

THE ROLE OF TRANSPORT IN THE RISE AND DECLINE OF THE JOHANNESBURG CBD, 1886-2001

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Introduction

From the inception of the Johannesburg mining camp in 1886, through its evolution to village, town, city and metropolis the main agglomeration of its retail and financial businesses and services have only initially been centrally located in the geographical sense of the word. In a more technical sense where central means accessible, and central business implies high-order business (Berry, 1963; Berry and Garrison, 1958a, 1958b; Beavon, 1977), the main concentration of commercial activities was exactly that. Consequently the term the central business district (or CBD) of Johannesburg was apt and could be used correctly for approximately a century. Nevertheless with the passage of years the CBD located just north of the original mining land became increasingly, in the geographical sense, less central to the population as a whole, to the built-up area, and most significantly to the weighted centre of gravity of disposable income concentrated in the expanding bulge of the northern suburbs (Fig. 1).

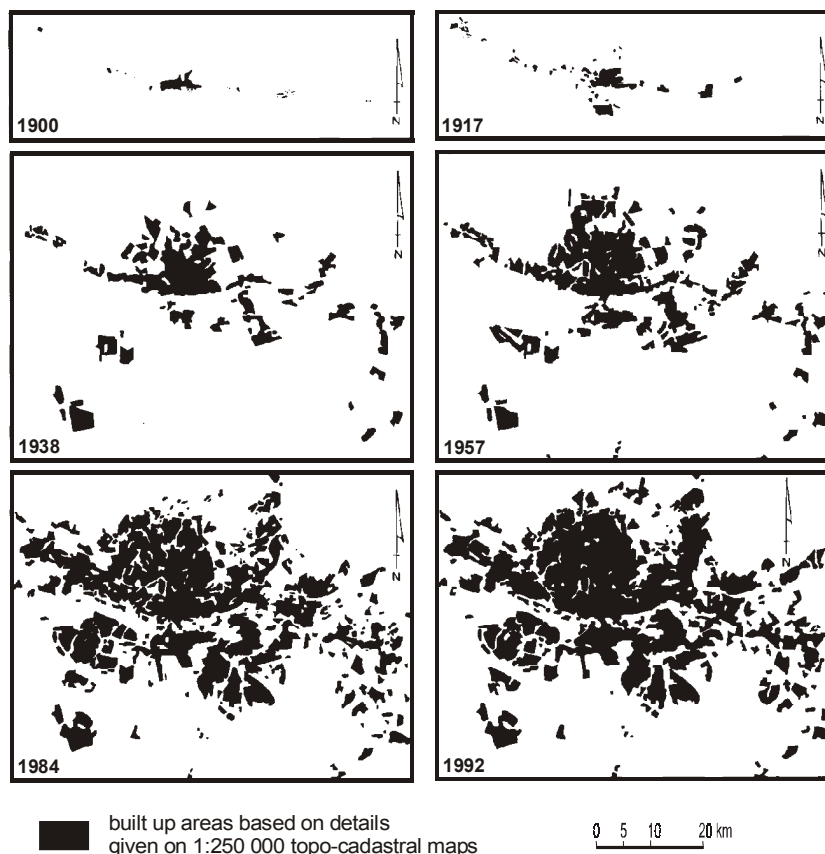


Fig. 1: Areal growth of Johannesburg and the Central Witwatersrand 1900-1992 (modified from Whitlow and Brooker 1995)

Notwithstanding the above introductory comments the area known as the Johannesburg CBD has remained highly accessible to the population in general. Consequently one might wonder whether there is any justification for the word decline in the title of this paper. Because if the business district is highly accessible then in theory it should be capable of sustaining its high-order functions and continue to be the CBD of the metropolis. The harsh reality, not accepted by all, is that a case can be made that the area known as the Johannesburg CBD is dying (Beavon, 1997, 1998, 2001; Beavon and Larsen, 1998), or at best is in a state of serious decay (Memela, 1997; Rantao, 2001), is characterised as a whole by severe manifestations of physical and functional blight (see Berry, 1963), and is shunned by the middle and upper classes in respect of their shopping and general needs for service businesses where that entails face-to-face contact with the provider (Beavon, 2000). Against such a backdrop it then becomes appropriate to ask whether an improvement in transportation, implying both mass- and private-transport modes might in themselves restore the Johannesburg CBD to the status it once held.

In order to weigh the question just posed, and to consider some of the adjunct facets of the matter as sketched in the preceding paragraph, it seems appropriate to first examine how the central business area of Johannesburg evolved and how it benefited considerably from the fact that it was not only very accessible to the population it initially served but it remained accessible to the high concentration of purchasing power to the north as it grew in status until approximately 1960. Attention will also be paid to what might be termed the spread of low-density residential sprawl particularly in the northern suburbs, the early phase of retail and office decentralization to those areas, as facilitated to a marked degree by the increasing ratio of motor vehicles per family particularly in the north. In addition some attention will be given to whether a change in access *per se* has played a role in the decline of the CBD. Against that background, and in the light of the mushrooming mini-bus taxi industry, it will then be possible to speculate, albeit in hypothetical terms, on some of the implications that might flow from 'an improvement' in intra-city transport and whether such 'improvements' in themselves might serve to revive the CBD of South Africa's premier metropolis.

The Evolution of Johannesburg's Business District 1886-1899

Although the Witwatersrand goldfields had their origin in a chance discovery of gold-bearing conglomerate on the farm Langlaagte in the first half of 1886, the mining-camp (that would become the city of Johannesburg) was laid out in the second half of the year on a piece of state-owned land some 4 km east and slightly north of the strike (Fig. 2). The land itself known as Randjeslaagte was a remnant piece of ground lying between the farms Doornfontein, Braamfontein, and Turffontein. Apart from the fact that the state owned the land and believed it might make some money by renting out *standplaats*, or stands, where miners and other fortune seekers could outspan their wagons and camp, Randjeslaagte had nothing to offer. It lay on a south-facing slope of quartzites and poor soils, and had no immediate or regular supply of surface water. Nor was it linked to any tracks or roads that ran through the area at the time. Yet by 1887 the original 78 blocks of stands, or street blocks, laid out around and north of a market-square located on the south-western side of the Randjeslaagte triangle had become 168 blocks with the market-square only slightly west of the geographic centre to the town as a whole (Fig.3).

The main access roads to Johannesburg from the west and east approached the Market Square along Commissioner Street. The Square itself operated as an open-air market place (albeit under regulations imposed by Kruger's government in Pretoria) and as a terminus for the supply wagons from the coastal ports of Durban and Cape Town.

