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<td>21</td>
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<td>Peak Hour Passenger Forecast versus current terminal capacity</td>
<td>24</td>
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</tbody>
</table>
1. GENERAL

1.1 Travel South Africa!

South Africa is one of the world's top tourist destinations, with over 6.4 million visitors in 2003 and a tourism growth-rate that is three times greater than the world average. As a result, South Africa's transportation industry is rapidly expanding its efficiency and capacity to meet rising demand.

South Africa has a well-developed internal transportation network. Travel demand for the FIFA 2010 World Cup has been thoroughly reviewed to ensure that visitors can move around the country efficiently by road, air, rail and even sea.

1.2 Transport Networks

Frequent international air connections around the globe link directly to an extensive domestic airline network serving all the venue cities. Uncongested, world-class airports make air travel a pleasure.

National and local road networks are excellent, with effective transport management across the system. Traffic densities are lower than those of most industrialised countries making road travel a comfortable, reliable and enjoyable way to see the wonders of the country.

Intercity passenger rail services span the country and are supplemented by luxury long distance services featuring the Blue Train and Rovos Rail. Most venue cities also have local rail systems serving the stadiums.

Strategically located on sea routes linking Europe, North and South America, and the Far East, South Africa's three major passenger ports are also main venues that can accommodate large passenger liners - a more leisurely way to travel.

1.3 Meeting the Growth in Transport Needs

All main airports have recently been upgraded and further work is continuing. A new high-speed rail link - linking Johannesburg International Airport with Johannesburg and Pretoria - is planned to be in operation for the Fifa 2010 World Cup.

These and many other projects demonstrate South Africa's commitment to transport infrastructure development and its ability to accommodate the staging of the FIFA 2010 World Cup.
1.4 Successful Hosting of World Events

Although every major sporting event has unique operational requirements and challenges there are certain principles of planning, transport, accreditation, security, etc. that are necessary to be in place to successfully host these major events. Fortunately, South Africa has gained significant experience and exposure to hosting mega events like the FIFA 2010 World Cup.

Through hosting of recent World Events, it has been proved that South African transport systems can successfully meet world best standards of delivery.

The South African experience of just three successful mega-events held recently in South Africa - namely the 1995 Rugby World Cup, the 2002 World Summit for Sustainable Development, and the 2003 Cricket World Cup are reviewed below.

1.4.1 1995 Rugby World Cup

South Africa hosted, with great success, the 1995 Rugby World Cup from 25 May to 24 June 1995. Although, smaller in scope than the FIFA 2010 World Cup (16 rugby teams v 32 soccer teams), important lessons and mega-event management skills were learnt. These related to the:

- Forecasting and management of airport arrivals and departures for both international and domestic air passengers;
- Development and communication of transport management plans to spectators in respect of each stadium;
- Encouraging the use of public transport to and from the stadiums;
- Event traffic management plans by metropolitan and local traffic police departments;
Establishment of a multi-disciplinary transportation task force for each World Cup City.

14.2 2002 World Summit for Sustainable Development (WSSD)

The hosting of the WSSD in Johannesburg attracted more than 40,000 delegates and 100 Heads of State. The Summit was the single biggest gathering of nations ever in South Africa. A dedicated WSSD transport system comprising some 300 buses and coaches and mini-bus taxis formed the backbone of all passenger movements between Summit venues and places of accommodation. The transport system together with extremely tight security measures ensured that the event was an absolute success.

14.3 2003 Cricket World Cup

From organizational criteria, the hosting of Cricket World Cup was considered by all stakeholders as being a resounding success. Logistically it was an ambitious event, spanning 3 countries (South Africa, Kenya and Zimbabwe), 15 host cities, 150 venues over 79 logistical days. The following world best practice measures were implemented, in terms of event logistics:

- The management of each event (venue) was planned, coordinated and monitored by a designated team responsible for the Event Management System (EMS).
- One of the goals of Cricket World Cup organizers was to leave behind a legacy of volunteering in South Africa. Over 3,000 volunteers were trained and successfully used in such tasks as ushering, manning information kiosks, VIP assistants, queue busting / organizing, magnetometer attendance, parking assistance, etc. An additional 5,000 volunteers participated in the highly rated opening ceremony.
- The frequency and scale of major events in South Africa has given rise to an eventing industry, which can support events like the 2003 Cricket World Cup, in terms of experienced organizers, support services such as catering, security, shuttle transport, audio / visual equipment, pedestrian control fencing, tourism support programmes, etc.

From a specific transport planning perspective, the following measures were achieved:

- Integration of the traffic force zone and security around each stadium. The traffic and security management plans were integrated for each venue and formed one of the cornerstones of event planning.
- Priority transport routes were planned for the CWC members, officials and cricket players to permit efficient transport between the hotels and the main event stadium on match days.
- On the World Cup match days, spectators were encouraged to use public transport to access the stadium. This strategy reduced private car travel to and from the stadium and provided more reserve capacity for priority World Cup traffic.
- Vehicular parking adjacent to the stadium was restricted to the World Cup players and officials. Most of the spectators walked to the stadium from either the nearest public transport stations / terminals or the designated remote parking areas. By maximizing spectator walking opportunities important transport management benefits achieved in particular spreading the travel demand both spatially and temporally on the transport infrastructure around the stadium. The walking
opportunities also provided special vending and carnival type areas, which helped create the special World Cup vibe.

1.5 FIFA Requirements Relating to World Cup Transport

A high quality, reliable, efficient and safe transportation system will provide for the specific needs of each category of the World Cup Family. FIFA’s requirements for official vehicles will be fully met by the Organising Association.

The FIFA requirements clearly emphasise the crucial need for an excellent transport plan that would result in a flawlessly operated transport system. The first and most lasting impression made by the host country upon teams, officials, members of the media, guests and spectators is closely bound to the performance of the transport systems.

The general guidelines given differentiate between the transport needs of the FIFA delegation, the media and the spectators. Thus, in this report a transport plan for each category of user is developed at both the national and regional venue level of planning, including a review of infrastructure, organisation and operations.

The organisation of all international travel for the FIFA delegation and the related costs (with the exception of finalist teams) will be the responsibility of FIFA, for their respective participating member countries. Once the FIFA delegation arrives in South Africa, local transport and related costs will be the responsibility of the Organising Association.
1.6 Planning Principles

The transport requirements of everyone who has a part to play in making the FIFA 2010 World Cup in South Africa successful will be meticulously reviewed and planned. During the tournament itself, the local Organising Committee will oversee the operations and management of all aspects of transport that are supplementary to the everyday operation of South Africa’s transport system.

The fundamental planning objectives are to ensure a high-quality, reliable, safe, efficient and enjoyable travelling experience to all visitors to South Africa during the FIFA 2010 World Cup.

The preparation of the World Cup Bid document has required a transportation audit to be carried out to evaluate the capacity and quality issues of international, national and local transport systems as key inputs to the FIFA 2010 World Cup.

In the technical transport review the following key issues have been assessed:

- International travel requirements;
- Venue selection from a transportation perspective;
- National transport networks and the quality and capacity issues of travel between World Cup venues;
- The operation of transport within each venue city for every category of visitor and spectator;
- Individual travelling requirements;
- The effective management of the interface between normal transport system operation and the special transport requirements during the 2006 World Cup;
- Making maximum use of existing available transport infrastructure and services to ensure a highly cost effective transport plan;
- Underscoring every element with an endorsement that the entire scheme is workable, efficient and of a very high quality.
2. TRANSPORT FOR OFFICIALS

This section describes the travel arrangements for members of the World Cup family and has been categorised into five distinct systems to deal with their unique operational and security requirements:

- FIFA Members and officials
- Players and team officials
- Referees and medical officials
- Media
- Main Sponsors and suppliers

2.1 Arrival in South Africa and Accreditation Plan

The Organising Association, working in close collaboration with the respective government authorities, shall provide preferential priority treatment for the teams and the FIFA Delegation, as well as for accredited persons, by elaborating special immigration, customs and check-in procedures.

The table below indicates the World Cup family numbers arriving through Johannesburg International Airport (JIA), the main gateway for access and accreditation.
World Cup Family Air Passenger Demand at JIA

<table>
<thead>
<tr>
<th>World Cup Family</th>
<th>Total No.</th>
<th>% at JIA</th>
<th>Passengers to JIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. FIFA members and officials</td>
<td>500</td>
<td>100%</td>
<td>500</td>
</tr>
<tr>
<td>2. Players and team officials</td>
<td>1 600</td>
<td>100%</td>
<td>1 600</td>
</tr>
<tr>
<td>3. Referees and medical officials</td>
<td>100</td>
<td>100%</td>
<td>100</td>
</tr>
<tr>
<td>4. Media</td>
<td>12 000</td>
<td>70%</td>
<td>8 400</td>
</tr>
<tr>
<td>5. Sponsors and suppliers</td>
<td>6 000</td>
<td>80%</td>
<td>4 800</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20 200</strong></td>
<td></td>
<td><strong>15 400</strong></td>
</tr>
</tbody>
</table>

Notes:
1. The media assumption is based on 30% of the media contingent being sourced from within South Africa’s borders.
2. The sponsors assumption is based on 20% of sponsors originating from South Africa.

