 4-2 – Intersection counts summarised per approach and vehicles class(private- and heavy vehicles);
- Table 4-3 – Total public transport passengers per public transport vehicle type;
- Table 4-4 - Total public transport vehicles per public transport vehicle type.

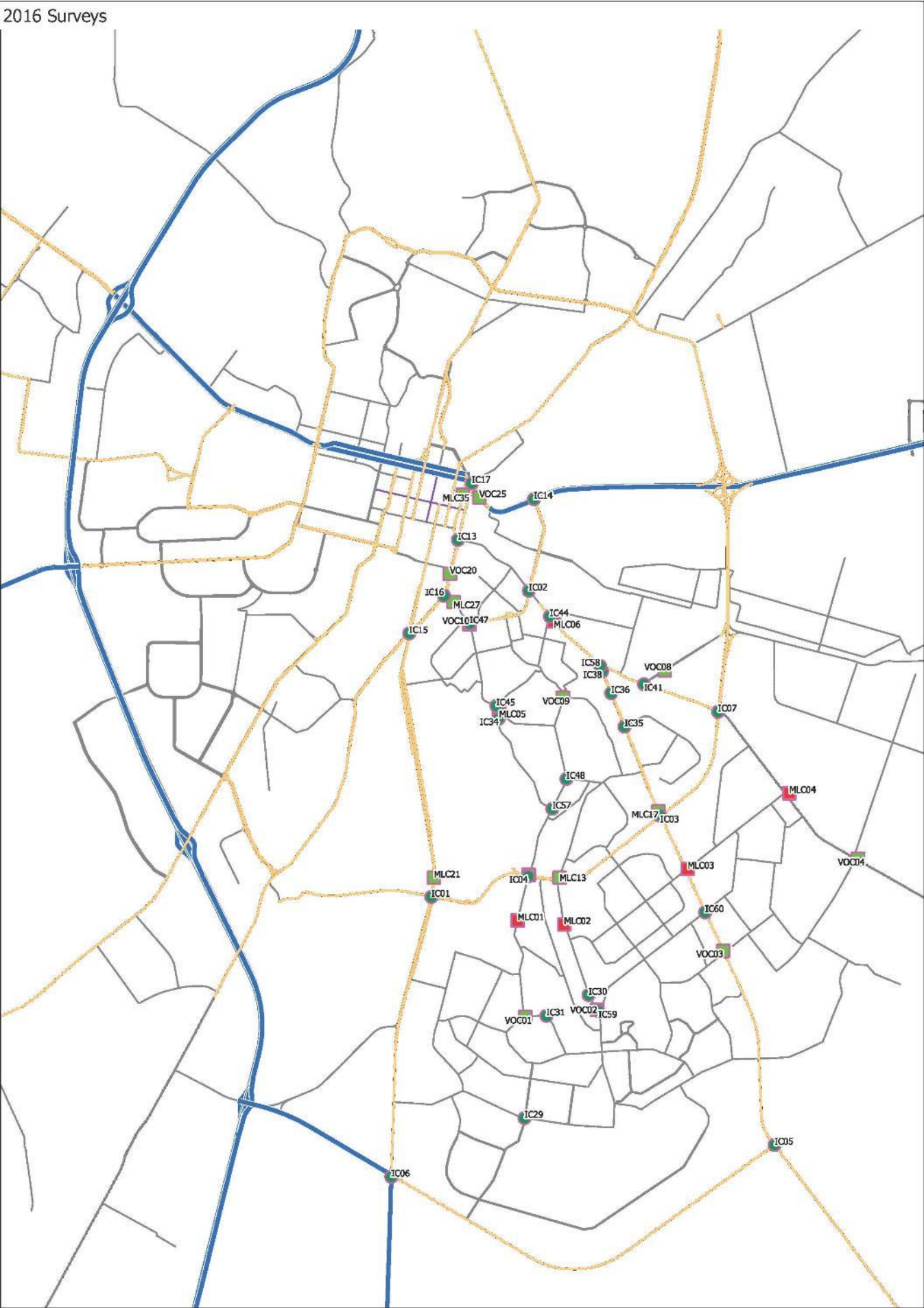


Figure 4-1: Location of surveys conducted during 2016

Table 4-1: Survey Locations (2016)

| Survey Location No. | Description | X Coordinate | Y Coordinate |
|---------------------|--|--------------|--------------|
| IC01 | Kerk St/M10 (4-leg) | 26,22033 | -29,1727 |
| IC02 | Hamilton Rd/McGreggor St (4-leg) | 26,23576 | -29,1304 |
| IC03 | Dr Belcher Rd/Dewetsdorp Rd(4-leg) | 26,25659 | -29,1615 |
| IC04 | Moshoeshoe St/M10 (4-leg) | 26,23564 | -29,1699 |
| IC05 | R702/N3 (3-leg) | 26,27468 | -29,207 |
| IC06 | N6/Church St (4-leg) | 26,21399 | -29,2114 |
| IC07 | M10/Meadows St (4-leg) | 26,26573 | -29,1471 |
| IC13 | Fort St/Hanger St/Harvey Rd (4-leg) | 26,22453 | -29,1233 |
| IC14 | Mc Greggor St/N8 (4-leg) | 26,23657 | -29,1177 |
| IC15 | Kerk St/Harvey Rd (4-leg) | 26,21683 | -29,1363 |
| IC16 | Fort Hare Rd/Harvey Rd (4-leg) | 26,22234 | -29,1311 |
| IC17 | Nelson Mandela Dr/Berg St/Glen Rd (5-leg) | 26,22674 | -29,1155 |
| IC29 | Taelo MolosioaSt/Leepile St (New Count) | 26,23509 | -29,2033 |
| IC30 | Singonzo St/Modimogale St (New Count) | 26,24522 | -29,1863 |
| IC31 | Chief Moroka Crescent/Modimogale St (New Count) | 26,23855 | -29,1891 |
| IC34 | Maphisa Rd/Mtyobile St (New Count) | 26,23098 | -29,1481 |
| IC35 | Dr Belcher Rd/Anna Maggerman Crescent (New Count) | 26,25092 | -29,1492 |
| IC36 | Dr Belcher Rd/Hamlet St (New Count) | 26,24879 | -29,1445 |
| IC38 | Dr Belcher Rd/Access to Hospital (New Count) | 26,24736 | -29,1415 |
| IC41 | Heatherdale Rd/Sonneblom St (New Count- 3 Leg) | 26,254 | -29,1433 |
| IC44 | Dr Belcher Rd/Mkuhlane St (New Count) | 26,23909 | -29,1339 |
| IC45 | Fort Hare Rd/Mkuhlane St (New Count) | 26,23063 | -29,1463 |
| IC47 | Fort Hare Rd/Hamilton St (New Count) | 26,22641 | -29,1349 |
| IC48 | Moshoeshoe St/Seeiso Rd (New Count) | 26,24171 | -29,1564 |
| IC57 | Maphisa Rd/Moshoeshoe St (New Count) | 26,23948 | -29,1605 |
| IC58 | Dr Belcher Rd/Heatherdale Rd (New Count) | 26,24705 | -29,1408 |
| IC59 | Singonzo St/Unknown Rd (New Count) | 26,24678 | -29,1885 |
| IC60 | Dewetsdorp Rd/Unknown Rd (New Count) | 26,26368 | -29,1748 |
| MLC01 | Moshoeshoe St (south of M10) | 26,23399 | -29,176 |
| MLC02 | Singonzo St (south of M10) | 26,24136 | -29,1765 |
| MLC03 | Dewetsdorp Rd (south of M10) | 26,26092 | -29,1688 |
| MLC04 | Meadows St (South of M10 at Heidedal) | 26,277 | -29,1584 |
| MLC05 | Fort Hare Rd and Mkuhlane St | 26,23108 | -29,147 |
| MLC06 | Belcher Rd & Mkuhlane St | 26,23973 | -29,1346 |
| MLC07_VOC01 | Moshoeshoe St (North of Chief Moroka Crescent) | 26,23518 | -29,1893 |
| MLC08_VOC02 | Singonza St (at Rocklands) | 26,24659 | -29,1883 |
| MLC09_VOC03 | Dewetsdorp Rd (at Chris Hani) | 26,26655 | -29,1802 |
| MLC10_VOC04 | Meadows St (between Grasslands and Sonskyn) | 26,2879 | -29,1674 |
| MLC11_VOC05 | Moshoeshoe St north of M10 George Lubbe St (4 lanes) | 26,23573 | -29,1696 |
| MLC13_VOC07 | Monapi St (North of M10) | 26,24064 | -29,17 |
| MLC14_VOC08 | Sonneblom St (West of Iris St) | 26,25727 | -29,1414 |
| MLC15_VOC09 | Mkuhlane St and Kokozela St | 26,24116 | -29,1452 |
| MLC17_VOC11 | Hilton Rd and Fort Hare Rd | 26,22636 | -29,135 |
| MLC21_VOC15 | Dr Belcher north of M10 George Lubbe St (2 lanes) | 26,25629 | -29,1609 |
| MLC22_VOC16 | M30 Kerk St north of the M10 George Lubbe St (4 lanes) | 26,22071 | -29,17 |
| MLC23_VOC17 | | | |
| MLC26_VOC20 | Monument Rd south of Rhodes Ave (4 lanes) | 26,22326 | -29,128 |
| MLC27_VOC21 | Fort Hare Rd east of Monument St (4 lanes) | 26,22383 | -29,1319 |
| MLC31_VOC25 | N8 east of Charles St (4 lanes) | 26,22794 | -29,1175 |

Table 4-2: Intersection Counts: Daily Vehicle Volumes per direction (2016)

| Location Numbers | Description | Vehicle Type | Daily Vehicle Numbers per Direction | | | |
|------------------|---|--------------|-------------------------------------|--------|-------|--------|
| | | | South | East | North | West |
| IC01 | Kerk St/M10 (4-leg) | Private | 3 243 | 6 330 | 4 472 | 5 491 |
| | | Trucks | 189 | 2 648 | 813 | 724 |
| | | Totals | 3 432 | 8 978 | 5 285 | 6 215 |
| IC02 | Hamilton Rd/McGreggor St (4-leg) | Pass Cars | 19 713 | 6 505 | 5 626 | 5 549 |
| | | Trucks | 986 | 3241 | 445 | 360 |
| | | Totals | 20 699 | 9 746 | 6 071 | 5 909 |
| IC03 | Dr Belcher Rd/Dewetsdorp Rd (4-leg) | Pass Cars | 4 423 | 3 405 | 7 421 | 10 247 |
| | | Trucks | 412 | 569 | 1 328 | 350 |
| | | Totals | 4 835 | 3 974 | 8 749 | 10 597 |
| IC04 | Moshoeshoe St/M10 (4-leg) | Pass Cars | 4 348 | 3 810 | 7 271 | 6 906 |
| | | Trucks | 477 | 131 | 637 | 94 |
| | | Totals | 4 825 | 3 941 | 7 908 | 7 000 |
| IC05 | R702/N3 (3-leg) | Pass Cars | 2 081 | 0 | 1 059 | 689 |
| | | Trucks | 209 | 0 | 623 | 475 |
| | | Totals | 2 290 | 0 | 1 682 | 1 164 |
| IC06 | N6/Church St (4-leg) | Pass Cars | 1 437 | 939 | 1 496 | 1 961 |
| | | Trucks | 232 | 231 | 179 | 206 |
| | | Totals | 1 669 | 1 170 | 1 675 | 2 167 |
| IC07 | M10/Meadows St (4-leg) | Pass Cars | 4 208 | 1 497 | 2 981 | 3 224 |
| | | Trucks | 1 585 | 50 | 3 968 | 591 |
| | | Totals | 5 793 | 1 547 | 6 949 | 3 815 |
| IC13 | Fort St/Hanger St/Harvey Rd (4-leg) | Pass Cars | 4 345 | 4 498 | 7 194 | 0 |
| | | Trucks | 247 | 2 097 | 356 | 0 |
| | | Totals | 4 592 | 6 595 | 7 550 | 0 |
| IC14 | Mc Greggor St/N8 (4-leg) | Pass Cars | 2 701 | 621 | 7 517 | 2 828 |
| | | Trucks | 585 | 20 | 883 | 221 |
| | | Totals | 3 286 | 641 | 8 400 | 3 049 |
| IC15 | Kerk St/Harvey Rd (4-leg) | Pass Cars | 2 852 | 9 631 | 2 641 | 4 071 |
| | | Trucks | 134 | 669 | 259 | 1 217 |
| | | Totals | 2 986 | 10 300 | 2 900 | 5 288 |
| IC16 | Fort Hare Rd/Harvey Rd (4-leg) | Pass Cars | 4 244 | 3 705 | 5 092 | 1 438 |
| | | Trucks | 500 | 187 | 902 | 79 |
| | | Totals | 4 744 | 3 892 | 5 994 | 1 517 |
| IC17 | Nelson Mandela Dr/Berg St/Glen Rd (5-leg) | Pass Cars | 7 116 | 8 122 | 8 287 | 8 290 |
| | | Trucks | 1 347 | 1 083 | 1 009 | 1 002 |
| | | Totals | 8 463 | 9 205 | 9 296 | 9 292 |
| IC29 | Taelo MolosioaSt/Leepile St (New Count) | Pass Cars | 4 421 | 1 409 | 2 127 | 1 753 |
| | | Trucks | 3 450 | 183 | 87 | 82 |
| | | Totals | 7 871 | 1 592 | 2 214 | 1 835 |
| IC30 | Singonzo St/Modimogale St (New Count) | Pass Cars | 2 204 | 0 | 2 981 | 1 237 |
| | | Trucks | 131 | 0 | 1 089 | 63 |
| | | Totals | 2 335 | 0 | 4 070 | 1 300 |
| IC31 | Chief Moroka Crescent/Modimogale St (New Count) | Pass Cars | 1 204 | 1 761 | 2 624 | 0 |
| | | Trucks | 239 | 155 | 691 | 0 |
| | | Totals | 1 443 | 1 916 | 3 315 | 0 |
| IC34 | Maphisa Rd/Mtyobile St (New Count) | Pass Cars | 3 556 | 752 | 1 667 | 2 116 |
| | | Trucks | 177 | 26 | 59 | 99 |
| | | Totals | 3 733 | 778 | 1 726 | 2 215 |
| IC35 | Dr Belcher Rd/Anna Maggerman Crescent (New Count) | Pass Cars | 1 178 | 4 131 | 2 099 | 4 151 |
| | | Trucks | 1 582 | 304 | 277 | 2 409 |
| | | Totals | 2 760 | 4 435 | 2 376 | 6 560 |
| IC36 | Dr Belcher Rd/Hamlet St (New Count) | Pass Cars | 3 366 | 519 | 5 312 | 1 209 |
| | | Trucks | 395 | 9 | 591 | 216 |
| | | Totals | 3 761 | 528 | 5 903 | 1 425 |
| IC38 | Dr Belcher Rd/Access to Hospital (New Count) | Pass Cars | 4 231 | 0 | 3 112 | 2 222 |
| | | Trucks | 608 | 0 | 351 | 116 |

| Location Numbers | Description | Vehicle Type | Daily Vehicle Numbers per Direction | | | |
|------------------|--|--------------|-------------------------------------|-------|--------|-------|
| | | | South | East | North | West |
| | | Totals | 4 839 | 0 | 3 463 | 2 338 |
| IC41 | Heatherdale Rd/Sonneblom St (New Count- 3 Leg) | Pass Cars | 0 | 1 492 | 2 098 | 3 509 |
| | | Trucks | 0 | 84 | 250 | 455 |
| | | Totals | 0 | 1 576 | 2 348 | 3 964 |
| IC44 | Dr Belcher Rd/Mkuhlane St (New Count) | Pass Cars | 12 818 | 0 | 14 162 | 5 217 |
| | | Trucks | 672 | 0 | 511 | 58 |
| | | Totals | 13 490 | 0 | 14 673 | 5 275 |
| IC45 | Fort Hare Rd/Mkuhlane St (New Count) | Pass Cars | 2 596 | 1 013 | 1 982 | 0 |
| | | Trucks | 172 | 13 | 139 | 0 |
| | | Totals | 2 768 | 1 026 | 2 121 | 0 |
| IC47 | Fort Hare Rd/Hamilton St (New Count) | Pass Cars | 3 449 | 4 323 | 6 447 | 4 039 |
| | | Trucks | 326 | 214 | 677 | 275 |
| | | Totals | 3 775 | 4 537 | 7 124 | 4 314 |
| IC48 | Moshoeshoe St/Seeiso Rd (New Count) | Pass Cars | 3 948 | 1 625 | 5 478 | 0 |
| | | Trucks | 124 | 1 102 | 265 | 0 |
| | | Totals | 4 072 | 2 727 | 5 743 | 0 |
| IC57 | Maphisa Rd/Moshoeshoe St (New Count) | Pass Cars | 1 999 | 0 | 3 725 | 2 005 |
| | | Trucks | 144 | 0 | 208 | 54 |
| | | Totals | 2 143 | 0 | 3 933 | 2 059 |
| IC58 | Dr Belcher Rd/Heatherdale Rd (New Count) | Pass Cars | 938 | 1 079 | 3 681 | 0 |
| | | Trucks | 215 | 219 | 186 | 0 |
| | | Totals | 1 153 | 1 298 | 3 867 | 0 |
| IC59 | Singonzo St/Unknown Rd (New Count) | Pass Cars | 473 | 136 | 58 | 0 |
| | | Trucks | 1 828 | 948 | 1 358 | 0 |
| | | Totals | 2 301 | 1 084 | 1 416 | 0 |
| IC60 | DeWetsdorp Rd/Unknown Rd (New Count) | Pass Cars | 2 562 | 0 | 3 188 | 1 250 |
| | | Trucks | 1 979 | 0 | 2 378 | 563 |
| | | Totals | 4 541 | 0 | 5 566 | 1 813 |

Table 4-3: 12-hour Public Transport Passenger Volumes per location per direction (2016)

| Survey Location No. and Direction of travel | Total Pax for 4+1 Taxis | Total Pax for Mini Buses | Total Pax for Midi Buses | Total Pax for Buses | Total Pax for Artic Buses | Total Number of PT Pax |
|---|-------------------------|--------------------------|--------------------------|---------------------|---------------------------|------------------------|
| MLC01 | 10 822 | 4 134 | 3 396 | 903 | 333 | 19 588 |
| - Northbound | 5 583 | 450 | 3 156 | 273 | 333 | 9 795 |
| - Southbound | 5 239 | 3 684 | 240 | 630 | - | 9 793 |
| MLC02 | 1 256 | 2 312 | 2 415 | 959 | 109 | 7 051 |
| - Northbound | 799 | 1 297 | 110 | 240 | 109 | 2 555 |
| - Southbound | 457 | 1 015 | 2 305 | 719 | - | 4 496 |
| MLC03 | 1 101 | 44 839 | 1 445 | 3 786 | 1 660 | 52 831 |
| - Northbound | 820 | 21 231 | 471 | 1 656 | 1 648 | 25 826 |
| - Southbound | 281 | 23 608 | 974 | 2 130 | 12 | 27 005 |
| MLC04 | 402 | 15 071 | 2 422 | 2 102 | 1 750 | 21 747 |
| - Northbound | 286 | 10 556 | 1 694 | 1 051 | 1 638 | 15 225 |
| - Southbound | 116 | 4 515 | 728 | 1 051 | 112 | 6 522 |
| MLC05 | 7 991 | 14 529 | 2 482 | 2 662 | 665 | 28 329 |
| - Northbound | 4 621 | 7 497 | 1 883 | 1 705 | 556 | 16 262 |
| - Southbound | 3 370 | 7 032 | 599 | 957 | 109 | 12 067 |
| MLC06 | 2 340 | 47 208 | 2 637 | 3 792 | 2 827 | 58 804 |
| - Northbound | 231 | 18 681 | 1 086 | 1 324 | 847 | 22 169 |
| - Southbound | 2 109 | 28 527 | 1 551 | 2 468 | 1 980 | 36 635 |
| MLC07_VOC01 | 2 537 | 3 550 | 787 | 720 | 275 | 7 869 |
| - Eastbound | 1 307 | 1 565 | 175 | 236 | 275 | 3 558 |
| - Westbound | 1 230 | 1 985 | 612 | 484 | - | 4 311 |
| MLC08_VOC02 | 1 475 | 3 355 | 10 137 | 398 | 329 | 15 694 |
| - Northbound | 575 | 1 471 | 9 978 | 132 | 274 | 12 430 |

| Survey Location No. and Direction of travel | Total Pax for 4+1 Taxis | Total Pax for Mini Buses | Total Pax for Midi Buses | Total Pax for Buses | Total Pax for Artic Buses | Total Number of PT Pax |
|---|-------------------------|--------------------------|--------------------------|---------------------|---------------------------|------------------------|
| - Southbound | 900 | 1 884 | 159 | 266 | 55 | 3 264 |
| MLC09_VOC03 | 345 | 16 682 | 1 262 | 3 540 | 1 925 | 23 754 |
| - Northbound | 175 | 10 379 | 458 | 1 757 | 1 151 | 13 920 |
| - Southbound | 170 | 6 303 | 804 | 1 783 | 774 | 9 834 |
| MLC10_VOC04 | - | 5 831 | 1 136 | 777 | - | 7 744 |
| - Eastbound | - | 2 177 | 252 | 236 | - | 2 665 |
| - Westbound | - | 3 654 | 884 | 541 | - | 5 079 |
| MLC11_VOC05 | 10 598 | 7 329 | 11 466 | 1 977 | 275 | 31 645 |
| - Northbound | 5 996 | 2 592 | 11 012 | 1 125 | 275 | 21 000 |
| - Southbound | 4 602 | 4 737 | 454 | 852 | - | 10 645 |
| MLC13_VOC07 | 895 | 2 920 | 192 | 565 | 1 | 4 573 |
| - Northbound | 479 | 1 216 | 74 | 332 | 1 | 2 102 |
| - Southbound | 416 | 1 704 | 118 | 233 | - | 2 471 |
| MLC14_VOC08 | 76 | 8 042 | 926 | 5 364 | 5 164 | 19 572 |
| - Eastbound | 66 | 2 740 | 432 | 504 | 5 143 | 8 885 |
| - Westbound | 10 | 5 302 | 494 | 4 860 | 21 | 10 687 |
| MLC15_VOC09 | 12 988 | 1 820 | 145 | 790 | 276 | 16 019 |
| - Eastbound | 7 597 | 1 296 | 45 | 532 | 276 | 9 746 |
| - Westbound | 5 391 | 524 | 100 | 258 | - | 6 273 |
| MLC17_VOC11 | 72 | 37 728 | 806 | 8 886 | 1 708 | 49 200 |
| - Eastbound | 72 | 25 253 | 695 | 3 180 | 1 708 | 30 908 |
| - Westbound | - | 12 475 | 111 | 5 706 | - | 18 292 |
| MLC21_VOC15 | 40 | 14 046 | 11 351 | 1 934 | 791 | 28 162 |
| - Northbound | 15 | 3 284 | 10 934 | 662 | 770 | 15 665 |
| - Southbound | 25 | 10 762 | 417 | 1 272 | 21 | 12 497 |
| MLC22_VOC16 | 10 433 | 17 047 | 1 875 | 5 425 | 1 598 | 36 378 |
| - Northbound | 4 134 | 8 545 | 969 | 3 868 | 1 431 | 18 947 |
| - Southbound | 6 299 | 8 502 | 906 | 1 557 | 167 | 17 431 |
| MLC23_VOC17 | 19 | 244 | 48 | 362 | 3 | 676 |
| - Northbound | 16 | 123 | 24 | 230 | 3 | 396 |
| - Southbound | 3 | 121 | 24 | 132 | - | 280 |
| MLC26_VOC20 | 5 266 | 19 824 | 2 000 | 3 261 | 1 990 | 32 341 |
| - Northbound | 2 216 | 4 087 | 227 | 1 506 | 1 384 | 9 420 |
| - Southbound | 3 050 | 15 737 | 1 773 | 1 755 | 606 | 22 921 |
| MLC27_VOC21 | 10 433 | 17 047 | 1 875 | 5 425 | 1 598 | 36 378 |
| - Northbound | 4 134 | 8 545 | 969 | 3 868 | 1 431 | 18 947 |
| - Southbound | 6 299 | 8 502 | 906 | 1 557 | 167 | 17 431 |
| MLC31_VOC25 | 1 245 | 7 715 | 2 877 | 10 009 | 13 869 | 35 715 |
| - Northbound | 1 220 | 2 328 | 1 492 | 2 749 | 2 524 | 10 313 |
| - Southbound | 25 | 5 387 | 1 385 | 7 260 | 11 345 | 25 402 |

Table 4-4: 12-Hour Public Transport Vehicles per location per direction (2016)

| Survey Location No. and Direct of Survey | Totals 4+1 Taxis | Totals Mini Buses | Totals Midi Buses | Totals Buses | Totals Artic Buses | Totals PT Vehicles |
|--|------------------|-------------------|-------------------|--------------|--------------------|--------------------|
| MLC01 | 5 630 | 618 | 407 | 39 | 5 | 6 699 |
| - Northbound | 2 704 | 169 | 387 | 17 | - | 3 277 |
| - Southbound | 2 926 | 449 | 20 | 22 | 5 | 3 422 |
| MLC02 | 701 | 352 | 170 | 31 | 5 | 1 259 |
| - Northbound | 367 | 199 | 37 | 11 | 1 | 615 |
| - Southbound | 334 | 153 | 133 | 20 | 4 | 644 |
| MLC03 | 578 | 5 172 | 179 | 138 | 40 | 6 107 |
| - Northbound | 10 | 2 429 | 76 | 54 | 28 | 2 597 |
| - Southbound | 568 | 2 743 | 103 | 84 | 12 | 3 510 |
| MLC04 | 331 | 1 484 | 188 | 118 | 22 | 2 143 |
| - Northbound | 248 | 986 | 106 | 59 | 18 | 1 417 |

| Survey Location No. and Direct of Survey | Totals 4+1 Taxis | Totals Mini Buses | Totals Midi Buses | Totals Buses | Totals Artic Buses | Totals PT Vehicles |
|--|---------------------|----------------------|----------------------|--------------|-----------------------|-----------------------|
| - Southbound | 83 | 498 | 82 | 59 | 4 | 726 |
| MLC05 | 3 426 | 1 305 | 125 | 70 | 17 | 4 943 |
| - Northbound | 1 732 | 720 | 92 | 41 | 1 | 2 586 |
| - Southbound | 1 694 | 585 | 33 | 29 | 16 | 2 357 |
| MLC06 | 1 356 | 5 442 | 228 | 144 | 73 | 7 243 |
| - Northbound | 124 | 2 588 | 122 | 76 | 37 | 2 947 |
| - Southbound | 1 232 | 2 854 | 106 | 68 | 36 | 4 296 |
| MLC07_VOC01 | 1 551 | 733 | 90 | 48 | 5 | 2 427 |
| - Eastbound | 812 | 400 | 19 | 12 | 0 | 1 243 |
| - Westbound | 739 | 333 | 71 | 36 | 5 | 1 184 |
| MLC08_VOC02 | 923 | 436 | 842 | 14 | 5 | 2 220 |
| - Northbound | 409 | 184 | 828 | 4 | 4 | 1 429 |
| - Southbound | 514 | 252 | 14 | 10 | 1 | 791 |
| MLC09_VOC03 | 231 | 2 552 | 137 | 116 | 35 | 3 071 |
| - Northbound | 5 | 1 397 | 75 | 56 | 14 | 1 547 |
| - Southbound | 226 | 1 155 | 62 | 60 | 21 | 1 524 |
| MLC10_VOC04 | 0 | 1 000 | 137 | 41 | 0 | 1 178 |
| - Eastbound | 0 | 349 | 29 | 7 | 0 | 385 |
| - Westbound | 0 | 651 | 108 | 34 | 0 | 793 |
| MLC11_VOC05 | 5 887 | 923 | 1 042 | 57 | 5 | 7 914 |
| - Northbound | 2 937 | 323 | 1 004 | 37 | 2 | 4 303 |
| - Southbound | 2 950 | 600 | 38 | 20 | 3 | 3 611 |
| MLC13_VOC07 | 506 | 578 | 38 | 21 | 1 | 1 144 |
| - Northbound | 251 | 299 | 23 | 12 | 0 | 585 |
| - Southbound | 255 | 279 | 15 | 9 | 1 | 559 |
| MLC14_VOC08 | 62 | 1 044 | 111 | 148 | 88 | 1 453 |
| - Eastbound | 55 | 533 | 8 | 24 | 7 | 627 |
| - Westbound | 7 | 511 | 103 | 124 | 81 | 826 |
| MLC15_VOC09 | 7 017 | 302 | 10 | 54 | 6 | 7 389 |
| - Eastbound | 3 452 | 212 | 4 | 20 | 6 | 3 694 |
| - Westbound | 3 565 | 90 | 6 | 34 | 0 | 3 695 |
| MLC17_VOC11 | 21 | 4 190 | 115 | 246 | 34 | 4 606 |
| - Eastbound | 21 | 2 540 | 98 | 108 | 34 | 2 801 |
| - Westbound | 0 | 1 650 | 17 | 138 | 0 | 1 805 |
| MLC21_VOC15 | 21 | 2 005 | 1 001 | 110 | 35 | 3 172 |
| - Northbound | 4 | 462 | 941 | 54 | 14 | 1 475 |
| - Southbound | 17 | 1 543 | 60 | 56 | 21 | 1 697 |
| MLC22_VOC16 | 4 295 | 1 627 | 161 | 145 | 32 | 6 260 |
| - Northbound | 1 975 | 822 | 67 | 92 | 27 | 2 983 |
| - Southbound | 2 320 | 805 | 94 | 53 | 5 | 3 277 |
| MLC23_VOC17 | 16 | 80 | 6 | 10 | 3 | 115 |
| - Northbound | 13 | 41 | 3 | 3 | 0 | 60 |
| - Southbound | 3 | 39 | 3 | 7 | 3 | 55 |
| MLC26_VOC20 | 2 911 | 3 585 | 252 | 125 | 46 | 6 919 |
| - Northbound | 1 151 | 1 260 | 93 | 66 | 34 | 2 604 |
| - Southbound | 1 760 | 2 325 | 159 | 59 | 12 | 4 315 |
| MLC27_VOC21 | 4 295 | 1 627 | 161 | 145 | 32 | 6 260 |
| - Northbound | 1 975 | 822 | 67 | 92 | 27 | 2 983 |
| - Southbound | 2 320 | 805 | 94 | 53 | 5 | 3 277 |
| MLC31_VOC25 | 549 | 976 | 186 | 185 | 153 | 2 049 |
| - Northbound | 531 | 465 | 103 | 61 | 40 | 1 200 |
| - Southbound | 18 | 511 | 83 | 124 | 113 | 849 |

4.2 Manual Link and Intersection Survey Results (2017)

This section of the report reflects the status quo data of the most recent (2017) Link Counts (LC) as well as the Vehicle Occupancy Counts (VOC) taken at the locations reflected in Figure 4-2 below. The specific details of the 2017 survey locations are indicated in Table 4-5 below. The results of the surveys are summarised in:

- Table 4-6 – Intersection counts summarised per approach and vehicles class(private- and heavy vehicles);
- Table 4-7 – Total public transport passengers per public transport vehicle type;
- Table 4-8 - Total public transport vehicles per public transport vehicle type.



Figure 4-2: Locations of surveys conducted during 2017 – Bloemfontein

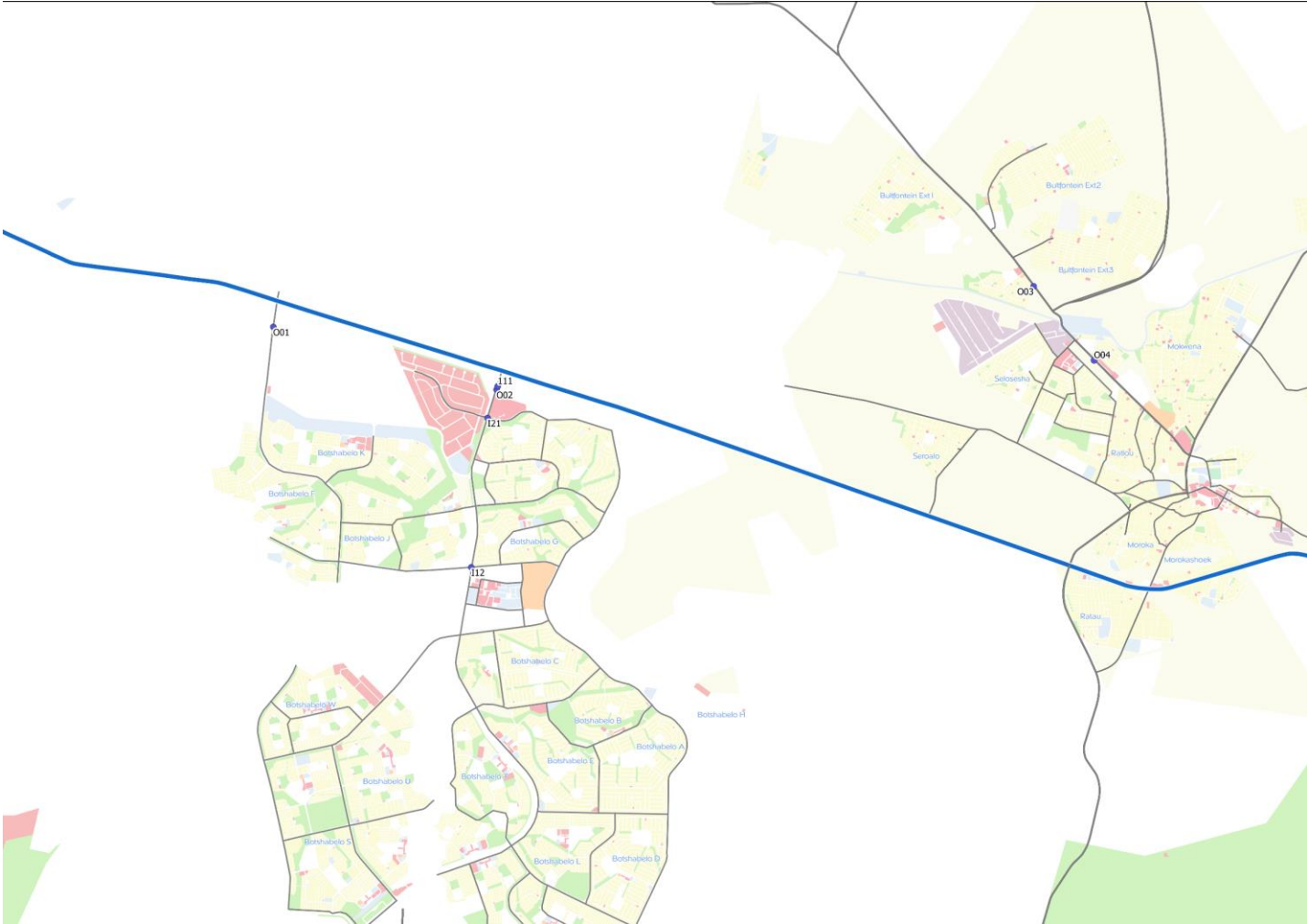


Figure 4-3: Locations of surveys conducted during 2017 – Thaba Nchu

Table 4-5: Survey Locations (2017)

| Survey Point No. | Description | X-Coordinate | Y-Coordinate |
|------------------|------------------------------|---------------|----------------|
| I01 | Nelson Mandela And Glen_Berg | 26,22663 | -29,1154 |
| I02 | Charles And Berg_Harvey | 26,22648 | -29,117 |
| I03 | Charles And Hanger | 26,22543 | -29,1167 |
| I04 | N8 AND LINK ROAD | 26.790688 | -29.220131 |
| I05 | N8 AND JAN VAN RIEBEECK | 26.865123 | -29.226979° |
| I06 | ROAD C AND ROAD D | 26.838975 | -29.209938 |
| I07 | ROAD C AND MARKET | 26.841846 | -29.215139 |
| I08 | St Georges And Hanger | 26,22395 | -29,1218 |
| I09 | St Georges And Harvey | 26,22491 | -29,1219 |
| I10 | Peet And Hanger | 26,2242 | -29,1206 |
| I11 | Peet And Harvey | 26,22524 | -29,1209 |
| I13 | Hanger And St Andrews | 26,22482 | -29,1191 |
| I14 | N8 Main Road To Botshabelo | 26.8168750522 | -29.2275183751 |
| I15 | N8 Main Road To Botshabelo | 26.8165529496 | -29.2283056483 |
| I16 | Harvey And St Andrews | 26,22563 | -29,1193 |
| I17 | ROAD F AND BRAND | 26.8385220727 | -29.2159527668 |
| I18 | 1st Ave And Park | 26,21017 | -29,1207 |
| I19 | Aliwal And Zastron | 26,21928 | -29,113 |
| I20 | Aliwal And Nelson Mandla | 26,21909 | -29,1138 |
| I21 | Road B And Road O | 26,70891 | -29,2039 |
| I21 | Road B And Road O | 26,22442 | -29,114 |
| I22 | Harvey And Fort | 26,22445 | -29,1234 |
| I23 | Alexandra And Zastron | 26,22579 | -29,1143 |

| Survey Point No. | Description | X-Coordinate | Y-Coordinate |
|------------------|---|---------------|----------------|
| I24 | 1st Ave And Zastron | 26,21265 | -29,1116 |
| I25 | 1st Ave And Nelson Mandela | 26,21244 | -29,1124 |
| I26 | Nelson Mandela And Zastron | 26,20211 | -29,1103 |
| I27 | Nelson Mandela And Df Malherbe | 26,18875 | -29,105 |
| I28 | Kolbe_Pres Boshoff And Victoria | 26,21147 | -29,124 |
| I29 | Faure And Victoria | 26,20351 | -29,1224 |
| I30 | Parfitt_ Walter Sisulu And Victoria | 26,19874 | -29,1214 |
| I31 | Park And Betoger | 26,20627 | -29,1198 |
| I32 | Park And Ella | 26,20816 | -29,1203 |
| L01 | Road A_South Of Botshabelo-F | 26,67703 | -29,2359 |
| L02 | Road G_Botshabelo Rural | 26,69529 | -29,2437 |
| L03 | Road H_Botshabelo U | 26,70496 | -29,2517 |
| L04 | Road I_Botshabelo T | 26,71583 | -29,2763 |
| L05 | Road L_Botshabelo E | 26,72295 | -29,268 |
| L06 | Road H_Botshabelo C | 26,71088 | -29,2503 |
| L07 | Road G_Botshabelo Ba | 26,70781 | -29,2386 |
| L08 | Road J_Botshabelo Ia | 26,7045 | -29,2134 |
| L09 | Road K_Botshabelo J | 26,70528 | -29,2187 |
| L10 | Road K_Botshabelo H | 26,70977 | -29,218 |
| L11 | Road A_South Of N8 | 26,66718 | -29,2032 |
| L13 | Kolbe Street | 26,21114 | -29,1249 |
| L14 | Walter Sisulu | 26,19831 | -29,1224 |
| L15 | President Paul Kruger | 26,19298 | -29,1194 |
| L16 | President Paul Kruger_East Of Df Malherbe | 26,18285 | -29,1187 |
| L17 | Roth Street East Of Faure | 26,20279 | -29,1249 |
| L18 | Df Malherbe_South Of Nelson Mandela | 26,18725 | -29,1065 |
| L19 | Gen Dan Pienaar_North Of Kellner Street | 26,20291 | -29,1071 |
| L20 | 1st Ave_North Of Barnes Street | 26,21357 | -29,1091 |
| L21 | Aiwal Street_North Of 4th Street | 26,22171 | -29,1077 |
| L22 | Union Ave_South Of Delville Street | 26,22068 | -29,1075 |
| L23 | Raymond Mhlaba_East Of Alexandra | 26,2258 | -29,1121 |
| L24 | N8_South Of Charles Street | 26,2283 | -29,1177 |
| L25 | Fort Street_East Of Harvey | 26,22655 | -29,1237 |
| L26 | Harvey_South Of Rhodes Ave | 26,22324 | -29,1282 |
| L27 | Harvey_South Of President | 26,21904 | -29,1277 |
| L28 | Vereeniging Dr_North Of Jurgens Potgieter | 26,19159 | -29,1645 |
| L29 | Sonneblom Street_West Of M10 Interchange | 26,2649 | -29,1372 |
| L30 | Church Street M30 | 26,21438 | -29,2055 |
| L31 | Road L East Of N6 | 26,19994 | -29,2003 |
| L32 | Road M_In Blomanda | 26,23089 | -29,2102 |
| L33 | Olive Grinter_Between Eliot And Raath Streets | 26,18616 | -29,144 |
| L34 | Dr Belcher_South Of Devis Street | 26,23972 | -29,1346 |
| L35 | N8_West Of Melville Drive | 26,19663 | -29,1078 |
| L36 | Victoria East Of Streeten | 26,20242 | -29,1221 |
| L37 | President Ave_East Of Pres Brand | 26,21637 | -29,1255 |
| L38 | Ferreira Rd_North Of Vereeniging Drive | 26,19948 | -29,1664 |
| L39 | M10_South Of Thaba Nchu Interchange | 26,26638 | -29,1426 |
| O01 | Road A South of N8 Interchange Botshabelo | 26,66921 | -29,1892 |
| O02 | Road B South Of N8 Interchange | 26,7106 | -29,1993 |
| O03 | Thaba Nchu | 26.8135956118 | -29.1863051337 |
| O04 | Thaba Nchu | 26.8183465223 | -29.1917757157 |
| O05 | M14 In Wynand Mouton | 26,16824 | -29,1123 |
| O06 | Walter Sisulu | 26,17964 | -29,1263 |
| O07 | Jagerfontein | 26,18992 | -29,1527 |
| O08 | Oliver Tambo | 26,21609 | -29,1402 |

| Survey Point No. | Description | X-Coordinate | Y-Coordinate |
|------------------|----------------|--------------|--------------|
| O09 | Nelson Mandela | 26,21409 | -29,1128 |
| O10 | Zastron | 26,21429 | -29,1119 |
| O11 | Parfitt Ave | 26,20154 | -29,1131 |
| O12 | Nelson Mandela | 26,20031 | -29,1097 |
| O13 | Charles Street | 26,21372 | -29,1143 |

Table 4-6: Summary of Intersection Count Volumes per Link Count per Direction (2017)

| Location Numbers | Description | Vehicle Type | Vehicle Volumes per Direction | | | |
|------------------|------------------------------|--------------|-------------------------------|-------|--------|-------|
| | | | South | East | North | West |
| I01 | Nelson Mandela and Glen Berg | Pass Cars | 14 091 | 2 858 | 14 972 | 105 |
| | | Mini - Buses | 703 | 630 | 751 | 1 |
| | | Midi - Buses | 127 | 30 | 85 | 1 |
| | | Buses | 130 | 106 | 60 | - |
| | | Art Buses | 105 | 99 | 23 | - |
| | | Trucks | 592 | 174 | 479 | 3 |
| | | Totals | 15 748 | 3 897 | 16 370 | 110 |
| | | | | | | |
| I02 | Charles and Berg Harvey | Pass Cars | - | 1 488 | 3 819 | 2 848 |
| | | Mini - Buses | - | 125 | 72 | 829 |
| | | Midi - Buses | - | 16 | 899 | 47 |
| | | Buses | - | 1 | 35 | 114 |
| | | Art Buses | - | - | 25 | 83 |
| | | Trucks | - | 87 | 218 | 142 |
| | | Totals | 0 | 1 717 | 5 068 | 4 063 |
| | | | | | | |
| I03 | Charles and Hanger | Pass Cars | 5 982 | 2 079 | - | 2 060 |
| | | Mini - Buses | 1 917 | 66 | - | 40 |
| | | Midi - Buses | 89 | 7 | - | 4 |
| | | Buses | 202 | 11 | - | 2 |
| | | Art Buses | 148 | 7 | - | - |
| | | Trucks | 216 | 67 | - | - |
| | | Totals | 8 554 | 2 237 | 0 | 2 106 |
| | | | | | | |
| I08 | St Georges and Hanger | Pass Cars | 8 679 | 999 | - | 2 957 |
| | | Mini - Buses | 4 529 | 756 | - | 424 |
| | | Midi - Buses | 100 | 79 | - | 56 |
| | | Buses | 206 | 23 | - | 102 |
| | | Art Buses | 125 | 11 | - | 113 |
| | | Trucks | 234 | 31 | - | 109 |
| | | Totals | 13 873 | 1 899 | 0 | 3 761 |
| | | | | | | |
| I09 | St Georges and Harvey | Pass Cars | - | 577 | 6 450 | 2 759 |
| | | Mini - Buses | - | 702 | 5 157 | 404 |
| | | Midi - Buses | - | 106 | 287 | 67 |
| | | Buses | - | - | 167 | 11 |
| | | Art Buses | - | - | 97 | 7 |
| | | Trucks | - | 24 | - | - |
| | | Totals | 0 | 1 409 | 12 158 | 3 248 |
| | | | | | | |
| I10 | Peet and Hanger | Pass Cars | 7 346 | - | - | - |
| | | Mini - Buses | 2 698 | - | - | - |
| | | Midi - Buses | 88 | - | - | - |
| | | Buses | 44 | - | - | - |
| | | Art Buses | 23 | - | - | - |
| | | Trucks | 222 | - | - | - |
| | | Totals | 10 421 | 0 | 0 | 0 |
| | | | | | | |
| I11 | Peet and Harvey Road | Pass Cars | - | 193 | 5 510 | 326 |
| | | Mini - Buses | - | 510 | 2 056 | 122 |
| | | Midi - Buses | - | 12 | 187 | 2 |
| | | Buses | - | - | 177 | - |
| | | Art Buses | - | - | 98 | - |
| | | | | | | |

| Location Numbers | Description | Vehicle Type | Vehicle Volumes per Direction | | | |
|------------------|---------------------------|--------------|-------------------------------|--------|-------|--------|
| | | | South | East | North | West |
| I12 | Road B and Road E | Trucks | - | - | 213 | 4 |
| | | Totals | 0 | 715 | 8 241 | 454 |
| | | | | | | |
| | | Pass Cars | 2 814 | 1 388 | 2 850 | 716 |
| | | Mini - Buses | 1 398 | 106 | 1 083 | 433 |
| | | Midi - Buses | 117 | 8 | 129 | 14 |
| | | Buses | 60 | 16 | 54 | 7 |
| | | Art Buses | 47 | 7 | 21 | - |
| I13 | Hanger and St Andrews | Trucks | 109 | 84 | 162 | 32 |
| | | Totals | 4 545 | 1 609 | 4 299 | 1 202 |
| | | | | | | |
| | | Pass Cars | 6 617 | - | - | 3 812 |
| | | Mini - Buses | 2 420 | - | - | 205 |
| | | Midi - Buses | 94 | - | - | 33 |
| | | Buses | 365 | - | - | 56 |
| | | Art Buses | 282 | - | - | 40 |
| I16 | Harvey and St Andrews | Trucks | 227 | - | - | 162 |
| | | Totals | 10 005 | 0 | 0 | 4 308 |
| | | | | | | |
| | | Pass Cars | - | 70 | 2 548 | 3 416 |
| | | Mini - Buses | - | 9 | 1 018 | 1 172 |
| | | Midi - Buses | - | 4 | 163 | 23 |
| | | Buses | - | - | 24 | 145 |
| | | Art Buses | - | - | 21 | 83 |
| I18 | 1st Ave and Park | Trucks | - | 5 | 165 | 56 |
| | | Totals | - | 88 | 3 939 | 4 895 |
| | | | | | | |
| | | Pass Cars | - | 4 637 | 6 770 | 7 370 |
| | | Mini - Buses | - | 176 | 145 | 410 |
| | | Midi - Buses | - | 26 | 17 | 74 |
| | | Buses | - | 18 | 7 | 44 |
| | | Art Buses | - | 6 | 10 | 33 |
| I19 | Aliwal and Zastron | Trucks | - | 90 | 79 | 146 |
| | | Totals | - | 4 953 | 7 028 | 8 077 |
| | | | | | | |
| | | Pass Cars | - | - | 6 039 | 13 480 |
| | | Mini - Buses | - | - | 31 | 545 |
| | | Midi - Buses | - | - | 18 | 71 |
| | | Buses | - | - | 18 | 55 |
| | | Art Buses | - | - | 12 | 43 |
| I20 | Aliwal and Nelson Mandela | Trucks | - | - | 77 | 344 |
| | | Totals | - | - | 6 195 | 14 538 |
| | | | | | | |
| | | Pass Cars | - | 13 375 | 7 140 | - |
| | | Mini - Buses | - | 460 | 36 | - |
| | | Midi - Buses | - | 36 | 14 | - |
| | | Buses | - | 59 | 47 | - |
| | | Art Buses | - | 29 | 44 | - |
| I21 | Road B and Road O | Trucks | - | 407 | 85 | - |
| | | Totals | - | 14 366 | 7 366 | - |
| | | | | | | |
| | | Pass Cars | 2 778 | 785 | 1 412 | 1 666 |
| | | Mini - Buses | 1 073 | 745 | 51 | 754 |
| | | Midi - Buses | 149 | 29 | 106 | 11 |
| | | Buses | 84 | 25 | 56 | 9 |
| | | Art Buses | 67 | 1 | 27 | - |
| I22 | Harvey and Fort | Trucks | 139 | 114 | 183 | 123 |
| | | Totals | 4 290 | 1 699 | 1 835 | 2 563 |
| | | | | | | |
| | | Pass Cars | 6 383 | 7 206 | 7 329 | - |
| | | Mini - Buses | 2 970 | 1 793 | 6 151 | - |
| | | Midi - Buses | 276 | 134 | 267 | - |
| | | Buses | 80 | 134 | 143 | - |
| | | Art Buses | 28 | 101 | 86 | - |
| | | Trucks | 266 | 224 | 267 | - |
| | | | | | | |

| Location Numbers | Description | Vehicle Type | Vehicle Volumes per Direction | | | |
|------------------|-------------------------------------|---------------|-------------------------------|---------------|---------------|---------------|
| | | | South | East | North | West |
| | | Totals | 10 003 | 9 592 | 14 243 | 0 |
| I23 | Alexandra and Zastron | Pass Cars | 12 726 | - | 5 870 | 10 185 |
| | | Mini - Buses | 609 | - | 278 | 291 |
| | | Midi - Buses | 27 | - | 23 | 43 |
| | | Buses | 63 | - | 27 | 23 |
| | | Art Buses | 18 | - | 8 | 8 |
| | | Trucks | 368 | - | 190 | 361 |
| | | Totals | 13 811 | 0 | 6 396 | 10 911 |
| I24 | 1st Ave and Zastron | Pass Cars | 5 830 | - | 6 793 | 13 724 |
| | | Mini - Buses | 26 | - | 31 | 461 |
| | | Midi - Buses | 9 | - | 4 | 80 |
| | | Buses | 2 | - | 1 | 71 |
| | | Art Buses | - | - | - | 39 |
| | | Trucks | 44 | - | 39 | 389 |
| | | Totals | 5 911 | 0 | 6 868 | 14 764 |
| I25 | 1st Ave and Nelson Mandela | Pass Cars | 6 621 | 13 950 | 7 564 | - |
| | | Mini - Buses | 25 | 460 | 91 | - |
| | | Midi - Buses | 92 | 48 | 9 | - |
| | | Buses | 3 | 81 | 5 | - |
| | | Art Buses | 1 | 58 | 2 | - |
| | | Trucks | 64 | 478 | 53 | - |
| | | Totals | 6 806 | 15 075 | 7 724 | 0 |
| I26 | Nelson Mandela and Zastron | Pass Cars | 12 029 | 14 326 | 11 813 | 16 926 |
| | | Mini - Buses | 83 | 281 | 50 | 204 |
| | | Midi - Buses | 17 | 57 | 3 | 29 |
| | | Buses | 22 | 70 | 19 | 27 |
| | | Art Buses | 3 | 44 | 9 | 11 |
| | | Trucks | 159 | 404 | 118 | 366 |
| | | Totals | 12 313 | 15 182 | 12 012 | 17 563 |
| I27 | Nelson Mandela and DF Malherbe | Pass Cars | 6 305 | 14 370 | 2 356 | 12 253 |
| | | Mini - Buses | 176 | 225 | 107 | 111 |
| | | Midi - Buses | 34 | 63 | 10 | 49 |
| | | Buses | 8 | 59 | 14 | 31 |
| | | Art Buses | 3 | 34 | 3 | 10 |
| | | Trucks | 66 | 388 | 26 | 355 |
| | | Totals | 6 592 | 15 139 | 2 516 | 12 809 |
| I28 | Kolbe Pres Boshoff and Victoria | Pass Cars | 10 937 | 10 892 | 15 165 | 5 597 |
| | | Mini - Buses | 214 | 296 | 110 | 82 |
| | | Midi - Buses | 70 | 76 | 14 | 16 |
| | | Buses | 70 | 76 | 14 | 16 |
| | | Art Buses | 11 | 8 | 20 | 1 |
| | | Trucks | 130 | 193 | 221 | 98 |
| | | Totals | 11 432 | 11 541 | 15 544 | 5 810 |
| I29 | Faure and Victoria | Pass Cars | 4 374 | 5 456 | 3 099 | 5 609 |
| | | Mini - Buses | 36 | 114 | 43 | 54 |
| | | Midi - Buses | 22 | 25 | 17 | 13 |
| | | Buses | 12 | 16 | 4 | 7 |
| | | Art Buses | 4 | 5 | - | - |
| | | Trucks | 43 | 154 | 26 | 115 |
| | | Totals | 4 491 | 5 770 | 3 189 | 5 798 |
| I30 | Parfitt_ Walter Sisulu and Victoria | Pass Cars | 124 | 5 962 | 5 524 | 2 041 |
| | | Mini - Buses | - | 34 | 98 | 23 |
| | | Midi - Buses | - | 13 | 3 | 3 |
| | | Buses | - | 9 | 8 | - |
| | | Art Buses | - | 3 | - | - |
| | | Trucks | 19 | 152 | 113 | 50 |
| | | Totals | 143 | 6 173 | 5 746 | 2 117 |

| Location Numbers | Description | Vehicle Type | Vehicle Volumes per Direction | | | |
|------------------|------------------|---------------|-------------------------------|--------------|------------|--------------|
| | | | South | East | North | West |
| I31 | Park and Betoger | Pass Cars | - | 5 068 | 532 | 7 452 |
| | | Mini - Buses | - | 267 | 4 | 360 |
| | | Midi - Buses | - | 37 | - | 49 |
| | | Buses | - | 24 | 2 | 29 |
| | | Art Buses | - | 16 | - | 48 |
| | | Trucks | - | 102 | 1 | 138 |
| | | Totals | - | 5 514 | 539 | 8 076 |
| I32 | Park and Ella | Pass Cars | 1 376 | 5 625 | - | 7 049 |
| | | Mini - Buses | 99 | 498 | - | 407 |
| | | Midi - Buses | 5 | 44 | - | 76 |
| | | Buses | - | 12 | - | 52 |
| | | Art Buses | - | 14 | - | 39 |
| | | Trucks | 28 | 110 | - | 119 |
| | | Totals | 1 508 | 6 303 | 0 | 7 742 |

Table 4-7: 12-hour Public Transport Passenger Volumes per location per direction 2017

| Survey Location No. and Direction of travel | Total Pax for 4+1 Taxis | Total Pax for Mini Buses | Total Pax for Midi Buses | Total Pax for Buses | Total Pax for Artic Buses | Total Number of PT Pax |
|---|-------------------------|--------------------------|--------------------------|---------------------|---------------------------|------------------------|
| VOC-01 | 304 | 207 | 336 | 1 498 | 1 529 | 3 874 |
| - Northbound | 112 | 71 | 116 | 163 | 111 | 573 |
| - Southbound | 192 | 136 | 220 | 1 335 | 1 418 | 3 301 |
| VOC-02 | 964 | 1 652 | 3 919 | 6 225 | 8 290 | 21 050 |
| - Northbound | 408 | 691 | 1 831 | 1 927 | 2 456 | 7 313 |
| - Southbound | 556 | 961 | 2 088 | 4 298 | 5 834 | 13 737 |
| VOC-03 | 1 792 | 1 680 | 1 07 | 1 016 | 1 038 | 5 633 |
| - Northbound | 992 | 916 | 66 | 771 | 872 | 3 617 |
| - Southbound | 800 | 764 | 41 | 245 | 166 | 2 016 |
| VOC-04 | 1 936 | 2 720 | 113 | 2 217 | 821 | 7 807 |
| - Northbound | 1 152 | 1 509 | 67 | 1 319 | 818 | 4 865 |
| - Southbound | 784 | 1 211 | 46 | 898 | 3 | 2 942 |
| VOC-05 | 672 | 1 412 | 748 | 929 | 2 966 | 6 727 |
| - Eastbound | 176 | 641 | 389 | 339 | 1 752 | 3 297 |
| - Westbound | 496 | 771 | 359 | 590 | 1 214 | 3 430 |
| VOC-06 | 372 | 436 | 194 | 721 | 549 | 2 272 |
| - Eastbound | 200 | 51 | 128 | 297 | 438 | 1 114 |
| - Westbound | 172 | 385 | 66 | 424 | 111 | 1 158 |
| VOC-07 | 1 008 | 1 954 | 899 | 1 619 | 766 | 6 246 |
| - Northbound | 508 | 1 358 | 713 | 880 | 1 | 3 460 |
| - Southbound | 500 | 596 | 186 | 739 | 765 | 2 786 |
| VOC-08 | 2 076 | 21 591 | 1 445 | 4 084 | 3 968 | 33 164 |
| - Northbound | 1 476 | 10 773 | 814 | 2 049 | 1 977 | 17 089 |
| - Southbound | 600 | 10 818 | 631 | 2 035 | 1 991 | 16 075 |
| VOC-10_E | 700 | 2 987 | 436 | 1 404 | 1 009 | 6 536 |
| - Eastbound | 700 | 2 987 | 436 | 1 404 | 1 009 | 6 536 |
| VOC_009_W | 656 | 4 216 | 928 | 4 031 | 3 189 | 13 020 |
| - Westbound | 656 | 4 216 | 928 | 4 031 | 3 189 | 13 020 |
| VOC-12 | 692 | 5 857 | 1 116 | 1 952 | 2 155 | 11 772 |
| - Eastbound | 400 | 1 134 | 199 | 541 | 556 | 2 830 |
| - Westbound | 292 | 4 723 | 917 | 1 411 | 1 599 | 8 942 |
| VOC-13 | 1 332 | 1 753 | 358 | 98 | 109 | 3 650 |
| - Eastbound | 956 | 771 | 112 | 65 | - | 1 904 |
| - Westbound | 376 | 982 | 246 | 33 | 109 | 1 746 |

Table 4-8: 12-Hour Public Transport Vehicles per location per direction (2017)

| Survey Location No. and Direct of Survey | Total Vehicles for Mini Buses | Total Vehicles for Midi Buses | Total Vehicles for Buses | Total Vehicles for Artic Buses | Total Vehicles for PT Vehicles |
|--|-------------------------------|-------------------------------|--------------------------|--------------------------------|--------------------------------|
| LO1 | 24 | 3 | 10 | - | 37 |
| - Northbound | 10 | 2 | 6 | - | 18 |

| Survey Location No. and Direct of Survey | Total Vehicles for Mini Buses | Total Vehicles for Midi Buses | Total Vehicles for Buses | Total Vehicles for Artic Buses | Total Vehicles for PT Vehicles |
|--|-------------------------------|-------------------------------|--------------------------|--------------------------------|--------------------------------|
| - Southbound | 14 | 1 | 4 | - | 19 |
| LO2 | 764 | 44 | 56 | 13 | 877 |
| - Eastbound | 368 | 18 | 27 | 4 | 417 |
| - Westbound | 396 | 26 | 29 | 9 | 460 |
| LO3 | 51 | 2 | - | 13 | 66 |
| - Eastbound | 26 | 2 | - | 7 | 35 |
| - Westbound | 25 | - | - | 6 | 31 |
| LO4 | 937 | 10 | 27 | 3 | 977 |
| - Northbound | 594 | 8 | 16 | 3 | 621 |
| - Southbound | 343 | 2 | 11 | - | 356 |
| LO5 | 200 | 13 | 5 | 18 | 236 |
| - Eastbound | 82 | 6 | 4 | 7 | 99 |
| - Westbound | 118 | 7 | 1 | 11 | 137 |
| LO6 | 59 | 11 | 5 | - | 75 |
| - Eastbound | 26 | 3 | 1 | - | 30 |
| - Westbound | 33 | 8 | 4 | - | 45 |
| LO7 | 307 | 18 | 27 | 9 | 361 |
| - Eastbound | 102 | 12 | 12 | 6 | 132 |
| - Westbound | 205 | 6 | 15 | 3 | 229 |
| LO8 | 135 | 16 | 7 | 2 | 160 |
| - Eastbound | 81 | 6 | 4 | - | 91 |
| - Westbound | 54 | 10 | 3 | 2 | 69 |
| LO9 | 568 | 53 | 25 | 7 | 653 |
| - Eastbound | 331 | 18 | 10 | 3 | 362 |
| - Westbound | 237 | 35 | 15 | 4 | 291 |
| LO10 | 80 | 20 | 18 | 9 | 127 |
| - Eastbound | 48 | 11 | 10 | 6 | 75 |
| - Westbound | 32 | 9 | 8 | 3 | 52 |
| LO11 | 284 | 32 | 31 | 8 | 355 |
| - Northbound | 140 | 21 | 20 | 5 | 186 |
| - Southbound | 144 | 11 | 11 | 3 | 169 |
| LO13 | 402 | 147 | 91 | 25 | 665 |
| - Northbound | 201 | 66 | 48 | 12 | 327 |
| - Southbound | 201 | 81 | 43 | 13 | 338 |
| LO15 | 1 177 | 163 | 114 | 42 | 1 496 |
| - Eastbound | 572 | 73 | 36 | 12 | 693 |
| - Westbound | 605 | 90 | 78 | 30 | 803 |
| LO16 | 718 | 112 | 41 | 32 | 903 |
| - Eastbound | 316 | 50 | 11 | 4 | 381 |
| - Westbound | 402 | 62 | 30 | 28 | 522 |
| LO17 | 93 | 56 | 25 | 2 | 176 |
| - Eastbound | 40 | 29 | 10 | - | 79 |
| - Westbound | 53 | 27 | 15 | 2 | 97 |
| LO18 | 464 | 96 | 27 | 33 | 620 |
| - Northbound | 234 | 52 | 21 | 25 | 332 |
| - Southbound | 230 | 44 | 6 | 8 | 288 |
| LO19 | 69 | 4 | 44 | 22 | 139 |
| - Northbound | 27 | 1 | 17 | 10 | 55 |
| - Southbound | 42 | 3 | 27 | 12 | 84 |
| LO20 | 54 | 9 | 3 | - | 66 |
| - Northbound | 30 | 4 | 2 | - | 36 |
| - Southbound | 24 | 5 | 1 | - | 30 |
| LO21 | 260 | 20 | 52 | 32 | 364 |
| - Northbound | 42 | 9 | 27 | 16 | 94 |
| - Southbound | 218 | 11 | 25 | 16 | 270 |
| LO22 | 605 | 48 | 21 | 1 | 675 |
| - Northbound | 358 | 27 | 11 | 1 | 397 |

| Survey Location No. and Direct of Survey | Total Vehicles for Mini Buses | Total Vehicles for Midi Buses | Total Vehicles for Buses | Total Vehicles for Artic Buses | Total Vehicles for PT Vehicles |
|--|-------------------------------|-------------------------------|--------------------------|--------------------------------|--------------------------------|
| - Southbound | 247 | 21 | 10 | - | 278 |
| LO23 | 395 | 57 | 46 | 27 | 525 |
| - Eastbound | 216 | 28 | 27 | 16 | 287 |
| - Westbound | 179 | 29 | 19 | 11 | 238 |
| LO24 | 1 123 | 423 | 510 | 332 | 2 388 |
| - Northbound | 514 | 189 | 227 | 176 | 1 106 |
| - Southbound | 609 | 234 | 283 | 156 | 1 282 |
| LO25 | 5 591 | 411 | 249 | 171 | 6 422 |
| - Eastbound | 2 778 | 176 | 141 | 99 | 3 194 |
| - Westbound | 2 813 | 235 | 108 | 72 | 3 228 |
| LO26 | 3 859 | 259 | 129 | 64 | 4 311 |
| - Northbound | 1 855 | 120 | 69 | 34 | 2 078 |
| - Southbound | 2 004 | 139 | 60 | 30 | 2 233 |
| LO27 | 1 528 | 140 | 136 | 42 | 1 846 |
| - Northbound | 844 | 64 | 82 | 34 | 1 024 |
| - Southbound | 684 | 76 | 54 | 8 | 822 |
| LO28 | 69 | 7 | 37 | 1 | 114 |
| - Eastbound | 36 | 5 | 17 | 1 | 59 |
| - Westbound | 33 | 2 | 20 | - | 55 |
| LO29 | 558 | 130 | 72 | 35 | 795 |
| - Eastbound | 310 | 65 | 43 | 16 | 434 |
| - Westbound | 248 | 65 | 29 | 19 | 361 |
| LO30 | 70 | 13 | 4 | - | 87 |
| - Northbound | 52 | 11 | 3 | - | 66 |
| - Southbound | 18 | 2 | 1 | - | 21 |
| LO31 | 21 | 175 | 30 | 15 | 241 |
| - Eastbound | 12 | 127 | 14 | 7 | 160 |
| - Westbound | 9 | 48 | 16 | 8 | 81 |
| LO32 | 351 | 9 | 10 | 1 | 371 |
| - Northbound | 108 | 2 | 5 | 1 | 116 |
| - Southbound | 243 | 7 | 5 | - | 255 |
| LO33 | 276 | 75 | 28 | 16 | 395 |
| - Eastbound | 128 | 33 | 6 | - | 167 |
| - Westbound | 148 | 42 | 22 | 16 | 228 |
| LO34 | 5 940 | 201 | 158 | 62 | 6 361 |
| - Eastbound | 2 990 | 116 | 87 | 38 | 3 231 |
| - Westbound | 2 950 | 85 | 71 | 24 | 3 130 |
| LO35 | 354 | 123 | 80 | 59 | 616 |
| - Eastbound | 187 | 62 | 50 | 41 | 340 |
| - Westbound | 167 | 61 | 30 | 18 | 276 |
| LO36 | 188 | 42 | 27 | 4 | 261 |
| - Eastbound | 95 | 28 | 16 | 2 | 141 |
| - Westbound | 93 | 14 | 11 | 2 | 120 |
| LO37 | 581 | 107 | 65 | 20 | 773 |
| - Eastbound | 364 | 77 | 28 | 10 | 479 |
| - Westbound | 217 | 30 | 37 | 10 | 294 |
| LO38 | 63 | 30 | 9 | - | 102 |
| - Northbound | 31 | 9 | 4 | - | 44 |
| - Southbound | 32 | 21 | 5 | - | 58 |
| LO39 | 809 | 190 | 53 | 23 | 1 075 |
| - Northbound | 357 | 78 | 16 | 12 | 463 |
| - Southbound | 452 | 112 | 37 | 11 | 612 |
| O01 | 28 | 33 | 15 | 5 | 81 |
| - Northbound | 15 | 22 | 12 | 4 | 53 |
| - Southbound | 13 | 11 | 3 | 1 | 28 |
| O02 | 147 | 199 | 80 | 45 | 471 |
| - Northbound | 73 | 99 | 46 | 24 | 242 |

| Survey Location No. and Direct of Survey | Total Vehicles for Mini Buses | Total Vehicles for Midi Buses | Total Vehicles for Buses | Total Vehicles for Artic Buses | Total Vehicles for PT Vehicles |
|--|-------------------------------|-------------------------------|--------------------------|--------------------------------|--------------------------------|
| - Southbound | 74 | 100 | 34 | 21 | 229 |
| O05 | 181 | 82 | 34 | 52 | 349 |
| - Eastbound | 106 | 38 | 14 | 27 | 185 |
| - Westbound | 75 | 44 | 20 | 25 | 164 |
| O06 | 49 | 20 | 14 | 10 | 93 |
| - Eastbound | 43 | 4 | 8 | 3 | 58 |
| - Westbound | 6 | 16 | 6 | 7 | 35 |
| O07 | 242 | 83 | 40 | 10 | 375 |
| - Northbound | 109 | 34 | 23 | 9 | 175 |
| - Southbound | 133 | 49 | 17 | 1 | 200 |
| O08 | 2 235 | 131 | 160 | 82 | 2 608 |
| - Northbound | 1 127 | 69 | 93 | 47 | 1 336 |
| - Southbound | 1 108 | 62 | 67 | 35 | 1 272 |
| O09 | 429 | 67 | 102 | 61 | 659 |
| - Eastbound | 429 | 67 | 102 | 61 | 659 |
| O10 | 452 | 77 | 62 | 38 | 629 |
| - Westbound | 452 | 77 | 62 | 38 | 629 |
| O11 | 159 | 49 | 35 | 2 | 245 |
| - Northbound | 73 | 23 | 17 | 1 | 114 |
| - Southbound | 86 | 26 | 18 | 1 | 131 |
| O12 | 662 | 109 | 68 | 54 | 893 |
| - Eastbound | 433 | 64 | 39 | 37 | 573 |
| - Westbound | 229 | 45 | 29 | 17 | 320 |
| O13 | 248 | 27 | 2 | 1 | 278 |
| - Eastbound | 134 | 16 | 1 | 1 | 152 |
| - Westbound | 114 | 11 | 1 | - | 126 |

4.3 Electronic Counts Results (2017)

The survey positions of the 7-day electronic counts are presented in Figure 4-4 and Figure 4-5 and the detail per site provided in Table 4-9. The 24-hour total vehicles per station are presented in Table 4-10.