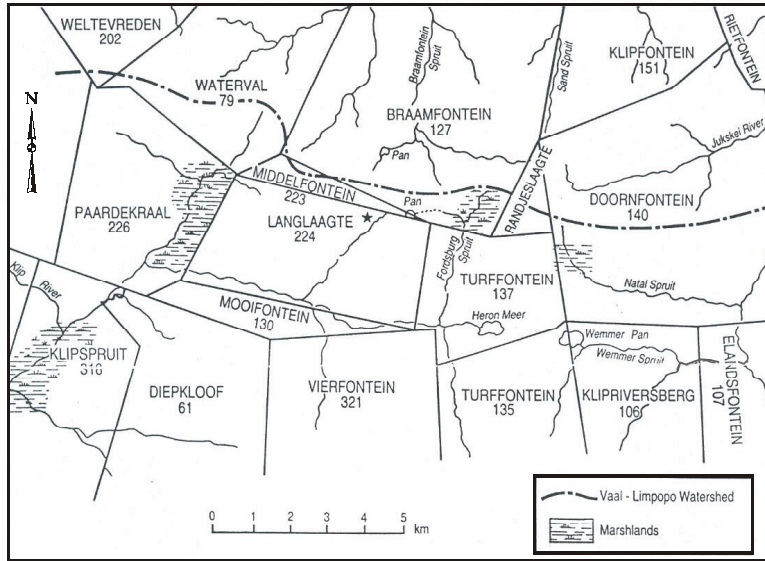


Fig 2: The location of Randjeslaagte relative to the site of the gold discovery on the farm Langlaagte (modified from Grant and Flinn 1992)

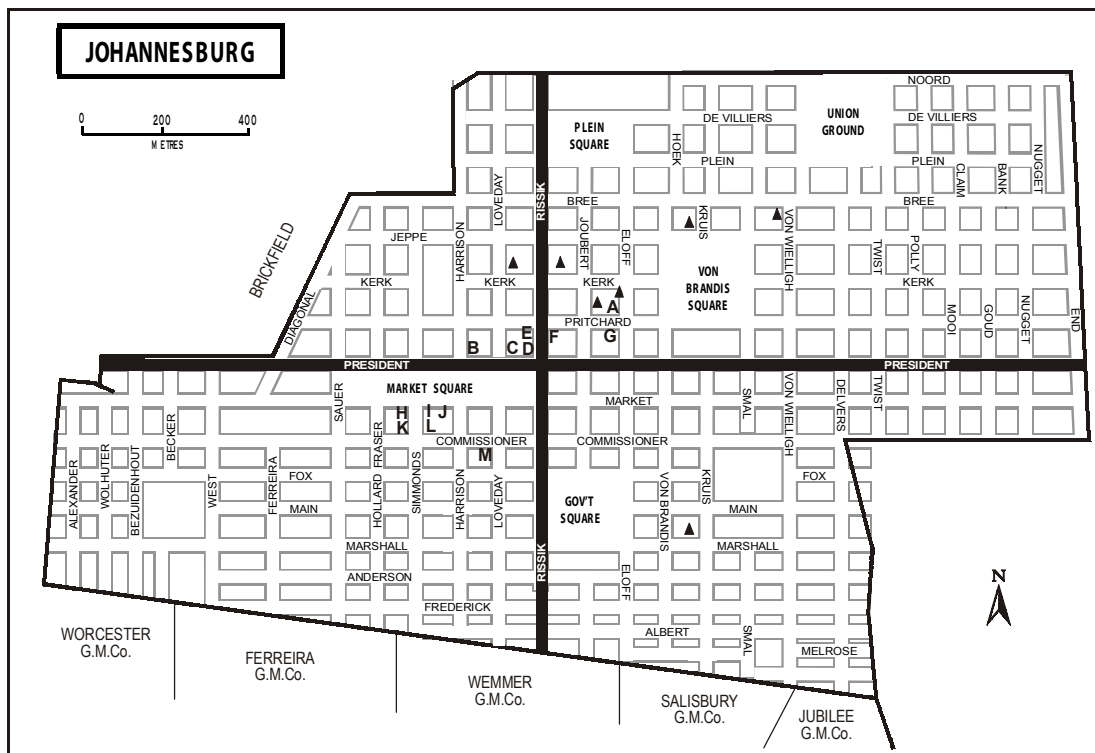


Fig. 3: A set of hypothetical axes centred on the intersection of President and Rissik Streets demarcate the settlement into four quadrants that are used for reference purposes in the text. Places of religious worship are indicated by the small triangles. The location of some of the particular buildings referred to in the text are indicated by the letters: **A** Markham's; **B** Beckett's; **C** Henwood's; **D** Greenacre's; **E** Palace Building; **F** Stuttaford's; **G** Cuthbert's; **H** Robinson's Bank; **I** Natal Bank; **J** Chamber of Mines; **K** Stock Exchange; **L** Wernher and Beit's Corner House; **M** Rand Club.

The Market Square and the stands facing onto it soon became the commercial core of the blossoming youthful Johannesburg. By the 1890s there was an almost clear division between retailing that was expanding along the northern side of the 'square' as well as eastwards along Pritchard Street to Eloff Street, and the financial and mining houses located on the south-western side. It is significant that amongst the retailers were branches of major business houses based in Pretoria (Beckett's), Durban (Greenacre's and Henwood's) and Cape Town (Stuttaford's and Markham's) (Macmillan, 1933; Leyds, 1964; Norwich, 1986: cards 71, 73, 77). By 1893 Pritchard Street between Von Brandis Square and Loveday Street was the frontage for a large number of drapery shops, ladies and men's outfitters, shoe stores, as well as jewellers, milliners, confectionery, and other specialist businesses. The financial institutions included the Standard Bank and other banking housing as well as a stock exchange with international links (Longland's, 1893). Thus from an early stage the business centre of the town was a focus of genuinely high-order commercial activities and its accessibility also improved rapidly. It must be noted that even in the era before formal segregation and later apartheid racial discrimination against black people was marked and it certainly extended to the arena of public transport. Black people were only allowed to use the 'black' horse-drawn tram and later the 'black' electric trams that offered a limited service. Thereafter the concession was restricted to a limited number of seats at the back of the upper deck of public conveyances (Pirie, 1989, 1990). Consequently when reference is made here to developments in commercial activities and to improved intra- and even inter-urban transportation, the benefits were to all intents and purposes restricted only to members of the white race from 1886 to 1990.

The railway

In 1890 a light railway, styled the Rand Tram, was inaugurated primarily to bring coal from Boksburg to Johannesburg but it also had facilities for conveying passengers. Although the station bearing the name Johannesburg was located northwest of Newtown (approximately where Braamfontein station is today) the station closest to the centre of Johannesburg was located at the northern end of Eloff Street. Positioned as it was in the vicinity of the Kruger and Joubert Parks it was called Park Station (Fig. 4). The initial and continued success of the light railway soon had an effect on the pattern of shopping in the downtown of Johannesburg. Obviously not all of the 66 000 passengers (South African Transport Services Museum, 1990) who made use of the Rand Tram in 1890, and the growing number of passengers from 1891, would have alighted or climbed aboard the train at Park Station but many would. Significantly the entrance/exit to Park Station was at the northern end of Eloff Street (Fig. 3). Passengers who had come to Johannesburg to shop would almost certainly have proceeded south along Eloff Street and would then have either turned west at the intersection with President Street, in order to reach the main shopping cluster on the northern side of Market Square, or might well have 'cut corners' and turned into Pritchard Street in order to approach the Market Square on 'the diagonal' at the intersection of Pritchard and Rissik Streets (Fig. 3). It was that consumer flow, coupled with the growth of population in the Johannesburg area, which continued to prompt the opening of new business premises in the quadrant northeast of the President and Rissik Streets intersection.

Horse-drawn trams

The early years of the 1890s not only saw a greater flow of customers from Park Station but as a consequence an increase in the quality and quantity of retail frontage along Eloff Street, particularly south of the Pritchard Street intersection. The importance of Rissik Street for retail businesses was given a boost with the inauguration in February 1891 of Johannesburg's first public transportation system of horse-drawn trams (Fig. 5). For several years prior to 1891 it had been possible for some

members of the public to move through the fabric of the city in Johannesburg's version of Hansom cabs; horse-drawn Cape-carts with canopies. The cab fares were, however, relatively high and therefore beyond the reach of most of the town dwellers (van Onselen, 1982); the trams, however, reduced the cost of intra-urban movement.

