Draft Southern Baseline and Analysis Report 2019

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A. STATE OF THE BUILT ENVIRONMENT
1 INTRODUCTION

1.1 Awaiting input

2 LAND USE AND DEVELOPMENT TRENDS

Whilst the District and component areas of South Peninsula are often referred to in broad terms, the area includes a wide diversity of settlement patterns reflecting their historical establishment (a lot of the district was developed in some way over a century ago) and settlement influences during this time. These influences were originally associated with a north-south link that developed between the CBD and Muizenberg and Simons Town, then with links to agricultural / resource areas such as Constantia, Tokai, Hout Bay and Noordhoek, and finally with links to amenity areas such as Kommetjie, Llandudno, and Bishopscourt.

2.1 Residential

In terms of residential development, the area reflects, on the one hand, a range of established residential neighbourhoods to the west of the railway line. Most of these constitute large properties (low density / <15dw/ha) which with expansion away from the rail line are increasingly low density and car dependent areas.

On the other hand, the areas to the east of the rail line are generally newer, of higher density, lower value, and many instances associated with the re-location of communities forcefully removed from more established areas to the west of the rail line.

2.1.1 Key dynamics and trends

The area does reflect some dynamism in terms of urban development pressure linked to residential development relating to:

- Continuing pressure for market related development into high amenity, but also environmentally sensitive, areas.
  - This includes foremostly coastal and mountain slope areas. As this has tended to occur in newer development areas at greater distance from CBD / work and other opportunity areas, allied with deteriorating public transport (primarily the rail line) these developments have remained highly dependent on private mobility, which has been reflected in increasing road congestion levels. This peripheral urban expansion has in recent years been moderated by (from 2001) a definitive urban edge and also constrained services provision (e.g. in the Far South along Kommetjie Road).

- An apparent decrease in population associated with increasing development in some areas.
  - This is attributable to a significant decrease in average household size associated with smaller planned families, increasing divorces and single parent families, older marriage ages and increasing single, which is reflected in smaller properties and building units.

- Steadily increasing pressure for lower income development in well located areas (of employment opportunity).
  - As these are generally high amenity and high income areas (i.e. high property price areas – see s2 in Property Market chapter) access to these areas is highly constrained and increasingly only by illegal means in areas where this is practically possible. Thus rather than land invasion in new greenfields areas (which are generally quickly addressed) this is constrained to existing low income areas including Imizamo Yethu, Hangberg, Westlake, and Masiphumelele through in-migration into backyard shacks or incremental expansion of informal settlement component areas thereof. This has resulted in massive internal growth of these areas and massive associated overcrowding and service incapacity and management problems, such that these areas are the pre- eminent urban crisis areas within the district. Red Hill informal settlement is an outlier with similar issues but quite different physical and social context.
An increasing securitisation of residential areas, through gated security villages, orientation of development away from (perceived to be dangerous) open spaces, and walling and gating of properties.

- This has resulted in public spaces (roadways, river corridors and open spaces) becoming more impersonal, with lower ‘community ownership’, and ironically more dangerous (and un-kept).

- The ‘gentrification’ of well located areas to the east of the railway line.
  - This has resulted as property price pressure has increased to the west of the line (eg. Rondebosch, Rondebosch East, Lynfare).

- The booming demand for student residential accommodation near to UCT.
  - This has resulted in substantial development of student orientated flats, and general increase in property values in and around the Rondebosch, Mowbray and to a lesser extent Claremont CBDs. This has led to some unhappiness by existing residents who perceive developments to be excessive in relation to associated negative impacts such as parking in streets and impact on character.

- Recent steep increase in development of flats and town-houses, now comprising approx 60% of all residential development applications.

- Small-scale subdivisions and limited cases of change in land use in high-income high-amenity areas.
  - This includes for retirement villages, small security estates, restaurants and small retail developments. This has led to some unhappiness by existing residents who perceive developments to be excessive in relation to associated negative impacts on character.

With regard to these trends, the availability of land to accommodate new settlement in the area is a severe constraint. There are limited extensive areas suitable for new greenfield development, most of which are in areas some distance from daily opportunities (work, education etc.) and public transport. This is allied with high unit development costs (vis-à-vis tenure type and compatible design interfaces) as well as substantial local community opposition to the development in such areas.

### 2.1.2 Second dwellings

With the inclusion of second dwellings in the single residential zone as an additional use right, the process for obtaining such rights were thus streamlined. The take-up of such rights are, however, still subject to title deed restrictions in particularly the older areas.

The exercising this ‘as of right’ (subject to building plan approval) second dwelling has been varied across the district, but generally not yet to any great degree. This is dependent on economic circumstances of landowners (linked to the broader state of the economy) as well as to individual site-specific circumstances (re- location of the primary erf on the property and available room for a second dwelling or subdivision.

Whereas opposition to second dwellings by local communities is not possible, a significant issue in some more affluent areas is community opposition, usually on the grounds of protecting urban character, to subdivision instead of a second dwelling on the basis that this opens the opportunity for the resultant two erven to each have a second dwelling as of right. However, evidence (re-land use applications) indicates landowners often prefer selling off a subdivided property (on which another landowner could build a house) rather than have a second dwelling or sectional title property. It is not clear yet how significant an issue this is or will be (i.e. how many subdivisions will result in second dwellings on either or both sub-divided properties) suffice to say that it is an issue that may need addressing in the district plan review process. This could, for example, include that within certain landscape character areas if a property is subdivided then second dwellings are not permitted as of right.

A unique area where second dwellings are popular and commonplace is in low income settlements where landowners, ironically on far smaller properties, construct one or often more
second dwelling(s). This may include a formal structure or informal backyard shack and may or may not include formal application and approval. Clearly this is an area that into the future requires greater monitoring and regulation, and should be addressed in a new district SDF.

2.2 Industrial

These areas, comprising principally Retreat (Main Road), Elfindale, Access Park, Retreat Road, and Lekkerwater Road and Fish Eagle Park industrial areas, have for many years been subject to increasing pressure for wholesale retailing (factory shops). More recently this has also begun to include pressure for community and residential uses (e.g. in Main Road Retreat/Tokai).

This is associated with a continuing general move away from traditional industrial uses to light industrial and service uses in well located and higher property value areas. This, along with better located new industrial land east of this (e.g. Lansdowne industrial area) arguably accounts for why the Retreat Road industrial area, less well located (in the Southern district context) and with lower property value, has to date remained largely vacant.

Nevertheless, there is limited industrial land in the district generally, and a need for a certain amount to remain distributed across the district into the future, particularly with continuing intensification and transformation of urban nodes and corridors and the ‘forcing out’ of less compatible or inappropriate uses such as car service garages and tyre replacement centres from these areas. The transformation of industrial uses to residential areas in these areas is likely to compromise this and therefore such people focused uses require careful consideration in these areas.

The low amount of industrial space in the district (comparative to other areas of the city), and the steady transformation thereof, impacts significantly on the relative lack of employment opportunities in the district, and the resultant need for (‘blue collar workers’) to travel to other parts of the metro. The zoned but as yet largely undeveloped industrial area on Retreat Main Road is a noticeable exception and anomaly here.

2.3 Retail and Office

In terms of formal economic activity, most investment has been in the form of retail development in proximity to key public transport interchanges associated with rail. This has been primarily concentrated in the Claremont CBD and to a lesser extent in the Retreat – Tokai urban node. A notable exception to this has been the continued lagging of the Wynberg CBD area as a significant growth area, despite its inherent potential. Investment levels in retail and office have also generally lagged in Mowbray, Rondebosch and Plumstead, and also further south in Muizenberg and Fish Hoek CBD. In recent decades commercial nodes developed away from the rail line (Constantia, Blue Route, Kenilworth centre and Access Park and Long Beach) and these have continued to be highly attractive development areas.

There has been continued pressure for expansion / relocation of small-scale businesses into residential areas. This may in part be related to the muted economic conditions of the last decade where such businesses become too big to operate out of residential homes and seek cheap property options within residential areas rather than locating in formal business areas. This is also attributable to roll-out of higher-speed internet & increasing road congestion. This development has tended to seek location on primary local area roads.

As a result of the above there has been little new retail or office development in identified key urban node areas such as Wynberg, Mowbray, Rondebosch, Retreat, and Fish Hoek.

2.4 Mixed Use
Mixed use development has been slowly increasing in CBD areas across the district, although largely confined to the Main Road corridor. This is primarily concentrated in CBD areas close to UCT where increased demand for student accommodation has driven a development response for flats in the Rondebosch, Mowbray and Claremont CBDs.

The extent of mixed use development remains subject to demand and, apart from student accommodation, is comparatively limited across the district. Significant future mixed use development opportunities are the shopping mall complexes along the main public transport routes (i.e. Main Road corridor, Klipfontein corridor, and Imam Haron corridor) where residential tower blocks could occur. This includes malls at Claremont, Kenilworth Centre, Wynberg, Plumstead, Retreat, Muizenberg etc. The only areas where this has so far occurred is in Rondebosch (in progress) and planning for similar also in Rondebosch and in Mowbray. This opportunity is, however, constrained by low economic growth conditions and low growth property market.

Some additional mixed use development has been slowly occurring in other lower intensity urban areas to meet changing demand patterns, and to an extent greater densification. This includes the growth of more localised small convenience shops (Pick ‘n Pays etc) such as in Rosmead Avenue, Kenilworth CBD, Constantia (on the old dump site), and the old Marine Oil site near Simon’s Town.

There is continuing pressure in the district for small-scale business encroachment or intrusion into residential areas. Some of this includes potentially non-conforming activities (such as professional practices in flats, design and decoration practices in houses), as well as formal applications for business use premises (e.g. medical practices), offices and small office parks, security and emergency services businesses, rehab centres, and restaurants and tearooms. This has been considered appropriate in some residential contexts but not in others, and dependent on type and nature of the activity in relation to this. This has resulted in one-off individual land use changes within residential areas (e.g. offices in Chapmans Peak Estate, or some combined semi-transformation of an area (e.g. Chelsea Village). This is often controversial, but not necessarily inappropriate.

In recent years this has included a more explicit focus on active ground floors (e.g. commercial), quality street interfaces and environments, and residential surveillance over the street(s). In the corridor areas between the nodes redevelopment has been limited to residential use and included low-rise flats and town-houses. Although this has in many cases involved rezoning, in many others the historical zoning has precluded this being necessary. Clearly, however, this is an area of land use activity and management which needs regular monitoring, reassessment and review.

2.5 Tourism

The tourism sector forms a considerable and continually growing part of the local economy in this district. This is based on the bio-physical attributes (mountains, sea etc.) of the district, as well as related facilities (e.g. harbours & slipways, scenic routes and walking trails). This is also based on the developed cultural heritage (e.g. winelands & cultural landscapes, historical precincts such as Simons Town & Kalk Bay). More recently the formalisation of the TMNP is opening up and realising significant further opportunities. Much scope for expansion still exists in this sector. Another significant opportunity are established but under-performing destination areas (e.g. Muizenberg & Fish Hoek beachfronts)

The district is arguably has a greater competitive advantage in this sector than any other district, with the exception of the Table Bay district. This needs greater consideration in how to best leverage this opportunity whilst, importantly, not compromising into the long term on the protection and enhancement of the natural and cultural environments responsible for these opportunities.
2.6 Agricultural land

Agricultural land in the district for active farming is now very limited, and includes only a few active farms. This is attributable to massive loss of agricultural areas to urban expansion over the last 30 - 100 years, as well as to the fact that much land with an agricultural zoning (primarily in high lying / mountain areas) is now considered as critical biodiversity area and inappropriate for farming given that the peninsula area is now a global biodiversity hotspot.