The accreditation process will fully meet FIFA’s requirements and, being located at Johannesburg International Airport (JIA), the main point of arrival in South Africa, will ensure efficient, one-stop accreditation procedures. Directly adjacent to the proposed Accreditation Centre are parking garages which would be used as transport departure points for the World Cup family to their various areas of accommodation.

The Accreditation Centre will also be used to co-ordinate the various transport links for the different categories of the World Cup family to their host cities and accommodation centres. It will also be possible to hold welcoming ceremonies there for FIFA VIP’s and teams, making their arrival for the FIFA 2010 World Cup a memorable occasion.

2.2 Transport Performance Standards

The World Cup Family transport will operate to the highest performance standards and will strive to achieve the following goals:

- Anticipate and plan for the effect of adverse weather and/or traffic conditions on travel times;
- Minimise travel time between place of accommodation and venue to less than 30 minutes;
- No player or team official should have to wait longer than five minutes for a dedicated luxury coach;
- No accredited media member should have to wait longer than 10 minutes for a scheduled bus service from accommodation to Media Centre / Broadcast Centre / Stadium.

2.3 World Cup Family Vehicle Requirements

The Organising Association shall bear the costs of providing the following minimum number of modern vehicles, driven by chauffeurs who speak fluent English and are thoroughly familiar with the area.

Alternatively, if provided by one of the official FIFA partners, the Organising Association may use VIK (value in kind) products.
To meet the above performance criteria, the table below gives a summary of the World Cup Family vehicle requirements.

Efficient and faultless arrangements for transfer to and from airports, greeting on arrival and departure, as well as hotel welcoming will be arranged by the Organising Association.

<table>
<thead>
<tr>
<th>World Cup Family Vehicle Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of persons</strong></td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>FIFA members &amp; officials</td>
</tr>
<tr>
<td>Players and team officials</td>
</tr>
<tr>
<td>Referees &amp; medical officials</td>
</tr>
<tr>
<td>Media: Broadcast media</td>
</tr>
<tr>
<td>Print media</td>
</tr>
<tr>
<td>Sponsors &amp; suppliers</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

Teams, referees and FIFA officials will be transported punctually to every match in official vehicles, accompanied by a police escort.

### 2.4 Individual Transport Plans

#### 2.4.1 Members of FIFA, VIPS and FIFA officials

Transport will be of a luxury standard (with high security status), almost exclusively road based, but supplemented by private plane and helicopter when required. This group will travel via the World Cup priority road corridors to ensure the quickest possible travel times. Police escorts will be provided and routing will be varied in accordance with security arrangements. Personal cars and chauffeurs will be provided to certain FIFA officials, as listed by FIFA.

Dedicated minibuses (8-10 seater vehicles) will be made available to the FIFA Officials. These vehicles will satisfy the required level of mobility between the FIFA Headquarters, the Main Media Centre, the accommodation centres and the stadiums. When required for special occasions, larger coaches will be provided.

#### 2.4.2 Players and Team officials

Dedicated transport from the hotels to the competition and training venues will be provided as per FIFA requirements. The transport shall be at the permanent disposal of each team from the moment they arrive in the host country until, and including, the day of their departure.

If the teams play their matches in different venues, transport shall be provided for them at their point of departure as well as their point of arrival. Teams are entitled to the most appropriate form of transport to and from any venue and shall be given top priority whenever they arrive, depart or stopover.

Routing to the stadiums will be in accordance with the security plans. The
most appropriate transport will be provided for them, and they shall be given top priority when travelling.

### 2.4.3 Referees and Medical officials

A combination of coach, minibus and sedan vehicles will be provided to transport referees and medical officials around the major venue cities. A luggage van will also be included. Transport in the subsidiary venues and on match days will also be provided for this category.

### 2.4.4 Media

Although it is expected that many media teams will make their own travel arrangements, provision will be made for an efficient, free shuttle bus system to convey media representatives to and from each stadium and the main centres (Media Centre, International Broadcasting Centre, main accommodation, entertainment centre, etc.) within each venue on match days and non-match days.

The media bus system in the Johannesburg/Pretoria area will focus on the Main Media Centre, the International Broadcasting Centre and media accommodation on match days and non-match days. The media will be accommodated in hotels in close proximity to the Main Media Centre to facilitate short travel times. Limited transport shall also be provided for the Media, free of charge, to and from team’s training grounds on non-match days. Preferential terms shall be negotiated with public transport authorities to enable accredited Media representatives to travel between the various venue cities.

### 2.4.5 Sponsors and Suppliers

A portion of this group’s transport needs (i.e. chief executives of the main sponsors) will be catered for as part of the FIFA members and VIP’s group. Pool vehicles will be made available for the remaining persons in this group, totalling an estimated 6 000 in number, for their specific hire needs.
3. INTERNATIONAL AND REGIONAL ACCESS TO SOUTH AFRICA

3.1 Overview

A highly successful staging of the world’s most prestigious team sporting event relies on the efficient operation of the host nation’s national transport system. This section of the report describes the present degree and quality of access to and within South Africa and briefly reviews the infrastructure developments on a national scale envisaged to be undertaken by 2010.

3.1.1 Development of Transport Network

South Africa is one of the most intensively mineralised countries in the world and one of the world’s great mining power-houses, producing 20% and 75% of the world’s gold and platinum output. In addition, South Africa produces over 50 mineral commodities. The communications networks established through early European settlement and the development of the mining industry have expanded to aid the country’s industrialisation. Today, South Africa boasts the most comprehensive transportation network in Africa. Furthermore, access afforded by the country’s air, road and rail routes is comparable to that of the most highly developed countries in the world.

3.1.2 Urban Population

South Africa’s population of approximately 44.8 million (2001) is spread across 1 223 201 sq. km. The population density remains low compared with most heavily industrialised countries. Continuing urbanisation trends have resulted in the majority of the population being concentrated in the main urban areas of the country. These are, most notably, Johannesburg: 4.5 million (10%), Pretoria: 2.0 million, (5%), Cape Town: 3.0 million (7%), Durban: 2.5 million (6%), Port Elizabeth: 750 000 (2%), East London: 550 000 (1%), and Bloemfontein: 410 000 (1%) These population concentrations are the focus of regional transport connections.

3.2 Growth in South African Travel and Tourism

The natural uniqueness of many African countries is in part due to the existence of areas relatively untouched by human development. However South Africa enjoys a high frequency and connectivity of international air services and good travel access within the country. Good transport links are helping South Africa to become an increasingly popular destination.

3.2.1 Nature-Based Tourism

Travelling in South Africa can offer the opportunity of truly discovering a ‘A World in One Country’. South Africa is one of the world’s prime ecotourism (nature-based touring) destinations, especially considering its wildlife concentration of the Big Five (lion, elephant, buffalo, leopard and rhino).

There are over 100 major national parks and nature reserves. The largest, the Kruger National Park accommodates more wildlife species than any other African game sanctuary.
Magnificent scenery, the huge diversity and splendour of the natural environment, the richness provided by the many cultures that co-exist within South Africa and, of course, the integration of some of the world’s largest and best game parks all adds up to offer a breathtaking experience which continues to astound the visitor to South Africa.

3.2.2 Travel and Tourism Facts

The tourism industry (both international and national) is growing rapidly with concomitant improvements in the transport infrastructure. Grant Thornton* in their review of South African Tourism, comment “this buoyant growth, in overseas arrivals in particular, can be attributed to a number of factors, including the increasing perception of South Africa being a safe destination after the events of September 11, the effect of a weak rand against the pound and the dollar thereby making South Africa a value-for-money destination and improved capacity on inbound flights.”

The World Travel and Tourism Council (WTTC) estimates that “in South Africa travel and tourism is now a R108,5 billion industry in terms of total demand. It expects this figure to grow by 4,8% per annum between 2002 and 2012. The travel and tourism industry currently contributes 3% (or R31,1bn) of South Africa’s gross domestic product (GDP), whilst measured in its broadest form, the travel and tourism economy contributes 7,1% of South Africa’s GDP. The WTTC expects this figure to rise to 8,1% by 2012.

Even though tourism is unlikely to ever contribute more than 15% of our GDP, it is an important contributor to job creation, representing 6,9% of total employment or 1 148 000 jobs at the economy level.
In 10 years’ time the WTTC predicts that the travel and tourism economy will account for 7.9% of South Africa’s employment, therefore adding some 407 000 new jobs. The travel and tourism industry currently accounts for 3% of total employment or 493 000 jobs. The WTTC predicts that in 10 years’ time this figure will increase to 679 000 jobs or 3.4% of the total. Therefore, the South African tourism industry has considerable growth potential since it is still behind, compared with global estimates and forecasts. WTTC figures indicate that in 2012 the world travel and tourism economy will contribute 10.6% to global GDP and 8.6% to global employment.”