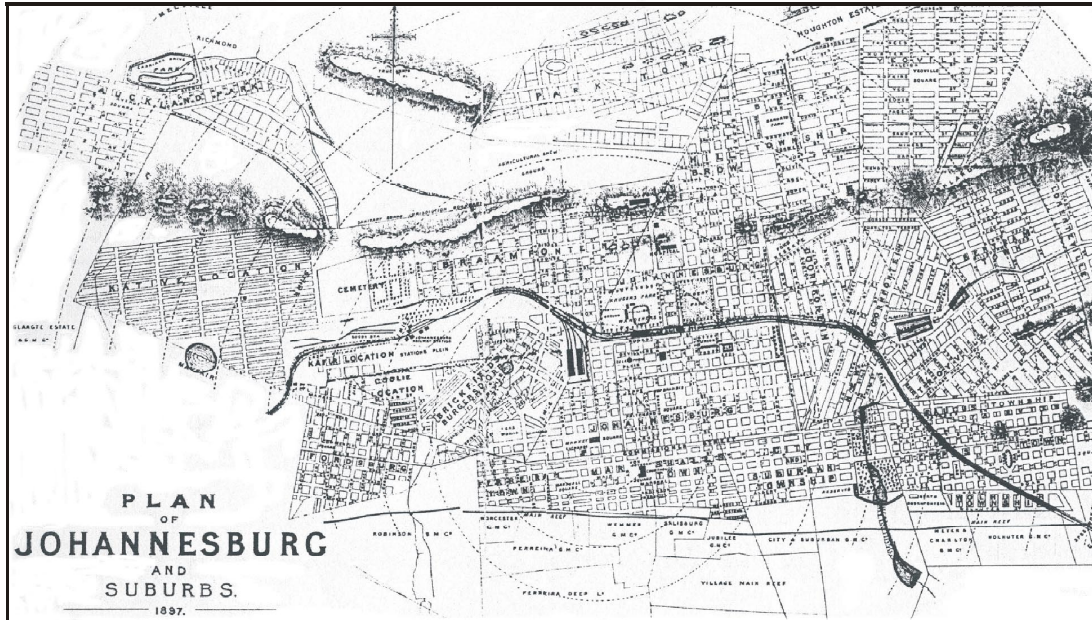


Fig. 4: Map of the main parts of Johannesburg in 1897 and apparently based on the map of the whole layout prepared by Jeppe

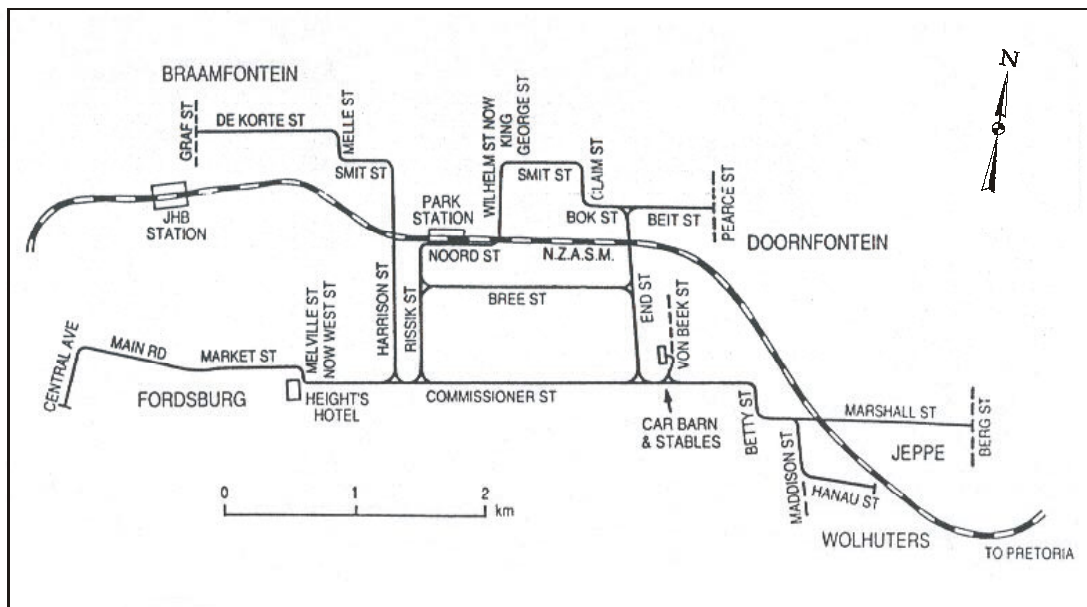


Fig. 5: Routes of Johannesburg's horse-drawn trams (at their maximum extent) (after Spit 1976).

The effect of the tramway was to make it easier for residents, especially in the bachelor residential areas, and in the residential suburbs that were spreading eastward and westward of the centre, to reach the main attractions of the downtown. That was particularly true after the extensions to Wolhuter and Fordsburg were completed and again when some late-night trams were

provided to run after the normal service ceased at 20:45 (Spit, 1976: 12). The full significance of the tramway system on the commercial premises in the downtown can perhaps be gauged from the fact that by mid-1896 the tram fleet was covering a 1 600 km a day and carrying 2.5 million passengers a year! (van Onselen 1982, p.167).

There is little doubt that an increase in population following the economic upturn after the 1890 slump, the success of the Rand Tram contributing to the flow of pedestrians along Eloff Street, and the role of the horse-drawn trams in Commissioner, Rissik, and Bree Streets, all contributed to the growth of commerce in the business centre of Johannesburg. That growth was not only evidenced by increasingly tall, massive, and ornate office buildings particularly in the south-western financial quadrant (see Barnett Collection, 1966; Benjamin, 1979; Norwich, 1986; Palestrant, 1986; and Chipkin, 1993 for illustrations) but by the continued expansion of retail and service businesses.

So between 1891 and the late-1890s the central area of Johannesburg became increasingly an area of businesses even at the expense of part of its inner-residential components (Figure 1). In general the 'centrality' or accessibility of the central area had been enhanced not only by the Rand Tram, and later by the mainline rail links to Natal, the Cape, and Mozambique, but by the public horse-drawn trams supplemented by the Cape-cart cabs whose numbers continued to increase until 1896 (van Onselen, 1982).

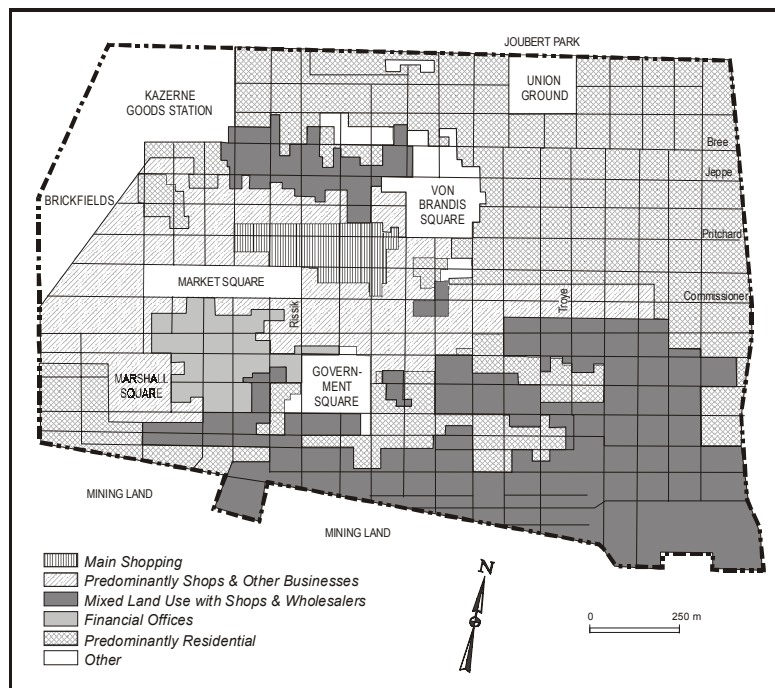


Fig. 6: The functional character of the central area of Johannesburg by 1898 (after City Engineer 1976)

