University of Pretoria, South Africa
Department of Town and Regional Planning

Mark Oranje

1. The urban and regional context of the department

The University of Pretoria, in which the Department of Town and Regional Planning is located, is situated in the most dynamic economic area of the country, generally known as the Gauteng City Region, which contributed approximately 50% to the Gross Value Added (GVA) of the South African economy in 2004 (The Presidency 2007). The municipality in which the department is located, the City of Tshwane, 2 198 km² in extent and in existence since 5 December 2000, contributed 9.2% to this figure. Even though it is the fourth-biggest municipal economy in the country, it is still a junior partner of the most dominant and single most important economic force in the country, the City of Johannesburg, which contributed nearly double that figure – 18.13% (City of Tshwane 2004b; City of Tshwane n.d.; The Presidency 2007).

While the economy of the region is strong and has experienced solid growth over the last two decades, it is marred by deep inequalities. These inequalities still run along the old apartheid lines of race and space, with the former white suburbs in the region still remaining areas of relative prosperity in which there are good schools, functioning municipal services, and generally a good quality of life (City of Tshwane 2004b, 2006). These areas stand in stark contrast to the former townships, where housing quality is still far below that in even the most deprived former white suburbs, municipal services are still incompletely installed, and schools are of an inferior quality (City of Tshwane 2004b, 2006; Serfontein & Oranje 2008). Increasingly, the new sphere of growth in inequality is within racial groups. This is also finding expression in space, with the new black middle- and upper-income groups settling in newly built urban extensions, of which most are of an enclosed, estate-type nature (see Serfontein & Oranje 2008). These developments are spatially concentrated primarily in the south-eastern and north-eastern quadrants of the municipality – areas that are not in close proximity to the major former townships in the municipality. In addition to this, the inner city area and adjacent high-density apartment areas of the city have seen a massive out-movement of white residents and an in-movement of blacks, comprising primarily lower-middle income earners, students and foreign nationals (see City of Tshwane 2006; The Presidency 2007).

While the municipality is located in the populous and densely settled Gauteng Province,[1] it has sizeable stretches of lower-density, high-poverty, semi-rural/peri-urban settlement, especially so in its far northern and north-western sections (City of Tshwane 2006; The Presidency 2007). In the eastern segment, former white-owned agricultural holdings and small farms have by and large made way for high-income low-density equestrian and golf estates. It is this type of development, coupled with the more urban/suburban and inner-city settlements, that renders the use of definitions of 'urban' and 'rural' not just problematic but meaningless (see Figure 1). Nonetheless, there is a tendency in official documents and in the local tongue to refer to the far northern areas and tracts of the north-western section of the municipality as rural (see City of Tshwane 2006).

---

[1] The province had nearly 10 million inhabitants in 2006, and was only second to KwaZulu-Natal Province in terms of population size (The Presidency 2007).

Figure 1: Population densities in the City of Tshwane, 2004
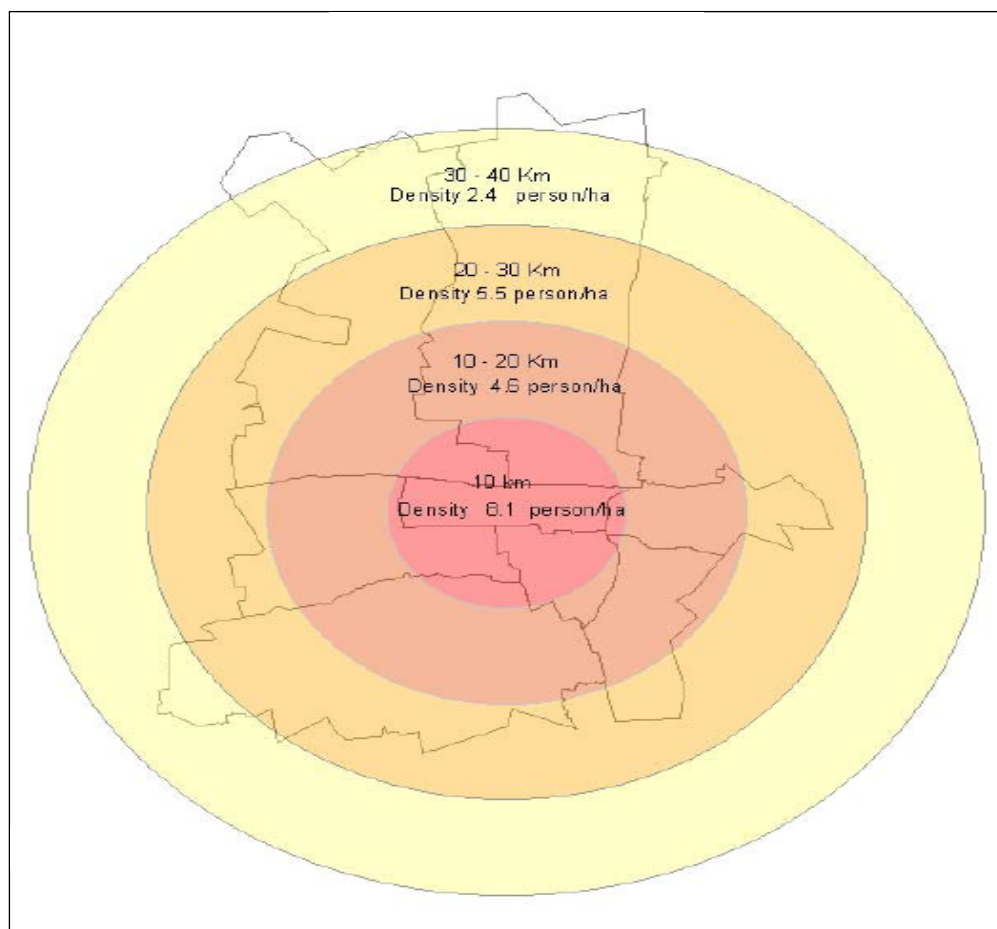
Source: City of Tshwane 2004a

1.1 Demographic trends in Tshwane

The strong growth of the economy has seen a significant in-movement of migrants (a net in-movement of 156 359 people between 1996 and 2001, and 137 685 people between 2001 and 2006), many in the age bracket 18–35, and predominantly from the provinces of Limpopo, Mpumalanga and Northwest (City of Tshwane 2004; The Presidency, 2007).[2] This high level of in-migration,[3] in addition to strong natural population growth of 3.37% per annum, saw the population grow from 1 669 787 in 1996 to 1 987 549 in 2001 (City of Tshwane, 2004a; The Presidency 2007). More recently the figure being quoted is 2.2 millions inhabitants, of whom approximately 72.5% are African, 24% white, 2% coloured and 1.5% Indian (City of Tshwane 2004a, 2006, n.d.). Tables 1–3 provide some

[2] In comparison to municipalities in Limpopo Province such as Mopani, Sekhukhune, Giyani and Letaba, where the percentage of the population in the age bracket 20–65 was approximately 40% in 2001, the figure in Tshwane was 68% (City of Tshwane n.d.; Stats SA 2003).

[3] In terms of net in-migration as a percentage of the population in 1996, the City of Tshwane, at 7.15%, had the third-highest level of in-migration between 1996 and 2001of the 283 municipalities in the country (The Presidency 2007). In absolute numbers it was only second to the Ekurhuleni Metropolitan Municipality with a net in-migration of 140 252 during this period (The Presidency 2007).

perspective on the population totals, population growth and in-migration trends of Tshwane in relation to four of the other district/metropolitan municipalities in the country.[4]

Many of the migrants have strong ties to 'homes' other than the one they inhabit in Tshwane, in the more rural provinces and neighbouring countries from which they migrated to the city. While official figures are not available, it is broadly accepted that a sizeable segment of income earned in Tshwane is remitted to relatives in these 'other homes'. At the same time, the existence of many higher education establishments in the region not only cause a high temporary in-movement of young persons from all over the country and increasingly from the continent, but also a sizeable amount of money being remitted from relatives outside the area to these students in the city.

Table 1: Population figures for the five most populous district/metropolitan municipalities in South Africa, 2007

	District/metropolitan municipality (MM)	Province	Total population 2007	Percentage of national population 2007	Cumulative percentage of national population
1	City of Johannesburg MM	Gauteng	3 888 183	8.03	8.03
2	City of Cape Town MM	Western Cape	3 497 101	7.22	15.24
3	eThekwini MM	KwaZulu-Natal	3 468 083	7.16	22.40
4	Ekurhuleni MM	Gauteng	2 724 226	5.62	28.03
5	City of Tshwane MM	Gauteng	2 345 909	4.84	32.87

Source: Quantec 2007 data, using Stats SA community survey (10% sample) extrapolated.[5]

Table 2: South African district/metropolitan municipalities with the greatest population growth, 1996–2007

	District/metropolitan municipality (MM)	Province	Total population growth 1996–2007	Average annual % growth 1996–2007	Percentage of national population growth
1	City of Johannesburg MM	Gauteng	1 254 056	3.60	15.37
2	City of Cape Town MM	Western Cape	948 874	2.92	11.63
3	eThekwini MM	KwaZulu-Natal	728 715	2.17	8.93
4	Ekurhuleni MM	Gauteng	700 446	2.74	8.59
5	City of Tshwane MM	Gauteng	674 917	3.13	8.27

---

[4] In terms of the Municipal Structures Act, 1998, there are three categories of 'municipality' in the country:

- ♦ Category A municipalities, also known as 'metropolitan municipalities', which have exclusive municipal executive and legislative authority in their area of jurisdiction. In other words, there is only one municipal council in an area with a Category A municipality.

- ♦ Category B municipalities, also known as 'local municipalities', which share municipal executive and legislative authority in their area with a Category C municipality within whose area they fall.

- ♦ Category C municipalities, also known as 'district municipalities', which have municipal executive and legislative authority in an area that includes more than one municipality.

[5] Quantec is a private company located in Pretoria/Tshwane that compiles databases for both public and private buyers, using both Statistic South Africa (Stats SA) data and their own surveys.

Source: Quantec data, using Stats SA 1996, 2001 data and 2007 community survey (10% sample) extrapolated.