Figure 4-4: Locations of electronic surveys conducted during 2017 - Bloemfontein



Figure 4-5: Locations of electronic surveys conducted during 2017 – Thaba Nchu, Botshabelo

Table 4-9: Electronic Counts Listed

| No | STATION NO | LOCATION 1 | ROAD TYPE | LOCATION | | NO OF LANES |
|----|------------|----------------------|-----------|-------------|------------------|-------------|
| | | | | Between | and | |
| A | 888110 | N8 | Surface | Selossha 26 | Botshabelo west | 3 |
| B | 888111 | Botshabelo main rd | Surface | N8 | | 4 |
| C | 888112 | N8 | Surface | BFN | Botshabelo east | 3 |
| D | 888113 | Sand du Plessis st | Gravel | | Kruger st | 1(2) |
| E | 888114 | Andries Pretorius | Surface | Utrecht st | Haarlem | 4 |
| F | 888115 | Eeufees rd | Surface | Deal rd | Versailles st | 4 |
| G | 888116 | Bybel huis | Surface | N1 | Jac Van Rhyn rd | 6 |
| H | 888117 | Walter Sesulu | Surface | N8 | Van Schalkwyk st | 3 |
| I | 888118 | Kerk st | Surface | M10 | Harley st | 4 |
| J | 888119 | DR Belcher rd | Surface | | | 4 |
| K | 888120 | Jagersfontein/Currie | Surface | N1 | - | 2 |

Table 4-10: Electronic Counts Summary

| Date | Week Day | Heavy | Total | Light | | | | Heavy | Total | Light |
|------------|-----------|--------------------|-------|-------|----------------------------|-----|-------|-----------------|-------|-------|
| F110 | | East to Selossha | | | West to Botshabelo Main Rd | | | Both Directions | | |
| 13/11/2017 | Monday | 3 330 | 510 | 3 840 | | | | 3 330 | 510 | 3 840 |
| 14/11/2017 | Tuesday | 6 379 | 1 117 | 7 496 | | | | 6 379 | 1 117 | 7 496 |
| 15/11/2017 | Wednesday | 7 091 | 1 192 | 8 283 | | | | 7 091 | 1 192 | 8 283 |
| 16/11/2017 | Thursday | 6 895 | 1 126 | 8 021 | | | | 6 895 | 1 126 | 8 021 |
| 17/11/2017 | Friday | 8 684 | 1 238 | 9 922 | | | | 8 684 | 1 238 | 9 922 |
| 18/11/2017 | Saturday | 7 693 | 594 | 8 287 | | | | 7 693 | 594 | 8 287 |
| 19/11/2017 | Sunday | 5 695 | 463 | 6 158 | | | | 5 695 | 463 | 6 158 |
| 20/11/2017 | Monday | 6 712 | 1 168 | 7 880 | | | | 6 712 | 1 168 | 7 880 |
| 21/11/2017 | Tuesday | 6 619 | 1 186 | 7 805 | | | | 6 619 | 1 186 | 7 805 |
| 22/11/2017 | Wednesday | 6 624 | 1 170 | 7 794 | | | | 6 624 | 1 170 | 7 794 |
| 23/11/2017 | Thursday | 6 996 | 1 235 | 8 231 | | | | 6 996 | 1 235 | 8 231 |
| 24/11/2017 | Friday | 483 | 139 | 622 | | | | 483 | 139 | 622 |
| F111 | | North to N8 | | | South to Botshabelo | | | Both Directions | | |
| 13/11/2017 | Monday | 1 003 | 182 | 1 185 | 989 | 285 | 1 274 | 1 992 | 467 | 2 459 |
| 14/11/2017 | Tuesday | 2 431 | 573 | 3 004 | 2 171 | 525 | 2 696 | 4 602 | 1 098 | 5 700 |
| 15/11/2017 | Wednesday | 2 726 | 602 | 3 328 | 2 466 | 577 | 3 043 | 5 192 | 1 179 | 6 371 |
| 16/11/2017 | Thursday | 2 751 | 607 | 3 358 | 2 536 | 585 | 3 121 | 5 287 | 1 192 | 6 479 |
| 17/11/2017 | Friday | 3 322 | 698 | 4 020 | 3 232 | 672 | 3 904 | 6 554 | 1 370 | 7 924 |
| 18/11/2017 | Saturday | 3 120 | 376 | 3 496 | 3 066 | 377 | 3 443 | 6 186 | 753 | 6 939 |
| 19/11/2017 | Sunday | 2 170 | 251 | 2 421 | 1 918 | 249 | 2 167 | 4 088 | 500 | 4 588 |
| 20/11/2017 | Monday | 2 657 | 608 | 3 265 | 2 312 | 571 | 2 883 | 4 969 | 1 179 | 6 148 |
| 21/11/2017 | Tuesday | 2 472 | 602 | 3 074 | 2 308 | 567 | 2 875 | 4 780 | 1 169 | 5 949 |
| 22/11/2017 | Wednesday | 2 474 | 579 | 3 053 | 2 294 | 576 | 2 870 | 4 768 | 1 155 | 5 923 |
| 23/11/2017 | Thursday | 2 658 | 625 | 3 283 | 2 462 | 617 | 3 079 | 5 120 | 1 242 | 6 362 |
| 24/11/2017 | Friday | 257 | 138 | 395 | 125 | 20 | 145 | 382 | 158 | 540 |
| F112 | | East to Botshabelo | | | West to Bloemfontein | | | Both Directions | | |
| 13/11/2017 | Monday | 1 302 | 331 | 1 633 | 881 | 198 | 1 079 | 2 183 | 529 | 2 712 |
| 14/11/2017 | Tuesday | 3 486 | 824 | 4 310 | 3 650 | 866 | 4 516 | 7 136 | 1 690 | 8 826 |
| 15/11/2017 | Wednesday | 3 975 | 879 | 4 854 | 3 951 | 888 | 4 839 | 7 926 | 1 767 | 9 693 |

| Date | Week Day | Heavy | Total | Light | | | | Heavy | Total | Light |
|------------|-----------|-------------------------------|-------|-------------------------|-------|-----------------|-------|--------|-------|--------|
| 16/11/2017 | Thursday | 3 921 | 843 | 4 764 | 3 878 | 873 | 4 751 | 7 799 | 1 716 | 9 515 |
| 17/11/2017 | Friday | 5 220 | 966 | 6 186 | 4 653 | 1 015 | 5 668 | 9 873 | 1 981 | 11 854 |
| 18/11/2017 | Saturday | 4 011 | 465 | 4 476 | 4 052 | 541 | 4 593 | 8 063 | 1 006 | 9 069 |
| 19/11/2017 | Sunday | 2 370 | 325 | 2 695 | 3 275 | 354 | 3 629 | 5 645 | 679 | 6 324 |
| 20/11/2017 | Monday | 3 550 | 894 | 4 444 | 3 861 | 903 | 4 764 | 7 411 | 1 797 | 9 208 |
| 21/11/2017 | Tuesday | 3 210 | 758 | 3 968 | 3 717 | 875 | 4 592 | 6 927 | 1 633 | 8 560 |
| 22/11/2017 | Wednesday | 3 461 | 814 | 4 275 | 3 651 | 872 | 4 523 | 7 112 | 1 686 | 8 798 |
| 23/11/2017 | Thursday | 3 733 | 885 | 4 618 | 4 018 | 915 | 4 933 | 7 751 | 1 800 | 9 551 |
| 24/11/2017 | Friday | 959 | 243 | 1 202 | 2 279 | 458 | 2 737 | 3 238 | 701 | 3 939 |
| F113 | | To ABC Brick(East) | | To Kruger St(West) | | Both Directions | | | | |
| 17/11/2017 | Friday | 391 | 193 | 584 | | | | | | |
| 18/11/2017 | Saturday | 283 | 97 | 380 | | | | | | |
| 19/11/2017 | Sunday | 136 | 31 | 167 | | | | | | |
| 20/11/2017 | Monday | 582 | 249 | 831 | | | | | | |
| 21/11/2017 | Tuesday | 643 | 288 | 931 | | | | | | |
| 22/11/2017 | Wednesday | 621 | 303 | 924 | | | | | | |
| 23/11/2017 | Thursday | 604 | 334 | 938 | | | | | | |
| 24/11/2017 | Friday | 669 | 263 | 932 | | | | | | |
| 25/11/2017 | Saturday | 275 | 106 | 381 | | | | | | |
| 26/11/2017 | Sunday | 129 | 66 | 195 | | | | | | |
| 27/11/2017 | Monday | 144 | 55 | 199 | | | | | | |
| F114 | | To Utrecht St(South) | | To Haarlem St(North) | | Both Directions | | | | |
| 14/11/2017 | Tuesday | 1 657 | 378 | 2 035 | 1 570 | 303 | 1 873 | 3 227 | 681 | 3 908 |
| 15/11/2017 | Wednesday | 3 405 | 751 | 4 156 | 3 017 | 733 | 3 750 | 6 422 | 1 484 | 7 906 |
| 16/11/2017 | Thursday | 3 560 | 728 | 4 288 | 3 233 | 716 | 3 949 | 6 793 | 1 444 | 8 237 |
| 17/11/2017 | Friday | 4 348 | 716 | 5 064 | 4 102 | 718 | 4 820 | 8 450 | 1 434 | 9 884 |
| 18/11/2017 | Saturday | 2 668 | 402 | 3 070 | 2 618 | 334 | 2 952 | 5 286 | 736 | 6 022 |
| 19/11/2017 | Sunday | 2 264 | 185 | 2 449 | 2 333 | 249 | 2 582 | 4 597 | 434 | 5 031 |
| 20/11/2017 | Monday | 2 856 | 469 | 3 325 | 2 960 | 607 | 3 567 | 5 816 | 1 076 | 6 892 |
| 21/11/2017 | Tuesday | 2 899 | 608 | 3 507 | 3 037 | 690 | 3 727 | 5 936 | 1 298 | 7 234 |
| 22/11/2017 | Wednesday | 2 868 | 595 | 3 463 | 2 942 | 737 | 3 679 | 5 810 | 1 332 | 7 142 |
| 23/11/2017 | Thursday | 3 225 | 669 | 3 894 | 3 115 | 751 | 3 866 | 6 340 | 1 420 | 7 760 |
| 24/11/2017 | Friday | 212 | 107 | 319 | 209 | 83 | 292 | 421 | 190 | 611 |
| F115 | | To Deal Rd(South) | | To Versailles St(North) | | Both Directions | | | | |
| 14/11/2017 | Tuesday | 3 555 | 318 | 3 873 | 4 421 | 266 | 4 687 | 7 976 | 584 | 8 560 |
| 15/11/2017 | Wednesday | 6 580 | 480 | 7 060 | 6 804 | 495 | 7 299 | 13 384 | 975 | 14 359 |
| 16/11/2017 | Thursday | 6 565 | 464 | 7 029 | 6 730 | 414 | 7 144 | 13 295 | 878 | 14 173 |
| 17/11/2017 | Friday | 7 264 | 459 | 7 723 | 7 487 | 421 | 7 908 | 14 751 | 880 | 15 631 |
| 18/11/2017 | Saturday | 4 987 | 228 | 5 215 | 5 119 | 173 | 5 292 | 10 106 | 401 | 10 507 |
| 19/11/2017 | Sunday | 3 788 | 127 | 3 915 | 3 808 | 104 | 3 912 | 7 596 | 231 | 7 827 |
| 20/11/2017 | Monday | 6 787 | 420 | 7 207 | 6 866 | 430 | 7 296 | 13 653 | 850 | 14 503 |
| 21/11/2017 | Tuesday | 6 535 | 501 | 7 036 | 6 769 | 430 | 7 199 | 13 304 | 931 | 14 235 |
| 22/11/2017 | Wednesday | 6 650 | 502 | 7 152 | 6 887 | 480 | 7 367 | 13 537 | 982 | 14 519 |
| 23/11/2017 | Thursday | 7 030 | 500 | 7 530 | 7 120 | 471 | 7 591 | 14 150 | 971 | 15 121 |
| 24/11/2017 | Friday | 261 | 46 | 307 | 292 | 28 | 320 | 553 | 74 | 627 |
| F116 | | East to Jac van Rhyn Rd(East) | | West to N1(West) | | Both Directions | | | | |

| Date | Week Day | Heavy | Total | Light | | | | Heavy | Total | Light |
|------------|-----------|---------------------|-------|--------------------------|--------|-----------------|--------|--------|-------|--------|
| 14/11/2017 | Tuesday | 8 609 | 428 | 9 037 | 11 647 | 405 | 12 052 | 20 256 | 833 | 21 089 |
| 15/11/2017 | Wednesday | 15 295 | 647 | 15 942 | 15 247 | 707 | 15 954 | 30 542 | 1 354 | 31 896 |
| 16/11/2017 | Thursday | 14 800 | 668 | 15 468 | 14 911 | 687 | 15 598 | 29 711 | 1 355 | 31 066 |
| 17/11/2017 | Friday | 16 347 | 652 | 16 999 | 16 376 | 667 | 17 043 | 32 723 | 1 319 | 34 042 |
| 18/11/2017 | Saturday | 10 467 | 349 | 10 816 | 10 786 | 337 | 11 123 | 21 253 | 686 | 21 939 |
| 19/11/2017 | Sunday | 6 985 | 195 | 7 180 | 7 253 | 265 | 7 518 | 14 238 | 460 | 14 698 |
| 20/11/2017 | Monday | 14 967 | 576 | 15 543 | 14 948 | 638 | 15 586 | 29 915 | 1 214 | 31 129 |
| 21/11/2017 | Tuesday | 14 818 | 676 | 15 494 | 14 751 | 727 | 15 478 | 29 569 | 1 403 | 30 972 |
| 22/11/2017 | Wednesday | 14 953 | 698 | 15 651 | 15 046 | 692 | 15 738 | 29 999 | 1 390 | 31 389 |
| 23/11/2017 | Thursday | 16 227 | 784 | 17 011 | 15 889 | 797 | 16 686 | 32 116 | 1 581 | 33 697 |
| 24/11/2017 | Friday | 738 | 64 | 802 | 563 | 93 | 656 | 1 301 | 157 | 1 458 |
| F117 | | East to Stals Rd | | West to Van Schalkwyk St | | Both Directions | | | | |
| 14/11/2017 | Tuesday | 3 468 | 181 | 3 649 | 3 054 | 128 | 3 182 | 6 522 | 309 | 6 831 |
| 15/11/2017 | Wednesday | 4 877 | 248 | 5 125 | 4 528 | 209 | 4 737 | 9 405 | 457 | 9 862 |
| 16/11/2017 | Thursday | 4 872 | 228 | 5 100 | 4 262 | 189 | 4 451 | 9 134 | 417 | 9 551 |
| 17/11/2017 | Friday | 5 825 | 221 | 6 046 | 5 131 | 201 | 5 332 | 10 956 | 422 | 11 378 |
| 18/11/2017 | Saturday | 4 541 | 103 | 4 644 | 4 121 | 83 | 4 204 | 8 662 | 186 | 8 848 |
| 19/11/2017 | Sunday | 3 580 | 50 | 3 630 | 2 934 | 47 | 2 981 | 6 514 | 97 | 6 611 |
| 20/11/2017 | Monday | 4 726 | 177 | 4 903 | 4 364 | 165 | 4 529 | 9 090 | 342 | 9 432 |
| 21/11/2017 | Tuesday | 4 956 | 250 | 5 206 | 4 623 | 201 | 4 824 | 9 579 | 451 | 10 030 |
| 22/11/2017 | Wednesday | 5 646 | 268 | 5 914 | 5 108 | 207 | 5 315 | 10 754 | 475 | 11 229 |
| 23/11/2017 | Thursday | 5 772 | 248 | 6 020 | 5 364 | 204 | 5 568 | 11 136 | 452 | 11 588 |
| 24/11/2017 | Friday | 234 | 17 | 251 | 223 | 13 | 236 | 457 | 30 | 487 |
| F118 | | To Harley St(North) | | To M10(South) | | Both Directions | | | | |
| 15/11/2017 | Wednesday | 5 179 | 414 | 5 593 | 6 747 | 363 | 7 110 | 11 926 | 777 | 12 703 |
| 16/11/2017 | Thursday | 11 092 | 884 | 11 976 | 11 476 | 817 | 12 293 | 22 568 | 1 701 | 24 269 |
| 17/11/2017 | Friday | 11 942 | 982 | 12 924 | 12 661 | 876 | 13 537 | 24 603 | 1 858 | 26 461 |
| 18/11/2017 | Saturday | 8 248 | 441 | 8 689 | 8 768 | 377 | 9 145 | 17 016 | 818 | 17 834 |
| 19/11/2017 | Sunday | 5 557 | 218 | 5 775 | 6 017 | 185 | 6 202 | 11 574 | 403 | 11 977 |
| 20/11/2017 | Monday | 10 486 | 849 | 11 335 | 11 397 | 818 | 12 215 | 21 883 | 1 667 | 23 550 |
| 21/11/2017 | Tuesday | 10 320 | 860 | 11 180 | 11 128 | 841 | 11 969 | 21 448 | 1 701 | 23 149 |
| 22/11/2017 | Wednesday | 10 469 | 894 | 11 363 | 11 154 | 861 | 12 015 | 21 623 | 1 755 | 23 378 |
| 23/11/2017 | Thursday | 10 722 | 980 | 11 702 | 11 485 | 891 | 12 376 | 22 207 | 1 871 | 24 078 |
| 24/11/2017 | Friday | 808 | 90 | 898 | 664 | 112 | 776 | 1 472 | 202 | 1 674 |
| F119 | | To Monapi Rd(North) | | To M10(South) | | Both Directions | | | | |
| 14/11/2017 | Tuesday | 3 333 | 205 | 3 538 | 4 572 | 239 | 4 811 | 7 905 | 444 | 8 349 |
| 15/11/2017 | Wednesday | 9 093 | 576 | 9 669 | 9 677 | 628 | 10 305 | 18 770 | 1 204 | 19 974 |
| 16/11/2017 | Thursday | 8 828 | 577 | 9 405 | 9 518 | 545 | 10 063 | 18 346 | 1 122 | 19 468 |
| 17/11/2017 | Friday | 9 917 | 541 | 10 458 | 10 483 | 683 | 11 166 | 20 400 | 1 224 | 21 624 |
| 18/11/2017 | Saturday | 8 785 | 260 | 9 045 | 9 476 | 392 | 9 868 | 18 261 | 652 | 18 913 |
| 19/11/2017 | Sunday | 6 762 | 168 | 6 930 | 7 514 | 262 | 7 776 | 14 276 | 430 | 14 706 |
| 20/11/2017 | Monday | 8 821 | 517 | 9 338 | 9 378 | 675 | 10 053 | 18 199 | 1 192 | 19 391 |
| 21/11/2017 | Tuesday | 8 461 | 528 | 8 989 | 9 014 | 646 | 9 660 | 17 475 | 1 174 | 18 649 |
| 22/11/2017 | Wednesday | 8 448 | 510 | 8 958 | 8 888 | 576 | 9 464 | 17 336 | 1 086 | 18 422 |

5 Public Transport Surveys

5.1 Mini-Bus Taxi Supply

5.1.1 Taxi Associations

The mini-bus taxi industry in Bloemfontein plays an important role in the daily transport of the local population of Mangaung. Taxi services are provided throughout the entire Bloemfontein, Botshabelo and Thaba Nchu areas. This transport mode is primarily provided by three (3) registered Taxi Associations namely:

- Greater Bloemfontein Taxi Association (GBTA).
- Thalsta Taxi Association,
- Bata Taxi Association,

The Thalsta Taxi association provides taxi services to Thaba Nchu, the Bata Taxi Association provides services to the Botshabelo and GBTA provides taxi services within the Bloemfontein area. It should be noted that the GBTA also includes 4+1 taxi's which provide transport in the Bloemfontein CBD area.

An extensive electronic on-board survey was conducted in order to gather operational data of the GBTA services within the Bloemfontein CBD area. This on-board was necessary to identify the routes, the passenger numbers and the operational data of the respective associations. The on-board survey was conducted during 2017 in order to inform the planning process of the IPTN and to assist with the determination of the potential impact the IPTN might have on the taxi industry in particular. The raw data obtained from the on-board surveys as well as the outputs are attached to this report as Annexure F. These on-board surveys were conducted with the knowledge and assistance of the Taxi industry as the industry had to sign-off on the final data which will be utilised to determine the impact on future taxi operations and to provide guidance with the taxi industry compensation model. Due to the proposed alignment of the first phasing of the IPTN, it was necessary to primarily focus on the taxi industry operating in those areas. For this reason, only the GBTA operations were surveyed at length and the Thaba Nchu and Botshabelo services had to be abandoned. Limited funding and the future phasing of the IPTN to Thaba Nchu and Botshabelo rendered it less important at this point in time.

Specific outcomes from the survey provided an indication of the service offerings provided by the GBTA, especially in the areas where Phase 1 and 2 of the IPTN will affect their market share and subsequent profitability. Table 5-1 provides a summary of the operational data of GBTA.

Table 5-1: Operational Data of Taxi Associations (all routes)

| Taxi Associations | Number of Vehicles | Members | Areas Operated | No Routes Operated |
|---------------------------------------|--------------------|---------|--------------------------------------|--------------------|
| GBTA On-board Surveys | 1 135* (757)** | 580* | Entire Bloemfontein CBD | 12 |
| GBTA 5- day Facility Survey | 728 | | | |
| 4+1 Taxis | 87 | | Entire Bloemfontein CBD | 12 |
| Thalsta Taxi Association [#] | 230 | 318 | Thaba Nchu and into Bloemfontein CBD | 16 |
| Bata Taxi Association [#] | 130 | | Botshabelo and into Bloemfontein CBD | 16 |
| Totals | | | | |

Note: * - Modelled fleet and Member size based on on-board survey process with Vehicle Availability Factor (VAR) of 100%.

** - Modelled fleet size based on on-board survey process with 67% VAR.

- Association was not included in the electronic on-board survey process and numbers mentioned above can thus not be confirmed.

5.2 Minibus-taxi Facilities

A number of formal, semi-formal and informal taxi facilities were identified and surveyed during 2016. These surveys were conducted with the assistance of the management of the associations as well as selected taxi association members. These associations operate mainly from the following formal locations, namely:

- Thalsta Taxi facility (Blue Rank),
- Bata Taxi facility, and;
- The Greater Bloemfontein Taxi facility.

The abovementioned taxi associations operate specific routes from these facilities which were surveyed in order to determine their operational extent.

5.2.1 Thalsta Taxi Facilities

The Thalsta Taxi Association operates from the taxi facilities shown in Figure 5-1 below.

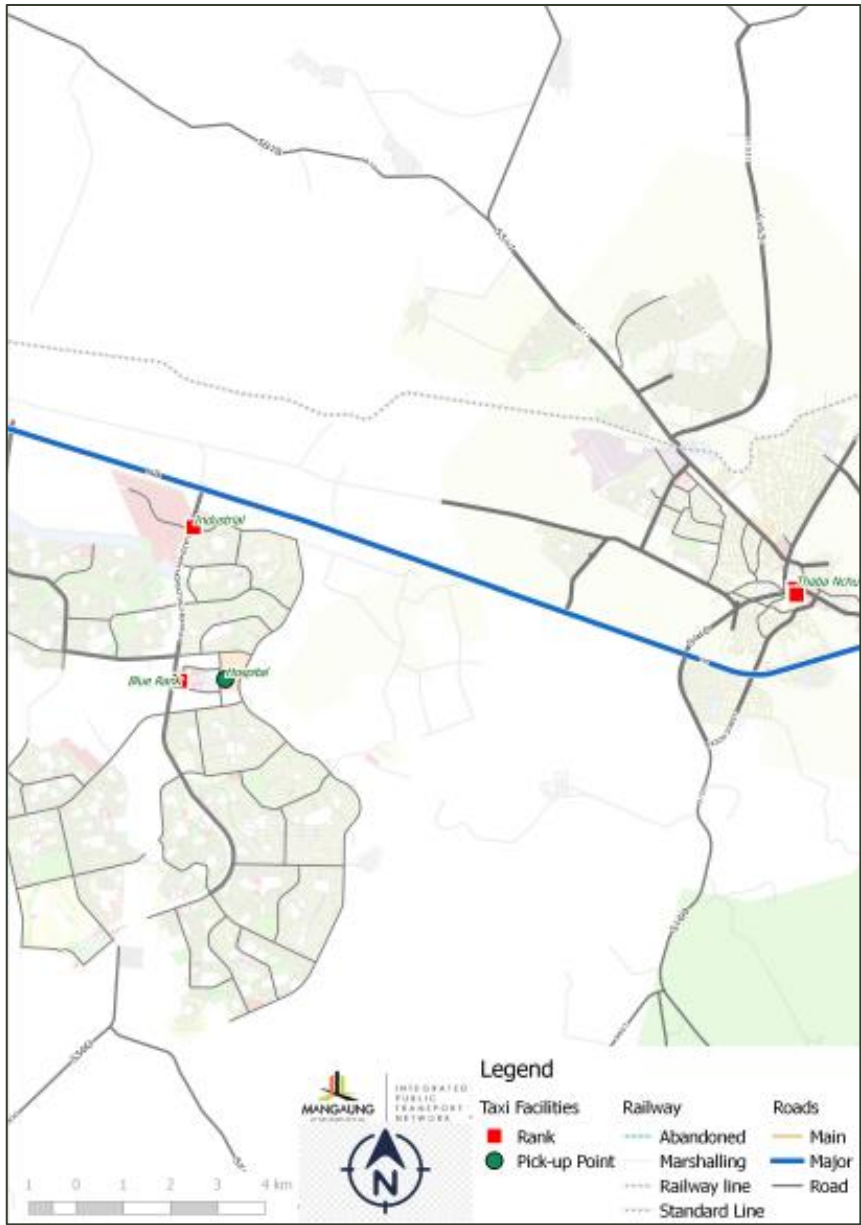


Figure 5-1: Locations of Thalsta and BATA Taxi Facilities

The details for the locations of these facilities are indicated in Table 5-2 below.

Table 5-2: Details of Thalsta Taxi facilities

| Rank Name | Location | Area (m²) | X – Coordinate | Y – Coordinate |
|-----------------------|---------------|-----------|----------------|----------------|
| Main Rank | Brand Street | 2 326 | -29.2164 | 26.8410 |
| 4 + 1 Rank (Ext Rank) | Joseph Street | 1 170 | -29.2153 | 26.8406 |

5.2.2 Bata Taxi Facilities

The Bata Taxi Association operates from the taxi facilities shown in Figure 5-1.

Table 5-3: Details of Bata Taxi facilities

| Rank Name | Location | Approximate Area (m²) | X - Coordinate | Y - Coordinate |
|-------------------------------|-----------|-----------------------|----------------|----------------|
| Industrial Rank | Main Road | 2 788 | -29.2036 | 26.7096 |
| Long-Distance (Hospital) Rank | Main Road | 3 715 | -29.2325 | 26.71651 |
| Local (Blue) Rank | Main Road | 5 964 | -29.2328 | 26.7067 |

5.2.3 GBTA Taxi Facilities

The Greater Bloemfontein Taxi Association (GBTA) operates from various formal and informal taxi facilities throughout the city. The facilities, in the instance of GBTA coincides with the route names as these routes originate or terminate at a particular facility location as indicated in the operations section below.

Due to the proposed IPTN phasing, limited budget and short timelines, it was decided not to proceed with the on-board taxi surveys for the Thalsta and Bata Taxi Associations. Based on this decision no confirmed taxi operational information is available for the Thalsta and Bata Taxi Associations.

It should however also be noted that the minibus taxi industry operates from three (3) formal facilities of which the main intermodal facility is not currently being used by GBTA. GBTA organise themselves and are currently collecting and picking up passengers in the adjacent streets next to the intermodal facility. Road reserves in a radius of approximately one kilometre around the inter-modal facility appear to be unorganised and congested, specifically within the AM and PM peak periods. It is thus of paramount importance that the facility becomes operational and are used by the GBTA on a 24-hour basis.

Figure 5-2 represents the various taxi facility locations utilised on a daily basis by the GBTA taxi association. These facilities vary in their level of operability. Some of the facilities are either formal, semi-formal or informal.



Figure 5-2: Locations of GBTA Taxi Facilities

The facility survey was conducted to obtain information on:

- Origin and destinations,
- Vehicle types,
- Passenger numbers and utilisation of routes and vehicles,
- Number of vehicles entering and exiting the facility,
- Taxi and passenger waiting times.

This taxi facility information was captured over a two (2) week, five (5) days period and the information was gathered over a 12-hr period (5 AM to 6 PM) for the days mentioned below. The survey period included the following weekdays:

- Friday
- Saturday
- Sunday
- Tuesday
- Thursday

The aim was to have as broad as possible spread over a one-week period (including weekends) in order to obtain a holistic view of taxi and passenger movement as well as the preferred origins and destinations. Table 5-4 thus provides a list of ranks, pick-up points as well as the origins and destinations which the various associations service.

Table 5-4: Taxi Origin and Destinations

| Association And (Service Area) | Facility Type | Origin | Destination |
|--|---------------|------------------|-------------------------|
| Thalsta Taxi Association (Thaba Nchu) | Rank | Thaba Nchu Ld | Various |
| | | Thaba Nchu TR | Bochabela |
| | | Thaba Nchu TR | Botshabelo B |
| | | Thaba Nchu TR | Excelsior |
| | | Thaba Nchu TR | Motlatla |
| | | Thaba Nchu TR | Ratau |
| | | Thaba Nchu TR | Ratlou |
| | | Thaba Nchu TR | Rooifontein |
| | | Thaba Nchu TR | Selosesha |
| | | Thaba Nchu TR | Selosesha X 11 |
| | | Thaba Nchu TR | Seroalo |
| | | Thaba Nchu TR | Tweespruit |
| | | Thaba Nchu TR | Unknown |
| | | Thaba Nchu TR | Zone 1 |
| | Rank | 4 + 1 (Ext Rank) | Albert Moroka Secondary |
| | | | Makurung |
| | | | Sananyoka |
| | | | Zone 1 |
| | | | Zone 2 |
| Bata Taxi Association (Botshabelo) | Rank | Industrial Rank | Bloemfontein |
| | | | Botshabelo BA |
| | | | Botshabelo F |
| | | | Botshabelo H |
| | | | Botshabelo J |
| | | | Botshabelo S |
| | | | Botshabelo V |
| | | | Botshabelo W |
| | | | Katamelo Primary |
| | | | |

| Association And (Service Area) | Facility Type | Origin | Destination |
|--------------------------------|---------------|-------------------------------|-----------------------|
| | Pick-Up | Long-Distance Rank (Hospital) | Thaba Nchu |
| | | | Unknown |
| | | | Blue Rank |
| | | | Botshabelo BA |
| | | | Botshabelo C |
| | | | Botshabelo G |
| | | | Botshabelo H |
| | | | Botshabelo K |
| | | | Botshabelo W |
| | | | Industrial |
| | Rank | Local (Blue) Rank | Botshabelo BA |
| | | | Botshabelo D |
| | | | Botshabelo F |
| | | | Botshabelo G |
| | | | Botshabelo H |
| | | | Botshabelo K |
| | | | Botshabelo L |
| | | | Botshabelo M |
| | | | Botshabelo N |
| | | | Botshabelo S |
| | | | Botshabelo T |
| | | | Botshabelo U |
| | | | Botshabelo V |
| | | | Botshabelo W |
| | | | H1 |
| | | | Industrial |
| | | | J1 |
| | | | Thaba Nchu |
| GBTA (Mangaung) | Pick-Up | Academy | Batho |
| | | | Bochabela |
| | Pick-Up | Anna Maggerman | CBD |
| | | | Maphisa |
| | Pick-Up | Bainsvlei | CBD |
| | | | Bainsvlei |
| | | | Bainsvlei Settlement |
| | | | CBD |
| | Pick-Up | Batho Police Station | Langenhovenpark |
| | | | CBD |
| | Pick-Up | Bloemside_1 | Blomanda |
| | | | CBD |
| | Pick-Up | Brandwag | CBD |
| | | | Mimosa |
| | | | Tempe |
| | | | UFS |
| | Rank | BSQ | Unknown |
| | | | Bainsvlei |
| | | | Bayswater |
| | | | CBD |
| | | | Heuwelsig |
| | | | Langenhovenpark |
| | | | Mimosa Mall |
| | | | Noordhoek |
| | | | Pentagonpark |
| | | | Preller Square Centre |
| | | | Tempe |
| | | | UFS |
| | | | Universitas |

| Association And (Service Area) | Facility Type | Origin | Destination |
|--------------------------------|---------------|-------------------------|----------------------|
| | | | Universitas Hospital |
| | | | Unknown |
| | | | Woodlands |
| | Pick-Up | Casino | CBD |
| | | | Lourie Park |
| | | | Pellissier |
| | | | Unknown |
| | Pick-Up | Cross Rd | Bloemside |
| | | | CBD |
| | | | Heidedal |
| | | | Namibia |
| | Pick-Up | Devis Street | CBD |
| | Pick-Up | Engen | CBD |
| | Pick-Up | Fauna | CBD |
| | Pick-Up | Freedom Square | Bloemside |
| | | | CBD |
| | | | Heidedal |
| | Pick-Up | Grassland Super Market | CBD |
| | Pick-Up | Heidedal Police Station | CBD |
| | Pick-Up | Home Affairs | Bergman |
| | | | Bloemside |
| | | | CBD |
| | | | Heidedal |
| | Pick-Up | Hostetel1 | Bloemside |
| | | | CBD |
| | | | Heidedal |
| | Pick-Up | Hyperama | CBD |
| | | | Bloemside |
| | | | CBD |
| | | | HEIDEDAL |
| | | | Hyperama |
| | Pick-Up | Ipopeng | Ipopeng |
| | Pick-Up | KFC | Bergman |
| | | | BLOEMSIDE |
| | | | CBD |
| | | | HEIDEDAL |
| | Pick-Up | Langenhoven Park | CBD |
| | | | LANGENHOVENPARK |
| | Pick-Up | Lourie Park | CBD |
| | | | LOURIERPARK |
| | Pick-Up | Mafora Central | Sowesto |
| | | | BLOMANDA |
| | | | CBD |
| | Pick-Up | Mafora East | Rocklands |
| | | | BLOMANDA |
| | | | CBD |
| | | | DINAWENG |
| | | | Mafora |
| | Pick-Up | Mafora West | Phase 2 |
| | | | BLOMANDA |
| | | | DINAWENG |
| | | | Mafora |
| | Pick-Up | Maitland | Phase 2 |
| | | | BLOMANDA |
| | | | DINAWENG |
| | | | Mafora |
| | | | Phase 2 |
| | Pick-Up | | Bergman |
| | | | BLOEMSIDE |
| | | | GRASSLANDS |
| | | | HEIDEDAL |

| Association And (Service Area) | Facility Type | Origin | Destination |
|--------------------------------|---------------|--------------------|----------------------------------|
| | Pick-Up | Makro | CBD |
| | Pick-Up | Maphisa | CBD |
| | | | Rocklands |
| | Pick-Up | Masakhane | CBD |
| | Pick-Up | Meadows | BLOEMSIDE |
| | | | CBD |
| | | | HEIDEDAL |
| | Pick-Up | Mimosa | CBD |
| | Pick-Up | Monape Street | CBD |
| | Pick-Up | National Hospital | CBD |
| | | | Unknown |
| | Pick-Up | Northridge Mall | CBD |
| | | | Unknown |
| | Pick-Up | Pasteur Hospital | CBD |
| | | | LOURIERPARK |
| | | | PELLISSIER |
| | Pick-Up | Pelenomi Hospital | CBD |
| | Pick-Up | Phahameng 4+1 | BATHO |
| | | | BOCHABELA |
| | | | Boohebel Primary |
| | | | Bothaville |
| | | | BOTSHABELO B |
| | | | CBD |
| | | | Mahlohonolo I.School |
| | | | MALELEKA |
| | | | Maphisa |
| | | | Maphisa, Batho |
| | | | PHAHAMENG |
| | | | Rocklands |
| | | | Unknown |
| | Pick-Up | Phelindaba | Phase 4 |
| | Pick-Up | Rocklands | Phelindaba |
| | | | BLOMANDA |
| | | | CBD |
| | Pick-Up | Rose Park Hospital | Rocklands |
| | | | CBD |
| | Pick-Up | SA Truck | Hyperama |
| | | | CBD |
| | Pick-Up | Shoprite | Phase 2 |
| | | | BLOMANDA |
| | | | Bophelong |
| | | | CHRIS HANI |
| | | | Ipopeng |
| | | | Mafora |
| | | | NAMIBIA |
| | | | PHAHAMENG |
| | | | Phase 2 |
| | | | Phelindaba |
| | Pick-Up | Sowetso | Rocklands |
| | | | Unknown |
| | | | Bloemfontein - South High School |
| | | | Fauna |
| | | | FICHARDTPARK |
| | | | Hypermarket |
| | | | Hyperama |
| | | | LANGENHOVENPARK |

| Association And (Service Area) | Facility Type | Origin | Destination |
|--------------------------------|---------------|----------------|-------------------|
| | | | Lourie Park |
| | | | LOURIERPARK |
| | | | National Museum |
| | | | PELLISSIER |
| | Pick-Up | Sowetso | Rosepark Hospital |
| | Pick-Up | Tempe | CBD |
| | Pick-Up | Turfkaagte | Phase 4 |
| | | | Turflagte Cross |
| | Rank | Twin City Mall | BLOEMSIDE |
| | | | CBD |
| | | | GRASSLANDS |
| | | | Taxi Rank |
| | Rank | UFS | Unknown |
| | Pick-Up | Vista Park | CBD |

5.3 Minibus-Taxi Operations

5.3.1 GBTA Taxi routes

Specific high activity areas provided input to stops/station locations and assisted with the capturing and refinement of the route alignments. These routes are identified as the following, namely:

- Mafora Central,
- Mafora East,
- Mafora West,
- Ipopeng,
- Brandwag,
- Universitas,
- Langenhoven Park,
- Turflaagte,
- Freedom Square,
- Heidedal,
- Namibia,
- Hyperama.

The abovementioned routes are represented by the various maps indicated below. Figure 5-3 provides an indication of the taxi route and drop-off and pick-up points of passengers on the route known as Mafora Central. The points highlighted in green in Figure 5-3 represent all stops made by the taxi industry along the Mafora Central route. The consolidation of stopping points provides an indication where potential stops can be positioned when the design of the IPTN is considered. Figure 5-3, Figure 5-4 and Figure 5-5 provide maps on the taxi routes and stops obtained during the extensive on-board survey process for Mafora East, Mafora West and Mafora Central.

Figure 5-6 to Figure 5-14 provide maps with route alignments and taxi stops for the remaining routes mentioned above. This route information was used in order to determine the coverage areas for the respective phases of the planned IPTN.

Legend for Maps – Number of pax boarding/alighting per stop:

- 0

● 1

● 2 - 4

● 5 - 10

● 11 - 21

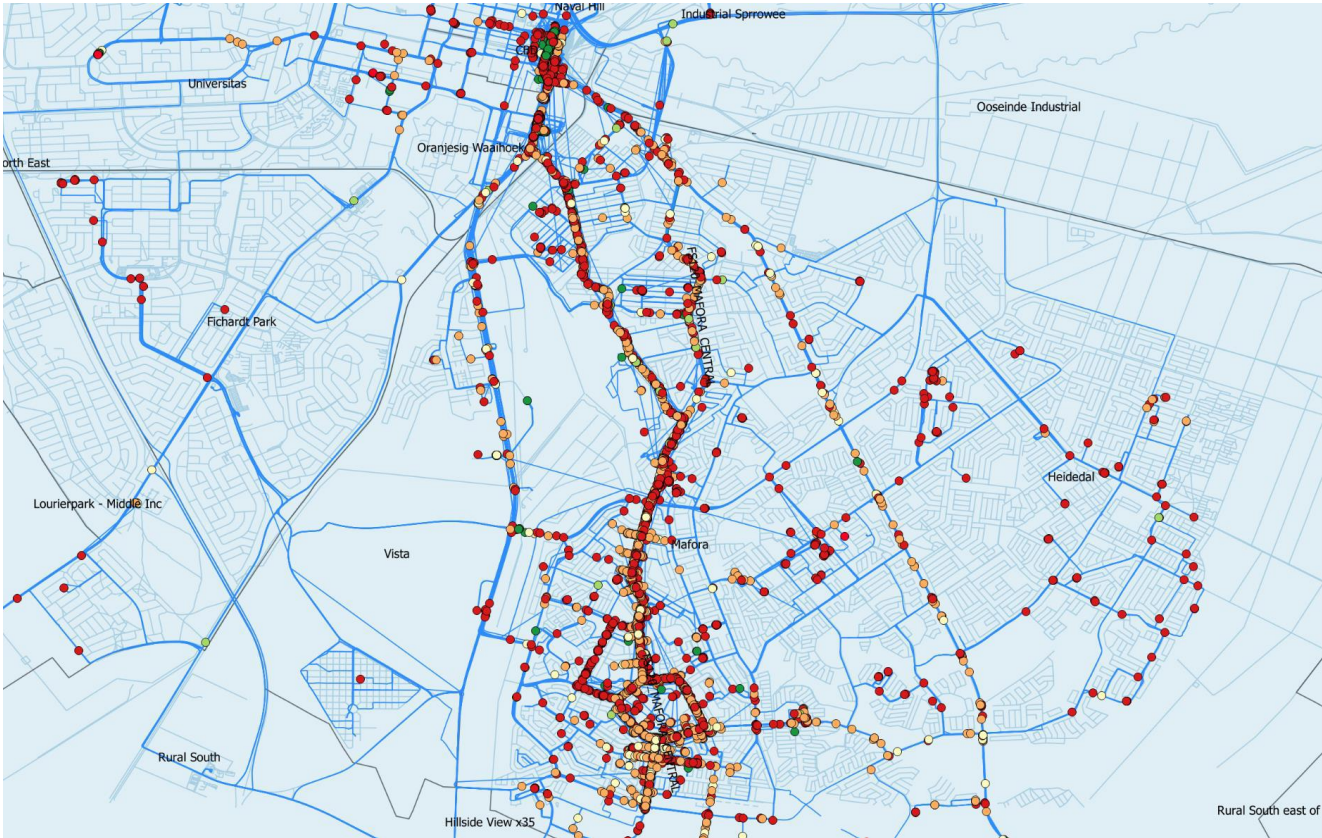


Figure 5-3: Existing Taxi Route Alignment for Mafora Central

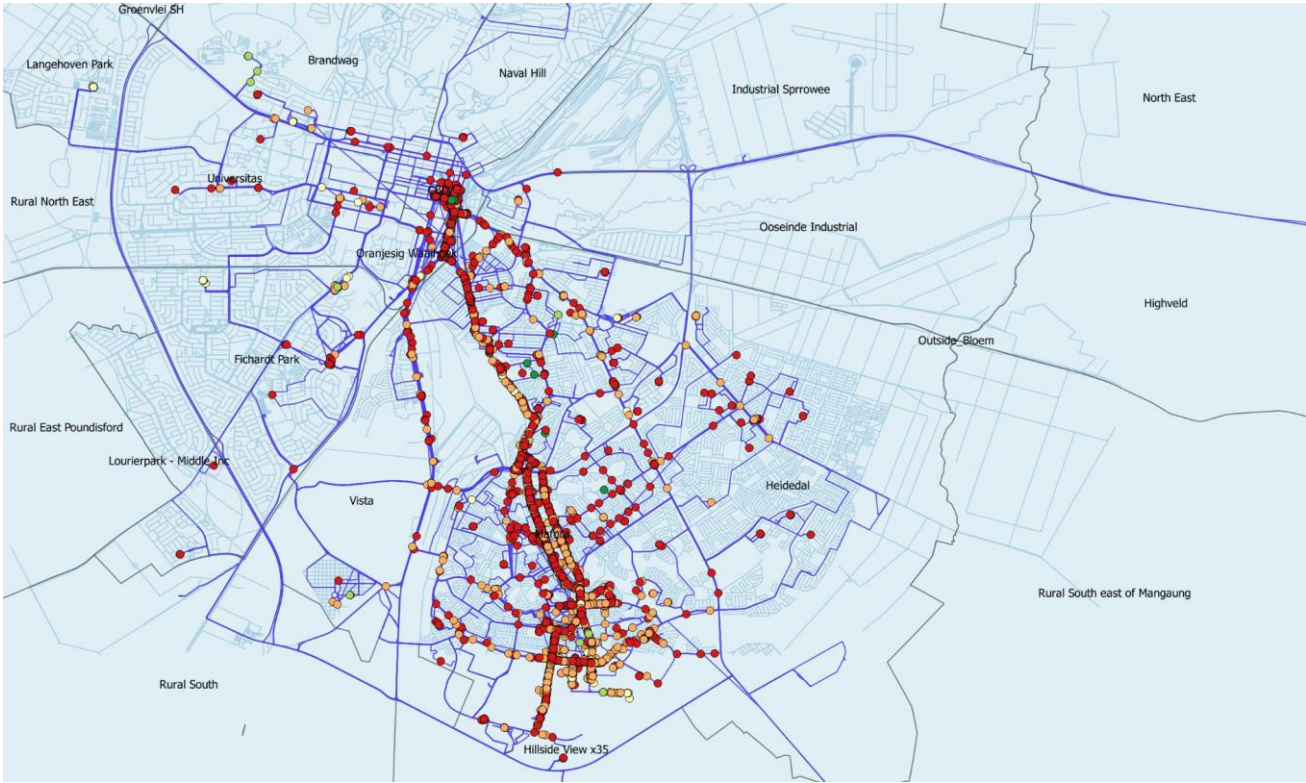


Figure 5-4: Existing Taxi Route Alignment for Mafora East

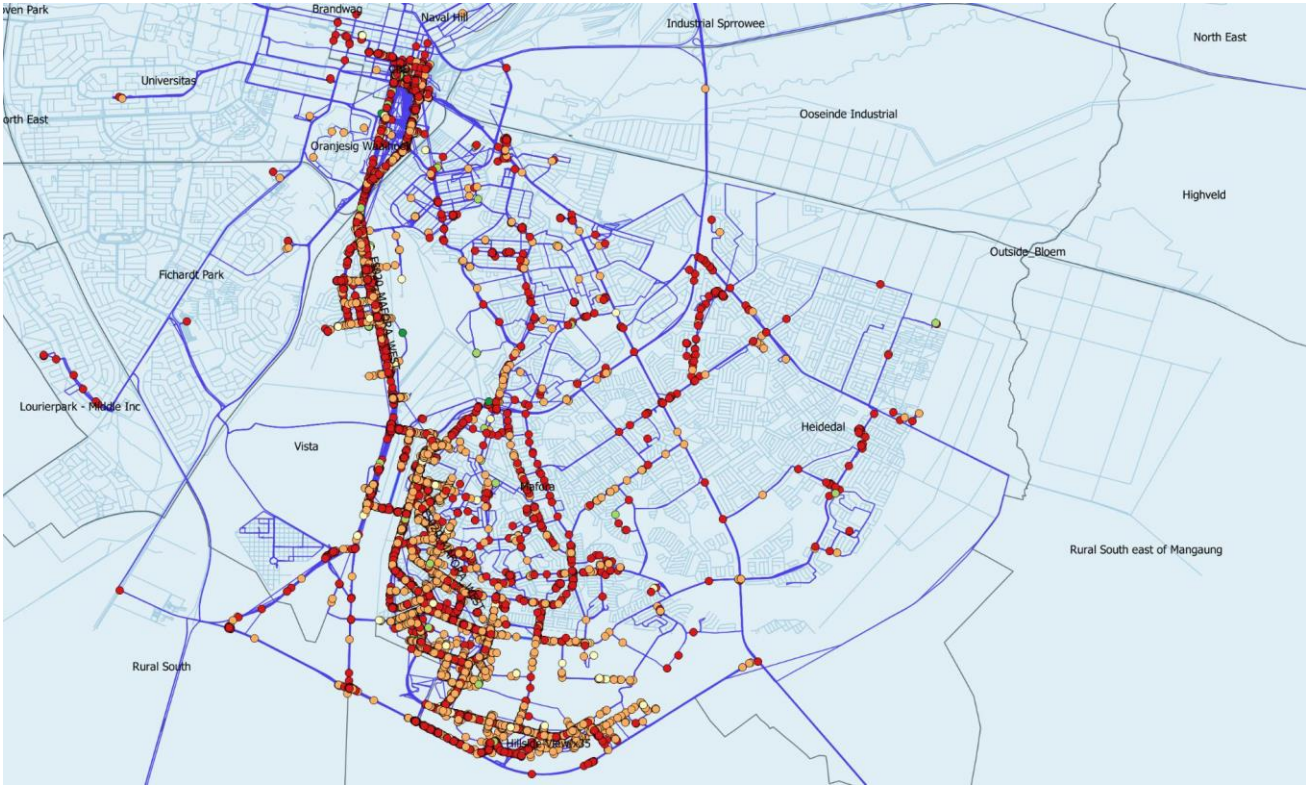


Figure 5-5: Existing Taxi Route Alignment for Mafora West

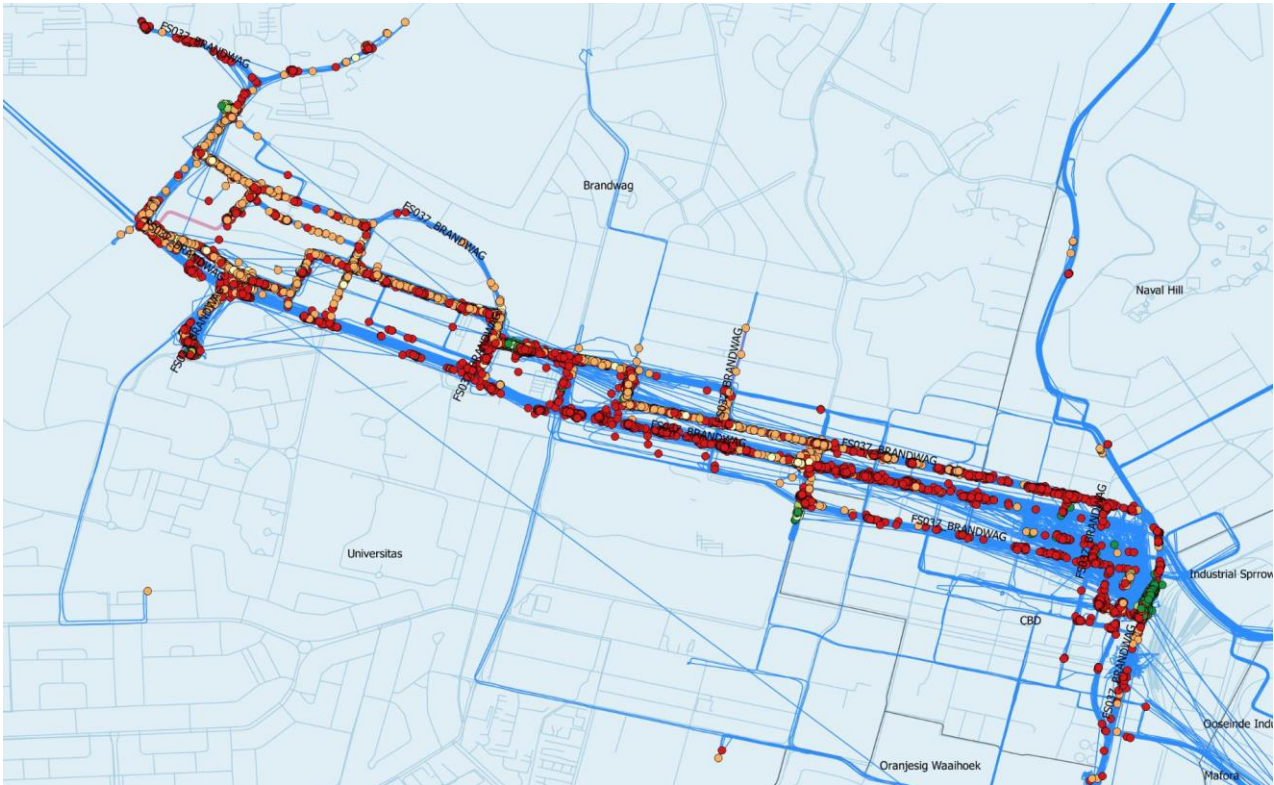


Figure 5-7: Existing Taxi Route Alignment for Brandwag

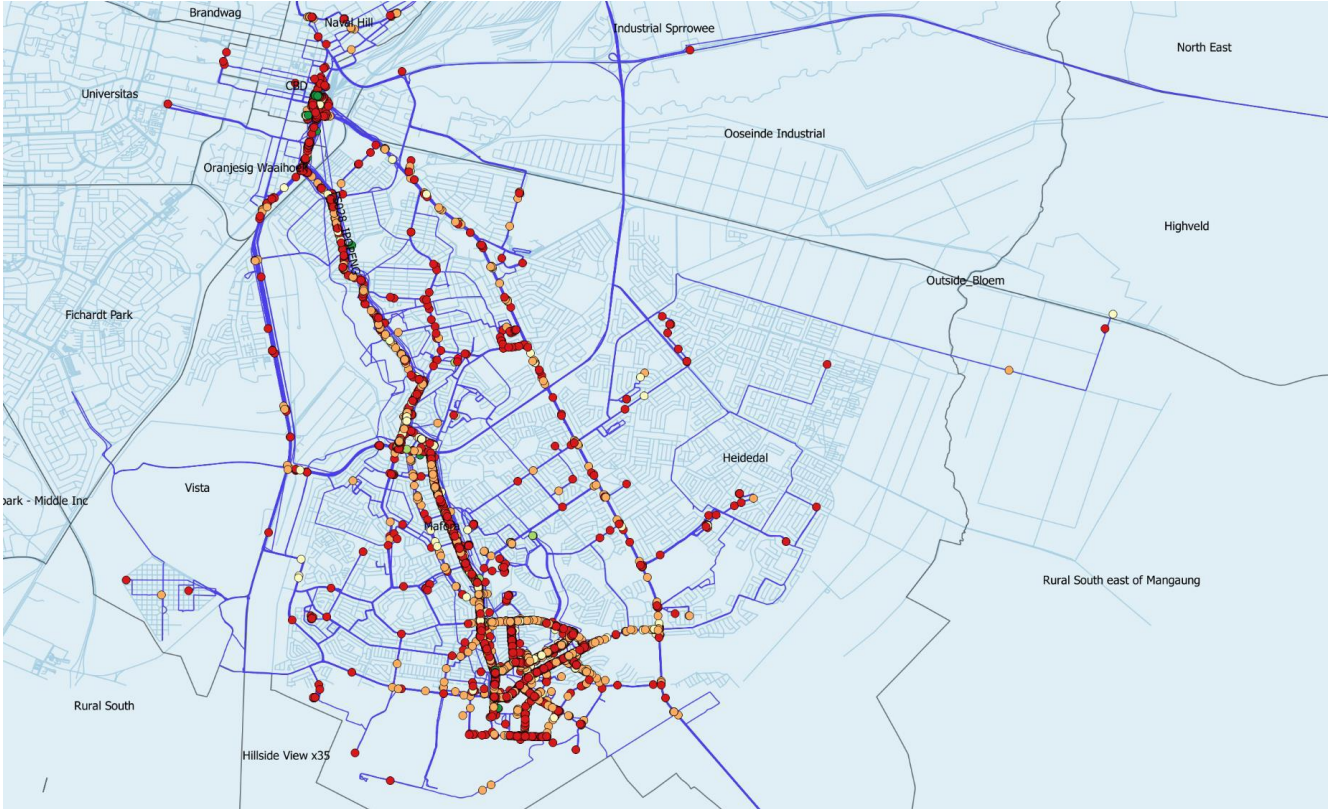


Figure 5-6: Existing Taxi Route Alignment for Ipopeng

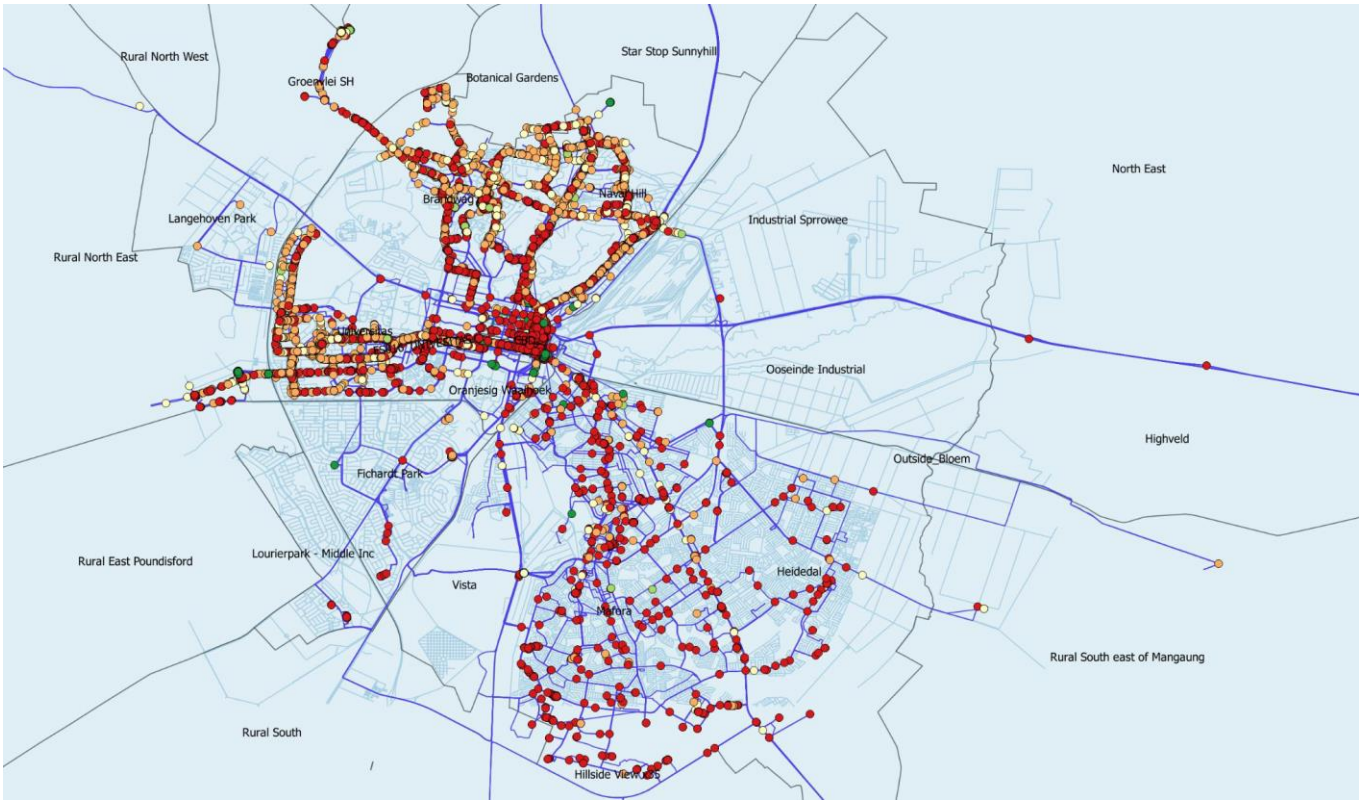


Figure 5-8: Existing Taxi Route Alignment for Universitas

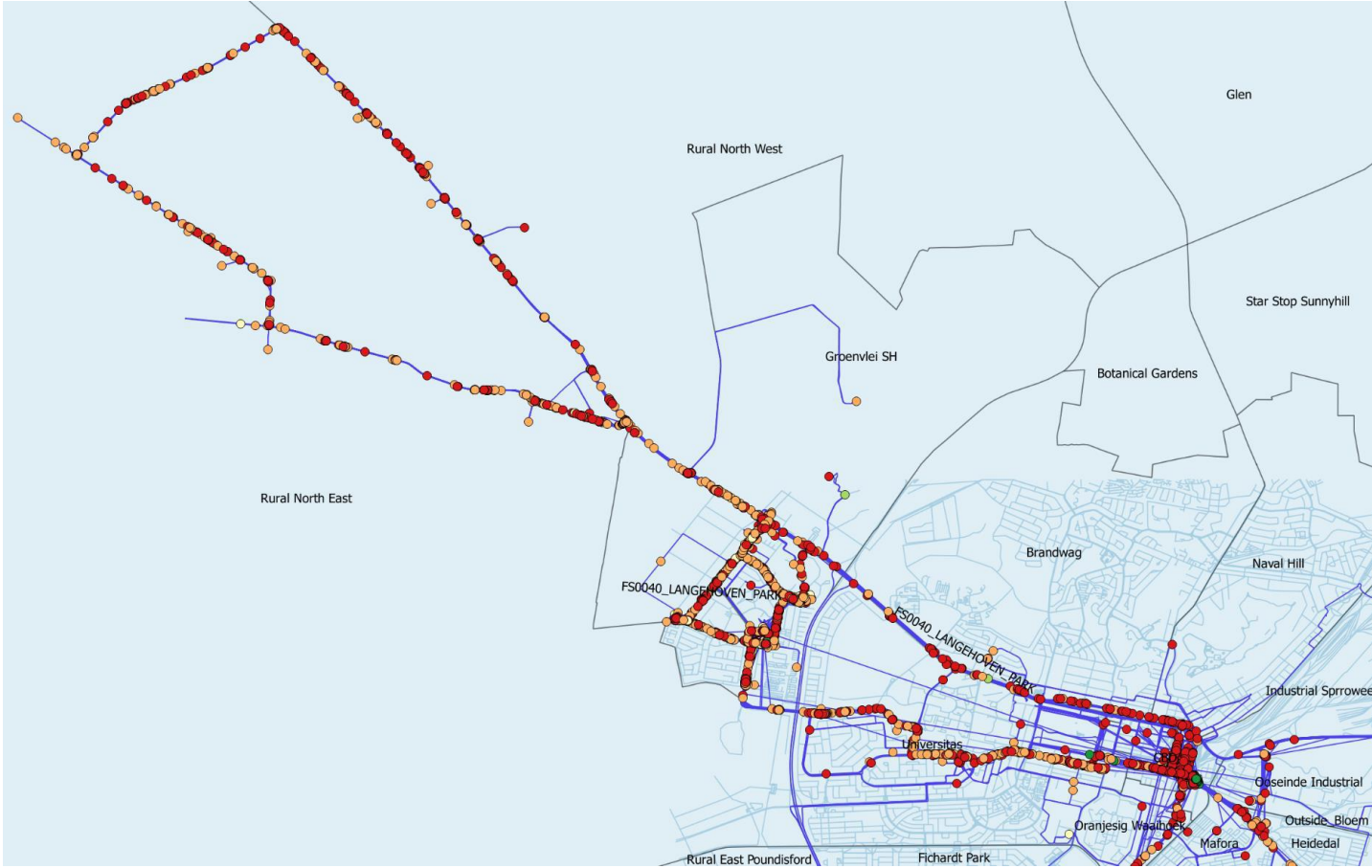


Figure 5-9: Existing Taxi Route Alignment for Langenhoven Park

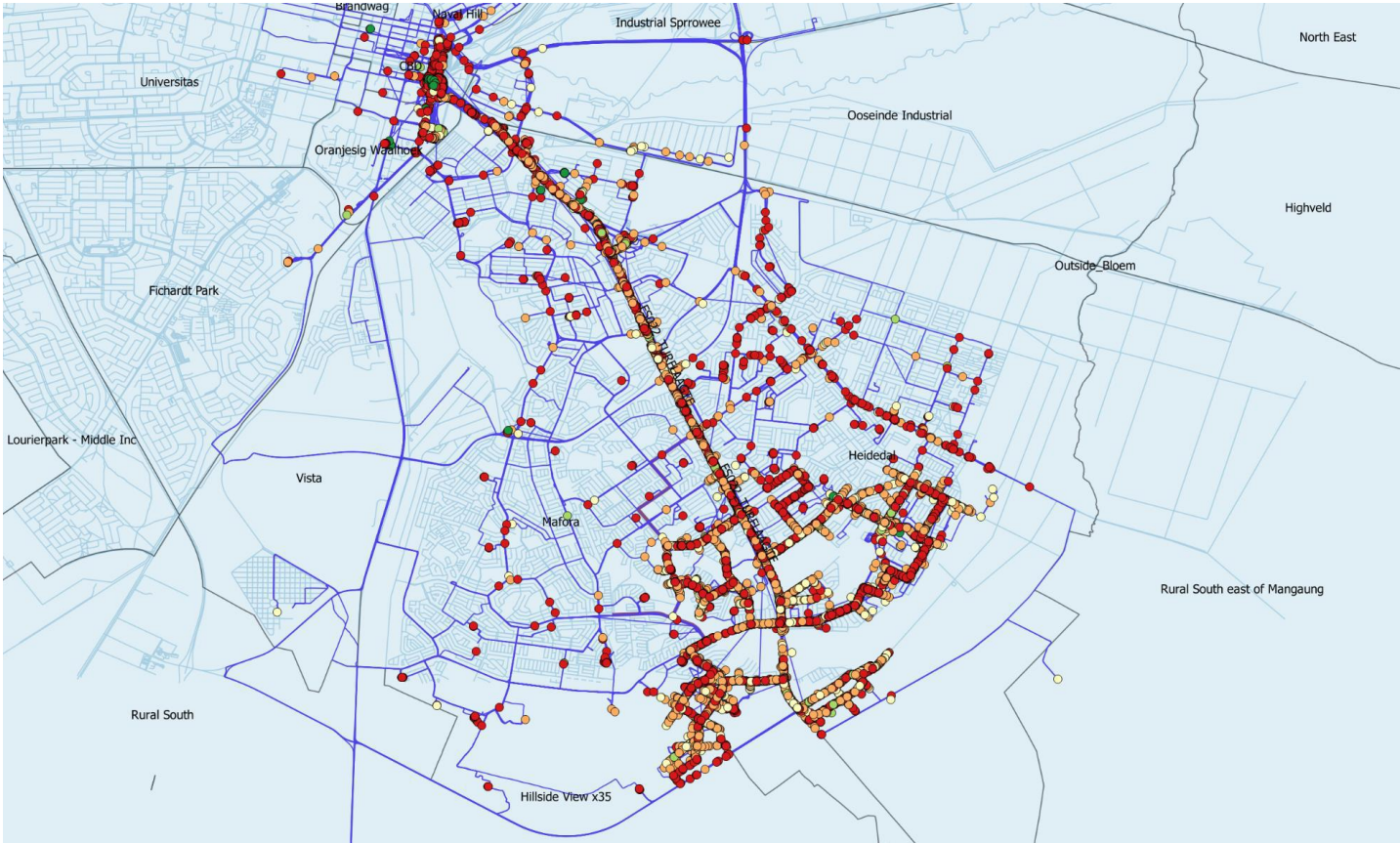


Figure 5-10: Existing Taxi Route Alignment for Turflaagte

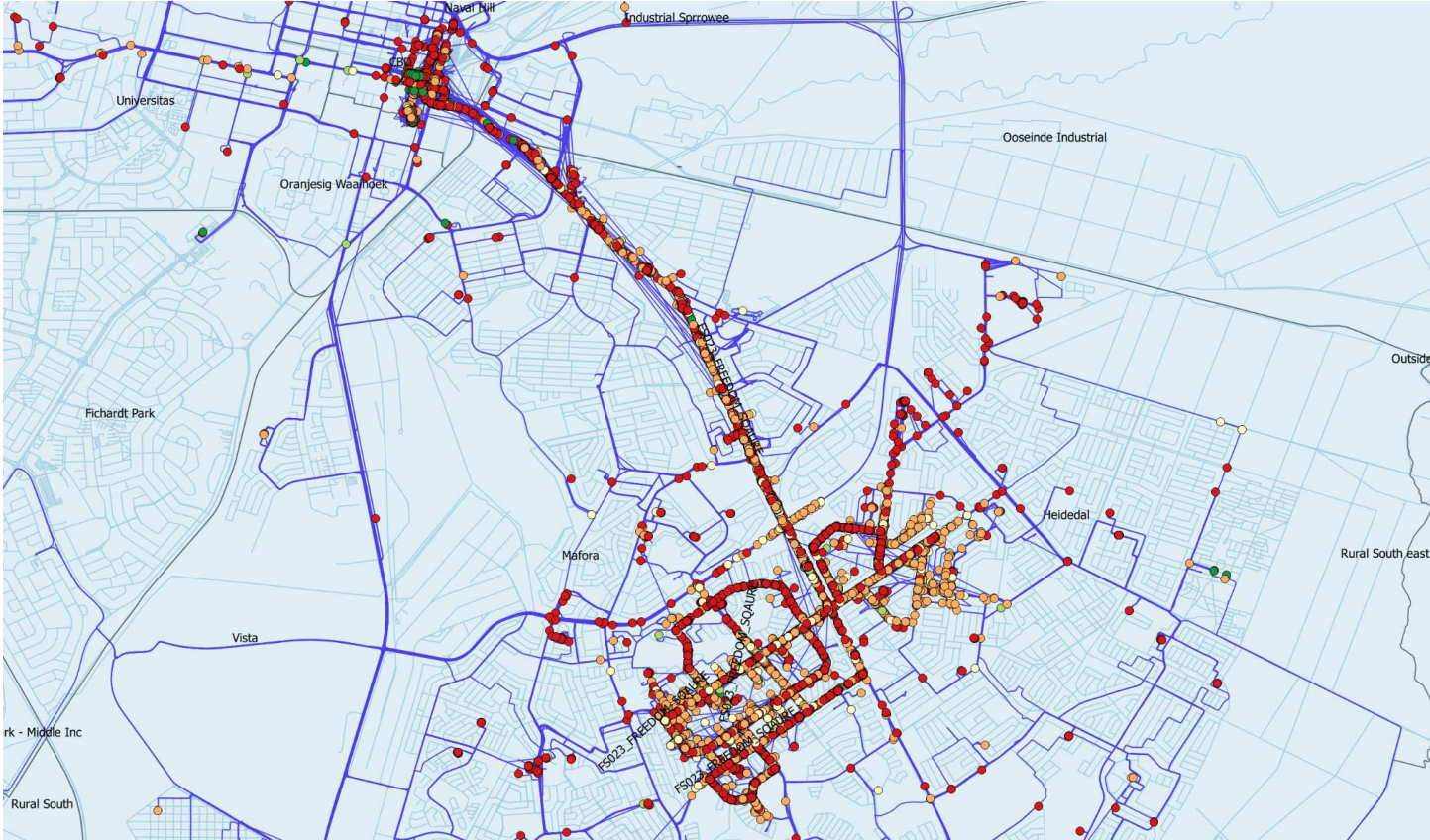


Figure 5-11: Existing Taxi Route Alignment for Freedom Square

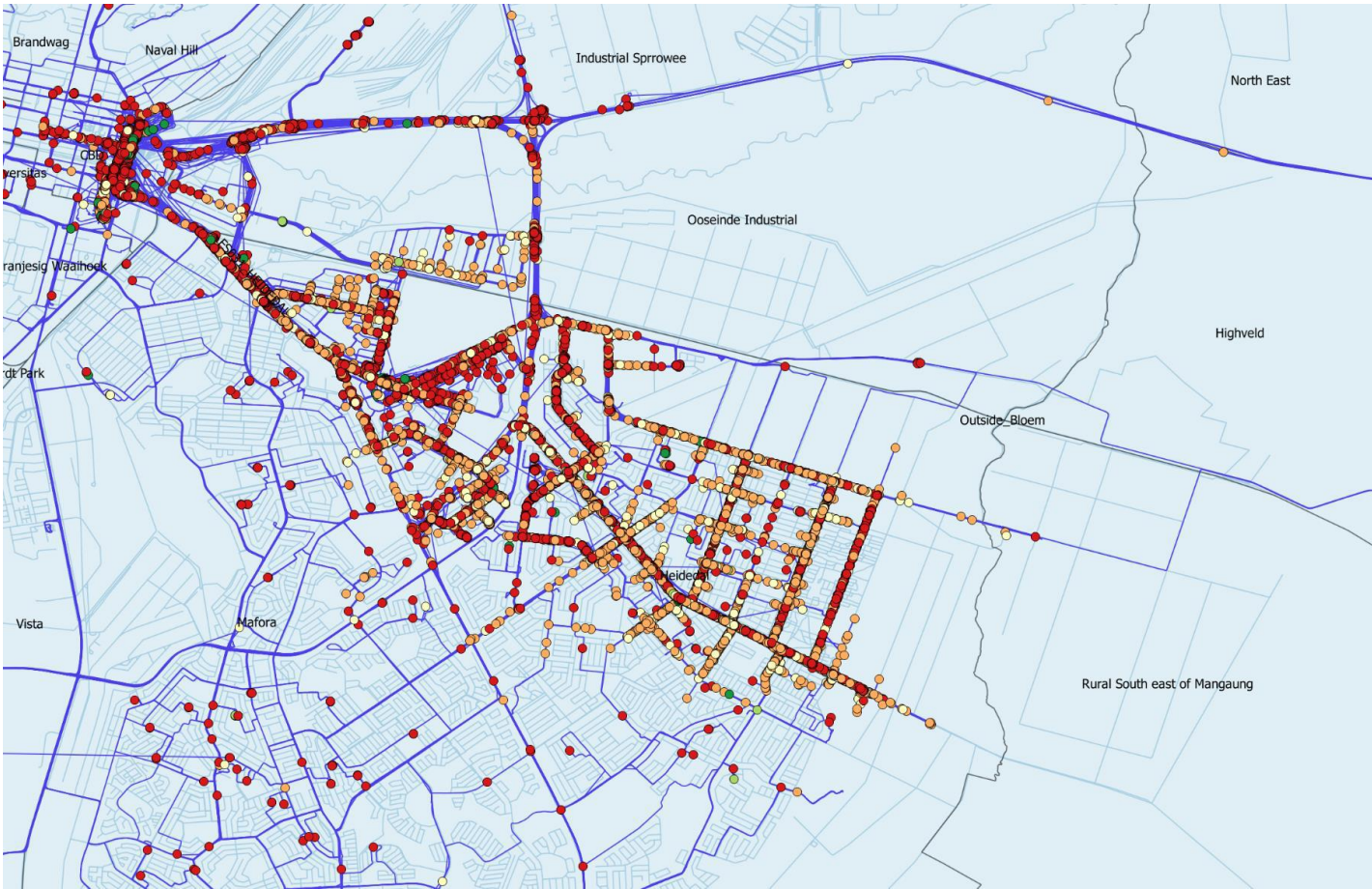


Figure 5-12: Existing Taxi Route Alignment for Heidedal

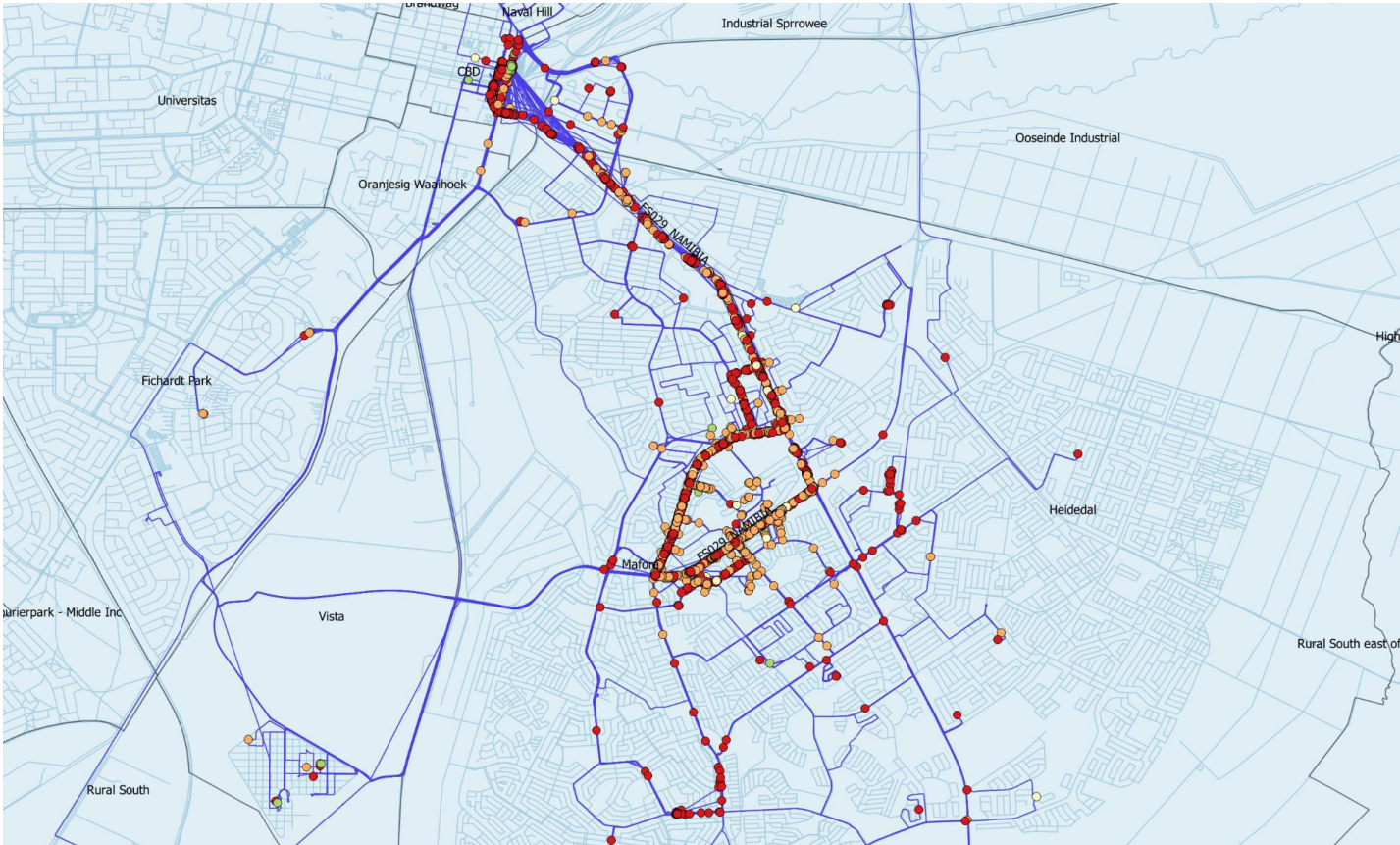


Figure 5-13: Existing Taxi Route Alignment for Namibia

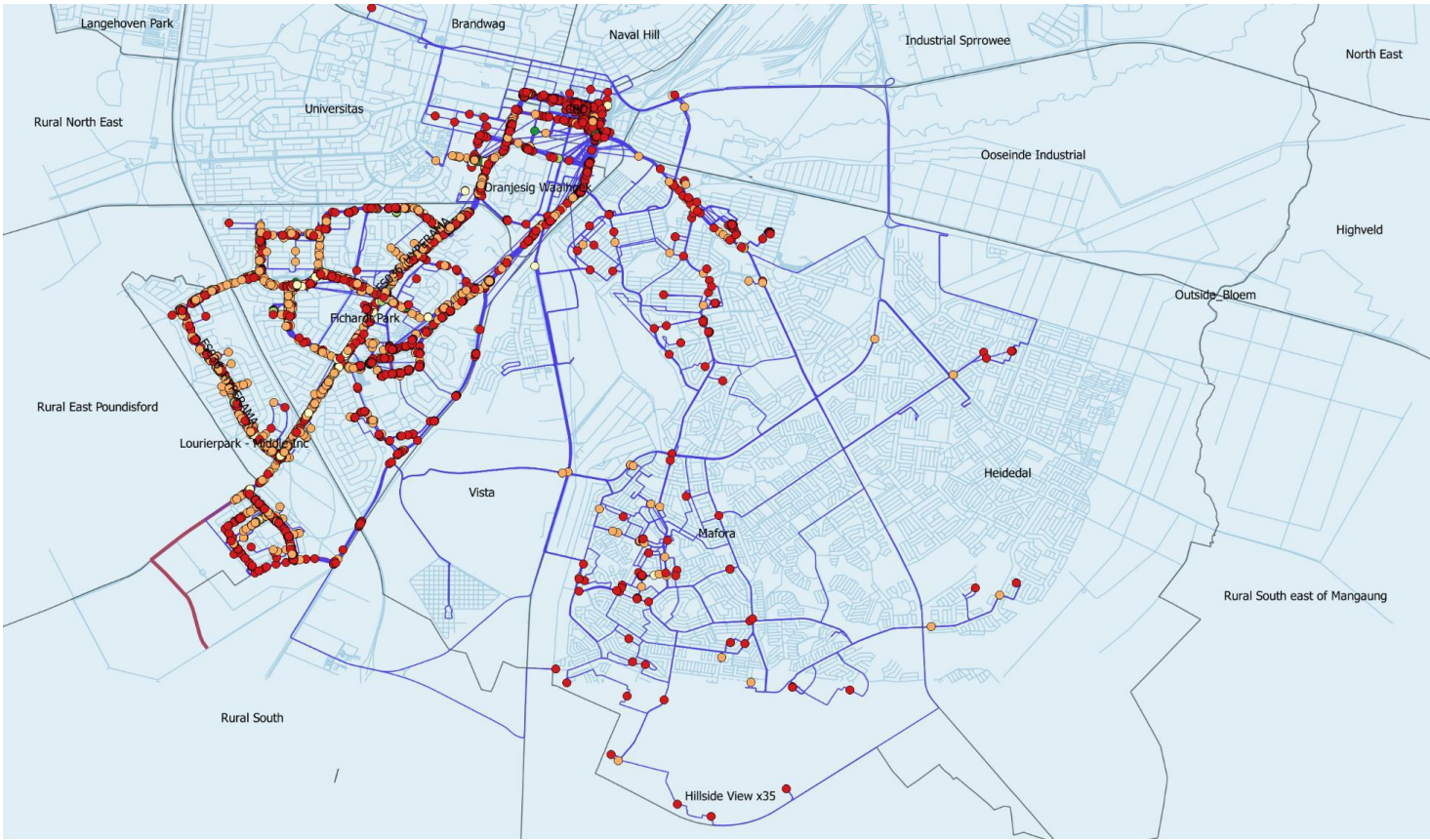


Figure 5-14: Existing Taxi Route Alignment for Hyperama

5.3.2 Thaltsa Taxi Routes

- Mini-Bus Taxi Operators operating along the following routes:

- (FS 003) Trips from Taxi Rank, Van Riebeeck Thaba Nchu to Thaba Nchu Sun Hotel and Casino situated at Groothoekdam, Thaba Nchu via Morolong Village and Ratau Village, Thaba Nchu and return. (Vehicle to be stationed at Thaba Nchu taxi rank, Van Riebeeck Street, Thaba Nchu and must be operated from there).
- (FS 004) Trips from Taxi Rank, Van Riebeeck Thaba Nchu to Serwalo Village, Thaba Nchu via Paloko Sanatorium, St. Pauls School, Tshipinare School, Child Welfare, Thejane School, Unit Extension, Stadium, Seates Shop, Army Camp, Serwalo Board and return. (Vehicle to be stationed at Thaba Nchu taxi rank, Van Riebeeck Street, Thaba Nchu and must be operated from there).
- (FS 005) Trips from Taxi Rank, Van Riebeeck Thaba Nchu to Koppie Village, Thaba Nchu via Moroka Hospital, Moroka High School, Station View, Eskom, Fire Station, Lutheran Church, Anglican Church, Civic Centre, Bus Stop 1,2,3, Thaba Nchu and return. (Vehicle to be stationed at Thaba Nchu taxi rank, Van Riebeeck Street, Thaba Nchu and must be operated from there).
- (FS 008) Trips from Taxi Rank, Van Riebeeck Thaba Nchu to Dikolobeng, Thaba Nchu via Pito’s Stop, St. Pauls School, Tshipinare School, Child welfare, Thejane School, Baitemin Unit Ext, Ga Rana Bus Stop, Stadium Stop, Jam Alley, Thaba Nchu return. (Vehicle to be stationed at Thaba Nchu taxi rank, Van Riebeeck Street, Thaba Nchu and must be operated from there).
- (FS 070) Trips from Taxi Rank, Van Riebeeck Thaba Nchu to Blue Taxi Rank, Reahola Complex, CBD, Botshabelo via Albert Moroka High School situated in road N8, Metro Wholesale, Main Street, Botshabelo and return. (Vehicle to be stationed at Thaba Nchu taxi rank, Van Riebeeck Street, Thaba Nchu and must be operated from there).
- (FS 071) Trips from Taxi Rank, Van Riebeeck Thaba Nchu to Bastion Square Taxi Rank, c/o St. George Street and Power Road, Bloemfontein via Albert Moroka High School situated in road N8, Thaba Nchu and return. (Vehicle to be stationed at Thaba Nchu taxi rank, Van Riebeeck Street, Thaba Nchu and must be operated from there).
- Three (3) long-distance routes operate from the main rank in van Riebeeck Street to Excelsior, Rooifontein, Kommisie Drift.
- Nine (9) cross border routes operate from the rank to Mafikeng, Tweespruit, Hobhouse, Ficksburg, Bethlehem, Phithaditjhaba, Brandfort, Welkom, Kimberly, Rustenburg, Kroonstad
- Existing Taxi Fleet is estimated at approximately 442 vehicles with 229 active operating licenses. This fleet number needs to be validated during detail design and business planning processes.

5.3.3 BATA Taxi Routes

- Mini-Bus Taxi Operators operating along the following routes:
 - Line F/K/J;
 - Line G/H;
 - Line W/U/S/T;
 - Line A/B/C/D;
 - Line M/N/L;
 - Line Thaba Nchu
 - Line Bloemfontein.
- Existing Taxi Fleet is estimated at approximately 186 vehicles. This fleet number needs to be validated during detail design and business planning processes.

5.3.4 Minibus-taxi Passengers, Trips and Service Utilisation

The number of passengers transported on the routes mentioned in the aforementioned section was not available for use in the design of the IPTN as well as to accurately determine compensation models for the taxi industry, in areas where these are affected by the IPTN. For purposes of determining the extent of the taxi industry operations in Mangaung, the passenger volumes transported, operational routes, number of vehicles and locations of drop-off and pick-up points were captured by means of an electronic on-board survey. This on-board taxi survey was conducted during 2017, which assessed taxi operations along the 12 routes highlighted above. The individual routes were surveyed nine (9) consecutive times in order to build a statistical record of operations along these routes.

A representative sample size was determined with input from the taxi industry whereby electronic tracking devices (GPS based) as well as a video monitoring equipment was installed into individual vehicles. The full detail of the survey process, number of taxis, survey dates, etc. can be obtained from the detailed on-board taxi survey report. The results of the surveys were then consolidated, calibrated and used in the modelling process to obtain representative results which were up-scaled from the sample to represent the GBTA taxi operations in Mangaung. A summarised version of this information is reflected in Table 5-5 below.

Table 5-5: Passenger and Taxi Volumes per route

| Route | Projected Passenger Volume per Vehicle per Route | Projected Base Year (2017) Taxi Fleet | Projected Base Year (2017) Route Volumes |
|----------------|--|---------------------------------------|--|
| Mafora Central | 85,1 | 63 | 5 390 |
| Mafora East | 94,3 | 63 | 5 908 |
| Mafora West | 127,0 | 91 | 11 598 |
| Ipopeng, | 88,9 | 17 | 1 481 |
| Brandwag | 142,3 | 41 | 5 787 |
| Universitas | 119,4 | 67 | 8 041 |
| Turflaagte | 184,8 | 146 | 26 976 |
| Freedom Square | 113,6 | 63 | 7 116 |
| Heidedal | 145,6 | 114 | 16 602 |
| Namibia | 101,3 | 25 | 2 500 |

The projected vehicle and passenger volumes for the base year (2017) was determined based on the on-board taxi survey process which took place in 2016/17 after a nine (9) cycle survey process was followed. The initial vehicle and passenger volumes obtained were statistically upscaled from a representative sample to the population size reflected in the table above. The calculation performed assumed a vehicle availability factor (VEF) of 100% which was applied to determine the base year (2017) route volumes for each taxi route and association.

Taxi rank surveys were conducted during a five day period whereby the number of vehicles entering and exiting a specific rank were observed and recorded per day and summarised in Table5-6 below. The survey was generally conducted from 05h00 AM till 16H00 PM on a particular day.

Table 5-6: Passenger and Taxi Volumes per route

| Date and Facility Surveyed | Number of Taxis | | Grand Total |
|----------------------------|-----------------|--------|-------------|
| | In | Out | |
| Apr 2016 | 17 758 | 20 816 | 38 574 |
| 28-Apr 2016 | 5 200 | 6 235 | 11 435 |
| BSQ | 611 | 673 | 1 284 |
| Sowesto | 144 | | 144 |
| Thaba Nchu 4+1 Rank_JB | 1 262 | 1 656 | 2 918 |
| Thaba Nchu 4+1 Rank_SB | 128 | | 128 |
| Botshabelo Blue Rank | 1 981 | 2 946 | 4 927 |
| Botshabelo Industrial | 1 074 | 960 | 2 034 |
| 29-Apr 2016 | 6 312 | 7 188 | 13 500 |
| BSQ | 107 | 216 | 323 |
| Mafora Central | 108 | 108 | 216 |
| Thaba Nchu 4+1 Rank_JB | 1 693 | 2 332 | 4 025 |

| | | | |
|------------------------|--------|--------|--------|
| Thaba Nchu 4+1 Rank_SB | 337 | | 337 |
| Twin City Mall | 151 | 167 | 318 |
| Botshabelo Blue Rank | 2 630 | 2 361 | 4 991 |
| Botshabelo Industrial | 1 286 | 2 004 | 3 290 |
| 30-Apr 2016 | 6 246 | 7 393 | 13 639 |
| BSQ | 613 | 812 | 1 425 |
| Sowesto | 268 | 268 | 536 |
| Thaba Nchu 4+1 Rank_JB | 1 508 | 1 659 | 3 167 |
| Thaba Nchu 4+1 Rank_SB | 128 | 528 | 656 |
| Botshabelo Blue Rank | 2 716 | 3 379 | 6 095 |
| Botshabelo Industrial | 1 013 | 747 | 1 760 |
| 01-May 2016 | 5 220 | 5 506 | 10 726 |
| Sowesto | 144 | | 144 |
| Thaba Nchu 4+1 Rank_JB | 1 188 | 2 370 | 3 558 |
| Thaba Nchu 4+1 Rank_SB | 281 | 215 | 496 |
| Botshabelo Blue Rank | 3 008 | 2 450 | 5 458 |
| Botshabelo Industrial | 599 | 471 | 1 070 |
| 03-May 2016 | 7 238 | 6 344 | 13 582 |
| Phahameng | 518 | 75 | 593 |
| Sowesto | 219 | | 219 |
| Thaba Nchu 4+1 Rank_JB | 1 413 | 2 060 | 3 473 |
| Thaba Nchu 4+1 Rank_SB | 392 | 215 | 607 |
| Botshabelo Blue Rank | 3 522 | 2 454 | 5 976 |
| Botshabelo Industrial | 1 174 | 1 540 | 2 714 |
| Grand Total | 30 216 | 32 666 | 62 882 |

The results from the 2016 link counts provided a broad indication of the vehicle volumes and estimated passenger volumes from which the vehicle capacity utilisation was extracted. Table 5-7 provides a summary of the 2016 link counts for PT utilisation rates per direction for the AM peak period. The vehicle types included in the PT component consist of 4+1 taxi's, minibus taxi's, midibus taxi's, standard buses and articulated buses. The AM peak period used in the determination of the utilisation rates consists of the passenger volumes for the periods from 06h00 to 08h00 (3 consecutive hours).

Table 5-7: Public Transport Vehicle Utilisation Rates obtained from the 2016 Link Count Information (AM Peak Period)

| Survey Location No. | Vehicle Utilisation Rates (%) – AM Peak Period | | | |
|---------------------|--|-----------|------------|-----------|
| | Southbound | Eastbound | Northbound | Westbound |
| MLC01 | 28% | | 49% | |
| MLC02 | 20% | | 54% | |
| MLC03 | 8% | | 88% | |
| MLC04 | 27% | | 90% | |
| MLC05 | 33% | | 80% | |
| MLC06 | 22% | | 60% | |
| MLC07_VOC01 | | 15% | | 40% |
| MLC08_VOC02 | 29% | | 63% | |
| MLC09_VOC03 | 11% | | 80% | |
| MLC10_VOC04 | | 9% | | 78% |
| MLC11_VOC05 | 26% | | 63% | |
| MLC13_VOC07 | 20% | | 31% | |

| Survey Location No. | Vehicle Utilisation Rates (%) – AM Peak Period | | | |
|---------------------|--|-----------|------------|-----------|
| | Southbound | Eastbound | Northbound | Westbound |
| MLC14_VOC08 | | 16% | | 64% |
| MLC15_VOC09 | | 62% | | 25% |
| MLC17_VOC11 | | 92% | | 6% |
| MLC21_VOC15 | 9% | | 76% | |
| MLC22_VOC16 | 73% | | 20% | |
| MLC26_VOC20 | 8% | | | |
| MLC27_VOC21 | 73% | | 20% | |
| MLC31_VOC25 | | | 49% | |
| VOC_O09 | | | | 91% |
| VOC-01 | 44% | | 47% | |
| VOC-02 | 73% | | 72% | |
| VOC-03 | 73% | | 36% | |
| VOC-04 | 48% | | 23% | |
| VOC-05 | | 7% | | 85% |
| VOC-06 | | 22% | | 82% |
| VOC-07 | 74% | | 82% | |
| VOC-08 | 42% | | 60% | |
| VOC-10 | | 27% | | |
| VOC-12 | | 7% | | 87% |
| VOC-13 | | 54% | | 83% |

Some of the vehicle occupancy rates are very low, which might be contributable to the location of the vehicle occupancy count. Where vehicle occupancy counts are very low it can be contributed to the survey location being too close to the start or the end destination, implying that passengers have not embarked yet or have already disembarked along the route. Table 5-8 provides a summary of the 2016 link counts for PT utilisation rates per direction for the PM peak period. The PM peak period used in the determination of the utilisation rates consisting of the vehicle and passenger volumes for the periods from 15h00 to 17h00 (3 consecutive hours).

Table 5-8: Public Transport Vehicle Utilisation Rates obtained from the 2016 Link Count Information (PM Peak Period)

| Survey Location No. | Vehicle Utilisation Rates (%) – PM Peak Period | | | |
|---------------------|--|-----------|------------|-----------|
| | Southbound | Eastbound | Northbound | Westbound |
| MLC01 | 70% | | 26% | |
| MLC02 | 85% | | 22% | |
| MLC03 | 91% | | 14% | |
| MLC04 | 67% | | 35% | |
| MLC05 | 82% | | 56% | |
| MLC06 | 87% | | 18% | |
| MLC07_VOC01 | | 48% | | 36% |
| MLC08_VOC02 | 64% | | 47% | |
| MLC09_VOC03 | 80% | | 12% | |
| MLC10_VOC04 | | 64% | | 12% |
| MLC11_VOC05 | 64% | | 31% | |

| Survey Location No. | Vehicle Utilisation Rates (%) – PM Peak Period | | | |
|---------------------|--|-----------|------------|-----------|
| | Southbound | Eastbound | Northbound | Westbound |
| MLC13_VOC07 | 50% | | 17% | |
| MLC14_VOC08 | | 70% | | 47% |
| MLC15_VOC09 | | 32% | | 33% |
| MLC17_VOC11 | | 18% | | 95% |
| MLC21_VOC15 | 83% | | 25% | |
| MLC22_VOC16 | 40% | | 79% | |
| MLC26_VOC20 | 12% | | 33% | |
| MLC27_VOC21 | 54% | | 23% | |
| MLC31_VOC25 | 40% | | 79% | |
| VOC_O09 | 89% | | 54% | |
| VOC-01 | | | | 33% |
| VOC-02 | 94% | | 60% | |
| VOC-03 | 94% | | 78% | |
| VOC-04 | 31% | | 57% | |
| VOC-05 | 45% | | 74% | |
| VOC-06 | | 98% | | 27% |
| VOC-07 | | 96% | | 43% |
| VOC-08 | 49% | | 72% | |
| VOC-10 | 87% | | 61% | |
| VOC-12 | | 50% | | |
| VOC-13 | | 71% | | 30% |

The 12-hour taxi facility survey conducted in 2016 provided information on the vehicle and passenger numbers per destination. Figure 5-15 to Figure 5-49 below provides graphic representations of the IN and OUT taxi movements for the various taxi facilities in Mangaung.

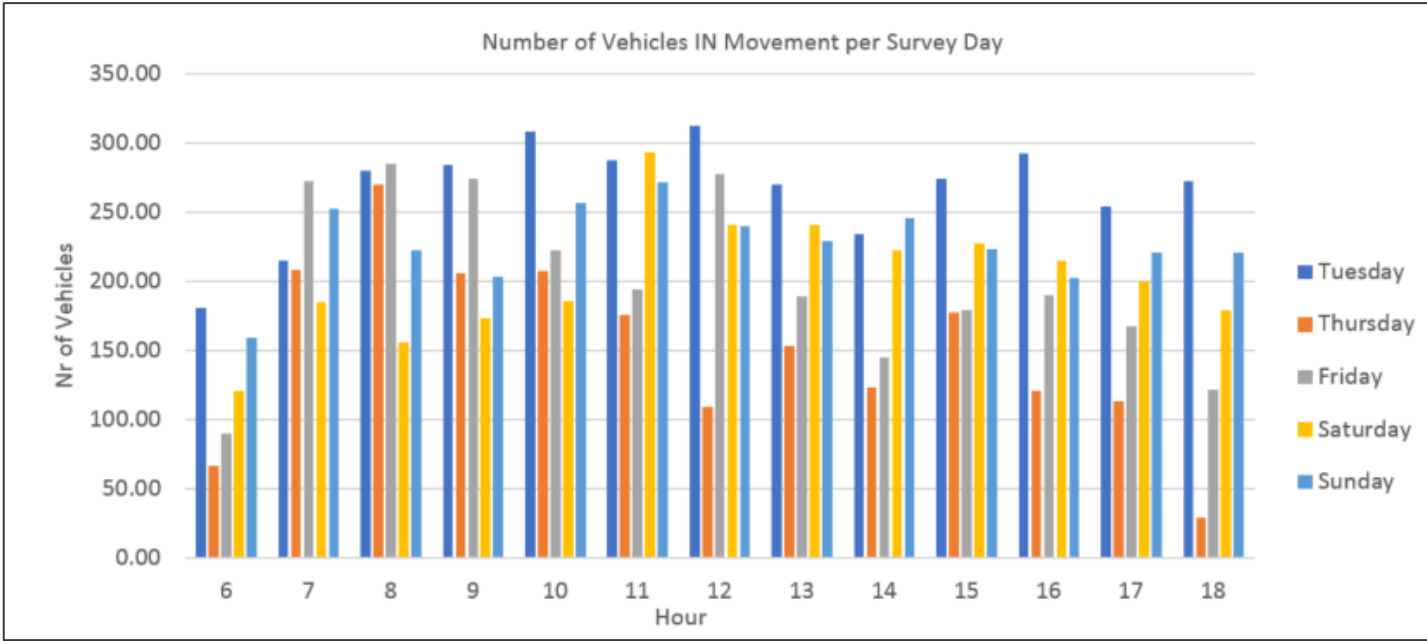


Figure 5-15: Number of Taxi In-Movement at the Botshabelo Blue Rank

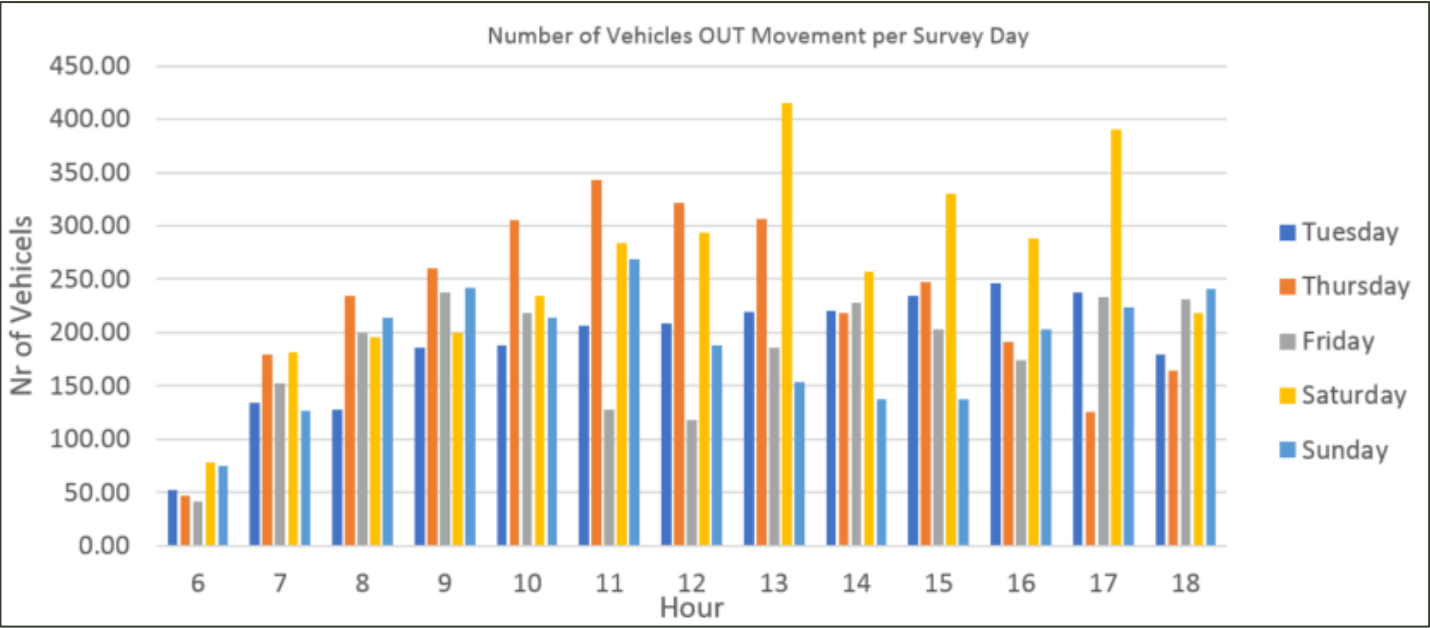


Figure 5-16: Number of Taxi Out-Movement at the Botshabelo Blue Rank

Figure 5-16 above illustrates that the majority of taxi movements take place at the Botshabelo Blue Rank. The information gathered from this 2017 survey was utilised to determine the available taxi seating capacity and to measure this against the occupants observed in the taxi’s in order to determine the level of utilisation.