Post Boer War Developments and the Advent of Electric Trams

British forces occupied Johannesburg in mid-1900 and under the administration of the colonial power Johannesburg not only gained a constitution of its own, had new municipal boundaries drawn and fixed but was perceived by investors to be safe for long-term investment (Maud, 1938). The magnitude of the developments that followed the Boer War is perhaps best demonstrated by the fact that in the six years from the beginning of 1901 to the end of 1906 the areal extent of Johannesburg's suburbia increased by a factor of 2.2 over that which had existed at the outbreak of the war. Forty-four new suburbs were established (although not extensively built upon) in the six

years just mentioned (Fig. 7). Whereas only eleven additional suburbs were created between 1906 and 1910 the demarcated residential space by then accounted for 41 per cent of the large municipal area with most of it in the northern areas of Johannesburg where the more affluent whites were choosing to live (van der Waal, 1987: fn. 100.2, and calculations from raw data in RAU, 1979).

Notwithstanding that developers in the majority of the new suburbs persisted with the small (standard) 15m by 30m stands the layouts of several of the new northern suburbs included residential plots that were considerably larger thereby creating lower residential densities. For example, in Parktown North the stands were 30m by 75m. In Houghton, where the stands were 60m by 60m, many of the sales were composed of blocks of adjacent stands that effectively made individual properties well over 4 000m² (1 acre) in size; between 9 to 18 times larger than the 'popular' smaller stands in the majority of the existing eastern and western suburbs (Greenlees, 1912).

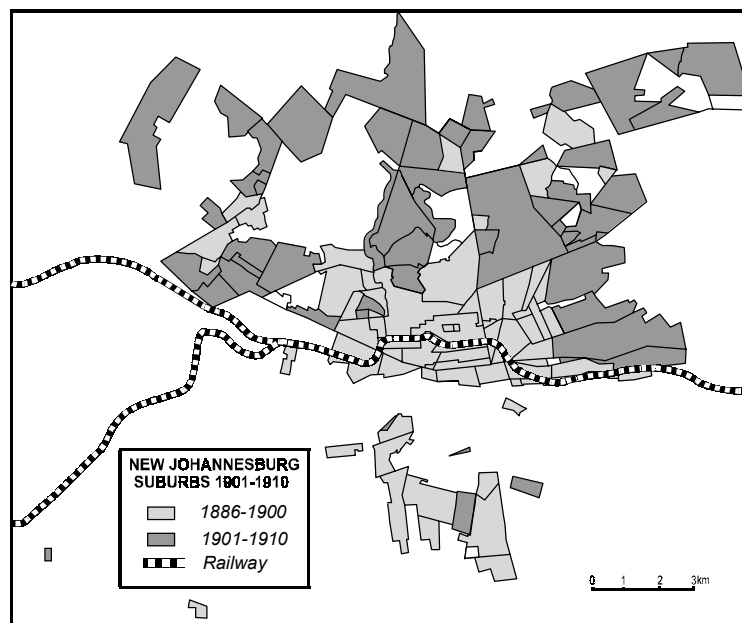


Fig. 7: Spread of Johannesburg townships and suburbs 1901-1910 based on data collected from RAU, 1979 and the Johannesburg Local Government

Electric trams

Despite their larger stands, and by implication higher prices, sales of properties in the suburbs lying along the line of the Parktown and Linksfield Ridges, and in those towards the then northern edge of the municipality, appear to have been assisted by the promised arrival of the new tramway system. Although the electric trams only commenced operations in 1906 it was widely known as early as 1902 that the Johannesburg Council had the authority to introduce its own public tram service and would do so (Maud, 1938; Spit, 1976). As electric trams were already a proven means of transport in the industrial countries of the northern hemisphere, and could be purchased readily from suppliers in Britain, there was every reason to expect that they would be introduced in Johannesburg. As such the steep northern ridges, adjacent to the suburbs laid out in the nineteenth century, would no longer present the barrier they had to horse-drawn trams. Soon after the inauguration of the electric-powered service in 1906 construction was commenced on two northern lines with terminal points being established in Norwood and Parktown North by 1911, and then soon extended to Rosebank (Fig. 8) (Spit, 1979). The trams, running at 5 to 10 minute intervals (Spit, 1979) certainly made the workplaces, shops, and businesses of the rapidly expanding

downtown of Johannesburg even more accessible to people with the means to buy into the low-density northern suburbs. The early appearance, in 1897, and rapid increase in private motor cars after the First World War (Shorten, 1970), one of the most visible trappings of the wealthy and better-off citizens, further enhanced the attractiveness of the northern suburbs for the higher-income groups who could reach the downtown with increasing ease using either public or private transport. As such the improvements in the intra-urban transport generally enhanced the centrality, in terms of both accessibility and order of business, of the CBD of Johannesburg.

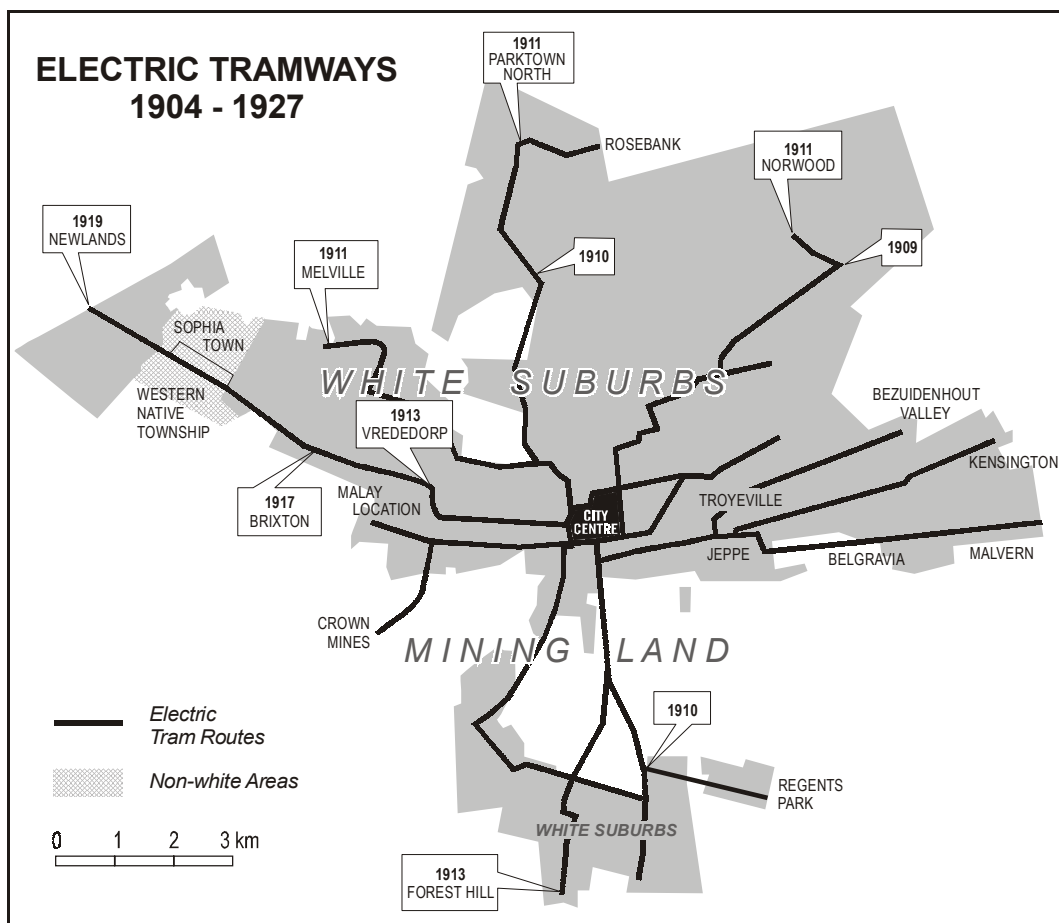


Fig. 8: Electric tramway routes and terminal points established at different dates (after Spit 1976)