Those few remaining agricultural farms are now considered very important from a heritage and cultural landscape perspective. This is now arguably more important a consideration than the agricultural value of the lands.

Of growing importance in relation to this are tourism economy activities, such as wine-tasting, restauranting, cycling and walking, concerts etc. This is allied with the comparative uncompetitiveness of farming in an urban area where adjacent property prices are so high and the viability of historic farming operations are questioned by landowners. Suffice to say that the generally historic farms, including the iconic Groot Constantia, are increasingly significant destination places and playing an increasingly important role in the local tourism economy.

2.7 Supportive land uses

Given its proximity to the ocean and mountain, there is a significant number of tourist-related accommodation establishments across the district, especially in coastal villages and the Constantia - Tokai winelands area. This continues to be an application type that is consistently submitted to the district for evaluation, including for guest houses, restaurants etc. embedded within residential areas.

Other supportive land use requests include retirement villages, hospitals, schools, early childhood development centres (of varying scales), and the expansion of existing community facilities (inclusion of after cares, special needs facilities) where previous conditions or zoning schemes limited such uses to a single land use.

2.8 Development Pressures

Areas currently experiencing the greatest amount of development pressures linked to limited infrastructure, land and/or services capacity are listed below:

- The Far South generally but especially to the west (Kommetjie area)
- Imizamo Yethu
- Masiphumelele
- Westlake

2.9 Vacant Land

Figure 16 depicts all the vacant land opportunities in the Southern District. The vacant land has been grouped into four categories using the following criteria:

<table>
<thead>
<tr>
<th>Code</th>
<th>Category</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>
| 1 | Underutilised vacant land: | Vacant Land without any of the following attributes:  
- reservations,  
- public projects (human settlements; social facilities etc.)  
- building plan approvals  
- rezoning land use approvals. |
| 2 | Potentially-utilised vacant land: | Vacant Land with any of the following attributes:  
- reservations,  
- pending building plan approvals,  
- any public projects in pipeline stage. |
| 3 | Utilised Vacant Land: (vacant land under development or a registered intent to be developed) | Vacant Land with any of the following attributes:  
- any public projects in planning or construction stage,  
- existing building plan approvals,  
- rezoning land use approvals. |
| 4 | Vacant Land Reserved and/or Zoned for Community or Recreational use: | This will include vacant land currently zoned OS1, OS2, OS3, CO1, CO2.  
[Only applicable layers that did not fall within the utilised (3) of potentially-utilised (2) categories] |
| 5 | Vacant Land Zoned for Transport Use: | This will include vacant land currently zoned TR1, TR2 and Utility.  
[Only applicable layers that did not fall within the utilised (3) of potentially-utilised (2) categories] |

It must also be noted that land located in the Critical Natural Assets and Discouraged Growth STAs as designated by the City’s approved MSDF have been excluded in Figure 16.

Vacant land in the district is highly constrained, with very little of this in public ownership (especially where it is needed most – including in Hout Bay and the Far South).

Properties shaded in blue and grey are land zoned for community or recreational use, and should ideally be reserved as such in order to accommodate existing communities and anticipated growth/intensification in residential development. However, there are some larger-scaled properties which can potentially accommodate additional mixed use development (non-residential and residential land uses), other than only community or recreation.

(the land use & development trends map needs substantial revision – await revised map)
Figure 1: Building Plan Approvals 2012-2018
2.10 Key Challenges and Opportunities

2.10.1 Opportunities and Management Priorities

- Good existing transport infrastructure, particularly in the northern part of the district;
- Good service provision in most parts of the district relative to other districts of the CoCT; the proposed medium-term relocation of Victoria Hospital could have a significant boost for the area surrounding this.
- The roll-out of high-speed internet fibre represents a significant development disrupter opportunity (re-working flexibility, remote studying etc.).
- High quality living environment due to an abundance of ‘special places’ within the district, including Kirstenbosch, Llandudno, Constantia wine farms, Tokai ‘forest’ plantation, Zandvlei, Muizenberg, Simon’s Town, Boulders, Smitswinkel Bay, Cape Point, Noordhoek beach and wetlands, Table Mountain range etc.

2.10.2 Challenges

- Unique topographical attributes in association with other city attractions (‘pull’ factors), and ‘push’ factors elsewhere in South Africa resulting in continuing strong middle & upper income residential demand within the district.
- Unique bio-physical attributes of the Southern District, including mountains, sea, wetlands and high biodiversity areas (including areas falling within the TMNP), limiting the availability of developable land and the provision of transport infrastructure and services, particularly to the southern peninsula (there is only one water and sewerage mains running from Cape Town to Simon’s Town);
- In-migration resulting from a lack of facilities, employment and services in rural or low-income urban areas is putting pressure on well-located areas in the City to supply housing and services. The Southern District has experienced pressure in this regard, e.g. in the informal settlements of Imizamo Yethu, Hangberg and Masiphumelele;
- Continuing market-driven development, occupying more ‘marginal’ lands, e.g. in the Noordhoek wetlands or on the mountain slopes of the Noordhoek/Fish Hoek corridor and around Simon’s Town;
- Increasing demands on limited transport infrastructure for private cars, especially from residents of the Peninsula;
- Continuing population growth in the district requires upgrades to services infrastructure (e.g. Wildevoëlvlei and Athlone WWTWs, replacement of Noordhoek’s septic tank system with a waterborne sewerage system);
- Steadily increasing demand for cell mast stations posing an increasing impact on urban (scenic) landscape;
- Limited capacity of the receiving environment to absorb e.g. wastes from development without sustaining permanent damage;
- Scarcity of developable, suitable and available land within the urban edge, which it makes it difficult for the CoCT to provide low cost housing in the district;

2.10.3 Management Priorities

- Restrict development to within the urban edge;
- Avoid development within the CPPNE or other areas that are earmarked for future inclusion in the TMNP by SANParks;
- Upgrade informal settlements by providing – as a minimum – basic services;
- Enhance the reliability, safety and efficiency of public transport, with particular focus on the rail line to Simon’s Town, Integrated Rapid Transit routes and pedestrian and non-motorised transport;
- Intensify land use along major transport routes and identified nodes (e.g. along Main Road);
- Identify vacant and under-utilised land within the urban edge that could be available for lower income residential development;
- Maintain, enhance, promote and invest in open spaces for residents and visitors. Areas identified for upgrading and enhancement include:
  - Tokai forest;
Princessvlei; Maynardville; and

- A new district park with linkages to surrounding open space systems at Princessvlei;
- William Herbert sportsgrounds
- Beachfront destinations areas (Muizenberg etc.)

Enable and optimise linkages between urban open space networks and the TMNP, where possible;

Facilitate inclusion of biodiversity areas into protected and managed areas and investigate opportunities for their sustainable utilisation (e.g. for education, tourism, medicinal plant harvesting, recreation etc.);

Develop new infill residential and mixed-use areas within the urban edge where possible (areas that have been identified in the SDP include Fernwood, Constantia ‘waste’ site, Kendal Road depot site, Wynberg Military Camp, land adjacent to the Steenberg Station and Pollsmoor Prison agricultural lands); and

Provide improved east-west transport linkages, particularly extension of the R300;

Facilitate access to basic needs, health and social services, particularly in the South Peninsula; and

Appropriately increase urban densities in residential areas (particularly those along the Main Road corridor). Appropriate densification should ensure that the character of residential areas is retained.
3 TRANSPORT AND ACCESSIBILITY

3.1 Introduction

This chapter provides an status quo analysis of the mobility and accessibility networks within the Southern District.

There is a strong focus on transport as an informant of the CTMSDF, using the TOD Strategic Framework (2016), in line with international planning trend which recognizes the need for spatial planning tools to support public transport and non-motorised transport options, as well as reducing the need to travel. The CTMSDF now needs to be translated “down” in scale to a district level. This section therefore focuses on the application of TOD to a district / corridor level.

The diagram below is useful in this regard, showing TOD at various scales.

Figure 3.1: Transit Oriented Development Concept at Various Scales (Source: TOD SF, 2016: 24)

At a metro scale, there is a need to balance and shorten trips through:
i. maximising the residential opportunities in and around the CT CBD;
ii. maximising the work (and education) opportunities in the Metro South East;
iii. enabling greater internal trip generation (i.e., balance trip producers and attractors) in Atlantis, greater Somerset West area, and the Far South.

At a corridor scale, TOD requires the generation of bi-directional flow (to replace the current “tidal” commuter patterns), reduced travel distances to public transport, and higher seat renewal (multiple origins and destinations along the route). The district plan will identify which corridors in the district should be reinforced with land use proposals.

3.2 Strategic Parameters & Informants

The City of Cape Town developed a host of strategies which aim to provide various strategic intents and objectives to guide the delivery of an efficient transport system and outline the primary framework within which the system develops. Further strategies address other transport needs such as non-motorised transport, universal accessibility, parking, operations, etc. These strategies are highlighted in section.

3.2.1 District Specific Transport Strategies

3.2.1.1 Far South Transport Plan

The Plan was developed to address the transport challenges being experienced in the area in terms of congestion and poor public transport. In relation to this district spatial plan, the transport plan relies on two premises:

iv. That the area will become more “self-contained”, by providing for the employment, educational and service needs of a broad range of its residents
v. That the need for travel can be reduced through the intensification (densification and diversification) of land use at nodes and along corridors
vi. That there should be a focused precinct planning process for the Fish Hoek node, incorporating the beachfront, the public transport interchange, and the civic node
3.3 State of Public Transport

3.3.1 Existing Infrastructure and Services

3.3.1.1 High Order Public Transport

Rail

The Southern rail line route comprises, along with Main Road, the primary urban structuring route in the district. As the oldest rail line in the country the southern line is also arguably the rail route most integrated into the surrounding urban context in the country.

The eastern part of the district is hence very well served by the passenger rail infrastructure, with 24 rail stations located in the area along the line from Mowbray to Simons Town. Several of these stations form significant interchanges with road based public transport including Mowbray, Wynberg, Claremont, Retreat, and Steenberg. Retreat station also has one of the most utilised park-and-ride facilities in the city.

Rail and road based public transport utilisation is, with the exception of residents from Imizamo Yethu, Masiphumelele and Ocean View, almost exclusively by people living to the east of the railway line. Their strong reliance on public transport is reflected by the fact that several public transport facilities in the District are amongst the busiest in the city, including Mowbray, Claremont and Wynberg public transport interchanges.

While the rail service has deteriorated since 2012, as a result of institutional failure, lack of maintenance and investment, and ongoing vandalism and crime, the system will endure, and it is expected that service improvements will eventually attract back choice users, even if this is only in the medium term. Hence the rail network continues to be an important structuring element in this plan. It follows a very scenic route on the South Peninsula up to Simon’s Town, with all the elements necessary for a tourism and recreational experience.