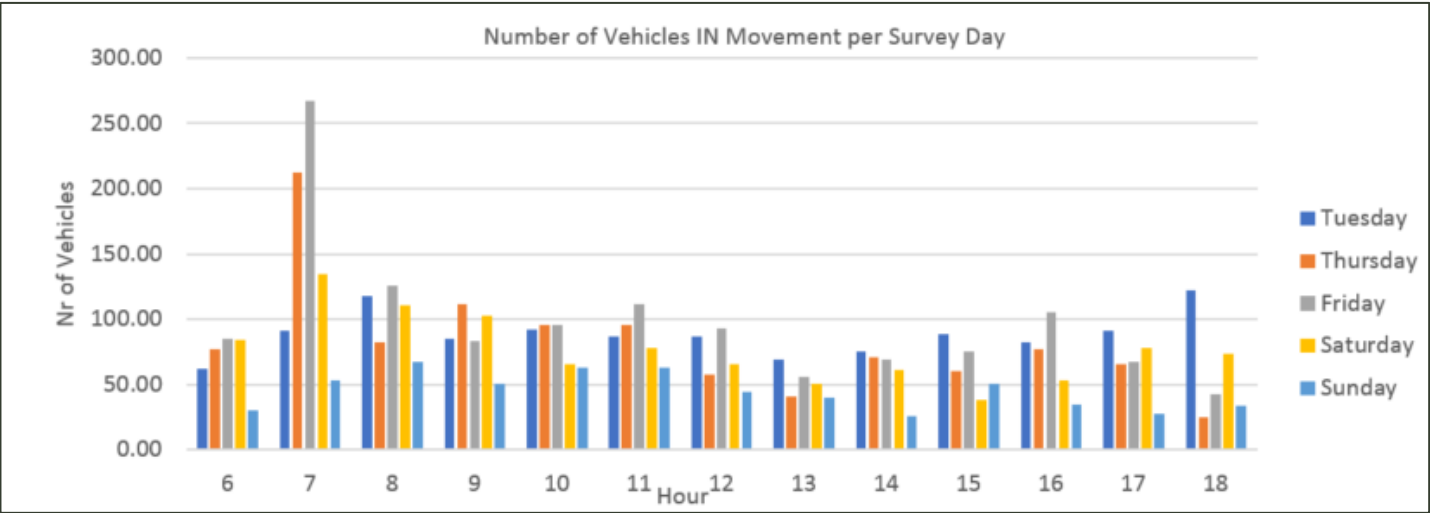


Figure 5-17: Number of Taxi In-Movement at the Industrial Rank

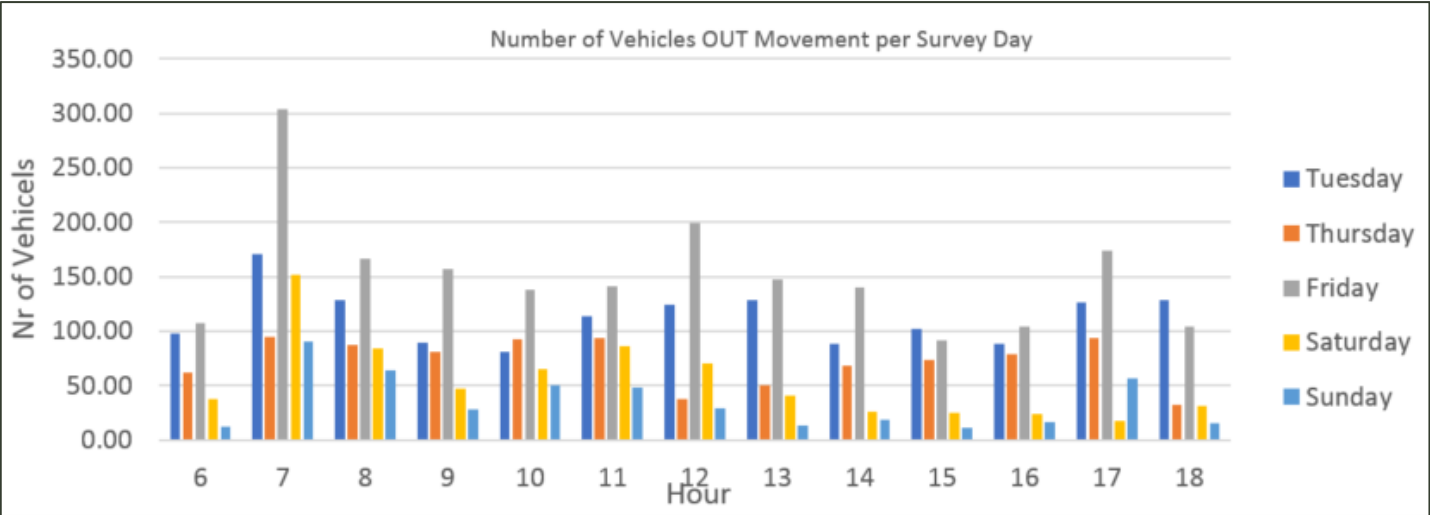


Figure 5-18: Number of Taxi Out-Movement at the Industrial Rank

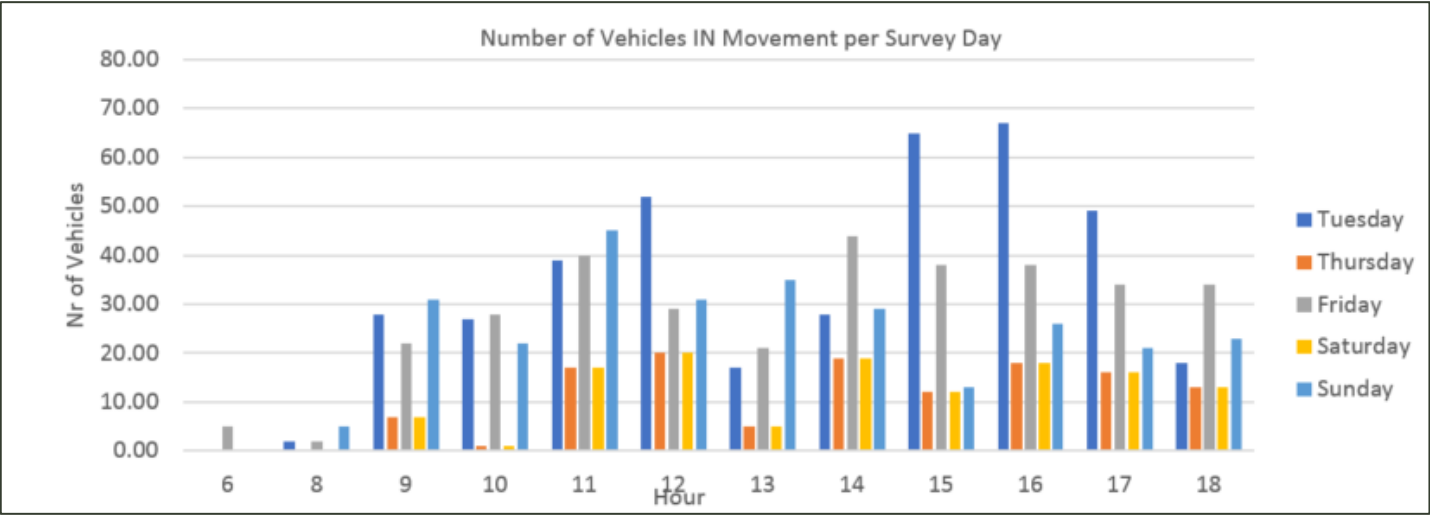


Figure 5-19: Number of Taxi In-Movement at the Thaba Nchu 4+1_SB Rank

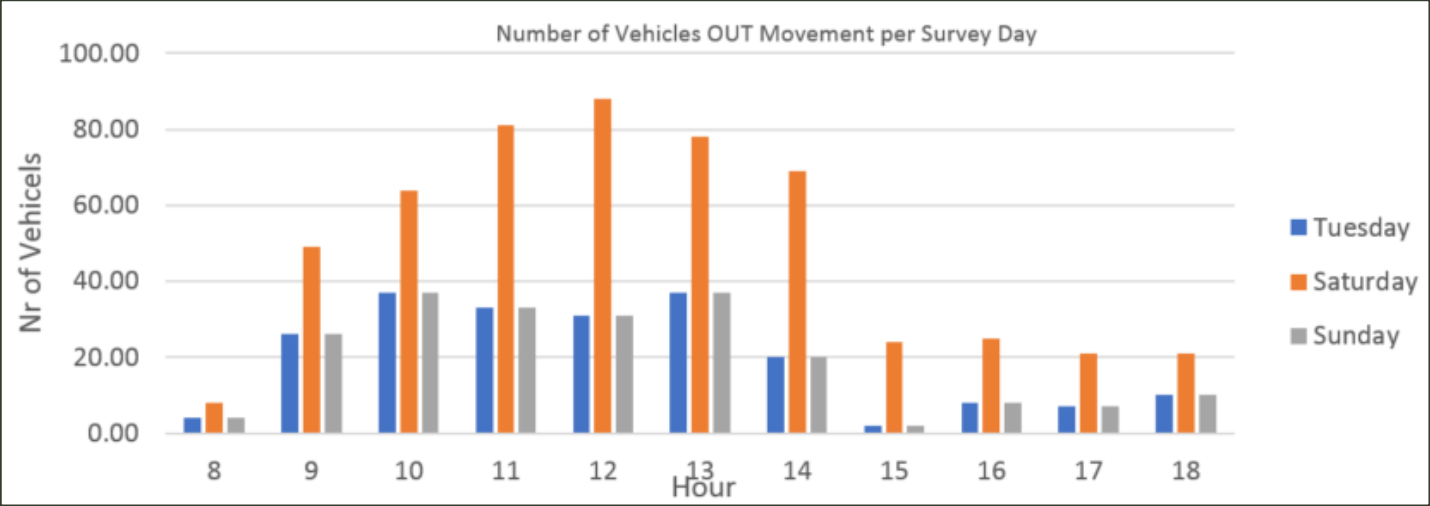


Figure 5-20: Number of Taxi Out-Movement at the Thaba Nchu 4+1_SB Rank

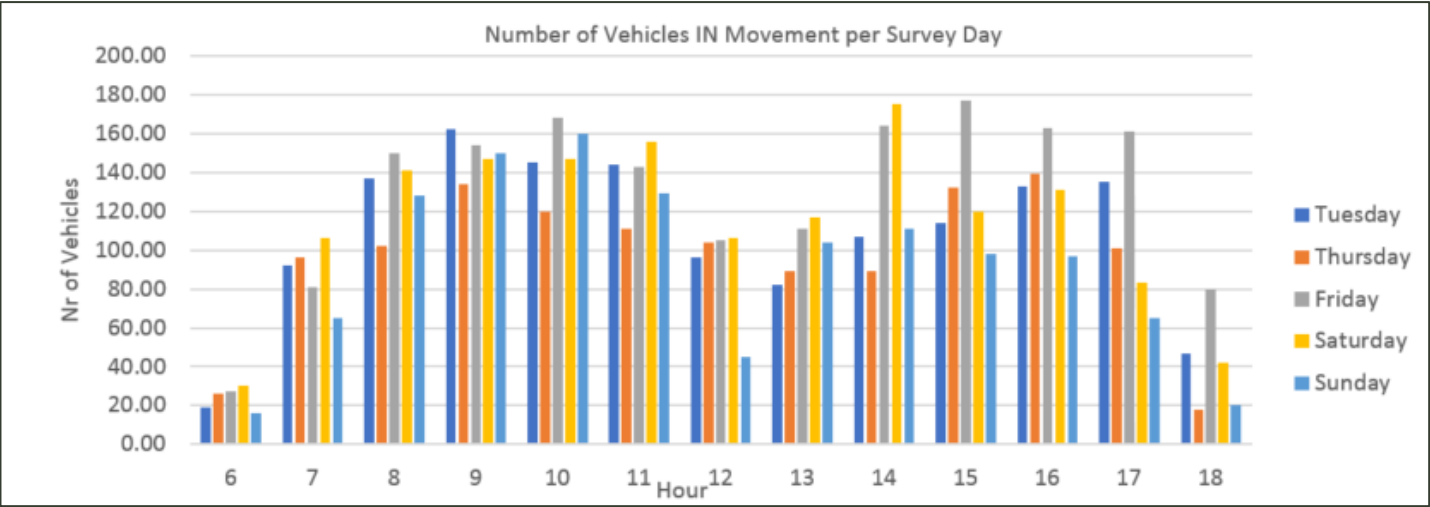


Figure 5-21: Number of Taxi In-Movement at the Thaba Nchu 4+1_JB Rank

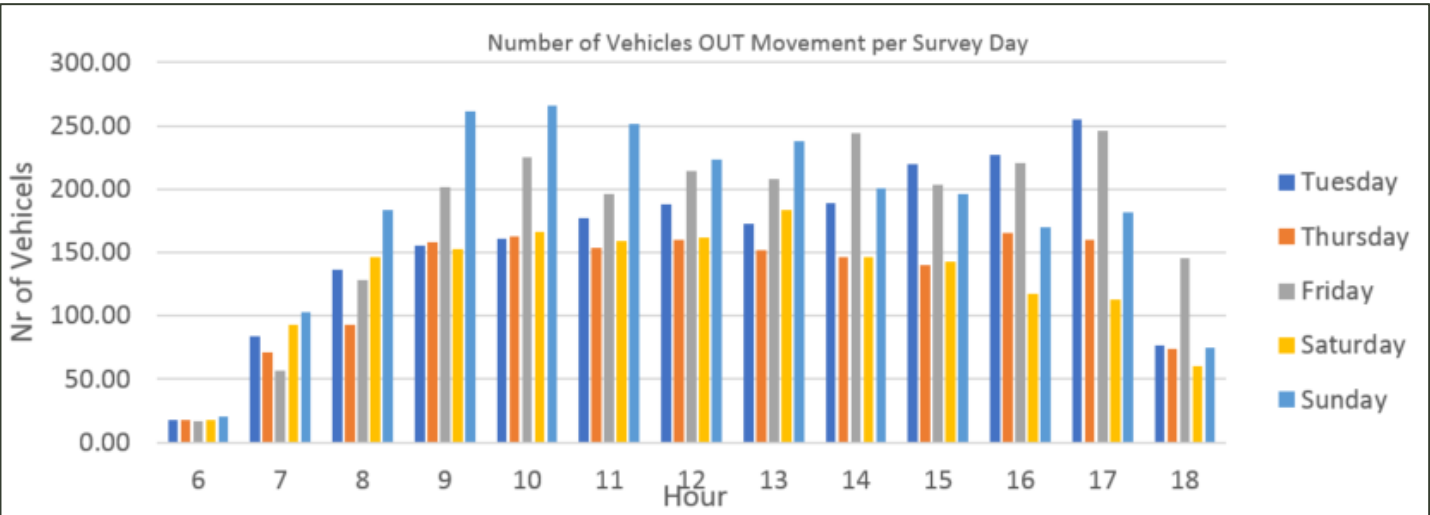


Figure 5-22: Number of Taxi Out-Movement at the Thaba Nchu 4+1_JB Rank

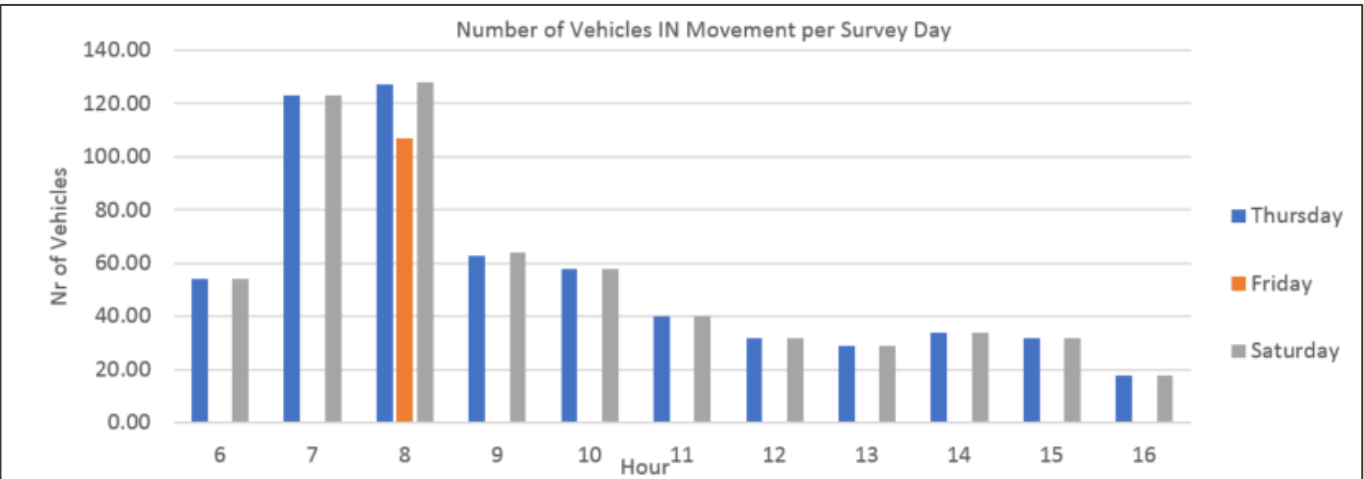


Figure 5-23: Number of Taxi In-Movement at the BSQ Rank

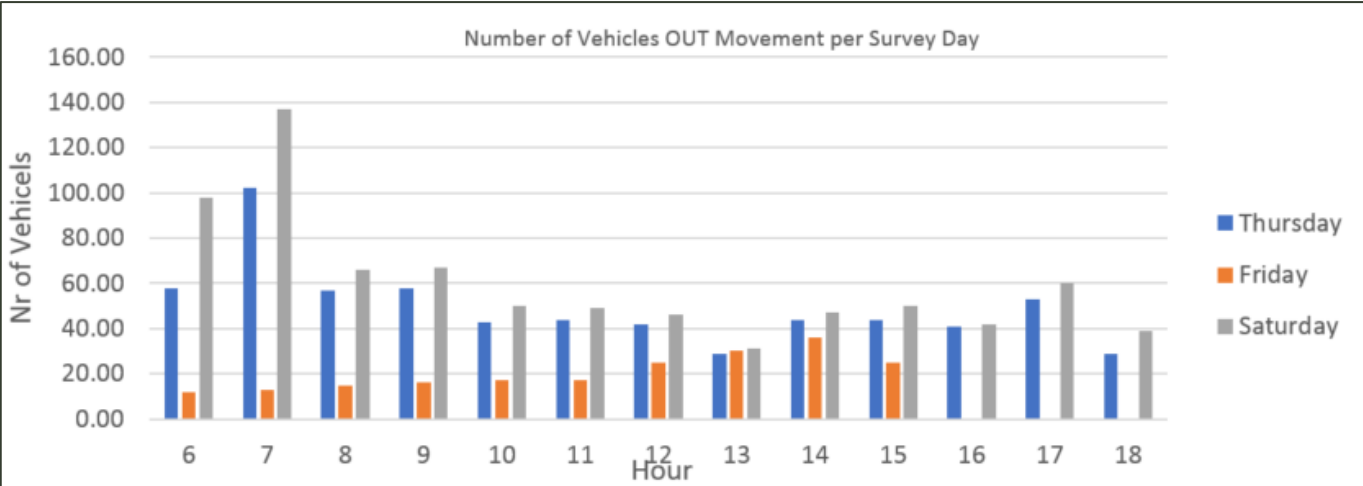


Figure 5-24: Number of Taxi Out-Movement at the BSQ Rank

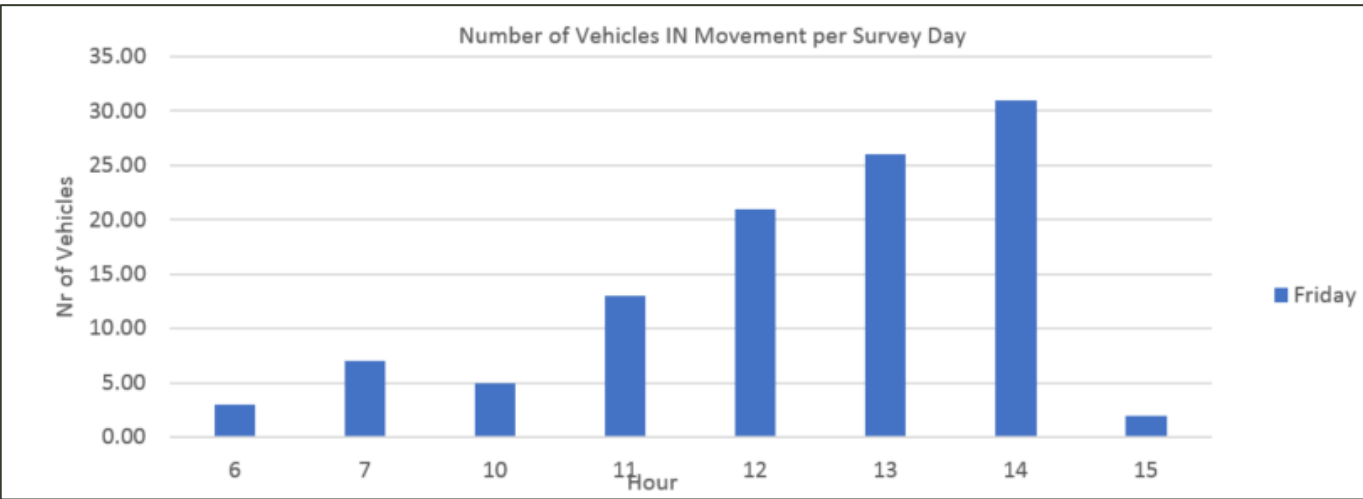


Figure 5-25: Number of Taxi In-Movement at the Mafora Central Rank

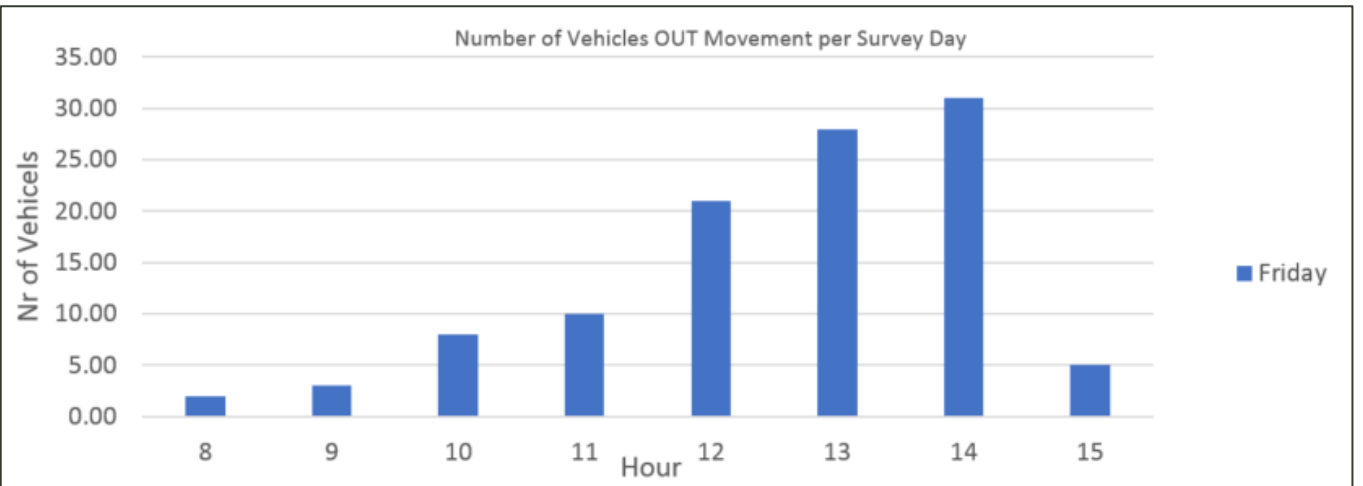


Figure 5-26: Number of Taxi Out-Movement at the Mafora Central Rank

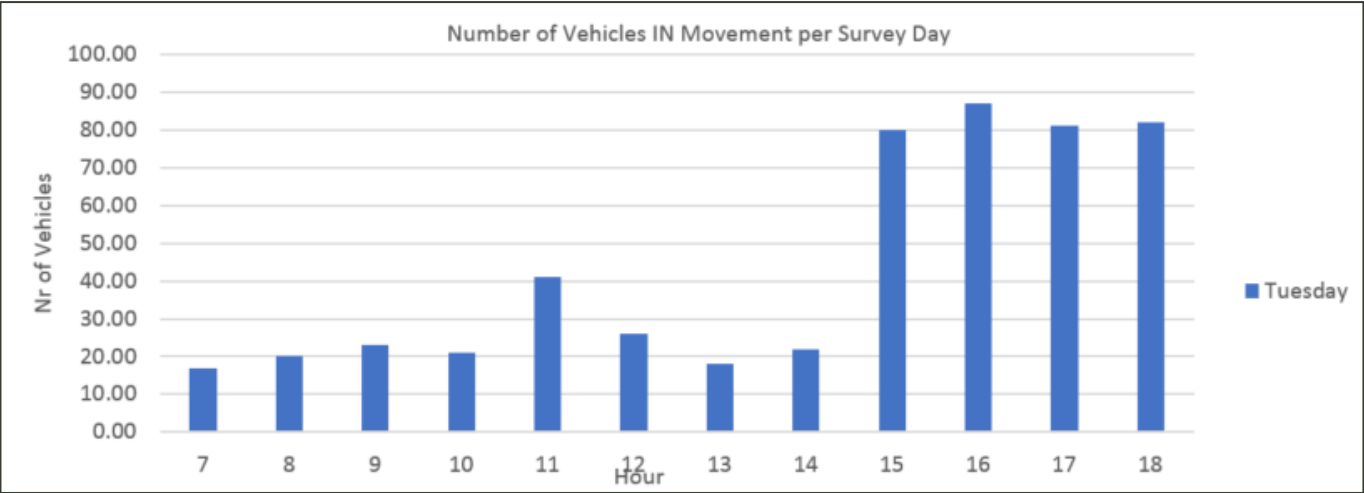


Figure 5-27: Number of Taxi In-Movement at the Phahameng 4+1 Rank

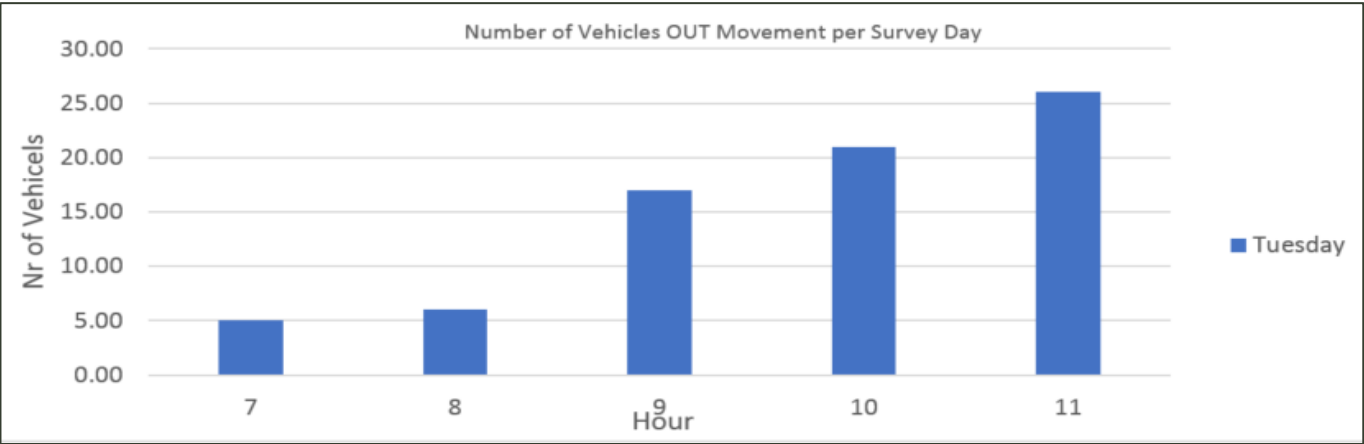


Figure 5-28: Number of Taxi Out-Movement at the Phahameng 4+1 Rank

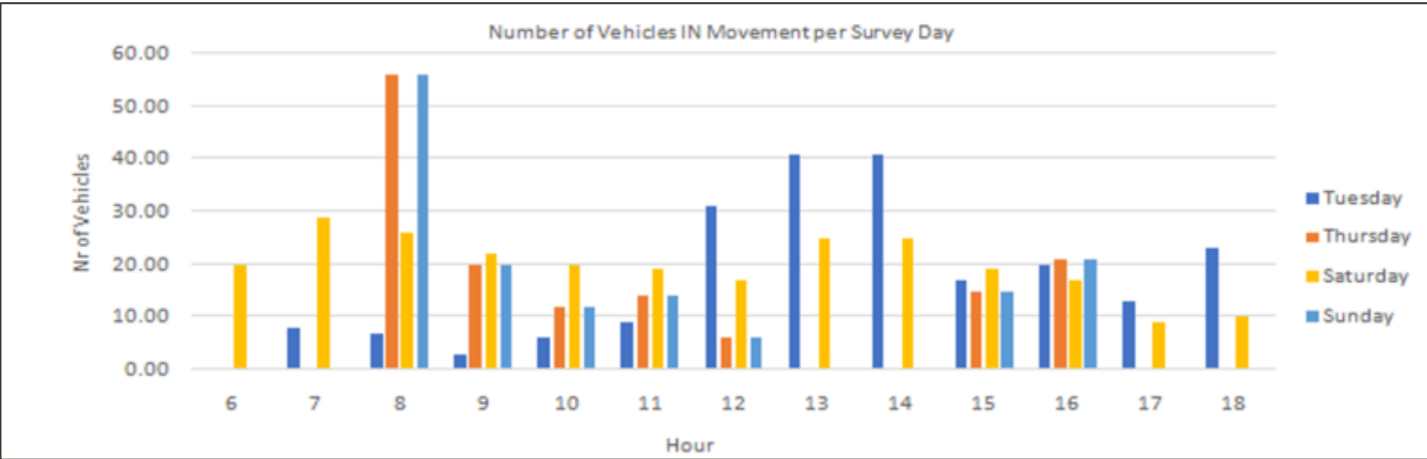


Figure 5-29: Number of Taxi In-Movement at the Sowesto Rank

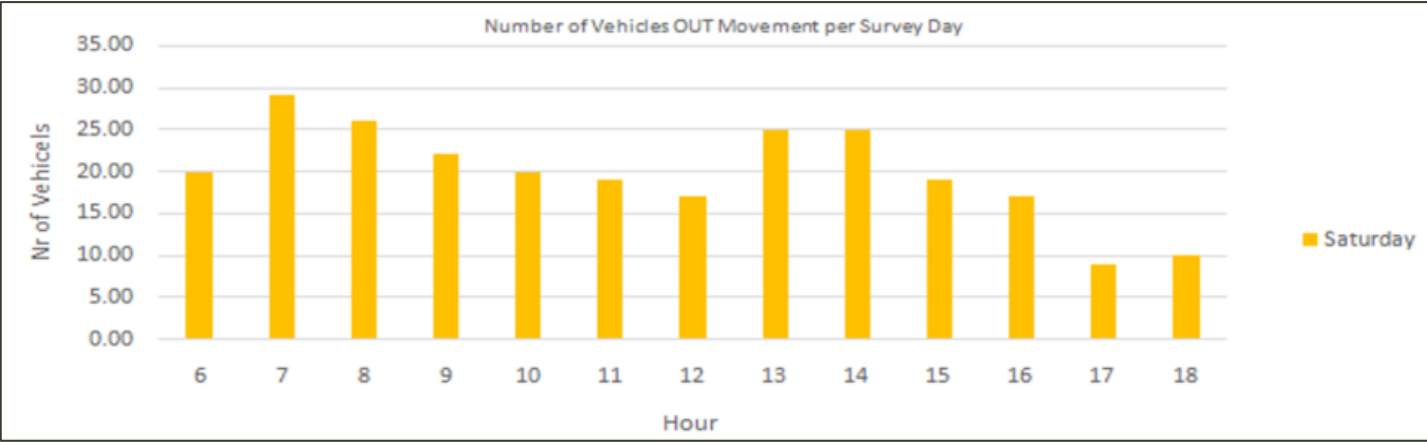


Figure 5-30: Number of Taxi Out-Movement at the Sowesto Rank

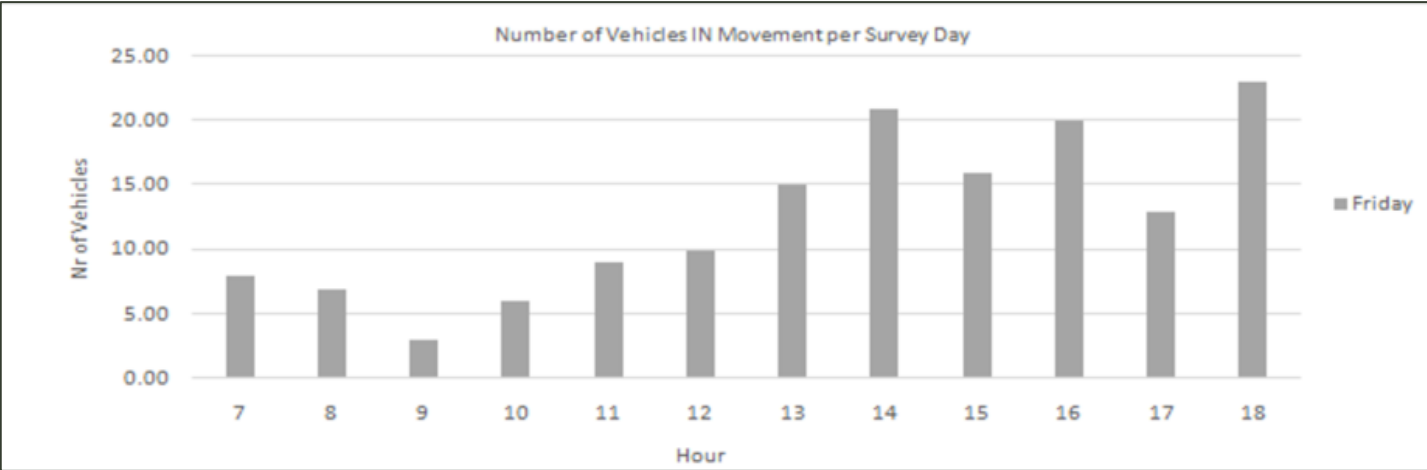


Figure 5-31: Number of Taxi In-Movement at the Twin City Rank

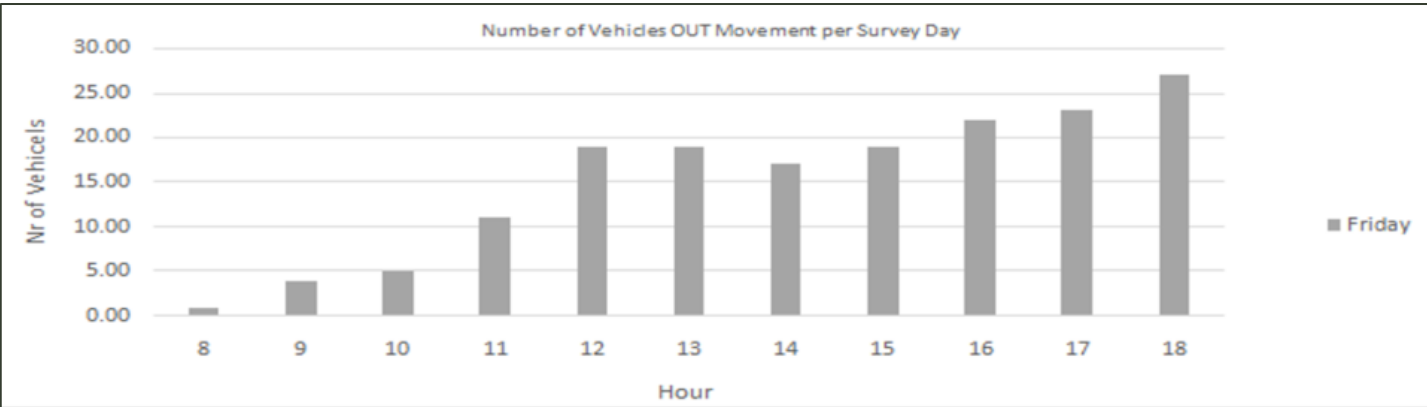


Figure 5-32: Number of Taxi Out-Movement at the Twin City Rank

Table 5-9 to Table 5-11 reflects the available seats utilised by passengers based on an extensive 5-day facility survey conducted at specific ranks during 2016. This information was utilised to determine the demand for seats by passengers and the supply thereof by GBTA, Bata and the Thalsta taxi associations. The utilisation reflected in the tables below represents the percentage of available seats taken up by passengers entering and exiting the respective facilities.

Table 5-9: Daily Vehicle Capacity Utilisation per Destination for BATA Taxi Association

| Destination and Origin | 28/04/2016 | | | 29/04/2016 | | | 30/04/2016 | | | 01/05/2016 | | | 03/05/2016 | | | Average % Seating Capacity Utilisation |
|------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|--|
| | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | |
| BATA | 11 791 | 15 311 | | 18 739 | 22 757 | | 18 435 | 20 947 | | 14 229 | 16 460 | | 18 373 | 22 615 | | |
| Blue Rank | 8 460 | 9 313 | | 15 002 | 16 462 | | 14 351 | 15 758 | | 10 772 | 11 834 | | 12 564 | 13 793 | | |
| BOTSHABELO BA | 540 | 600 | 90% | 843 | 908 | 93% | 873 | 960 | 91% | 836 | 930 | 90% | 675 | 750 | 90% | 91% |
| BOTSHABELO D | 1 187 | 1 305 | 91% | 1 819 | 2 010 | 90% | 1 973 | 2 197 | 90% | 1 559 | 1 725 | 90% | 1 684 | 1 860 | 91% | 90% |
| BOTSHABELO F | 815 | 915 | 89% | 2 400 | 2 685 | 89% | 524 | 585 | 90% | 1 029 | 1 155 | 89% | 681 | 765 | 89% | 89% |
| BOTSHABELO G | | | | 14 | 15 | 93% | 39 | 45 | 87% | | | | 13 | 15 | 87% | 89% |
| BOTSHABELO H | 568 | 609 | 93% | 934 | 989 | 94% | 554 | 588 | 94% | 648 | 653 | 99% | 912 | 963 | 95% | 95% |
| BOTSHABELO K | 540 | 615 | 88% | 1 375 | 1 530 | 90% | 1 696 | 1 879 | 90% | 945 | 1 050 | 90% | 902 | 1 005 | 90% | 90% |
| BOTSHABELO L | 592 | 659 | 90% | 678 | 750 | 90% | 1 052 | 1 155 | 91% | 770 | 846 | 91% | 980 | 1 072 | 91% | 91% |
| BOTSHABELO M | 543 | 600 | 91% | 1 186 | 1 290 | 92% | 1 267 | 1 387 | 91% | 857 | 945 | 91% | 1 013 | 1 102 | 92% | 91% |
| BOTSHABELO N | 765 | 832 | 92% | 963 | 1 057 | 91% | 1 219 | 1 342 | 91% | 921 | 1 012 | 91% | 1 185 | 1 297 | 91% | 91% |
| BOTSHABELO S | 1 018 | 1 140 | 89% | 1 292 | 1 439 | 90% | 1 467 | 1 634 | 90% | 1 500 | 1 678 | 89% | 1 374 | 1 529 | 90% | 90% |
| BOTSHABELO T | 67 | 75 | 89% | 26 | 30 | 87% | | | | 41 | 45 | 91% | 134 | 150 | 89% | 89% |
| BOTSHABELO U | 54 | 60 | 90% | | | | | | | | | | | | | 90% |
| BOTSHABELO V | 509 | 561 | 91% | 173 | 195 | 89% | 424 | 464 | 91% | 149 | 165 | 90% | 81 | 90 | 90% | 90% |
| BOTSHABELO W | 107 | 120 | 89% | 1 047 | 1 169 | 90% | 1 027 | 1 147 | 90% | 660 | 742 | 89% | 659 | 735 | 90% | 89% |
| H1 | 460 | 460 | 100% | 796 | 796 | 100% | 484 | 484 | 100% | 592 | 603 | 98% | 792 | 847 | 94% | 98% |
| Industrial | 56 | 56 | 100% | 56 | 56 | 100% | 96 | 96 | 100% | 120 | 120 | 100% | 132 | 132 | 100% | 100% |
| J1 | 131 | 150 | 87% | 413 | 465 | 89% | 437 | 495 | 88% | 145 | 165 | 88% | 509 | 570 | 89% | 88% |
| THABA NCHU | 508 | 556 | 91% | 983 | 1 074 | 92% | 1 205 | 1 285 | 94% | | | | 825 | 896 | 92% | 92% |
| Unknown | | | | 4 | 4 | 100% | 14 | 15 | 93% | | | | 13 | 15 | 87% | 93% |
| Hospital | 876 | 3 180 | | 950 | 3 010 | | 558 | 1 368 | | 682 | 1 700 | | 1 524 | 4 182 | | |
| BLUE RANK | 734 | 2 690 | 27% | 766 | 2 489 | 31% | 441 | 1 074 | 41% | 473 | 1 250 | 38% | 1 153 | 3 110 | 37% | 35% |
| BOTSHABELO B | | | | 15 | 34 | 44% | | | | | | | | | | 44% |
| BOTSHABELO BA | | | | 2 | 15 | 13% | 6 | 30 | 20% | 30 | 124 | 24% | 40 | 135 | 30% | 22% |
| BOTSHABELO C | 8 | 30 | 27% | 3 | 15 | 20% | 8 | 30 | 27% | 20 | 75 | 27% | | | | 25% |
| BOTSHABELO G | 7 | 15 | 47% | 1 | 4 | 25% | | | | 21 | 24 | 88% | 5 | 8 | 63% | 55% |
| BOTSHABELO H | 4 | 8 | 50% | 23 | 73 | 32% | 36 | 75 | 48% | 81 | 107 | 76% | 111 | 186 | 60% | 53% |
| BOTSHABELO K | 2 | 15 | 13% | | | | | | | 24 | 37 | 65% | 10 | 15 | 67% | 48% |
| BOTSHABELO W | 4 | 15 | 27% | | | | | | | | | | | | | 27% |
| H1 | | | | | | | | | | 7 | 8 | 88% | | | | 88% |
| Industrial | 117 | 407 | 29% | 139 | 376 | 37% | 66 | 155 | 43% | 26 | 75 | 35% | 205 | 728 | 28% | 34% |
| Police Station | | | | 1 | 4 | 25% | 1 | 4 | 25% | | | | | | | 25% |
| Industrial | 2 455 | 2 818 | | 2 787 | 3 285 | | 3 526 | 3 821 | | 2 775 | 2 926 | | 4 285 | 4 640 | | |
| BLOEMFONTEIN | | | | | | | 2 129 | 2 246 | 95% | 1 929 | 2 018 | 96% | 2 072 | 2 165 | 96% | 95% |
| BOTSHABELO B | 7 | 4 | 175% | | | | | | | | | | | | | 175% |
| BOTSHABELO BA | 4 | 4 | 100% | | | | | | | | | | | | | 100% |
| BOTSHABELO F | 1 270 | 1 410 | 90% | 2 044 | 2 280 | 90% | 1 397 | 1 575 | 89% | | | | 2 213 | 2 475 | 89% | 89% |

| Destination and Origin | 28/04/2016 | | | 29/04/2016 | | | 30/04/2016 | | | 01/05/2016 | | | 03/05/2016 | | | Average % Seating Capacity Utilisation |
|------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|--|
| | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | |
| BOTSHABELO G | 4 | 4 | 100% | | | | | | | | | | | | | 100% |
| BOTSHABELO H | 19 | 24 | 79% | 25 | 50 | 50% | | | | | | | | | | 65% |
| BOTSHABELO J | 186 | 240 | 78% | 75 | 120 | 63% | | | | | | | | | | 70% |
| BOTSHABELO K | 41 | 45 | 91% | | | | | | | | | | | | | 91% |
| BOTSHABELO S | 82 | 97 | 85% | | | | | | | | | | | | | 85% |
| BOTSHABELO U | 40 | 45 | 89% | | | | | | | | | | | | | 89% |
| BOTSHABELO V | 63 | 75 | 84% | | | | | | | | | | | | | 84% |
| BOTSHABELO W | 120 | 135 | 89% | | | | | | | | | | | | | 89% |
| Katamelo Primary | 104 | 109 | 95% | 74 | 90 | 82% | | | | | | | | | | 89% |
| THABA NCHU | | | | | | | | | | 846 | 908 | 93% | | | | 93% |
| Unknown | 515 | 626 | 82% | 569 | 745 | 76% | | | | | | | | | | 79% |

Table 5-10: Daily Vehicle Capacity Utilisation per Destination for THALSTA Taxi Association

| Destination and Origin | THALSTA Survey Dates | | | | | | | | | | | | | | | Average % Seating Capacity Utilisation |
|---------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|--|
| | 2016/04/28 | | | 2016/04/29 | | | 2016/04/30 | | | 2016/05/01 | | | 2016/05/03 | | | |
| | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | |
| THALSTA | 5 176 | 5 522 | | 8 856 | 9 401 | | 8 881 | 9 662 | | 6 520 | 6 984 | | 9 020 | 9 664 | | |
| 4+1 Rank | 792 | 792 | | 1 478 | 1 499 | | 1 358 | 1 354 | | 968 | 968 | | 1 484 | 1 511 | | |
| • Albert Moroka Secondary | | | | 4 | 4 | 100% | | | | | | | | | | 100% |
| • Makurung | 180 | 180 | 100% | 371 | 377 | 98% | 420 | 422 | 100% | 264 | 264 | 100% | 392 | 392 | 100% | 100% |
| • Mothe College | | | | 8 | 8 | 100% | 24 | 24 | 100% | | | | | | | 100% |
| • RATAU | | | | 4 | 4 | 100% | | | | | | | | | | 100% |
| • Sananyoka | 144 | 144 | 100% | 184 | 184 | 100% | 136 | 136 | 100% | 84 | 84 | 100% | 124 | 124 | 100% | 100% |
| • SELOSESHA | 8 | 8 | 100% | 4 | 4 | 100% | | | | | | | | | | 100% |
| • SEROALO | 4 | 4 | 100% | | | | | | | | | | | | | 100% |
| • Unknown | | | | 12 | 16 | 75% | | | | | | | | | | 75% |
| • Zone 1 | | | | 4 | 4 | 100% | 4 | 4 | 100% | 4 | 4 | 100% | | | | 100% |
| • Zone 2 | 112 | 112 | 100% | 260 | 260 | 100% | 188 | 188 | 100% | 168 | 168 | 100% | 294 | 306 | 96% | 99% |
| • Zone 3&4 | 60 | 60 | 100% | 77 | 80 | 96% | 92 | 92 | 100% | 16 | 16 | 100% | 68 | 64 | 106% | 101% |
| • Zone 5 | 284 | 284 | 100% | 550 | 558 | 99% | 494 | 488 | 101% | 432 | 432 | 100% | 606 | 625 | 97% | 99% |
| Thaba Nchu LD | 517 | 585 | | 1 078 | 1 160 | | 1 051 | 1 121 | | 685 | 739 | | 882 | 938 | | |
| | 517 | 585 | 88% | 1 078 | 1 160 | 93% | 1 051 | 1 121 | 94% | 685 | 739 | 93% | 882 | 938 | 94% | 92% |
| Thaba Nchu TR | 3 867 | 4 145 | | 6 300 | 6 742 | | 6 472 | 7 187 | | 4 867 | 5 277 | | 6 654 | 7 215 | | |
| • BOCHABELA | 450 | 489 | 92% | | | | | | | | | | | | | 92% |
| • BOTSHABELO B | | | | 838 | 890 | 94% | 1 089 | 1 127 | 97% | 763 | 799 | 95% | 783 | 832 | 94% | 95% |
| • Excelsior | 56 | 60 | 93% | 175 | 186 | 94% | 196 | 231 | 85% | 76 | 82 | 93% | 154 | 163 | 94% | 92% |
| • HobHouse | | | | 14 | 15 | 93% | | | | | | | | | | 93% |
| • MOTLATLA | 218 | 240 | 91% | 454 | 536 | 85% | 519 | 745 | 70% | 369 | 466 | 79% | 536 | 647 | 83% | 81% |
| • RATAU | 432 | 444 | 97% | 655 | 672 | 97% | 711 | 740 | 96% | 649 | 692 | 94% | 749 | 788 | 95% | 96% |
| • RATLOU | 4 | 4 | 100% | 32 | 32 | 100% | 64 | 64 | 100% | 52 | 52 | 100% | 52 | 52 | 100% | 100% |
| • ROOIFONTEIN | 96 | 104 | 92% | 195 | 211 | 92% | 181 | 272 | 67% | 181 | 228 | 79% | 227 | 254 | 89% | 84% |
| • SELOSESHA | 1 056 | 1 068 | 99% | 1 138 | 1 163 | 98% | 982 | 992 | 99% | 736 | 756 | 97% | 1 055 | 1 076 | 98% | 98% |

| Destination and Origin | THALSTA Survey Dates | | | | | | | | | | | | | | | Average % Seating Capacity Utilisation |
|------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|--|
| | 2016/04/28 | | | 2016/04/29 | | | 2016/04/30 | | | 2016/05/01 | | | 2016/05/03 | | | |
| | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | |
| • SELOSESHA X 11 | 544 | 544 | 100% | 578 | 580 | 100% | 438 | 432 | 101% | 298 | 300 | 99% | 502 | 504 | 100% | 100% |
| • SEROALO | 183 | 192 | 95% | 334 | 344 | 97% | 256 | 260 | 98% | 214 | 216 | 99% | 183 | 192 | 95% | 97% |
| • THABA NCHU X 21 | | | | 4 | 4 | 100% | | | | 20 | 24 | 83% | | | | 92% |
| • Tweespruit | 124 | 156 | 79% | 332 | 357 | 93% | 299 | 387 | 77% | 125 | 134 | 93% | 302 | 363 | 83% | 85% |
| • Unknown | 4 | 4 | 100% | 70 | 87 | 80% | 155 | 160 | 97% | 144 | 144 | 100% | 183 | 184 | 99% | 95% |
| • Zone 1 | 700 | 840 | 83% | 1 481 | 1 665 | 89% | 1 582 | 1 777 | 89% | 1 240 | 1 384 | 90% | 1 928 | 2 160 | 89% | 88% |

Table 5-11: Daily Vehicle Capacity Utilisation per Destination for GBTA Taxi Association

| Destination and Origin | GBTA Survey Dates | | | | | | | | | | | | | | | Average % Seating Capacity Utilisation |
|------------------------|----------------------|-----------------|--------------------------------|-----------------------------|------------------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|----------------------|-----------------|--------------------------------|--|
| | 28/04/2016 | | | 29/04/2016 | | | 30/04/2016 | | | 01/05/2016 | | | 03/05/2016 | | | |
| | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Sum of Number of Passengers | Sum of Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | |
| GBTA | 68,285 | 91,818 | 74% | 67,260 | 89,419 | 75% | 70,265 | 94,189 | 75% | 50,346 | 63,171 | 80% | 99,070 | 127,785 | 78% | 76% |
| Academy | | | | | | | | | | | | | 1,121 | 1,398 | 80% | 80% |
| BATHO | | | | | | | | | | | | | 233 | 296 | 79% | 79% |
| BOCHABELA | | | | | | | | | | | | | 194 | 240 | 81% | 81% |
| CBD | | | | | | | | | | | | | 501 | 599 | 84% | 84% |
| Maphisa | | | | | | | | | | | | | 193 | 263 | 73% | 73% |
| Anna Maggerman | 1,694 | 2,010 | 84% | 1,536 | 1,800 | 85% | 951 | 1,459 | 65% | 1,384 | 1,605 | 86% | | | | 80% |
| CBD | 1,694 | 2,010 | 84% | 1,536 | 1,800 | 85% | 951 | 1,459 | 65% | 1,384 | 1,605 | 86% | | | | 80% |
| Bainsvlei | 303 | 336 | 90% | 984 | 1,203 | 82% | 740 | 773 | 96% | | | | | | | 89% |
| Bainsvlei | | | | 287 | 314 | 91% | 719 | 758 | 95% | | | | | | | 93% |
| BAINSVLEI SETTLEMENT | 303 | 336 | 90% | | | | | | | | | | | | | 90% |
| CBD | | | | 697 | 889 | 78% | | | | | | | | | | 78% |
| LANGENHOVENPARK | | | | | | | 21 | 15 | 140% | | | | | | | 140% |
| Batho Police Station | 633 | 1,279 | 49% | 643 | 1,014 | 63% | 713 | 1,378 | 52% | 885 | 1,696 | 52% | 1,452 | 2,521 | 58% | 55% |
| CBD | 633 | 1,279 | 49% | 643 | 1,014 | 63% | 713 | 1,378 | 52% | 885 | 1,696 | 52% | 1,452 | 2,521 | 58% | 55% |
| Bloemside_1 | 530 | 761 | 70% | 531 | 761 | 70% | 557 | 761 | 73% | | | | | | | 71% |
| BLOMANDA | 305 | 330 | 92% | 305 | 330 | 92% | 305 | 110 | 277% | | | | | | | 154% |
| CBD | 225 | 431 | 52% | 226 | 431 | 52% | 252 | 651 | 39% | | | | | | | 48% |
| Brandwag | 7,015 | 7,648 | 92% | 7,564 | 8,264 | 92% | 3,425 | 3,684 | 93% | 4,402 | 4,753 | 93% | 3,111 | 3,351 | 93% | 92% |
| CBD | | | | | | | | | | 1,195 | 1,295 | 92% | | | | 92% |
| Mimosa | 1,576 | 1,729 | 91% | 604 | 651 | 93% | | | | 990 | 1,070 | 93% | 604 | 658 | 92% | 92% |
| Tempe | 1,396 | 1,512 | 92% | 276 | 307 | 90% | | | | 892 | 958 | 93% | | | | 92% |
| UFS | 1,756 | 1,907 | 92% | 765 | 845 | 91% | | | | | | | | | | 91% |
| Unknown | 2,287 | 2,500 | 91% | 5,919 | 6,461 | 92% | 3,425 | 3,684 | 93% | 1,325 | 1,430 | 93% | 2,507 | 2,693 | 93% | 92% |
| BSQ | 7,655 | 9,798 | 78% | 5,132 | 5,606 | 92% | 7,691 | 9,828 | 78% | 4,022 | 4,427 | 91% | 4,022 | 4,442 | 91% | 86% |
| Bainsvlei | | | | 231 | 246 | 94% | | | | | | | | | | 94% |
| BAYSWATER | 1,495 | 1,623 | 92% | 1,793 | 1,942 | 92% | 1,495 | 1,623 | 92% | | | | | | | 92% |
| CBD | 898 | 2,445 | 37% | | | | 903 | 2,460 | 37% | | | | | | | 37% |
| HEUWELSIG | 203 | 217 | 94% | | | | 203 | 217 | 94% | | | | | | | 94% |
| LANGENHOVENPARK | | | | 294 | 322 | 91% | | | | | | | | | | 91% |
| Mimosa Mall | | | | | | | | | | | | | 627 | 723 | 87% | 87% |
| Noordhoek | 1,399 | 1,518 | 92% | 883 | 968 | 91% | 1,399 | 1,518 | 92% | | | | | | | 92% |
| PENTAGONPARK | 1,275 | 1,391 | 92% | 358 | 389 | 92% | 1,285 | 1,391 | 92% | | | | | | | 92% |
| Preller Square Centre | 976 | 1,046 | 93% | 700 | 756 | 93% | 976 | 1,046 | 93% | 1,067 | 1,152 | 93% | 1,067 | 1,152 | 93% | 93% |
| Tempe | | | | | | | | | | 627 | 723 | 87% | | | | 87% |
| UFS | | | | 406 | 430 | 94% | | | | | | | | | | 94% |
| UNIVERSITAS | 1,196 | 1,319 | 91% | | | | 1,217 | 1,334 | 91% | 805 | 881 | 91% | 805 | 881 | 91% | 91% |
| Universitas Hospital | | | | | | | | | | 951 | 1,025 | 93% | 951 | 1,040 | 91% | 92% |
| Unknown | | | | 369 | 404 | 91% | | | | | | | | | | 91% |
| WOODLANDS | 213 | 239 | 89% | 98 | 149 | 66% | 213 | 239 | 89% | 572 | 646 | 89% | 572 | 646 | 89% | 84% |

| Destination and Origin | GBTA Survey Dates | | | | | | | | | | | | | | | Average % Seating Capacity Utilisation |
|-------------------------|-------------------------|--------------------|--------------------------------------|-----------------------------------|------------------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|---|
| | 28/04/2016 | | | 29/04/2016 | | | 30/04/2016 | | | | 01/05/2016 | | | | 03/05/2016 | |
| | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Sum of Number of Passengers | Sum of Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | |
| Casino | | | | 3,389 | 5,885 | 58% | | | | | | | | | | 58% |
| CBD | | | | 1,797 | 2,962 | 61% | | | | | | | | | | 61% |
| Lourie Park | | | | 1,400 | 2,646 | 53% | | | | | | | | | | 53% |
| PELLISSIER | | | | 129 | 187 | 69% | | | | | | | | | | 69% |
| Unknown | | | | 63 | 90 | 70% | | | | | | | | | | 70% |
| Cross Rd | 1,407 | 1,841 | 76% | 1,484 | 1,931 | 77% | 1,252 | 1,402 | 89% | 793 | 846 | 94% | | | | 84% |
| BLOEMSIDE | | | | | | | 544 | 585 | 93% | | | | | | | 93% |
| CBD | | | | | | | 68 | 127 | 54% | | | | | | | 54% |
| Freedom Square | 133 | 476 | 28% | | | | | | | | | | | | | 28% |
| HEIDEDAL | | | | | | | 584 | 630 | 93% | | | | | | | 93% |
| NAMIBIA | 1,274 | 1,365 | 93% | 1,351 | 1,440 | 94% | 56 | 60 | 93% | 793 | 846 | 94% | | | | 94% |
| Unknown | | | | 133 | 491 | 27% | | | | | | | | | | 27% |
| Devis Street | 1,065 | 1,327 | 80% | 1,159 | 1,477 | 78% | 964 | 1,177 | 82% | 947 | 1,128 | 84% | 1,159 | 1,477 | 78% | 81% |
| CBD | 1,065 | 1,327 | 80% | 1,159 | 1,477 | 78% | 964 | 1,177 | 82% | 947 | 1,128 | 84% | 1,159 | 1,477 | 78% | 81% |
| Engen | 1,711 | 2,652 | 65% | 1,678 | 2,704 | 62% | 1,659 | 2,637 | 63% | 1,611 | 2,564 | 63% | 2,203 | 3,727 | 59% | 62% |
| CBD | 1,711 | 2,652 | 65% | 1,678 | 2,704 | 62% | 1,659 | 2,637 | 63% | 1,611 | 2,564 | 63% | 2,203 | 3,727 | 59% | 62% |
| Fauna | 288 | 483 | 60% | 147 | 278 | 53% | | | | 337 | 370 | 91% | 320 | 341 | 94% | 74% |
| CBD | 288 | 483 | 60% | 147 | 278 | 53% | | | | 337 | 370 | 91% | 320 | 341 | 94% | 74% |
| Freedom Square | 4,893 | 8,810 | 56% | 1,182 | 1,327 | 89% | 13,929 | 19,600 | 71% | | | | 14,158 | 20,154 | 70% | 71% |
| BLOEMSIDE | | | | 530 | 570 | 93% | | | | | | | | | | 93% |
| CBD | 4,893 | 8,810 | 56% | 68 | 127 | 54% | 13,915 | 19,585 | 71% | | | | 14,158 | 20,154 | 70% | 63% |
| HEIDEDAL | | | | 584 | 630 | 93% | | | | | | | | | | 93% |
| Unknown | | | | | | | 14 | 15 | 93% | | | | | | | 93% |
| Grassland Super Market | 316 | 412 | 77% | 321 | 427 | 75% | 269 | 365 | 74% | 1,901 | 2,535 | 75% | 2,274 | 2,888 | 79% | 76% |
| CBD | 316 | 412 | 77% | 321 | 427 | 75% | 269 | 365 | 74% | 1,901 | 2,535 | 75% | 2,274 | 2,888 | 79% | 76% |
| Heidedal Police Station | 1,066 | 1,779 | 60% | 1,669 | 2,805 | 60% | 785 | 1,980 | 40% | | | | 2,714 | 4,279 | 63% | 56% |
| CBD | 1,066 | 1,779 | 60% | 1,669 | 2,805 | 60% | 785 | 1,980 | 40% | | | | 2,714 | 4,279 | 63% | 56% |
| Home Affairs | 1,305 | 1,404 | 93% | 1,697 | 1,851 | 92% | 1,522 | 1,634 | 93% | 1,394 | 1,501 | 93% | 2,107 | 2,259 | 93% | 93% |
| Bergman | | | | 224 | 269 | 83% | 140 | 135 | 104% | | | | | | | 93% |
| BLOEMSIDE | | | | 790 | 847 | 93% | 727 | 787 | 92% | | | | | | | 93% |
| CBD | 1,305 | 1,404 | 93% | | | | | | | 1,394 | 1,501 | 93% | 2,107 | 2,259 | 93% | 93% |
| HEIDEDAL | | | | 683 | 735 | 93% | 655 | 712 | 92% | | | | | | | 92% |
| Hostetel1 | 675 | 946 | 71% | 707 | 986 | 72% | 1,657 | 1,783 | 93% | 679 | 990 | 69% | 2,153 | 3,169 | 68% | 75% |
| Bergman | | | | | | | 182 | 194 | 94% | | | | | | | 94% |
| BLOEMSIDE | | | | | | | 792 | 854 | 93% | | | | | | | 93% |
| CBD | 675 | 946 | 71% | 707 | 986 | 72% | | | | 679 | 990 | 69% | 2,153 | 3,169 | 68% | 70% |
| HEIDEDAL | | | | | | | 683 | 735 | 93% | | | | | | | 93% |
| Hyperama | 1,143 | 1,210 | 94% | 406 | 433 | 94% | 777 | 830 | 94% | 685 | 739 | 93% | 1,035 | 1,121 | 92% | 93% |
| CBD | 1,143 | 1,210 | 94% | 406 | 433 | 94% | 777 | 830 | 94% | 685 | 739 | 93% | 1,035 | 1,121 | 92% | 93% |
| Hypermarket | 785 | 1,980 | 40% | 1,070 | 1,877 | 57% | 1,541 | 2,134 | 72% | 732 | 1,744 | 42% | 1,627 | 1,753 | 93% | 61% |
| Bergman | | | | | | | | | | | | | 140 | 149 | 94% | 94% |
| BLOEMSIDE | | | | | | | | | | | | | 741 | 802 | 92% | 92% |
| CBD | 785 | 1,980 | 40% | 1,070 | 1,877 | 57% | 753 | 1,295 | 58% | 732 | 1,744 | 42% | 63 | 67 | 94% | 58% |
| HEIDEDAL | | | | | | | | | | | | | 683 | 735 | 93% | 93% |
| Hyperrama | | | | | | | 788 | 839 | 94% | | | | | | | 94% |
| Ipopeng | 1,735 | 1,875 | 93% | 1,545 | 1,695 | 91% | 750 | 870 | 86% | 445 | 495 | 90% | 1,721 | 1,860 | 93% | 90% |
| Ipopeng | 1,735 | 1,875 | 93% | 1,545 | 1,695 | 91% | 750 | 870 | 86% | 445 | 495 | 90% | 1,721 | 1,860 | 93% | 90% |
| KFC | 1,172 | 1,251 | 94% | 1,697 | 1,858 | 91% | 588 | 610 | 96% | 953 | 946 | 101% | 4,357 | 5,000 | 87% | 94% |
| Bergman | | | | 224 | 269 | 83% | | | | | | | | | | 83% |
| BLOEMSIDE | | | | 790 | 854 | 93% | | | | | | | | | | 93% |
| CBD | 1,172 | 1,251 | 94% | | | | 588 | 610 | 96% | 953 | 946 | 101% | 4,357 | 5,000 | 87% | 94% |
| HEIDEDAL | | | | 683 | 735 | 93% | | | | | | | | | | 93% |
| Langenhoven Park | 406 | 805 | 50% | 717 | 783 | 92% | 961 | 1,065 | 90% | | | | | | | 77% |
| CBD | 149 | 530 | 28% | | | | | | | | | | | | | 28% |
| LANGENHOVENPARK | 257 | 275 | 93% | 717 | 783 | 92% | 961 | 1,065 | 90% | | | | | | | 92% |
| Lourie Park | 175 | 897 | 20% | 830 | 873 | 95% | 1,296 | 3,280 | 40% | 197 | 979 | 20% | 1,294 | 2,616 | 49% | 45% |
| CBD | | | | 830 | 873 | 95% | 867 | 1,802 | 48% | | | | 1,294 | 2,616 | 49% | 64% |
| LOURIERPARK | 20 | 180 | 11% | | | | 429 | 1,478 | 29% | 20 | 194 | 10% | | | | 17% |
| Sowesto | 155 | 717 | 22% | | | | | | | 177 | 785 | 23% | | | | 22% |

| Destination and Origin | GBT A Survey Dates | | | | | | | | | | | | | | | Average % Seating Capacity Utilisation |
|------------------------|-------------------------|--------------------|--------------------------------------|-----------------------------------|------------------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|---|
| | 28/04/2016 | | | 29/04/2016 | | | 30/04/2016 | | | 01/05/2016 | | | 03/05/2016 | | | |
| | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Sum of Number of Passengers | Sum of Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | |
| Mafora Central | 2,676 | 2,895 | 92% | 606 | 849 | 71% | 1,574 | 2,235 | 70% | 2,355 | 2,482 | 95% | 4,224 | 4,432 | 95% | 85% |
| BLOMANDA | 566 | 615 | 92% | | | | | | | 566 | 615 | 92% | 1,187 | 1,241 | 96% | 93% |
| CBD | | | | 606 | 849 | 71% | 1,574 | 2,235 | 70% | | | | | | | 71% |
| Rocklands | 2,110 | 2,280 | 93% | | | | | | | 1,789 | 1,867 | 96% | 3,037 | 3,191 | 95% | 95% |
| Mafora East | 2,621 | 2,797 | 94% | 1,621 | 1,725 | 94% | 1,509 | 1,605 | 94% | 2,266 | 2,415 | 94% | 2,700 | 4,264 | 63% | 88% |
| BLOMANDA | 573 | 615 | 93% | 350 | 375 | 93% | 336 | 360 | 93% | 492 | 525 | 94% | | | | 93% |
| CBD | | | | | | | | | | | | | 2,700 | 4,264 | 63% | 63% |
| DINAWENG | 915 | 967 | 95% | 609 | 645 | 94% | 567 | 600 | 95% | 813 | 855 | 95% | | | | 95% |
| Mafora | 820 | 885 | 93% | 412 | 435 | 95% | 398 | 420 | 95% | 751 | 810 | 93% | | | | 94% |
| Phase 2 | 313 | 330 | 95% | 250 | 270 | 93% | 208 | 225 | 92% | 210 | 225 | 93% | | | | 93% |
| Mafora West | 3,215 | 3,465 | 93% | 5,174 | 5,595 | 92% | 4,992 | 5,385 | 93% | 2,657 | 2,812 | 94% | 5,258 | 5,685 | 92% | 93% |
| BLOMANDA | 932 | 1,005 | 93% | 1,899 | 2,070 | 92% | 1,829 | 1,995 | 92% | 588 | 630 | 93% | 1,953 | 2,130 | 92% | 92% |
| DINAWENG | 163 | 180 | 91% | 1,258 | 1,350 | 93% | 1,216 | 1,290 | 94% | 928 | 967 | 96% | 1,274 | 1,365 | 93% | 93% |
| Mafora | 665 | 720 | 92% | 784 | 840 | 93% | 742 | 795 | 93% | 826 | 885 | 93% | 768 | 825 | 93% | 93% |
| Phase 2 | 1,455 | 1,560 | 93% | 1,233 | 1,335 | 92% | 1,205 | 1,305 | 92% | 315 | 330 | 95% | 1,263 | 1,365 | 93% | 93% |
| Maitland | | | | | | | | | | 1,670 | 1,800 | 93% | 6,225 | 6,745 | 92% | 93% |
| Bergman | | | | | | | | | | 1,002 | 1,080 | 93% | 2,172 | 2,326 | 93% | 93% |
| BLOEMSIDE | | | | | | | | | | | | | 1,203 | 1,305 | 92% | 92% |
| GRASSLANDS | | | | | | | | | | 668 | 720 | 93% | 1,666 | 1,809 | 92% | 92% |
| HEIDEDAL | | | | | | | | | | | | | 1,184 | 1,290 | 92% | 92% |
| Makro | | | | 494 | 1,133 | 44% | 1,878 | 2,652 | 71% | | | | | | | 57% |
| CBD | | | | 494 | 1,133 | 44% | 1,878 | 2,652 | 71% | | | | | | | 57% |
| Maphisa | | | | | | | | | | | | | 1,650 | 1,823 | 91% | 91% |
| CBD | | | | | | | | | | | | | 270 | 301 | 90% | 90% |
| Rocklands | | | | | | | | | | | | | 1,380 | 1,522 | 91% | 91% |
| Masakhane | | | | | | | | | | | | | 1,381 | 2,213 | 62% | 62% |
| CBD | | | | | | | | | | | | | 1,381 | 2,213 | 62% | 62% |
| Meadows | 4,688 | 5,898 | 79% | 9,233 | 15,871 | 58% | 1,655 | 1,783 | 93% | 1,621 | 2,025 | 80% | 2,362 | 2,891 | 82% | 78% |
| Bergman | | | | | | | 182 | 194 | 94% | | | | | | | 94% |
| BLOEMSIDE | | | | | | | 790 | 854 | 93% | | | | | | | 93% |
| CBD | 4,688 | 5,898 | 79% | 9,233 | 15,871 | 58% | | | | 1,621 | 2,025 | 80% | 2,362 | 2,891 | 82% | 75% |
| HEIDEDAL | | | | | | | 683 | 735 | 93% | | | | | | | 93% |
| Mimosa | 1,418 | 1,554 | 91% | 2,128 | 2,899 | 73% | 1,338 | 1,452 | 92% | | | | 1,418 | 1,554 | 91% | 87% |
| CBD | 1,418 | 1,554 | 91% | 2,128 | 2,899 | 73% | 1,338 | 1,452 | 92% | | | | 1,418 | 1,554 | 91% | 87% |
| Monape Street | | | | | | | | | | | | | 2,374 | 3,658 | 65% | 65% |
| CBD | | | | | | | | | | | | | 2,374 | 3,658 | 65% | 65% |
| National Hospital | 1,585 | 1,781 | 89% | | | | 1,428 | 1,781 | 80% | 1,428 | 1,781 | 80% | 1,428 | 1,781 | 80% | 82% |
| CBD | 1,585 | 1,781 | 89% | | | | | | | | | | | | | 89% |
| Unknown | | | | | | | 1,428 | 1,781 | 80% | 1,428 | 1,781 | 80% | 1,428 | 1,781 | 80% | 80% |
| Northridge Mall | | | | 618 | 1,174 | 53% | 623 | 1,286 | 48% | | | | | | | 51% |
| CBD | | | | 618 | 1,174 | 53% | | | | | | | | | | 53% |
| Unknown | | | | | | | 623 | 1,286 | 48% | | | | | | | 48% |
| Pasteur Hospital | | | | | | | 849 | 1,325 | 64% | | | | | | | 64% |
| BOTSHABELO H | | | | | | | 39 | 45 | 87% | | | | | | | 87% |
| CBD | | | | | | | 452 | 711 | 64% | | | | | | | 64% |
| LOURIERPARK | | | | | | | 211 | 337 | 63% | | | | | | | 63% |
| PELLISSIER | | | | | | | 147 | 232 | 63% | | | | | | | 63% |
| Pelenomi Hospital | 1,408 | 2,395 | 59% | 1,408 | 2,406 | 59% | 1,313 | 2,180 | 60% | 1,193 | 2,166 | 55% | 4,434 | 6,658 | 67% | 60% |
| CBD | 1,408 | 2,395 | 59% | 1,408 | 2,406 | 59% | 1,313 | 2,180 | 60% | 1,193 | 2,166 | 55% | 4,434 | 6,658 | 67% | 60% |
| Phahameng 4+1 | 554 | 3,383 | 16% | 1,041 | 1,350 | 77% | 1,152 | 1,181 | 98% | 875 | 914 | 96% | 3,370 | 3,539 | 95% | 76% |
| BATHO | | | | 250 | 322 | 78% | | | | | | | 20 | 20 | 100% | 89% |
| BOCHABELA | | | | 143 | 184 | 78% | 336 | 354 | 95% | | | | | | | 86% |
| Boohebel Primary | | | | | | | | | | | | | 392 | 396 | 99% | 99% |
| Bothaville | | | | | | | | | | | | | 32 | 32 | 100% | 100% |
| BOTSHABELO B | | | | 4 | 4 | 100% | | | | | | | | | | 100% |
| CBD | 554 | 3,383 | 16% | 475 | 613 | 77% | 4 | 4 | 100% | | | | 286 | 313 | 91% | 71% |
| Mahlohonolo I.School | | | | | | | 8 | 19 | 42% | | | | 16 | 16 | 100% | 71% |
| MALELEKA | | | | | | | 28 | 28 | 100% | | | | 108 | 108 | 100% | 100% |
| Maphisa | | | | 169 | 227 | 74% | 148 | 148 | 100% | | | | | | | 87% |