Critical Residential Densities and the Rise of the Motor-car

In 1934 the municipal transport commission of the city reported that the density of population in Johannesburg was only 7 per acre (17.5/ha). The figure compared unfavourably with those for cities in Germany and Britain with between 26.5 and 24.4 per acre (67.25 and 61 per hectare) considered desirable for maintaining a cheap and sufficient public transport system (Maud, 1938). The population densities in Johannesburg were of course anything but even. They were extremely high in the black locations and other residential areas and also varied within the white suburbs. Most of the older white residential areas between the Witwatersrand Ridge and the mining land that lay east and west of the central city contained 250m² and 450m² stands. The same was largely true of the then southern suburbs. North of the Witwatersrand ridge and east of Louis Botha Avenue the densities were extremely low (Fig. 9). Nevertheless the northern suburbanites were still able to bring their purchasing power to the central area because they were served by the tram service and

they were steadily becoming the main owners of private motor cars. Significantly, however, the low densities in new suburbs established farther and farther from the CBD meant that public transport links to the city centre were doomed in the long-run.

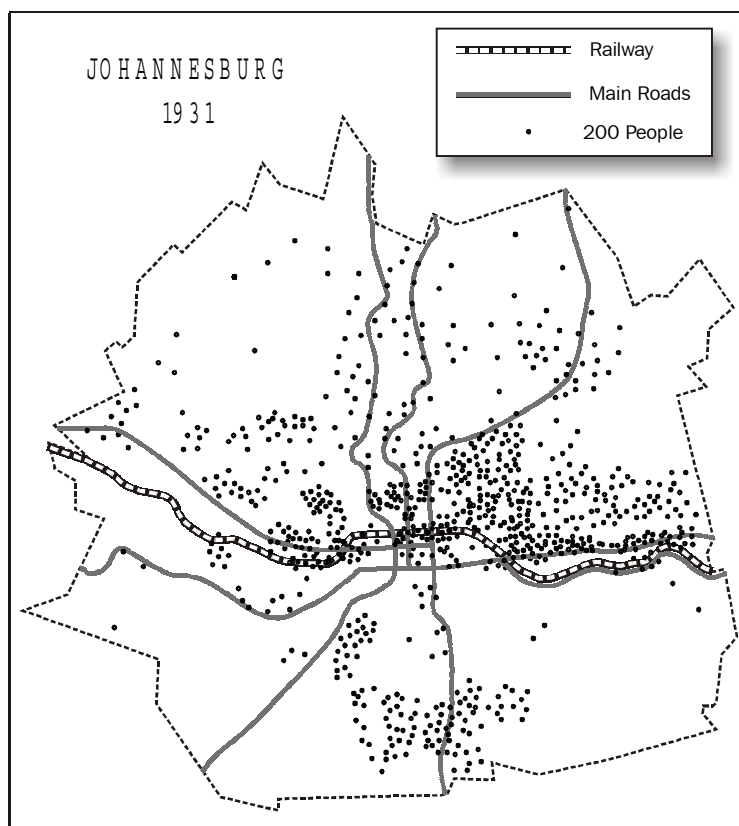


Fig. 9: Distribution of the white population 1931 (after City Engineer 1970)

In 1903 there were only 28 motor vehicles registered in Johannesburg but by 1926 it had grown to 10 500 and to 27 500 by 1933 (Grant and Flinn, 1992) (when coincidentally Johannesburg also had 31 000 licensed bicycles) (Hart, 1974). It must also be remembered that the great building boom of the mid-1930s, sparked by the decision that took South Africa off the gold standard, also saw a substantial amount of fashionable high-density apartment buildings, for upper middle-class tenants, erected in the vicinity of the old Union Grounds and Joubert Park.

The situation just described is one that would have at least sustained, and to a degree increased, the high level of accessibility and the high-order

Changing Circumstances After 1939

It is a well-known fact that the economic base of the Witwatersrand shifted dramatically during the period that covers the Second World War and the years of the early 1950s. As gold mining declined in the vicinity of Johannesburg secondary industry, and particularly tertiary services, boomed. In 1951 some 31 per cent of employment on the Witwatersrand was still in mining. By the early-1970s mining accounted for only 8 per cent of the Witwatersrand's employment but secondary industry, with 37 per cent of the employment (230 000 jobs), contributed 54 per cent of the region's external earnings. Commerce (including financial and transport services) made up 27

per cent of the workforce and was responsible for 32 per cent of net external earning capacity. Thus in the space of only 20 years the Witwatersrand had been transformed from what was primarily a mining area into a maturing metropolitan region with a different economic base. Overall the total workforce had risen from 897 100 to 1 182 000 despite the decrease of employment in mining from 300 212 to 110 130 (Fair and Muller, 1981; Urban and Regional Research Unit, 1973). Not surprisingly as secondary industry became more important it attracted and generated a surge of tertiary activity with numbers employed in the Johannesburg Metropolitan Area rising from 272 000 to 422 000 between 1951 and 1970. Much of the tertiary activity was concentrated in Johannesburg's CBD and it remained the undisputed leading service centre of the region and the nation (Hobart Houghton 1964; Fair and Muller 1981). The increasing number of office workers helped to boost daily sales in the retail establishments especially during the lunch hour. Businesses located on streets that were on major bus or tram routes also prospered.

Attention must also be drawn to the re-emergence of Hillbrow in the post-war period as a high-density area with a considerable volume of purchasing power located on the north-eastern shoulder of the Johannesburg CBD. Up to the mid-1940s Hillbrow had consisted of single-storey detached and semi-detached houses on stands, mostly 248m² in size, occupied by middle- and lower middle-class residents. Before the tall apartment blocks began to crowd one another the new high-rise Hillbrow vista was described in the *Architectural Review* as most impressive and "nowhere in England, Europe or North America, can such a consistently up-to-date neighbourhood be seen" (Pevsner, 1953, p. 382). Demand for the exciting accommodation was high and individual flats were being occupied even as upper floors of the buildings were still under construction (Pevsner, 1953). Consequently high rents could be demanded and readily found. In particular from wealthy retired people who favoured the location that gave them modern living and easy access to the CBD they had known and enjoyed in their younger years, and where they were able to continue spending their disposable income (Hart, 1975).

Given the areal limits of Johannesburg, and the low-density residential sprawl over much of the 'whites-only' areas of the municipality, it became increasingly obvious that the expansion in 'white-collar' tertiary sector jobs (held overwhelmingly by white people) meant that a growing number of non-Johannesburg residents were employed in and about the metropolitan core. Furthermore by 1970 one third of the 276 240 white persons employed in Johannesburg resided outside the municipality (Urban and Regional Research Unit, 1973). The implications of the sprawl just referred to meant that there was a growing demand for decentralized goods and services at the same time as the flow of vehicles carrying workers to the CBD was increasing.