Table 3: Top five in-migration district/metropolitan municipalities, 2001–2006

	District/metropolitan municipality (MM)	Total in-migration 2001–2006	Total population growth 2001–2006	In-migration 2001–2006 as % of total district/MM growth
1	City of Tshwane MM	157 525	259 837	60.62
2	City of Cape Town MM	141 157	339 622	41.56
3	Ekurhuleni MM	136 399	264 105	51.65
4	City of Johannesburg MM	118 323	277 768	42.60
5	eThekwini MM	54 139	158 516	34.15

Source: CSIR 2008

1.2 Informal economic activity

As in most other urban parts of the country, the economy is a dense mix of formal and informal interactions and arrangements. The highest levels of classical informal economic activities take place on the peripheries of the major retail, office and entertainment areas. Informal retail and service-related activities are strongly concentrated in the former township areas and in many of the lower-income formerly white suburbs. Notwithstanding this, less visible and less intrusive informal activities take place in many of the middle-income formerly white suburbs. These often take place without consent or approval from the City Council of Tshwane, and are generally not reported to the authorities by neighbours due to their low impact. The municipality does, however, enforce compliance with the municipal town planning scheme and municipal by-laws, should it become aware of (or be alerted to) such activities. In the case of the informal activities in the townships and lower-income areas, the tendency seems to be to turn a blind eye, and to only respond when the activity becomes a threat to public safety or convenience. The same practice prevails regarding the sale of furniture, bicycles and plants along major metropolitan routes. Table 4 explores the informal sector of the economy and indicates where informal trade areas are located and how many businesses form part of this sector.

Table 4: Number of informal traders in selected areas of the Tshwane Metropolitan Municipality

Informal trade area	Area name	Traders (N)	%
Bloed/Van der Walt Street taxi ranks	Pretoria–CBD	411	11.4
Marabastad	Pretoria West	658	18.2
Denneboom Station	Mamelodi	627	17.3
Bosman Station	Pretoria–CBD	111	3.1
Wierda Park taxi rank	Centurion	15	0.4
Laudium shopping mall	Laudium	15	0.4
Centurion taxi rank	Centurion	12	0.3
Saulsville Station	Saulsville	98	2.7
East Lynn business district	East Lynn	85	2.4
Church Street mall & square	Pretoria–CBD	191	5.3
Kopanong Station	Mabopane	1	0.0
Babelegi Station & business area	Hammanskraal	372	10.3
Ga-Rankuwa Hospital/shopping complex	Ga-Rankuwa	89	2.5

Wonderboom Station	Pretoria North	54	1.5
Eerstefabrieke Station	Mamelodi	10	0.3
Sunderland Ridge industrial area	Centurion	2	0.1
Road Junction Station	Centurion	9	0.2
Irene Station	Centurion	5	0.1
Mabopane Station	Mabopane	831	23.0
Soshanguve Station	Mabopane	18	0.5
Total		3 614	100.0

Source: Bureau for Market Research 2004

1.3 Housing provision and property development

Even though the provision of lower-income housing has been taking place at a steady pace, the city still has a housing backlog of 280 000 (Groenewald 2008). As in most other municipalities, this provision of lower-income housing has by and large taken place on the peripheries of the former townships, and has been of the single house-per-stand type, which represents 96.65% of the total housing stock in the municipality (City of Tshwane 2004a). This has further swollen the already large footprint of the city and increased travel distances and motorised travel dependency (see Figure 1). Informal settlement is largely restricted to backyard shacks and scattered shelters in the more run-down parts of the inner city. This relatively limited prevalence of informal settlement is primarily the result of high levels of state housing provision, and of the city and private landowners holding a tight rein on illegal settlement (see Groenewald 2008). This pattern seems set to continue, largely due to the shrinking area of land available in the municipality for development, and the high (and rising) value of land due to a very active property development sector in the municipality.

Table 5: **District/metropolitan municipalities with the largest number of formal, informal and traditional houses, 2007**

	Formal housing*		Informal housing**		Traditional housing***	
	District/metropolitan municipality	Total (N) 2007	District/metropolitan municipality	Total (N) 2007	District/metropolitan municipality	Total (N) 2007
1	City of Johannesburg	837 849	Ekurhuleni	286 448	OR Tambo	235 818
2	City of Cape Town	603 207	City of Johannesburg	260 332	Amatole	130 712
3	eThekwini	572 682	City of Cape Town	179 977	Vhembe	124 760
4	Ekurhuleni	538 492	eThekwini	172 945	Mopani	81 843
5	City of Tshwane	437 733	City of Tshwane	164 922	Uthungulu	80 782

Source: Quantec data, using Stats SA community survey (10% sample) extrapolated.

Notes: * Formal housing comprises: a house or brick structure on a separate stand or yard; a flat in a block of flats; a town/cluster/semi-detached house (simplex, duplex or triplex); a house/flat/room in a back yard; a room/flatlet, not in a back yard, but on a shared property.
** Informal housing comprises: an informal dwelling/shack in a back yard; an informal dwelling/shack, *not* in a back yard, e.g. in an informal/squatter settlement.
*** Traditional housing refers to a dwelling/hut/structure made of traditional materials.

Table 6: **District/metropolitan municipalities with the highest absolute number of formal, informal and traditional houses built between 1995 and 2007**

Formal housing		Informal housing		Traditional housing	
District/metropolitan municipality	Growth 1995–2007	District/metropolitan municipality	Growth 1995–2007	District/metropolitan municipality	Growth 1995–2007

1	City of Johannesburg	218 210	Ekurhuleni	111 289	Vhembe	33 594
2	Ekurhuleni	130 490	City of Johannesburg	90 513	OR Tambo	30 103
3	eThekwini	106 652	City of Tshwane	67 369	eThekwini	24 746
4	City of Cape Town	90 687	Bojanala	43 475	Uthukela	20 746
5	City of Tshwane	86 994	City of Cape Town	37 690	Sisonke	16 021

Source: Quantec data, using Stats SA community survey (10% sample) extrapolated.

The property development sector has been a strong contributor to the economy of the municipality, finding expression in the construction of huge numbers of housing units for the middle- and higher-income market segments; in massive retail, entertainment and office expansion in the form of malls and office parks; and of late, in sizeable light industrial and warehouse-type developments along the main routes connecting the municipality to the rest of the Gauteng City Region (see Du Toit et al. 2008). In this kind of environment speculation in land is rife, and land ownership is a key ingredient in wealth creation and economic growth (see Serfontein 2007). Such ownership is in most cases private and corporate, with traditional and tribal arrangements prevailing in the more rural northern and western areas.

These latter forms of ownership may have contributed to these areas not seeing the same kind of development as that taking place in the areas where private ownership prevails. The more likely explanation is simply that these areas are located in the historically lower-income parts of the city, and are in any case not as targeted to the same extent by the private sector as the higher income south-eastern areas (see Serfontein, 2007). This may of course change, as green-field land available for development is rapidly dwindling.

1.4 Transformation and economic inequalities in Tshwane

On the score of transformation and the pursuit of greater equality since 1994, the City of Tshwane has, despite some positive gains (see Figure 2), as in most of the country, not seen the kind of movement desired. While access to housing and basic services has made great strides, these have not necessarily resulted in the creation of quality settlements (see Oranje 2003). In many cases it is still a case of 'housing in the veld', not unlike the provision of housing during the apartheid era. As noted earlier, schooling in the former townships is also not remotely close, in terms of quality and physical infrastructure, to the schooling offered in state schools[6] and private schools located in the formerly white suburbs.

Unemployment has also shown a stubborn resistance to positive change – one source claiming a figure of 55% unemployment in the informal areas of the city (City of Tshwane n.d.), another a figure of between 45% and 60% in the north-western areas, and between 15% and 45% in the other former township areas (City of Tshwane 2004a). There is very little to suggest that there will be any change for the better soon. It is especially youth unemployment that has remained high and even grown – up from 49% in 1996 to 53% in 2001 for the age group 20–24, and reaching as much as 81% in the north-western areas of the municipality (City of Tshwane 2004a). As noted earlier, inequality in income and ownership of capital has remained high and even risen, with the Gini coefficient in the City of Tshwane rising from 0.57 in 1996 to 0.6 in 2002 (City of Tshwane 2004a). In terms of poverty, the

---

[6] Some of these schools, often referred to as 'former Model-C schools', were permitted to integrate their student population in the final years of the apartheid government; the schools which chose this route were, by definition, committed to offering high-quality, progressive education to all children, and they have remained sites of relatively privileged schooling – often raising private sector funds to augment their state funding – since the advent of democracy in 1994.

number of people living below the Minimum Living Level is approximately 515 537, representing just below 26% of the total population of the municipality (The Presidency 2007). Another source has it at 29.1% of the population, with the figure for the north-western sections of the municipality exceeding 45% (see City of Tshwane 2004a).