The above trends demonstrate that leisure tourism (including major events tourism, i.e. sporting, cultural, trade and industry) are all expanding, which in turn is having a positive effect on South African transport infrastructure - both in terms of capacity and quality of service. Thus, this section of the Report will overview the key elements of the transport plan that spectators and soccer tourists can expect to experience during their stay in South Africa.

### 3.2.3 Importance of Good Transport

The availability of high-quality transport networks within South Africa ensures that the visitor is offered the best of Africa whilst being able to rely on good connectivity. The growth in South Africa’s tourism industry is expected to continue for many years to come. Investment in national networks to accommodate future increases is obviously a key consideration.

By offering effective transport, the endless discovery of this truly remarkable country is easily available to the ever-increasing numbers of visitors. The continuing improvements and upgrading of transport systems and networks, which are reviewed in this chapter, are the key to South Africa’s tourism future.

### 3.3 Air Transport

#### 3.3.1 International Connections

**Intercontinental air connections**

Currently over 30 international airline carriers provide South Africa with excellent intercontinental connections. South Africa is also the main hub of African air travel with almost 800 flights occurring on a weekly basis.

Air travel to South Africa is very convenient with many direct flights, particularly from European destinations with the added advantage of sharing the same time zone. 75% of FIFA’s member countries are within 12 hours flying time from South Africa.

Recent figures from the Airports Company South Africa (ACSA) indicate that close to 3 million passengers move out of
Johannesburg International Airport (JIA) and Cape Town International Airport (CTIA) on international flights per annum. Smaller international airports, like Upington, offer regional flights to other African Countries.

### Total number of flights per week, arrive and depart:

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
<th>London</th>
<th>Frankfurt</th>
<th>Zurich</th>
<th>Paris</th>
<th>Amsterdam</th>
<th>Madrid</th>
<th>Hong Kong</th>
<th>Singapore</th>
<th>Perth</th>
<th>Kuala Lumpur</th>
<th>Mumbai</th>
<th>Dubai</th>
<th>Sao Paulo</th>
<th>New York</th>
<th>Buenos Aires</th>
<th>Tel Aviv</th>
<th>Tel Aviv</th>
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</thead>
<tbody>
<tr>
<td>Europe</td>
<td>249</td>
<td>105</td>
<td>28</td>
<td>28</td>
<td>26</td>
<td>21</td>
<td>11</td>
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<td>Asia and Australia</td>
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<tr>
<td>Normth and South America</td>
<td>36</td>
<td>Atlanta</td>
<td>14</td>
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<td></td>
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<td>New York</td>
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<td>Middle East</td>
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<td>Dubai</td>
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<tr>
<td>Other African</td>
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</tbody>
</table>

**Growth in International Passengers to/from South Africa**

![Graph showing growth in international passengers to/from South Africa](image-url)
International air links
Regional Air Connections

South Africa is well served by many regional routes and airline carriers. More than 20 major African carriers operate regular routes between South Africa and various African countries.

The flights into and out of South Africa number 355 and 430 per week respectively. The weekly distribution is given below:

<table>
<thead>
<tr>
<th></th>
<th>OUTBOUND</th>
<th>INBOUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>61</td>
<td>52</td>
</tr>
<tr>
<td>Tuesday</td>
<td>60</td>
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<tr>
<td>Wednesday</td>
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<tr>
<td>Saturday</td>
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</tr>
<tr>
<td>Sunday</td>
<td>68</td>
<td>46</td>
</tr>
<tr>
<td>TOTAL</td>
<td>430</td>
<td>355</td>
</tr>
</tbody>
</table>

Recent figures from the Airports Company South Africa (ACSA) indicate that close to 280 000 passengers move out of JIA and CIA on regional flights per annum.

Johannesburg International Airport (JIA) serves as the main regional airline hub covering most of the African continent and serving many African countries. These include Zimbabwe, Botswana, Tanzania, Egypt and Kenya. JIA is the busiest international airport in Africa with a sizeable portion of total flights being to and from African countries. Many flight between South Africa and destinations abroad also stop over in various African countries. Cape Town International Airport and Durban International Airport also serve destinations like Malawi and Mauritius respectively. Smaller airports like Polokwane, the Kruger International and Lanseria serve private and charter flight on a regular basis.

As African carriers into the major international airports in South Africa have extensive connection flight partnerships in place, travel to and from South Africa from Africa is very convenient.

3.3.2 Domestic Air Connections

The domestic airline system in South Africa is well developed. Recent statistics indicate that close to seven million air-passenger movements are facilitated by airports in South Africa annually.

Johannesburg, Cape Town and Durban International Airports form important domestic hub airports for regional air travel within South Africa. These three airports are interlinked with regional airports that directly serve all proposed FIFA 2010 World Cup venues.

Recent figures put the flights between larger cities in South Africa at over 1 000 per week. Four main carriers serve all domestic destinations in South Africa. These are British Airways, South African Airways / SA Airlink, Kulula.com and Nationwide Airlines.

World Cup Venues are well served by local daily flights, with all venues having an airport capable of handling regional air travellers. Pretoria, which will host some of the events is located very close to Johannesburg International Airport, and is well served by a good road network.

<table>
<thead>
<tr>
<th>Airport</th>
<th>Number of Large Carrier Domestic Flights per Week (Arrive &amp; Depart)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johannesburg</td>
<td>304</td>
</tr>
<tr>
<td>Cape Town</td>
<td>166</td>
</tr>
<tr>
<td>Durban</td>
<td>130</td>
</tr>
<tr>
<td>Other ACSA Airports*</td>
<td>395</td>
</tr>
</tbody>
</table>

*not including the privately operated regional airports
The major international airports are Johannesburg International (JIA) and Cape Town International (CIA). Connections to these two main hubs are frequent as most of the flights to smaller hubs originate and terminate at JIA and CIA.

The localities directly linked by commercial domestic passenger flights, and where World Cup Football stadiums are positioned, are shown in the Airports Map.

### Domestic Air Passenger Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1,000,000</td>
</tr>
<tr>
<td>1992</td>
<td>1,500,000</td>
</tr>
<tr>
<td>1994</td>
<td>2,000,000</td>
</tr>
<tr>
<td>1996</td>
<td>2,500,000</td>
</tr>
<tr>
<td>1998</td>
<td>3,000,000</td>
</tr>
<tr>
<td>2000</td>
<td>3,500,000</td>
</tr>
</tbody>
</table>

Domestic air routes in relation to proposed World Cup venues with travel times.
3.3.3 South Africa’s Airports

The Airports Company of South Africa (ACSA) is continually expanding and improving the airport infrastructure to meet "best world" aviation standards and to meet the growing demand as forecasted by the International Air Transport Association (IATA).

Current capacities and further planned upgrades will ensure that the busiest day passenger scenarios during the World Cup period will be managed at a high level of service. South Africa’s airports enjoy an unblemished safety record and its air traffic control systems meet the most stringent international operational and safety performance criteria.

**Determination of development needs: generic approach**

As a general principle of business The Airports Company of South Africa (ACSA) have historically followed the simple premise that growth in capacity should by and large match growth in airport traffic. In other words, additional capacity is always provided in a demand driven fashion. In simplistic terms, the derivation of airport development programming thus amounts to a translation of airport traffic forecasts into future airport infrastructure needs.

The occurrence of special events such as the potential FIFA 2010 World Cup tournament, conferences, sports tournaments, etc. normally do not lead to direct special airport developments. There are several reasons for this:

- In most cases ample spare capacity in any case is available to cope with increased demands.

- Specific demands associated with the special event most often is absorbed through normal scheduled traffic with no significant increase in overall demand.

- The operation of non-scheduled (e.g. chartered) activity is normally either quite limited by virtue of the geographical location with respect to the rest of the world or such charter activity simply takes place outside peak operational hours.

- Special operational measures (e.g. increased manpower) are put in place to deal with increased demands in the short term covering the duration of the special event.

- The infrequency of the special events does not warrant significant capital expenditure that results in facilities that are poorly utilized during all other periods.

As a general approach therefore, the accommodation of projected scheduled passenger flows for 2010 should largely be sufficient to cope with any additional demands resulting from awarding of the FIFA 2010 World Cup Bid to South Africa.

**Air Passengers During FIFA 2010 World Cup**

There will be peaked demand in international arrivals during the early stages of the competition. This will be partly balanced by airline pricing strategies and tour packaging aimed at spreading demand and making best use of capacity.