More bridges, better linkages, wider roads, more cars

Notwithstanding the fact that the city had literally grown outwards in all directions from the CBD (Fig. 1) access to the centre for a growing volume of vehicular traffic approaching from both the north and south was not as good as it might appear to be from a map. The reason was simple. In the case of the southern approaches the number of direct routes were limited to three arterial roads (Booyens Road, Eloff Street Extension, and Rosettenville Road; Fig. 10) that cut across the privately-owned swathe of mining-land separating the central area from the southern suburbs. Routes in and out from the north were bedevilled by the fact that even as late as 1936 there were only the four subways and three bridges that had been constructed under and over the main railway lines between 1905 and 1911; and of those only four allowed for unimpeded, but only two-lane, passage directly into and out of the central business area via Harrison, Wanderers, King George V, and Twist Streets (Shorten, 1970). The then concentration of cross-overs on the north-eastern side of the CBD was a reflection of the relative importance of the residential area in the vicinity of Joubert Park (Fig. 10).

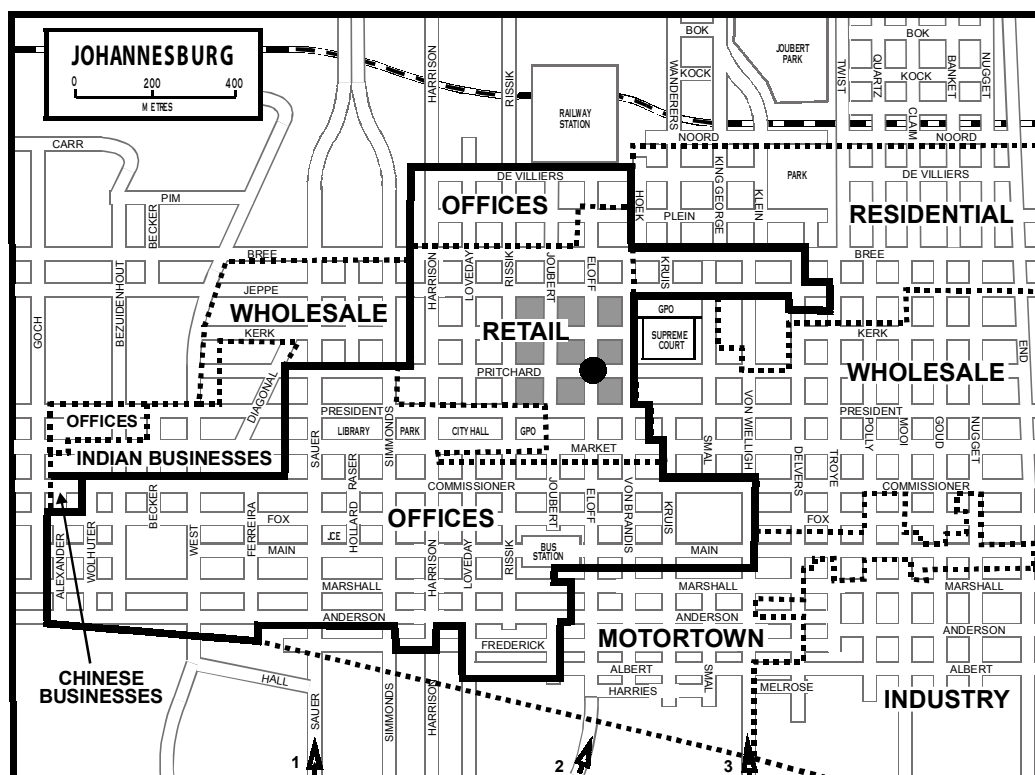


Fig. 10: Functional zones of the central business area in, also known as the downtown area, in 1959. The more tightly defined central business district boundary encloses the retail and office cores. The PLVI is indicated by the large dot. Routes into the CBD from the south are: 1. Booyens Road; 2. Eloff Street Extension; and 3. Rosettenville Road (after Marshall 1959).

The boom in the central area, that followed the move off the gold standard in late-1932, had prompted the local authority to embark on an ambitious programme of public works in 1936 (Grant and Flinn, 1992). The intention was to improve the transport linkages to the central area and elsewhere but especially with the northern side where the bulk of white residential areas were located (see Fig. 1). It had also become apparent by that time that the number of platforms serving Park Station would have to be increased as the volume of intra- and inter-city passengers swelled. First it would be necessary to drop the level of the railway lines in order to construct bridges that would be at grade on either side of the crossings. Consequently the existing subways would have to be scrapped and replaced with a set of new bridges.

Between 1951 and 1954 five bridges were constructed allowing motor traffic on Claim, Rissik, Harrison, Simmonds (Van Riebeeck Bridge), and Sauer Streets (Queen Elizabeth Bridge) to drive north and south unimpeded by the 300 metre-wide 'river' of steel tracks (Fig. 10). By late 1954 there were 16-lanes for motor traffic spanning the railway lines just in the 400m stretch west of Rissik Street (Shorten, 1970; The Star, 1987). Once again improvements to the transportation infrastructure had enhanced the accessibility of the CBD and thereby given its businesses a boost.

Beyond the confines of the eastern and western edges of the central business area an additional six bridges had also been completed somewhat earlier but their effect on the CBD is not important enough to be considered here.

As a backdrop to the discussion at this stage one should note that the number of Johannesburg-registered motor vehicles had jumped from 27 500 in 1933 to 110 000 in 1954. A mere five years later the figure was 152 000 and by 1964 it was 179 800 (Grant and Flinn, 1992). Whereas a sizeable number of commuters who worked in the central business area reached it via access routes

to the south, increasingly the most important approaches were from the north. The majority of the ever-growing numbers of black people who were workers in Johannesburg and who were reliant on rail transport disembarked at Park Station on the northern side of the CBD. Because of racist regulations the segregated local and long-distance buses that carried black people to the central area of Johannesburg, had routes that either had no stops within, or that kept them outside, the white CBD. Hence the terminal points were located mainly in Newtown adjacent to the northern edge of the central business area (City Engineer, 1967). As already indicated the concentration of white people in the neighbouring towns to the east and west of Johannesburg's municipal boundaries, as well as the majority of white people in the Johannesburg municipal area itself, were located on land to the north of the east-west railway line. Thus as the ownership of private cars amongst white people increased not only in Johannesburg but in the commuter towns of the Reef, so did the pressure on the new and improved access routes on the northern side of the CBD.

The beginnings of a change

Ironically the decision in 1948 to commence the elimination of the trams (and to replace them in part by buses) not only served to encourage greater use of private cars on some routes but also provided a means of rapidly widening some of the arterials that led to and from the city. On Jan Smuts Avenue and Booyens Road, as well as on some of the western arterials, trams had run on twin sets of tracks laid on their own permanent reserve parallel with the road. When the tracks were lifted the width of the road reserve was doubled and dual-carriageway arterials 'appeared' and became usable almost overnight. Given the improved ease of entry into the CBD on dual-carriage arterials the daily volume of motor vehicles, including those from neighbouring towns, that converged on the centre of the city also rose dramatically over a short period of time before the pendulum began to swing the other way. The growing traffic congestion, and associated problems with the small street blocks and the multiplicity of intersections in downtown Johannesburg, were all exacerbated by the juxtaposition of the geography of employment in the functional zones of the central business area and the social geography of the metropolis. Furthermore there was no genuine bypass for vehicles that simply wanted to get to a destination on the 'other side' of Johannesburg from which the journey had originated. And that applied even to vehicles travelling on the national road between the southern and northern Transvaal.