Figure 2: Economic growth per metropolitan municipality
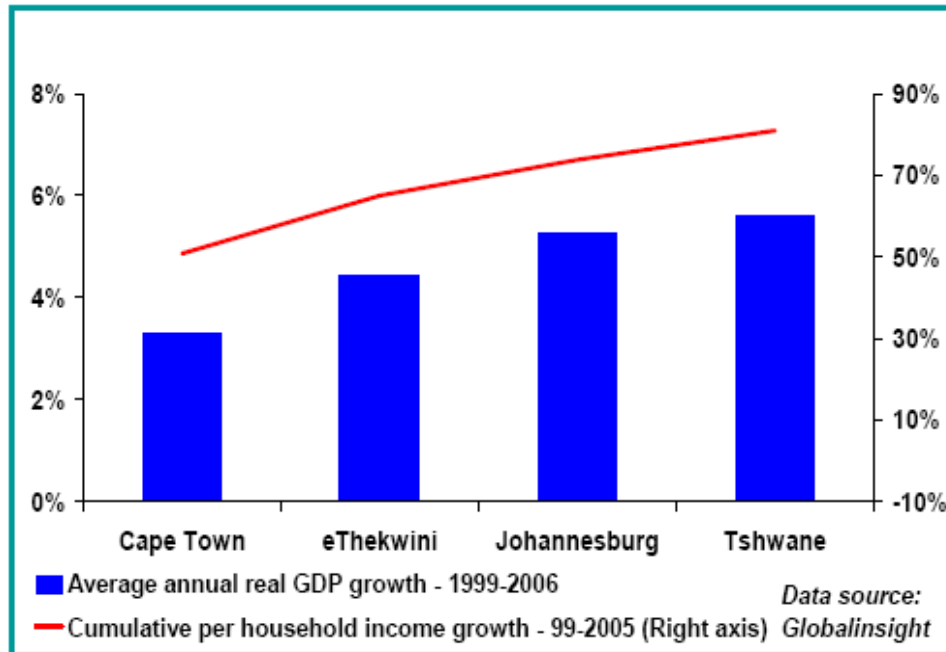

Source: First National Bank 2007

1.5   Cultural and ethnic factors affecting the city

While civil society is largely divided along lines of colour and income, and these two still tend to overlap, this historical crevice is increasingly being replaced by growing intra-racial group income inequalities. These divisions have not spilled over into major conflict, but have seen a growing groundswell of deep-seated unhappiness about persistent poverty, as well as frustrations around waiting lists for housing and the location and type of housing, and the lack of job opportunities. Conflicts have also been brewing around the presence of foreign nationals from other African and some Asian states, and these came to a head in mid-2008 with many of the townships in the municipality experiencing the kinds of xenophobic attacks and riots that were also erupting elsewhere in the country. Other than this, there do not seem to be major ethnic conflicts or contests in the municipality. This may not necessarily mean that negative feelings or stereotypes about other groups do not exist, simply that these have not led to violence, or are not reported on in the media.

Traditional African cultural practices are still practised in the former townships in the municipality, reflecting the presence of a semi-rural community in the greater Gauteng area. Similar rituals have been observed in the former white suburbs as part of ceremonies conducted for weddings, baptisms and deaths, as people formerly confined to townships have bought homes in the suburbs and begun to introduce their cultural traditions into these areas.

1.6   Other factors impacting on development

Crime is a major problem in Tshwane, with personal and property crimes in the city amongst the highest in South Africa (see Figure 3) (City of Tshwane 2006). With regard to certain categories of crime such as armed residential robberies and hijackings, the municipality is one of the worst-hit in the country. This high crime level has been identified as the single biggest contributor to the birth and massive growth of enclosed, barricaded and patrolled suburbs and estates (see Du Toit et al. 2008).

Figure 3: Number of people experiencing residential burglary in South African cities, 2001
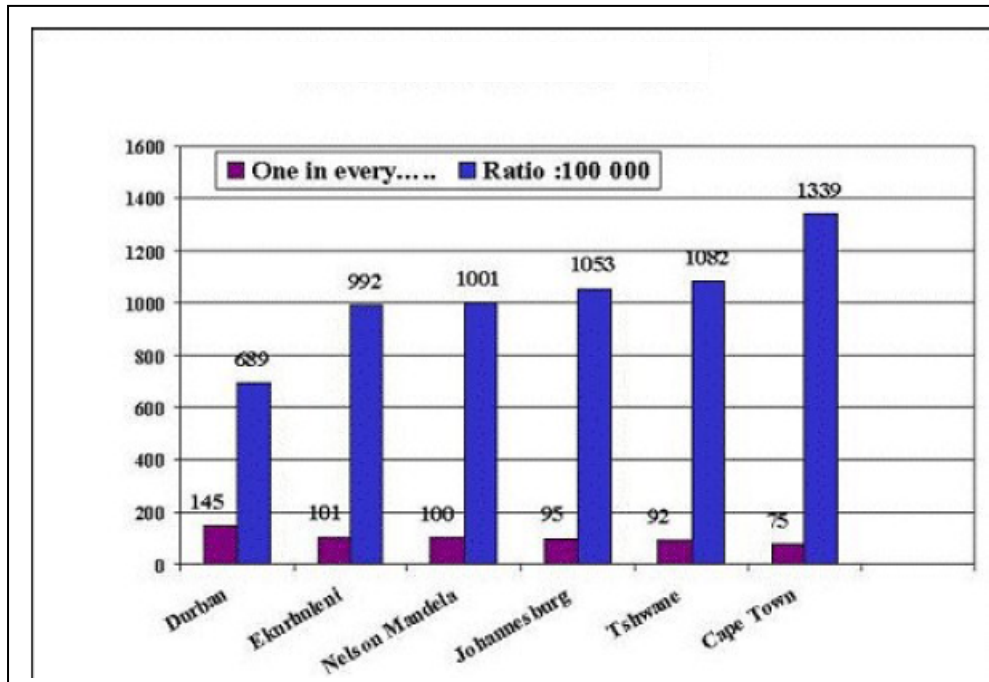
Source: Centre for the Study of Violence and Reconciliation 2001, cited in City of Tshwane 2004a.

With regard to health issues the biggest single killer remains HIV/AIDS. Official statistics suggest that approximately 17% of the population of the city is HIV-positive (City of Tshwane 2004a). The city has a relatively well-functioning public and primary health care system (see City of Tshwane 2006). A clear contributor to this situation is the 36 hospitals and clinics in the municipality (City of Tshwane n.d.). Water-borne infections have been few and far between, largely due to a well-functioning municipal administration and generally good health services.

In terms of environmental challenges, the municipality faces (1) the problem of shrinking pristine natural land and land for agricultural purposes, due to the low-density form of urban expansion; (2) pollution due to high motorised transport dependency/use; and (3) an increasing likelihood of water shortages due to the rising population and the predominant low-density, 'house-plus-garden' form of development and land utilisation taking place (City of Tshwane 2004a).

2. The planning system of the country and region

2.1 Moving from apartheid to post-apartheid planning

The South African planning system can be described as 'in transition'. On the one hand the regulatory, land use management side is still primarily locked into the legislation of the past. Other than a 1995 national Act, the Development Facilitation Act (DFA) (No. 67 of 1995), which provides an alternative avenue for applying for land use rights, provincial ordinances and bantustan legislation of the previous political dispensation still prevail (see Oranje 2002). These fragmented pieces of legislation are essentially a mix of the British town planning schemes of the first half of the 20th century with some sprinklings of North American 1920s notions of zoning (Oranje 1998).

On the other hand, the strategic, 'forward' planning function is mandated and regulated by new, post-1994 local government legislation. In terms of this legislation, primarily the Municipal Systems Act (No. 32 of 2000) and regulations passed in August 2001 in terms of this Act, all municipalities in

the country have to prepare Integrated Development Plans (IDPs). These IDPs are five-year strategic plans which are meant to provide the framework in terms of which all actions of government (including national and provincial government departments) in a particular municipality are determined and guided, and are reviewed on an annual basis. As such, the IDPs are also meant to be the central drivers of decision-making in relation to the budgets of all three spheres of government – local, provincial and national. When linked to the performance management system of a municipality, they are a key instrument for the monitoring and evaluation of the performance of officials and municipal departments/units.

In addition to the preparation and review of IDPs, the Municipal Systems Act (Section 26) also calls for the preparation of Spatial Development Frameworks (SDFs), which are intended to provide the frameworks within which (1) infrastructure investment and development spending in municipalities is to take place; and (2) decisions on land development applications are to be taken. The Municipal Systems Act also stipulates that the SDF has to provide 'basic guidelines' for the Land Use Management System (LUMS) of the municipality. The notion of a LUMS has in many municipalities been construed as 'the old town planning scheme (zoning scheme) with a more pleasant, less restrictive flavour'. This has seen a number of municipalities come up with a new Town Planning Scheme for their areas (as in the case of Tshwane in April of 2008), with the major departure from the previous schemes being that it now covers the whole municipal area (including the former townships, which under apartheid were excluded from town planning schemes for 'white' areas of a municipality) and a few new land use categories (essentially to provide for informal home-based activities, e.g. spaza (convenience) shops, hairdressers and taverns).

While it has been argued in this section that the planning system is, in some respects, not that different from the previous apartheid-governed system, there are some major departures that need to be mentioned. The first is the clear intent to connect local, provincial and national planning in a single, strategic instrument through the linking up of the IDPs, Provincial Growth and Development Strategies (PGDSs) and the directives of the National Spatial Development Perspective (NSDP). Unfortunately the system is not functioning as wished for, largely due to a lack of monitoring and evaluation, power contests in and between spheres and sectors of government, and capacity constraints.

The second departure is the normative base that now underpins and guides planning, through the normative principles in the DFA of 1995; all planning and land development in the country has to be undertaken and managed in terms of these principles. The third departure is the desire to integrate strategic and sector planning, e.g. planning of land use, transport, education, health, environmental management, etc. The fourth is the wish to integrate strategic planning and financial planning (i.e. the budget), with the stated intent being for strategic planning to drive the budget. The fifth is the pursuit of a link between strategic/forward planning and spatial planning and land use management. Finally, the preparation of plans and frameworks now takes place with far more community participation than in the past, albeit without the participation of business people, farmers and white people generally. Whether this more participatory form of planning really entails 'the participatory preparation of plans', though, is debatable.

Even though many of these novel developments have not borne the fruits wished for, they do represent a move in a direction that is very different from the one that planning was constrained by during the apartheid years. These new municipal plans, policies and frameworks have by and large been prepared by South Africans, with some foreign involvement in the form of funding for policy development, plan preparation and study visits, and minimal technical assistance.

2.2 Local government in the City of Tshwane

As in other metropolitan municipalities in the country, the City of Tshwane prepares a myriad of

plans (see Oranje 2006). Over and above the sector plans, such as those for transportation, economic development and the development and protection of green systems, a number of strategic plans with integrated development and spatial development in mind are prepared by the Office of the Mayor and the City Planning and Development Division. These are the IDP (see Figure 4), the Metropolitan Spatial Development Framework (MSDF) (see Figure 5), the Regional Spatial Development Frameworks (RSDFs) (five in total), the City Strategy (CS)[7] and the Spatial Vision 2010 (see Oranje and Coetzee 2008). Despite the clear aim to ensure integration of these different plans, this is still not happening as envisaged. One of the key reasons for this is a lack of clarity as to which plan guides which, and what the strategic objectives are overall, largely as a result of the wide diversity of objectives in the different plans (Oranje & Coetzee 2008). It is anticipated that the creation of five new regions, together with their RSDFs, will provide a closer fit between the strategic objectives of the city and development on the ground. Suggestions have been made for an even 'lower' form of planning, i.e. planning for the 76 wards in the municipality.