Bus Rapid Transit (BRT): Phase 1 and Phase 2A

The only part of the District which is currently served by MyCiTi is Hout Bay: two feeder services connect it to the CBD via the Atlantic Seaboard, and are well-patronised.

There is currently no BRT service operating in the eastern side of the district (as the rail forms the “trunk service”). However, Phase 2A planning is well underway, and will serve part of the district (see section below on future transport plans).
Figure 3.2: High Order Public Transport Services showing Current MyCiTi Service to Hout Bay
3.3.1.2 Low Order Public Transport

Minibus Taxis and Golden Arrow Bus Services (GABS), and related Public Transport Interchanges (PTIs)

The main road-based public transport networks are concentrated on higher order routes. Klipfontein, Imam Haron, and Wetton Roads, and Retreat Road (into 5th Avenue) are the most significant in terms of high frequency commuter based services in an east-west direction from the Cape Flats urban areas into the Main Road corridor.

The following list of public transport facilities can be found in the district. These provide important opportunities not just for access, but are associated with informal trading and existing or potential transit-oriented developments and intensification of development.

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Formal/Informal</th>
<th>Any plan for upgrading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mowbray Station Transport Interchange Eastern Side</td>
<td>Formal</td>
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<tr>
<td>2</td>
<td>Mowbray Station Transport Interchange Western Side</td>
<td>Formal</td>
<td></td>
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<tr>
<td>3</td>
<td>Claremont Station Transport Interchange</td>
<td>Formal</td>
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<tr>
<td>4</td>
<td>Constantia Minibus-taxi Rank</td>
<td>Formal</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Fish Hoek Station Transport Interchange</td>
<td>Formal</td>
<td></td>
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<tr>
<td>6</td>
<td>Hout Bay Minibus-taxi Terminus</td>
<td>Formal</td>
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<tr>
<td>7</td>
<td>Imizamo Yethu Minibus-taxi Terminus</td>
<td>Informal</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Masiphumelele (Site 5 ) Minibus-taxi Terminus</td>
<td>Informal</td>
<td>New asset completed (2019)</td>
</tr>
<tr>
<td>9</td>
<td>Ocean View Public Transport Interchange 1</td>
<td>Formal</td>
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<td>10</td>
<td>Ocean View Public Transport Interchange 2</td>
<td>Formal</td>
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<td>11</td>
<td>Retreat Station Transport Interchange Eastern Side</td>
<td>Formal</td>
<td>Procurement</td>
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<td>12</td>
<td>Retreat Station Transport Interchange Western Side</td>
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<td>Procurement</td>
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<td>13</td>
<td>Simon’s Town Red Hill Minibus-Taxi Rank</td>
<td>Informal</td>
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<td>14</td>
<td>Simon’s Town Station Transport Interchange</td>
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<td>15</td>
<td>Steenberg</td>
<td>Formal</td>
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<td>16</td>
<td>Sun Valley / Noordhoek Minibus-taxi Terminus (Longbeach Mall)</td>
<td>Formal</td>
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<tr>
<td>17</td>
<td>Tokai Blue Route Mall Minibus-taxi Rank</td>
<td>Formal</td>
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<td>18</td>
<td>Westlake Minibus-Taxi Rank</td>
<td>Formal</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Wynberg Station Transport Interchange Eastern Side</td>
<td>Formal</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Wynberg Station Transport Interchange Western Side (North)</td>
<td>Formal</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Wynberg Station Transport Interchange Western Side (South)</td>
<td>Formal</td>
<td></td>
</tr>
</tbody>
</table>

NMT

The relatively short commuting distances because of the mix of land uses lends the district to cycling particularly, and is home to the oldest sections cycling network (Rondebosch), as well as some of the newest (Diepriver, Tokai to Kirstenhof). While not on formalized routes, commuter cycling is common in the Far South, particularly between Ocean View / Masiphumelele and Noordhoek / Fish Hoek.

Pedestrian movement is very limited in the district, excepting for middle and lower middle income areas to the east of Main Road in the south (Retreat and Steenberg). High pedestrian movement zones are, however, located around the transport interchanges (stations) at Mowbray, Claremont, Wynberg and Retreat in particular.
3.3.2 Planned Transport Infrastructure and Services

3.3.2.1 BRT feeders and trunks

As part of Phase 2 of the City’s public transport plan (IPTN), three MyCiTi trunk routes, and a number of feeder routes are proposed for the district. Feeder routes are still to be determined; but their purpose
is to extend the trunk service through providing easier access to it. In Phase 2A, which is currently being planned for implementation, trunk routes will run from Mitchell’s Plain and Khayelitsha along Govan Mbeki Rd, Jan Smuts Drive, Turfhall Rd, Racecourse Rd, Chichester Rd and Imam Haron Road into Claremont, and along either New Ottery Road or Wetton Road into Wynberg (see map below). A district route is planned in a further phase along Klipfontein Road, from Mitchells Plan to the CBD via Mowbray.

The Phase 2A feeder routes are only indicative at this stage, but are planned to link areas of employment such as the southern suburbs, as well as more remote areas such as Hout Bay, to the trunk service.

Kenilworth Centre, Wynberg and Claremont are the locations of the planned stations.

![Figure 3.4: Planned Phase 2A MyCiTi Trunk Routes](image)

### 3.3.2.2 Rail

PRASA’s Modernisation Plan of 2012 remains an expression of their intentions. It will result in significant upgrades to the infrastructure, stations, station precincts and the service in this district.

One possible future change could be the conversion of the rail section between Fish Hoek and Simon’s Town into a feeder service. If that were to be a quality bus service, it creates the possibility of extending the service into the heart of Simon’s Town (and beyond); freeing up land south of the station in Fish Hoek to reinforce the node’s connection to the beachfront; and adapting to the increased sea level intrusion onto the railway line.

### 3.3.2.3 PTIs

Retreat PTI is planned for upgrading.
3.3.3 Level of Public Transport Accessibility

As part of the TODC model a scoring of the various Transport Accessible Precincts (TAPs) around stations and stops in the city was conducted. The overall score provides a measure of the level of accessibility of the City’s current public transport network using the following indicators:

C1. Status of station: Existing or Proposed
C2. Status of network: Existing or Proposed
C3. Connectivity: Accumulative Travel time to the City’s top 10 employment destinations
C4. Capacity: Capacity of stations to accommodate passenger volumes
C5. Modal Integration: Level of integration between modes of public transport (Rail/BRT/PTI/Feeder)
C6. Intensity: Number of people within 500m of a station/core feeder stop

Note that this scoring methodology does not take into account the functionality of the public transport services. The measure is purely a locational score. Based on these scorings, the following patterns are highlighted for the district:

- The TAPS scores are generally high in the district, representing generally high accessibility
- However, the district also has areas with very low accessibility scores, particularly because of little development due to topography
- There is notably little to no accessibility west of the Main Rd (current or planned) from Mowbray to Fish Hoek
Figure 3.5: TAPs Accessibility Scoring
Figure 3.6: Current Public Transport and Related Infrastructure
3.4 State of Road Infrastructure

3.4.1 Overview of the district road network

The eastern side of the Southern District is well endowed with transport infrastructure. Two motorways, the M3 and M5, as well as Main Road provide the main north-south road linkages in the northern part of the Southern District. Ou Kaapse Weg, Chapman’s Peak Drive and Main Road link the southern part of the district to the north. The western areas are connected by a single roadway to the north and one to the east (over Constantia Nek).

In terms of the functioning of the network:

Connection of the district with the eastern metro remains a constraint. This is due to factors both within the district, such as the north-south alignment of many of the rivers and waterways (eg. Zandvlei) and also the railway line, as well as outside the district, such as the Philippi Horticultural Area (PHA) and False Bay Waste Water Treatment Works and the Zeekoevlei complex of vleis.

The road network in the study area is characterised by the provision of a strong mix of mobility and activity oriented routes, most particularly in a north-south orientation.

With the exception of the M5, most of the arterial road network was already engrained in the urban form of this area 50 years ago. The result is that a number of arterial roads in the area provide only limited mobility because they also serve as activity corridors.

3.4.1.1 Roads constructed over the past 5 years

The Main Rd rehabilitation with upgraded NMT facilities between Muizenberg and Fish Hoek was completed in 2017. While it did not increase road capacity, it greatly improved the walkability of the route and cycling provision.

See the map below for recently constructed / upgraded roads, and possible future roads / upgrades.

This district is home to one of the biggest roads upgrade projects outside of the BRT system. The upgrading of intersections and road sections along Kommeljie Rd and the urban portions of Ou Kaapse Weg was identified as a priority in the congestion management strategy of the city. This upgrading gives priority to public transport as well as NMT, and does not only meet the needs of private motorists.

3.4.1.2 Historic Road Schemes to be reviewed

Most of the City’s historic road schemes fall within this District, including approximately 15 which must be reviewed (in light blue in the map below). These schemes are significant to the district plan as they do provide for future connections, as the pressure on the network increases. But they also have a dampening effect on the development of erven adjacent to the scheme, as owners wait for certainty before realizing their rights.

3.4.2 Congestion Management
Parking is becoming an increasingly contentious issue in this district in particular. The relatively strong economic health along the historic southern line attracts many trips, resulting in regular on-street parking in some adjacent zones. While the local residents may find this inconvenient, such off-site and slightly remote parking does support the local economy, through increasing footfall, and security, through increasing the “eyes on the street”. This plan could contribute towards a new vision for parking; making reference to the City’s Parking Policy, and the emerging Parking Management strategy.
3.4.4 Planned Road Infrastructure

3.4.4.1 Roads required in the short term (5 years)

Because the area is so well developed, there are few roads new roads required, but there are some requiring upgrading or missing links, as shown on the map below.

Few short term projects are planned:

- Dualling of Royal Rd, Muizenberg;
- Houmoed Ave missing link;
- Connection of South Road to Constantia Main Road (in support of the MyCiTi roll-out).

3.4.4.2 Roads required in the medium term (10 years)

Planned links in the Cape Flats District will assist in addressing this district’s east-west connectivity, but is constrained in the vicinity of the False Bay coastline (particularly south of the waste water treatment works), and for the foreseeable future is limited only to improved management of Baden Powell Drive, and the extension of Steenberg Rd east to Prince George Drive.

In addition, some upgrades and missing links are planned within the district.

The Far South Transport Plan has identified the need to improve access to that area, either through dualling Ou Kaapse Weg, or linking the northern Fish Hoek bypass to a contour route around Trappieskop, linking it to Boyes Drive.
Figure 3.8: Possible Road Improvements

3.5 The State of Freight
The freight sector is critical to the efficient movement of goods in support of the economy and the provision of services. On the other hand, it can be a hindrance to traffic flow, and trucks place a disproportionate maintenance burden on road infrastructure (and the impact of accidents are great).

Freight movement in the city as a whole can be seen on the map below: clearly the largest volumes are on the national roads, and related to the Port. Cape Town’s deep water port processes ±15 million tons of freight per annum, with around 95% of freight movement on the land-side being road-based. The port together with over 30 industrial areas located in various parts of the City, contribute to a high number of trucks on the municipal road network.