International visitors to will predominantly arrive at South Africa three International Gateway Airports. While direct international access from other airports is feasible, planning to ensure high service levels is based on arrivals via JIA, CTIA and DIA only as indicated in the table below.
**International Air Passengers During FIFA 2010 World Cup**

<table>
<thead>
<tr>
<th>International Gateway Airport</th>
<th>% of Total Arrivals</th>
<th>Arrivals/Depart. During WC*</th>
<th>International Arrival or Departure Pass. / day</th>
<th>2003 Terminal Capacity</th>
<th>Forecast 2010 Terminal Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>JIA, (Johannesburg)</td>
<td>75%</td>
<td>225 000</td>
<td>Busiest day during World Cup 2010</td>
<td>16 000</td>
<td>15 000</td>
</tr>
<tr>
<td>CTIA, (Cape Town)</td>
<td>20%</td>
<td>60 000</td>
<td>5 000</td>
<td>8 300</td>
<td>8 300 +</td>
</tr>
<tr>
<td>DIA, (Durban)</td>
<td>5%</td>
<td>15 000</td>
<td>1 000</td>
<td>1 000</td>
<td>3 000 +</td>
</tr>
</tbody>
</table>

*High-demand scenario of International passengers including World Cup travelers, business and other leisure travelers.

**Domestic Air Passengers During FIFA 2010 World Cup**

<table>
<thead>
<tr>
<th>Airport</th>
<th>Busiest day during World Cup 2010*</th>
<th>2003 Effective Terminal Capacity</th>
<th>Forecast Effective 2010 Terminal Capacity**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johannesburg</td>
<td>15 000</td>
<td>18 000</td>
<td>20 000 +</td>
</tr>
<tr>
<td>Cape Town</td>
<td>8 000</td>
<td>6 000</td>
<td>9 000 +</td>
</tr>
<tr>
<td>Durban</td>
<td>6 000</td>
<td>5 000</td>
<td>7 000 +</td>
</tr>
<tr>
<td>Port Elizabeth</td>
<td>4 000</td>
<td>2 000</td>
<td>4 500 +</td>
</tr>
<tr>
<td>Bloemfontein</td>
<td>3 000</td>
<td>2 000</td>
<td>3 000 +</td>
</tr>
</tbody>
</table>

*High-demand scenario of domestic passengers including World Cup travelers, business and other leisure travelers.

**During the 2006 World Cup more flights will operate in off-peak time increasing effective daily capacities beyond the figures indicated.

**JOHANNESBURG INTERNATIONAL AIRPORT (JIA)**

Since 1999, JIA has been extensively upgraded, with new access roads, a multi-storey parking garage and hotels. Recent completion of the new domestic terminal has resulted in the largest airport infrastructure development programme to date, with capacity for peak-hourly flow of 2500-2700 passengers. Development focus will now shift back to the International Terminal.

**JIA - Broad Capacity Development Outlook**

Following an update of the airport masterplan during 1998-9, ACSA embarked on its most extensive airport infrastructure development programme to date – that of

the new domestic terminal complex. This complex, comprising a new terminal, a redeveloped Charlie Apron, an extension to the southern terminal road system and an extension to the existing parkade became operational in the first quarter of 2003. A significant increase in capacity has been effected, in line with the strategic objectives set. The complex is capable of comfortably handling 10 million domestic passengers per annum, equivalent to a peak hourly flow of 2500-2700 passengers per hour.
JIA - Updated peak IATA forecasts vs actual current capacity

As outlined above, it is the peak volumes expected in each traffic segment that will inform future capacity needs.

The following table represents the passenger peak conditions forecast by IATA for the period 2002 plus 15 years.

<table>
<thead>
<tr>
<th>Year</th>
<th>International Departing</th>
<th>International Arriving</th>
<th>Domestic Departing</th>
<th>Domestic Arriving</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2,113</td>
<td>1,644</td>
<td>1,365</td>
<td>1,394</td>
</tr>
<tr>
<td>2007</td>
<td>2,269</td>
<td>1,738</td>
<td>1,580</td>
<td>1,415</td>
</tr>
<tr>
<td>2012</td>
<td>2,423</td>
<td>1,918</td>
<td>1,710</td>
<td>1,591</td>
</tr>
<tr>
<td>Approximate Current Hourly Capacity</td>
<td>2,200</td>
<td>1,900</td>
<td>2,700</td>
<td>2,500</td>
</tr>
</tbody>
</table>

It follows that by 2010 ample terminal capacity would be available in the domestic sector; however international terminals would become saturated shortly.

JIA - Key Anticipated Developments

Following the recent successful completion and commissioning of the new domestic terminal complex, the development focus will shift to the international segment. Further capacity development would be required to balance the existing terminal precinct west of the runway system at an annual capacity of approximately 20 million passengers, expected to be reached by 2010 at the earliest.

- Consolidation of Terminal Precinct
  - One of the first steps in the international terminal development is the provision of additional holding space and commensurate contact gate capacity through the development of an international pier adjacent to the international terminal.
  - The discontinuity between the new domestic terminal and the existing international terminal will be filled by a building extension that is earmarked to house the required international passenger capacity for 2010. This central terminal building is currently planned to double existing peak capacity and become operational in 2009.

- Gautrain
  - ACSA is working closely with the provincial government of Gauteng in the development of a high speed train link to the airport. The airport station for this link will most probably from a development point of view be integrated with the central terminal building listed above.
Apron developments
  - In response to ongoing demand increases, a new apron (Echo) for wide body aircraft will be constructed in conjunction with the international pier listed above.

Airfield system
  - To achieve a balanced capacity between airport sub-systems, it is important to maintain adequate runway capacity. Therefore, ACSA is planning to within the next couple of years construct high speed taxiway exits and runway holding bays.

In response to the fleet renewal programme of SAA and the anticipated entry into service by 2006 of the new large aircraft under development by Airbus Industrie, ACSA is continuing the upgrade of taxiway systems.

Landside parking
  - As passenger numbers continue to grow, so does the need for vehicle parking. Subsequently ACSA will develop an additional multi-storey parkade west of the terminal buildings in the next two to three years.

All of these developments will in total guarantee that the peak demands projected for 2010 can be comfortably be dealt with, with spare capacity available.

Planned developments will take overall capacity for the airport to beyond 20 million annual passengers, exceeding planned requirements for the FIFA 2010 World Cup.

Johannesburg International Airport
CAPE TOWN INTERNATIONAL AIRPORT (CTIA)

During the last 5 years, both the international arrival and departure terminals have been extensively re-developed, providing sufficient capacity for the medium term. The Domestic terminals are now the focus for development.

CTIA - Broad Capacity Development Outlook

Development of airport infrastructure at CPT continues to follow the structural framework laid down in previous Master Plans, Development Plans and other studies. Similar to other airports within the ACSA system, airport infrastructure has been developed in a demand driven fashion. As a result of this, during the last 5 years, both the international arrival and departure terminals were extensively re-developed.

As a result, this traffic sector is not expected to require any significant development during the medium term up to 2010.

Similarly to the principle of demand-driven airport development, modest domestic growth (both in volume and peak) during 2000/01 led to the domestic terminal development proposed in previous development plans being deferred.

CTIA - Updated peak IATA forecasts vs actual current capacity

As outlined above, it is the peak volumes expected in each traffic segment that will inform future capacity needs.

The following table represent the passenger peak conditions forecast by IATA for the period 2002 plus 15 years.

<table>
<thead>
<tr>
<th>Year</th>
<th>International Departing</th>
<th>International Arriving</th>
<th>Domestic Departing</th>
<th>Domestic Arriving</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>768</td>
<td>824</td>
<td>840</td>
<td>823</td>
</tr>
<tr>
<td>2007</td>
<td>976</td>
<td>993</td>
<td>1000</td>
<td>942</td>
</tr>
<tr>
<td>2012</td>
<td>1143</td>
<td>1108</td>
<td>1099</td>
<td>1033</td>
</tr>
<tr>
<td>Approximate Current Hourly Capacity</td>
<td>1200</td>
<td>1200</td>
<td>850</td>
<td>850</td>
</tr>
</tbody>
</table>

It follows that by 2010 ample terminal capacity would be available in the international sector; however domestic terminals are effectively already saturated.

CTIA - Key Anticipated Developments

- Terminal development
  - The international terminal complex has recently been redeveloped to provide sufficient medium term capacity. However, domestic peak demands have indicated that the existing domestic terminals have become largely inadequate for both current and future traffic. ACSA is well underway with the planning and design of a new domestic terminal, due for completion by about 2006. This new terminal will be located centrally in the terminal precinct and will be capable of handling in excess
of 1200 passengers per hour, either arriving or departing.

- Landside parking
  - CPT currently is experiencing very healthy growth, driven largely by the strong tourism market. Thus landside capacity is approaching saturation.
  - A project for the **rationalisation of the parking area** is currently in the planning and design stage. This will consolidate disparate pockets of parking zones into one and simultaneously increase total capacity.

- Airside
  - Based on continued growth, development of additional apron space is required. A detailed concept design has been prepared by ACSA for **additional aprons** opposite the international terminal buildings.
  - Similar to developments at JNB, the **taxiway system** will continue to be redeveloped in anticipation of changes to the aircraft fleet, most notably the new generation of large aircraft.