In April of 2008 the City Planning and Development Division produced a new Tshwane Town Planning Scheme, 2008, in terms of the former Transvaal province's Town-Planning and Townships Ordinance (No. 15 of 1986), which it sees as the key component of a new LUMS (see City of Tshwane 2008). This scheme, for the first time in the history of the city, covers the whole city (see Figure 6). As noted earlier on a more generic level, it has been suggested by some commentators that the city seems to believe that a new LUMS could be instituted simply by preparing a new town planning scheme. Whatever the situation may be, the new town planning scheme represents a new and welcome departure from the previous segregated system.

Figure 4: The Tshwane IDP

---
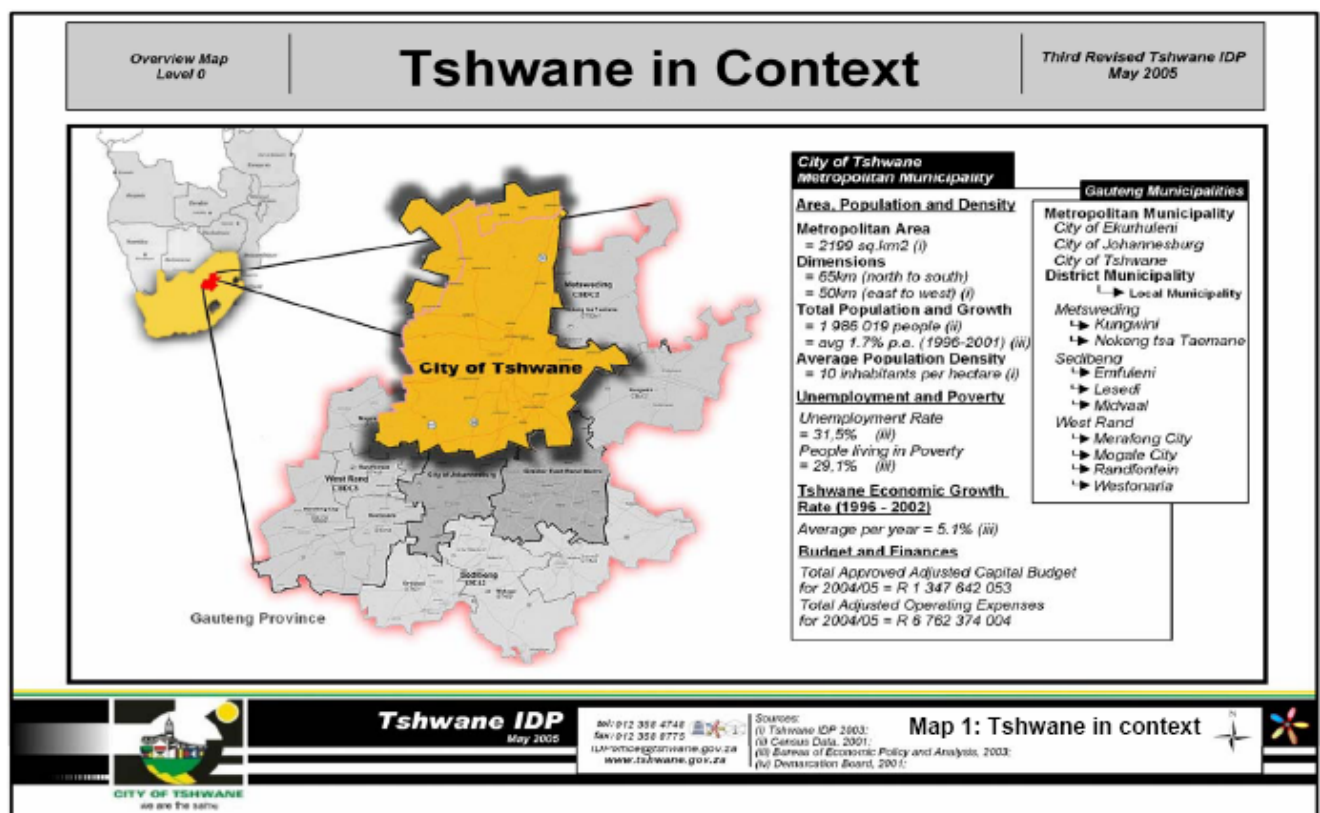
[7] Also known as the City Development Strategy (CDS).

Source: City of Tshwane 2006

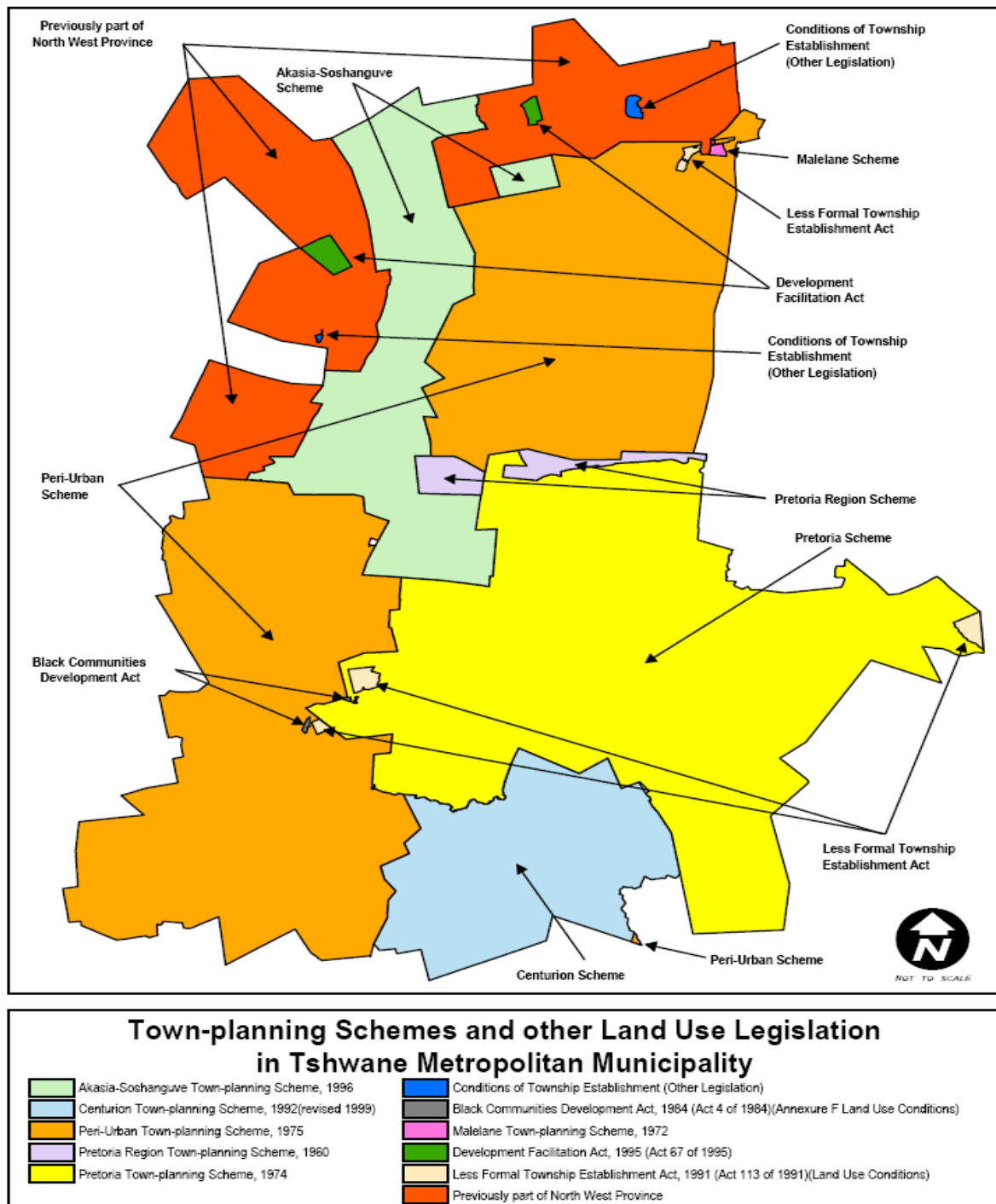**Figure 5: Tshwane Spatial Development Concept**
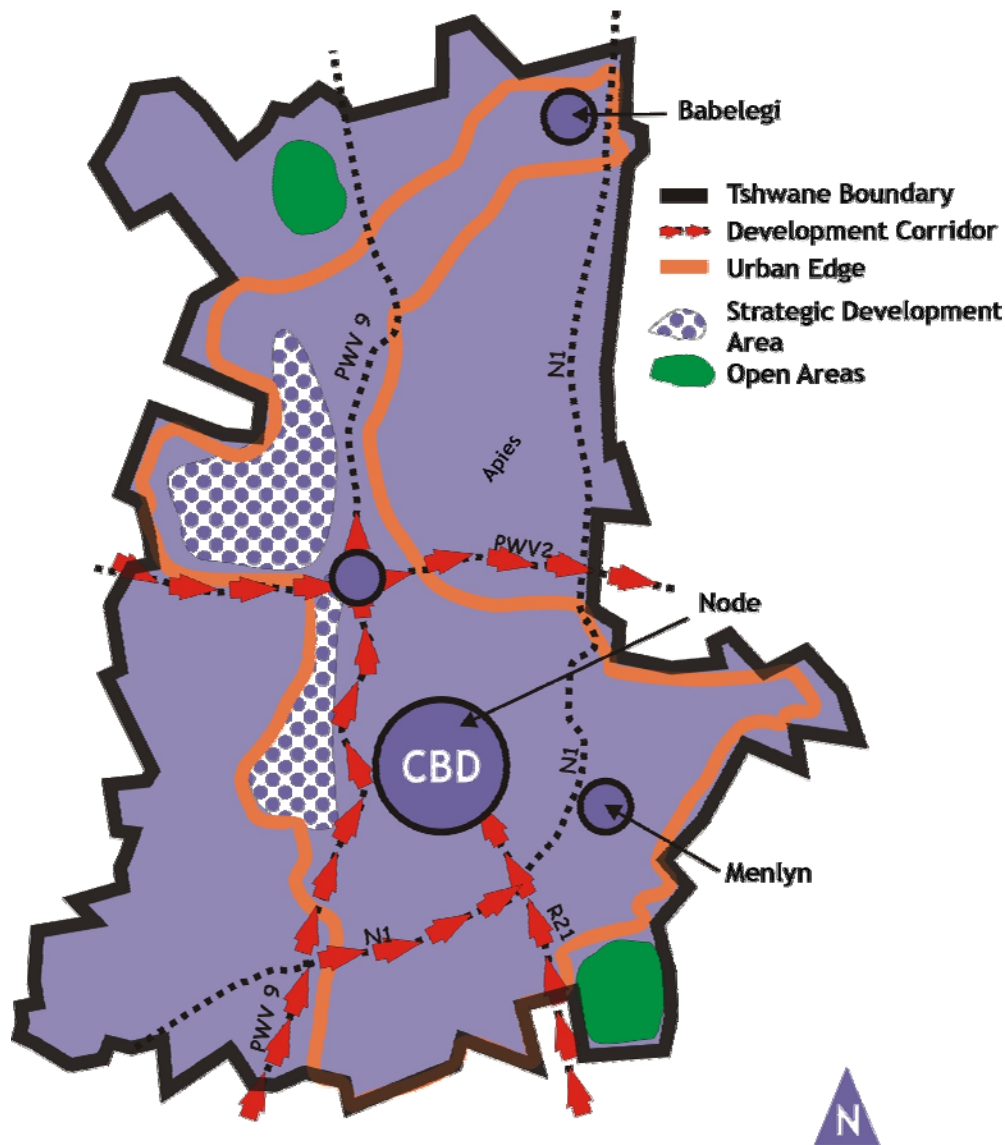
Source: City of Tshwane 2005