The City’s Freight Management Strategy addresses the planning and management of freight operations within the city’s functional region. It recognises the need to shift the modal split back towards rail where possible.
The map shows that the district experiences little freight traffic compared to the rest of the metropolitan area, which could represent the lack of industrial activity in the area, as well as possible suppressed demand because of the mountainous nature of the district.
3.6.1 **Current (EMME Demand – Base year 2015)**

The following features for the district as a whole are observed:

- The intensity of trip generators and trip attractors are generally very low in the district, with the highest trip generators concentrated in areas of population density far from work opportunities.
- The major trip attractor is the University of Cape Town, then Claremont CBD.
- Trip attractors and generators cluster along the Southern suburbs line, with a predominance of trip attractors: this results in an in-flow of people into the district for employment and education purposes.

![Figure 3.9: Current Distribution of Trip Generators and Attractors](image)

3.6.2 **2013 Origin Destination Movements for the District**

The metropolitan origin-destination maps for this district show the following patterns:
State of the Built Environment

- There is greater movement into the area than out, mainly from the metro SE. Public transport is the major mode of transport into the district, except from the adjacent Cape Flats district, with almost equal volumes of public and private trips.
- The major movement routes out of the area by both public and private transport are to the Cape Town CBD and adjacent inner city.
- Tygerberg and Cape Flats districts also attract trips.

Figure 3.10: Origin- Destination of All Commuter Trips (2013)
**Figure 3.11: Origin-Destination of Private and Public Transport Trips (2013)**

<table>
<thead>
<tr>
<th>Origin</th>
<th>Destination</th>
<th>NMT</th>
<th>Car</th>
<th>Taxi</th>
<th>Bus</th>
<th>BRT</th>
<th>Train</th>
<th>Public Transport</th>
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<td>1114</td>
<td>200</td>
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<td>254</td>
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<td>459</td>
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<td>101</td>
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<td>950</td>
<td>2754</td>
<td>3670</td>
<td>22</td>
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<td>0</td>
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<td>16331</td>
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</table>

|                         |             |     | 1307  | 10857 | 10916 | 9726 | 50   | 12158 | 32849 |

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At the same time, the map below shows the areas of greatest road congestion and the railway services of greatest overcrowding, in the map below. This has directly informed the location of road upgrade projects: in this district the Kommetjie Main Rd – Ou Kaapseweg suit of upgrades which began in 2016.

Figure 3.12: Congestion Hotspots in the Metropolitan Area

3.6.2.1 Cost of Travel

This nature of tidal movement across the city results in an inefficient use of public transport and of the road-space: people traveling into the CBD in the morning, and out in the afternoon. This has a significant cost.

3.6.2.2 User costs

The newly-developed Urban Development Index (UDI) measured the cost of travel for different income groups, different travel modes, and to their top 5 destinations\(^1\) in terms of travel time, travel distance, and direct costs.

Modal choice is influenced by a range of factors: not simply direct costs, but indirect costs such as safety (of the service itself), security (on the service, as well as accessing it), level of flexibility (of the service), reliability (of the service), and the impact of congestion on the service. The high rate of NMT as the primary mode of transport as evidenced in poorer areas has less to do with short travel distances, and more to do with affordability.

The western part of the district, similar to the Heiderberg district, displays a high modal split in favour of private car use: between 60% and 90%.

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\(^1\) The top 5 commuting destinations were identified for each area based on employment and education patterns
The “Far South” area (south of the Muizenberg mountain range) experiences the longest travel distances by public transport to the top 5 destinations (26-32km), and average distances decrease towards the north of the district. The Hout Bay area experiences the longest average travel times by public transport (38min by minibus taxi; 55min by MyCiTi) and the 122min by bus from the Muizenberg area. By private transport, the longest travel times are from the Muizenberg, then Grassy Park, Hout Bay, and Westlake areas (35min to 29mins).

Direct travel costs as a percentage of income are highest in the Hout Bay area for the low income group (28%), but relatively good for all income groups in the central and eastern parts of the district. On the other hand, private travel costs are high for all income groups in the Sunnydale, Fish Hoek, Muizenberg and Hout Bay areas, with Westlake and Grassy Park also being expensive for the middle and high income groups.

3.6.2.3 Operational costs

There is a high cost to operate public transport in a sprawling urban environment. If the travel demand patterns of the city remains at current variables this will translate into a deterioration of the recurrent annual operating deficit for the whole MyCiTi system by approximately R1 billion (IPTN Business Plan, 2017).
3.6.2.4 Environmental and Economic costs

- Serious constraints on economic growth and development - Congestion currently costs Cape Town R2.8 billion per year.
- Increasing negative environmental impacts
- CO₂ emissions and energy consumption.

3.6.2.5 Future Ideal Distribution of Trip Generators and Attractors (2032)

In modelling the future land use patterns which would generate the demand for trips to be served by the IPTN, an “ideal” scenario, namely “Comprehensive Transit Oriented Development”, or CTOD, was run for 2032. The CTOD response is to try to balance trip attractors and trip producers in all areas, to theoretically eliminate/ minimise the need to travel by having jobs and residences in the same area. The map below shows this ideal future state to work towards, with growth in the right locations to minimise travel time.

From a transport optimisation perspective, the large quantity of anticipated residential units (trip producers) in some locations which are far from existing trip attractors needs to be countered / matched by new non-residential land uses (trip attractors) in order to achieve this goal.

From a spatial planning perspective, this means mixing land use (diversifying land use). This DSP must use it as a guide and determine how this is achievable.

While growth is projected to be fairly evenly in this district, additional trip attractors are required throughout, and additional trip producers are required along the Southern line.
Figure 3.13: Ideal Location of Future Trip Generators and Attractors
3.7 Key Transport Challenges and Opportunities

3.7.1 Constraints

3.7.1.1 Poor access to and from isolated urban enclaves

Hout Bay and the Far South (inclusive of Fish Hoek, Simon’s Town, Noordhoek, and Kommetjie) are two unique urban areas in Cape Town. They are attractive high amenity areas which have or are undergoing rapid urban growth. However, both are comparatively small valley basins separated from the rest of the district and metro area by rugged mountains, and as a result linked by limited, tenuous road infrastructure, comprising in the main mountain passes. All the linking routes would be very expensive to develop further to increase capacity. As a result these two enclave areas often experience high congestion in and out of them, with any event that impedes this access (such as veldfire or car crash) resulting in them nearly being cut-off, which has serious implications for emergency services.

3.7.1.2 Poor east-west accessibility

Development in this district historically first occurred along a north-south roadway linking the original city bowl settlement with farms and later residences in Rondebosch and Wynberg, and sea activities in Muizenberg and Simon’s Town. As settlements grew this was reinforced over time with rail and more developed road infrastructure. However, until comparatively recently (50 years ago) little development had occurred to the east of this spine. Furthermore, linkages to Somerset West and Stellenbosch were constrained by dunefields and wetlands, so tended to occur further north along already established connections from the old city centre. By contrast linkages westwards into the Hout Bay and Noordhoek valleys were, and still are, constrained by the mountainous topography.

Development to the east of the district from the 1960’s, in firstly Hanover Park, Manenburg and Gugulethu, and further to the south in Grassy Park and Lavender Hill etc., and then more recently in Mitchells Plain and Khayelitsha has been both rapid and considerable. This has been largely low income development and marked by little accompanying economic (and quality recreational) opportunities, and has resulted in massive and growing demand for movement to opportunities in the Southern District and other more established and integrated areas. Movement infrastructure, as well as public transport services, haven’t managed to meet this demand sufficiently.

Despite the majority of the city’s population not owning a car there is nevertheless rapidly increasing road congestion on the existing road network. This is not helped by the barrier effect of the Cape Town – Simon’s Town and ‘Cape Flats’ railway lines (with limited bridge access points) or by the absence of an east west railway line linking the southern suburbs to Mitchells Plain and Khayelitsha.

The massive capital costs associated with railway line construction and rolling stock would suggest that developing an east-west rail connection is inappropriate. Developing road based public transport systems are considerably cheaper and more flexible, and can be as efficient, safe and of high quality. Emphasis should be on identifying as well as upgrading strategic east-west road linkages, focussing on public transport capability. Private car based linkages cannot be ignored, and may be critical to improving overall accessibility, but the public transport emphasis would suggest the R300 extension may be of lesser importance in the medium term, unless the development of future commercial opportunities (eg. freight services) become seriously constrained by the lack of high speed east-west mobility.

3.7.1.3 Movement safety & security & reliability

NMT is increasingly highly constrained due to perceived and real safety and security concerns. Safety in relation to increasingly poor, less respectful, and inadequately policed vehicle-driving such that NMT users, and cyclists and children in particular, are reluctant to utilize NMT routes/ facilities. Security in relation to increasing crime such that users, especially school children, are reluctant to utilize NMT routes/ facilities.

Train services along the southern corridor have steeply deteriorated over the last 5 years due to poor management, loss of rolling stock, crime and grime.
The outcome in relation to the above has been steadily decreasing levels of NMT and rail public transport utilization and concomitant increase instead of private vehicular use and congestion, particularly at peak school start and end times.

### 3.7.1.4 Low transport densities

Despite its mature form, transport densities are still low, because private car use predominates, particularly to the west of the corridor. These are not simply population densities, but the density of public transport users specifically.

### 3.7.1.5 Low seat renewal and little bi-directional flow

While performing better than the other districts, and except for the Main Road, the predominant pattern is for commuters to be travelling right through to the CBD in the morning peak, and back in the afternoon peak. This makes for an inefficient transport system, and few opportunities for TOD adjacent to destination points, except at the PTIs.

### 3.7.2 Opportunities

#### 3.7.2.1 Main Road Corridor Integrated Transport and Development Potential

The Main Road corridor is arguably / potentially one of (if not) the most optimal integrated transport - land use urban development corridors in the country. Comprising Main Road itself, the passenger railway line, the M3 and M5 expressways, and a number of supporting mobility connector/bypass routes, as well as a range of intersection east-west road routes, as well as clearly discernable high access development nodes / concentration areas, this corridor has steadily developed and intensified over the last few centuries, but the last 50 years in particular. However, notwithstanding some key infrastructural upgrades and associated operations, there remains massive unrealized urban development capacity yet.

#### 3.7.2.2 Incremental road based public transport service

The potential in the future for the current MBT and GABS services to be upgraded incrementally into a quality bus service, in line with the BRT, exists, particularly in this area with its large proportion of choice users.

#### 3.7.2.3 New generation technologies

New generation technologies may enable a different form of movement pattern, for example increased working from home; remote working at office hubs; app-based carpooling; app-based tools supporting a quality bus service; e-hailing reducing the need for parking; etc.
3.7.3 Spatial Implications

The district plan will need to address the potential conflict between the metropolitan imperatives, and the local interests. At a metropolitan transport level, greater intensification (diversification and densification) is required along the Southern corridor, which will inevitably result in an erosion of the suburban character. Similarly, population densities need to increase to support a quality public transport system. This has and will continue to elicit localized opposition from a preservationist perspective. This plan will need to balance servicing metropolitan and local needs; considering social, economic and environmental development imperatives. It may well be worthwhile aligning with the Resilience Strategy process: some of its related pathfinding questions have relevance to the District:

- How can we improve the design and co-location of public facilities to achieve multiple resilience dividends?
- How can we incentivise city residents to become more involved in resilient place making?
- How can partnerships in society be leveraged to contribute to reducing the stress of traffic congestion?
4 INFRASTRUCTURE

Awaiting info from Nigel

Medium Term Infrastructure Investment Framework (MTIIF)

Figures x and x current level of supply of water, sanitation, electricity and stormwater infrastructure in the Southern district as identified in the 2015 Medium Term Infrastructure Investment Framework.