| Destination and Origin | GBTA Survey Dates | | | | | | | | | | | | | | | Average % Seating Capacity Utilisation |
|----------------------------------|-------------------------|--------------------|--------------------------------------|-----------------------------------|------------------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|---|
| | 28/04/2016 | | | 29/04/2016 | | | 30/04/2016 | | | 01/05/2016 | | | 03/05/2016 | | | |
| | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Sum of Number of Passengers | Sum of Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | |
| Maphisa, Batho | | | | | | | 4 | 4 | 100% | | | | 264 | 264 | 100% | 100% |
| PARADYS SMALL HOLDINGS | | | | | | | | | | | | | 4 | 4 | 100% | 100% |
| PHAHAMENG | | | | | | | 136 | 136 | 100% | | | | 200 | 200 | 100% | 100% |
| Rocklands | | | | | | | 4 | 4 | 100% | | | | 1,376 | 1,492 | 92% | 96% |
| Unknown | | | | | | | 484 | 484 | 100% | 875 | 914 | 96% | 672 | 694 | 97% | 98% |
| Phelindaba | | | | | | | | | | 1,314 | 1,369 | 96% | 540 | 1,530 | 35% | 66% |
| Phase 4 | | | | | | | | | | | | | 540 | 1,530 | 35% | 35% |
| Phelindaba | | | | | | | | | | 1,314 | 1,369 | 96% | | | | 96% |
| Rocklands | | | | 2,820 | 3,490 | 81% | 726 | 777 | 93% | 3,161 | 4,006 | 79% | 849 | 1,010 | 84% | 84% |
| BLOMANDA | | | | 181 | 195 | 93% | | | | 167 | 180 | 93% | | | | 93% |
| CBD | | | | 135 | 194 | 70% | 726 | 777 | 93% | 604 | 926 | 65% | 849 | 1,010 | 84% | 78% |
| Rocklands | | | | 2,504 | 3,101 | 81% | | | | 2,390 | 2,900 | 82% | | | | 82% |
| Rose Park Hospital | | | | 167 | 417 | 40% | 180 | 708 | 25% | 305 | 1,039 | 29% | 212 | 703 | 30% | 31% |
| CBD | | | | 158 | 350 | 45% | 175 | 678 | 26% | 281 | 912 | 31% | 212 | 703 | 30% | 33% |
| Hypermarket | | | | 4 | 15 | 27% | | | | | | | | | | 27% |
| Hyperrama | | | | 5 | 52 | 10% | 5 | 30 | 17% | 24 | 127 | 19% | | | | 15% |
| SA Truck | 5,740 | 6,106 | 94% | 1,620 | 1,888 | 86% | 1,162 | 1,245 | 93% | 2,982 | 3,195 | 93% | 5,712 | 6,054 | 94% | 92% |
| CBD | | | | 1,620 | 1,888 | 86% | | | | | | | | | | 86% |
| Phase 2 | 5,726 | 6,091 | 94% | | | | 1,162 | 1,245 | 93% | 2,982 | 3,195 | 93% | 5,712 | 6,054 | 94% | 94% |
| Unknown | 14 | 15 | 93% | | | | | | | | | | | | | 93% |
| Shoprite | 720 | 760 | 95% | 508 | 548 | 93% | 338 | 376 | 90% | 1,140 | 1,234 | 92% | 720 | 760 | 95% | 93% |
| BLOMANDA | 198 | 208 | 95% | 142 | 152 | 93% | 78 | 88 | 89% | 270 | 288 | 94% | 208 | 220 | 95% | 93% |
| BOCHABELA | 4 | 4 | 100% | 4 | 4 | 100% | | | | | | | 4 | 4 | 100% | 100% |
| Bophelong | 26 | 28 | 93% | 22 | 24 | 92% | 12 | 12 | 100% | 32 | 32 | 100% | 26 | 28 | 93% | 95% |
| Bothaville | 12 | 12 | 100% | 12 | 12 | 100% | 12 | 12 | 100% | 24 | 24 | 100% | 12 | 12 | 100% | 100% |
| CBD | 2 | 4 | 50% | 2 | 4 | 50% | | | | | | | 8 | 12 | 67% | 56% |
| CHRIS HANI | 4 | 4 | 100% | | | | | | | | | | 4 | 4 | 100% | 100% |
| DINAWENG | 4 | 4 | 100% | 8 | 8 | 100% | 4 | 4 | 100% | 16 | 16 | 100% | 8 | 8 | 100% | 100% |
| Freedom | 8 | 8 | 100% | 4 | 4 | 100% | 2 | 4 | 50% | 10 | 12 | 83% | 4 | 4 | 100% | 87% |
| Ikaelelo I.School | | | | | | | 2 | 4 | 50% | 2 | 4 | 50% | | | | 50% |
| Ipopeng | 4 | 4 | 100% | 4 | 4 | 100% | 14 | 16 | 88% | 68 | 72 | 94% | 12 | 12 | 100% | 96% |
| Mafora | 64 | 68 | 94% | 44 | 48 | 92% | 52 | 56 | 93% | 184 | 203 | 91% | 66 | 68 | 97% | 93% |
| NAMIBIA | 20 | 20 | 100% | 12 | 12 | 100% | | | | 8 | 8 | 100% | 16 | 16 | 100% | 100% |
| PHAHAMENG | 10 | 12 | 83% | 8 | 8 | 100% | 12 | 12 | 100% | 24 | 24 | 100% | 10 | 12 | 83% | 93% |
| Phase 2 | 100 | 100 | 100% | 64 | 64 | 100% | 22 | 24 | 92% | 106 | 108 | 98% | 84 | 84 | 100% | 98% |
| Phase 4 | | | | | | | | | | 4 | 4 | 100% | | | | 100% |
| Phelindaba | 84 | 88 | 95% | 56 | 60 | 93% | 42 | 44 | 95% | 94 | 96 | 98% | 86 | 88 | 98% | 96% |
| Rocklands | 124 | 132 | 94% | 86 | 96 | 90% | 56 | 60 | 93% | 160 | 184 | 87% | 130 | 140 | 93% | 91% |
| SEJAKE | 34 | 40 | 85% | 22 | 28 | 79% | 6 | 8 | 75% | 14 | 16 | 88% | 24 | 28 | 86% | 82% |
| Spar | 4 | 4 | 100% | 4 | 4 | 100% | 4 | 4 | 100% | 4 | 4 | 100% | 4 | 4 | 100% | 100% |
| Unknown | 18 | 20 | 90% | 14 | 16 | 88% | 20 | 28 | 71% | 120 | 139 | 86% | 14 | 16 | 88% | 85% |
| Sowetso | 2,740 | 2,944 | 93% | | | | 3,624 | 3,827 | 95% | 2,449 | 2,637 | 93% | 3,516 | 3,696 | 95% | 94% |
| Bloemfontein - South High School | 28 | 30 | 93% | | | | | | | 28 | 30 | 93% | | | | 93% |
| Fauna | 110 | 120 | 92% | | | | | | | 96 | 105 | 91% | 192 | 202 | 95% | 93% |
| FICHARDTPARK | 767 | 829 | 93% | | | | | | | 659 | 702 | 94% | 237 | 246 | 96% | 94% |
| Hypermarket | 122 | 127 | 96% | | | | 527 | 561 | 94% | 98 | 105 | 93% | 349 | 367 | 95% | 95% |
| Hyperrama | 602 | 650 | 93% | | | | 1,061 | 1,128 | 94% | 529 | 575 | 92% | 1,398 | 1,454 | 96% | 94% |
| LANGENHOVENPARK | | | | | | | 1,283 | 1,356 | 95% | | | | 499 | 531 | 94% | 94% |
| Lourie Park | | | | | | | 146 | 149 | 98% | | | | | | | 98% |
| LOURIERPARK | 415 | 449 | 92% | | | | 175 | 187 | 94% | 361 | 389 | 93% | | | | 93% |
| National Museum | 502 | 537 | 93% | | | | 63 | 67 | 94% | 502 | 537 | 93% | 519 | 552 | 94% | 94% |
| PELLISSIER | 64 | 67 | 96% | | | | 301 | 304 | 99% | 62 | 67 | 93% | 252 | 269 | 94% | 95% |
| Rosepark Hospital | 130 | 135 | 96% | | | | 68 | 75 | 91% | 114 | 127 | 90% | 70 | 75 | 93% | 93% |
| Tempe | 546 | 599 | 91% | 462 | 487 | 95% | 131 | 375 | 35% | 691 | 763 | 91% | 174 | 427 | 41% | 70% |
| CBD | 546 | 599 | 91% | 462 | 487 | 95% | 131 | 375 | 35% | 691 | 763 | 91% | 174 | 427 | 41% | 70% |
| Turfkaagte | 1,131 | 1,305 | 87% | 347 | 375 | 93% | 962 | 1,110 | 87% | 1,079 | 1,245 | 87% | 1,157 | 1,335 | 87% | 88% |
| Khayalisha | | | | 13 | 15 | 87% | | | | | | | | | | 87% |
| Phase 4 | 325 | 375 | 87% | | | | 156 | 180 | 87% | 325 | 375 | 87% | 325 | 375 | 87% | 87% |
| Turflagte Cross | 806 | 930 | 87% | | | | 806 | 930 | 87% | 754 | 870 | 87% | 832 | 960 | 87% | 87% |

| Destination and Origin | GBTA Survey Dates | | | | | | | | | | | | | | | Average % Seating Capacity Utilisation |
|------------------------|-------------------------|--------------------|--------------------------------------|-----------------------------------|------------------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|-------------------------|--------------------|--------------------------------------|---|
| | 28/04/2016 | | | 29/04/2016 | | | 30/04/2016 | | | 01/05/2016 | | | 03/05/2016 | | | |
| | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Sum of Number of Passengers | Sum of Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | Number of Passengers | Number of Seats | Available Seating Utilised (%) | |
| Unknown | | | | 334 | 360 | 93% | | | | | | | | | | 93% |
| Twin City Mall | 464 | 736 | 63% | 1,045 | 1,230 | 85% | 255 | 725 | 35% | 370 | 711 | 52% | | | | 59% |
| BLOEMSIDE | | | | 507 | 600 | 85% | | | | | | | | | | 85% |
| CBD | 464 | 736 | 63% | | | | | | | 370 | 711 | 52% | | | | 58% |
| GRASSLANDS | | | | 538 | 630 | 85% | | | | | | | | | | 85% |
| Taxi Rank | | | | | | | 255 | 725 | 35% | | | | | | | 35% |
| UFS | 595 | 2,359 | 25% | 462 | 494 | 94% | 583 | 2,359 | 25% | 583 | 2,359 | 25% | 583 | 2,359 | 25% | 39% |
| CBD | | | | 462 | 494 | 94% | | | | | | | | | | 94% |
| Unknown | 595 | 2,359 | 25% | | | | 583 | 2,359 | 25% | 583 | 2,359 | 25% | 583 | 2,359 | 25% | 25% |
| Universitas Hospital | | | | 200 | 345 | 58% | | | | | | | | | | 58% |
| Unknown | | | | 200 | 345 | 58% | | | | | | | | | | 58% |
| Vista Park | 2,212 | 3,337 | 66% | 1,218 | 1,305 | 93% | 1,966 | 2,572 | 76% | 840 | 900 | 93% | 1,955 | 2,312 | 85% | 83% |
| CBD | 2,212 | 3,337 | 66% | 1,218 | 1,305 | 93% | 1,966 | 2,572 | 76% | 840 | 900 | 93% | 1,955 | 2,312 | 85% | 83% |
| | | | | | | | | | | | | | | | | |

5.3.5 Minibus-taxi Passenger Waiting Times and Level of Service

A 12-hour, seven-day taxi facility survey was conducted at various taxi ranks throughout the Mangaung area. The purpose of this survey was to measure the average waiting times for potential passengers to board a taxi and leave the rank. This waiting time was gathered in the isles which represented different destinations. The outcome of this survey provided some clarity on passenger and vehicle waiting times in order to try and achieve reduced waiting times and by doing so, to improve the level of service offered to commuters. Figure 5-33 to Figure 5-45 only provides a high-level summary of the average total waiting times gathered at the Botshabelo Blue

Included in the average total waiting times is the waiting time to be able to board a taxi and secondly, the average in vehicle waiting time prior to the vehicle exiting the rank. It is also important to note that the in-vehicle waiting times are the longest from 06h00 onwards over the weekends. This was specifically applicable on Friday's and Saturday's, when surveys were conducted. The longest average in vehicle waiting time recorded (waiting for vehicle to be fully loaded) was 55 minutes which was subsequently recorded on a Friday morning at the Industrial rank in Botshabelo. These longer than normal in facility waiting times, further exacerbate the long travel times which commuters experience when making use of taxis on a daily basis.

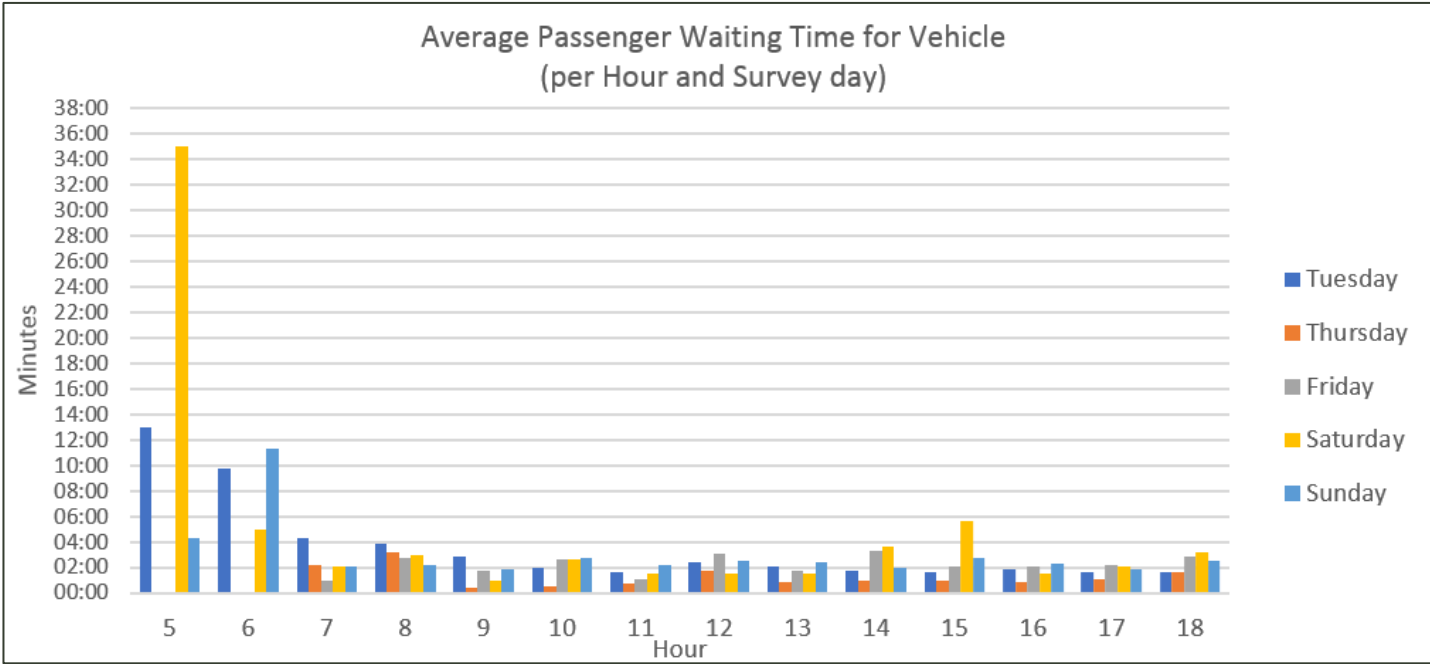


Figure 5-33: Average Passenger Waiting Time for a Vehicle at the Botshabelo Blue Rank

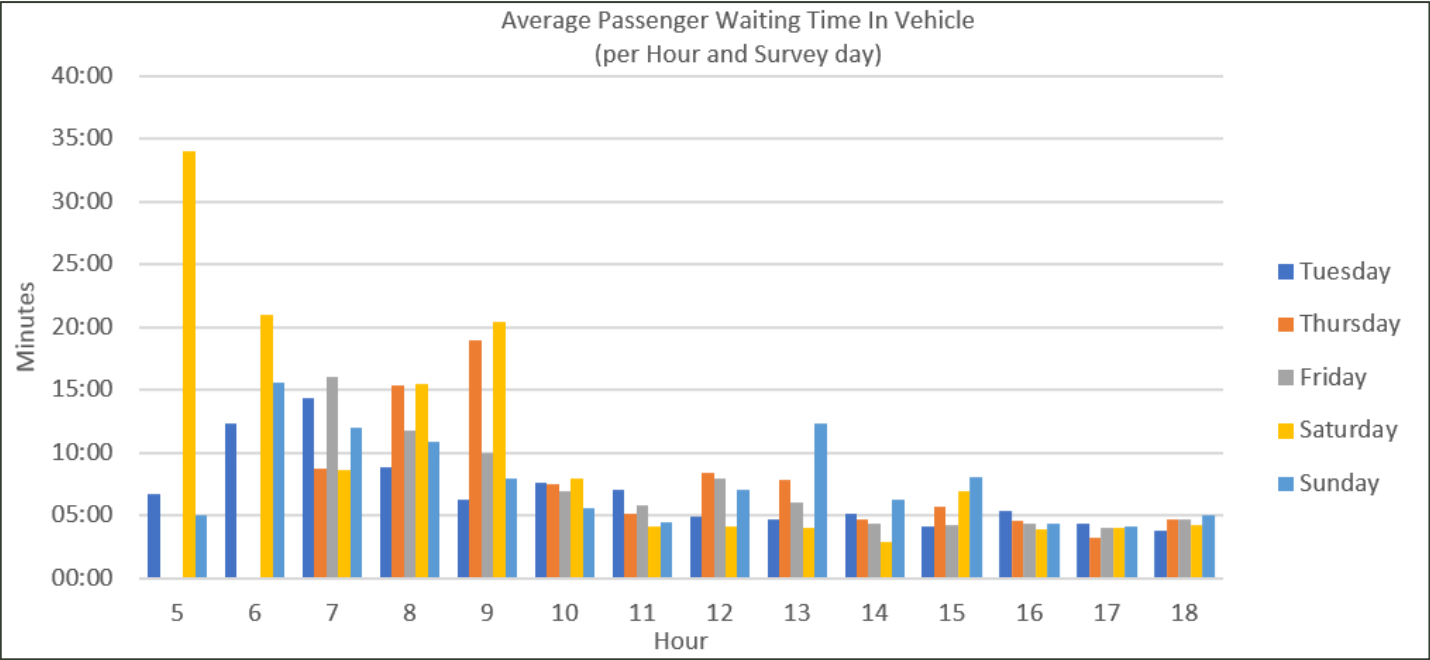


Figure 5-34: Average Passenger In-Vehicle Waiting Time at the Botshabelo Blue Rank

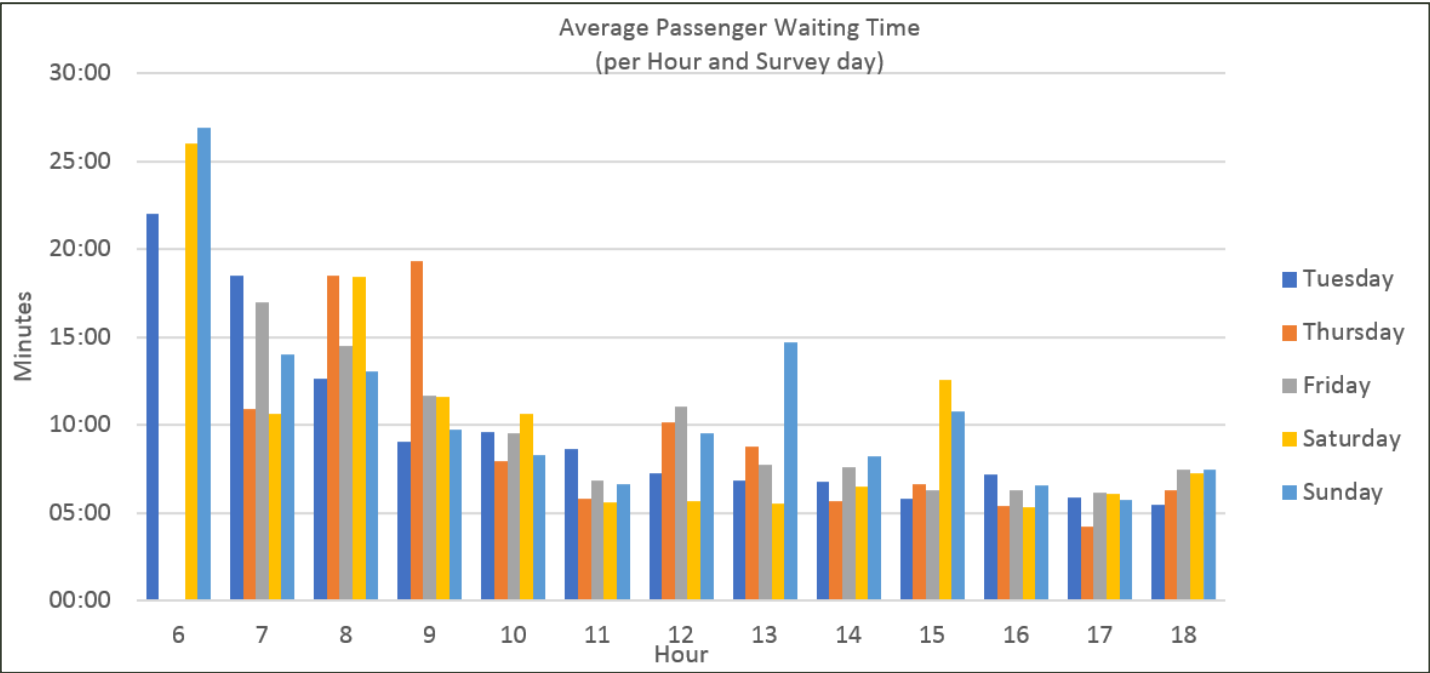


Figure 5-35: Average Passenger Waiting Time at the Botshabelo Blue Rank

Figure 5-33 and Figure 5-34 above indicate that at 05h00 on a Saturday and Sunday morning the average passenger waiting time at the Botshabelo Blue rank is approximately 34 minutes. This waiting time is very long and the reason for it being so long should be investigated and solutions should be found to reduce the time which passengers have to wait for a vehicle as well as the in-vehicle waiting time to the minimum. Figure 5-36 to Figure 5-38 provides a summary of the average waiting times gathered at the Industrial Rank in Botshabelo.

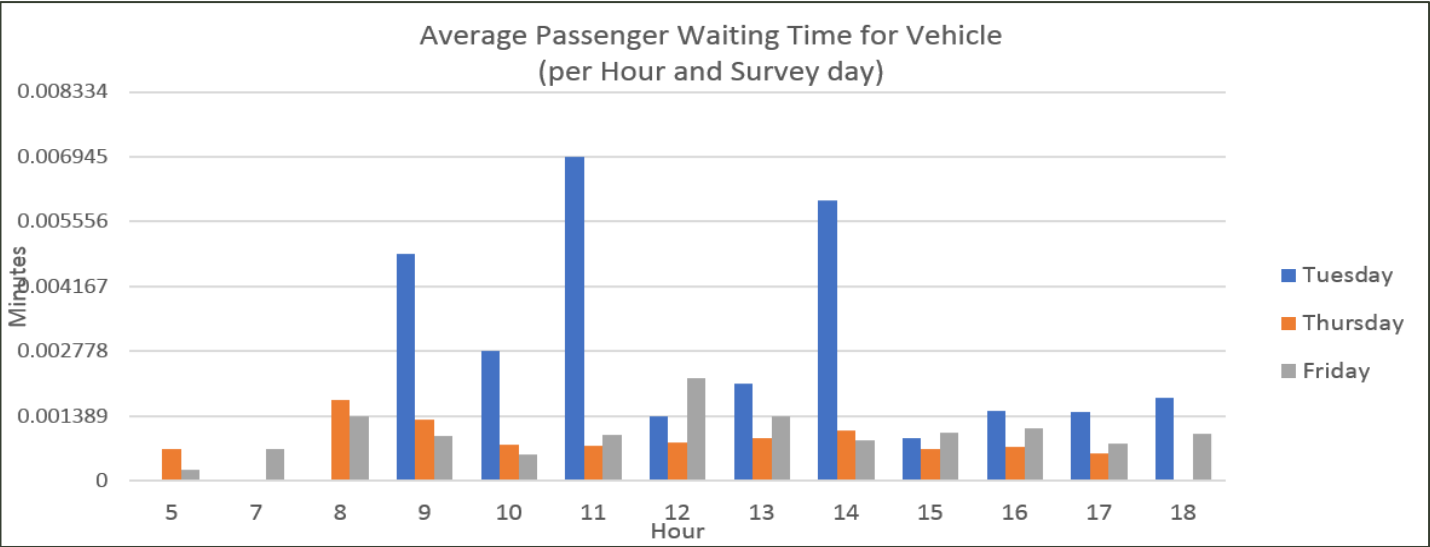


Figure 5-36: Average Passenger Waiting Time for a Vehicle at the Industrial Rank

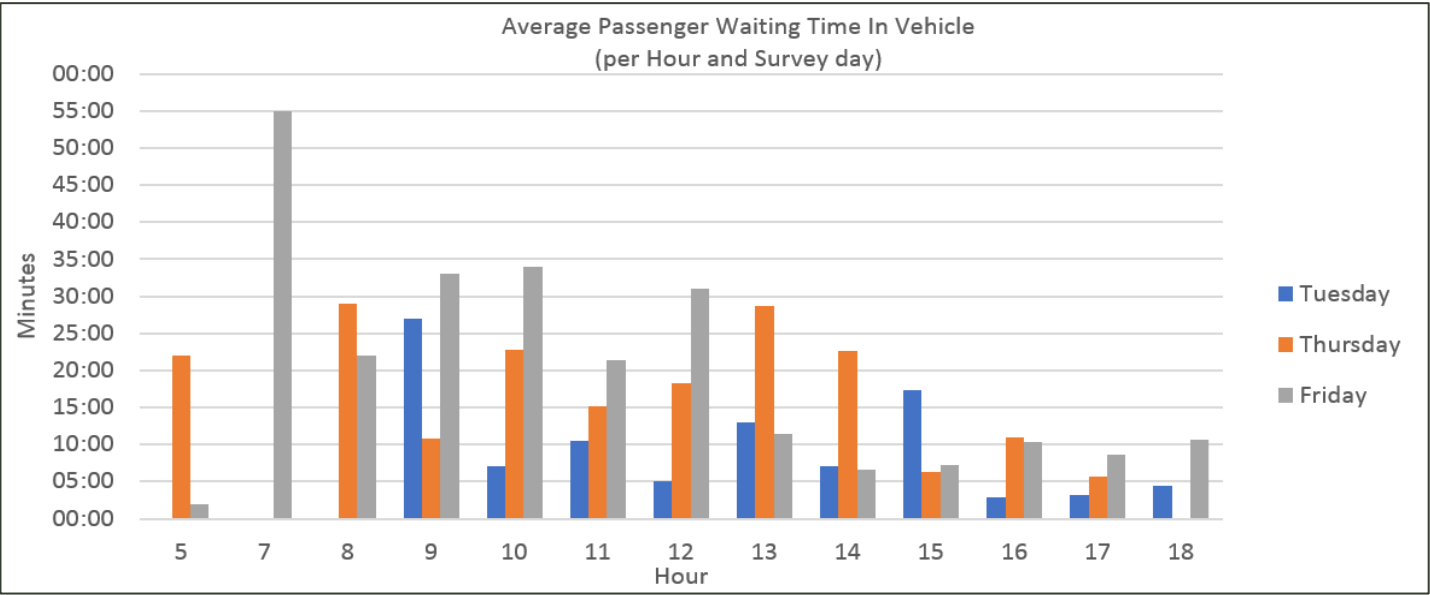


Figure 5-37: Average Passenger In-Vehicle Waiting Time at the Industrial Rank

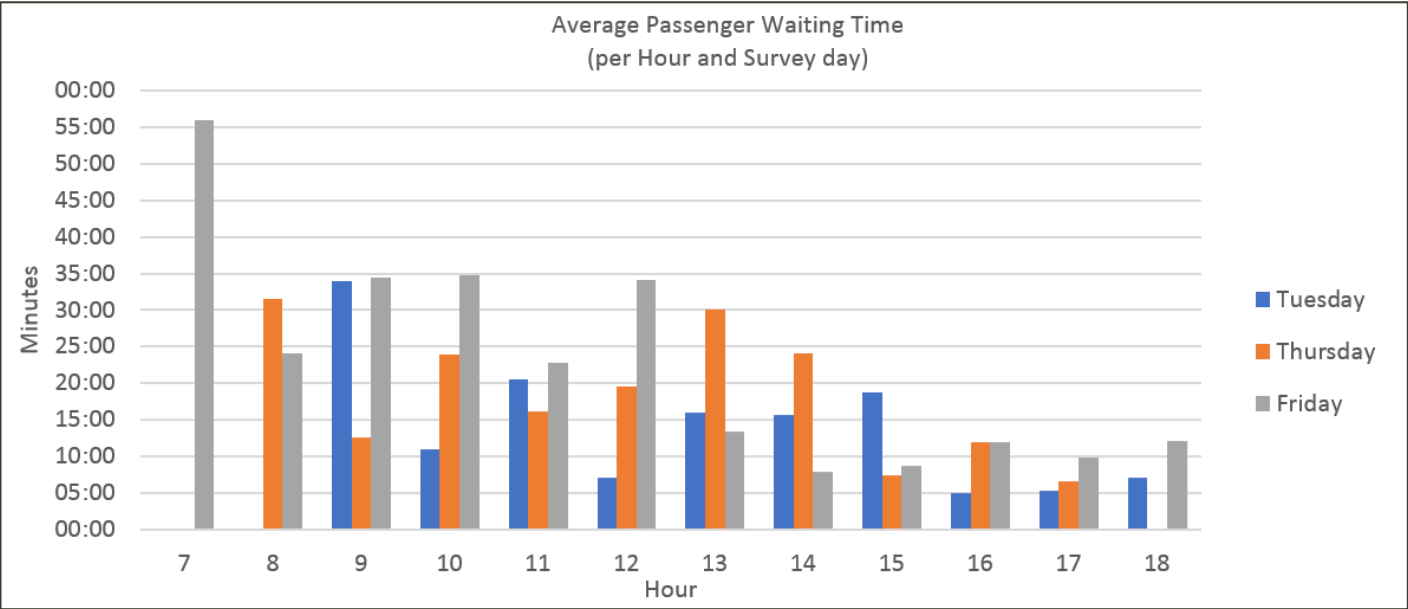


Figure 5-38: Average Passenger Waiting Time at the Industrial Rank

Figure 5-37 and Figure 5-38 above indicate that at 07h00 on a Friday morning the average passenger waiting time at the Industrial rank is approximately 56 minutes. This waiting time is very long and the reason for it being so long should be investigated and solutions found to reduce the time which passengers have to wait for a taxi as well as the in-vehicle waiting time, to the minimum. Figure 5-39 to Figure 5-41 provide a graphical representation of the average passenger waiting times at the Thaba Nchu 4+1_SB rank.

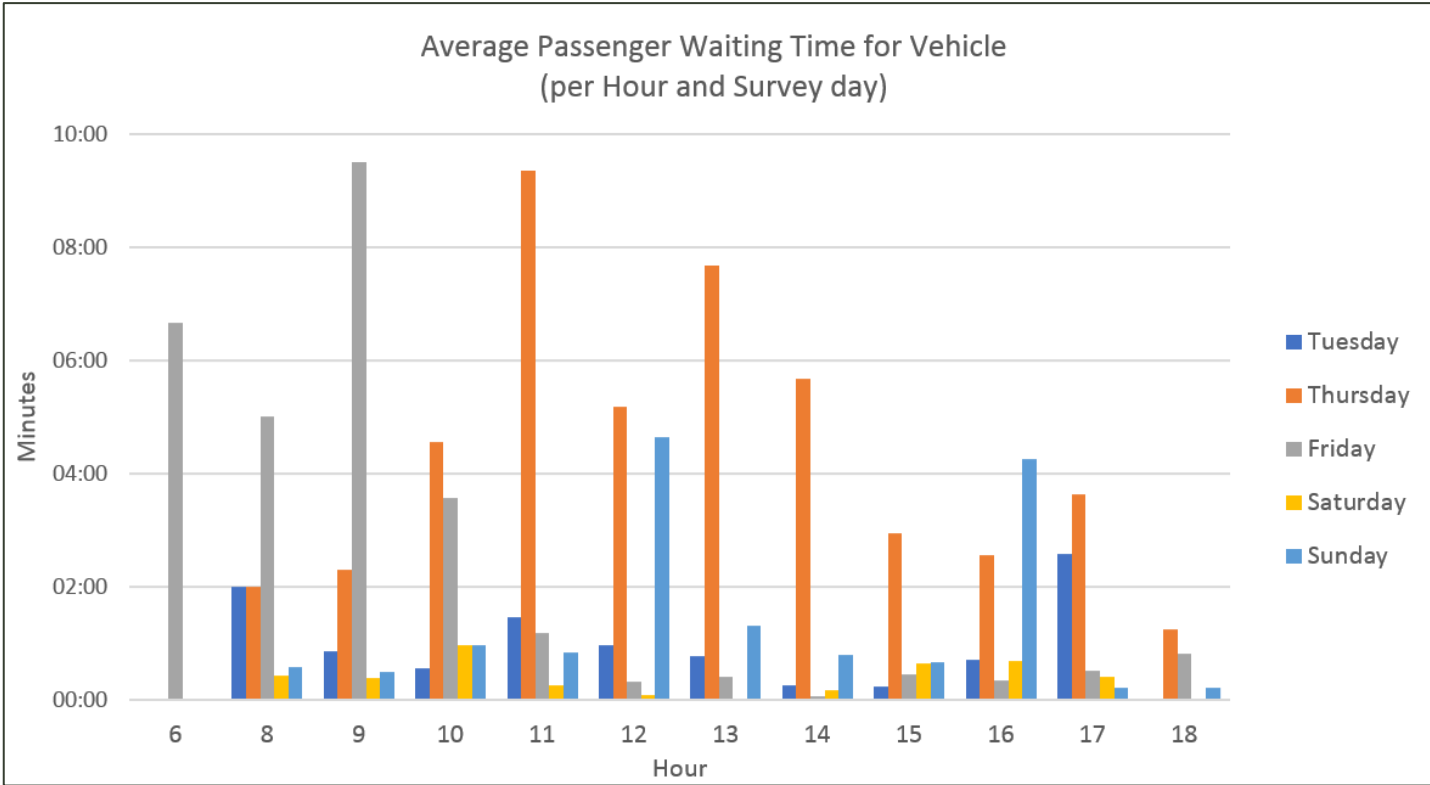


Figure 5-39: Average Passenger Waiting Time for a Vehicle at the Thaba Nchu 4+1_SB Rank

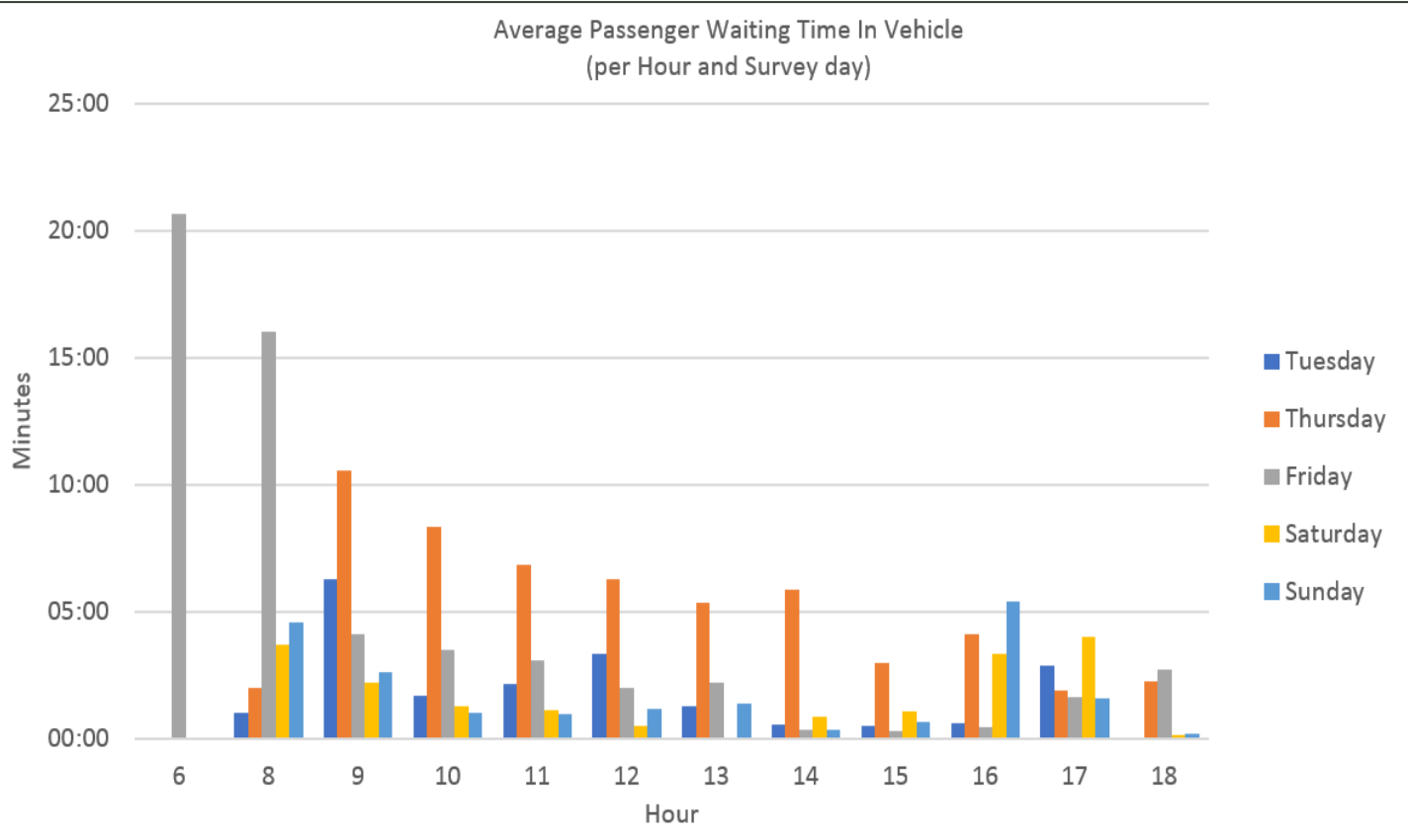


Figure 5-40: Average Passenger In-Vehicle Waiting Time at the Thaba Nchu 4+1_SB Rank

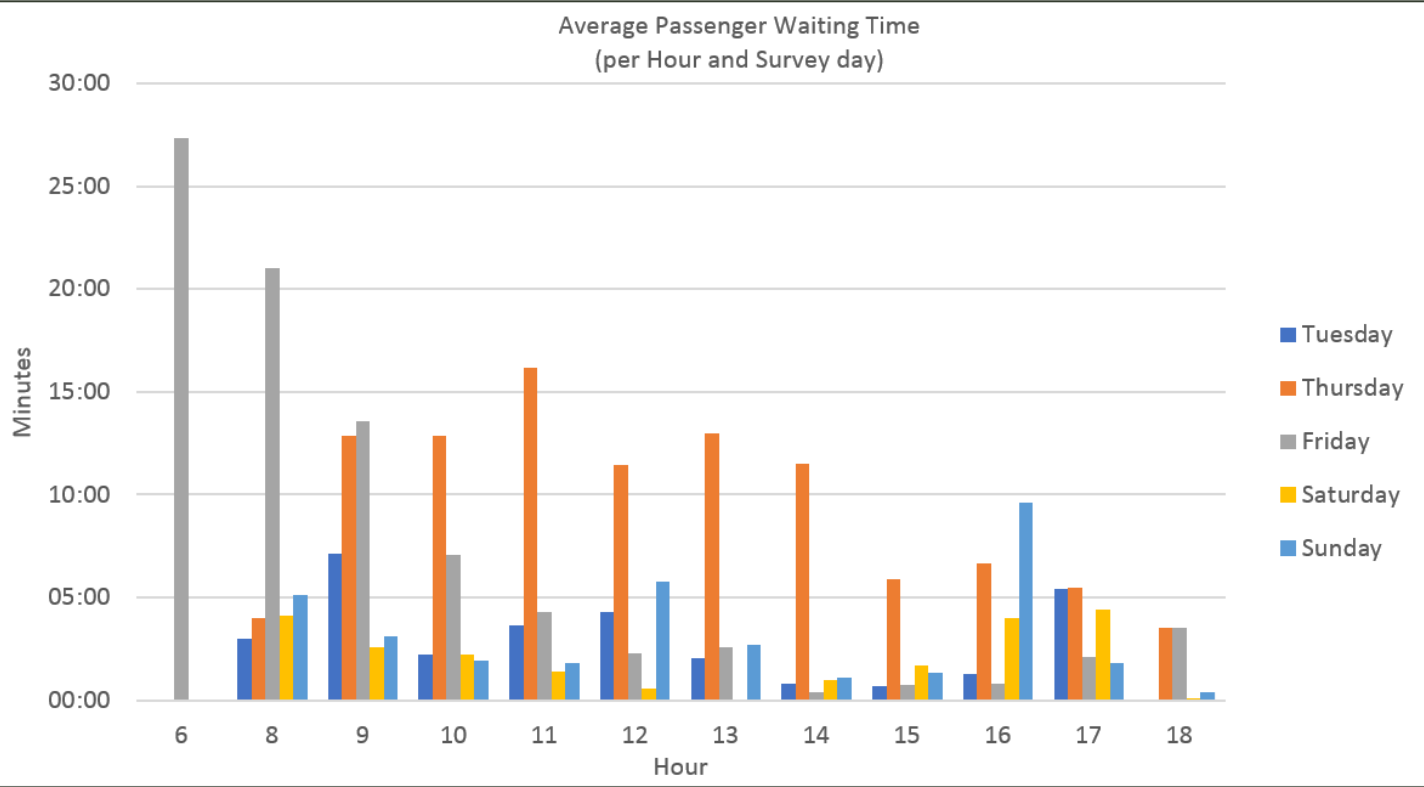


Figure 5-41: Average Passenger Waiting Time at the Thaba Nchu 4+1_SB Rank

Figure 5-39 to Figure 5-41 above indicate that the average passenger waiting time on a Friday morning at 06h00 at the Thaba Nchu 4+1_SB rank is approximately 27 minutes. The average passenger waiting time fortunately decreases later in the day to between 5 and 10 minutes. The early morning waiting times are very long and the reason for it being so long should be investigated and solutions

found to reduce the waiting times similar to that of the afternoon. Figure 5-39 to Figure 5-41 provide a graphical representation of the average passenger waiting times at the Thaba Nchu 4+1_SB rank.

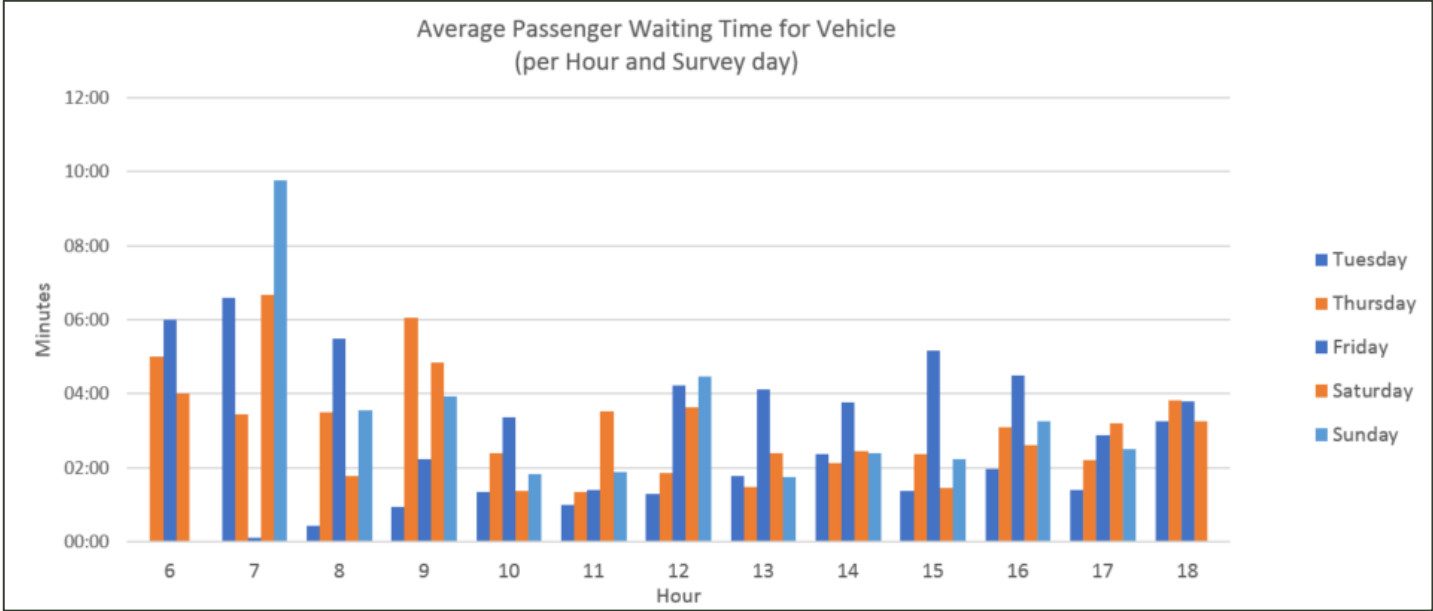


Figure 5-42: Average Passenger Waiting Time for a Vehicle at the Thaba Nchu 4+1_JB Rank

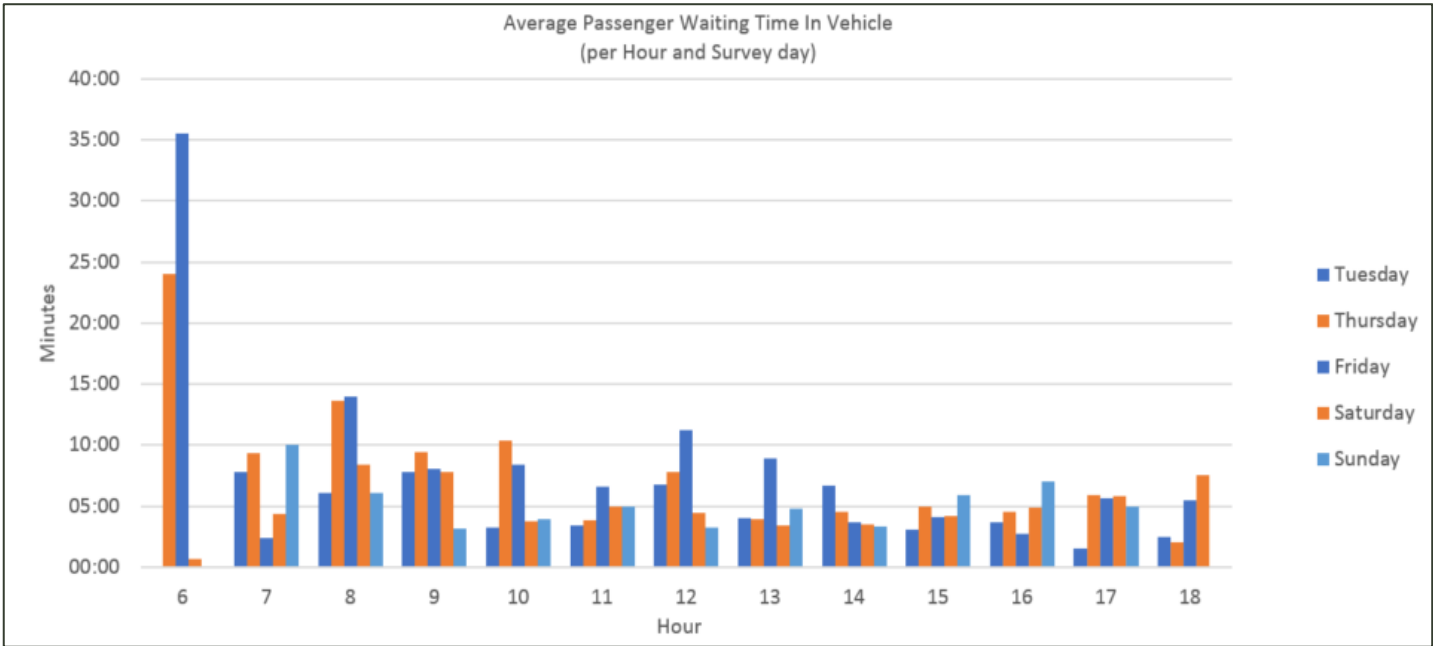


Figure 5-43: Average Passenger In-Vehicle Waiting Time at the Thaba Nchu 4+1_JB Rank

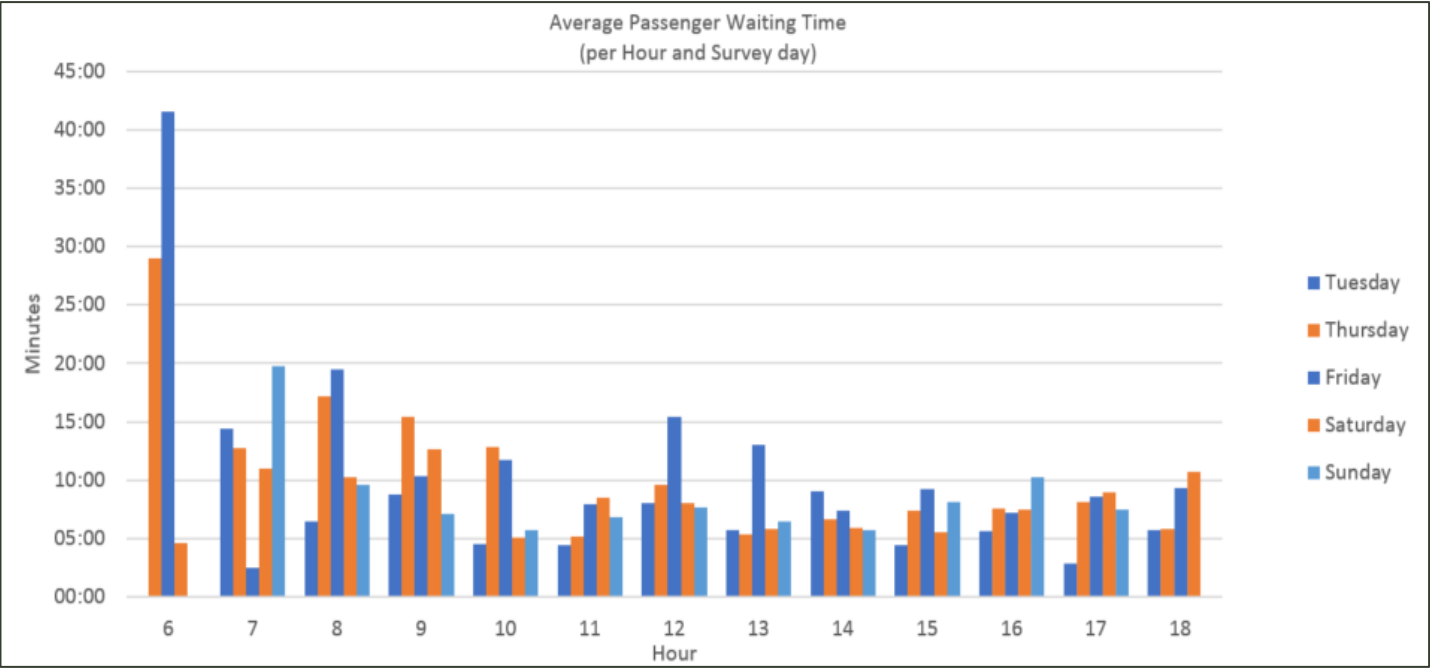


Figure 5-44: Average Passenger Waiting Time at the Thaba Nchu 4+1_JB Rank

Figure 5-45, Figure 5-46 and Figure 5-47 present the average passenger waiting times for the BSQ rank. It is high (22 minutes) on Friday mornings around 09h00.

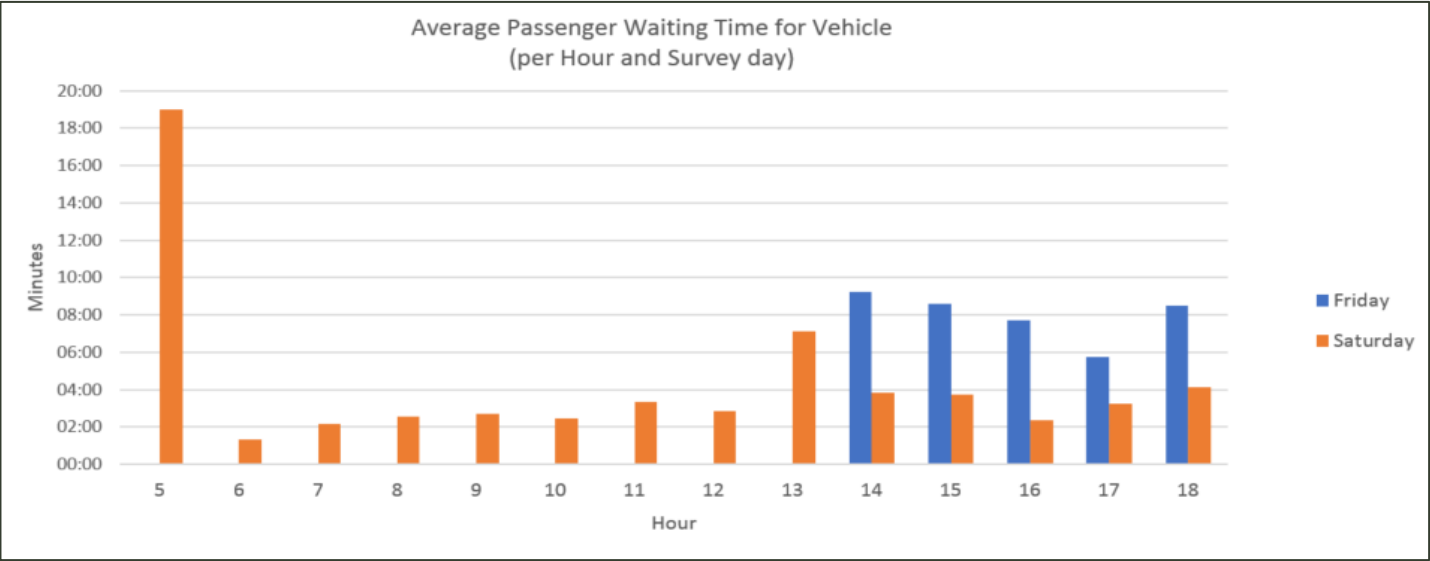


Figure 5-45: Average Passenger Waiting Time for a Vehicle at the BSQ Rank

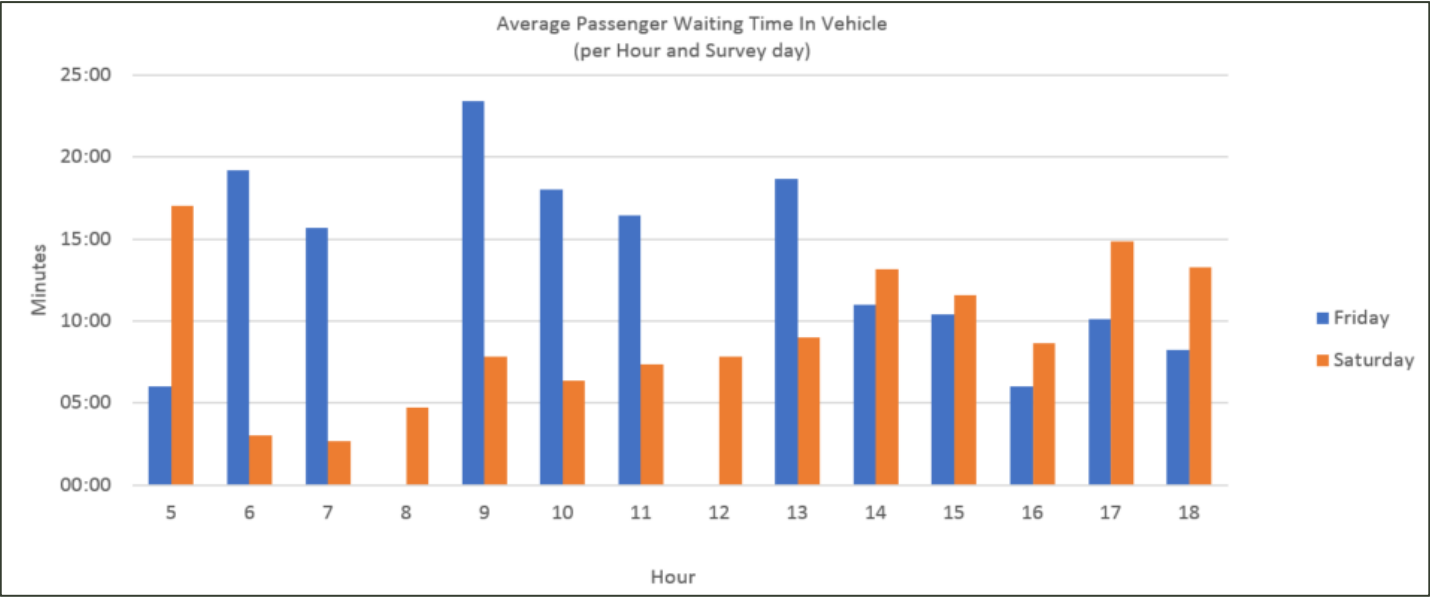


Figure 5-46: Average Passenger In-Vehicle Waiting Time at the BSQ Rank

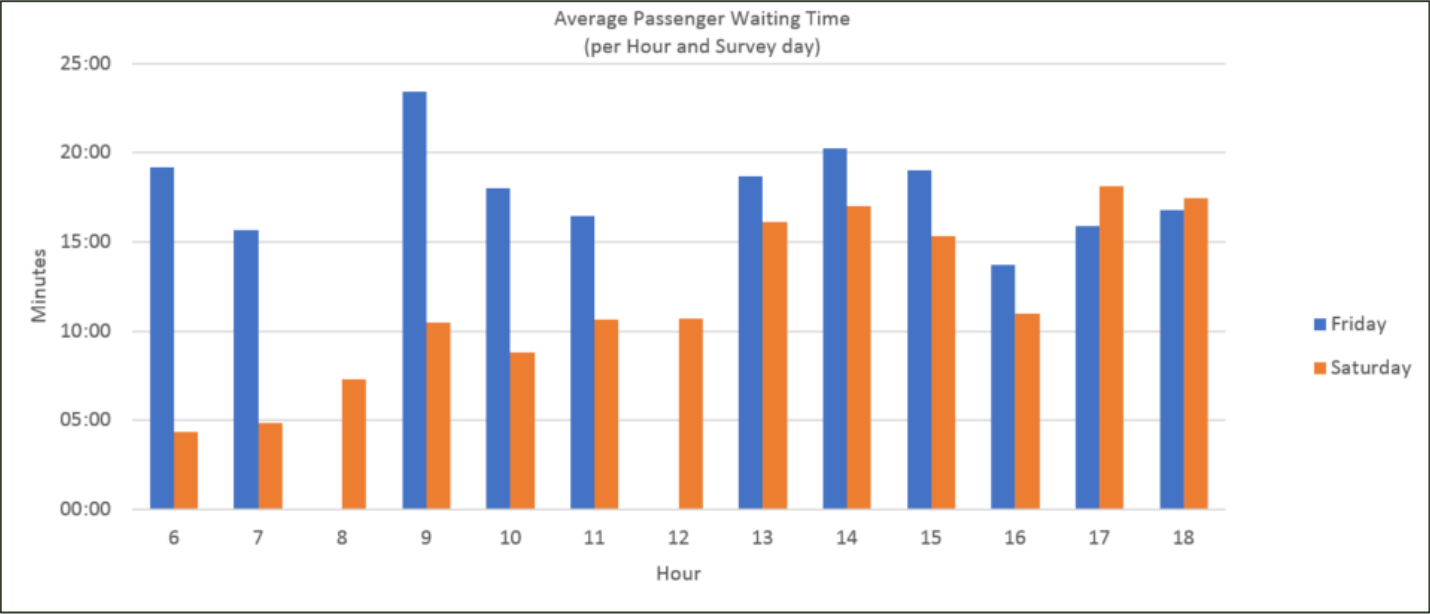


Figure 5-47: Average Passenger Waiting Time at the BSQ Rank

Figure 5-48 and Figure 5-49 represents the average passenger waiting times for the Mafora Central rank with acceptable waiting times in the order of 12 minutes.