In addition to the broader-level plans, the city prepares specific precinct plans for areas experiencing rapid development or where government intends making substantial investments in infrastructure. Private developers are often also asked to prepare a development framework for the wider area in which they are proposing a development. In many cases developers do so of their own accord, to ensure a land development pattern that will benefit both them and the surrounding land owners/users.

While many new plans have been prepared, the links between the plans, especially those between the SDF and the RSDFs on the one hand, and the SDF and the LUMS on the other, are not always as desired. This is largely due to the novel nature of the new system and to decision-makers not always considering these strategic frameworks when taking their decisions. This situation is worsened by the fact that the DFA creates a parallel process by which a provincially appointed DFA Development Tribunal, and not the City Council of Tshwane, is empowered to take decisions on land development

applications. This tribunal is guided by what it is presented with, which may mean that the way in which it interprets the SDF is not the same as the way in which city officials do so.

Figure 6: The many former town planning schemes covered by the new Tshwane Town-Planning Scheme, 2008
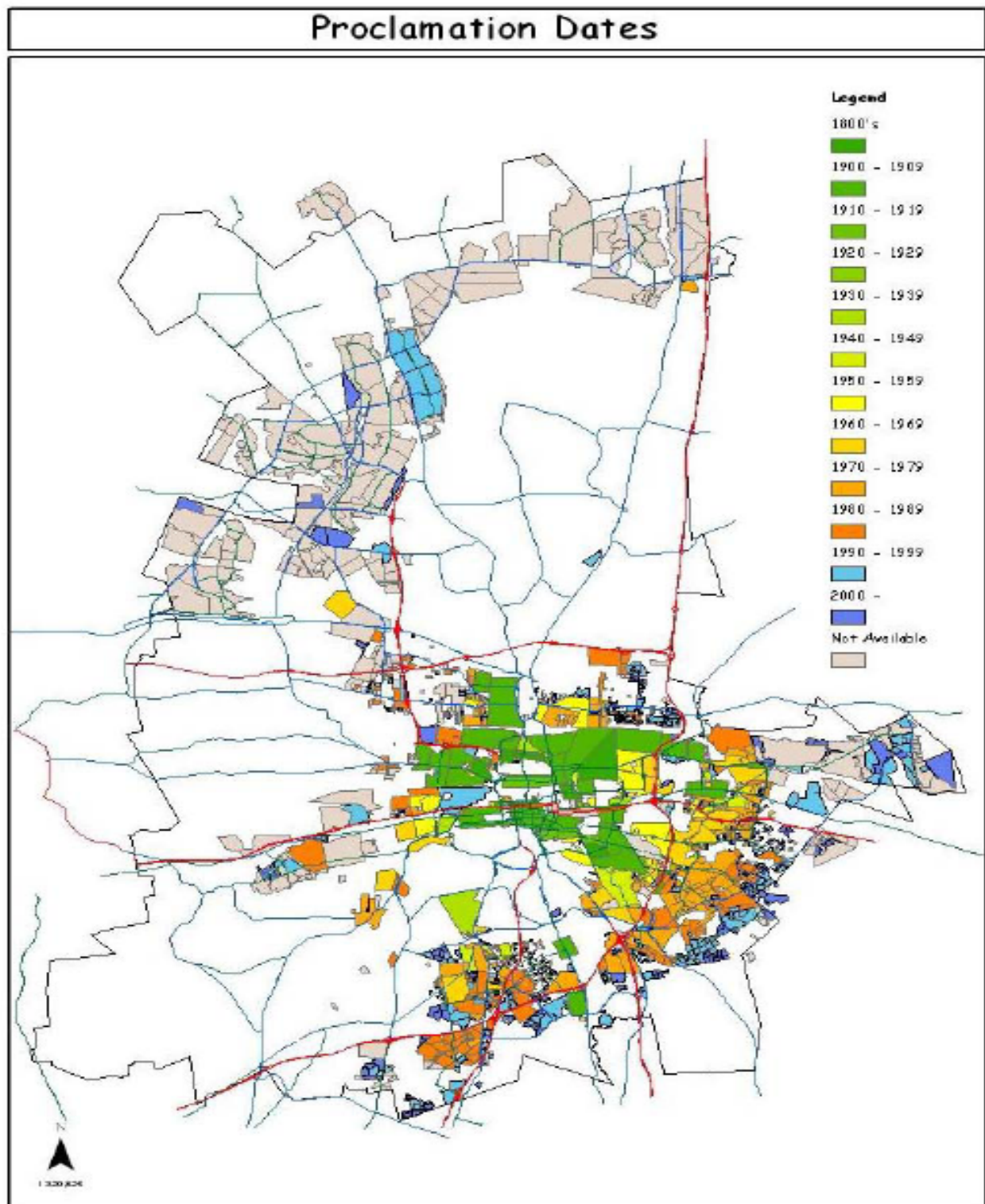
Source: City of Tshwane 2008

2.3 Plans and objectives

The strategic and land use development plans referred to above are all focused on achieving more sustainable, more integrated cities and high-quality living environments. The plans themselves have all been prepared with this in mind, and by and large provide frameworks that could assist the city in meeting these objectives. As noted earlier, delivery on these objectives has not been as wished for; something that could in all likelihood be attributed less to the plans than to funding and capacity constraints and dysfunctional institutional arrangements. In addition to this, the scale of the challenge, and the lack of a phased strategy or programme for meeting these objectives, could also be responsible for the lack of movement in the desired direction. This means that the apartheid space economy still prevails, with only members of the new black middle class and elite that have moved into the former white suburbs and the new estates escaping the poverty and finding themselves in better living environments. In addition to this, the current low-income housing policy of a single house per stand has not assisted in turning the tide against the apartheid socio-economic-spatial model. This situation has also barely changed since the introduction of the government's current plan for the development of sustainable human settlements, 'Breaking New Ground', which seeks to ensure the provision of inclusive housing (see Oranje 2007). This is largely the result of the policy not having been in existence long enough for its implementation to have produced significant effects, and also of the limited impact the policy can in any case have, even in a best-case scenario.

Despite some changes, the situation is therefore that the city has changed little since the advent of democracy in 1994, in terms of both form – it is still low-density and sprawling (and environmentally disastrous), and access to opportunities – despite some new retail developments in former townships, these areas are still essentially dormitory townships. Essentially, both the former townships and the new settlements created post-1994 are low-quality, drab and far from the envisaged good-quality environments. To blame planning for this would be wrong, though. The key culprits are in all likelihood the economic system, weak formal education in townships – for instance in certain of the north-western parts of the municipality more than 27% of the population 20 years and older have no formal education (City of Tshwane 2004) – and an over-complicated and ineffective state administrative architecture. This means that the intergovernmental interactions and the desired linkages and alignment between the plans, budgets and actions of the various spheres and sectors of government are not taking place as envisaged. This state of affairs is not captured on paper, with all plans professing such linkages, but with reality unfortunately proving differently.

As for the interface between the municipality and private sector developments, the plans do provide guidance for investors, assuming that investors consult these plans – something that some officials doubt actually happens (see Du Toit et al. 2008). While there seems to be a general compliance with plans, either by simply advising developers to invest in certain areas and not others, or by turning down applications, there are also gaps. The major and growing disjunction lies between the wish of the private sector to invest in the south and south-eastern parts of the municipality and the stated wish of the city for this investment to take place in the north and north-west, where a large segment of the poor are concentrated (see Figure 7). This wish for investment in the south-east is in all likelihood nothing more than a desire to invest in the areas inhabited by the middle- and higher-income groups, and not a concerted wish to exclude the poor. Increasingly, investment is also taking place in 'lower-income areas', but not at the same scale as in the middle- and higher-income areas – the market economy simply creates and is fed by an investment model that is not focused on the poor.

Figure 7: An overview of residential expansion in the City of Tshwane, 1860–2004

Source: City of Tshwane 2004a

3. The planning education system in the Department of Town and Regional Planning, University of Pretoria

The Department of Town and Regional Planning follows an 'outcomes-based approach' to education, which is in accordance with international trends and the educational philosophy of the University of Pretoria. Lecturers facilitate appropriate conditions for learning and assessment in accordance with official course curricula and study guides, whereas students have to take responsibility for their studies, including attending and preparing for classes, participating in class discussions and adhering to assessment criteria in writing papers and doing practical assignments. Central to the department's educational approach is the emphasis on understanding, rather than on memorising, in order to stimulate creative thinking and problem-solving. A problem-driven approach to learning is therefore followed. Table 7 provides a summary of the different programmes offered by the department.