6.1 Electricity

Bulk electrical infrastructure includes:

- Existing main transmission substations (MTSs)
- New MTSs
- Existing 132/11 kV distribution substations
- New 132/11 kV distribution substations
- Existing 132 and 66 kV underground (UG) cables and overhead lines (OHLs)
- New 132 kV UG cables

Most of the information used for the assessment of bulk electrical infrastructure capacity is from 2014 peak loads at distribution stations. The information was processed and each substation supply area classifies according to its level of existing capacity. There are 114 substation supply areas in the metropolitan, 82 of these are within the City of Cape Town’s distribution area, while 38 are within Eskom’s area of distribution. The table below gives the definitions used to classify the capacity of a substation area. The assessment was done using Transport Analysis Zones (TAZ’s), which have different geographical delineations when compared to the substation supply areas.

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<thead>
<tr>
<th>Capacity status</th>
<th>Definition</th>
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<tr>
<td>Severe lack of capacity</td>
<td>Over 100% of firm substation capacity</td>
</tr>
<tr>
<td>Slight lack of capacity</td>
<td>90% to 100% of firm substation capacity</td>
</tr>
<tr>
<td>Adequate capacity</td>
<td>70% to 90% of firm substation capacity</td>
</tr>
<tr>
<td>Spare capacity</td>
<td>Less than 70% of firm substation capacity</td>
</tr>
</tbody>
</table>

Table showing Definition of electrical system capacity (MTIIF, 2017 Draft, pg 68)

In the Southern district, the following areas have a severe lack of capacity:

- Tokai, Coniston Park and Kirstenhof
- Parts of Steenberg, Bergvliet, Constantia, Westlake, Lakeside and Marina De Gama

The following areas have a slight lack of capacity:

- Parts of Constantia, Bishopscourt, Kenilworth, Elfindale, Southfield, Meadowridge and Wynberg.

The following areas have adequate or spare capacity:

- The entire Sub-district 1: Hout Bay and Llandudno
- The entire Sub-district 4: The ‘Far South’
- Mowbray, Rosebank, Rondebosch, Newlands, Claremont, Plumstead and Heathfield
- Part of Constantia, Bergvliet, Southfield and Muizenberg

[Awaiting further/updated information, and a list of current and planned projects (Eskom vs COCT), from the line department]

6.2 Water

For the purposes of this project bulk water infrastructure included the following:
State of the Built Environment

- Bulk supply system from the water sources to the water treatment works (WTW)
- WTWs
- Supply pipelines from the WTW to reservoirs
- Reservoirs
- Pump stations and rising mains
- Distribution pipes ≥250 mm diameter (nominal)

The information used for this baseline assessment relies on 2011 and 2015 data which was processed for MTIIF. The impacts of the drought in terms of water infrastructure.

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<th>Definition</th>
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<td></td>
<td>&lt; 36 hours x AADD reservoir storage</td>
</tr>
<tr>
<td>Slight lack of capacity</td>
<td>15 - 24 m residual pressure in the reticulation networks</td>
</tr>
<tr>
<td></td>
<td>36 - 48 hours x AADD reservoir storage</td>
</tr>
<tr>
<td>Adequate capacity</td>
<td>25 - 60 m residual pressure in the reticulation networks 48 – 72 hours x AADD reservoir storage</td>
</tr>
<tr>
<td>Spare capacity</td>
<td>&gt; 60 m residual pressure in the reticulation networks</td>
</tr>
<tr>
<td></td>
<td>&gt; 72 hours x AADD reservoir storage</td>
</tr>
</tbody>
</table>

Table showing definition of water system capacity

In the Southern district, the following areas have a severe lack of capacity:

- Ocean View, Noordhoek, Kommetjie, Capri- all severely constrained areas located within sub-district 4: The ‘Far South’.

The following areas have a slight lack of capacity:

- Most of Retreat and parts of Steenberg and Tokai.

The following areas have adequate or spare capacity:

- Muizenberg, Lakeside, parts of Retreat and Steenberg, Including everything from Heathfield up to Mowbray.
- The entire Sub-district 1: Hout Bay to Llandudno
- The entire Sub-district 2: Bishopscourt- Constantia- Tokai with the exception of parts of Tokai
- Fish Hoek, Glencairn, Scarborough, Misty Cliffs and Simon’s Town.

[Awaiting further information, and a list of current and planned projects, from the line department]

6.3 Sanitation (Waste Water and Solid Waste)

6.3.1 Waste Water

Waste Water infrastructure includes the following components:

- All wastewater treatment works (WWTWs)
- Pump stations (≥50 ℓ/s duty flow)
- Rising mains (≥250 mm diameter (nominal))
- Gravity pipelines (≥250 mm diameter (nominal))

The information used for this baseline assessment relies on 2011 and 2015 data which was processed for MTIIF.

<table>
<thead>
<tr>
<th>Capacity status</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe lack of capacity</td>
<td>WWTW: Capacity exceeded (major drainage areas)</td>
</tr>
<tr>
<td></td>
<td>Gravity mains: &lt; 15 % relative spare capacity</td>
</tr>
<tr>
<td>Slight lack of capacity</td>
<td>WWTW: Capacity exceeded (minor drainage areas)</td>
</tr>
<tr>
<td></td>
<td>PS: Required pump flow 105% - 115% of current capacity</td>
</tr>
<tr>
<td></td>
<td>Gravity mains: 15% - 30% relative spare capacity</td>
</tr>
<tr>
<td>Adequate capacity</td>
<td>WWTW: 95% - 100% of treatment capacity required</td>
</tr>
</tbody>
</table>
Gravity mains: 30% to 50% relative spare capacity  
PS: Required pump flow 95% - 105% of current capacity  

| Spare capacity | WWTW: < 95% of treatment capacity required  
PS: Required pump flow < 95% of current capacity |

In the Southern district, the following areas have a severe lack of capacity:

- The entire sub-district 2 is experiencing severe lack of capacity;
- Most of the areas within sub-district 2 is experiencing severe constraints, including: Muizenberg, Lakeside, Kirstenhof, Heathfield, Bergvliet, Meadowridge, Claremont, Newlands, Rosebank, Mowbray and parts of Steenberg, Retreat, Kenilworth and Rondebosch;
- In the Far South the areas with severe lack of capacity include: Simons Town and Kalk Bay

The following areas have a slight lack of capacity:

- The entire Llandudo and parts of Hout Bay;
- Parts of Sunnydale, Capri, Simon’s Town and Glencairn

The following areas have adequate or spare capacity:

- Fish Hoek, Noordhoek, Kommetjie and Ocean View
- Parts of Hout Bay
- Plumstead, Southfield, Kenilworth and parts of Steenberg, Wynberg, Heathfield and Retreat

6.2.3 Bulk solid waste

Bulk solid waste infrastructure considered for the purpose of this project consists of the infrastructure required to provide current waste management services to existing and future developments and new infrastructure associated with evolving legislative requirements. This includes:

- Landfills and associated mechanical plant
- Refuse transfer stations
- Drop-off facilities (garage waste, greens, builders rubble, recyclables, household hazardous waste)
- Buy-back centers
- Fleet (Workshop, Collection vehicles, Cleansing vehicles)
- Material recovery facilities
- Alternative treatment technologies

The information is based on data from 2011 and 2014/2015, 2019

Table showing existing bulk solid waste management infrastructure capacity status [MTIF, pg.77]
### Excludes regional landfill site of which the authority is under consideration.

Infrastructures, plant and equipment at all landfill sites are sustainable managed and compliant with License Authority regulated audits.

The Regional landfill will receive most household/business waste via RTSs.

### RTSs

The total transfer capacity available currently meets the demand capacity. Additional RTSs are being planned and included in the SWM IWM Plan. RTSs are primarily designed for the waste compactor fleet servicing household/businesses.

RTSs are strategically located throughout the city and hence do not necessarily coincide with the city area model. TRSs service large catchments, structured in terms of resource economic models.

Due to the sensitivity of obtaining land/authority of these type of activities closer to high demand areas, they are in most instances built at landfill sites or on main roads to improve accessibility.

More RTSs are however required as existing centralized landfills are closing. At an RTS the waste collected by refuse compactors are downloaded, re-compacted, containerized and then hauled to landfill sites. These new required additional RTSs will where practically possible be developed on landfill sites (operational or closed) or be strategically located on city owned land.

### Drop-off facilities

Currently the city has adequate capacity in terms of drop-off floor area. The actual number of drop-offs are significantly less than what is required to improve accessibility.

The need for drop-offs closer to communities is a major challenge. The current spread is a drop-off within 7km of each household.

Due to many economic and social factors communities find it difficult to effectively utilize these facilities. To improve accessibility and to decrease illegal dumping the planned spread of drop-offs should not be one within 3km of each household, with even a higher density in poorer communities.

It is extremely difficult to find suitable land that is compliant with city policies.
and by-laws, additional to the resistance from adjacent or close-by property owners. Pressure is on SWM to close existing facilities as development is allowed closer to the same.

**Buy-back centers/recycling facilities**

Nil

There is a huge desire to develop buy-back centers or recycling facilities, to be operated by SMME’s, CBO’s, NGO’s or the city in poorer communities throughout the city.

Whilst the land requirement is <1000m², it is difficult to secure city land within communities that are compliant with city policies and bylaws.

Support for these type of facilities is increasingly provided by Councilors and lately also from City Urban Renewal and Sub Councils.

**Fleet - Collection vehicles**

Adequate number of collection compactors

Replace and supplement Collection fleet in accordance with city growth and service requirements (different communities, local conditions, different vehicle types). Ensure collection fleet has an average replacement age of < 7 years.

**Fleet - Workshop**

Adequate capacity

City operates own dedicated workshop for servicing at Hillstar. Emergency repairs & maintenance, tyre services and overhauls are outsourced.

**Cleansing vehicles**

Lack in capacity of the correct vehicles, heavy plant and equipment

Replace and supplement Cleansing fleet in accordance with city growth and service requirements (different communities, local conditions, different vehicle types). Ensure cleansing fleet has an average replacement age of less than the 5 years, 7 years and 12 years respectively.

The number of vehicles need to increase significantly, also the type of vehicles in use., such as mechanical cleaning equipment, loaders and tippers.

**MRFs**

Lack of capacity in the city

Growth in recycling is hampered due to the unavailability of MRFs.

The city has developed a MRF in Kraaifontein and 2 more are planned.
for development, at Coastal Park and at ARTS.

The city will supplement these larger MRFs with mini-MRFs to increase capacity, to improve accessibility by all and to create SMME opportunities. Current larger drop-offs are earmarked for this added function.