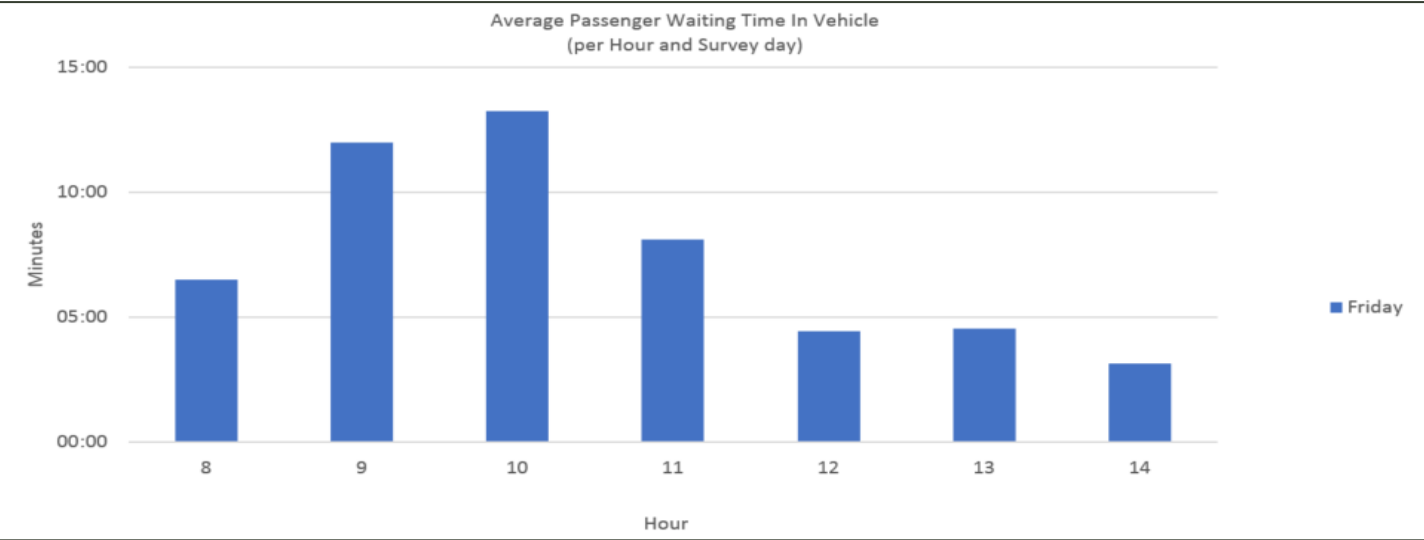


Figure 5-48: Average Passenger In-Vehicle Waiting Time at the Mafora Central Rank

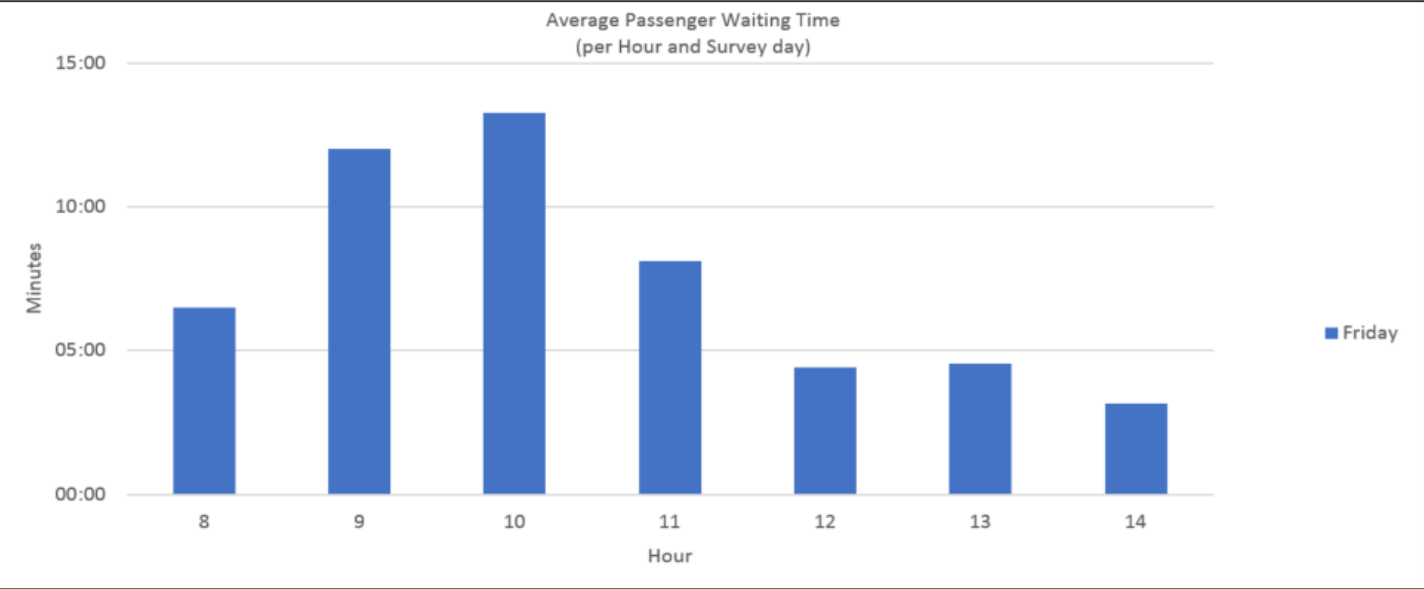


Figure 5-49: Average Passenger Waiting Time at the Mafora Central Rank

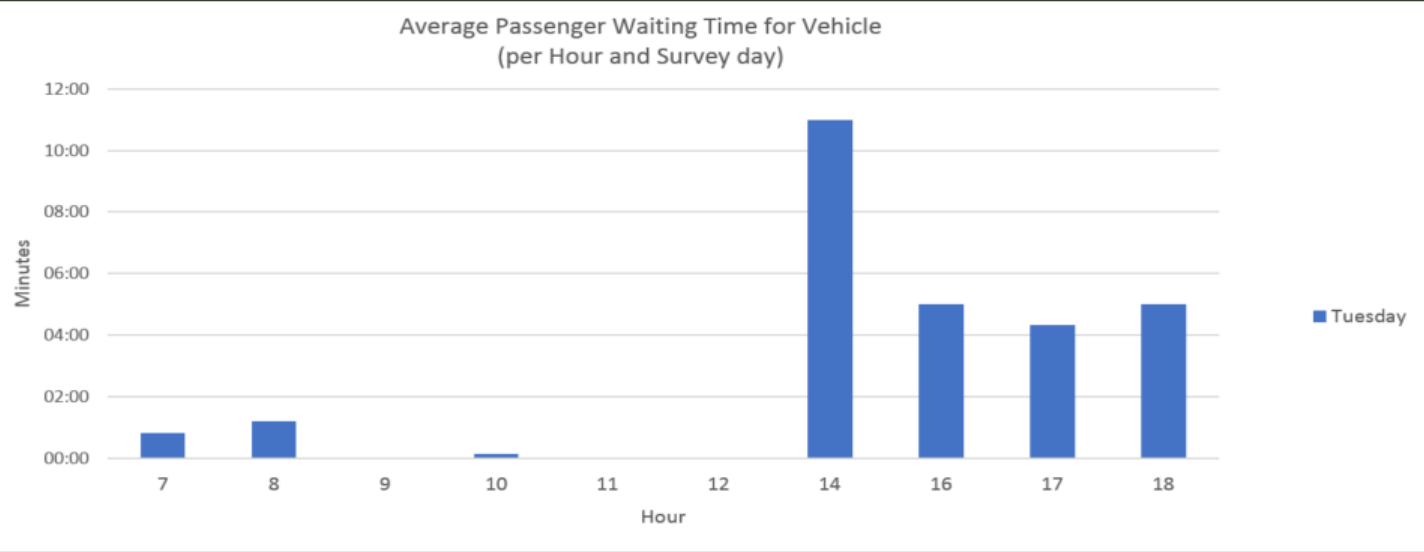


Figure 5-50: Average Passenger Waiting Time for a Vehicle at the Phahameng 4+1 Rank

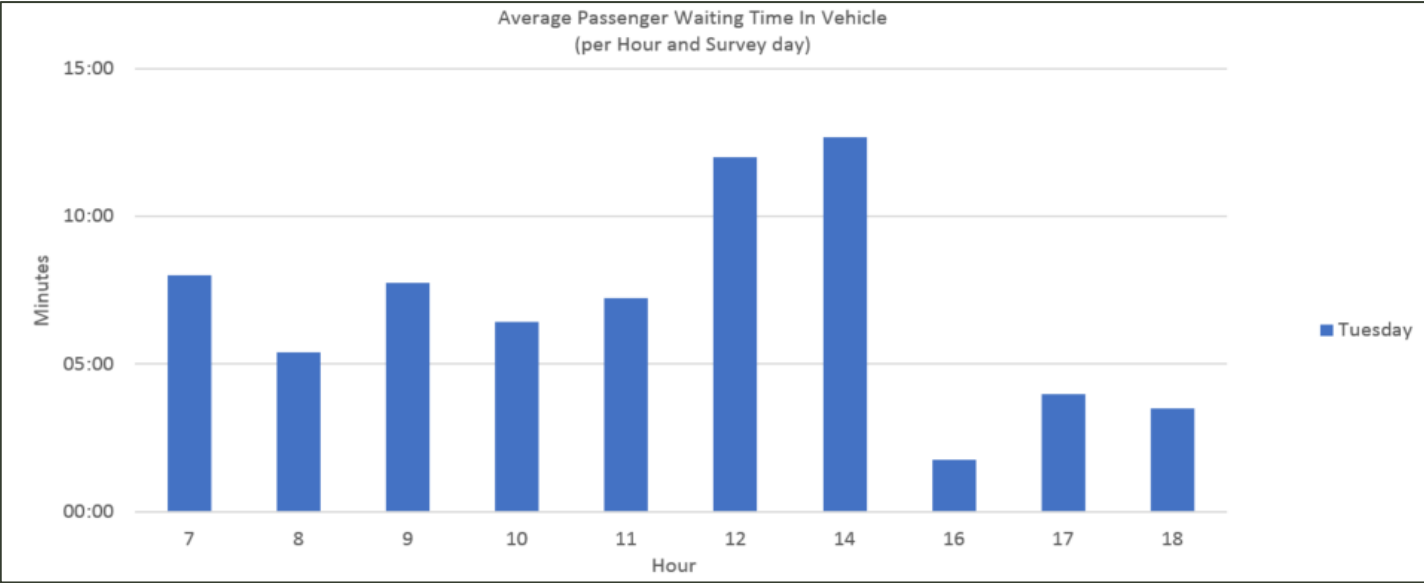


Figure 5-51: Average Passenger In-Vehicle Waiting Time at the Phahameng 4+1 Rank

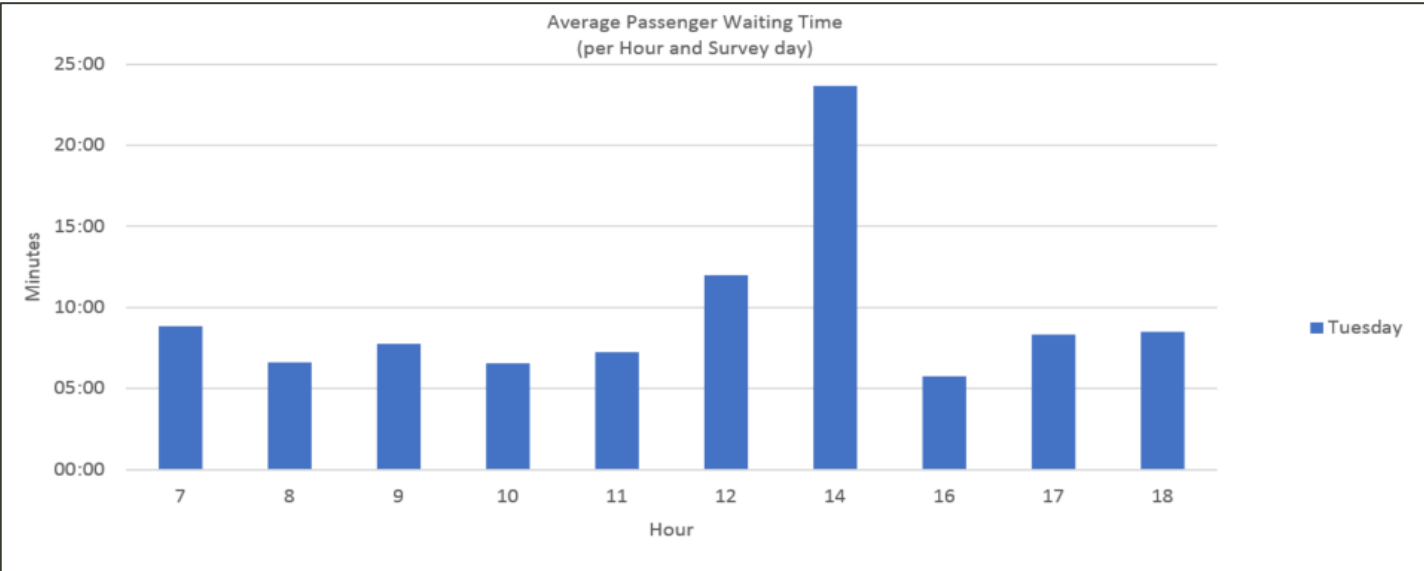


Figure 5-52: Average Passenger Waiting Time at the Phahameng 4+1 Rank

Figure 5-50 to Figure 5-52 presents the average passenger waiting times for the Phahameng 4+1 Rank with high waiting times around 14:00 on Tuesday, for the remainder of the day acceptable total waiting time was recorded.

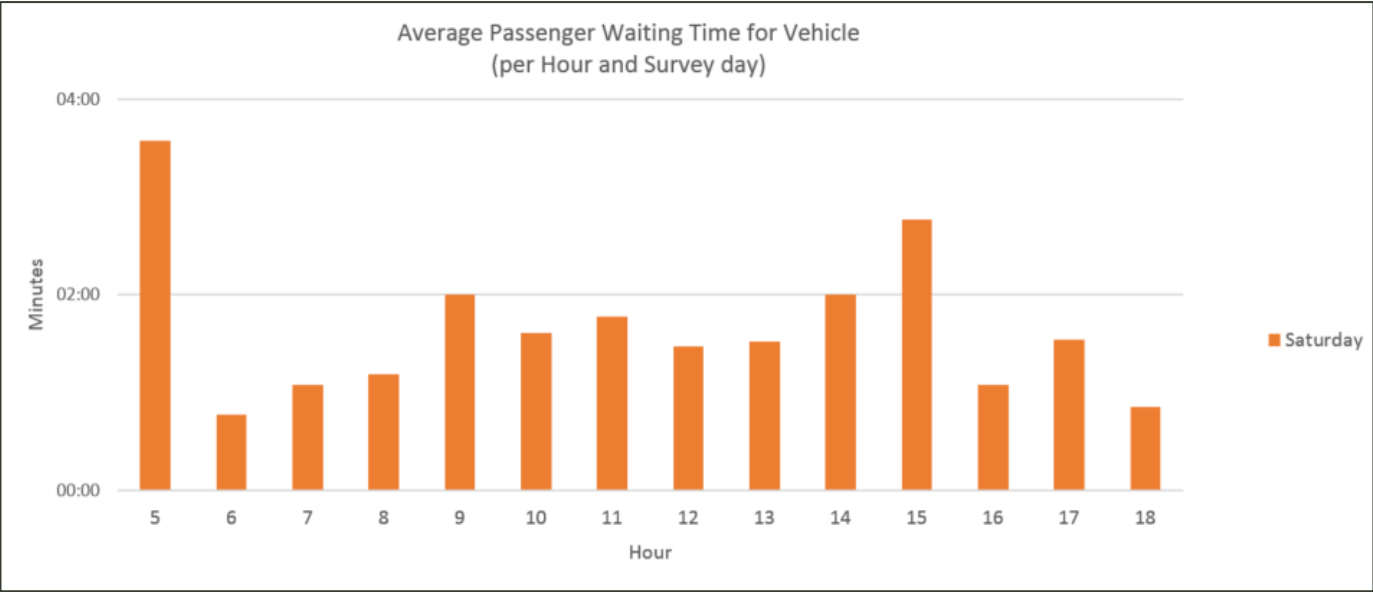


Figure 5-53: Average Passenger Waiting Time for a Vehicle at the Sowesto Rank

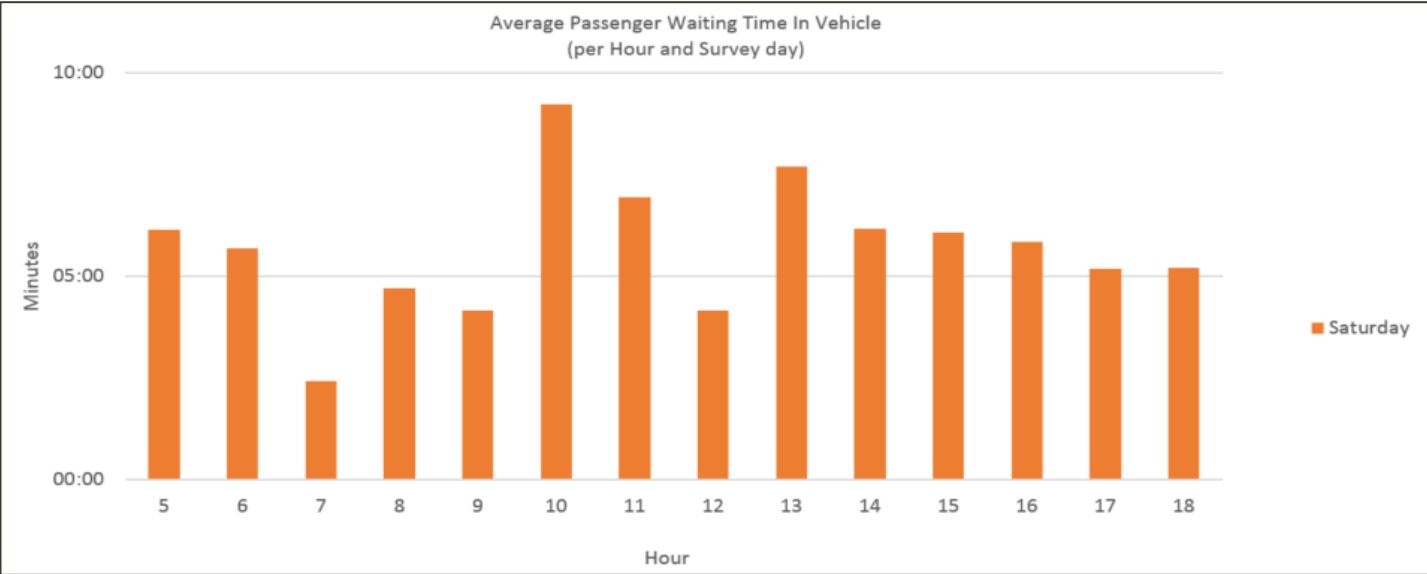


Figure 5-54: Average Passenger In-Vehicle Waiting Time at the Sowesto Rank

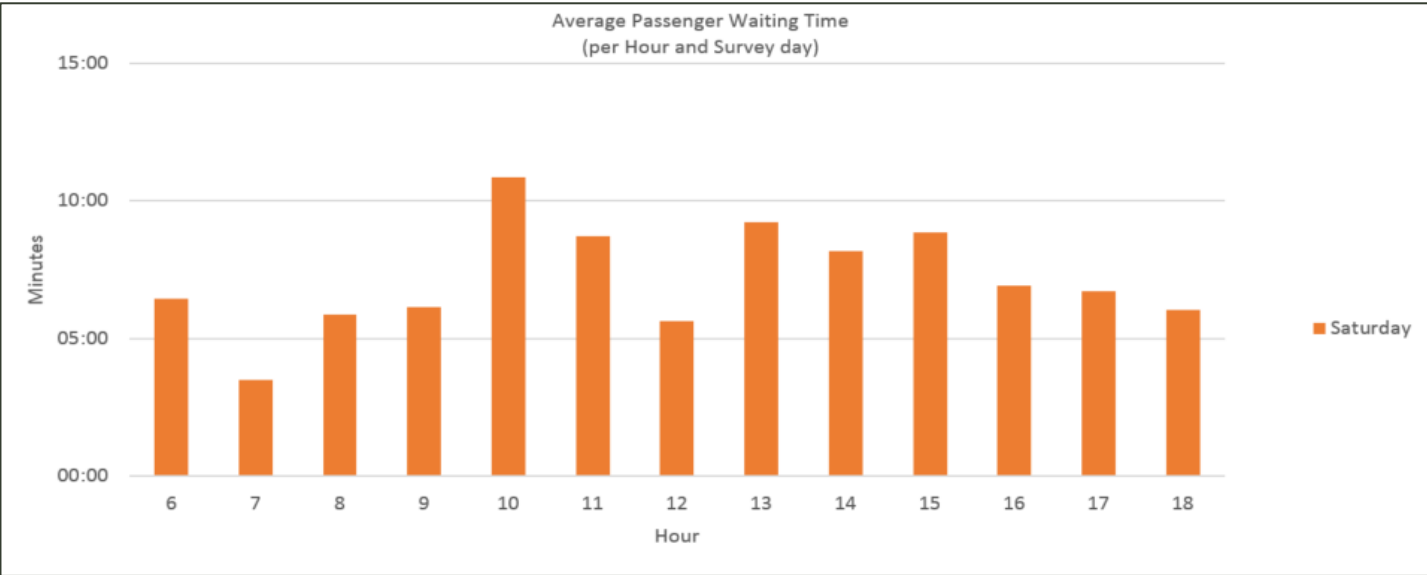


Figure 5-55: Average Passenger Waiting Time at the Sowesto Rank

Figure 5-53 to Figure 5-55 presents the average waiting times for passenger for a Saturday for the Soweto Rank with acceptable waiting times.

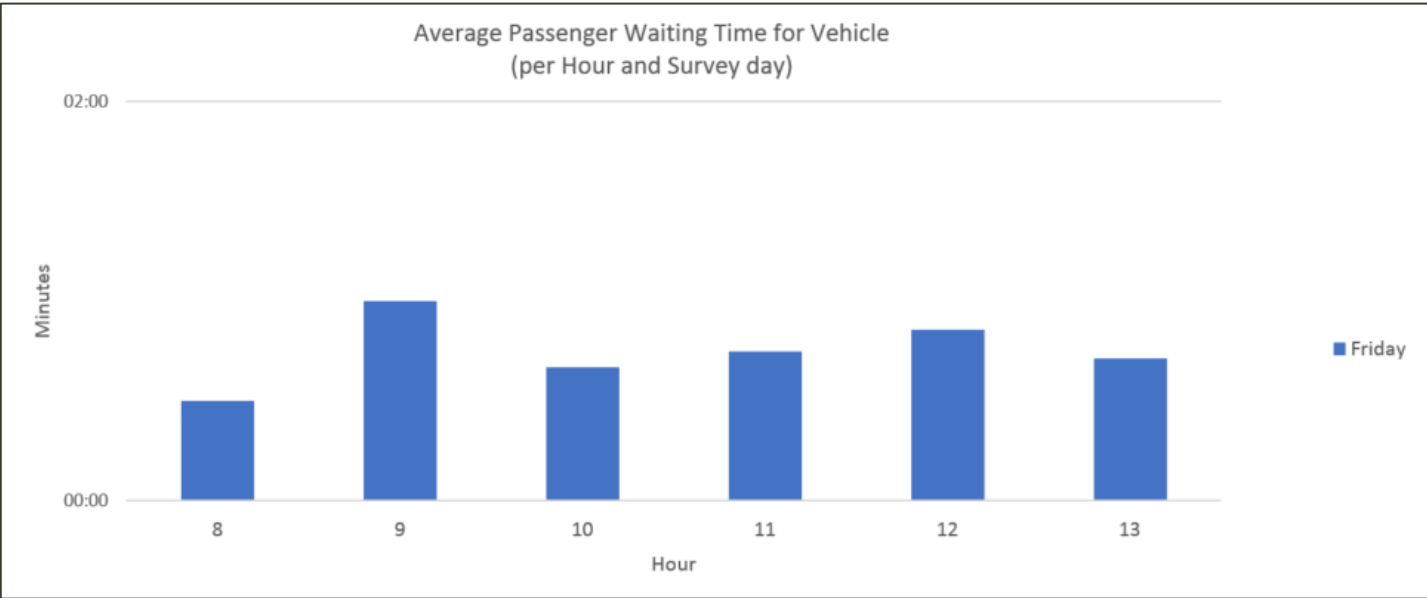


Figure 5-56: Average Passenger Waiting Time for a Vehicle at the Twin City Rank

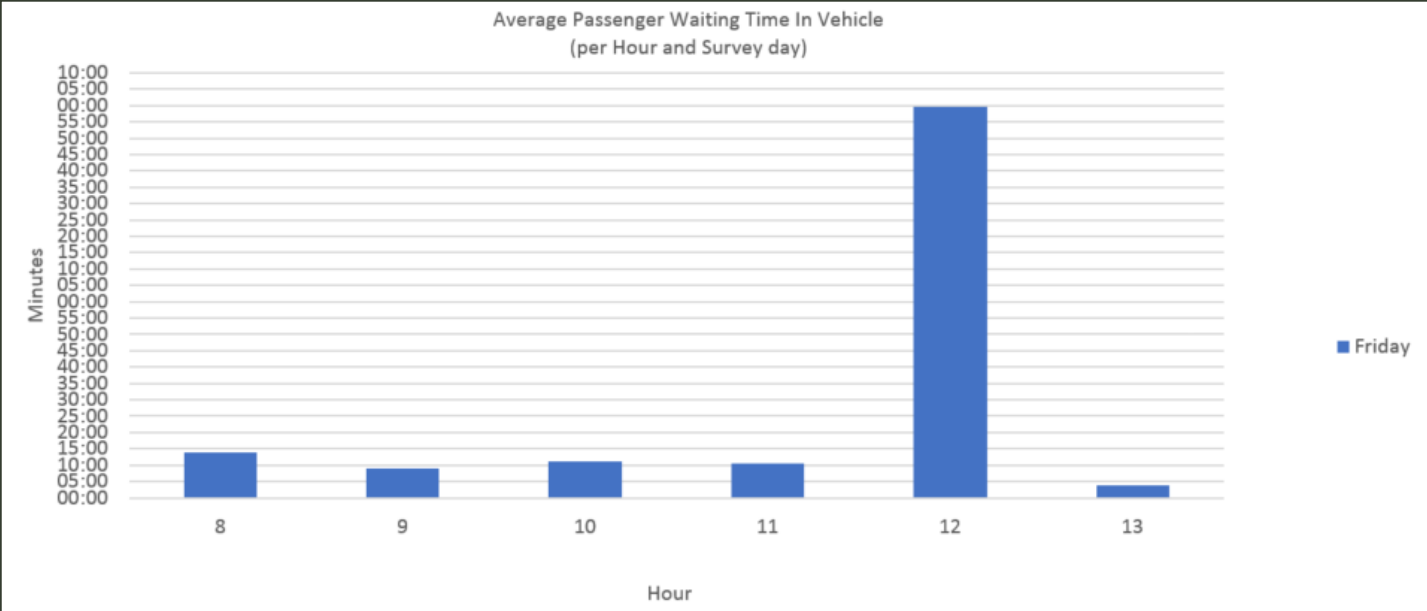


Figure 5-57: Average Passenger In-Vehicle Waiting Time at the Twin City Rank

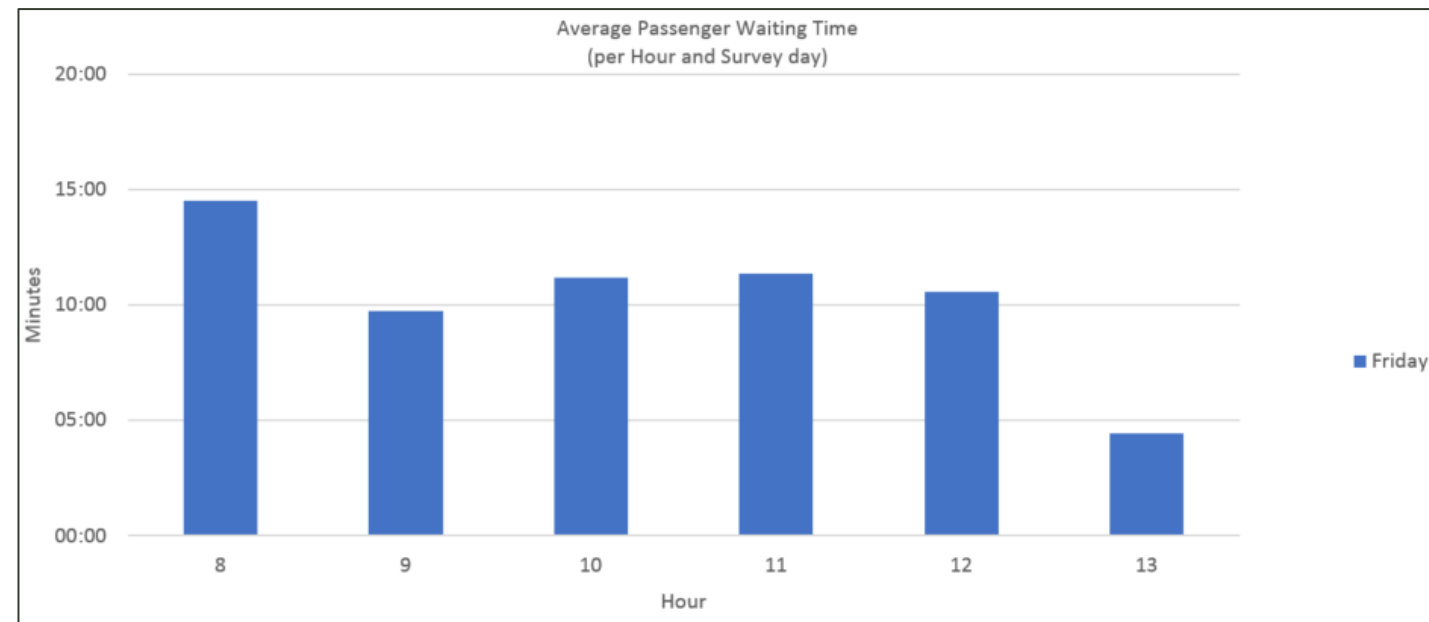


Figure 5-58: Average Passenger Waiting Time at the Twin City Rank

Figure 5-56 to Figure 5-58 presents the average waiting times for passenger for a Friday for the Twin City Rank with acceptable waiting times.

5.3.6 Conclusion

From the above figures it is clear that specific facilities recorded long average passenger waiting times during Friday and Saturday mornings. These ranks and the average passenger waiting times are as follows:

- Botshabelo Blue rank – 34 minutes,
- Industrial rank – 55 minutes (,
- Thaba Nchu 4+1_SB rank – 27 minutes,
- Thaba Nchu 4+1_JB rank – 42 minutes, and
- BSQ rank – 23 minutes.

The reasons for the abovementioned longer than average passenger waiting times should be investigated and rectified in order to reduce the total passenger travel times. It might even be possible that passengers in some instances have to wait longer to board a taxi or be in the vehicle than their journey time to their final destination.

5.3.7 Minibus-Taxi User Cost

The taxi user cost was also gathered during the on-board survey process (9 cycles) in order to determine the current base cost for commuters to travel from one destination to another. The ticket costs per route was determined from the taxi industry whereby it will form the base case for the development of the IP|TN compensation model. The price per trip paid by commuters are currently used to cover the direct operational costs (profit included) incurred by the taxi industry. The taxi industry in Mangaung do not receive any form of operational subsidy from Government at present. It should however also be noted that the taxi user costs for Mangaung is a based on a flat fare for specific routes or destinations. The fare is not distance based and as such some cross subsidisation might take place by shorter distance commuters to those commuters that travel the longer distances.

The trip costs paid by commuters recorded during September 2017 are presented in Table 5-12.

Table 5-12: Minibus Taxi user Costs

| From (Origin) | To (Destination) | % Daily Kilometres Travelled | Cost per Single Trip | | % Daily Passengers (Market Share) | % Contribution to Total Fare Income |
|--|------------------|------------------------------|----------------------|--|-----------------------------------|-------------------------------------|
| Bloemfontein CBD (Intermodal Facility) | Mafora Central | 7.4% | R10.00 | | 5.66% | |
| | Mafora East | 8.7% | R10.00 | | 6.17% | |
| | Mafora West | 9.5% | R10.00 | | 8.40% | |
| | Ipopeng | 8.0% | R10.00 | | 5.87% | |
| | Brandwag | 4.7% | R10.00 | | 9.27% | |
| | Universitas | 8.4% | R12.00 | | 8.57% | |
| | Langenhoven Park | 8.6% | R12.00 | | 7.74% | |
| | Turflaagte | 13.7% | R10.00 | | 12.06% | |
| | Freedom Square | 7.2% | R10.00 | | 7.44% | |
| | Heidedal | 9.4% | R10.00 | | 9.55% | |
| | Namibia | 6.2% | R10.00 | | 6.68% | |
| | Hyperama | 8.3% | R10.00 | | 12.58% | |

It should however be noted that no monthly ticket discount for frequent users are reflected in the user costs mentioned in the table above.

5.3.8 Minibus-Taxi Stops

The electronic on-board taxi survey captured all stop locations made by the taxis belonging to the GBTA. The results of the survey show the following number of Taxi stops for the GBTA Association, namely:

- GBTA (Network 1) – 12 stops,
- GBTA (Network 2) – 18 stops, and
- GBTA (Network 3) – 17 stops.

The locations of these stops are listed in Table 5-13.

Table 5-13: Taxi Stops on GBTA Routes

| Network | Stations/Stops | X - Coord | Y - Coord |
|------------------|------------------------------------|-----------|-----------|
| GBTA - Network 1 | Batho Police Station Pick Up Point | -29.1345 | 26.2267 |
| | Bloemside 1 | -29.1514 | 26.2612 |
| | Devis St | -29.1344 | 26.2398 |
| | Engen | -29.1322 | 26.2378 |
| | Grassland Super Market | -29.1185 | 26.2253 |
| | Heidedal Police Station | -29.1184 | 26.2252 |
| | Hostel 1 | -29.1339 | 26.2386 |
| | Maitland | -29.1182 | 26.225 |
| | Masakhane | -29.1445 | 26.2489 |
| | Meadows | -29.1653 | 26.2831 |
| | Phelindaba | -29.1211 | 26.2249 |
| | Shoprite | -29.1824 | 26.2346 |
| | Twin City Mall | -29.1423 | 26.2522 |

| Network | Stations/Stops | X - Coord | Y - Coord |
|------------------|------------------------------|-----------|-----------|
| GBTA - Network 2 | Academy | -29.1272 | 26.2328 |
| | Anna Maggerman | -29.1492 | 26.2514 |
| | Cross Rd (Namibia & Freedom) | -29.1191 | 26.2259 |
| | Freedom Square | -29.1696 | 26.2608 |
| | Home Affairs | -29.1701 | 26.2355 |
| | Ipopeng | -29.1208 | 26.225 |
| | KFC | 29.1700 | 26.2360 |
| | Mafora Central | -29.1181 | 26.225 |
| | Mafora East | -29.1211 | 26.2248 |
| | Mafora West | -29.1203 | 26.2225 |
| | Maphisa | -29.1656 | 26.2369 |
| | Monape Street | -29.1554 | 26.2538 |
| | Pelonomi Hospital | -29.1436 | 26.248 |
| | Phahameng 4+1 | -29.1615 | 26.239 |
| | Rocklands | -29.1746 | 26.2344 |
| | SA Truck | -29.1726 | 26.2213 |
| | Turflagte Cross | -29.2028 | 26.2725 |
| | Vista Park | -29.184 | 26.2171 |
| GBTA - Network 3 | Bainsvlei | -29.0768 | 26.1509 |
| | Brandwag | -29.1185 | 26.226 |
| | BSQ (Long-distance) | -29.1227 | 26.2261 |
| | Casino | -29.1728 | 26.1768 |
| | Fauna | -29.1648 | 26.1894 |
| | Hypermarket | -29.145 | 26.1808 |
| | Hyperama | -29.1565 | 26.1914 |
| | Langenhoven Park | -29.0666 | 26.1361 |
| | Lourier Park | -29.1795 | 26.1779 |
| | Makro | -29.1272 | 26.1562 |
| | Mimosa | -29.1075 | 26.2002 |
| | Northridge Mall | -29.0715 | 26.2353 |
| | Rose Park Hospital | -29.1494 | 26.1794 |
| | Sowesto | -29.1228 | 26.2243 |
| | Tempe | -29.0979 | 26.1888 |
| | UFS | -29.1078 | 26.187 |
| | Universitas Hospital | -29.1181 | 26.1851 |

It is further important to note that these taxi stops were individually assessed to determine the status from an infrastructure perspective, its functionality and the area covered and potential number of taxis which could make use of the facility in a fully developed state. A scoring system was developed to identify the status of existing stops or facilities and its functionality. The criteria and the scoring are presented in Table 5-14.

Table 5-14: Evaluation Criteria

| Scores | Status of Facility Criteria | Scores | Functionality of Facility Criteria |
|--------|--|--------|------------------------------------|
| 1 | Formal – infrastructure present, watertight surfacing and fenced-off. | 1 | Ranking Facility |
| 2 | Semi-formal - no-Infra, dedicated unsurfaced area and not fenced | 2 | Holding (overflow) area |

| | | | |
|---|--|---|-----------------------|
| 3 | Informal - No-infrastructure exists, no dedicated area, no fencing. | 3 | Load & Drop-off point |
|---|--|---|-----------------------|

In order to determine the usable area of facilities it was assumed that between 60 and 70% of the area remains available after provision for turning movements, walkways and passing lanes are provided in a taxi facility design The available area was then divided by the area taken up by a standard parking bay (7m *2,5m = 15m²) in order the obtain an estimated number of taxi vehicles which the facility would be able to accommodate. The above-mentioned criteria were applied and the following results were obtained (see Table 5-15).

Table 5-15: Taxi Stop information along GBTA Routes

| Network | Stations/Stops | Status of Facility | Functionality of Facility | Scaled Facility Area (m²) | Estimated Vehicle Capacity |
|------------------|------------------------------------|--------------------|---------------------------|---------------------------|----------------------------|
| GBTA - Network 1 | Batho Police Station Pick Up Point | 4 | 3 | - | 0 |
| | Bloemside 1 | 4 | 3 | 140 | 9 |
| | Devis St | 3&4 | 3 | 2 441 | 163 |
| | Engen | 1 | 3 | 71 | 5 |
| | Grassland Super Market | 4 | 2 | 155 | 10 |
| | Heidedal Police Station | 4 | 2 | 155 | 10 |
| | Hostel 1 | 3 | 3 | 384 | 26 |
| | Maitland | 4 | 2 | 73 | 5 |
| | Masakhane | 4 | 3 | 176 | 12 |
| | Meadows | 4 | 3 | - | 0 |
| | Phelindaba | 4 | 2 | 217 | 14 |
| | Shoprite | 4 | 3 | - | 0 |
| | Twin City Mall | 1 | 1 | 901 | 60 |
| GBTA - Network 2 | Academy | 4 | 3 | 175 | 12 |
| | Anna Maggerman | 4 | 3 | - | 0 |
| | Cross Rd (Namibia & Freedom) | 4 | 2 | 313 | 21 |
| | Freedom Square | 4 | 3 | 383 | 26 |
| | Home Affairs | 4 | 3 | - | 0 |
| | Ipopeng | 4 | 2 | 324 | 22 |
| | KFC | 4 | 3 | 205 | 14 |
| | Mafora Central | 4 | 2 | 73 | 5 |
| | Mafora East | 4 | 2 | 315 | 21 |
| | Mafora West | 4 | 2 | 575 | 38 |
| | Maphisa | 4 | 3 | - | 0 |
| | Monape Street | 4 | 3 | 139 | 9 |
| | Pelonomi Hospital | 1 | 3 | 233 | 16 |
| | Phahameng 4+1 | 4 | 3 | - | 0 |
| | Rocklands | 4 | 3 | 252 | 17 |
| | SA Truck | 4 | 3 | 186 | 12 |
| | Turflagte Cross | 4 | 3 | - | 0 |
| | Vista Park | 4 | 3 | - | 0 |
| GBTA - Network 3 | Bainsvlei | 4 | 3 | - | 0 |
| | Brandwag | 4 | 2 | 584 | 39 |
| | BSQ (Long-distance) | 1 | 1 | 7 218 | 481 |
| | Casino | 4 | 3 | - | 0 |
| | Fauna | 2 | 3 | 3 051 | 203 |
| | Hypermarket | 4 | 3 | 32 | 2 |
| | Hyperama | 4 | 3 | 424 | 28 |
| | Langenhoven Park | 3 | 3 | - | 0 |
| | Lourier Park | 2 | 3 | 545 | 36 |

| Network | Stations/Stops | Status of Facility | Functionality of Facility | Scaled Facility Area (m²) | Estimated Vehicle Capacity |
|---------|----------------------|--------------------|---------------------------|---------------------------|----------------------------|
| | Makro | 4 | 3 | - | 0 |
| | Mimosa | 4 | 3 | 74 | 5 |
| | Northridge Mall | 4 | 3 | 138 | 9 |
| | Rose Park Hospital | 4 | 3 | - | 0 |
| | Sowesto | 2 | 1 | 1 298 | 87 |
| | Tempe | 2 | 2 | 3 832 | 255 |
| | UFS | 1 | 2 | 2 234 | 149 |
| | Universitas Hospital | 1 | 3 | - | 0 |

Note: These values are only estimates and proper designs should be conducted to determine the actual number of vehicles which each facility could accommodate.

Further to the aspects mentioned above, it should be noted that some of these facilities are situated on either private property or within existing road reserves. Proper assessments will have to be conducted to determine whether a taxi stop can remain or whether it should be relocated. The stops within road reserves create dangerous situations where vehicles and passengers alike have to enter or exit stops to board or alight vehicles.

During the assessment of the stops it was also observed that inadequate pedestrian safety measures exist around locations of moderate to high vehicle movement. These areas are at lodges, the casino, shopping centres, schools and major road crossings. The possibility to create bus/taxi laybys should also be investigated as a limited number of these laybys were observed.

5.4 Bus Operations

A substantial component of the public transport system is currently rendered by buses belonging to Itumeleng Bus Services (t/a Interstate Bus Lines - IBL). These bus operated services are contracted to IBL which predominantly focuses on the long-distance transport of commuters from areas such as Botshabelo, Thaba Nchu and Soutpan areas. These contracted services were extensively surveyed and recorded by the Mangaung Metropolitan Municipality during 2016 in order to understand the full extent of the bus service, the number of passengers transported on a daily basis as well as the cost implications (subsidies included) to commuters and government alike. The detailed bus investigation formed part of the Mangaung IPTN investigation and therefore the report known as “*The Collection of Operational Information on Subsidised Bus Services dated 25 October 2016*” should be read in conjunction with this section of this report. This report thus only highlights specific status quo information relevant to this report.

5.4.1 Bus routes

Itumeleng Bus Service (IBL) are currently contracted by the Provincial Government to operate, on a contract bases, a subsidised public passenger transport service between Bloemfontein and Thaba Nchu, Botshabelo, Mangaung and Soutpan as well as distribution services from Central Park Terminus to Bloemfontein’s residential areas. These services rendered by IBL are generally performed by both standard/rigid buses and train/articulated buses.

The operations of the 5 tendered contracts are funded through the Public Transport Operational Grant (PTOG) by means of allocations made by National Treasury in terms of the Division of Revenue Act (DORA). These contracts with IBL to provide public transport services between Bloemfontein and Botshabelo, Thaba Nchu and Mangaung were entered into in 1998 and the services operating between Bloemfontein and Soutpan was entered into in January 2015. The particular contract numbers and fleet configurations are as follows:

- VT20282/98 (standard rigid buses and train buses),

- VT20283/98 (standard rigid buses and train buses),
- VT20284/98 (standard rigid buses),
- VT20285/98 (standard rigid buses),
- VT20286/98 (standard rigid buses).

According to the abovementioned contracts, these contract services are performed by 214 buses (203 peak and 11 spare buses). The split per contract and vehicle type are reflected in Table 5-16 below.

Table 5-16: Vehicle Type and Number per Subsidised Contract (2015/16)

| Contracts | Standard Buses | | | Train Buses | | |
|--------------|-------------------------------------|-----------------|---------------------------------------|-------------------------------------|-----------------|---------------------------------------|
| | Buses operating subsidised services | | Buses operating unsubsidised services | Buses operating subsidised services | | Buses operating unsubsidised services |
| | Peak No. Buses | Spare No. Buses | | Peak No. Buses | Spare No. Buses | |
| VT20282S | 57 | 3 | 3 | | | |
| VT20282T | | | | 11 | 1 | 1 |
| VT20283S | 58 | 3 | 5 | | | |
| VT20283T | | | | 58 | 2 | 5 |
| VT20284S | 6 | 0 | 1 | | | |
| VT20285S | 11 | 1 | 1 | | | |
| VT20286S | 2 | 1 | 0 | | | |
| Sub - Totals | 134 | 8 | 10 | 69 | 3 | 6 |
| Totals | 142 | | | 72 | | |

Source: Mangaung IPTN - Report on the Collection of Operational Information on Subsidised Bus Services (2016)

The bus fleet reflected in the table above provides subsidised public transport services along specific routes. The operational network coverage of IBL is reflected in Figure 5-59 below.

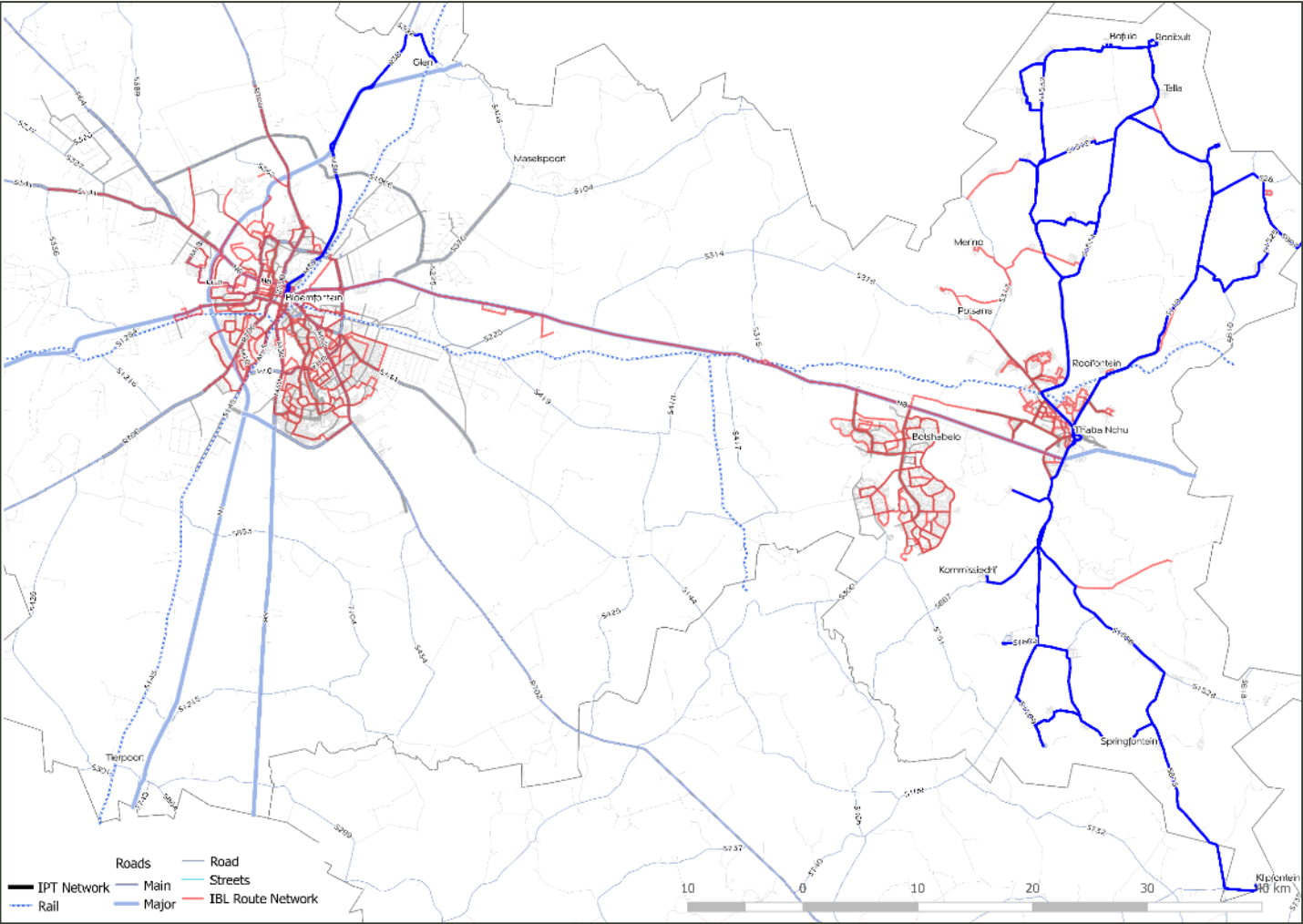


Figure 5-59: Subsidised bus routes for Bloemfontein, Botshabelo and Thaba Nchu.

The section below provides operational details of the IBL services provided per contract as well as details on the routes and their distances.

5.4.2 Bus Routes - Contract No. VT20282/98

This contract has two separate components namely one for standard buses and the other for train buses. The routes covered by these two service types are reflected in Table 5-24 and Table 5-18 below.

- VT20282/98 (standard rigid buses and train buses), the route origins, destinations and route length are provided in Table 5-17 and Table 5-18 respectively;
- VT20283/98 (standard rigid buses and train buses), the route origins, destinations and route length are provided in Table 5-19 and Table 5-20 respectively;
- VT20284/98 (standard rigid buses), the route origins, destinations and route length are provided in Table 5-21;
- VT20285/98 (standard rigid buses), the route origins, destinations and route length are provided in Table 5-22’;
- According to contract VT20285 provision is made for public passenger transport services from various origins in areas north of Thaba Nchu to destinations in Thaba Nchu and Bloemfontein). A number of 31 individual routes are operated under this contract. These routes (both directions) and their specific details are listed in Table 5-22 below.

- VT20286/98 (standard rigid buses), the route origins, destinations and route length are provided in Table 5-23.