All of these developments will guarantee that the peak demands projected for 2010 can be comfortably dealt with, with spare capacity also being available.
DURBAN INTERNATIONAL AIRPORT (DIA)

DIA - Broad Capacity Development Outlook

Similar to other airports within the ACSA system, airport infrastructure has been developed in a demand driven fashion. As a result of this, during 1999/2000, the terminal complex was extensively re-developed. The redevelopment has resulted in a single contiguous terminal complex, with vastly improved service levels, capacity and general operations. Tied to this development, a major re-organisation of the terminal kerb and parking areas were also undertaken. In addition, a reconfiguration of the Bravo Apron resulted in increased apron flexibility and capacity. As a general statement therefore, at first glance, no significant capacity increases should be expected, at least on the medium term (i.e. 5-10 years).

The detail capacity outlook would in broad terms be influenced by the following factors:

- Peak hour traffic growth in all traffic sectors, if any.
- The development horizon to be chosen, which is in turn largely influenced by the suggested relocation of airport operations to the La Mercy site.

Given the recent increases in capacity and modest peak hour levels, it follows that the La Mercy question is the key determinant in infrastructure development planning for the 5 years up to 2009.

The decision to move to La Mercy will be taken at a high governmental/political level. In assessing this question for medium term development purposes, ACSA scrutinised the potential business factors around project management, procurement etc. In this assessment it was concluded that, even if this development meets with high level approval in 2003, and putting all other considerations aside, the likely lead time from that decision to first operations would amount to at least 6 years. This is the time that would have to be set aside for planning, procurement and design of such a large scale development. On this basis, it can therefore be concluded that Durban International Airport (DUR) would require sustained operations on the current site until at least 2010. On this basis, ACSA have for the purpose of medium term planning assumed that no move to the La Mercy would take place and the subsequent capital expenditure would be based on the premise of “business as usual”.

Nevertheless, considering the worst case, even if the decision to move to the new airport site is taken early, interim capital expenditure would be required at DUR during that lead time from decision to relocation. The purposes of such expenditure would be to sustain ongoing operations and accommodate interim capacity increases, if any are required. On this basis therefore, all capacity increases proposed for the medium term up to 2010 have been executed in a minimalist way.

DIA - Updated peak IATA forecasts vs actual current capacity

As outlined above, it is the peak volumes expected in each traffic segment that will inform future capacity needs.

The following table represent the passenger peak conditions forecast by IATA for the period 2002 plus 15 years.
Peak Hour Passenger Forecast versus current terminal capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>International</th>
<th></th>
<th>Domestic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Departing</td>
<td>Arriving</td>
<td>Departing</td>
<td>Arriving</td>
</tr>
<tr>
<td>2002</td>
<td>147</td>
<td>142</td>
<td>455</td>
<td>424</td>
</tr>
<tr>
<td>2007</td>
<td>152</td>
<td>191</td>
<td>537</td>
<td>491</td>
</tr>
<tr>
<td>2012</td>
<td>160</td>
<td>313</td>
<td>565</td>
<td>555</td>
</tr>
<tr>
<td>Approximate Capacity Hourly</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
</tr>
</tbody>
</table>

It follows that by 2010 ample terminal capacity would be available all traffic sectors, and that if no move takes place to the La Mercy site, anticipated peak traffic could be comfortably accommodated.

*DIA - Key Anticipated Developments*

Through a major terminal upgrade completed two years ago, DUR has gained sufficient capacity to handle terminal peaks for the foreseeable medium term future. Capacity development is being carefully controlled in anticipation of the government’s intention to relocate airport operations to a new facility at La Mercy.

Further landside parking developments are underway to compliment the acquired terminal capacity.

To deal with anticipated growth in aircraft movements, a re-configuration of the Alpha Apron will take place, providing a net gain of 2-3 additional aircraft parking positions.

All of these developments will in total guarantee that the peak demands projected for 2010 can be comfortably dealt with, with spare capacity available.

*NATIONAL AIRPORTS*

The ACSA airport system comprises of three international plus seven domestic airports. The latter are referred to as the “national airports” within the system and comprise the following:

- Port Elizabeth
- East London
- George
- Bloemfontein
- Kimberley
- Pilanesberg / Sun City
- Upington.

*National Airports - Traffic levels*

The airports by the end of the financial year 2002/03 experienced annual traffic levels as follows:

<table>
<thead>
<tr>
<th>Airport</th>
<th>Approximate current annual passenger traffic levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Elizabeth</td>
<td>900 000</td>
</tr>
<tr>
<td>East London</td>
<td>380 000</td>
</tr>
<tr>
<td>George</td>
<td>310 000</td>
</tr>
<tr>
<td>Bloemfontein</td>
<td>220 000</td>
</tr>
<tr>
<td>Kimberley</td>
<td>92 000</td>
</tr>
<tr>
<td>Pilanesberg</td>
<td>35 000</td>
</tr>
<tr>
<td>Upington</td>
<td>33 000</td>
</tr>
</tbody>
</table>
The overwhelming majority of this traffic is composed of domestic passengers to main centres such as Johannesburg and Cape Town.

**National Airports - Special events capability**

All of these airports (with the possible exception of Upington) have in the past been subject to sporadic increased traffic levels related to special events or severe seasonal fluctuations. These events include the Rugby World Cup, the African Soccer Finals, the Cricket World Cup, Golf tournaments, conferences, pageants etc.

In all of these cases the airports were capable to sufficiently deal with the increased demands through either of the following:

- **Adequate spare capacity being available:** This is the result of the fact that the traffic patterns in South Africa has changed significantly over the years with the effect that air traffic to/from these airports often comprise single flight events of small commuter type aircraft. In many cases, the airports were also planned and constructed around military or air force activity, which has greatly diminished, leaving spare capacity in terms of runways, taxiways, hangars, aprons etc.

- **Focused special operational efforts:** The significant capital expenditure associated with airport expansion normally does not warrant it being performed for infrequent special events. Therefore the most common practice is to put special operational measures in place for the duration of the special event. This may range from additional manpower, interim operational procedures, temporary marquees etc. As an example, during the recent Cricket World Cup (early 2003), preparations were made for more than 5 000 passengers and 13 flights being handled at Port Elizabeth Airport within 4 hours on one morning prior to a semi-final match. This equated to more than double the average daily traffic being handled in the space of a couple hours through operational measures such as aircraft parking on an inactive runway, passenger processing through special hangars etc.

Most of these airports are capable of accepting operations by wide body aircraft such as the Boeing 747 family. The taxiway and runway system is in principle from both a geometrical and pavement design point of view capable of accommodating these aircraft. The only potential restriction could be on runway length, which follows from the fuel payload intended by operators. This may vary from case to case, and could place a potential restriction on long haul range. Domestic and regional destinations would however be reached comfortably.

**National Airports - Expansion and upgrade prior to 2010**

ACSA recently concluded its application for tariff renewal, which was inclusive of a full infrastructure development plan up to 2009. In the case of the national airports, significant amounts have been budgeted for special infrastructure interventions. The overriding objectives are to sustain ongoing operations and provide capacity increases where required.

Some of these interventions include

- Complete replacement programme for instrument landing systems (coastal airports)
- Replace/upgrade fire fighting services (all airports)
PART A

FIFA 2010 World Cup

- Upgrades/refurbishments to airside pavement works (all airports)
- Upgrade and expansion to George terminal and aircraft apron
- Major refurbishment to Bloemfontein terminal
- Expansion to Upington terminal
- Upgrade to security systems and perimeter fencing (all airports)
- Expansion to East London apron.

Port Elizabeth Airport is currently undergoing a significant terminal expansion programme, which will increase capacity span to well beyond 2010. Pilanesberg Airport terminal was recently upgraded and in anticipation of increased tourism activity, the holding lounge is earmarked for another extension within the next couple of years.

A programme of expansions and upgrades at these airports will satisfy demand projects to the 2010 planning horizon.

PRIVATELY OPERATED AIRPORTS

These include:
- Lanseria
- Grand Central
- Kruger Mpumalanga International Airport
- Polokwane.

These airports will play an important role during FIFA 2010 World Cup with most capable of accepting wide body aircraft. The airports have managed increased traffic levels associated with past special events including the 1995 Rugby World Cup, the 2000 African Soccer Finals, the 2003 Cricket World Cup, Golf tournaments, conferences, official visits, etc.

During major events the airports are capable of accommodating increased demand through either of the following:
- Adequate spare capacity being available: In many cases, the airports were planned and constructed around a now greatly diminished military activity, leaving spare capacity in terms of runways, taxiways, hangars, aprons etc.
- Special operational measures: Additional manpower, interim operational procedures etc.

Lanseria Airport

Lanseria Airport is the major airport serving the private and charter flight market in Gauteng. It is located north west of Johannesburg and is the preferred base for major South African corporations including SAB, Rembrandt, Comair, Billiton, Execujet, NAC, Ross Air, Sun Air and Rovas Air and Barlows. It is also the chosen port of entry for many of the overseas corporate aircraft visiting South Africa as well as most diplomatic and foreign visiting private aircraft.