<table>
<thead>
<tr>
<th>Alternative treatment technologies</th>
<th>No capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In terms of legislative requirements, the city is obliged to meet stringent diversion targets for several waste types. Organic and food waste diversion is a major challenge that falls in this category for alternative treatment technologies.</td>
</tr>
<tr>
<td></td>
<td>Best technologies, required infrastructure and business requirements are being investigated in an effort to identify the basic requirements.</td>
</tr>
<tr>
<td></td>
<td>Where practically possible existing land at landfills or RTSs will be used to host the new integrated waste infrastructure.</td>
</tr>
</tbody>
</table>

6.4 Stormwater

The stormwater system of the CCT consists of a wide range of infrastructure components. The CCT’s Management of Urban Stormwater Impacts Policy (CCT, 2009) defines the stormwater system as “both the constructed and natural facilities, including pipes, culverts and watercourses, whether over or under public or privately owned land, used or required for the management, collection, conveyance, temporary storage, control, monitoring, treatment, use and disposal of stormwater”.

The stormwater infrastructure applicable to this study therefore includes the following:

- Piped networks (excluding provision for minor drainage system associated with road provision)
- Culverts
- Open channels, lined and unlined, including watercourses
- Detention and retention facilities
- Energy dissipation structures
- Water quality management facilities
- Outfalls to watercourses or the sea
- Storm surge and flood protection infrastructure

There are no areas within the Southern district that is experiencing severe lack of capacity in terms of stormwater.
Key Opportunities and Constraints

In terms of the assessment above, areas that have spare capacity signify opportunities, while those with a severe lack of capacity are the most constrained areas.

The MTIIF information needs to be updated and verified by line departments, which should include new projects to address the existing backlogs in the district.
The concept of integrated human settlements goes beyond providing housing, but rather speaks to creating environments that support the social, physical, and economic integration of housing developments into the existing urban fabric and establishing quality living environments that are sustainable. This means that housing is merely one of the basic infrastructure components required to build integrated and resilient communities (see Figure 14 below). Housing must be integrated within areas through housing mix, typologies, design and income, and be close to transport routes supporting transit-oriented development.

Figure 14: Building Integrated Communities
5.1 Housing Overview

5.1.1 Type

The majority of structures in this district are formal dwellings (58.6%), compared to 11.6% informal dwellings, which includes both informal backyards and informal settlements. Flats and freestanding houses make up the majority of the formal housing typologies within the district. The district also has a large number of semi-detached houses (5107-4.8%). See Table 6 and 7 below for a detailed breakdown of dwelling typologies. The spatial distribution of the various formal typologies is shown in Figure 10 below.

Table 1: Dwelling typologies in the Southern District

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>House or brick/concrete block structure on a separate stand or yard or on a farm</td>
<td>58.50</td>
</tr>
<tr>
<td>Traditional dwelling/hut/structure made of traditional materials</td>
<td>0.41</td>
</tr>
<tr>
<td>Flat or apartment in a block of flats</td>
<td>16.88</td>
</tr>
<tr>
<td>Cluster house in complex</td>
<td>2.54</td>
</tr>
<tr>
<td>Townhouse (semi-detached house in a complex)</td>
<td>2.02</td>
</tr>
<tr>
<td>Semi-detached house</td>
<td>16.88</td>
</tr>
<tr>
<td>House/flat/room in backyard</td>
<td>0.41</td>
</tr>
<tr>
<td>Informal dwelling (shack; in backyard)</td>
<td>0.05</td>
</tr>
<tr>
<td>Informal dwelling (shack; not in backyard; e.g. in an informal/squatter settlement or on a farm)</td>
<td>0.58</td>
</tr>
<tr>
<td>Room/flatlet on a property or larger dwelling/servants quarters/granny flat</td>
<td>5.00</td>
</tr>
<tr>
<td>Caravan/tent</td>
<td>5.00</td>
</tr>
<tr>
<td>Other</td>
<td>6.56</td>
</tr>
</tbody>
</table>

residential informal structures in the Southern District are shown in Figure 10. These are –based on the 2017 informal door and roof count. Informality is scattered across the district however there are certain areas where this informality is much higher than others, these high numbers of informality typically occurs in the informal settlements of Imizamo Yethu, Masiphumelele, Red Hill and Hangberg. There are also pockets of informality in areas such as Wynberg, Retreat, Ocean View and Diep River.
Figure 17: Distribution of housing typologies in the Southern District
Given that freestanding structures are dominant; it is difficult to see a clear area where another typology is prevalent. Instead, household typology seems to be fairly scattered among sub-places except for the informal settlements where informal dwellings are dominant.

5.1.2 Tenure Status

Based on census 2011 data on the tenure status of the Southern District, the majority of the households are in properties they own (±55%) with ±36% households renting. Interestingly the informal settlement of Masiphumelele has the highest number of rented households which stood at 3691, approximately 747 more than Claremont which followed with 2944 households being rented. Retreat has the highest number of owned and fully paid off households at 2487, followed by Plumstead at 2194 households. Plumstead also has the highest number of owned but not fully paid off households at 2361 and is closely followed by Claremont at 2142 households.

*Table 2: Southern District tenure status*

<table>
<thead>
<tr>
<th>Tenure Status</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned and fully paid off</td>
<td>33687</td>
<td>31.6%</td>
</tr>
<tr>
<td>Owned but not yet paid off</td>
<td>25916</td>
<td>24.3%</td>
</tr>
<tr>
<td>Rented</td>
<td>37840</td>
<td>35.5%</td>
</tr>
<tr>
<td>Occupied rent-free</td>
<td>6984</td>
<td>6.5%</td>
</tr>
<tr>
<td>Other</td>
<td>2237</td>
<td>2.1%</td>
</tr>
</tbody>
</table>
The distribution of tenure status of households in the Southern District is shown in Figure 12.

- Most owned and fully paid up houses are in Retreat
- Plumstead has the most houses owned but not yet paid off
- Masiphumelele has the highest number of rented dwellings (3691), followed by Claremont (2944) and Wynberg (2520).
- In the occupied rent-free category, Imizamo Yethu has the largest number of dwellings (2466) followed by Sunnydale (1404) and Masiphumelele (399).

5.2 Housing Demand

Housing demand in the Southern District is assessed using a proxy\(^2\) of the number of informal structures in the District, as well as the number of people that have registered their need for housing on the City’s Housing Needs Register. NOTE: People who have registered their need for housing might also be living in informal settlements in the area.

*Insert graph of number of informal dwellings and people registered on housing database*

There were 8492 informal dwellings in the District, according to a 2017/18 roof count by the City of Cape Town. Most informal dwellings were located in Masiphumelele and Imizamo Yethu. The Southern District has the second lowest number of informal dwellings in the City.

By the end of 2018, 8328 people had registered their need for housing on the City’s Housing Needs Registry. This accounted for 2.9% of all people who have registered their need across the City. NOTE: Anyone is able to register their need for housing on the Housing Needs Register, however many of the people registered might not qualify for housing, or their circumstances may have changed over time, thus the data needs to be treated with caution. A background check of beneficiaries registered on the database is only done at project inception.

The population growth and increase in households in the Southern District suggest that housing demand will continue to grow in the area. This is particularly the case in Masiphumelele and Imizamo Yethu – both areas that have seen increases in population growth - are areas with large numbers of informal dwellings.

Of concern is the increase in the number of households in the Southern District with no monthly income. These individuals are likely to be living informally, and would rely on the state to provide formal housing.

5.3 Housing Supply

5.3.1 1.3.1. Constructed/Delivered

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\(^2\) A comprehensive picture of housing demand showing all income levels in relation to housing stock at various prices, is not included in this section.
Over the 5 year period from 2013/14 to 2017/18, a total of 2380 housing opportunities were created in the Southern District.

This included the following: 851 Integrated Residential Development Programme (IRDP) serviced site beneficiaries (<R7000 monthly household income); 166 Breaking New Ground (BNG) houses (built in Masiphumelele and Dido Valley) transferred to housing beneficiaries on the City’s Housing Needs Register who earned R3500 and below; Some 582 households were relocated to better sites within Hangberg, Imizamo Yethu and Masiphumelele as part of the Upgrading of Informal Settlements Programme; Over the same period, 709 top structures were developed for households as part of the People’s Housing Process, in Ocean View and Masiphumelele. This programme allows households to be actively involved in decision-making around the housing process and product, and caters for households earning R3500 and below; Finally, 72 GAP housing units were developed in Hangberg, which catered to households earning R15 000 and below. This income bracket has since been increased to R22 000.

While government is a key provider of housing households earning lower incomes – particularly those who earn below R3500 – the private sector plays a crucial role in the provision of housing at all income levels.

The City’s housing programmes have not been able to keep up with housing need expressed by registrations on the Housing Needs Register. As indicated above, in the period 2012/13 to 2017/18 some 2380 housing opportunities were developed in the Southern District. However, over the same period some 3972 additional individuals in the Southern District expressed their need for housing by registering on the City’s Housing Needs Register, over and above the 4356 that were already registered in the District. This means that while housing delivery increased by an average of 14% per annum over this period, the number of people registered on the City’s Housing Needs Registered increased by an average of 62% per annum. The City is thus failing to make headway in reducing the registered housing need – with housing need continuously outstripping housing supply.
Limitation within Housing Demand and Supply data:

Needs Summary:
- Records marked as “Assisted” – this is not a true reflection on supply per financial year as records are not regularly updated. For this reason there is a difference between the figures (per financial year) for “Assisted” records and “Total Supply”.
- Furthermore, “Assisted” records primarily refer to the supply of BNG, PHP and CRU housing opportunities as not all housing products supplied are currently captured on the Housing Needs Register.
- Records marked as “Waiting” – this only refers to persons who came forward to express their housing need and not necessarily person who will qualify for a state subsidized housing opportunity. The qualification verification process will only occur once a person is selected for a housing opportunity.

Supply Summary:
- UISP – persons who are beneficiaries within a Upgrading of Informal Settlements Project are not necessarily registered on the City’s Housing Needs Register as this is not a mandatory provision as per the prescripts of the National Human Settlements Policy. The idea is to upgrade the identified Informal Settlements regardless of a person’s eligibility criteria. A person’s eligibility criteria is however taken into account during the transfer of ownership of a services site and/or top-structure.
- GAP – person who are beneficiaries within the GAP market are not necessarily registered on the City’s Housing Needs Register. Eligible persons apply directly to the developer to purchase the property and will apply directly to the Western Cape Department of Human Settlement for the Financed Linked Individual Subsidy Programme (FLISP) subsidy.
- Land Restitution/ Institutional - persons who are beneficiaries within this housing programme are not necessarily registered on the City’s Housing Needs Register.
- Social and rent to buy - persons who are beneficiaries within this housing programme are not necessarily registered on the City’s Housing Needs Register as this housing programme caters for households with an income up to R15 000 per month. Prospective tenants apply directly to the respective Social Housing Institutions for rental vacancies.

5.3.2 Pipelined, Planned and in Construction
While the data above outlines the housing delivery, the map below outlines human settlements projects that are in construction, planned (meaning budget has been allocated to them), or pipelined (future developments that will be planned next).
5.4 Key Opportunities and Constraints

5.4.1 Generic constraints:

A key constraint with human settlements implementation across the City has been a lack of integrated planning of budget cycles, which impacts on the prioritisation of projects by City Directorates. This has undermined the attempt to create integrated communities in some areas of the City.