Table 5-17: Bus Route Numbers, Description and Length for Contract VT20282S (2015/16)

| Route No | From | To | Route Length (km) |
|----------|----------------|------------------|-------------------|
| 093A | ZONE 1 | CENTRAL PARK | 79,0 |
| 093B | CENTRAL PARK | ZONE 1 | 83,0 |
| 093B | ZONE 1 | CENTRAL PARK | 83,0 |
| 093C | CENTRAL PARK | ZONE 1 | 78,0 |
| 093D | CR SWART | ZONE 1 | 89,0 |
| 093D | ZONE 1 | PELONOMI | 89,0 |
| 094A | CENTRAL PARK | UNIT 1 | 70,0 |
| 094A | UNIT 1 | CENTRAL PARK | 70,0 |
| 094B | CENTRAL PARK | ZONE 5 | 75,0 |
| 094B | ZONE 5 | CENTRAL PARK | 75,0 |
| 094C | SAKANYOKA | CENTRAL PARK | 75,0 |
| 094D | CENTRAL PARK | MAKURUNG | 75,6 |
| 094D | MAKURUNG | CENTRAL PARK | 75,6 |
| 097A | MOKWENA | CENTRAL PARK | 81,0 |
| 097A | MOROKA | CENTRAL PARK | 69,0 |
| 097B | CENTRAL PARK | MOKOENA | 81,0 |
| 098A | AIR FORCE BASE | ZONE1 | 81,0 |
| 098B | TEMPE | THABA NCHU | 75,0 |
| 098B | THABA NCHU | TEMPE | 75,0 |
| 098C | ZONE1 | TEMPE | 87,0 |
| 098D | ZONE1 | AIR FORCE BASE | 81,0 |
| 128A | PHELINDABA | UNIVERSITAS HOSP | 22,0 |
| 129A | BLOEMANDA | UOVS | 20,0 |

Table 5-18: Bus Route Numbers, Description and Length for Contract VT20282T (2015/16)

| Route No | From | To | Route Length (km) |
|----------|--------------|--------------|-------------------|
| 0064 | ROCKLANDS | CENTRAL PARK | 11,0 |
| 0093 | ZONE 1 | CENTRAL PARK | 74,0 |
| 0094 | ZONE 2 | CENTRAL PARK | 77,0 |
| 0095 | CENTRAL PARK | ZONE 3 & 4 | 76,0 |
| 0095 | ZONE 3 & 4 | CENTRAL PARK | 76,0 |
| 0098 | SELOSESHA | CENTRAL PARK | 75,0 |
| 0142 | MAFORA | CENTRAL PARK | 11,0 |
| 093A | CENTRAL PARK | ZONE 1 | 79,0 |
| 093A | ZONE 1 | CENTRAL PARK | 79,0 |
| 093B | CENTRAL PARK | ZONE 1 | 79,0 |
| 093B | CENTRAL PARK | ZONE 1 | 83,0 |
| 093B | ZONE 1 | CENTRAL PARK | 83,0 |
| 093C | CENTRAL PARK | ZONE 1 | 78,0 |
| 097A | MOROKA | CENTRAL PARK | 69,0 |

Table 5-19: Bus Route Numbers, Description and Length for Contract VT20283S/98 (2015/16)

| Route No | From | To | Route Length (km) |
|----------|--------------|--------------|-------------------|
| 0001 | A1 | CENTRAL PARK | 60,0 |
| 0001 | CENTRAL PARK | A1 | 60,0 |
| 0002 | A4 | CENTRAL PARK | 61,0 |
| 0002 | CENTRAL PARK | A4 | 61,0 |
| 0003 | C2 | CENTRAL PARK | 57,0 |
| 0003 | CENTRAL PARK | C2 | 57,0 |
| 0004 | CENTRAL PARK | D1 | 62,0 |
| 0004 | D1 | CENTRAL PARK | 62,0 |
| 0005 | CENTRAL PARK | J1 | 52,0 |
| 0005 | J1 | CENTRAL PARK | 52,0 |
| 0006 | CENTRAL PARK | J3 | 52,0 |

| Route No | From | To | Route Length (km) |
|----------|-----------------|------------------|-------------------|
| 0006 | J3 | CENTRAL PARK | 52,0 |
| 0007 | CENTRAL PARK | K6 | 51,0 |
| 0007 | K6 | CENTRAL PARK | 51,0 |
| 0008 | CENTRAL PARK | M1 | 65,0 |
| 0008 | M1 | CENTRAL PARK | 65,0 |
| 0009 | CENTRAL PARK | N1 | 61,0 |
| 0009 | N1 | CENTRAL PARK | 61,0 |
| 0010 | CENTRAL PARK | S1 | 60,0 |
| 0010 | S1 | CENTRAL PARK | 60,0 |
| 0011 | CENTRAL PARK | T1 | 58,0 |
| 0011 | T1 | CENTRAL PARK | 58,0 |
| 0012 | CENTRAL PARK | U7 | 61,0 |
| 0012 | U7 | CENTRAL PARK | 61,0 |
| 0013 | CENTRAL PARK | W4 | 59,0 |
| 0013 | W4 | CENTRAL PARK | 59,0 |
| 0016 | BLOEMDUSTRIA | N1 | 60,0 |
| 0026 | CENTRAL PARK | FAIRWAYS | 53,0 |
| 0028 | CENTRAL PARK | N6 | 63,0 |
| 0028 | N6 | CENTRAL PARK | 63,0 |
| 0029 | CENTRAL PARK | H2 | 55,0 |
| 0029 | H2 | CENTRAL PARK | 55,0 |
| 0030 | FAIRWAYS | CENTRAL PARK | 53,0 |
| 0031 | KORTPAD | CR SWART | 59,0 |
| 0033 | K6 | TRANSWERKE | 67,0 |
| 0033 | TRANSWERKE | K6 | 67,0 |
| 0034 | C1 | CENTRAL PARK | 61,0 |
| 0036 | E3 | CENTRAL PARK | 60,0 |
| 0039 | F3 | CENTRAL PARK | 63,0 |
| 0040 | BAINSVLEI | CENTRAL PARK | 15,0 |
| 0040 | CENTRAL PARK | BAINSVLEI | 15,0 |
| 0041 | BAYSWATER | CENTRAL PARK | 8,0 |
| 0041 | CENTRAL PARK | BAYSWATER | 8,0 |
| 0042 | BRANDWAG | CENTRAL PARK | 6,0 |
| 0042 | CENTRAL PARK | BRANDWAG | 6,0 |
| 0044 | CENTRAL PARK | DAN PIENAAR | 8,0 |
| 0044 | DAN PIENAAR | CENTRAL PARK | 8,0 |
| 0046 | CENTRAL PARK | FAUNA | 11,0 |
| 0046 | FAUNA | CENTRAL PARK | 11,0 |
| 0047 | CENTRAL PARK | FICHARDT PARK | 10,0 |
| 0047 | FICHARDT PARK | CENTRAL PARK | 10,0 |
| 0051 | CENTRAL PARK | HAMILTON | 4,0 |
| 0052 | CENTRAL PARK | HEUWELSIG | 9,0 |
| 0052 | HEUWELSIG | CENTRAL PARK | 9,0 |
| 0053 | CENTRAL PARK | HOSPITAALPARK | 6,0 |
| 0053 | HOSPITAALPARK | CENTRAL PARK | 6,0 |
| 0054 | CENTRAL PARK | LANGENHOVENPARK | 13,0 |
| 0054 | LANGENHOVENPARK | CENTRAL PARK | 13,0 |
| 0056 | CENTRAL PARK | PARKERAAD | 3,0 |
| 0056 | PARKERAAD | CENTRAL PARK | 3,0 |
| 0058 | CENTRAL PARK | NOORDHOEK | 8,0 |
| 0058 | NOORDHOEK | CENTRAL PARK | 8,0 |
| 0059 | CENTRAL PARK | OOSEINDE | 6,0 |
| 0059 | OOSEINDE | CENTRAL PARK | 6,0 |
| 0062 | CENTRAL PARK | PELLISSIER | 10,0 |
| 0062 | PELLISSIER | CENTRAL PARK | 10,0 |
| 0067 | CENTRAL PARK | UNIVERSITAS | 9,0 |
| 0067 | UNIVERSITAS | CENTRAL PARK | 9,0 |
| 0068 | CENTRAL PARK | UNIVERSITAS WEST | 9,0 |

| Route No | From | To | Route Length (km) |
|----------|------------------|---------------|-------------------|
| 0068 | UNIVERSITAS WEST | CENTRAL PARK | 9,0 |
| 0069 | CENTRAL PARK | VOGUE | 8,0 |
| 0069 | VOGUE | CENTRAL PARK | 8,0 |
| 0070 | CENTRAL PARK | WILGEHOF | 8,0 |
| 0070 | WILGEHOF | CENTRAL PARK | 8,0 |
| 0071 | CENTRAL PARK | UOVS | 6,0 |
| 0071 | UOVS | CENTRAL PARK | 6,0 |
| 0099 | BRANDFORT | CENTRAL PARK | 60,0 |
| 0099 | CENTRAL PARK | BRANDFORT | 60,0 |
| 0151 | CENTRAL PARK | BOTS HOSPITAL | 58,0 |
| 001A | A1 | CENTRAL PARK | 67,0 |
| 001A | CENTRAL PARK | A1 | 67,0 |
| 001B | CENTRAL PARK | A1 | 67,0 |
| 004A | CENTRAL PARK | D1 | 66,0 |
| 005A | CENTRAL PARK | J1 | 63,0 |
| 005A | J1 | CENTRAL PARK | 63,0 |
| 005B | CENTRAL PARK | G2 | 63,0 |
| 008A | CENTRAL PARK | M4 | 62,0 |
| 008A | M4 | CENTRAL PARK | 62,0 |
| 009B | N1 | CENTRAL PARK | 64,0 |
| 012A | CENTRAL PARK | U7 | 67,0 |
| 031A | CR SWART | N4 | 84,0 |
| 046A | CENTRAL PARK | DE WET PARK | 8,0 |
| 046A | DE WET PARK | CENTRAL PARK | 8,0 |
| 046B | FAUNA MUN | CENTRAL PARK | 8,0 |
| 046C | CENTRAL PARK | FAUNA | 12,0 |
| 046C | FAUNA | CENTRAL PARK | 12,0 |
| 051A | CENTRAL PARK | HAMILTON | 4,0 |
| 051A | Hamilton | CENTRAL PARK | 4,0 |
| 051B | CENTRAL PARK | HAMILTON | 4,0 |
| 051B | HAMILTON PAO | CENTRAL PARK | 4,0 |
| 35A4 | BLOCK W4 | TEMPE | 73,0 |
| 35A7 | A5 | TEMPE | 73,0 |
| 35D1 | BLOCK D1 | TEMPE | 73,0 |
| 35D1 | TEMPE | BLOCK M4 | 73,0 |
| 35G1 | BLOCK G2 | TEMPE | 73,0 |
| 35G1 | TEMPE | BLOCK N1 | 73,0 |
| 35K6 | BLOCK K6 | TEMPE | 73,0 |
| 35K6 | TEMPE | BLOCK K6 | 73,0 |

Table 5-20: Bus Route Numbers, Description and Length for Contract VT20283T/98 (2015/16)

| Route No | From | To | Route Length (km) |
|----------|--------------|--------------|-------------------|
| 0001 | A1 | CENTRAL PARK | 60,0 |
| 0001 | CENTRAL PARK | A1 | 60,0 |
| 0002 | A4 | CENTRAL PARK | 61,0 |
| 0002 | CENTRAL PARK | A4 | 61,0 |
| 0003 | C2 | CENTRAL PARK | 57,0 |
| 0003 | CENTRAL PARK | C2 | 57,0 |
| 0004 | CENTRAL PARK | D1 | 62,0 |
| 0004 | D1 | CENTRAL PARK | 62,0 |
| 0005 | CENTRAL PARK | J1 | 52,0 |
| 0005 | J1 | CENTRAL PARK | 52,0 |
| 0007 | CENTRAL PARK | K6 | 51,0 |
| 0007 | K6 | CENTRAL PARK | 51,0 |
| 0009 | CENTRAL PARK | N1 | 61,0 |
| 0009 | N1 | CENTRAL PARK | 61,0 |
| 0012 | CENTRAL PARK | U7 | 61,0 |
| 0012 | U7 | CENTRAL PARK | 61,0 |

| Route No | From | To | Route Length (km) |
|----------|-----------------|----------------|-------------------|
| 0013 | CENTRAL PARK | W4 | 59,0 |
| 0013 | W4 | CENTRAL PARK | 59,0 |
| 001A | A1 | CENTRAL PARK | 67,0 |
| 001A | CENTRAL PARK | A1 | 67,0 |
| 0026 | CENTRAL PARK | FAIRWAYS | 53,0 |
| 0026 | CENTRAL PARK | KORTPAD | 53,0 |
| 0029 | CENTRAL PARK | H2 | 55,0 |
| 0029 | H2 | CENTRAL PARK | 55,0 |
| 0030 | FAIRWAYS | CENTRAL PARK | 53,0 |
| 0036 | E3 | CENTRAL PARK | 60,0 |
| 0041 | BAYSWATER | CENTRAL PARK | 8,0 |
| 0041 | CENTRAL PARK | BAYSWATER | 8,0 |
| 0042 | BRANDWAG | CENTRAL PARK | 6,0 |
| 0044 | CENTRAL PARK | DAN PIENAAR | 8,0 |
| 0044 | DAN PIENAAR | CENTRAL PARK | 8,0 |
| 0047 | CENTRAL PARK | FICHARDT PARK | 10,0 |
| 0047 | FICHARDT PARK | CENTRAL PARK | 10,0 |
| 004A | CENTRAL PARK | D1 | 66,0 |
| 004A | D1 | CENTRAL PARK | 66,0 |
| 0051 | CENTRAL PARK | HAMILTON | 4,0 |
| 0051 | HAMILTON | CENTRAL PARK | 4,0 |
| 0052 | CENTRAL PARK | HEUWELSIG | 9,0 |
| 0052 | HEUWELSIG | CENTRAL PARK | 9,0 |
| 0054 | CENTRAL PARK | LANGENHOVENPA | 13,0 |
| 0054 | LANGENHOVEN | CENTRAL PARK | 13,0 |
| 0058 | CENTRAL PARK | NOORDHOEK | 8,0 |
| 0058 | NOORDHOEK | CENTRAL PARK | 8,0 |
| 0059 | CENTRAL PARK | OOSEINDE | 6,0 |
| 0059 | OOSEINDE | CENTRAL PARK | 6,0 |
| 005A | CENTRAL PARK | J1 | 63,0 |
| 005B | CENTRAL PARK | G2 | 63,0 |
| 005B | G2 | CENTRAL PARK | 63,0 |
| 0062 | CENTRAL PARK | PELLISSIER | 10,0 |
| 0062 | PELLISSIER | CENTRAL PARK | 10,0 |
| 0067 | CENTRAL PARK | UNIVERSITAS | 9,0 |
| 0067 | UNIVERSITAS | CENTRAL PARK | 9,0 |
| 0070 | CENTRAL PARK | KWAGGAFONTEIN | 10,0 |
| 0070 | CENTRAL PARK | MAKRO | 10,0 |
| 0070 | CENTRAL PARK | WILGEHOF | 8,0 |
| 0070 | KWAGGAFONTEIN | CENTRAL PARK | 10,0 |
| 0070 | WILGEHOF | CENTRAL PARK | 8,0 |
| 0081 | CENTRAL PARK | KWAGGAFONTEIN | 10,0 |
| 0099 | CENTRAL PARK | BRANDFORT | 60,0 |
| 0099 | BRANDFORT | CENTRAL PARK | 60,0 |
| 008A | CENTRAL PARK | M4 | 62,0 |
| 009A | N1 | CENTRAL PARK | 79,0 |
| 009B | N1 | CENTRAL PARK | 64,0 |
| 012A | CENTRAL PARK | U7 | 67,0 |
| 012A | U7 | CENTRAL PARK | 67,0 |
| 0146 | CENTRAL PARK | WOODLAND HILLS | 9,0 |
| 0146 | WOODLANDS | CENTRAL PARK | 9,0 |
| 051A | HAMILTON | CENTRAL PARK | 4,0 |
| 051A | HAMILTON NAMPAK | CENTRAL PARK | 4,0 |

Table 5-21: Bus Route Numbers, Description and Length for Contract VT20284S/98 (2015/16)

| Route No | From | To | Route Length (km) |
|----------|----------------|----------------|-------------------|
| 0106 | KOMMISSIEDRIFT | THABA NCHU | 33,0 |
| 0106 | THABA NCHU | KOMMISSIEDRIFT | 33,0 |

| Route No | From | To | Route Length (km) |
|----------|----------------|----------------|-------------------|
| 0110 | KLIPFONTEIN | THABA NCHU | 60,0 |
| 0110 | SPRINGFONTEIN | THABA NCHU | 60,0 |
| 0110 | THABA NCHU | SPRINGFONTEIN | 60,0 |
| 0111 | THABA NCHU | WOODBIDGE | 41,0 |
| 0111 | WOODBIDGE | ESSO | 41,0 |
| 0111 | WOODBIDGE | THABA NCHU | 41,0 |
| 0117 | THABA NCHU SUN | ZONE 1 | 35,0 |
| 0117 | ZONE 1 | THABA NCHU SUN | 35,0 |
| 106A | THABA NCHU | KOMMISSIEDRIFT | 35,0 |
| 110A | SPRINGFONTEIN | THABA NCHU | 90,0 |
| 110A | THABA NCHU | SPRINGFONTEIN | 90,0 |
| 111A | THABA NCHU | WOODBIDGE | 47,0 |
| 111A | WOODBIDGE | THABA NCHU | 47,0 |
| 111B | WOODBIDGE | THABA NCHU | 57,0 |
| 111C | ESSO | CENTRAL PARK | 66,0 |

Table 5-22: Bus Route Numbers, Description and Length for Contract VT20285S/98 (2015/16)

| Route No | From | To | Route Length (km) |
|----------|--------------|--------------|-------------------|
| 0103 | CENTRAL PARK | TALLA | 94.0 |
| 0105 | BOFULO | THABA NCHU | 47.0 |
| 0105 | THABA NCHU | BOFULO | 47.0 |
| 0107 | MARIASDAL | THABA NCHU | 67.0 |
| 0107 | THABA NCHU | MARIASDAL | 67.0 |
| 0108 | MERINO | THABA NCHU | 29.0 |
| 0108 | THABA NCHU | MERINO | 29.0 |
| 0109 | THABA NCHU | ROOIFONTEIN | 11.0 |
| 0115 | SPITSKOP | THABA NCHU | 41.0 |
| 0115 | THABA NCHU | SPITSKOP | 41.0 |
| 0119 | SEDIBA | THABA NCHU | 67.0 |
| 0119 | THABA NCHU | SEDIBA | 67.0 |
| 0120 | ROOIBULT | THABA NCHU | 44.0 |
| 0120 | THABA NCHU | ROOIBULT | 44.0 |
| 0122 | FELOANE | THABA NCHU | 22.0 |
| 0122 | THABA NCHU | FELOANE | 22.0 |
| 0123 | MORAGO | THABA NCHU | 41.0 |
| 0123 | THABA NCHU | MORAGO | 41.0 |
| 0124 | THABA NCHU | SEDITI | 37.8 |
| 100A | CENTRAL PARK | MOROTO | 102.0 |
| 100A | MOROTO | CENTRAL PARK | 102.0 |
| 100B | CENTRAL PARK | MARIASDAL | 110.0 |
| 100B | MARIASDAL | CENTRAL PARK | 110.0 |
| 103A | CENTRAL PARK | TALLA | 99.0 |
| 103A | TALLA | CENTRAL PARK | 99.0 |
| 103B | HOUTNEK | TALLA | 26.0 |
| 105A | TALLA | THABA NCHU | 52.0 |
| 105A | THABA NCHU | TALLA | 52.0 |
| 107A | THABA NCHU | MARIASDAL | 41.0 |
| 107A | THABA NCHU | MARIASDAL | 67.0 |
| 107B | MARIASDAL | THABA NCHU | 90.0 |
| 107B | THABA NCHU | MARIASDAL | 90.0 |
| 107C | MARIASDAL | THABA NCHU | 60.0 |
| 107C | THABA NCHU | MARIASDAL | 60.0 |
| 107D | MARIASDAL | THABA NCHU | 63.0 |
| 107E | THABA NCHU | TALLA | 60.0 |
| 107F | SEDITI | THABA NCHU | 41.0 |
| 108A | MERINO | THABA NCHU | 22.0 |
| 108A | THABA NCHU | MERINO | 22.0 |

| Route No | From | To | Route Length (km) |
|----------|-------------|------------|-------------------|
| 108B | TIGER RIVER | THABA NCHU | 32.0 |
| 109A | ROOIFONTEIN | THABA NCHU | 20.0 |
| 115A | SPITSKOP | THABA NCHU | 36.0 |
| 115A | THABA NCHU | SPITSKOP | 36.0 |
| 115B | SPITSKOP | THABA NCHU | 29.0 |
| 115B | THABA NCHU | SPITSKOP | 29.0 |
| 119A | SEDIBA | THABA NCHU | 52.0 |
| 119A | THABA NCHU | SEDIBA | 52.0 |
| 119B | SEDIBA | THABA NCHU | 42.0 |
| 119B | THABA NCHU | SEDIBA | 42.0 |
| 123B | MORAGO | THABA NCHU | 36.0 |
| 124B | MORAGO | THABA NCHU | 45.0 |
| 124B | THABA NCHU | MORAGO | 45.0 |
| 108A | MERINO | THABA NCHU | 22.0 |
| 108A | THABA NCHU | MERINO | 22.0 |
| 108B | TIGER RIVER | THABA NCHU | 32.0 |
| 109A | ROOIFONTEIN | THABA NCHU | 20.0 |
| 115A | SPITSKOP | THABA NCHU | 36.0 |
| 115A | THABA NCHU | SPITSKOP | 36.0 |
| 115B | SPITSKOP | THABA NCHU | 29.0 |
| 115B | THABA NCHU | SPITSKOP | 29.0 |
| 119A | SEDIBA | THABA NCHU | 52.0 |
| 119A | THABA NCHU | SEDIBA | 52.0 |
| 119B | SEDIBA | THABA NCHU | 42.0 |
| 119B | THABA NCHU | SEDIBA | 42.0 |
| 123B | MORAGO | THABA NCHU | 36.0 |
| 124B | MORAGO | THABA NCHU | 45.0 |
| 124B | THABA NCHU | MORAGO | 45.0 |

Table 5-23: Bus Route Numbers, Description and Length for Contract VT20286S/98 (2015/16)

| Route No | From | To | Route Length (km) |
|----------|--------------|--------------|-------------------|
| 1 | Soutpan | Central Park | 47.9 |
| 2 | Central Park | Soutpan | 47.6 |

5.4.3 Passenger Trips

Table 5-24 provides a summary of the actual number of trips surveyed per weekday as well as the number of passengers transport during these periods.

Table 5-24: Trip numbers and Passenger Numbers for all routes

| Day of the week | Units | Before 14:00 | After 14:00 | Daily Total |
|-----------------|------------|--------------|-------------|-------------|
| Weekday(Wed) | Passengers | 44 357 | 39 244 | 83 601 |
| Friday | Pax | 43 335 | 36 154 | 79 489 |
| Mon-Fri | Trips | 788 | 838 | 1626 |
| Saturday | Pax | 11 957 | 8 562 | 20 519 |
| | Trips | 323 | 230 | 553 |

The annual operational statistics for the subsidised and unsubsidised services operated on all existing IBL contracts for the period March '15 to February '16 are summarised in Table 5-25 below.

Table 5-25: Annual Operational Statistics per Bus Contract (2015/16)

| Annual Trip Data | VT20282S | VT20282T | VT20283S | VT20283T | VT20284 | VT20285 | VT20286 |
|--------------------------|-----------|-----------|-----------|-----------|---------|---------|---------|
| Trips Scheduled: | 52 020 | 10 993 | 70 301 | 70 830 | 5 762 | 12 478 | 1 234 |
| Trips Operated: | 51 882 | 10 927 | 69 975 | 70 414 | 5 746 | 12 442 | 1 230 |
| Kilometres Scheduled: | 2 617 597 | 831 449 | 2 771 488 | 2 839 293 | 289 747 | 650 657 | 58 924 |
| Kilometres Operated: | 2 613 470 | 826 602 | 2 757 866 | 2 825 194 | 288 949 | 648 454 | 58 733 |
| Standing Kilometres: | - | - | - | - | - | - | - |
| Cash Passengers: | 318 695 | 111 739 | 262 104 | 472 181 | 44 806 | 81 420 | 18 260 |
| MJT (Season) Passengers: | 2 435 257 | 888 413 | 3 880 605 | 5 807 728 | 167 971 | 373 223 | 53 811 |
| Total Passengers: | 2 753 952 | 1 000 152 | 4 142 709 | 6 279 909 | 212 777 | 454 643 | 72 071 |
| Average Passengers/trip: | 53 | 92 | 59 | 89 | 37 | 37 | 59 |

5.4.4 Service Utilisation

According to the IBL service information the following service utilisation figures per route number were determined and are reflected in Table 5-26 below.

Table 5-26: Service Utilisation per Bus Contract (2015/16)

| Contract No | Direction of Travel | Route | | | Route Length (km) | Annual Total Number Trips Operated | Annual Total Number of Passengers Transported | Determined Average Utilisation Rate (%) |
|-------------|---------------------|-------|----------------|-----------------|-------------------|------------------------------------|---|---|
| | | No. | From | To | | | | |
| 282S | Forward | 48 | FREEDOM SQUARE | CENTRAL PARK | 10 | 753 | 51880 | 81,06% |
| 282S | Forward | 61 | PHASE 2 | CENTRAL PARK | 13 | 788 | 28409 | 42,41% |
| 282S | Forward | 63 | PHELINDABA | CENTRAL PARK | 9 | 993 | 52420 | 62,11% |
| 282S | Forward | 64 | ROCKLANDS | CENTRAL PARK | 11 | 275 | 18641 | 79,75% |
| 282S | Forward | 65 | PHASE 4 | CENTRAL PARK | 11 | 751 | 49574 | 77,66% |
| 282S | Forward | 66 | TURFLAAGTE | CENTRAL PARK | 11 | 1226 | 61104 | 58,64% |
| 282S | Forward | 72 | PETER SWART | CENTRAL PARK | 8 | 503 | 27537 | 64,41% |
| 282S | Forward | 73 | PHELINDABA | FICHARDT PARK | 20 | 242 | 15556 | 75,62% |
| 282S | Forward | 74 | PHELINDABA | DAN PIENAAR | 15 | 243 | 13024 | 63,05% |
| 282S | Forward | 75 | PHELINDABA | LANGENHOVENPARK | 22 | 243 | 13825 | 66,93% |
| 282S | Forward | 76 | PHELINDABA | PELLISSIER | 19 | 243 | 8883 | 43,01% |
| 282S | Forward | 77 | PHELINDABA | UNIVERSITAS | 18 | 243 | 10352 | 50,12% |
| 282S | Forward | 79 | PHELINDABA | WILGEHOF | 17 | 242 | 8271 | 40,21% |
| 282S | Forward | 84 | PHELINDABA | BAYSWATER | 19 | 242 | 9795 | 47,62% |
| 282S | Forward | 85 | PHASE 6 | CENTRAL PARK | 15 | 752 | 41166 | 64,40% |
| 282S | Return | 86 | BLOEMDUSTRIA | ZONE 1 | 58 | 233 | 8163 | 41,22% |
| 282S | Return | 90 | TRANSWERKE | ZONE1 | 81 | 243 | 11734 | 56,81% |
| 282S | Forward | 91 | MOKWENA | TRANSWERKE | 80 | 243 | 10504 | 50,85% |
| 282S | Forward | 93 | ZONE 1 | CENTRAL PARK | 74 | 1784 | 97466 | 64,27% |
| 282S | Forward | 94 | ZONE 2 | CENTRAL PARK | 77 | 761 | 56749 | 87,73% |
| 282S | Forward | 95 | ZONE 4 | CENTRAL PARK | 75,6 | 234 | 11535 | 57,99% |
| 282S | Forward | 95 | ZONE 3 | CENTRAL PARK | 76 | 1012 | 68866 | 80,06% |
| 282S | Forward | 96 | GARAPULANA | CENTRAL PARK | 72 | 251 | 15776 | 73,94% |
| 282S | Forward | 97 | MOKOENA | CENTRAL PARK | 71 | 1282 | 74556 | 68,42% |
| 282S | Forward | 98 | SELOSESHA | CENTRAL PARK | 75 | 1261 | 69365 | 64,72% |

| Contract No | Direction of Travel | Route | | | Route Length (km) | Annual Total Number Trips Operated | Annual Total Number of Passengers Transported | Determined Average Utilisation Rate (%) |
|-------------|---------------------|-------|----------------|------------------|-------------------|------------------------------------|---|---|
| | | No. | From | To | | | | |
| 282S | Forward | 101 | PARADYS | CENTRAL PARK | 113 | 251 | 9650 | 45,23% |
| 282S | Forward | 102 | ROOIFONTEIN | CENTRAL PARK | 76 | 234 | 11474 | 57,69% |
| 282S | Forward | 127 | PHELINDABA | UNIVERSITAS HOSP | 22 | 259 | 11584 | 52,62% |
| 282S | Forward | 128 | PHELINDABA | UNIVERSITAS HOSP | 25 | 251 | 10716 | 50,23% |
| 282S | Forward | 130 | PELONOMI | UNIVERSITAS HOSP | 17 | 250 | 10342 | 48,67% |
| 282S | Forward | 131 | PHELINDABA | NATIONAL HOSP | 15 | 251 | 9083 | 42,57% |
| 282S | Return | 132 | NATIONAL HOSP | PHELINDABA | 15 | 251 | 8843 | 41,45% |
| 282S | Return | 134 | UOVS | PHELINDABA | 28 | 232 | 8286 | 42,02% |
| 282S | Return | 135 | UOVS | PHASE 2 | 19 | 249 | 8818 | 41,66% |
| 282S | Return | 136 | UOVS | PHELINDABA | 22 | 8 | 236 | 34,71% |
| 282S | Forward | 137 | PHASE 2 | UNIVERSITAS HOSP | 27 | 34 | 1772 | 61,31% |
| 282S | Forward | 137 | PHELINDABA | UNIVERSITAS HOSP | 27 | 93 | 4252 | 53,79% |
| 282S | Forward | 138 | PHASE 3 | CENTRAL PARK | 8 | 20 | 739 | 43,47% |
| 282S | Forward | 141 | IPOPENG | CENTRAL PARK | 11 | 297 | 16165 | 64,03% |
| 282S | Forward | 142 | MAFORA | CENTRAL PARK | 11 | 17 | 799 | 55,29% |
| 282S | Forward | 143 | PHASE 7 | CENTRAL PARK | 25 | 257 | 14747 | 67,51% |
| 282S | Forward | 144 | IPOPENG | CENTRAL PARK | 11 | 8 | 535 | 78,68% |
| 282S | Return | 093A | CENTRAL PARK | ZONE 1 | 79 | 630 | 36485 | 68,13% |
| 282S | Forward | 093A | ZONE 1 | CENTRAL PARK | 79 | 664 | 47310 | 83,82% |
| 282S | Return | 093B | CENTRAL PARK | ZONE 1 | 83 | 3534 | 191469 | 63,74% |
| 282S | Forward | 093B | ZONE 1 | CENTRAL PARK | 83 | 3288 | 201477 | 72,09% |
| 282S | Return | 093C | CENTRAL PARK | ZONE 1 | 78 | 952 | 67879 | 83,88% |
| 282S | Return | 093D | CR SWART | ZONE 1 | 89 | 250 | 10433 | 49,10% |
| 282S | Forward | 093D | ZONE 1 | PELONOMI | 89 | 251 | 14346 | 67,24% |
| 282S | Return | 094A | CENTRAL PARK | UNIT 1 | 70 | 54 | 4103 | 89,39% |
| 282S | Forward | 094A | UNIT 1 | CENTRAL PARK | 70 | 734 | 46211 | 74,07% |
| 282S | Return | 094B | CENTRAL PARK | ZONE 5 | 75 | 249 | 14486 | 68,44% |
| 282S | Forward | 094B | ZONE 5 | CENTRAL PARK | 75 | 493 | 32118 | 76,64% |
| 282S | Forward | 094C | SAKANYOKA | CENTRAL PARK | 75 | 234 | 11859 | 59,62% |
| 282S | Return | 094D | CENTRAL PARK | MAKURUNG | 75,6 | 234 | 13627 | 68,51% |
| 282S | Forward | 094D | MAKURUNG | CENTRAL PARK | 75,6 | 234 | 15752 | 79,20% |
| 282S | Return | 097A | CENTRAL PARK | MOKWENA | 81 | 204 | 8434 | 48,64% |
| 282S | Forward | 097A | MOKWENA | CENTRAL PARK | 81 | 222 | 9281 | 49,18% |
| 282S | Forward | 097A | MOROKA | CENTRAL PARK | 69 | 295 | 15997 | 63,80% |
| 282S | Return | 097B | CENTRAL PARK | MOKOENA | 81 | 242 | 8940 | 43,46% |
| 282S | Return | 098A | AIR FORCE BASE | ZONE1 | 81 | 234 | 9021 | 45,35% |
| 282S | Forward | 098A | SELOSESHA | TEMPE | 81 | 189 | 6699 | 41,70% |
| 282S | Return | 098B | TEMPE | THABA NCHU | 75 | 234 | 8593 | 43,20% |
| 282S | Forward | 098B | THABA NCHU | TEMPE | 75 | 242 | 9199 | 44,72% |
| 282S | Return | 098C | TEMPE | ZONE1 | 87 | 189 | 6643 | 41,35% |
| 282S | Forward | 098C | ZONE1 | TEMPE | 87 | 234 | 12864 | 64,68% |
| 282S | Forward | 098D | ZONE1 | AIR FORCE BASE | 81 | 243 | 11118 | 53,83% |
| 282S | Forward | 128A | PHELINDABA | UNIVERSITAS HOSP | 22 | 243 | 9773 | 47,32% |
| 282S | Forward | 129A | BLOEMANDA | UOVS | 20 | 251 | 11641 | 54,56% |
| 282T | Forward | 0064 | ROCKLANDS | CENTRAL PARK | 11 | 234 | 20472 | 59,92% |
| 282T | Forward | 0093 | ZONE 1 | CENTRAL PARK | 74 | 535 | 49914 | 63,90% |
| 282T | Forward | 0094 | ZONE 2 | CENTRAL PARK | 77 | 710 | 67729 | 65,34% |
| 282T | Return | 0095 | CENTRAL PARK | ZONE 3 & 4 | 76 | 1939 | 166788 | 58,92% |
| 282T | Forward | 0095 | ZONE 3 & 4 | CENTRAL PARK | 76 | 751 | 67760 | 61,80% |
| 282T | Forward | 0098 | SELOSESHA | CENTRAL PARK | 75 | 231 | 22175 | 65,75% |
| 282T | Forward | 0142 | MAFORA | CENTRAL PARK | 11 | 230 | 21701,1 | 64,63% |
| 282T | Return | 093A | CENTRAL PARK | ZONE 1 | 79 | 449 | 44347 | 67,65% |

| Contract No | Direction of Travel | Route | | | Route Length (km) | Annual Total Number Trips Operated | Annual Total Number of Passengers Transported | Determined Average Utilisation Rate (%) |
|-------------|---------------------|-------|--------------|--------------|-------------------|------------------------------------|---|---|
| | | No. | From | To | | | | |
| 282T | Forward | 093A | ZONE 1 | CENTRAL PARK | 79 | 68 | 6578 | 66,26% |
| 282T | Return | 093B | CENTRAL PARK | ZONE 1 | 79 | 8 | 890 | 76,20% |
| 282T | Return | 093B | CENTRAL PARK | ZONE 1 | 83 | 1894 | 177128 | 64,06% |
| 282T | Forward | 093B | ZONE 1 | CENTRAL PARK | 83 | 1721 | 149575 | 59,53% |
| 282T | Return | 093C | CENTRAL PARK | ZONE 1 | 78 | 1680 | 159332 | 64,96% |
| 282T | Forward | 097A | MOROKA | CENTRAL PARK | 69 | 477 | 45763 | 65,71% |
| 283S | Forward | 1 | A1 | CENTRAL PARK | 60 | 468 | 34991 | 87,96% |
| 283S | Forward | 2 | A4 | CENTRAL PARK | 61 | 261 | 18161 | 81,86% |
| 283S | Forward | 3 | C2 | CENTRAL PARK | 57 | 753 | 51946 | 81,16% |
| 283S | Return | 3 | CENTRAL PARK | C2 | 57 | 994 | 60729 | 71,88% |
| 283S | Return | 4 | CENTRAL PARK | D1 | 62 | 1008 | 59394 | 69,32% |
| 283S | Forward | 4 | D1 | CENTRAL PARK | 62 | 512 | 38161 | 87,69% |
| 283S | Return | 5 | CENTRAL PARK | J1 | 52 | 771 | 52883 | 80,69% |
| 283S | Forward | 5 | J1 | CENTRAL PARK | 52 | 502 | 35443 | 83,06% |
| 283S | Return | 6 | CENTRAL PARK | J3 | 52 | 1980 | 134967 | 80,19% |
| 283S | Forward | 6 | J3 | CENTRAL PARK | 52 | 2215 | 164961 | 87,62% |
| 283S | Return | 7 | CENTRAL PARK | K6 | 51 | 1159 | 85913 | 87,21% |
| 283S | Forward | 7 | K6 | CENTRAL PARK | 51 | 727 | 36039 | 58,32% |
| 283S | Return | 8 | CENTRAL PARK | M1 | 65 | 3244 | 199832 | 72,47% |
| 283S | Forward | 8 | M1 | CENTRAL PARK | 65 | 2823 | 205201 | 85,52% |
| 283S | Return | 9 | CENTRAL PARK | N1 | 61 | 1758 | 120872 | 80,89% |
| 283S | Forward | 9 | N1 | CENTRAL PARK | 61 | 1479 | 74593 | 59,34% |
| 283S | Return | 10 | CENTRAL PARK | S1 | 60 | 493 | 24334 | 58,07% |
| 283S | Forward | 10 | S1 | CENTRAL PARK | 60 | 503 | 33910 | 79,31% |
| 283S | Return | 11 | CENTRAL PARK | T1 | 58 | 1716 | 105694 | 72,46% |
| 283S | Forward | 11 | T1 | CENTRAL PARK | 58 | 1230 | 84255 | 80,59% |
| 283S | Return | 12 | CENTRAL PARK | U7 | 61 | 1171 | 101413 | 101,89% |
| 283S | Forward | 12 | U7 | CENTRAL PARK | 61 | 971 | 71401 | 86,51% |
| 283S | Return | 13 | CENTRAL PARK | W4 | 59 | 1234 | 80809 | 77,04% |
| 283S | Forward | 13 | W4 | CENTRAL PARK | 59 | 992 | 60603 | 71,87% |
| 283S | Return | 16 | BLOEMDUSTRIA | N1 | 60 | 251 | 8568 | 40,16% |
| 283S | Return | 26 | CENTRAL PARK | FAIRWAYS | 53 | 719 | 43387 | 70,99% |
| 283S | Return | 28 | CENTRAL PARK | N6 | 63 | 1206 | 73358 | 71,56% |
| 283S | Forward | 28 | N6 | CENTRAL PARK | 63 | 996 | 35545 | 41,99% |
| 283S | Return | 29 | CENTRAL PARK | H2 | 55 | 251 | 17747 | 83,18% |
| 283S | Forward | 29 | H2 | CENTRAL PARK | 55 | 502 | 35788 | 83,87% |
| 283S | Forward | 30 | FAIRWAYS | CENTRAL PARK | 53 | 1295 | 71504 | 64,96% |
| 283S | Forward | 31 | KORTPAD | CR SWART | 59 | 251 | 8911 | 41,77% |
| 283S | Forward | 33 | K6 | TRANSWERKE | 67 | 251 | 8987 | 42,12% |
| 283S | Return | 33 | TRANSWERKE | K6 | 67 | 242 | 9341 | 45,41% |
| 283S | Forward | 34 | C1 | CENTRAL PARK | 61 | 486 | 31037 | 75,13% |
| 283S | Forward | 36 | E3 | CENTRAL PARK | 60 | 243 | 17644 | 85,42% |
| 283S | Forward | 39 | F3 | CENTRAL PARK | 63 | 124 | 6700 | 63,57% |
| 283S | Forward | 40 | BAINSVLEI | CENTRAL PARK | 15 | 258 | 18429 | 84,04% |
| 283S | Forward | 40 | CENTRAL PARK | BAINSVLEI | 15 | 501 | 20267 | 47,59% |
| 283S | Return | 41 | BAYSWATER | CENTRAL PARK | 8 | 509 | 37992 | 87,81% |
| 283S | Forward | 41 | CENTRAL PARK | BAYSWATER | 8 | 2102 | 88804 | 49,70% |
| 283S | Forward | 42 | BRANDWAG | CENTRAL PARK | 6 | 997 | 60353 | 71,22% |
| 283S | Forward | 42 | CENTRAL PARK | BRANDWAG | 6 | 1295 | 84460 | 76,73% |
| 283S | Forward | 44 | CENTRAL PARK | DAN PIENAAR | 8 | 543 | 31523 | 68,30% |
| 283S | Return | 44 | DAN PIENAAR | CENTRAL PARK | 8 | 1003 | 71633 | 84,02% |
| 283S | Forward | 46 | CENTRAL PARK | FAUNA | 11 | 992 | 69018 | 81,85% |

| Contract No | Direction of Travel | Route | | | Route Length (km) | Annual Total Number Trips Operated | Annual Total Number of Passengers Transported | Determined Average Utilisation Rate (%) |
|-------------|---------------------|-------|------------------|------------------|-------------------|------------------------------------|---|---|
| | | No. | From | To | | | | |
| 283S | Return | 46 | FAUNA | CENTRAL PARK | 11 | 761 | 40345 | 62,37% |
| 283S | Forward | 47 | CENTRAL PARK | FICHARDT PARK | 10 | 1097 | 62131 | 66,63% |
| 283S | Return | 47 | FICHARDT PARK | CENTRAL PARK | 10 | 402 | 23300 | 68,19% |
| 283S | Forward | 51 | CENTRAL PARK | HAMILTON | 4 | 262 | 19292 | 86,63% |
| 283S | Forward | 52 | CENTRAL PARK | HEUWELSIG | 9 | 264 | 19855 | 88,48% |
| 283S | Return | 52 | HEUWELSIG | CENTRAL PARK | 9 | 1235 | 70781 | 67,43% |
| 283S | Forward | 53 | CENTRAL PARK | HOSPITAALPARK | 6 | 1053 | 41711 | 46,60% |
| 283S | Return | 53 | HOSPITAALPARK | CENTRAL PARK | 6 | 1001 | 65315 | 76,76% |
| 283S | Forward | 54 | CENTRAL PARK | LANGENHOVENPARK | 13 | 838 | 35945 | 50,46% |
| 283S | Return | 54 | LANGENHOVENPARK | CENTRAL PARK | 13 | 451 | 18656 | 48,67% |
| 283S | Forward | 56 | CENTRAL PARK | PARKERAAD | 3 | 22 | 712 | 38,07% |
| 283S | Return | 56 | PARKERAAD | CENTRAL PARK | 3 | 234 | 14439 | 72,59% |
| 283S | Forward | 58 | CENTRAL PARK | NOORDHOEK | 8 | 326 | 21303 | 76,88% |
| 283S | Return | 58 | NOORDHOEK | CENTRAL PARK | 8 | 1012 | 56065 | 65,18% |
| 283S | Forward | 59 | CENTRAL PARK | OOSEINDE | 6 | 313 | 18075 | 67,94% |
| 283S | Return | 59 | OOSEINDE | CENTRAL PARK | 6 | 689 | 35538 | 60,68% |
| 283S | Forward | 62 | CENTRAL PARK | PELLISSIER | 10 | 31 | 1688 | 64,06% |
| 283S | Return | 62 | PELLISSIER | CENTRAL PARK | 10 | 636 | 44556 | 82,42% |
| 283S | Forward | 67 | CENTRAL PARK | UNIVERSITAS | 9 | 584 | 21143 | 42,59% |
| 283S | Return | 67 | UNIVERSITAS | CENTRAL PARK | 9 | 87 | 5523 | 74,69% |
| 283S | Forward | 68 | CENTRAL PARK | UNIVERSITAS WEST | 9 | 760 | 53282 | 82,48% |
| 283S | Return | 68 | UNIVERSITAS WEST | CENTRAL PARK | 9 | 760 | 42219 | 65,35% |
| 283S | Forward | 69 | CENTRAL PARK | VOGUE | 8 | 243 | 14663 | 70,99% |
| 283S | Return | 69 | VOGUE | CENTRAL PARK | 8 | 251 | 14677 | 68,79% |
| 283S | Forward | 70 | CENTRAL PARK | WILGEHOF | 8 | 1055 | 45447 | 50,68% |
| 283S | Return | 70 | WILGEHOF | CENTRAL PARK | 8 | 793 | 31589 | 46,86% |
| 283S | Forward | 71 | CENTRAL PARK | UOVS | 6 | 251 | 16858 | 79,02% |
| 283S | Return | 71 | UOVS | CENTRAL PARK | 6 | 250 | 9072 | 42,69% |
| 283S | Forward | 99 | BRANDFORT | CENTRAL PARK | 60 | 282 | 17250 | 71,96% |
| 283S | Return | 99 | CENTRAL PARK | BRANDFORT | 60 | 281 | 12556 | 52,57% |
| 283S | Return | 151 | CENTRAL PARK | BOTS HOSPITAL | 58 | 211 | 10022 | 55,88% |
| 283S | Forward | 69 | CENTRAL PARK | VOGUE | 8 | 243 | 14663 | 70,99% |
| 283S | Return | 69 | VOGUE | CENTRAL PARK | 8 | 251 | 14677 | 68,79% |
| 283S | Forward | 70 | CENTRAL PARK | WILGEHOF | 8 | 1055 | 45447 | 50,68% |
| 283S | Return | 70 | WILGEHOF | CENTRAL PARK | 8 | 793 | 31589 | 46,86% |
| 283S | Forward | 71 | CENTRAL PARK | UOVS | 6 | 251 | 16858 | 79,02% |
| 283S | Return | 71 | UOVS | CENTRAL PARK | 6 | 250 | 9072 | 42,69% |
| 283S | Forward | 99 | BRANDFORT | CENTRAL PARK | 60 | 282 | 17250 | 71,96% |
| 283S | Return | 99 | CENTRAL PARK | BRANDFORT | 60 | 281 | 12556 | 52,57% |
| 283S | Return | 151 | CENTRAL PARK | BOTS HOSPITAL | 58 | 211 | 10022 | 55,88% |
| 283S | Forward | 001A | A1 | CENTRAL PARK | 67 | 75 | 4035 | 63,29% |
| 283S | Return | 001A | CENTRAL PARK | A1 | 67 | 29 | 1355 | 54,97% |
| 283S | Return | 001B | CENTRAL PARK | A1 | 67 | 39 | 2422 | 73,06% |
| 283S | Return | 004A | CENTRAL PARK | D1 | 66 | 152 | 10396 | 80,46% |
| 283S | Return | 005A | CENTRAL PARK | J1 | 63 | 252 | 15027 | 70,15% |
| 283S | Forward | 005A | J1 | CENTRAL PARK | 63 | 304 | 18817 | 72,82% |
| 283S | Return | 005B | CENTRAL PARK | G2 | 63 | 56 | 4177 | 87,75% |
| 283S | Return | 008A | CENTRAL PARK | M4 | 62 | 257 | 10193 | 46,66% |
| 283S | Forward | 008A | M4 | CENTRAL PARK | 62 | 223 | 13727 | 72,42% |
| 283S | Forward | 009B | N1 | CENTRAL PARK | 64 | 50 | 2393 | 56,31% |
| 283S | Return | 012A | CENTRAL PARK | U7 | 67 | 25 | 1365 | 64,24% |
| 283S | Return | 031A | CR SWART | N4 | 84 | 251 | 10859 | 50,90% |

| Contract No | Direction of Travel | Route | | | Route Length (km) | Annual Total Number Trips Operated | Annual Total Number of Passengers Transported | Determined Average Utilisation Rate (%) |
|-------------|---------------------|-------|---------------|---------------|-------------------|------------------------------------|---|---|
| | | No. | From | To | | | | |
| 283S | Forward | 046A | CENTRAL PARK | DE WET PARK | 8 | 751 | 51749 | 81,07% |
| 283S | Return | 046A | DE WET PARK | CENTRAL PARK | 8 | 1479 | 66064 | 52,55% |
| 283S | Return | 046B | FAUNA MUN | CENTRAL PARK | 8 | 188 | 6451 | 40,37% |
| 283S | Forward | 046C | CENTRAL PARK | FAUNA | 12 | 62 | 3629 | 68,86% |
| 283S | Return | 046C | FAUNA | CENTRAL PARK | 12 | 737 | 28924 | 46,17% |
| 283S | Forward | 051A | CENTRAL PARK | HAMILTON | 4 | 243 | 13938 | 67,48% |
| 283S | Return | 051A | HAMILTON | CENTRAL PARK | 4 | 8 | 578 | 85,00% |
| 283S | Forward | 051B | CENTRAL PARK | HAMILTON | 4 | 242 | 12085 | 58,75% |
| 283S | Return | 051B | HAMILTON PAO | CENTRAL PARK | 4 | 243 | 9301 | 45,03% |
| 283S | Forward | 35A4 | BLOCK W4 | TEMPE | 73 | 251 | 15789 | 74,01% |
| 283S | Forward | 35A7 | A5 | TEMPE | 73 | 251 | 17745 | 83,17% |
| 283S | Forward | 35D1 | BLOCK D1 | TEMPE | 73 | 249 | 15628 | 73,84% |
| 283S | Return | 35D1 | TEMPE | BLOCK M4 | 73 | 189 | 7703 | 47,95% |
| 283S | Forward | 35G1 | BLOCK G2 | TEMPE | 73 | 250 | 11416 | 53,72% |
| 283S | Return | 35G1 | TEMPE | BLOCK N1 | 73 | 251 | 15324 | 71,83% |
| 283S | Forward | 35K6 | BLOCK K6 | TEMPE | 73 | 250 | 10654 | 50,14% |
| 283S | Return | 35K6 | TEMPE | BLOCK K6 | 73 | 251 | 9217 | 43,20% |
| 283T | Forward | 0001 | A1 | CENTRAL PARK | 60 | 1992 | 178711 | 61,45% |
| 283T | Return | 0001 | CENTRAL PARK | A1 | 60 | 2661 | 228358,9 | 58,78% |
| 283T | Forward | 0002 | A4 | CENTRAL PARK | 61 | 1722 | 147589 | 58,70% |
| 283T | Return | 0002 | CENTRAL PARK | A4 | 61 | 2224 | 190978 | 58,82% |
| 283T | Forward | 0003 | C2 | CENTRAL PARK | 57 | 482 | 43390 | 61,66% |
| 283T | Return | 0003 | CENTRAL PARK | C2 | 57 | 485 | 44074 | 62,24% |
| 283T | Return | 0004 | CENTRAL PARK | D1 | 62 | 726 | 63331 | 59,75% |
| 283T | Forward | 0004 | D1 | CENTRAL PARK | 62 | 743 | 64128 | 59,12% |
| 283T | Return | 0005 | CENTRAL PARK | J1 | 52 | 1708 | 148420 | 59,52% |
| 283T | Forward | 0005 | J1 | CENTRAL PARK | 52 | 1497 | 130762 | 59,83% |
| 283T | Return | 0007 | CENTRAL PARK | K6 | 51 | 2431 | 216397 | 60,97% |
| 283T | Forward | 0007 | K6 | CENTRAL PARK | 51 | 1746 | 151716 | 59,52% |
| 283T | Return | 0009 | CENTRAL PARK | N1 | 61 | 2262 | 195828 | 59,30% |
| 283T | Forward | 0009 | N1 | CENTRAL PARK | 61 | 1367 | 141454 | 70,88% |
| 283T | Return | 0012 | CENTRAL PARK | U7 | 61 | 1480 | 129189 | 59,79% |
| 283T | Forward | 0012 | U7 | CENTRAL PARK | 61 | 1498 | 136605 | 62,46% |
| 283T | Return | 0013 | CENTRAL PARK | W4 | 59 | 998 | 89661 | 61,53% |
| 283T | Forward | 0013 | W4 | CENTRAL PARK | 59 | 1503 | 130557 | 59,50% |
| 283T | Forward | 001A | A1 | CENTRAL PARK | 67 | 124 | 11716,8 | 64,72% |
| 283T | Return | 001A | CENTRAL PARK | A1 | 67 | 286 | 28237 | 67,62% |
| 283T | Return | 0026 | CENTRAL PARK | FAIRWAYS | 53 | 6488 | 580015 | 61,23% |
| 283T | Return | 0026 | CENTRAL PARK | KORTPAD | 53 | 176 | 19085 | 74,27% |
| 283T | Return | 0029 | CENTRAL PARK | H2 | 55 | 243 | 21699 | 61,16% |
| 283T | Forward | 0029 | H2 | CENTRAL PARK | 55 | 251 | 22979 | 62,71% |
| 283T | Forward | 0030 | FAIRWAYS | CENTRAL PARK | 53 | 6697 | 569093 | 58,20% |
| 283T | Forward | 0036 | E3 | CENTRAL PARK | 60 | 234 | 21194 | 62,04% |
| 283T | Return | 0041 | BAYSWATER | CENTRAL PARK | 8 | 1191 | 103805 | 59,70% |
| 283T | Forward | 0041 | CENTRAL PARK | BAYSWATER | 8 | 786 | 77750 | 67,75% |
| 283T | Return | 0042 | BRANDWAG | CENTRAL PARK | 6 | 242 | 24428 | 69,14% |
| 283T | Forward | 0044 | CENTRAL PARK | DAN PIENAAR | 8 | 2034 | 182053 | 61,30% |
| 283T | Return | 0044 | DAN PIENAAR | CENTRAL PARK | 8 | 1722 | 152043 | 60,48% |
| 283T | Forward | 0047 | CENTRAL PARK | FICHARDT PARK | 10 | 1006 | 85606 | 58,28% |
| 283T | Return | 0047 | FICHARDT PARK | CENTRAL PARK | 10 | 996 | 85473 | 58,78% |
| 283T | Return | 004A | CENTRAL PARK | D1 | 66 | 210 | 20061 | 65,43% |
| 283T | Forward | 004A | D1 | CENTRAL PARK | 66 | 123 | 12165 | 67,74% |

| Contract No | Direction of Travel | Route | | | Route Length (km) | Annual Total Number Trips Operated | Annual Total Number of Passengers Transported | Determined Average Utilisation Rate (%) |
|-------------|---------------------|-------|-----------------|----------------|-------------------|------------------------------------|---|---|
| | | No. | From | To | | | | |
| 283T | Forward | 0051 | CENTRAL PARK | HAMILTON | 4 | 741 | 64874 | 59,97% |
| 283T | Return | 0051 | HAMILTON | CENTRAL PARK | 4 | 265 | 25632 | 66,25% |
| 283T | Forward | 0052 | CENTRAL PARK | HEUWELSIG | 9 | 808 | 73872 | 62,62% |
| 283T | Return | 0052 | HEUWELSIG | CENTRAL PARK | 9 | 251 | 22695 | 61,93% |
| 283T | Forward | 0054 | CENTRAL PARK | LANGENHOVENPA | 13 | 2024 | 195706 | 66,23% |
| 283T | Return | 0054 | LANGENHOVEN | CENTRAL PARK | 13 | 2997 | 262848 | 60,07% |
| 283T | Forward | 0058 | CENTRAL PARK | NOORDHOEK | 8 | 989 | 84587 | 58,58% |
| 283T | Return | 0058 | NOORDHOEK | CENTRAL PARK | 8 | 243 | 22398 | 63,13% |
| 283T | Forward | 0059 | CENTRAL PARK | OOSEINDE | 6 | 259 | 25111 | 66,41% |
| 283T | Return | 0059 | OOSEINDE | CENTRAL PARK | 6 | 8 | 692 | 59,25% |
| 283T | Return | 005A | CENTRAL PARK | J1 | 63 | 234 | 21166 | 61,95% |
| 283T | Return | 005B | CENTRAL PARK | G2 | 63 | 415 | 39234,1 | 64,75% |
| 283T | Forward | 005B | G2 | CENTRAL PARK | 63 | 231 | 23955 | 71,03% |
| 283T | Forward | 0062 | CENTRAL PARK | PELLISSIER | 10 | 1375 | 120665 | 60,11% |
| 283T | Return | 0062 | PELLISSIER | CENTRAL PARK | 10 | 1276 | 126339 | 67,82% |
| 283T | Forward | 0067 | CENTRAL PARK | UNIVERSITAS | 9 | 1526 | 135032 | 60,61% |
| 283T | Return | 0067 | UNIVERSITAS | CENTRAL PARK | 9 | 1497 | 135053 | 61,79% |
| 283T | Forward | 0070 | CENTRAL PARK | KWAGGAFONTEIN | 10 | 8 | 715 | 61,22% |
| 283T | Forward | 0070 | CENTRAL PARK | MAKRO | 10 | 8 | 711 | 60,87% |
| 283T | Forward | 0070 | CENTRAL PARK | WILGEHOF | 8 | 249 | 24544 | 67,51% |
| 283T | Return | 0070 | KWAGGAFONTEIN | CENTRAL PARK | 10 | 8 | 859 | 73,54% |
| 283T | Return | 0070 | WILGEHOF | CENTRAL PARK | 8 | 485 | 42709 | 60,31% |
| 283T | Forward | 0081 | CENTRAL PARK | KWAGGAFONTEIN | 10 | 234 | 21350 | 62,49% |
| 283T | Return | 0099 | CENTRAL PARK | BRANDFORT | 60 | 25 | 2389 | 65,45% |
| 283T | Forward | 0099 | BRANDFORT | CENTRAL PARK | 60 | 25 | 2319 | 63,53% |
| 283T | Return | 008A | CENTRAL PARK | M4 | 62 | 1262 | 108745 | 59,02% |
| 283T | Forward | 009A | N1 | CENTRAL PARK | 79 | 31 | 3300 | 72,91% |
| 283T | Forward | 009B | N1 | CENTRAL PARK | 64 | 124 | 13427 | 74,17% |
| 283T | Return | 012A | CENTRAL PARK | U7 | 67 | 396 | 41537 | 71,84% |
| 283T | Forward | 012A | U7 | CENTRAL PARK | 67 | 392 | 38966 | 68,08% |
| 283T | Forward | 0146 | CENTRAL PARK | WOODLAND HILLS | 9 | 242 | 21263 | 60,18% |
| 283T | Return | 0146 | WOODLANDS | CENTRAL PARK | 9 | 481 | 43242 | 61,58% |
| 283T | Return | 051A | HAMILTON | CENTRAL PARK | 4 | 242 | 22686 | 64,21% |
| 283T | Return | 051A | HAMILTON NAMPAK | CENTRAL PARK | 4 | 729 | 62736 | 58,94% |
| 284S | Forward | 106 | KOMMISSIEDRIFT | THABA NCHU | 33 | 306 | 10142 | 38,99% |
| 284S | Return | 106 | THABA NCHU | KOMMISSIEDRIFT | 33 | 55 | 2578 | 55,14% |
| 284S | Forward | 110 | KLIPFONTEIN | THABA NCHU | 60 | 234 | 8568 | 43,08% |
| 284S | Forward | 110 | SPRINGFONTEIN | THABA NCHU | 60 | 72 | 3093 | 50,54% |
| 284S | Return | 110 | THABA NCHU | SPRINGFONTEIN | 60 | 259 | 11662 | 52,97% |
| 284S | Return | 111 | THABA NCHU | WOODBIDGE | 41 | 815 | 28511 | 41,16% |
| 284S | Forward | 111 | WOODBIDGE | ESSO | 41 | 9 | 159 | 20,78% |
| 284S | Forward | 111 | WOODBIDGE | THABA NCHU | 41 | 306 | 11199 | 43,06% |
| 284S | Return | 117 | THABA NCHU SUN | ZONE 1 | 35 | 617 | 20769 | 39,60% |
| 284S | Forward | 117 | ZONE 1 | THABA NCHU SUN | 35 | 617 | 20606 | 39,29% |
| 284S | Return | 106A | THABA NCHU | KOMMISSIEDRIFT | 35 | 251 | 8879 | 41,62% |
| 284S | Forward | 110A | SPRINGFONTEIN | THABA NCHU | 90 | 368 | 17866 | 57,12% |
| 284S | Return | 110A | THABA NCHU | SPRINGFONTEIN | 90 | 421 | 16279 | 45,49% |
| 284S | Return | 111A | THABA NCHU | WOODBIDGE | 47 | 356 | 12460 | 41,18% |
| 284S | Forward | 111A | WOODBIDGE | THABA NCHU | 47 | 559 | 19858 | 41,79% |
| 284S | Forward | 111B | WOODBIDGE | THABA NCHU | 57 | 250 | 8776 | 41,30% |
| 284S | Forward | 111C | ESSO | CENTRAL PARK | 66 | 251 | 11372 | 53,30% |
| 285S | Return | 103 | CENTRAL PARK | TALLA | 94 | 102 | 3311 | 38,19% |

| Contract No | Direction of Travel | Route | | | Route Length (km) | Annual Total Number Trips Operated | Annual Total Number of Passengers Transported | Determined Average Utilisation Rate (%) |
|-------------|---------------------|-------|--------------|--------------|-------------------|------------------------------------|---|---|
| | | No. | From | To | | | | |
| 285S | Forward | 105 | BOFULO | THABA NCHU | 47 | 251 | 8071 | 37,83% |
| 285S | Return | 105 | THABA NCHU | BOFULO | 47 | 251 | 14330 | 67,17% |
| 285S | Forward | 107 | MARIASDAL | THABA NCHU | 67 | 251 | 7798 | 36,55% |
| 285S | Return | 107 | THABA NCHU | MARIASDAL | 67 | 250 | 9929 | 46,72% |
| 285S | Forward | 108 | MERINO | THABA NCHU | 29 | 55 | 2422 | 51,81% |
| 285S | Return | 108 | THABA NCHU | MERINO | 29 | 56 | 2094 | 43,99% |
| 285S | Return | 109 | THABA NCHU | ROOIFONTEIN | 11 | 251 | 8150 | 38,20% |
| 285S | Forward | 115 | SPITSKOP | THABA NCHU | 41 | 675 | 21143 | 36,85% |
| 285S | Return | 115 | THABA NCHU | SPITSKOP | 41 | 480 | 14737 | 36,12% |
| 285S | Forward | 119 | SEDIBA | THABA NCHU | 67 | 789 | 24384 | 36,36% |
| 285S | Return | 119 | THABA NCHU | SEDIBA | 67 | 309 | 10888 | 41,45% |
| 285S | Forward | 120 | ROOIBULT | THABA NCHU | 44 | 251 | 8239 | 38,62% |
| 285S | Return | 120 | THABA NCHU | ROOIBULT | 44 | 511 | 16478 | 37,94% |
| 285S | Forward | 122 | FELOANE | THABA NCHU | 22 | 251 | 8620 | 40,40% |
| 285S | Return | 122 | THABA NCHU | FELOANE | 22 | 251 | 8790 | 41,20% |
| 285S | Forward | 123 | MORAGO | THABA NCHU | 41 | 251 | 12988 | 60,88% |
| 285S | Return | 123 | THABA NCHU | MORAGO | 41 | 250 | 8728 | 41,07% |
| 285S | Return | 124 | THABA NCHU | SEDITI | 37,8 | 468 | 17074 | 42,92% |
| 285S | Forward | 100A | MOROTO | CENTRAL PARK | 102 | 251 | 8085 | 37,90% |
| 285S | Forward | 100B | MARIASDAL | CENTRAL PARK | 110 | 56 | 2030 | 42,65% |
| 285S | Forward | 103A | TALLA | CENTRAL PARK | 99 | 249 | 8102 | 38,28% |
| 285S | Forward | 103B | HOUTNEK | TALLA | 26 | 194 | 6777 | 41,10% |
| 285S | Forward | 105A | TALLA | THABA NCHU | 52 | 114 | 7605 | 78,48% |
| 285S | Return | 105A | THABA NCHU | TALLA | 52 | 55 | 2015 | 43,10% |
| 285S | Forward | 107A | MARIASDAL | THABA NCHU | 41 | 17 | 161 | 11,14% |
| 285S | Return | 107A | THABA NCHU | MARIASDAL | 41 | 55 | 2172 | 46,46% |
| 285S | Return | 107A | THABA NCHU | MARIASDAL | 67 | 234 | 7971 | 40,08% |
| 285S | Forward | 107B | MARIASDAL | THABA NCHU | 90 | 361 | 24246 | 79,02% |
| 285S | Return | 107B | THABA NCHU | MARIASDAL | 90 | 358 | 18285 | 60,09% |
| 285S | Forward | 107C | MARIASDAL | THABA NCHU | 60 | 112 | 4083 | 42,89% |
| 285S | Return | 107C | THABA NCHU | MARIASDAL | 60 | 307 | 9568 | 36,67% |
| 285S | Forward | 107D | MARIASDAL | THABA NCHU | 63 | 248 | 9148 | 43,40% |
| 285S | Return | 107E | THABA NCHU | TALLA | 60 | 56 | 2078 | 43,66% |
| 285S | Forward | 107F | SEDITI | THABA NCHU | 41 | 232 | 7943 | 40,28% |
| 285S | Forward | 108A | MERINO | THABA NCHU | 22 | 250 | 8494 | 39,97% |
| 285S | Return | 108A | THABA NCHU | MERINO | 22 | 251 | 8175 | 38,32% |
| 285S | Forward | 108B | TIGER RIVER | THABA NCHU | 32 | 251 | 8504 | 39,86% |
| 285S | Forward | 109A | ROOIFONTEIN | THABA NCHU | 20 | 251 | 7979 | 37,40% |
| 285S | Forward | 115A | SPITSKOP | THABA NCHU | 36 | 251 | 8840 | 41,43% |
| 285S | Return | 115A | THABA NCHU | SPITSKOP | 36 | 251 | 9300 | 43,59% |
| 285S | Forward | 115B | SPITSKOP | THABA NCHU | 29 | 56 | 2235 | 46,95% |
| 285S | Return | 115B | THABA NCHU | SPITSKOP | 29 | 56 | 1968 | 41,34% |
| 285S | Forward | 119A | SEDIBA | THABA NCHU | 52 | 307 | 9898 | 37,93% |
| 285S | Return | 119A | THABA NCHU | SEDIBA | 52 | 56 | 1998 | 41,97% |
| 285S | Forward | 119B | SEDIBA | THABA NCHU | 42 | 251 | 14045 | 65,83% |
| 285S | Return | 119B | THABA NCHU | SEDIBA | 42 | 56 | 2048 | 43,03% |
| 285S | Forward | 123B | MORAGO | THABA NCHU | 36 | 250 | 8316 | 39,13% |
| 285S | Forward | 124B | MORAGO | THABA NCHU | 45 | 251 | 7863 | 36,85% |
| 285S | Return | 124B | THABA NCHU | MORAGO | 45 | 249 | 8291 | 39,17% |
| 283S | Forward | 1 | Soutpan | Bloemfontein | 47,9 | 617 | 39167,17 | 74,68% |
| 283S | Return | 1 | Bloemfontein | Soutpan | 47,6 | 613 | 32904,07 | 63,15% |

Total number of passengers reflected in the table above includes the number of cash paying customers as well as the seasonal (MJT) passengers per annum per route. Furthermore, the capacity calculation was based on the maximum allowable number of passengers per bus (seated and standing) for the standard and train bus configurations. The contractual capacity for a standard IBL bus is reflected as 85 passengers and that for a train bus as 146 passengers per vehicle.

The above utilisation percentages thus show that bus utilisation in some cases are as low as 11% whilst other routes are above 100%. The routes with lower than 50% utilisation are highlighted in red in the table above. The routes where train buses are utilised, which are the long-distance services, are used more effectively and thus shows higher utilisation rates than the standard buses which predominantly operate the shorter distance routes in and around the CBD area. It can thus be deduced that substantial inefficiencies exist within the current contracted bus services. The entire bus service should thus be optimised to maximise bus utilisation in order to reduce the amount of subsidy paid to IBL. This strategy should be applied in a manner that services to commuters do not suffer, in other words the level of service improves rather than reduces, without any detrimental effect to the profitability of the service provider.

5.4.5 Bus subsidies

The main objective with the payment of subsidies is to ensure efficiencies are built into the transport system in order to limit its dependency on transport subsidies whilst at the same time ensuring that the service offering remains cost effective, efficient and affordable to commuters.

The IBL service investigation relating to the bus services for Bloemfontein, Botshabelo and Thaba Nchu include a subsidised as well as an unsubsidised service. The unsubsidised section of the bus services are reported separately. The main focus of this investigation was to report on the subsidised section of the IBL service as this component of the IBL service is partially funded by the Public Transport Operations Grant (PTOG). The PTO Grant is utilised to fill the gap (shortfall) where operational costs exceed actual ticket sale income.