With regard to the curriculum, the overall objectives are to ensure that students acquire the knowledge, skills and values to enable them to become reflective, critical professionals, who are both able to implement the prevailing planning system, wherever they may encounter it, and with or in whichever sphere of government they may work, as well as capable of proposing ways to improve it. The view in the department has always been that it serves little purpose to be critical about something one does not understand; hence the emphasis both on learning about what is, and thinking and reading about what should and could be, and what it will take to get there.

3.1   Programmes offered

In order to achieve these outcomes the curriculum includes a wide variety of modules which seek to ensure, on the one hand, that students acquire knowledge and understanding of the planning system, and the basic skills to function in the system from day one, and on the other hand that they develop their creative thinking and critical reasoning abilities. In order to ensure a thorough understanding of the wider set of systems in which planning is located and of which it is a part, at least 40% of the modules in the Bachelor of Town and Regional Planning (BTRP) programme are taken in other departments. These 'non-planning' courses are all offered by the departments responsible for the particular areas of focus, e.g. Economics 110 and 120 are the same courses taken by students studying towards a Bachelor of Commerce degree and majoring in economics, and are not for instance offered 'in-house' by a planner who 'has a keen interest in economics'.

It needs to be noted that there is a difference in emphasis between the BTRP and the Master of Town and Regional Planning (MTRP) by coursework. While the former is more a classical town and regional planning education with a strong slant towards developing countries, the latter is a town and regional planning degree with a stronger emphasis on conceptual thinking skills, strategy development and policy formulation.

Both the BTRP and MTRP coursework programmes are built on three pillars:

- strategic and development planning;
- land development and land use management; and
- settlement planning and design.

All of the planning modules in both programmes (see Table 8) reflect these three sets of concerns. Courses which integrate these issues are offered in the fourth (final) year. These are identified by a 'TPI' course code.

Table 7: Summary of programmes offered by the Department of Town and Regional Planning, University of Pretoria

	BTRP	MTRP	PhD in Town and Regional Planning
Forms of work required	Coursework	Option 1: Dissertation. Supplementary undergraduate modules may be prescribed for students who have not obtained a BTRP. Option 2: Coursework and a treatise.	Students must have successfully completed a relevant module in Research Methodology and must submit a thesis as well as an academic article dealing with a topic in the field of study.
Format	Full-time	1. Thesis part-time 2. Coursework and treatise modularised	Part-time
Year initiated	1965	1. 1965 2. 2000	1965
Duration	4 years	Minimum 2 years	Minimum 2 years
Number of SAQA* credits	622	240	400
Current accreditation status with DLA**	Accredited	1. Not for professional accreditation 2. Formal request for accreditation lodged with SACPLAN***.	Not for professional accreditation
Number of students, 2008	198	1. 6 2. 57	6
Admission requirements	*Old system*: Grade 12 with university endorsement and E in HG Maths or D in SG Maths; a graduate from another tertiary institution; or pass in an examination prescribed by the university. Must pass an admission literacy test. *New system*: Afrikaans or English: 4 (50–59%); Mathematics: 4 (50–59%); Life Orientation: 4 (50–59%); and three other subjects. APS – 24****	1. A BTRP degree or an honour's degree in an associated discipline 2. A BTRP degree or an appropriate 4-year degree or 3-year degree and at least 15 years' practical experience.	A master's degree in an appropriate area of study

Notes: *   SAQA = South African Qualifications Authority
   **   DLA = Department of Land Affairs, the national government department responsible for planning legislation

Table 8: BTRP and MTRP course modules

Course code	First semester	Course code	Second semester
First year			
CIL111	Computer Literacy 111	CIL121	Computer Literacy 173
EKN110	Economics 110	EOT120	Academic literacy 152
EOT110	Academic literacy 151	EKN120	Economics 120
GGY132	Cartographic Skills 132	GGY162	Remote Sensing 162
STK110	Statistics 110	GGY164	Physical Geography of South Africa 164
TRP111	Planning & Settlement Histories before Industrial Revolution 111	TPA120	Settlement Analysis and Assessment 120
TPA110	Site Analysis and Assessment 110	TPS120	Principles of Settlement Design 120
TRP110	Introduction to Planning 110	TRP121	Planning and Settlement Histories since the Industrial Revolution 121
Second year			
GGY283	Introductory GIS 283	GGY264	Urban Social Morphology 264
PAD210	Public Administration 210	TPA220	Plan & Policy Analysis and Assessment 220
TPD210	Development Planning 210	TPD220	Theory of Strategic and Integrated Development Planning 220
TPS210	Settlement Design Concepts 210	TPS220	Settlement Establishment and Housing Delivery 220
TPU210	Land Use Management Theory 210	TPU261	Urban Land Development Economics 261
		TPU262	Land Use Management Practice 262
		RES151	Introduction to Research 151
Third year			
TPS310	Spatial Concepts 310	GGY363	Natural Resource Management 363
RES361	Research Methodology and Methods 361	MDS321	Municipal Services Provision 321
SOC261	Globalisation and Development 261	TPD320	Local Economic Development 320
SVC310	Transportation Engineering 310	TPD321	Participatory Planning 321
TRP310	Institutional and Legal Structures for Planning 310	TPS320	Metropolitan, District and Local Spatial Planning 320
TRP300	Planning Futures 300	TRP 300	Planning Futures 300
Fourth year			
EOW710	Property Financial Mathematics 710	EOW320	Introduction to Property Law 720
PRF412	Professional Practice 412	BHU320	Housing 720
TPE410	Essay 410	POU320	Practical Development Feasibility 720
TPI451	Planning Interventions: Metropolitan Areas 451	SVC324	Road Design 324
TPI452	Planning Interventions: Urban Areas 452	TPE420	Essay 420
TRP400	The Future of Planning 400	TPI453	Planning Interventions: Peri-Urban and Rural Areas 454
		TRP400	The Future of Planning 400
		TPI454	Planning Interventions: Supranational, National and Regional Scale 453

Master's degree (by coursework)		
TPU810	Land Use Management and Land Development	
TPI811	Metropolitan and Urban-area-based Interventions	
TPS810	Sustainable Settlement Planning and Design	
TPD820	Integrated Development Planning	
TPI821	Regional and Rural Interventions	
TPS820	Design for Safety	
TRP800	An Overview of Planning Theory and Practice	
	Students select additional modules offered by other departments.	
TPE	Treatise 800 (100 credits)	The Head of Department must approve the topic of the treatise.

A brief narrative description of the courses offered by the Department of Town and Regional Planning is provided in the Appendix.

3.2 Teaching and learning methods

The department uses a wide variety of teaching methods, including formal lectures, seminars, studio-based practical sessions, research papers and oral presentations. In all of these interactions students are encouraged to engage with the issues, question, share and be creative. Due to the fact that many of the projects involve real-life problems, students engage with community members, officials, politicians and practising planners. In addition to this, the Faculty of Engineering, Built Environment and Information Technology in which the department is located has instituted a semester-long community-service module for all students in the faculty.

3.3 Assessment

Assessment takes place by means of formal tests, term papers, practical assignments, presentations and written and oral examinations. Group work is often used to assist students in developing communication skills and working with and learning from students from different backgrounds and contexts.

3.4 Staff-student ratios and throughput rates

It is difficult to provide a figure for staff-student ratios for the simple reason that so many guest and part-time lecturers are used. In terms of absolute numbers of lecturing posts and numbers of student in the undergraduate programme, the staff-student ratio is approximately 1 : 33.

The same is true for student throughput rates. It would be fair to state that about half of all students who register in the first year (out of a total of between 35 and 50 new first-year students) in the BTRP programme finish in 4 years. In the case of the coursework master's programme, throughput is generally low. This is, however, not a case of students dropping out, but rather one of students not completing their dissertations, or taking 2–3 years to do so. The fact that the programme has only been running for 6 years does, however, make it difficult to make any clear statements in this regard.

3.5 Library and IT resources

Students have access to a very well stocked library, by South African standards, in terms of printed

journals and books, as well as a wide variety of electronic journals and databases accessible on the internet. All students are entitled to free use of a number of computer laboratories in the faculty, as well as internet facilities in the main library. By all accounts these are more than adequate. Lecturers also stay abreast of developments in the fields of planning and development and attend local and international conferences as delegates and presenters on a regular basis, where new ideas are communicated and debated.

3.6   Curriculum review

 The curriculum is revised on both a continual and an annual base. Minor amendments are made to modules in the following year, while more substantial changes, which require Regulation/Year Book amendments, have to be made a year in advance. This procedure can sometimes delay the implementation of crucial changes. In addition to this, changes to programmes and modules in the departments offering modules that planning students take, often also lead to curriculum amendments.

As for radical revisions, the last complete revision of the curriculum took place at the end of the 1990s, and came into operation in 2000. This was largely due to an internal process of curriculum refinement embarked upon in the early 1990s coming to fruition, as well as the result of external pressure in the form of the introduction of the South African Qualifications Authority's outcomes-based model.

4. Links to the planning profession and professional accreditation

The department seeks to maintain a constructive relationship with the planning profession in both formal and informal ways. Informally, practising professionals are invited to present guest lectures and also to lecture full modules, or parts of modules. (This is of course done not only to retain contact with the profession, but also to ensure that students have access to the latest ideas in practice, to 'buy in' skills that are not available in the staff contingent, and simply because of the limited number of lecturing positions in the department.) In addition to this, members of staff participate in the activities of the South African Planning Institute (SAPI), and collaborate with professional practising planners on projects and contract research.

In terms of professional accreditation the undergraduate bachelor's programme has been continually accredited on a 4–5-year cycle by the predecessor to the current South African Council for Planners (SACPLAN) since the establishment of that body in the late 1980s. The last formal such accreditation was undertaken in 2001 by the last Council of that body. Since the promulgation of the new Planning Profession Act (No. 36 of 2002) the department has not been visited by the new Council. This is not for want of trying on the part of the department, for a letter was sent in 2003 to the Council asking for a visit to inspect and accredit the MTRP coursework programme. If all goes well this visit, as well as that for the accreditation of the BTRP, should take place in February 2009.