The development of integrated human settlements requires the use of well-located land for government subsidised housing. Well-located land is expensive, in short supply, and often more appropriate for infill development than the large-scale BNG developments that are often on cheaper land.

Most of the government subsidised housing programmes implemented by the City are nationally funded programmes, which come with strict conditions and legal parameters. These human settlements programme parameters constrain the development of affordable housing that meets the spatial goals of the City – particularly the densification and diversification of typologies.

Capacity constraints regarding the social facilitation of human settlements developments can impact negatively on the outcomes of projects.

Land invasion has increased, and represents a significant challenge to the City. Land invasion sterilises land which was otherwise earmarked for human settlements, or other social or economic activity. It represents a challenge to the City’s human settlements project pipeline through redirecting resources. It also results in community conflict between those who have invaded land, and those who are waiting for long periods of time on the Housing Needs Register.

In situ upgrading of information settlements is a challenge, as firstly the land might not be suitable for development (e.g. area that is prone to flooding, environmentally sensitive areas etc.), and secondly, some areas of the City might be too dense so that de-densification becomes necessary in order to enable formalisation of areas.

5.4.2 Local constraints and opportunities:

Constraints

Demand for state-assisted housing remains a key, and indeed crisis, problem in and around low income settlements in the district, and Masiphumelele and Imizamo Yethu in particular. This trend, together with a proportional increase in household numbers, as well as an increase in households earning no income suggest that government housing interventions need to be appropriate, targeted, and integrated with other socio-economic imperatives and state-assisted responses.

There is an existing threat of land invasion and encroachment on to recreational, public open space, and environmentally sensitive and/or high risk (e.g. flood prone) development areas due to high demand. These areas are incredibly dense, which makes utilising in situ upgrading through the Upgrading of Informal Settlement Programme a challenge. The City should therefore concentrate on enabling formalisation by the local community, and encourage the development of an affordable property market in the area.

Opportunities

Mixed-income developments, which could have elements of social or GAP housing should be encouraged in identified densification and intensification areas in the district that are accessible
by public transport. This is primarily the Main Road corridor between Mowbray and Muizenberg, and could include proportions of medium and high rise developments where potentially increased development rights are potentially possible as a trade-off. This, however, is not likely to amount to many units in total.

Nevertheless, the rapidly increasing demand for student accommodation, as well as the steady move towards smaller residential units and flats, provides opportunities for increasing the range of income levels targeted within this priority corridor area. Furthermore, encouragement and support for more intensive development in hitherto under-performing property market areas, such as in Wynberg, also represent an opportunity for widening the range of housing opportunities in this area (as has happened to a limited extent already in Wynberg).

A relative opportunity has arguably arisen around key housing problem areas of Imizamo Yethu and Masiphumelele, thanks to the subdued property market and comparatively depressed property prices and reticence of landowners to develop vacant land they own in these areas, where government could acquire this land for future development for a lower income target market (re-primarily GAP housing).
6 PUBLIC FACILITIES

6.1 State of Supply and Demand

The following section provides a list of the current supply of public facilities in the area, and the demand of new facilities in the district accounting for the anticipated growth in population and required densification and intensification of land use in line with city policy.

6.1.1 Education

These encompass all public and private ECDs (early childcare development centres), crèches, primary and secondary schools in the city. Many public school facilities are under-utilised and could, according to context, benefit from greater multi-use (e.g. double schooling and/or after-hours adult education) and / or rationalisation for utilisation by other land uses (e.g. affordable housing, ECDs). This could assist with better upkeep and security of the education facilities.

The figures provided in this section only cover government schools and exclude any private schools or Early Childhood Development centers (ECD). This information also does not include the current status of school infrastructure or the level of utilization of the facilities (i.e. capacity considerations) which could also impact on the level of education services that can be provided.

In total there are approximately 93 public education facilities in the planning district: 61 primary and 32 secondary schools that have been divided into three (3) categories namely: Grade R, Primary and Secondary schools. All operational Grade R facilities are assumed to be within existing government primary schools.

The information is based on 2011 figures obtained from the City of Cape Town’s Department of Community Services and Health extracted from the revised 2011 Census. The assumed standard capacity ratio for each category of schooling is as follows:

- Grade R - 30 learners per class;
- Primary Schools - 40 learners;
- Secondary Schools - 40 learners

**Estimated number of pupils served by the schools**

The Table below indicates the current number of pupils served and unserved based on distance and capacity constraints within 5km of the school.

<table>
<thead>
<tr>
<th>Level of Schooling</th>
<th># of schools</th>
<th>Unserved pupils</th>
<th>Served Pupils</th>
<th>%served</th>
<th>Metro Average % served</th>
<th>Total Potential Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade R</td>
<td>61</td>
<td>1283</td>
<td>2498</td>
<td>66.07</td>
<td>58.46%</td>
<td>3781</td>
</tr>
<tr>
<td>Primary School</td>
<td></td>
<td>988</td>
<td>65113</td>
<td>95.97</td>
<td>96.23%</td>
<td>66101</td>
</tr>
<tr>
<td>Secondary School</td>
<td>32</td>
<td>3116</td>
<td>14882</td>
<td>82.69</td>
<td>81.71</td>
<td>17998</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>5387</td>
<td>108527</td>
<td>95.27</td>
<td></td>
<td>113914</td>
</tr>
</tbody>
</table>

Table: Number of pupils served within 5km of a school category (statistics to be confirmed/ updated: date?)

From the above Table is concluded that, based on the number of school going aged pupils in 2011, the Southern District is generally performing similarly to the rest of the Metro. This is, it should be noted, a quantitative assessment based on numbers of learners served within 5km of a school.

**Estimated travel distance of pupils to schools**
Travel distance for various category pupils, based on 2011 Census figures are expressed in the Table below.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of pupils</th>
<th>Percentage % of pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;1km</td>
<td>&lt;2km</td>
</tr>
<tr>
<td>Level of Schooling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade R</td>
<td>1853</td>
<td>1235</td>
</tr>
<tr>
<td>Primary School</td>
<td>13181</td>
<td>7628</td>
</tr>
<tr>
<td>Secondary Schools</td>
<td>8126</td>
<td>5244</td>
</tr>
<tr>
<td>Total</td>
<td>23160</td>
<td>7241</td>
</tr>
</tbody>
</table>

Table Travel distance of pupils to schools (statistics to be confirmed/updated : date?)

The above table provides an overview of the accessibility of schools in relation to the number of pupils that it serves.

It can be noted from the above table that in 2011 62.76% of the learners had access to a school within 1km; 19.62% between 1km and 2km and 17.62% between 2km and 5km from their homes. The majority of pupils, approximately 87 888, are located within 1km from a school. These figures are lower than in to most other districts. This can be attributed primarily to the disbursed settlement pattern associated with the geography of the district (re- the isolated urban and mini-urban enclaves of Hout Bay and the ‘Far South’, and Llandudno and Scarborough etc.), the extensive low very density residential areas such as Constantia, and the comparatively slow facilities response to rapid and massive population growth in Imizamo Yethu and Masiphumelele.

To address this requires a multiple-pronged response inclusive of improved public transport (frequency, and especially safety re- pupils), as well as new facilities in formerly almost exclusively residential areas. Many pupils are travelling to schools further afield within the district out of choice despite close proximity to a local school. Hence the importance of quality transport systems. The other response is quicker, more flexible, response to the provision of schooling facilities in under-served areas.

As noted, the above relates essentially to quantitative analysis in terms of numbers served and within reasonably catchment / access distances. However, a very important consideration is qualitative analysis. To this extent the Southern District is known for its high performing schools and number thereof, and particularly the number and concentration of these in the ‘Southern Suburbs schools zone’, which attracts learners from both the immediate local surrounds as well as many from areas up to 20km away. To this extent this is an area of excellence and district competitive advantage which has potential to stimulate and support further expansion of such schooling both locally and further afield. Associated with this is the presence of a significant range and number of specialist (generally private) schools, including ‘international’ schools, alternative learning schools (eg. Waldorf) sports and other academies (eg. at Newlands) and various schools for the impaired.

The other significant education area in this district is tertiary education, primarily with UCT which is a large, premier, local, metro, regional, national and international attractor, but also the growth of colleges across the district.

GAPS:
1. Building programme since 2012
2. Capacity of the schools i.e. number of learners vis-à-vis number of class rooms;
3. Current programmes for upgrades / enlargement of existing schools or new schools;
4. Original of leaners per school – is it possible to determine how many learners are actually from outside an area or travel to schools outside, i.e. should all areas provide the standard ratio or are more learner moving outside their residential area;
5. MOD (Mass Opportunity Development) centre schools – and the interrelationship between schools for say joint use of facilities;
6. Underutilized land:
   a. What schools are not optimally using their land and could dispose of them
   b. Can schools use city facilities and then potentially dispose of their underutilized and under-maintained facilities.
6.1.2 Medical

These encompass all public clinics, district and regional hospitals and private hospitals in the city.

Numerous hospitals of district importance are also located in this zone, including the Mowbray Maternity Hospital, Victoria Hospital, Claremont Medi-Hospital and Kingsbury Hospital, Wynberg Medi-Hospital, 2 Military Hospital, and Constantiaberg Medi-Hospital.
6.1.3 Community/Social Facilities

These encompass all public and communal facilities in the city including: libraries, halls, community centers, post offices, magistrate courts, fire stations, police stations, municipal offices and cemeteries.

The district is generally also very well served with lower order community facilities (including police stations, community halls, libraries, courts and post offices), although there are one or two exceptions which have emerged as a result of very rapid, and unplanned, population growth (eg. Imizamo Yethu, Masiphumelele and Red Hill). These facilities are generally clustered at accessible locations.
6.1.4 Parks and Recreational Facilities

These encompass all parks and sports facilities in the district.

Public open space is well developed across the region, with the exception of the area south of Ottery Road and north of Military Road.
Given the above there are no widespread or comprehensive future plans within this district. Future proposals, primarily for local community parks, are targeted to a few limited under-served and under-performing areas related to massive recent growth, including Imizamo Yethu, Masiphumelele, Ocean View, and Retreat.
6.2 Required Facilities

Figure xx and Table xx depicts the required facilities for the Southern district based on the current population and projections for 2032.

Required additional public facilities are generally closely aligned with where need is greatest and provision most compromised. In Masiphumelele there is a need for a new primary school, community health centre, and open space areas including formalised park facilities and also small quality public open space areas. A fire station is currently close to completion close to Masiphumelele, and planning for a new local police station is proceeding.

6.3 Key Observations

The Southern District is generally well serviced in terms of a range of community and public facilities both at a local and district scale. These facilities are also in general well maintained, although some facilities are not functioning optimally.

In terms of access, facilities within the district are generally publicly accessible and located on or close to major public transport routes. The exception to this are the isolated enclave areas of Hout Bay and the Far South where local area facilities are generally well catered for and accessible, but higher order district and metro facilities are not due to the comparative isolation of these areas.