Lanseria has a comprehensive range of facilities including air traffic control, 24-hour immigration and customs service, 24 hour refuelling, extensive fire services and emergency services. It features a domestic business lounge, secure covered parking, foreign exchange, car hire and both a retail and duty free shop.
Recent figures put the daily arrivals at 200 flights per day of which 90% are private and charter flights. The airport is currently operating at 25% of its ultimate capacity. Two main domestic carriers operate out of Lanseria namely Sun Air serving Cape Town and Shanlon Airlines serving Richardsbay and the Kruger National Park.

The airport can accommodate wide bodied jets up to a Boeing 727 but is currently being upgraded to accommodate jets up to a Boeing 767 or similar aircraft. The upgrades should be completed by mid-2004.

**Kruger Mpumalanga International Airport**

The Kruger Mpumalanga International Airport (KMIA) is the major airport serving the tourism market for Mpumalanga and the Kruger National Park. The airport is located 22km east of Nelspruit, and is designated as an international airport with full customs and immigration capabilities for flights to and from international destinations.

The airport can accommodate even the largest wide-bodied aircraft. The airport is also well linked to Johannesburg with South African Express operating regular flights to and from KMIA. Recent information puts the monthly number of passenger arriving and departing at 10 000. This is expected to increase as the airport increases in popularity among tourists heading to and from this part of Mpumalanga. Already, there are some 140 scheduled and chartered regional and international flights a week.

KMI has a comprehensive range of facilities including air traffic control, 24 hour refuelling, and extensive fire services and emergency services. It features a domestic business lounge, secure covered parking, foreign exchange, car hire and both a retail and duty free shop. An ongoing programme of airport expansion is in place.

### 3.4 Road Network Review

#### 3.4.1 Road Network within South Africa

South Africa has a very well developed National Road Network, which forms the backbone of the country’s land transport system and provides excellent regional accessibility. Five million light vehicles and 1.5 million commercial vehicles use the road network every day.

In 2001, there were 7 200 km of National Roads supported by over 50 000 km of tarred Provincial Roads. In all cases the National Road network links directly into the city road networks offering fast and efficient travel between all FIFA 2010 World Cup venues.

#### 3.4.2 International Links

South Africa is directly connected by the National Road network to all its neighbouring countries; Namibia, Botswana, Zimbabwe, Mozambique, Swaziland and Lesotho. South Africa, with its well-developed road, rail, air and maritime routes, is the focus for passenger and freight transport to and from all neighbouring countries.

#### 3.4.3 Traffic Volumes

The 6.5 million vehicles that use South Africa’s roads daily represent a relatively low figure in comparison with the more prosperous countries of the world. The advantage of the relatively low traffic volumes is that there are not currently, nor are there expected to be, serious capacity issues on the roads connecting the various venue cities for the FIFA 2010 World Cup.

Furthermore, it would be practical and comfortable to use the road network as the
main means of travel between many of the venue cities. Indeed, the combination of uncongested roads and magnificent countryside attracts an increasing number of visitors to tour the country by road.

### 3.4.4 Management of the Road Network

The South African National Roads Agency (SANRAL) was formed to deliver and maintain a world-class primary road network, one of the country’s most valuable assets. There are massive on-going upgrading plans throughout the network.

To successfully manage and finance these projects, SANRAL successfully developed a number of public-private financed national toll roads.

An Intelligent Transportation System (ITS) laboratory, recently set up by the South African National Roads Agency, has been mandated to coordinate the interactive communication and management of the national road network through variable message signs, monitoring instrumentation, etc. to ensure safer and more effective use of existing infrastructure.
3.5 Intercity Rail And Bus Services

3.5.1 Rail Travel

Best use will be made of all local commuter rail services which can provide access to World Cup stadiums in Johannesburg, Pretoria, Cape Town, Durban and Port Elizabeth.

In addition South Africa has an extensive inter-city passenger rail network of over 6 000 kilometres (3 720 miles).

Rail options include a regular service, the select Premier Class and the very luxurious.

The long distance rail passenger service is known as Shosholoza Meyl. "Shosholoza" is the song of hard-working men laying railway lines and "Meyl" is a colloquial term used to describe a long distance train. This rail service currently attracts 3.2 million passengers per annum.
Luxury rail travel on the *Blue Train* and *Rovos Rail* offers some of the most spectacular and famous rail journeys in the world. These services will be tremendously popular to a select number of visitors to the FIFA 2010 World Cup.

*Premier Class* was recently introduced to offer a service between the luxury *Blue Train* and ordinary trains. This service is offered on a weekly basis on the Pretoria – Cape Town route via Johannesburg.

Charter trains will also be available as supplementary services between the key venues during the FIFA 2010 World Cup.

### 3.5.2 Bus & Coach Travel

Besides local bus services which operate in most of the venues, there are long-distance intercity bus services and luxury tour buses for hire.

All major population centres in South Africa, along with cities in neighbouring Southern African countries, are connected by regular scheduled intercity luxury coach services. The demand for these services is growing in excess of 10% per year.

The coach industry renders tour charter services and scheduled intercity services throughout South Africa and its neighbouring countries.

It is expected that a significant number of visitors to the FIFA 2010 World Cup will travel as part of organised tour groups. Travel for these groups will be with luxury and semi-luxury coaches. Most tourist services within South Africa are provided by specialised operators, many of whom own their own luxury coaches.

All the established bus companies are affiliated to the Coach Operators Association (COASA), which has the mandate to maintain world-class standards of operation and safety in this sector. The current fleet size is approximately 240 44-seater luxury vehicles, and 150 60-seater luxury and semi-luxury vehicles.
3.6 **Sea Travel**

The Cape of Good Hope is strategically placed on the sea routes linking Europe, South America, and the Far East. The three port cities selected to host FIFA 2010 World Cup matches, namely Cape Town, Durban and Port Elizabeth, have multi-user berth facilities that accommodate the largest cruise liners currently in operation.
4. TRANSPORT CONCEPT

4.1 Planning Parameters

This section of the report quantifies the key transport planning parameters upon which South Africa’s FIFA 2010 World Cup concept plan is based.

4.1.1 Spectator Travel Demand

The anticipated total number of spectators has been derived from the expected total ticket sales for the FIFA 2010 World Cup and the average number of matches each spectator will attend.

These figures generate the key travel demand parameters of international visitors, regional spectators and local spectators. It is estimated that ticket sales will total 3 million for South Africa’s FIFA 2010 World Cup and there will be on average five-match attendances per visitor.
The vast majority of international spectators will arrive by air, although some visitors from neighbouring African countries are expected to travel by road (approximately 3% of all international ticket-holding spectators). Another important element to take into account is the number of visitors expected, especially from neighbouring countries, who will not be holding tickets but will wish to participate in the atmosphere of the tournament.

The number of expected spectators and visitors for the World Cup for each grouping is as follows:

- **Local: (typically within 100 km but up to 200 km)** These local travellers are expected to make up between 30% and 40% of the total spectators at the various matches.

- **Regional: (more than 200 km)** These spectators will be South Africans who will travel - primarily by air - from their cities of residence to one or more of the match venues. Between 20 and 30% of the spectators for each match are expected to be regional.

- **International:** Will typically attend a range of matches to follow their home team and, in line with the ticketing and marketing strategy, hold between three and seven match tickets each and will stay in South Africa for an average of 16 days. Between 30 and 40% of match tickets will go to international visitors. Taking into consideration the additional visitors (family and friends) who will travel with the ticket holders, the total number of international visitors during the World Cup period is estimated to be approximately 300 000.

To estimate the number of international visitors to the FIFA 2010 World Cup, the allocation of ticket sales has been examined for the 1994 and 1998 World Cups in the USA and France respectively, as well as FIFA’s expected policy for international tickets for the FIFA 2010 World Cup. For both of the previous World Cup Tournaments around 26 to 30% of the tickets were allocated to international visitors and the percentage is expected to increase.

### 4.1.2 Overall Passenger Service Concept

The guiding principles for spectator transport will be as follows:

- to offer a convenient service through the promotion of good-quality public transport options;
- to minimise passenger travel times;
- to ensure easy access to all transport and travel services and travel information.

It is envisaged that visitors will be able to plan their World Cup schedules well in advance because of the ready access to accommodation details, travel information and excursions through travel agencies and via the Internet.

Through promotion and good planning, the aim will be to achieve a high utilisation of public transport services. This will aid rapid access to venues and contribute to a faster, pleasant overall travelling experience.
4.1.3 Utilising Existing Transport Systems

One of the findings of this Technical Transport Report is that large improvements to the transport system infrastructure are not required in order to host the FIFA 2010 World Cup in South Africa. Presently, all venue cities are developing improved public transport plans as part of national transport policy.

The World Cup transport plans will focus on making the best use of existing air, road and rail infrastructure, and supplementing air, road and rail-based passenger transport services as required, in order to offer a fast and frequent World Cup Transport Scheme between and within each venue city.