The department has also, along with the other planning schools in the country, taken up contact with the Royal Town Planning Institute (RTPI) in the UK. Two members of this body visited South Africa in September 2008 on an exploratory visit and spent a day-and-a-half with the department. A report was recently received from the Institute in which a very favourable impression of the department, and of the University of Pretoria, was conveyed. It was also suggested that formal accreditation would be possible should it be pursued by the university.

5. Preparing students to operate in 21st-century urban and regional environments

The department seeks to expose students to the realties, practicalities and challenges they may encounter in the world of planning practice, as well as to equip them with the necessary skills, knowledge and values to attend to these challenges. Through regular interaction with the profession first-hand feedback is received from practice and gaps in the curriculum are addressed. This process is enriched by visits to other planning schools, both locally and abroad, interactions with foreign graduate students pursuing master's and PhD degrees and doing research in South Africa or taking modules in the programme, external examining, reading and the adoption of a critical stance. The process is also enhanced through an open approach to criticism and a willingness to revisit, revise, adapt and improve.

While the view in the department is that it is meeting the challenge well, and that students are, and will be, capable of functioning in the environments they will or may encounter, there are of course limits to what can be achieved given the number of available lecturers, funds and time (especially contact time, which is a major necessity in planning education). At the same time the output (quality of graduate) is also to a large degree determined by the input (quality of matriculant/graduate student). While it would seem that the quality of students has been improving, driven also by a higher entry requirement and a growing body of African students from more privileged home and educational backgrounds, the quality of students is still far below that of, for instance, those studying architecture. This simply means that aspirations to produce the kind of planner that will be required to function in and shape the 21st-century environment may be held back simply by the quality of students that planning programmes are attracting.

Another area of concern is located in the wide and diverse range of themes and study areas that planning entails. On the one hand the 'problem' lies with the small staff complement – with only five permanent members of staff the range of skills has its limits. (This problem of a small staff and limited contact time is compounded further by the fact that staff do not always have PhDs, which means that a key focus is on 'own studies', and also by the aspiration of university administrators to establish 'world-class research and publishing universities'.) In addition to this, the quality of education in a context where generic planning skills are valued in lecturers (for their ability to lecture the full contingent of modules offered in a programme) and not their unique areas of specialisation, is suspect.

For planning schools the ideal in such a setting is to attract and retain 'planning educators' with solid generic planning backgrounds, as well as definite areas of specialisation from which (many) publications can emanate. Such planners are hard to find and to keep. This means that in an environment in which the numbers of lecturing staff are not set to rise anytime soon, the current model deployed by the department, of 'buying in' expertise from the sizeable Gauteng professional planning market will have to suffice.

Over the longer term a better option may be to explore 'bigger and (hence) better' planning schools through mergers of departments/schools, and in doing so create programmes with at least 10–15 permanent members of staff. This would also improve the possibilities for creating research groups and strong streams of high-quality research outputs, and possibly even the yearned-for world-class research establishments.

Appendix

Brief description of courses offered by the Department of Town and Regional Planning

PRF 412   Professional Practice 412 (2 lectures/week, 14 weeks, 8 credits)
Professional conduct and practice addressing issues such as ethics and accountability; overview of the planning profession and organisations; introduction to business management; practical discussion of topics such as marketing, client service, promotion, administration and time management.

TPA 110   Site Analysis and Assessment 110 (2 lectures + 1×3 hours practical/week, 14 weeks, 16 credits)
Analysis and assessment of sites for planning purposes. Covers the analysis of context and natural (e.g. climate, geology), man-made (e.g. zoning, potential land value, land use and activity), and sensory elements (e.g. genius loci) of a site to determine the appropriate use of a site as well as the character of future development. Skills and techniques to communicate the analysis and assessment graphically.

TPA 120   Settlement Analysis and Assessment 120 (2 lectures + 1×3 hours practical/week, 14 weeks, 16 credits)
Analysis and assessment of settlements for planning purposes in terms of normative criteria, i.e. principles of good settlement forms and processes; aspects to be taken into consideration in settlement analysis, such as urban form, land use, transportation, socio-economic development, housing, local government; analysis instruments such as indicators, visual analysis, density analysis and citizen satisfaction surveys.

TPA 220   Plan and Policy Analysis and Assessment 220 (3 lectures/week, 14 weeks, 12 credits)
Analysis and assessment of plans and policy frameworks from a planning and development perspective. Analysis and assessment of substantive and communicative content. Deconstruction of text, norms and values, planning and development approaches. The role of planners and the democratisation of planning.

TPD 210   Development Planning 210 (3 lectures/week, 14 weeks, 12 credits)
Introduction to development problems, perspectives on and concepts of development. Approaches to development planning and development studies. Application of development proposals from local to national levels. International and local perspectives and case studies. Critical evaluation of development initiatives, and aspects such as culture, gender, diversity and sustainability. Role players in the development process.

TPD 220   Theory of Strategic Integrated Development Planning 220 (3 lectures/week, 14 weeks, 16 credits)
Theories of and processes in strategic planning, forward planning, integrated development planning; origins and intentions of these concepts. International and local perspectives and case studies. Policy framework for Integrated Development Planning in the South African context; role players in Integrated Development Planning processes, with specific reference to the role of the planner.

TPD 320   Local Economic Development 320 (3 lectures/week, 14 weeks, 12 credits)
Local economic development strategies and instruments. Local development initiatives. The direct and indirect roles of local government, the private sector and the public in local economic development.

The role of networks, linkages, locality, marketing and technology for local areas within the global

economy. Government programmes and initiatives that can influence and promote local economic development.

TPD 321   Participatory Planning 321 (3 lectures/week, 14 weeks, 12 credits)
Introduction to the concept, theories, aims and processes of participatory planning; participatory planning techniques and methods; democratisation of planning and the communicative nature of planning; role of the planner and other role players; evaluation, design and implementation of participatory planning processes.

TPD 820   Integrated Development Planning 820 (2 blocks, 14 weeks, 20 credits)
Introduction to development and development planning theories; the integrated development planning process; legal, institutional and policy frameworks in which integrated planning functions in South Africa; implementation of integrated development plans; case studies of integrated development planning; simulations of integrated development planning exercises.

TPE 410   Essay 410 (1 contact session/week, 14 weeks, 20 credits)
Identification and description of research problem. Literature study, research methodologies and programme. A study proposal in the prescribed format on a topic as approved by the Head of the Department.

TPE 420   Essay 420 (1 contact session/week, 14 weeks, 20 credits)
Design, plan and undertake research. The collection, synthesis and interpretation of data, in terms of the study proposal in TPE 410, as well as the written and verbal communication of findings.

TPE 800   Treatise 800 (4 blocks, 28 weeks, 100 credits)
Identification and discussion of a research problem; preparation of a research proposal in the prescribed format for approval by the Head of Department; literature study; design, plan and execution of research in line with approved research proposal; writing up and presentation of research findings; academic article for publication.

TPI 451   Planning Interventions: Metropolitan Areas 451 (2 lectures + 1×3-hours practical/week, 7 weeks, 16 credits)
Introduction to planning at metropolitan level; examples of planning interventions at metropolitan level; approaches to and examples of the delivery of housing, infrastructure and facilities; tensions in resource allocation and prioritising of development in metropolitan areas; institutional requirements and implications of planning and management of metropolitan development; critiques and improvements on current practice; simulated planning exercise.

TPI 452   Planning Interventions: Urban Areas 452 (2 lectures + 1x3 hours/week, 7 weeks, 16 credits)
The drafting of urban development and design frameworks to ensure development or redevelopment of urban areas in a relevant, social and environmentally accountable way. Specific focus on rehabilitation of declining city centres, fast growing edge cities, and underdeveloped parts of urban areas. Critique on and improvements of current practice; simulated planning exercise.

TPI 453   Planning Interventions: Peri-Urban and Rural Areas 454 (2 lectures + 1×3 hours practical/week, 7 weeks, 16 credits)
Introduction to planning and management of small towns, rural settlements, and peri-urban/rural districts; examples of planning interventions in rural areas; approaches to rural development, techniques and methods for planning in rural areas. Critique on and improvements on current practice; simulated planning exercise.

TPI 454   Planning Interventions: Supranational, National and Provincial Scale 453 (2 lectures + 1×3 hours practical/week, 7 weeks, 16 credits)

Introduction to planning at provincial, national and supranational scale. Approaches to planning and development of regions and provinces. Past and present examples of planning on each of these scales. Planners' roles in planning exercises at these scales; institutional requirements and implications of planning at these scales. Critiques and improvements on current practice; simulated planning exercise.

TPI 811   Metropolitan and Urban Area-based Interventions 811 (2 blocks, 14 weeks, 20 credits)
Scope, nature and rationale of metropolitan and urban area-based interventions; unique problems in metropolitan areas, for example inner city decay, fringe development, housing, services backlog, the dysfunctional apartheid cityscape and dependency on private transport; types of intervention (inter alia institutional, spatial, economic and social) in order to accomplish restructuring and development in metropolitan areas in South Africa in a relevant, social and environmentally accountable way; policy and legislation regarding urban restructuring and development in South Africa; international and local case studies; impact of globalisation on South African metropolitan areas and major cities; simulated metropolitan and urban area-based intervention exercise.

TPI 821   Regional Interventions 821 (2 blocks, 14 weeks, 20 credits)
Scope, nature and rationale of regional interventions on both a supra-national and sub-national scale; approaches to planning and development on continental, macro-regional, provincial and district scales; types of intervention (inter alia institutional, spatial, economic and social) in order to accomplish restructuring and development in regions in a relevant, social and environmentally accountable way, past and present examples of planning on each of these scales; planners' roles in planning exercises at these scales; critiques and improvements on current practice; rural urban linkages and their significance for regional interventions; debates around the way in which problems facing rural settlements (such as the absence of an economic base and necessary infrastructure, lack of access to land and conflicting demands on natural resources) in regions can be addressed; international and local case studies; simulated regional intervention exercise.