Despite the above facilities within (and for) lower income areas such as Imizamo Yethu and Masiphumelele, and to a lesser extent Hangberg and Ocean View, are generally heavily oversubscribed and poorly maintained. Open spaces and sports fields within these areas are under continual pressure from settlement encroachment, and in IY and Masiphumelele have been invaded by informal settlement and effectively no longer exist. Due to massive population growth existing facilities such as Community Health now require additional capacity or replacement by bigger/higher order facilities to service these communities.

Facility provision in the more recently developed areas such as in the far South is largely privately funded (e.g. private schools, medi-clinics etc.). Public provision of facilities such as schools, sportsfields, clinics etc. has to date been limited.

The well-established Main Road corridor includes many higher order district and sub-regional public facilities. Most of these are accessed by significant numbers from outside the district due to their quality and accessibility. As such these are significant attractors to the district.
7 SYNTHESIS

7.1 Summary of issues and trends

1. Massive internal growth of lowest income areas of Imizamo Yethu and Masiphumelele, and massive associated overcrowding and service incapacity and management problems, such that these areas are the pre-eminent urban crisis areas within the district.

2. Housing in lowest income areas is closely associated with economic activity / income generation through sub-letting to 2nd, 3rd and even 4th households in backyard shacks. This tends to result in growth of an existing nearby informal settlement as unhappy or thrown out tenants seek a cheap nearby alternative. It also tends to support demands for settlement expansion as longstanding backywarders eventually qualify for subsidised housing but on receiving it tend to immediately sub-let as an economic strategy (often the only one they have).

3. The availability of land to accommodate new settlement in the area is a severe constraint. There are limited extensive areas suitable for new greenfield development, most of which are in areas some distance from daily opportunities (work, education etc.) and public transport. This is allied with high unit development costs (vis-à-vis tenure type and compatible design interfaces) as well as substantial local community opposition to the development in such areas.

4. An increasing securitisation of residential areas, through gated security villages, orientation of development away from (perceived to be dangerous) open spaces, and walling, gating and electrification of property boundaries.

5. A general view that once one is in an area then no others should join, unless one is an owner / developer who will gain from leveraging later entrants.

6. A generally high lack of trust between poor and rich and between both these and the authority.

7. Business encroachment into residential areas.

8. Warehousing, wholesale retailing, institutional, and even residential, encroachment into industrial areas.

9.

7.2 Pressures and Constraints

1. Very limited available vacant developable land.

2. High botanical and scenic attributes (of recreational and tourism economy significance) a significant constraint to urban expansion.

3. A subdued economy which limits expenditure on intensification of development and potentially compromises quality of built outcome.

4. Economic trap of many low income households who are unable to access the economy and depend on survivalist economic strategies.

5. Deterioration of key infrastructure, most notably the rail system.

6. The threat of climate change and sea level rise.

7. The still continuing peak hour surges of people to and from places of work outside of the district (in the CBD etc).

8. The accessibility barriers of the railway line (for east-west movement) and the mountains and sea (for access into and out of the isolated urban enclaves of Hout bay and Far South), exacerbated over traffic morning and evening peak hours and, increasingly, holiday and weekend peaks.

9. The inhibiting effect of the movement system constraints on tourism and recreation in the district (e.g. trains and road congestion).
7.3 Opportunities

1. Due to its integrated historical development legacy the Southern District has the potential to gain most from improvement of the rail system and train services.

2. The urban development and natural area diversity, and interface and integration between these two across this district, represents a unique and substantial recreational and tourism economy potential still arguably only partially tapped. Key elements include:
   a. close interface between sea, mountain and urban development,
   b. diverse historical urban areas of character including coastal villages
   c. agricultural winelands
   d. 3 harbours, including a naval base, 1 launch pier, and 3 (separate) slipways
   e. Most of the TMNP
   f. Education hub between Mowbray and Wynberg including UCT, various other tertiary colleges, and numerous highly sought after ‘southern suburbs’ schools.
   g. Low income and informal settlements
   h. Cultural landscape areas including Constantia – Tokai and Noordhoek
   i. Sports centres including Newlands cricket & rugby
   j. Proximity of established development to many small diverse beaches and rocky shores

3. General spare services capacity in the most important (northerly) parts of the Main Road corridor can support further land use intensification and densification in these areas.

7.4 Implications for the spatial plan

1. The district, and particularly the area between Mowbray and Plumstead, is very well served with health, education and sports facilities. In fact the district acts as a major attractor to the rest of the metro in this respect, and in all likelihood will continue to do so. Hence the great importance attached to ensuring good access and movement into and within the district.

2. A greater degree of social compacting required between different local communities and between these communities and the authority. This needs to be at the metro, sub-regional and local level, and needs to include identification of reality/ies, elements that all parties can agree on, what the obstacles are & how best to address them, and identification of potential win-win outcomes.

3. Spatial transformation through facilitating the movement of lower income households into well located / accessible areas. This can include & inclusionary housing.

4. More intensified use of that land which is already developed, but within the constraints of local area context in relation to protection and enhancement of scenic character and natural attributes.

5. Key land use issues requiring district plan guidance:
<table>
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<tr>
<th>Major land use decision-making issues</th>
<th>Implications for District SDF</th>
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</table>
| 1 Business into residential areas    | • Specific (unique) site-specific reasons required, based on the unique locational qualities of the specific site, to motivate deviation from the prevailing approach - of limiting business encroachment into residential areas as well as ensuring agglomeration of employment generating activities in identified high access nodes and corridors.  
• Site-specific reasons would usually relate to location in relation to a primary road or intersection (e.g. where noise makes residential challenging) in the area and either appropriate screening or quality design that enhances the area.  
• Generally business encroachment should be confined to peripheral locations in relation to primary roads (which tend to be dividers) and never extend into the heart of the residential area. |
| 2 Residential into industrial areas   | • District plan to indicate industrial areas as mixed use intensification areas.  
• However, the principle should be that the residential development should not be responsible for subsequent displacement of a legitimate (existing) negative/noxious industrial activity.  
• Any residential in such areas must account for potential negative externalities associated with industrial areas (e.g. noise, smell) and include appropriate mitigation measures (e.g. sound-proofing). |
| 3 ‘Illegal land invasion’ into areas inappropriate for urban development | • Provide minimal legally required and humanely acceptable basic infrastructure support in such areas and maintain informal settlement status until such time as community ready to vacate it at which time it is progressively reverted back to its original state – rather than prioritising (usually in response to local community activism) the development formalisation of the settlement.  
• Re-affirmation in district plan of identification and significance of land identified as critical not to develop. This includes risk related (e.g. flooding or high visual impact or unstable slopes) or of high ecological or productive importance (e.g. conservation area or urban agric.). This should include identification of areas of highest risk in this regard, as well as proposed means to address this risk.  
• Re-affirmation also of land that is under or undeveloped that is appropriate for development. This needs also to include support for this development to be expedited. |
| 4 Facilitating the movement of lower income households into well located / accessible areas & inclusionary housing & spatial transformation | • Support for the ramping up of development of more affordable dwelling units, for both ownership and rental, in well-located areas. This requires a wider range of units, at high density in a range of strategic locations.  
• Means to achieve this (objective) requires incentives such as enhanced rights linked to affordability requirements & parameters.  
• Support for significantly smaller units & higher densities in these areas than is currently the case or permitted.  
• Spatial transformation is also achievable by expediting the development a quality trunk (dedicated) route public transport system / network to facilitate movement to and from all parts of the city. |
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<th></th>
<th>Better / expanded sub-district guidance (in-lieu of the formulation more local area plans)</th>
<th>Further local area development guidance where necessary should be included into the district plan to obviate the need for further local area policies.</th>
<th>Reviewing existing applicable local area policy for inclusion of development guidance statements that are still appropriate and relevant.</th>
<th>Linked to this, local area policies that are now dated should in general be withdrawn.</th>
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<td>6</td>
<td>Better guidance where appropriate of existing zoning scheme provisions which can potentially substantially assist with the district plan goals &amp; objectives.</td>
<td>A clearer indication in the district plan of where significant unutilised development rights still exist (e.g. GR4 in Wynberg &amp; Kenilworth).</td>
<td>This requires explicit sub-district and local area development guidance which clearly and specifically identifies areas for densification, and the broad desirable nature thereof.</td>
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<td>7</td>
<td>Initiating development in identified new coastal nodes</td>
<td>This needs to include (political) commitment and support for this development to be expedited, including the identification of any available or proposed mechanisms or processes that assist in this.</td>
<td>This should comprise precinct component part phased development stages based on a broad development framework.</td>
<td>As far as possible the private sector should be encouraged and incentivised to undertake the primary developer role here.</td>
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<td>8</td>
<td>Guidance for facilitating apparently contradictory development (e.g. densification in Constantia but retaining or actually enhancing the cultural landscape through doing so; other cases?)</td>
<td>An emphasis in the district plans of where surveillance is desirable and required, which relates inter alia to density and design (re- over-looking features).</td>
<td>Provide minimal legally required and humanely acceptable basic infrastructure support in such areas and maintain informal settlement status until such time as community ready to vacate it - at which time it is progressively reverted back to its original state – rather than prioritising (usually in response to local community activism) the development formalisation of the settlement.</td>
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<td>9</td>
<td>Improving an area’s safety &amp; security through development</td>
<td>Maximising amenity &amp; tourism leverage in key amenity locations</td>
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<td>10</td>
<td>Trend/tendency to id and occupy POS in high density low income areas to meet pressing/vocal housing need</td>
<td>Support for significantly smaller units &amp; higher densities in these areas than is currently the case or permitted.</td>
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<td>11</td>
<td>Dev pressure in &amp; near the PHA</td>
<td>Addressing Gentrification (concerns)</td>
<td>Support for progressive widening of range of residential options across all areas.</td>
<td>Clearer engagement and buy-in on, and communication of, primary development vision for the city, sub-districts and local areas, as well as development implications and related benefits thereof for respective communities.</td>
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<td>12</td>
<td>Trend/tendency to id and occupy POS in high density low income areas to meet pressing/vocal housing need</td>
<td>...NIMBY (a reluctance for other land uses &amp; income strata / housing types in an area)</td>
<td>With continuing relative move from ownership to rental as proportion of residential tenure this (NIMBY) factor will progressively diminish.</td>
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<td>15</td>
<td>Leveraging appropriate econ opportunity in or adjacent to appropriate open space areas</td>
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<td></td>
<td>• Open space areas need better maintenance and management.</td>
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<td>• Support greater density, and specifically 2 or multi-storey development adjacent to these open spaces to increase over-looking surveillance and ‘feet on the ground’ in the open space re-surveillance. Higher numbers of users is likely to stimulate higher propensity and capacity for community involvement in maintenance and management.</td>
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<th>16</th>
<th>Additional level of guidance to that currently provided by TAPs which only apply to IRT trunks – what about other public transport routes re-locational benefits of being close to feeders &amp; taxi routes?</th>
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<td>• TAP development guidance should apply to all existing medium and high frequency public transport routes (e.g. activity routes and streets)</td>
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<th>17</th>
<th>Public distrust in planning policy and planning procedures and processes governing land use planning decisions</th>
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<tr>
<td></td>
<td>• More and better engagement in policy development</td>
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<td>• Greater transparency in planning processes and decision-making</td>
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