Many of the people employed in the better-paid white-collar jobs of the office sector on the south-western side of the business district resided in suburbs either to the north or east of the CBD; as did managers of some of the industrial firms bordering on the south-eastern corner (Hart, 1975). Many of the Afrikaner working class employed in the industrial areas lived on the western side of the city, and many of those employed in the large railway administration complex near Park Station lived in the western and southern suburbs. It is therefore not surprising to find in 1956 that of the 108 600 motor vehicles (including buses) entering the CBD of Johannesburg during daylight hours almost 47 per cent were headed for places beyond the business area, and 50 per cent with destinations actually in the central business area were headed for the opposite side from which they had entered it (Grant and Flinn, 1992). Little wonder then that the City Engineer believed that advice from America, the country where the private automobile was being well catered for through the efforts of traffic engineers, might be appropriate when a new traffic plan for the City was drawn up in the mid-1950s (Grant and Flinn, 1992). The resultant plan and later reality was the belt of elevated "high capacity roads" (the M1 and M2 freeways and expressways) together with on and off ramps around the central business area with connections to the radial arterial routes from the suburbs.

Notwithstanding the importance of the M1-M2 system in relieving traffic pressure in the downtown other forces were already at work encouraging shops and their shoppers, offices and their clients to decentralize mainly to the northern suburbs. They were factors that would impede the

perceived high degree of accessibility that the CBD had possessed for just about 80 years and factors that would see high-order businesses seeking to promote their access to wealthy shoppers who were being deterred from shopping in the CBD because of the first set of factors.

Given the limited focus set for this paper it would be inappropriate to set out a detailed analysis of how actions during the building boom of the late-1960s and early-1970s only made matters worse. Those matters have been dealt with in some detail elsewhere (Beavon 1997, 1998, 2000). Suffice it to say here that yes, the growth, development, high degree of use, and the status enjoyed by the Johannesburg CBD up to the 1960s was in no little way due to the fact that it was so accessible. In addition its success was based on the fact that wealthy members of our racially divided society supported it by doing their business there and spending large sums of money on commodities ranging from the highest order downwards. Of course once established the CBD drew purchasing power and business support from a much larger region which in certain instances equated to the boundaries of the nation itself and its international business links.

Despite its apparent 'health', and indeed well before its major spurt in the 1970s, concern had been expressed for the future of the Johannesburg CBD. The occasion was the South African Town Planning Institute's Summer School of 1959. Even though small clumps of shops and some services had inevitably developed in the suburbs by the 1940s, Johannesburg at the time was still for all intents and purposes a city with a single major or central business district. With the continued expansion of the built-up area in the post-war years, and the increasing ownership of private motor cars by white people, it followed that clusters of decentralized shopping and the number of business nodes would increase and expand but it was anticipated that the CBD would not decline (Marshall 1959).

It has been claimed that confidence in the central core was dealt its first serious blow in the 1950s when the Council itself decided to move most of its offices out of the crowded City Hall, and nearby buildings, and place them in a single complex on the Braamfontein hill (The Star 1987). That decision, and the early march of offices to Braamfontein, seems to have been the reason (Beavon, 1997,1998) why the President of the South African Town Planning Institute believed that by 1959 the first sure indications of decentralization were visible and he expressed his concern that Johannesburg would in the future suffer a slump in property values and activities (Lauf, 1959). The shortage of parking spaces for users of the CBD and the parking policy of the municipality, that limited the provision of private off-street parking in the new tower blocks before the city had encouraged the erection of parking garages, were also harmful to the successful functioning of the CBD (Mandy, 1984). In short it became increasingly easier for shopping and general business to take place in the suburbs at decentralized nodes that were becoming increasingly plentiful (Beavon, 1980). The arrival of the 'major' malls, Sandton City and Eastgate in particular, simply helped to expedite the exodus of high-order shopping and that had an adverse effect on the smaller speciality stores that soon followed suit.

An Indication of the Nature of the Decline

As already indicated it would be inappropriate here to rehash the details that relate to the decline of the CBD. Nonetheless some indication of the losses that have been suffered need to be mentioned. There are now no longer any of the large, or grand, department stores of the past in the CBD. John Orrs, Stuttafords, Garlicks, and Ansteys are all gone. The scale of up-market retailing in the large malls of the suburbs is now substantial (Fig. 11) and by 1999 (Sapoa 1999a) there was 1 263 902 m² of retailing and service business in malls with a minimum size of 10 000m² in the suburbs. That exceeded the then current retail space in the CBD by a multiple of 1.63 and considerably exceeded it in terms of order of commodities available. Offices have largely followed in the wake of the malls, setting up in their near vicinity (Fig. 12), and by the end of 1999 top-grade

office space in the Sandton node alone was equal to 63 per cent of what had been in the CBD of Johannesburg as recently as 1990 (Sapoa 1999b; Beavon, 2000). With the demise of major retailing and the decline in the number of large office-based companies the top hotels could no longer remain in business. Not only were the four five-star international hotels forced to close but there is not a single 'graded' hotel left in the CBD. Perhaps most significantly the Johannesburg Stock Exchange (JSE) has closed up shop in Diagonal Street and headed for Sandton. An associated observation may also underscore the nature of the decline. At the beginning of 1991 of the 759 firms listed on the JSE 197 had their registered offices in the CBD of Johannesburg. By 1998 the CBD of Johannesburg was still home to 129 of the listed companies on the Exchange but by 2000 only 38 of them remained in the CBD together with 7 that had not been listed two years before. (JSE 1991; Alexander and Oldert 2000).

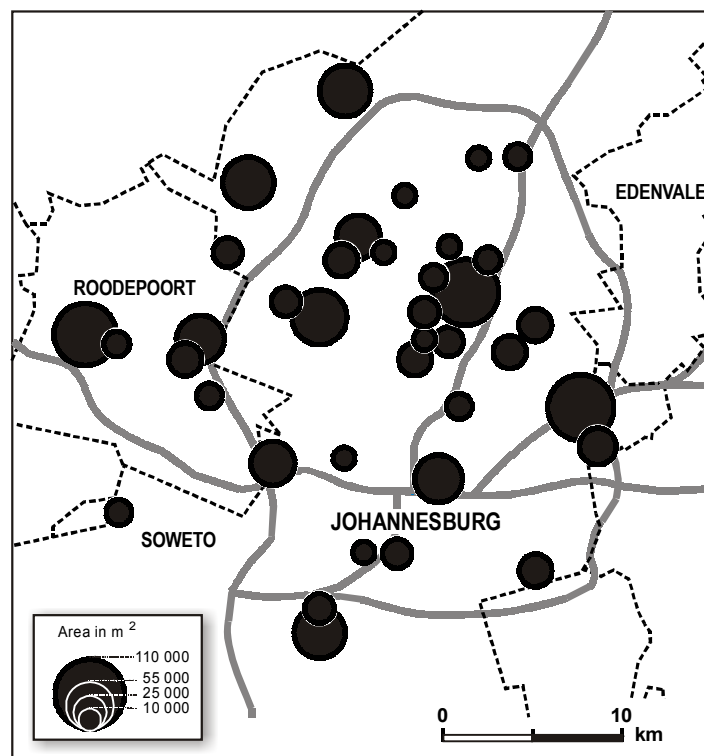


Fig. 11: The distribution of shopping malls (with a minimum size of at least 10 000m²) in 1997

Improvements in Transportation for Black People

Before attempting to comment on whether improvements to the transportation system alone will revive the CBD of Johannesburg mention must be made of the radical changes that have taken place in the movement of black commuters, shoppers, and workers, between their places of residence and the CBD of the city.