TPS 120   Principles of Settlement Design 120 (2 lectures + 1×3 hours practical/week, 14 weeks, 12 credits)
Introduction to the goals and principles of settlement design. Characteristics and measures as well as the design elements of a good living-environment; settlement design within both urban and rural contexts. Aspects that will be covered include settlement structure (open space and movement systems), sense, symbolism and legibility, accessibility, diversity and opportunity, sustainability, safety, justice and equity.

TPS 210   Settlement Design Concepts 210 (2 lectures + 1×3 hours practical/week, 14 weeks, 16 credits)
The skills and techniques to design a layout of a new settlements, or part of an existing settlement. It includes design for the provision of housing for both high and low income groups, as well as commercial and social facilities, open space systems, transportation systems and services. Design sustainable and equitable areas. Site analysis and assessment; development of alternative concepts; the detail design including the division of erven, infrastructure network, land development control and design guidelines.

TPS 220   Settlement Establishment and Housing Delivery 220 (2 lectures + 1×3 hours practical/week, 14 weeks, 16 credits)
Institutional and legal frameworks in which township establishment and housing provision takes place; user and site requirements; housing typologies and densities; engineering services; role players; financing; township establishment in terms of current legislation; simulated exercise; the detail design including the division of erven, infrastructure network, land development control and design guidelines.

TPS 310   Spatial Concepts 310 (2 lectures + 1×3 hours practical/week, 16 credits)
Spatial concepts regarding the development and planning of settlements. Morphological development processes such as decentralisation, counter urbanisation, residential infill and succession, urban sprawl. Spatial structuring elements, e.g. corridors, nodes, compact cities, mixed use.

TPS 320   Metropolitan, District and Local Area Spatial Planning 310 (2 lectures + 1×3 hours practical/week, 16 credits)
Practice of strategic and integrated spatial planning and design; design and plan an integrated development planning process; components of an integrated development plan such as vision, situational analysis, goals and objectives, strategies and projects, spatial framework, monitoring framework; role of public participation, communication and geographic information systems within spatial planning processes; simulated exercise of spatial planning on metropolitan, district and local level.

TPS 810   Sustainable Settlement Planning and Design 810 (2 blocks, 14 weeks, 20 credits)
Normative principles for sustainable settlement planning and design; design theory; planning and design processes; simulated urban and rural settlement planning and design exercise.

TPS 820   Design for Safety 820 (2 blocks, 14 weeks, 10 credits)
Normative principles for the planning and design for safety in the built environment; environmental criminology, the role of design in the prevention of crime; design principles for safer buildings, streets and areas. Case studies and design exercise.

TPU 210   Land Use Management Theory 210 (3 lectures/week, 14 weeks, 16 credits)
A brief history of land use management in South Africa; critique of land use management; rationale for land use management; the link between land use management and integrated urban development management; the characteristics of an appropriate land use management system for present-day South Africa; the current land use management system in the Gauteng province; the land use management system in selected developing and developed countries; ethics in land use management; the future of land use management systems.

TPU 261   Economics of Urban Land Development 261 (3 lectures/week, 7 weeks, 8 credits)
The economics of settlements, including issues such as economic advantages; locational choices of urban land uses; density and intensity of development; the effects of densities, location and transportation economics on land values; implications of zoning; the cost of urban growth, whether by densification or sprawl.

The property market; the functioning of the property market; the key role players; how decisions are taken; urban planning, local government and the property market.

TPU 262   Land Use Management Practice 262 (3 lectures/week, 7 weeks, 8 credits)
Generic components of land use applications and land development related applications and application procedures; practical exercises in the lodging, processing and evaluation of land use management applications, policy-preparation in terms of land use management systems; appeals.

TPU 810   Land Use Management and Land Development 810 (2 blocks, 14 weeks, 20 credits)
Definition and rationale of land use management; typology of land use management systems; international and South African examples of land use management systems, including the relevant institutional and legal frameworks; preparation, submission, processing and evaluation of land use and township establishment applications in terms of present legislation; guidelines for decision making in land use and township establishment applications.

TRP 110   Introduction to Planning 110 (3 lectures/week, 14 weeks, 12 credits)

Definitions of planning; rationale for planning; focus areas of planning; planning processes; planners' roles and work places; the institutional framework for planning; planning legislation; values and ethics of planners; the future of planning.

**TRP 111   Planning and Settlement Histories before the Industrial Revolution 111
               (3 lectures/week, 14 weeks, 12 credits)**

An in-depth analysis of city building and urban and regional planning in pre-modern times. The influence on settlement design and planning within the social, political and economic context of the Pre-historic; Classic (Roman and Greek); Feudal and Mercantile eras. Aspects such as visions of ideal cities, settlement patterns, the treatment of public space, the development of the edge of the settlement, functional zones and segregation are covered. Attention is given to the function, role, character, practice and beneficiaries of planning and the role of planners.

**TRP 121   Planning and Settlement Histories since the Industrial Revolution 121 (3 lectures/week,
               14 weeks, 12 credits)**

An in-depth analysis of city building and urban and regional planning in modern and post-modern times with special emphasis on the South African case. The influence on settlement design and planning within the social, political and economic context of Industrial and Post-industrial eras. Aspects such as visions of ideal cities, settlement patterns, the treatment of public space, the development of the edge of the settlement, functional zones and segregation are covered. Attention is given to the function, role, character, practice and beneficiaries of planning and the role of planners.

TRP 300   Planning Futures 300 (2 lectures/week, 28 weeks, 18 credits)

The future as a concept: the importance of thinking about, and planning for the future. The multiplicity of futures and the relation between the past, the present and the future. The practice of exploring and thinking about the future: past and present perspectives on the future. Techniques/methods of predicting and/or shaping the future: application of these techniques/methods.

**TRP 310   Institutional and Legal Structures for Planning 310 (3 lectures/week, 14 weeks,
               20 credits)**

Overview of South African institutional and legal structures for planning and development, on national and provincial scale. Relevant legislation and policies that influence planning. Specific reference to the legal frameworks guiding land development, the environment, municipal management and development, housing, transport, water, and Human Rights.

TRP 400   The Future of Planning 400 (2 lectures/week, 28 weeks, 20 credits)

Planning in the future: definitions, rationales, focus areas, processes and systems. Future planners' roles and work places, values and ethics.

TRP 800   An overview of planning theory and practice 800 (4 blocks, 28 weeks, 20 credits)

Definitions of planning; rationales for planning; focus areas of planning; planning processes; planners' roles and work places; the institutional framework for planning; the role, impact and evolution of planning legislation; values and ethics of planners; the future of planning. The future as a concept: the importance of thinking about, and planning for the future. Techniques/methods of predicting and/or shaping in the future. Overview of past and present planning theories.

References

Bureau for Market Research (2004) *Informal trading in Tshwane: Regulatory, Spatial and Economic*

Framework. Report prepared for the City of Tshwane. Accessed September 2008, http://www.tshwane.gov.za/documents/informaltradingreport.pdf

City of Tshwane (2004a) *Tshwane Metropolitan Profile 2004*. Tshwane: Metropolitan Planning Division, City of Tshwane

City of Tshwane (2004b) *Tshwane's City Strategy.* Final report, September 2004. Tshwane: City of Tshwane

City of Tshwane (2005) *The City of Tshwane Metropolitan Spatial Development Framework*. Tshwane: City of Tshwane

City of Tshwane (2006) *Integrated Development Plan (2006–2011)* Tshwane: City of Tshwane

City of Tshwane (2008) *Tshwane Town-Planning Scheme*. Adopted on 23 April 2008. Tshwane: City Planning and Development Division, City of Tshwane

City of Tshwane (n.d.) *City Infrastructure*. Accessed September 2008, http://www.tshwane.gov.za/citystructure.cfm.

CSIR (Council for Scientific and Industrial Research) (2008) National Spatial Trends Overview. Unpublished report prepared for the South African Cities Network, the Presidency and the Department of Provincial and Local Government

Du Toit J, Oranje M & Landman K (2008) Beyond policy frameworks: listening to the voices of developers and municipalities in urban land development in South Africa. Document prepared for Urban LandMark, Pretoria/Tshwane

First National Bank (2007) *Property Markets: Residential Property Market Q3 Update.* Accessed September 2008, https://www.fnb.co.za/downloads/commercial/propfin/Q3ResidentialMarketUpdate.pdf.

Groenewald L (2008) Housing delivery plans in Gauteng province: potential implications for informal settlements. Unpublished document

Oranje M (1998) The language game of South African urban and regional planning: A cognitive mapping from the past into the future. Unpublished PhD thesis in Town and Regional Planning, University of Pretoria

Oranje M (2002) Should provinces/regions have their own planning acts? An exploration of the debate using the post-1994 South African experience. In Y Rydin & A Thornley (eds) *Planning in a Global Era*. Aldershot, UK: Ashgate

Oranje M (2003) A comparative analysis of 1996 and 2001-Census data on vulnerable and special target groups. Prepared for the Department of Social Development and the Presidency as part of the Ten Year Review

Oranje M (2006) *An overview of long-term municipal planning and strategising in the Gauteng Province.* Prepared for the Gauteng Department of Local Government, Johannesburg. Accessed September 2008, http://www.dlg.gpg.gov.za/downloads/legislation_3.pdf

Oranje M (2007) A critical exploration of the anticipated impact of spatial directives and principles in public policy on social and economic infrastructure provision and (the promotion of) economic growth and sustainable development. Prepared for the Development Bank of Southern Africa

Oranje M & Coetzee J (2008) An analysis of the mandate and role of the City-Planning function in the City of Tshwane as key player in the South African Developmental State and proposals for change. Prepared for the City of Tshwane

Serfontein K (2007) An expounded reading on the conceptualisation of Tshwane between 2000 and

2004. MA dissertation, University of Pretoria

Serfontein K & Oranje M (2008) Connections and disconnections between the spaces of recognition and the spaces of reflection: An expounded reading on the conceptualisation of Tshwane between 2000 and 2004. *Town and Regional Planning* 52: 20–31

Stats SA (Statistics South Africa) (2003) *Census 2001*. Accessed September 2008, http://www.statssa.gov.za.

The Presidency (The Presidency, Republic of South Africa) (2007) *The National Spatial Development Perspective*. Tshwane: The Presidency