Private vehicles and the existing public transport system (which includes commuter rail, bus and taxi services) will be the main modes of travel for local spectators to the stadiums.

Car travellers will be guided towards special parking areas and park-and-ride locations to ease the traffic pressure close to the stadiums.
4.1.4 Experience in Access Control

Many of the proposed venues for the FIFA 2010 World Cup are all in use, regularly experiencing and coping with large capacity crowds. The relatively high level of public transport use in South Africa will ease the burden around stadiums on big match days. Currently, the transport operators, traffic police and security officials in charge of access to the venue stadiums deal admirably with traffic and pedestrian flows on a regular basis as well as for events on a world scale, as demonstrated during the Rugby World Cup of 1995. All the larger venues that were used for the Rugby World Cup will be key venues for the FIFA 2010 World Cup.

4.2 Airport Capacities: Busiest Days at Airports

The expected busiest days at domestic and international airport terminals during the World Cup have been reviewed and indicate that the air travel demand can be comfortably accommodated. In addition to the capacities indicated below, by increasing off-peak flights and operating late night services, the totals can be increased significantly.

Charter flights and a wide variety of light aircraft can be hired privately supplementing the scheduled flight services.

4.2.1 International Air Passengers During FIFA 2010 World Cup

There will be peaked demand in international arrivals during the early stages of the competition. This will be partly balanced by airline pricing strategies and tour packaging aimed at spreading demand to maintain high levels of service.

International visitors will predominantly arrive at South Africa’s three International Gateway Airports. While direct international access from other airports is feasible, planning to ensure high service levels is based on arrivals via Johannesburg International Airport (JIA), Cape Town International Airport (CTIA) and DIA (Durban International Airport) only as indicated in the graph below.
4.2.2 Domestic Air Passengers During FIFA 2010 World Cup

Busiest day scenarios at domestic airports during the World Cup period can also be managed at a high level of service.

![Bar chart showing Domestic Air Passengers, Selected Airports]

4.3 Transport Concept Plan: Spectators

World Cup transport plans will focus on making the best use of existing air, road and rail infrastructure, supplemented with additional services to ensure fast and efficient access between venues. Large improvements to the transport system infrastructure beyond what is already planned will not be necessary.

An overview of key concepts for spectator transport is outlined below. The supporting detailed planning has been carried out in the Transport Audit, which includes analysis of movement between key locations in each venue city by each mode of transport.

4.3.1 Providing a Quality Transport and Tourism Experience

South Africa is a primary tourist destination, delivering quality services in all aspects of travel. The South African tourism industry is growing rapidly. The World Travel and Tourism Council (WTTC) estimates that South African travel and tourism is now a US$15 billion industry in terms of total demand, and expects this figure to grow by 4.8% per annum to 2012.

Leisure tourism (including major events tourism, i.e. sporting, cultural, trade and industry) is a major part of this growth trend, with positive effects on the South African transport infrastructure, particularly in terms of capacity and the quality of service delivered.
International and domestic airline and airport capacity can satisfactorily accommodate the Event. A key principle is to promote World Cup Tour Packaging (e.g. Soccer and Game Park specials) to help spread arrivals and offer added quality; this will be an attractive feature of the FIFA 2010 World Cup.

### 4.4 Surface Travel and Access to Stadiums

In each host city a dedicated World Cup Bus Transport System will supplement the existing public transport networks, vehicle hire and courtesy vehicles to fully meet the travel demands of the international and out-of-town spectators.

An estimated 300 000 international supporters and accompanying visitors will attend the FIFA 2010 World Cup. Based on an average stay of 16 days, there would be a transport demand of approximately 150 000 international visitors at any one time to be catered for.

It is predicted that these visitors will make use of the following general travelling options within South Africa:

- Car hire
- Luxury coach (group package)
- Semi-luxury coach (charter hire)
- Micro-buses (associated with hotels, guest houses and personalised tour operators)
- Luxury trains
- No prior organised transport
- World Cup Bus System.

A review of the chosen mode of travel for international, regional and local visitors in the cities is provided in the table.

<table>
<thead>
<tr>
<th></th>
<th>International</th>
<th>Regional</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coach Travel (package)</td>
<td>30%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Car hire</td>
<td>25%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Hotel Transport</td>
<td>10%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Private /local/public transport services</td>
<td>10%</td>
<td>75%</td>
<td>95%</td>
</tr>
<tr>
<td>World Cup Bus &amp; Coach system</td>
<td>25%</td>
<td>10%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Many regional spectators will travel to the venue cities by road, and will have their own transport within the venue city. A significant number will travel by air and make use of car hire as well as the dedicated World Cup Bus System and public transport.

The local supporters will, in the main, make use of the local public transport system and their own private vehicles.

Each transport mode and category of spectator travel and the expected vehicle requirements is briefly reviewed below:
4.4.1 Transport Corridors for Inland and Coastal Venues

World Cup Transport Corridors will be established to effectively:

- Integrate venues and aid the orientation of visitors;
- Focus services and operations along dedicated routes;
- Facilitate the availability of service and tourist information;
- Ensure a high security presence and efficient traffic operations and control.

Within venue cities, local access corridors will link airports, main accommodation centres, stadiums, hotel hubs and other essential attractions.

Road, rail and air travel will be the main means of travel between all Inland Venues and stadiums. Johannesburg and Pretoria will be the main accommodation base with many international visitors travelling to the other Inland Venues via road, rail and air. Special rail and coach services will operate between these venues.

The Coastal Venues of Cape Town, Durban and Port Elizabeth are equally well linked by National Roads and rail services but distances will make air travel a favoured option, thus ensuring no venues are more than two hours apart.
Within each venue city the best access routes will be established to link main accommodation centres, media centres and the local airport to the stadiums and other attractions. The identification and promotion of these routes will ensure that visitors become orientated quickly within each host city, as signing will be consistent across the country. Main centres, travel agents and Internet links will be able to supply information on the corridors with regard to transport series, journey times and frequencies.

In addition, these corridors will have high-level traffic control, emergency response and active security measures, co-ordinated through each city’s Metropolitan Operations Centre (MOC).

Frequent bus services will be available along main corridors. For motorists, the routes will be clearly marked and route-finding aids will guide motorists to main parking areas. Park-and-ride locations will be focused on these local access corridors.

Where possible, public transport vehicles will operate on a priority basis along these corridors, with traffic management techniques being used to control access for all other vehicles. Where appropriate, dedicated public transport lanes will be designated. Every transport stop along these routes will be clearly marked and provided with key local information relevant to the World Cup. In each venue city the actual planning and operation of transport services will be managed in detail on a local level between the Local Organising Committee, the local transport authority and the contracted service providers.
4.4.2 Access to Stadiums

Strict access control arrangements will be enforced around each stadium. To minimise traffic conflict and promote a pleasant environment, an outer cordon will be set up to prohibit all non-residents. Private cars will be directed towards park-and-ride sites to interchange with public transport vehicles. Selected public transport vehicles will be allowed within the outer cordon. Within this area licensed vending, and entertainment will take place in designated areas. Public transport passenger terminals will be located within this area. A second inner cordon will form the ticket-holder only access.
4.4.3 Travel Demand Management

To optimise use of vehicle fleets, limit use of road space and promote easy access, fixture schedules will where practical take account of transport issues. For this purpose venues have been grouped according to their location.

To ensure the maximum availability of public transport vehicles and short journey times by road, kick-off times will be arranged wherever possible to fall within off-peak commuter periods, subject to the broader tournament principles and the need to schedule according to world-wide peak TV viewing times.

To ease the general background level of traffic the following Travel Demand Measures will be encouraged:

- Encouraging vacation taking during the World Cup period;
- Flexi-time working and work-from-home where possible;
- Use of public transport and park-and-ride options;
- Discouraging non-ticket holders from travelling near to World Cup venues by effective traffic management and the promotion of the local World-Cup Extra-Time Centres.

Each World Cup venue city will set up World Cup “Extra-Time Centres”: Besides acting as the main meeting and World Cup entertainment places, they will be the focal point where visitors can access any information they require on transport, accommodation, local attractions and excursions, etc. Some Extra-Time Centres will also act as “virtual stadiums” with World Cup games being transmitted on public big screens helping to divert some of the non-ticket holders away from the stadiums and ease traffic management.

The transport systems for spectators will be marketed and promoted well in advance of the tournament. Travel passes will be available either as separately-paid or purchased as part of a tour package.
Full details of local public transport operations, car hire and dedicated spectator transport systems will be available at main information points along World Cup Local Access Corridors, as well as on bus routes and in hotels and accommodation centres. Information will be made available in brochure form and will also be accessible over the Internet.