The relationship between the fare box which consist of cash sales, multi journey tickets (MJT) and subsidies per contract are highlighted in the sections below Table 5-27 and Table 5-28 provide an indication of the cash collected from ticket sales as well as the subsidies paid per contract. The ticket sales revenue, passenger numbers and the subsidies paid are for the period 1 March 2015 to 28 February 2016. The detail per route can be obtained from the analysis report prepared for the IBL bus services.

Table 5-27: Revenue Received and Subsidies Paid per Contract per annum (2015/16)

| Measurement | VT20282S | VT20282T | VT20283S | VT20283T | Totals for these Contracts |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|----------------------------|
| Cash Passenger Revenue: | R 5 625 199,56 | R 2 191 742,09 | R 4 746 154,89 | R 7 126 032,53 | R 19 689 129,07 |
| MJT (Season) Passenger Revenue: | R 19 761 890,21 | R 6 967 878,70 | R 26 525 845,74 | R 37 534 280,20 | R 90 789 894,85 |
| Total Passenger Revenue: | R 25 387 089,77 | R 9 159 620,80 | R 31 272 000,63 | R 44 660 312,73 | R 110 479 023,93 |
| PTOG allocation: | R 49 032 607,00 | R 10 871 483,00 | R 47 035 804,00 | R 60 791 558,00 | R 167 731 452,00 |
| Subsidy Paid: | R 46 246 779,86 | R 11 365 780,73 | R 46 135 878,07 | R 59 911 940,84 | R 163 660 379,50 |
| Average Subsidy/Km Operated: | R 17,70 | R 13,75 | R 16,73 | R 21,21 | |

Table 5-28: Revenue Received and Subsidies Paid per Contract per annum (Continue)

| Measurement | VT20284S | VT20285S | VT20286S | Totals for these Contracts |
|---------------------------------|----------------|-----------------|----------------|----------------------------|
| Cash Passenger Revenue: | R 754 363,34 | R 1 512 317,22 | R 319 191,15 | R 2 585 871,71 |
| MJT (Season) Passenger Revenue: | R 799 279,07 | R 1 674 244,90 | R 745 490,31 | R 3 219 014,28 |
| Total Passenger Revenue: | R 1 553 642,41 | R 3 186 562,11 | R 1 064 681,45 | R 5 804 885,97 |
| PTOG allocation: | R 4 437 340,00 | R 8 874 680,00 | R 668 584,50 | R 13 980 604,50 |
| Subsidy Paid: | R 5 118 208,75 | R 10 995 492,88 | R 973 790,86 | R 17 087 492,49 |

The combined revenue and subsidy values as per Table 5-27 and Table 5-28 above are summarised in Table 5-29 below.

Table 5-29: Revenue Received and Subsidies Paid per Contract per annum

| Measurement | Combined Totals |
|---------------------------------|------------------|
| Cash Passenger Revenue: | R 22 275 000,78 |
| MJT (Season) Passenger Revenue: | R 94 008 909,13 |
| Total Passenger Revenue: | R 116 283 909,90 |
| PTOG allocation: | R 181 712 056,50 |
| Subsidy Paid: | R 180 747 871,99 |
| Total Operational Costs | R 297 031 781,89 |

From Table 5-29 above it is clear that the IBL services which forms part of the contracted services generate an annual amount of R 116,28 million from ticket sales. The operational costs to run the IBL service however amounts to R 297,03 million which implies that a shortfall of R 180,75 million is required as a subsidy from the PTOG on an annual basis.

5.4.6 Passenger Waiting Times and Level of Service

A detailed waiting time survey was not conducted during the period of investigation, however some indications were given by IBL of buses not arriving due to breakdowns as well as buses arriving more than 30 minutes late. A summary of the aforementioned survey information is shown in Table 5-30 below.

Table 5-30: Passenger waiting times and Level of Service

| Scheduled Trips | Additional Trips | Trips that were held back | Did not Operate | Late >30 minutes | Total Trips Operated |
|-----------------|------------------|---------------------------|-----------------|------------------|----------------------|
| 223 368 | 16 | 312 | 496 | 194 | 222 382 |
| | 0,01% | 0,14% | 0,22% | 0,09% | |
| | | 1 002 | | | |

| Scheduled Trips | Additional Trips | Trips that were held back | Did not Operate | Late >30 minutes | Total Trips Operated |
|-----------------|------------------|---------------------------|-----------------|------------------|----------------------|
| | | 0,45% | | | |

It can be seen from the table above that IBL had the minimum breakdowns or increased capacity requirements (<0,1%) where additional trips had to be performed in order to maintain the same level of service. The overall total number of no shows or where the delays were so long that it disrupted the service are given as 1 002 trips. Even with this number of no shows (disruption to the service) the number only represent 0,45% of the overall total number of trips operated.

It should however be noted that the range of time delays are to coarse which implies that in order to provide a good level of service, one should measure time delays at 5 min interval from 5 to 30 minutes. The percentage of defaults in these ranges might be far higher than expected. Any delay in scheduled time of 15 minutes and longer provides a substantial delay to commuters and reduces the level of service dramatically. It might thus in future be necessary to conduct a customer satisfaction survey in order better quantify the time delays. According to the existing information the contracted service complies almost 99,5% with the contractual requirements.

5.4.7 Bus User Cost

The user cost individual route has been determined and included in the IBL investigation report. For purposes of this section of the report a summary with averages are provided as an indication of the overall cost for the commuter. The values might vary when considering the data per route. Table 5-31 provides an indication of the average costs per contract as shown below.

Table 5-31: User Cost Comparison per Contract

| Measurement | VT20282S | VT20282T | VT20283S | VT20283T | VT20284S | VT20285S | VT20286S |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|
| Average Revenue/Trip: | R 489,32 | R 838,26 | R 446,90 | R 634,25 | R 270,39 | R 256,11 | R 865,59 |
| Average Revenue/Km Operated: | R 9,71 | R 11,08 | R 11,34 | R 15,81 | R 5,38 | R 4,91 | R 18,13 |
| Average Subsidy/Km Operated: | R 17,70 | R 13,75 | R 16,73 | R 21,21 | R 17,71 | R 16,96 | R 16,58 |
| Total Cost/Km Operated | R 27,41 | R 24,83 | R 28,07 | R 37,02 | R 23,09 | R 21,87 | R 34,71 |
| Average Revenue/Passenger: | R 9,22 | R 9,16 | R 7,55 | R 7,11 | R 7,30 | R 7,01 | R 14,77 |
| Shortfall/Km Operated | R 18,19 | R 15,67 | R 20,52 | R 29,91 | R 15,79 | R 14,86 | R 19,94 |
| Revenue/Subsidy Ratio | 1:1,97 | 1:1,71 | 1:2,72 | 1:4,21 | 1:2,163 | 1:2,12 | 1:1,35 |
| % Revenue of Total cost/Km Operated | 35,4% | 44,6% | 40,4% | 42,7% | 23,3% | 22,5% | 52,2% |
| % Subsidy of Total cost/Km Operated | 64,6% | 55,4% | 59,6% | 57,3% | 76,7% | 77,5% | 47,8% |

It should be noted that the above table only provides average revenue generated per passenger, calculated against total revenue collected and the total number passengers transport. The subsidies for specific routes thus represents between 50% and 77% of the total operational costs. The above

table thus shows that some contracts are subsidised more than others which directly benefits commuters as they have to pay less out of their pockets for their transport. The percentage split in some cases are substantial which implies than when the averages per route are considered, some routes subsidise others.

5.4.8 Bus Stops

The bus stops in the Bloemfontein, Botshabelo and Thaba Nchu areas range from formal, to semi-formal to informal. In the majority of cases the bus stops are represented by a single pole with a route number and a destination attached to it, next to the edge of the road. The IBL bus service aims to provide a long-distance transport system between the rural areas of Botshabelo, Thaba Nchu and Soutpan and that of the Bloemfontein CBD.



Due to the rural nature of the IBL bus service and the long distances between the Botshabelo, Thaba Nchu and Soutpan areas, bus stops are spaced at irregular distances. The spacing of bus stops in or close to built-up areas or areas of high economic activity, bus stop spacing ranges between 300m to 1 km, in other words, within the limits of the allowable walking distance.

6 Non-Motorised Transport (NMT)

A large portion of the Mangaung population still walk long distances and cycle on a daily basis to access their place of work, attend school, shopping or for leisure purposes. In order to better understand the reason for walking or cycling one should consider the demographics of the city as well as the availability and accessibility of efficient and cost effective transport systems within the confines of the city. The majority of individuals which walk long distances daily are scholars.

6.1.1 Status Quo

The process of determining the walking and cycling status quo for Mangaung, a number of surveys were conducted on NMT users including pedestrians, cyclists and others.

The trip purpose (reason for travel) and other details can be obtained from the results of the household travel survey which was conducted during 2016/17 to assist with the planning and the design of the IPTN.

In order to fully understand the population demand to walk, proper investigations are required to assess their reason for walking, time of the activity, how often and particularly the distances they have to walk to get to their final destinations. This information will assist the city in determining the walking desire lines, the volumes of pedestrians in order to better understand the city’s need to provide adequate NMT infrastructure along important corridors.

A limited number of routes were surveyed during the IPTN process with the primary aim of ensuring adequate NMT infrastructure along IPTN routes in order to improve accessibility. This approach was necessary to ensure adequate NMT infrastructure will be available in future to further promote Mangaung’ s status as “the walking city”. This initial investigation needs to be expanded throughout the entire city in order to develop demand sensitive NMT movement plans across the entire city. Limited pedestrian surveys were conducted in the following areas in order to assist the NMT planning process along main public transport routes, namely:

- Bloemfontein CBD,
- Botshabelo,
- Thaba Nchu.

The locations and the details of pedestrian surveys which were captured in 2017 are reflected in the sections below.

6.1.2 Bloemfontein CBD

The pedestrian surveys conducted in the Bloemfontein CBD area was selected to align with IPTN trunk routes or feeder routes to enable integration of the various modes of transport namely walking, cycling, buses and taxis for the IPTN. The positions of the various pedestrian counts conducted in the Bloemfontein CBD are reflected in Figure 6-1 below.

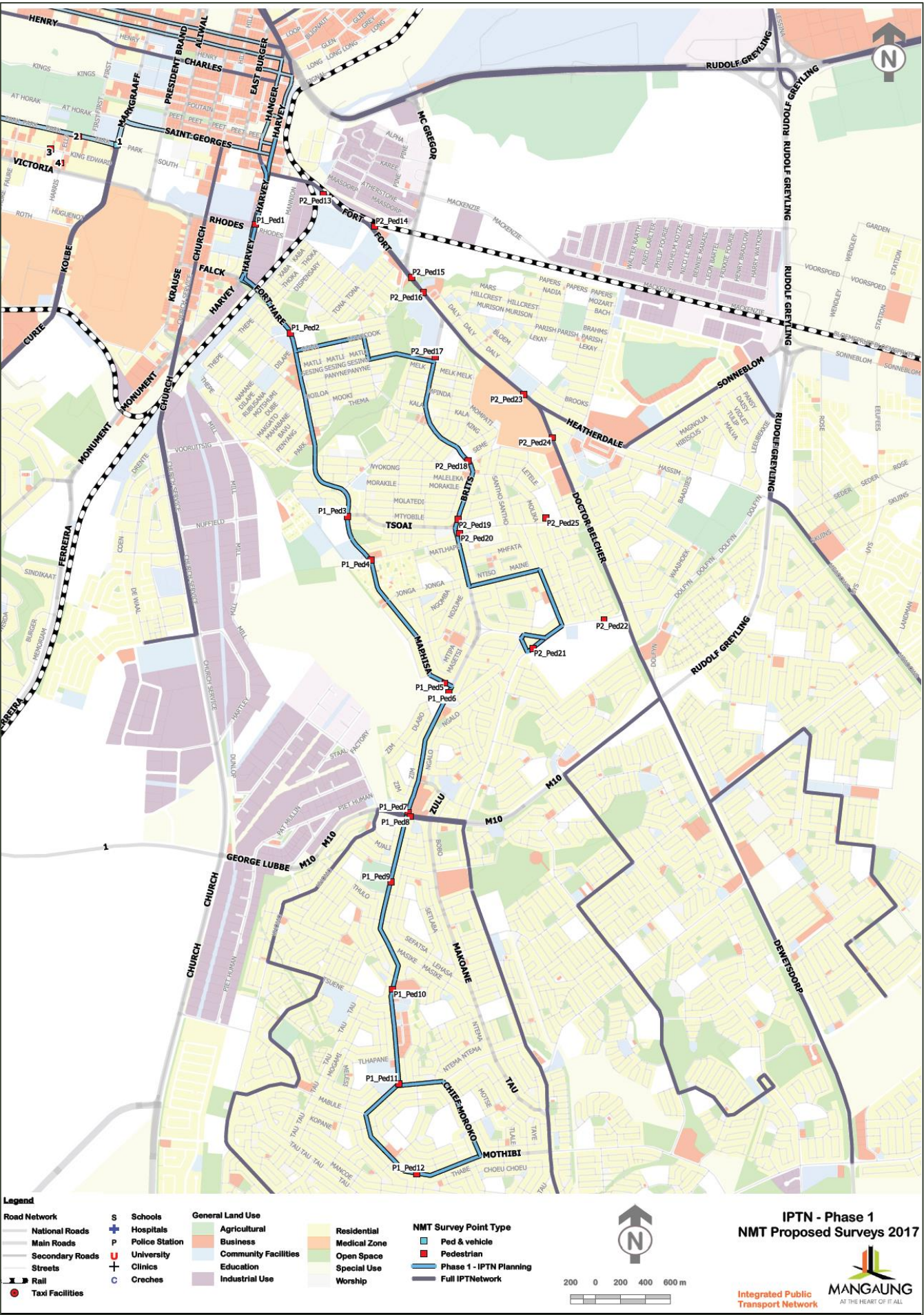


Figure 6-1: Locations of Pedestrian Surveys conducted in Botshabelo (2017)

6.1.3 Botshabelo (2017)

The positions of the pedestrian counts done in Botshabelo are reflected in Figure 6-2 below.



Figure 6-2: Locations of Pedestrian Surveys conducted in Botshabelo (2017)

6.1.4 Thaba Nchu (2017)

The locations of the various pedestrian counts done in Thaba Nchu are reflected in Figure 6-3 below.



Figure 6-3: Locations of Pedestrian Survey conducted in Thaba Nchu (2017)

It should however be noted that larger maps of these shown above are attached in Annexure G. Included in Annexure G is the diagrammatic presentation of the directional split of movement and weekday AM, midday and PM peak hour volumes diagrammatically.

6.1.5 Pedestrian Volumes 2017

A number of 14 hour pedestrian surveys were conducted during 2017 for the Bloemfontein CBD, Botshabelo and Thaba Nchu areas. The details of these surveys are reflected below.

6.1.6 Bloemfontein CBD

Table 6-1 reflects the number and location of the pedestrian surveys for the CBD

Table 6-1: Survey Locations and Peak Hour Information for Botshabelo

| Location No. | Location Name |
|--------------|--|
| 1 | Cnr Park and Markgraaff Street |
| 2 | Park Road between First Ave and Ella Street |
| 3 | King Edward Street Between Ehrlich and Ella Street |
| 4 | Ella Street between Victoria Road and King Edward Street |
| 5 | Victoria Road between Saint David and Ella Street |
| P1_Ped1 | Harvey Road (between Fort Street and Rhodes Avenue) |
| P1_Ped2 | Intersection of Fort Hare Rd and Hamilton Road |
| P1_Ped3 | Maphisa Road (south from Tsoai Street |
| P1_Ped4 | Intersection of Maphisa Rd and Maibamolotsha Street |
| P1_Ped5 | Maphisa Road before Moshoeshoe Street |
| P1_Ped6 | Moshoeshoe Street west from Maphisa Road |
| P1_Ped7 | Moshoeshoe towards the M10 |
| P1_Ped8 | M10 towards Moshoeshoe Street |
| P1_Ped9 | Moshoeshoe Street outside the Dr Rantlai Petrus Molemela Stadium |
| P1_Ped10 | Cnr Tsuene and Moshoeshoe Street |
| P1_Ped11 | Cnr of Chief Moroka and Moshoeshoe Street |
| P1_Ped12 | Chief Moroka west of Mothibi Street |
| P2_Ped13 | Fort Rd between Mannion and Lovedale Street |
| P2_Ped14 | Cnr Fort and McGregor Road |
| P2_Ped15 | Dr Belcher between McGregor and Daly Street |
| P2_Ped16 | Dr Belcher between Daly and McGregor Road |
| P2_Ped17 | Mkuhlane Street between Dr Belcher and Cooper Street |
| P2_Ped18 | Brits Street between Kodisang and Goronyane Street |
| P2_Ped19 | Brits Street between Tsoai and Moikangoa Street |
| P2_Ped20 | Tsoai Street between Dlamini and Ramatsoele Street |
| P2_Ped21 | Monapi Street between Short and Seiso Street |
| P2_Ped22 | Monapi Street between Noname and Dr Belcher |
| P2_Ped23 | Dr Belcher Street between Sending and Moravia Street |
| P2_Ped24 | Dr Belcher Street between Adin and Hamlet Street |
| P2_Ped25 | Dlamini Street between Dingalo and Dlamini Street |

A substantial number of movements were measured and the directional, AM and PM peak pedestrian volumes from the surveys are reflected Annexure G.

6.1.7 Botshabelo

The representative survey locations as well as the pedestrian volumes captured for Botshabelo are summarised in Table 6-2 below.

Table 6-2: Survey Locations and Peak Hour Information for Botshabelo

| Location No. | Location Name | AM Peak (6:45 – 7:45) | PM Peak (17:00 – 18:00) | Total for Survey Period |
|--------------|---|-----------------------|-------------------------|-------------------------|
| B01 | Road N (N/S) | 114 | 136 | 1 467 |
| B02 | South-West Of Road N (N/S) | 69 | 149 | 1 281 |
| B03/B04 | East Of Road B (E/W)/ West Of Road B (E/W) | 143 | 121 | 1 638 |
| B05 | Road G (E/W) | 110 | 69 | 1 004 |
| B06/B07 | Pedestrian Bridge (E/W)/ Pedestrian Foot Path (E/W) | 20 | 56 | 311 |
| B08 | Road E (E/W) | 100 | 77 | 1 028 |
| B09 | South Of Road E (N/S) | 21 | 50 | 311 |
| B10 | Road E (N/S) | 75 | 66 | 771 |
| B11 | South Of Road E (N/S) | 2 | 0 | 3 |
| B12 | Road E (E/W) | 38 | 21 | 384 |
| B13 | Road E (E/W) | 87 | 60 | 829 |
| B14 | South Of Road E (E/W) | 140 | 43 | 1 009 |
| B15 | Road E (N/S) | 90 | 142 | 1 185 |
| B16 | Road E (N/S) | 182 | 285 | 3 321 |
| B17/B18 | North Of Road E (N/S)/ South Of Road E (N/S) | 12 | 10 | 139 |

The detail pedestrian volumes per direction surveyed (along roadways and across the road for both directions) are attached to this report in Annexure H.

6.1.8 Thaba Nchu

The representative survey locations and the pedestrian volumes captured for Thaba Nchu are summarised in Table 6-3 below.

Table 6-3: Survey Locations and Peak Hour Information for Thaba Nchu

| Location No. | Location Name | AM Peak (6:45 – 7:45) | PM Peak (17:00 – 18:00) | Total Number Pedestrians for Survey Period |
|--------------|----------------|-----------------------|-------------------------|--|
| T01 | Road D (N/S) | 148 | 82 | 1 314 |
| T01 | Road D (N/S) | 307 | 156 | 3 526 |
| T03 | Brand St (E/W) | 146 | 137 | 1 762 |
| T04 | ROAD C (N/S) | 207 | 405 | 5 668 |
| T05 | ROAD O (N/S) | 230 | 178 | 2 489 |

The detail pedestrian volumes per direction surveyed (along roadway and across the road for both directions) are attached to this report in Annexure H. A detailed investigation was conducted to assess the capacity required to accommodate the current pedestrian volumes as reflected in the tables above.

7 Universal Accessible Transport

To attain the status quo relating to people with categories of special needs surveys are required. These surveys need to be commissioned during the next financial year. The percentage of the population reported to have special needs in 2011 stemming from the Census 2011 are presented in Table 7-1. It needs to be noted that subsequent studies did indicate that the percentage is under reported due to several factors.

Table 7-1: People with Categories of Special Needs

| | With Special Needs | | Without Special Needs | | Total |
|---------------|--------------------|------|-----------------------|------|-----------|
| | N | % | N | % | |
| Free State | 234 738 | 11,1 | 1 888 869 | 88,9 | 2 123 607 |
| MAN: Mangaung | 57 062 | 9,8 | 526 798 | 90,2 | 583 860 |
| Male | 23 139 | 8,4 | 252 264 | 91,6 | 275 403 |
| Female | 33 923 | 11,0 | 274 534 | 89,0 | 308 457 |

2011 - Profile of persons with disabilities in South Africa (StatsSA)

8 Air Transport Status Quo

Bram Fischer International Airport is located approximately 8km from the Bloemfontein CBD and is therefore well connected to the arterials of the N8, N6 and N1. The airport is centrally located linking the three urban areas in the Mangaung Local Municipality (Bloemfontein, Thaba Nchu and Botshabelo) with Maseru in nearby Lesotho and Kimberley in the Northern Cape Province.

Bram Fischer International Airport is a busy gateway. The airport has capacity to handle 600 000 passengers per annum. It also handles substantial volumes of cargo.

The runways are shared by Bloemspruit Air Force Base, whose activities contribute to the economic activity and sustainability of the area.

8.1 Property

The N8 corridor development between the city centre and the airport has been identified in the Mangaung Spatial Development Framework as a significant growth corridor for the city and where public and private investment will be directed. The airport has been identified as one of the primary development nodes along this corridor.

Bram Fischer International Airport
GDP contribution: **R79 million**
% contribution to provincial GDP: **0.1%**
Employment contribution: **239 jobs**
Income contribution: **R42 million**

Airports Company South Africa has enabled and fully and partially serviced the Bram Fischer Airport Boulevard measuring approximately 32Ha. Full development rights have been achieved for 5 Ha of the 32 Ha. The balance of the area enabled is awaiting EIA approval with the basket of rights application already submitted to the local authority for approval. The site is envisaged to accommodate a range of commercial mixed-use development, with the development of a private hospital concluded and underway. The Boulevard Precinct is the first phased envisaged to be developed over a period of 10 years to 2022. The second phase of the development area measures approximately 98 Ha; this will be enabled post completion of the development on the Boulevard Precinct.

The sites are secured, well connected to the regional road network and are ideal locations for freight, logistics and distribution related activities.

The airport will also be undertaking the development of a 3MW Solar PV installation over an area measuring approximate 6Ha. The project will form part of the sustainability and economic development aspect of the business. The installation will allow for the resale of electricity into the commercial grid.

8.2 Airport Service Quality

Bram Fischer International Airport ranked best airport by region in “under 2 million passengers” category and most improved airport (2018)

Capacity capabilities/constraints:

- Runway: up to Code 4E aircraft with load limitations
- Taxiway system the runways can accommodate up to 60 movements per hour
- Aircraft parking constraints; only 6 parking bays available.
- Scope for expansion into surrounding land if demand requires it in the longer-term

8.3 Existing Air Passengers

For the development f the IPTN the number of passengers that can be generated from the airport as a dedicated destination or origin is required to determine if a dedicated service need to be implemented to the airport. For the purpose this purpose the daily passenger demand was obtained. The 2016/17 annual passenger number was 395 452.

The air passenger growth fluctuates between -9% to +8% and +0.5% for 2016/17. A passenger growth percentage of between +0,5 and +1% is more realistic for the Braam Fischer Airport. The trend is either negative or very low positive, therefore the +8% in 2015/16 seems to be an anomaly.

9 Other Public Transport Modes

Metered taxis operate from several locations in the city. The main taxi association for metred taxis is Rainbow taxi association.

10 Rail Transport

10.1 Long distance Passenger Rail (PRASA)

Rail transport as a public transport mode to and from Bloemfontein is limited to the current Shosholoza Meyl. Shosholoza Meyl is a division of the Passenger Rail Agency of South Africa (PRASA) that mainly operates a long-distance passenger rail service. According to the formal PRASA information published on their 2018 website, they provide a long-distance rail service country wide, to approximately 4 million passengers annually, to various destinations. Bloemfontein station is merely one of the stations on route to numerous other destinations. Figure 10-1 is a map which depicts the routes passing Bloemfontein to the destinations shown on the map.

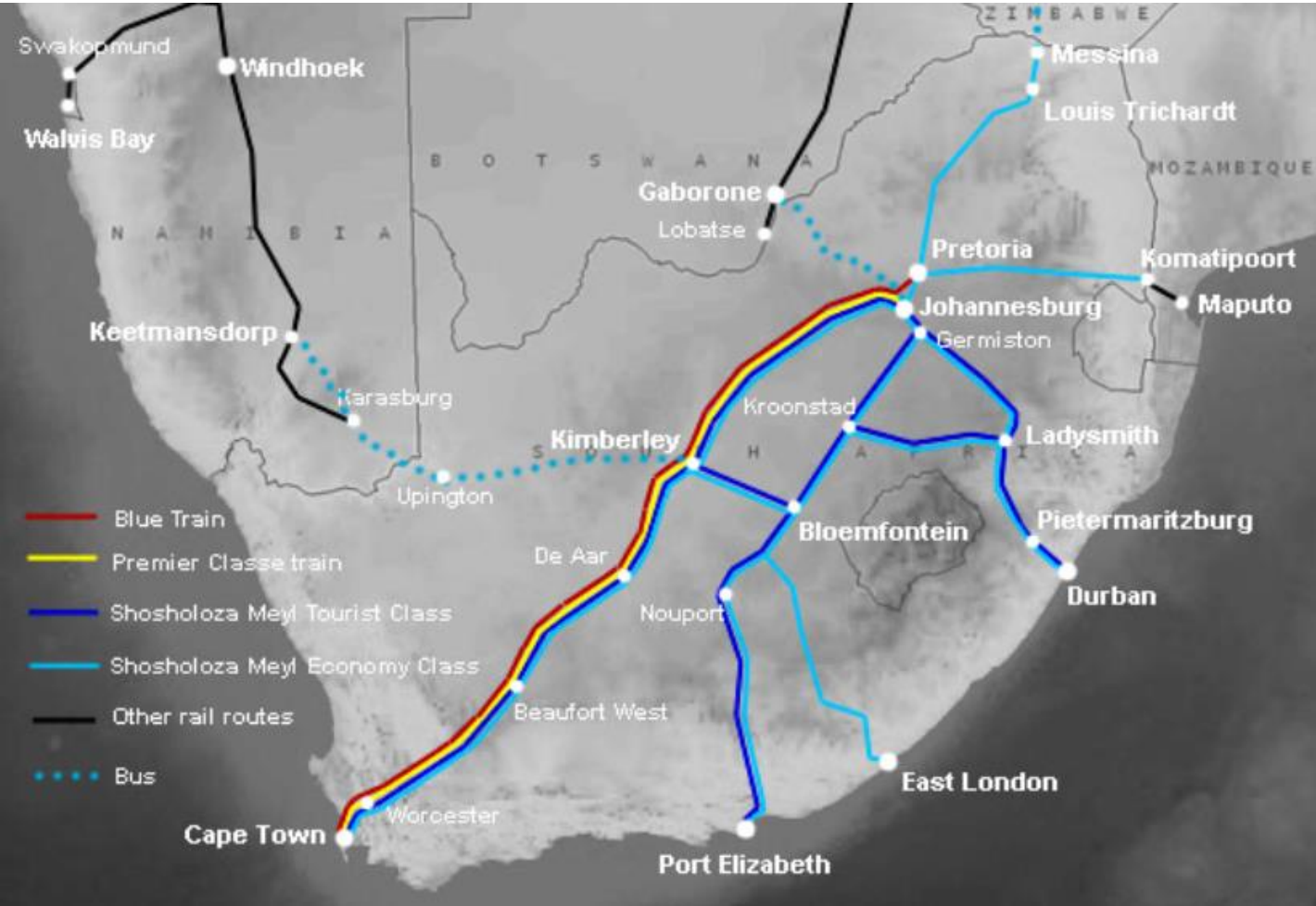


Figure 10-1: Shosholoza Meyl Route Map (2018)

The map only provides an indication of routes operated by PRASA in the past and might differ from the current situation due to operational decisions taken by PRASA from time to time. Furthermore, PRASA provides on Tourist Class (Economy Sleeper) trains and Premier Class (Deluxe Sleeper) trains for tourist and economy class services on these routes which thus allows a commuter to choose between a seated coach and or a sleeper coach. The two directional trips passing through Bloemfontein station include the following:

- Johannesburg to Bloemfontein
- East London to Bloemfontein
- Port Elizabeth to Bloemfontein.

Table 10-1: Shosholoza Meyl Destinations, Travel Time and Estimated Fares (2018)

| | Origin - Destination | Days of Week | Travel Time to Destination | Estimated Fare* |
|----|--|-------------------------------------|----------------------------|-----------------|
| 1. | Johannesburg to Bloemfontein or Bloemfontein to Johannesburg | 3 x per week (Wed, Friday & Sunday) | 6 hours 55 minutes | R 270-00 |
| 2. | East London to Bloemfontein | 3 x per week (Wed, Friday & Sunday) | 12 hours 45 minutes | R 260-00 |
| 3. | Port Elizabeth to Bloemfontein | 3 x per week (Wed, Friday & Sunday) | 12 hours 40 minutes | R 280-00 |

Note: * single trip per adult. This fair is subject to change and therefore purely an indication of the travel cost as seasonal adjustments are applicable

10.2 Commuter Rail

No commuter rail system is available in the City of Mangaung. The Transnet network however pass through the CBD of Bloemfontein with proper station infrastructure. The rail station is in close proximity with the bus and taxi facility. It would even be possible to integrate the Bloemfontein rail station with the Inter-modal facility for which the minimum capital input would be required in order to ensure that the rail station and the bus and taxi facilities are fully integrated. This initiative will ensure proper inter-modality between rail, bus and taxi transport.

The MMM has however acknowledged the continuous quest to provide reliable and affordable transport, not only for commuters but the state alike. The majority of transport systems are dependable on receiving subsidies (except for the taxi industry) to be affordable for daily commuters. This pressure has required the city to look at all possibilities, especially on the longer haul routes. The MMM thus launched an investigation to investigate the possibility to introduce a commuter rail service from Thaba Nchu and Botshabelo into the CBD. The investigation is aimed at testing the technical feasibility as well as the financial viability to introduce a scheduled daily rail service from Thaba Nchu and Botshabelo into the CBD. The outcome of this investigation has not been published as yet and therefore no further comment is possible relating to the potential to introduce a long-distance commuter rail service for Mangaung. . Figure 10-3 illustrate the alignment options included in the Thaba Nchu CBD Rejuvenation Plan The existing rail infrastructure is presented in Figure 10-2.

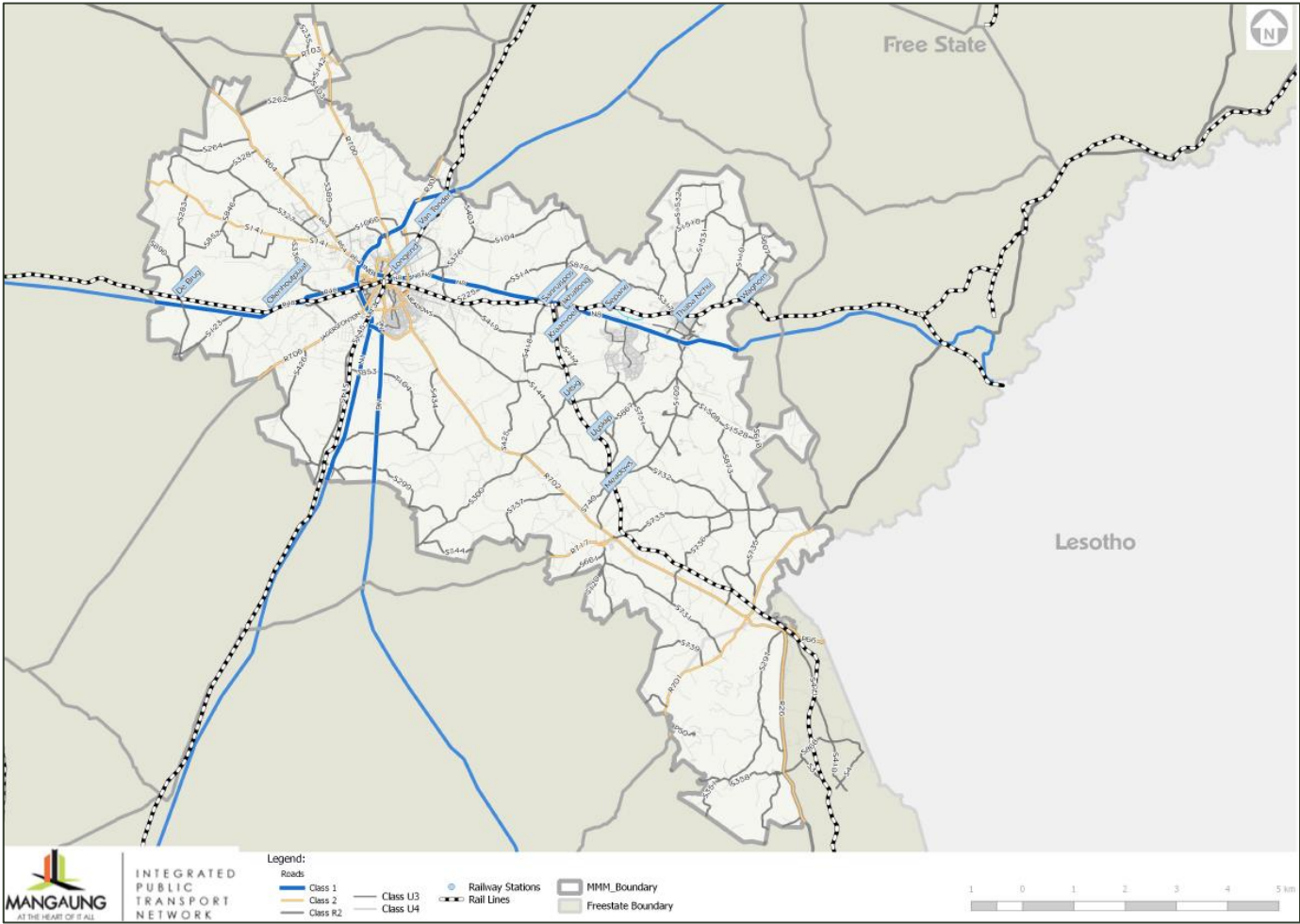


Figure 10-2: Rail Infrastructure



Figure 10-3: Rail Alignment Options – Thaba Nchu

11 Road Infrastructure and Network

Mangaung Local Municipality update the Road Master Plan for the city through the continues update of several local roadmaster Plans. The road master plans were initially developed between 1999-2004 and in recent years these plans were updated. The master plans in the process of updating or recently complete are:

- Bloemfontein Eastern Areas Roads Master Plan
- Western Areas Road Planning Study
- OR Tambo Transport study
- Waaihoek Bridge Study; and
- Thaba Nchu (Refer to Figure 11-4).

The road classification presented in the 2008 ITP is presented in Figure 11-1. The road classification is not based on the RCAM or RISFSA national(COTO) adopted road classification. Botshabelo and Thaba Nchu need to be included in the update of the road master plan to ensure integrated planning within all CBD's of the MMM. It is envisaged that the road master plan will be revised to align with the latest national accepted road classification system with the update of the Integrated Transport Plan.

Given the current road classification a Draft/proposed road network is presented for the utilisation in the Integrated Public Transport Network. The proposed road classification is presented in Figure 11-2 and was used as the basis in the public demand assignment model.

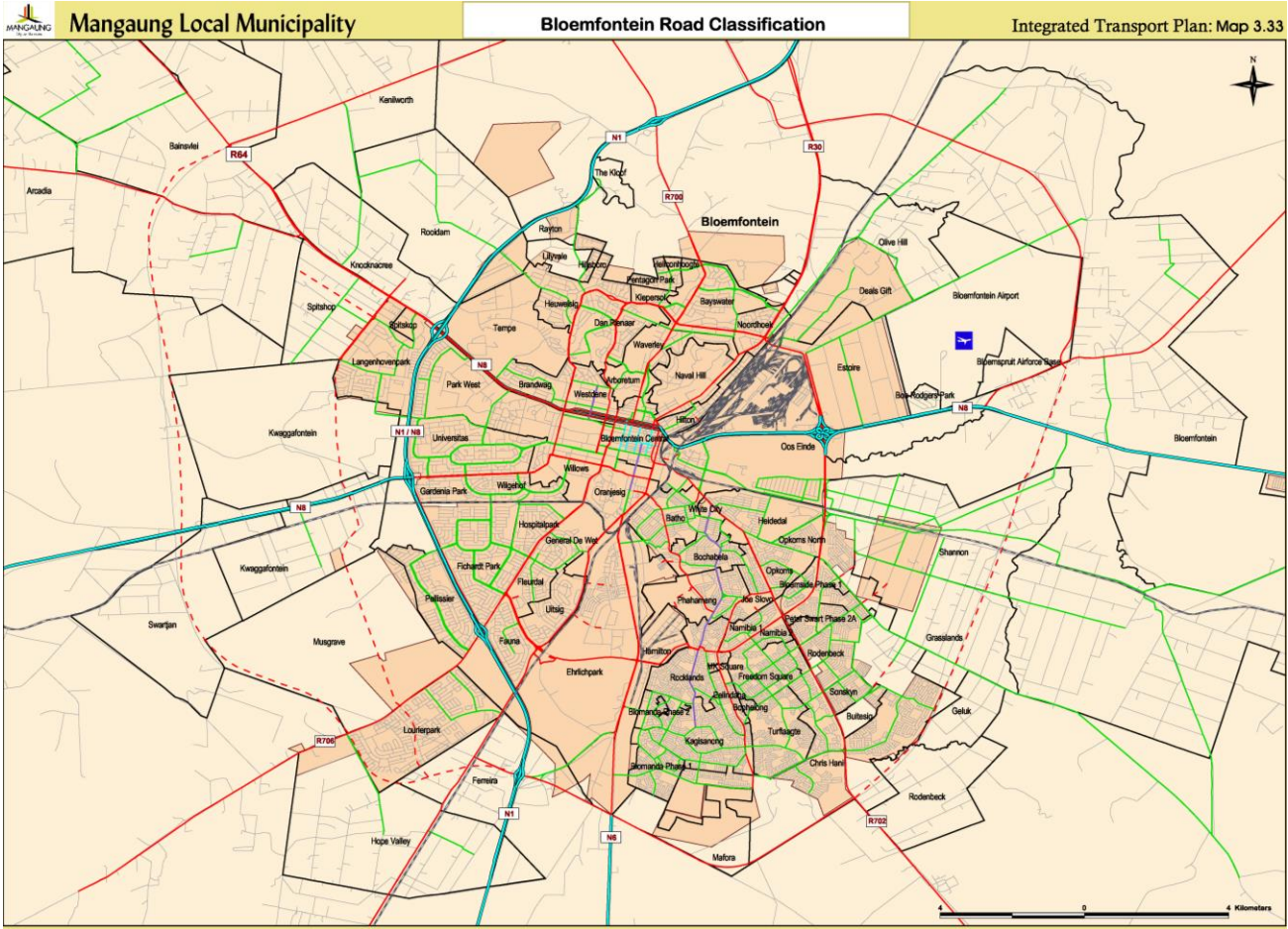


Figure 11-1: 2008 ITP Road Classification

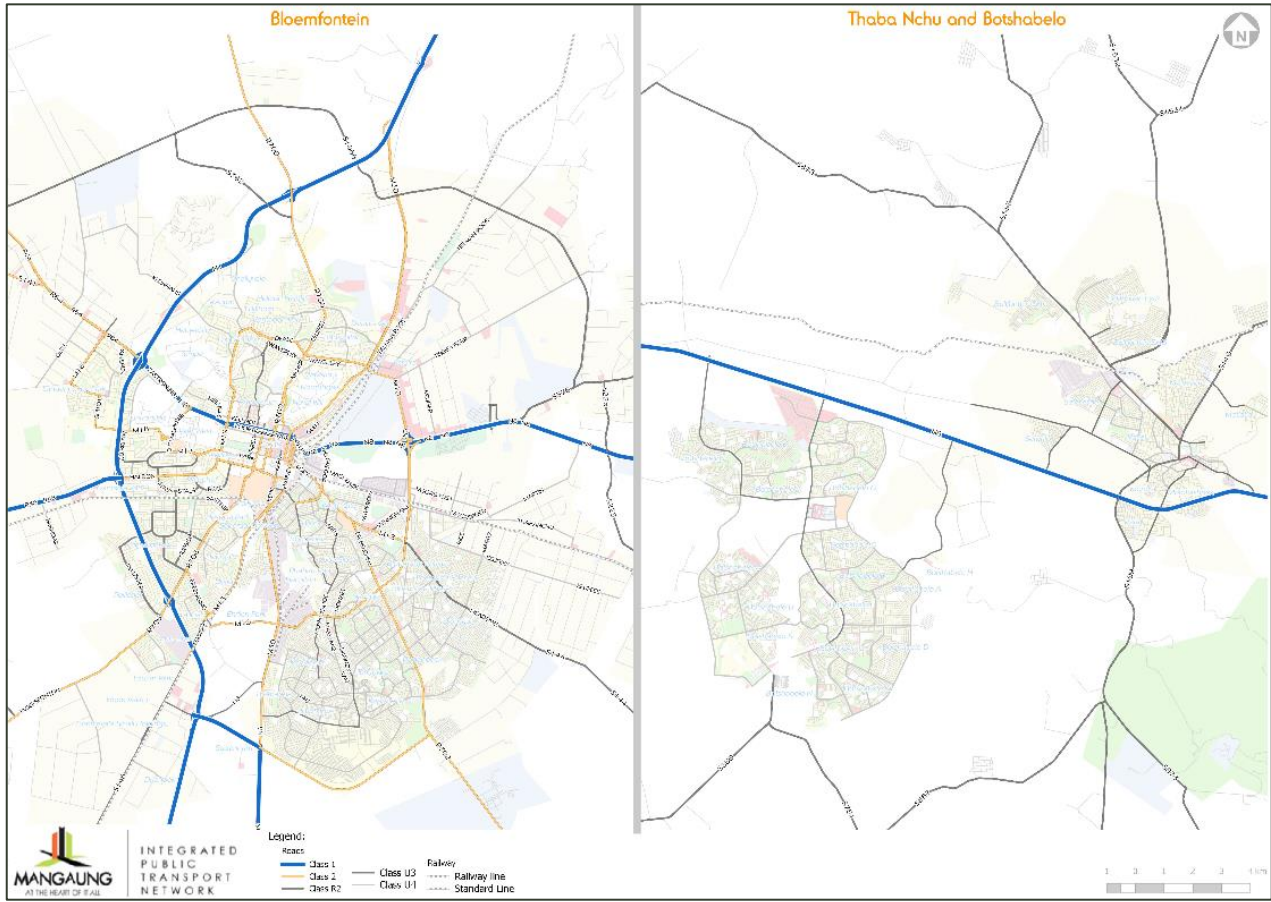


Figure 11-2: Existing Road Classification

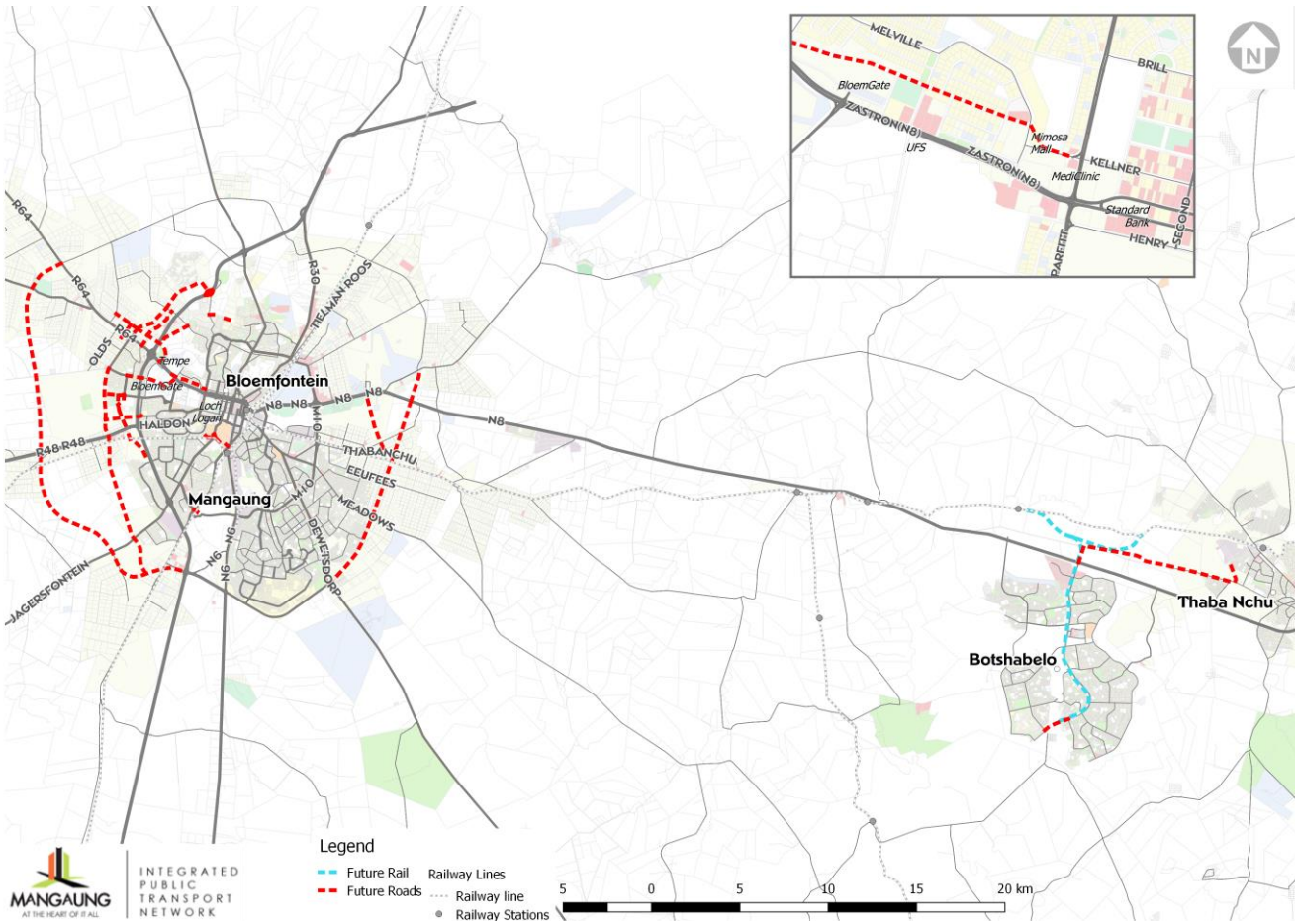


Figure 11-3: Proposed Road Network

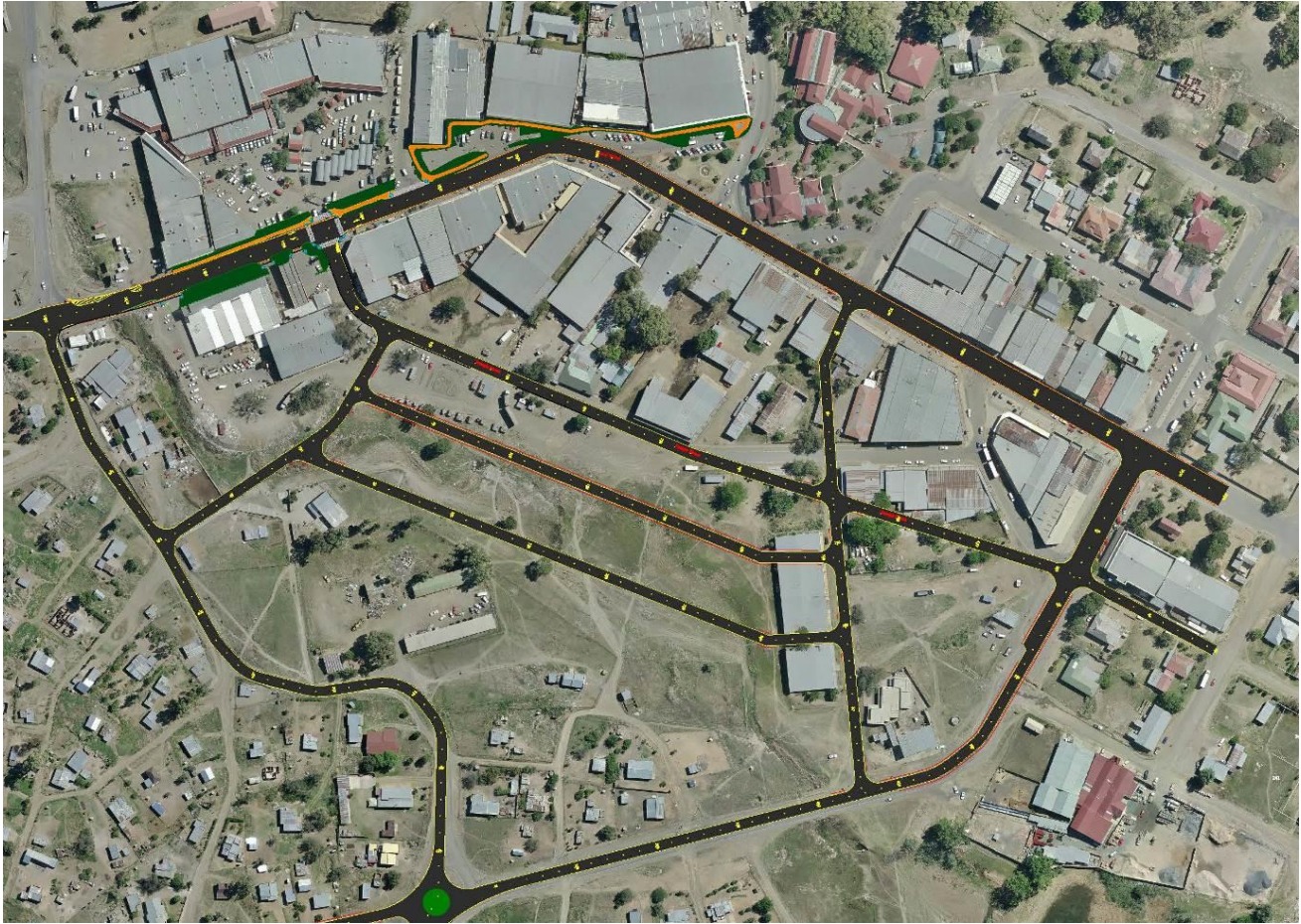


Figure 11-4: Thaba Nchu Proposed Road Network

12 Law Enforcement Status Quo

There is an acute need for dedicated and effective law enforcement to monitor and reduce the extent of illegal public transport operations in Mangaung. The law enforcement should be aimed at improving the compliance of the public transport service to specifications and regulations, as per the legal requirements i.e. operating permits, roadworthiness tests, overloading controlled, etc. The vision of the Mangaung ITP is to promote a safe and reliable public transport system and law enforcement officers should acquire additional training in the application of public transport policies and regulations.

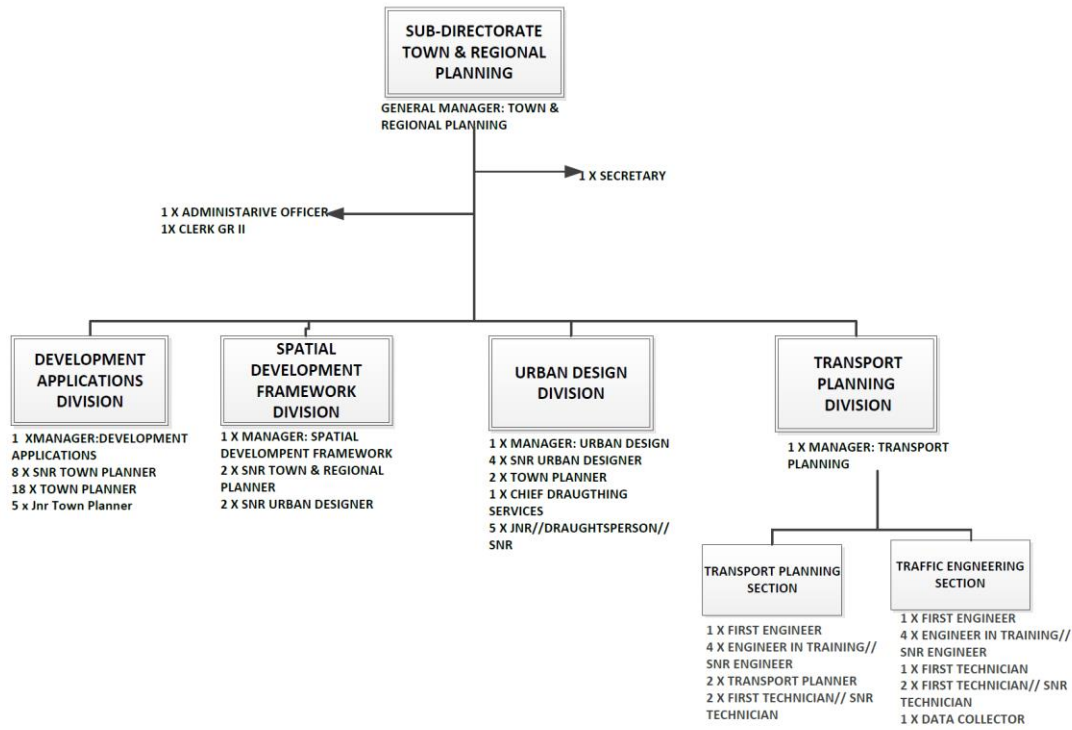
The Free State Province is responsible for the issuing of operating licences to minibus-taxi and bus operators and thus all law enforcement actions relating to public transport are coordinated by the provincial transport inspectorate. It is however suggested that any future transport law enforcement actions should be a combined effort between provincial and municipal law enforcement agencies incorporating the SAPS. The province will remain the overall coordinator of any such action.

13 Institutional Structures Status Quo

The Transport Planning Division for the city reside in the Directorate Planning, Sub-directorate Town and Regional Planning. The division comprise of Transport Planning and Traffic Engineering Sections. The total number of posts for transportation planning is presented in Diagram 13-1 and the Organisational Structures for MMM and Directorate Planning is presented in Diagram 13-2 and Diagram 13-3 respectively.

Tuesday, September 22, 2015

SUB-DIRECTORATE TOWN & REGIONAL PLANNING



ANNEXURE D.1

Diagram 13-1: Transport Planning Division Structure

Wednesday, September 21, 2016

ORGANISATIONAL STRUCTURE: MANGAUNG METRO
MUNICIPALITY

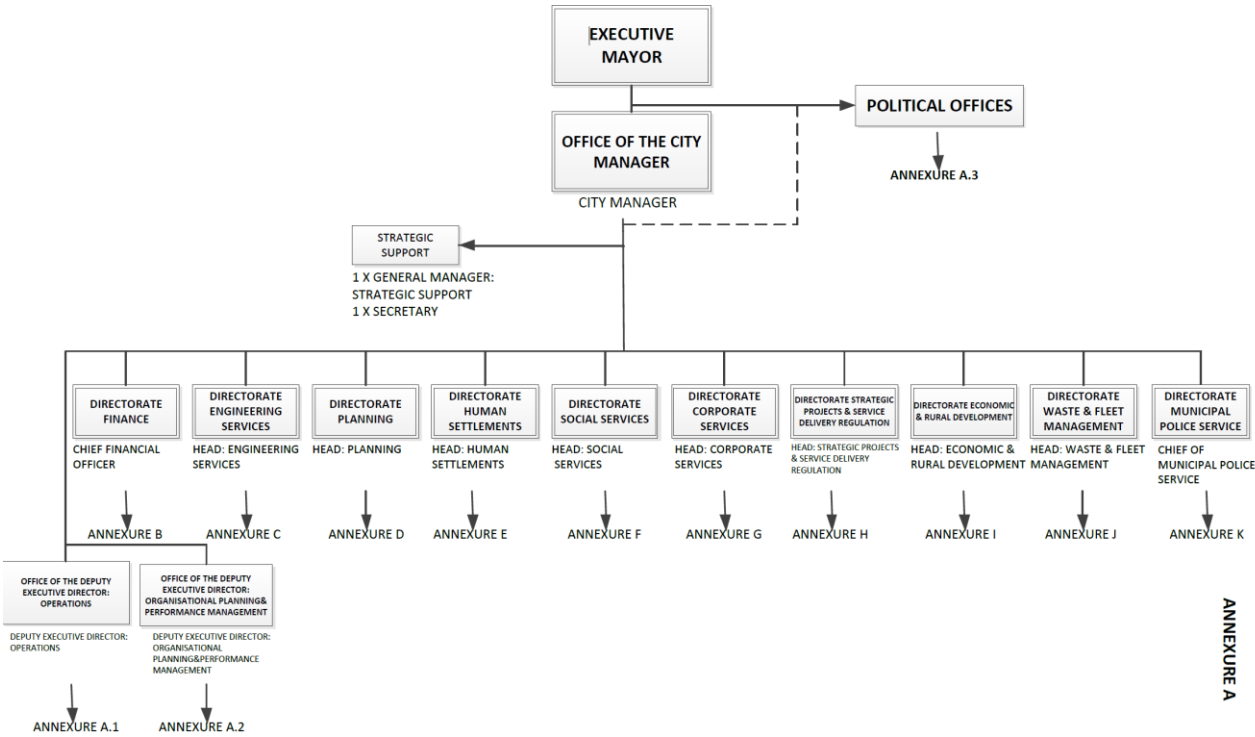


Diagram 13-2: Organisational Structure MMM

Tuesday, September 22, 2015

Approved Organisational Structure:
DIRECTORATE PLANNING

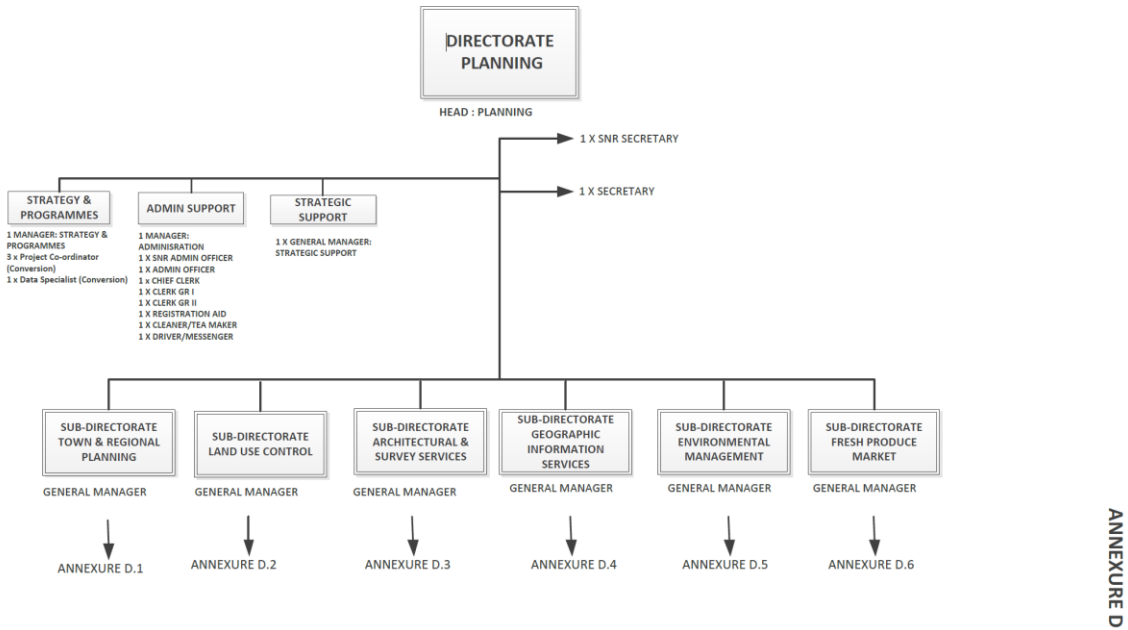


Diagram 13-3: Organisational Structure Directorate Planning

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|--|
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| Annexure E: IHS SOUTH AFRICAN ECONOMIC OUTLOOK, MARCH 2016 |
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| |
|--|
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| Annexure NN: Universal Access Strategy and Action Plan |
| Annexure OO: Industry Transition |
| Annexure PP: Legal and Compliance |
| Annexure QQ: Marketing Communications |
| Annexure RR: Stakeholder Participation |
| Annexure SS: Economic Impact |
| Annexure TT: Social Impact |
| Annexure UU: Signage and Wayfinding |
| Annexure VV: Traffic Management |
| Annexure WW: Household Travel Survey Technical Report and Results |