Data for 1976 shows that when vehicle ownership amongst whites was 1.32 cars per family, amongst Sowetans it was only 0.2 (Bureau of Market Research, 1976). Whereas those figures will have altered by now it is still patently obvious that the vehicle ownership amongst black people is extremely low compared to whites. Nonetheless in the late 1970s black people living in the townships on the various edges of Johannesburg, who wished to get to Johannesburg to work, to shop, or for other reasons, had only a set of poor choices. They were either forced by circumstance

to use the commuter trains which served a limited area of some townships or they would have to make use of the state-subsidized Putco bus company. Even then commuters and shoppers were faced with long walks to and from the limited sets of stopping points and their ultimate destinations.

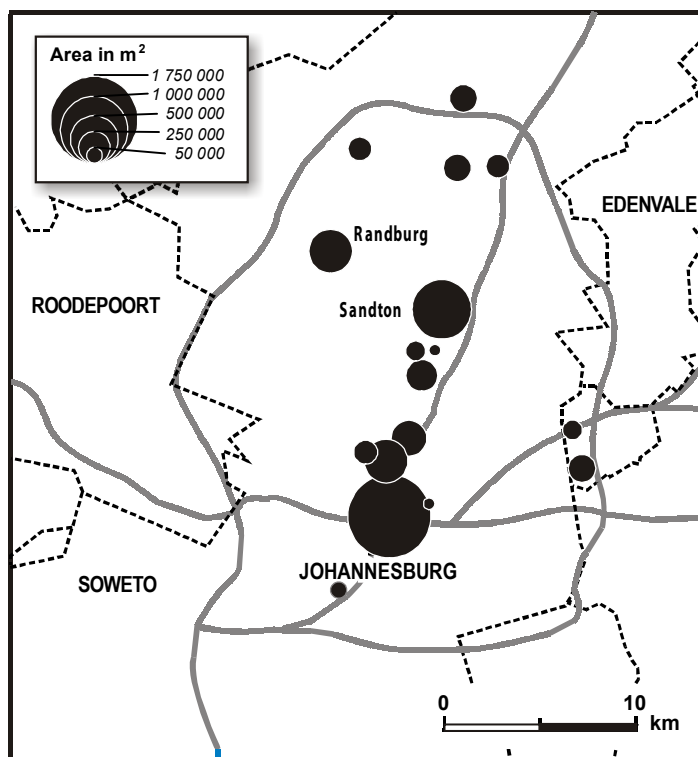


Fig. 12: The distribution of nucleations of top-grade office space in and beyond the Johannesburg CBD, 1997

Soon after the 1976 Soweto uprising the mini-bus taxi industry emerged and began to put on muscle at a spectacular if not an alarming rate. The taxis (as they will be termed here) operate in a manner somewhat between that of a roving cab and a regular bus (Khosa, 1991). They filled a desperate need for a reasonably inexpensive and rapid commuter service with more route flexibility than buses could provide. From no more than a handful of licensed mini-buses in Soweto the numbers of such vehicles increased to a ratio of 1.4 per thousand people in 1980, and 3.5 per thousand in 1990. By 1991 there were 7 000 legal taxis operating in and from Soweto alone (Khosa, 1992). Since then the number of taxis, both licensed and unlicensed, has increased many times over and in June 1998 the transport division of the Gauteng legislature had documentation on 35 000 taxis that operate in and from Johannesburg. Like them or hate them they are set to stay as the movement of black commuters cannot be handled in any other way. That said, however, the taxis and the taxi ranks in Johannesburg have contributed to the negative image of the CBD.

The vast majority of the taxi shuttle between the townships and the CBD from the crack of dawn. After the morning peak the taxis converge and, apart from a sizeable 'skeleton' set, most remain parked in and about the CBD, and in suburban and township business nodes, until the rush for 'home' in the late afternoon sets the shuttle service in motion once more. It follows that large taxi ranks are needed in the city to accommodate the stationary taxis during the day. The ranks are vast and generally resemble large bus stations in areal extent. Unfortunately even where formal taxi ranks have been constructed in recent years they tend to be points of chaos and litter in the city and from time to time scenes of death by shooting as a consequence of the so-called taxi wars.

The Current State of Accessibility of the CBD

If one sets aside the obnoxious side-effects of the taxi industry for the moment and considers what it represents in terms of access to the city then one must come to the conclusion that because of the taxi industry the CBD of Johannesburg, and its constituent parts, is now more accessible to black people than it has ever been. Indeed given the major shopping and office developments in the suburbs, and especially in the northern suburbs, it is fair to say from observation that the CBD is very accessible to white suburbanites: that is in terms of the ease with which one might drive to it. Furthermore from mid-morning to mid-afternoon the traffic congestion on the roads within the CBD seems to be low; particularly if compared to the congestion in and about the malls in the centre of the suburban nodes.

Concluding Comments

In light of what has been stated in the paper it can be claimed that improvements in transportation that simply raise the accessibility of the CBD are in themselves unlikely to revive the CBD. In any event one must ask what other improvements might be made to the transport system. Certainly making the trains safer to travel on, and more comfortable, and the better general policing of the taxi industry would almost certainly be welcomed by commuters and shoppers. How those improvements could translate into a revival of the CBD is not clear at all.

There has been much talk in recent months about how a bridge across the railway marshalling yards is to be constructed linking Braamfontein along the line of Jan Smuts Avenue directly with Newtown. That plan too has been touted as something that will revive the CBD. What the backers of the plan fail to realize is that in terms of psychological distance Newtown is now farther from what we might term the core of the CBD than it has been for years. The question that must be asked of the planners is just how will improved ease of access to Newtown, that is currently in a derelict state, in itself improve the CBD as a whole? One should not lose sight of the fact that the area covered by what is termed the CBD is extremely large.

In the distant past the business area of Johannesburg, later the CBD of the city, grew, expanded and thrived not because it was merely accessible, and even very accessible. That accessibility was coupled to the fact that there were no alternative business clusters that could rival the CBD. As such the purchasing power of the wealthy, the reasonably wealthy, and the very wealthy poured into the CBD and supported its genuinely high-order businesses. They in turn spawned associated but lower-order businesses, and they others. Had those businesses been retarded simply by a decrease in accessibility then improvements in transportation might have been the remedy provided the businesses did not close and depart the scene. In fact the congestion in the Johannesburg CBD was becoming really severe at just the moment that new retailing technology in the form of large enclosed malls and hypermarkets arrived in South Africa. Given their demands for large tracts of land at low prices they immediately and mainly opted for the suburban edges of the time. Their immediate success can in part be attributed to the frustration being experienced in the then CBD which, because of its high degree of accessibility was being choked by vehicles and at the same time starved of parking. Unfortunately drastic remedies that may have revived the CBD at that time were not taken and now that the 'patient' is really sick a transportation injection is not going to be enough.

One last comment might be added. If improved transportation means new bus routes from the suburbs to the CBD, as it exists in its present state then not only is it unlikely that suburbanites will flock to the CBD but the reverse could be true. The large numbers of shoppers who do frequent the lower-order shops that today characterize the CBD, might find it easy and convenient to take the

'return' transport to the suburban nodes and simply use the CBD as an interchange point between an improved bus system and the taxis to their homes.

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THE ROLE OF TRANSPORT IN THE RISE AND DECLINE OF THE JOHANNESBURG CBD, 1886-2001

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