4.4.4 Transport Connections and Spectator Transport Systems

In addition to making use of all regular services available, including local rail and bus services as appropriate, the following two-level transport system will operate:

A dedicated World Cup Bus System, operating in the venue cities for the duration of the tournament to provide visitors with quick, easy-to-access, safe and reliable links between hotels, airports, stadiums, World Cup “Extra-Time” Centres and other main attractions. This system will supplement the existing local transportation system. It is forecast that approximately 700 modern buses, with an easily identifiable livery, will support this system. The largest such operation will be within Johannesburg and Pretoria with buses linking the airport with accommodation, football stadiums and entertainment centres within each city. (The specification of vehicle numbers and operating requirements for such a bus system is reviewed for the main centre of Johannesburg and Pretoria in Chapter 5)

Vehicles to be used for the World Cup spectator bus system will be of a modern standard and have an easily identifiable livery.

A World Cup Coach System providing longer distance links between each of the Inland Venues, connecting the Johannesburg/Pretoria hub with the surrounding venues of Bloemfontein, Kimberley, Orkney, Rustenburg and Polokwane, and also linking the Coastal Venues. About 250 modern coaches will be dedicated as inter-venue transport supporting other travel modes.

The most comprehensive such system will operate between the Highveld Hub venues.

4.4.5 Marketing of Local Transport and Information for Transport Planning

A series of weekly Travel Passes will be on sale during the World Cup period. The travel pass will permit users to access all public transport modes that operate in the relevant Metropolitan Transport Areas.

Travel Passes will be competitively priced to encourage high public transport usage. It will be important to promote the bus service by strong branding and advertising.

Internationals and regional visitors are also expected to make some use of the existing local public transport services. Special information will be provided to guide visitors on which services to use and on service times, etc.
Examples of travel information from the Rugby World Cup
Car Hire

Many international visitors who wish to combine attending World Cup matches with independent travel around South Africa will regard car hire as the most appropriate method of travel. Within this category there may be some demand for chauffeur-driven cars for people unfamiliar with the local area and who prefer the ease of being driven, especially within cities.

There are currently 23 000 hire cars within South Africa. The industry forecasts that this figure will be around 32 000 vehicles in 2010, which is more than sufficient to meet the forecasted demand. If required, hire-car companies could delay the selling of their exiting fleets when they receive new vehicles until after the FIFA 2010 World Cup. This would increase the fleet to more than 50 000 cars.

Because of the number of people who will travel on group hire packages and who will not need a car within the cities, and because of the strong marketing around a local public transport system, the number of hire cars available is expected to be more than adequate to meet the demand. The expected number of vehicles available indicates that over 30% of all arrivals could hire cars for the full duration of the visit or 60% of all arrivals for an average of one week of their stay. Therefore there will be sufficient capacity in the car hire market to meet the expected demands.
Charter Coach and Midi-Bus Hire

This is expected to be a significant sector of the travel market. International spectators, who prefer to travel on a pre-arranged tour basis, with excursions built around their travel to matches, will expect luxury-standard coaches for long-distance travel. For short trips of up to two hours, semi-luxury vehicle standards will be adequate. For some visitors a vehicle will be hired for the entire stay, while for others the vehicle will be made available at predetermined times including travel to and from matches. The assumptions made are that across all venues, approximately 30% of all visitors will use charter coaches and the various midi-buses available for hire as the main means of travel.

Hotel/Guest House - Own Transport

Many hotels and guest houses own their own micro-buses or regularly arrange with a private operator for the hire of a vehicle with driver for their guests. This market is particularly large in the coastal locations and caters for the day-tripper tourist excursions. It is expected that this type of contract hire will be very popular during the World Cup, providing for up to 10% of all international spectator travel needs.

Visitors Staying with Family and Friends

Of all current international leisure trips made to South Africa, over 10% are for the purpose of visiting family and friends. It is expected that this total during the World Cup will be approximately 10%. Virtually all of this group will have their own transport arranged with their hosts.

Metered taxi services also have an important role in satisfying international visitor travel needs, especially those visitors who require a more personalised transport service.

4.4.6 Using the Gautrain during the FIFA 2010 World Cup

The Gautrain is the rapid rail link, planned between Pretoria and Johannesburg and Sandton and the Johannesburg International Airport. The Johannesburg-Tshwane spine will commence at Johannesburg Park Station, with stations at Rosebank, Sandton, Marlboro, Midrand, Centurion, Pretoria and Hatfield. The Sandton-JIA link will commence at Sandton, with stations at Marlboro, Rhodesfield and JIA. The Gautrain is planned to provide an efficient rail service, equivalent to international standards and is one of the Gauteng Province’s Blue IQ initiatives to invest in economic infrastructure development in the areas of tourism, technology and transport.

All sections of the Gautrain are scheduled to be in operation by the end of 2009.

The Gautrain will offer three important services to people in Gauteng during the World Cup. Firstly, it will provide a safe, comfortable, fast and reliable service for spectators to the games. Secondly, it would provide an acceptable form of public transport to tourists visiting and travelling in and between Pretoria and Johannesburg during World Cup period. Thirdly, the link between Sandton and the JIA will provide an important and convenient transport service for visitors arriving by international or domestic flights.

During the World Cup games the Gautrain will allow for the efficient movement of large volumes of people. Looking at the three stadiums in Gauteng and their location relative to the Gautrain Stations the following are the likely ways in which spectators using
the Gautrain, would be able to reach the stadiums:

- **Ellispark** – A special shuttle service could be operated between the stadium and Johannesburg Park Station. The proposed Johannesburg Station is located above the existing long distance coach terminus of Park Station, in the Johannesburg CBD. The shuttle service could also serve spectators arriving by coach from other parts of South Africa, e.g. Cape Town.

- **Loftus Versfeld** – The Hatfield Gautrain Station will be within close walking distance from the stadium.

- **FNB Stadium** – There is an existing rail commuter station at Nasrec, which means that a direct rail link between the Gautrain Park Station and the Nasrec Station exists and people can transfer with ease between the Gautrain and the existing commuter rail. However at this stage the level of service provided by the existing rail network is probably not acceptable, but it is envisaged that the rail service would be improved and that it would become a feasible option for providing transport for a large number of people.

Getting to the stations, spectators would be able to make use of four modes of travel, i.e.

- people in the vicinity of the stations could walk to the station,
- people can make use of their own / hired transport to travel to and park at the stations (park & ride) where safe parking and appropriate facilities will be provided,
- people could make use of existing public transport services to travel to the station,
- there will also be feeder and distribution services operating on dedicated routes which can be used to travel to stations.
5. TRANSPORT MANAGEMENT SYSTEMS

A state-of-the-art computerised management system will be used to organise transport for the FIFA 2010 World Cup. The transport management system will provide a "real-time" interface with the other systems for the event's overall operations and management.

Most of the larger cities have metropolitan operations centres (MOC's), ensuring the coordination of day-to-day metro operations as well as emergency situations. The primary role of the MOC's will be to gather and process information that could adversely affect efficient and safe metropolitan operations during the whole FIFA 2010 World Cup period.

The MOCs will co-ordinate many functions relevant to the successful staging of the World Cup in each venue. The role and function of the MOCs would be to:

- Gather information from every functional area as the basis for the co-ordination and integration of all activities/events affecting the day-to-day operation of the metropolitan area.
- Analyse and process this information and channel it to the affected functional areas. In this way every functional area will constantly be adjusting its operation based on the most up-to-date information.
- Assemble all information affecting the operation of transport in the metropolitan area(s).
- Analyse this information on a real-time basis and channel it to the appropriate functional area.
- Make this information available to the public, providing them with a real-time picture of the status of the operation of the metropolitan area. This information should include traffic conditions (points of congestion, incident locations, construction work); travel information (bus, rail and airport schedules); weather conditions and so on.
- Make decisions on information received and initiate appropriate operational plans.
Thus, in summary, the primary role and function of the MOCs will be to gather and process information that can adversely affect efficient and safe metropolitan operations and to take decisive co-ordinated actions – through the responsible functional authorities – to restore appropriate operating conditions expeditiously. The establishment of MOCs will have enormous benefits for hosting mega events like the FIFA 2010 World Cup.

During the period of the Fifa 2010 World Cup, the interface between the World Cup service functions and the host city will be co-ordinated by the relevant MOC. The MOC itself will interface with the following World Cup activities:

- Special responsibility for metropolitan routing and security for the FIFA members and VIPs, players and team officials between hotels and venues on match days.
- Spectator transport systems, including the management of temporary park-and-ride facilities, passenger capacity control at rail stations and transport interchanges, guidance signage to venues, and special transport for the physically challenged.
- To ensure at each World Cup venue that effective and safe approach/departure access is maintained at all times in the immediate environs of the venue. The co-ordination and designation of specific and alternative routes for the World Cup family, emergency services, goods and waste removal, etc. for each World Cup venue...
stadium will be monitored and co-ordinated through the relevant MOC.

- Police and security staff, by being provided with real-time information, will be able to ensure effective crowd control measures in the major areas of attraction that are associated with hosting the Fifa 2010 World Cup.

The Metropolitan Operations Centres will thus provide the umbrella organisation for integrating a range of metropolitan services that are necessary for the efficient hosting of a mega event like the Fifa 2010 World Cup.