

INTRODUCTION

South African Property Tax Rates

Property tax was introduced in South Africa by Governor Simon van der Stel during his reign in the Cape Colony during 1836. McCluskey, W.J. & Franzsen, R.C.D. (2001) documented that South Africa's history of taxing real properties dated back to 1677.

The article written by Franzsen, R.C.D., (2000) stated that the South African Government published a White Paper on the Local Government in March 1998 to set out the Local Government Municipal Structures Act and to assign new boundaries for the different categories of municipal metropolitan areas. Every municipal structure will have a Property Rates Bill which will recover property rates as described in the South African's Constitution (1996), Property Rates Bill, Section 229 (1-5).

South Africa made constitutional changes after the first National Democratic Elections in 1994. These changes affected the Local Governmental Transition Act of 1993 and of 1994–1995. According to McCluskey (2001) previously isolated urban local authorities merged into many different “non-racial transitional councils”.

Bell, M.E. (2002) stated that the National Government implemented a new Municipal Structures Act during March 1998 which stipulated the new boundaries for different categories of municipal governments in South Africa.

Franzsen, R.C.D. (2000) indicated that the local governmental structure also entailed the restructuring of the municipal finance system, which included the Property Rates Bill (PRB). This bill dealt entirely with taxation of properties since “Section 229 of the South African Constitution approved rates on property as property taxation.”

This bill was reviewed and approved as the Local Government: Municipal Property Rates Act 6 of 2004 (LG: MPRA 6 of 2004). In the present valuation system the Computer-Assisted Mass Appraisal (CAMA) assesses property valuation, the policy being to “treat persons liable for rates equitably” as stipulated in Section 3(3)(a) of the above-mentioned Act.

CHAPTER 1: BACKGROUND OF THE STUDY AREA

1.1 Introduction

A brief description of the history and characteristics of Midstream Estate will be given in order to give a general profile of the entire township development.

The photos displayed were received from a secondary source and indicate the following relevant criteria:

1.2 Uniqueness of the Properties (Annexure 9)

The photos indicate two criteria:

- a) Photos 1, 2, 3, and 4 display properties that are of a unique design. The market value of these properties would be assessed according to the principle of willing buyer, willing seller and the selling price would fall in the upper price bracket.
- b) Photos 5, 6, and 7 display properties that are not unique and regarding market value they will fall in another category than the properties shown in photos 1, 2, 3 and 4. This provides another reason why property owners should partake in their own valuation assessment: the cluster diversity between the properties is too different. It also reveals the unfair nature of the present assessment system.

1.3 Public Parks (Annexure 10)

There are twelve parks in Midstream Estate. Annexure 7 shows the location and size of the various parks. The photos in Annexure 10 emphasise the impression of open country within the Estate. The parks are very well maintained by the Estate management. If the maintenance were left to the Municipal Council, the property value would possibly deteriorate.

1.4 Location Area Map (Annexure 6)

Midstream Estate is situated within the jurisdiction of the EMM, the fourth largest municipality in the country and the second largest in Gauteng, Johannesburg being the largest.

The estate is located east of the N1 motor-way between Johannesburg and Pretoria, midway between the two cities (see Annexure 6). The nearest turnoff to the Estate on the Johannesburg N1 is the Samrand turnoff six kilometres from the entrance to the Estate. The area map shows that the following motor-ways cross the development: the K220 (which runs from west to east through the estate) and the K109 and K111 (which connects the estate with Johannesburg and Pretoria). The map also shows that the Estate is positioned to the north-east and fifteen kilometres from the main intersection of the Johannesburg-Pretoria (N1) and the Krugersdorp-Pretoria East (N1) motorways.

The map also shows that 60% of the estate approximately 3500 hectares has been developed; the 40% which has not been developed is located on its eastern and southern boundaries.

There are various commercial developments to the western side of the estate, such as a horse racing track and a shopping centre with shops such as Shop-rite, Woolworths and Clicks. The area used as a test sample is indicated by a red circle in the north-western section of the estate. Annexure 2 is a detailed map of this area.

1.5 Map of the Area of the Sample (Annexure 7)

The map shown in Annexure 7 indicates the specific area that was selected as the test sample. The area comprises eleven wards, but as two of these, wards 4 and 5, are separated from the others by the main entrance road from the N1, the Brakfontein Road, they were excluded from the survey sample area. There are 1 140 properties in the remaining nine wards, and from these a hundred were randomly selected for this research. The selected properties are indicated in yellow. The nine wards cover an area of ± 700 hectares, of which ± 120 hectares were developed as twelve parks (indicated in green). Midstream College is situated on the southern boundary of the Estate (centre left of the map), and covers an area of approximately 130 hectares (indicated in light green). The college is opposite the Midstream Estate shopping centre, indicated in blue.

The map shows that the development design is very well structured and that the Estate is designed to accommodate high-income property investors. The public

parks point towards a large area of free space for the private use of property owners; other facilities also indicate that the development targets up-market ownership.

1.6 Map of the Aerial of the Sample (Annexure 7)

The aerial photograph records the unique designs of the various types of properties in the estate. The map also shows two schools, a shopping centre, a filling station, a nursery, offices, and a sports centre with a golf course and club house. Not seen on the map is a twenty-four hour security system as well as a garden service to maintain the public parks.

CHAPTER 2: RESEARCH JUSTIFICATION

2.1 Introduction

The focal point of the current Municipal Property Rates Act 6 of 2004 (MPRA 6 of 2004), and in particular Section 45, was based on the mass appraisal principals, which were to be used to compensate for the shortfall of experienced valuation officials who could perform the required services to assess properties the way they should be assessed. McCluskey, W.J. & Franzsen, R.C.D. (2001) states that the above Act “forms the basis of South African property taxation”. It is important that local municipalities (LM) should develop and implement a clear and fair valuation system for properties according to the Act. McCluskey & Franzsen (2001) were also of the opinion that the present property taxation system in South Africa is based on Mass Appraisal Valuation Methods (MAVM), as noted in Section 45, and that it can only be applied to mass and comparable property developments, such as low-cost houses or flats.

The purpose of this research is to assess the present Mass Appraisal Valuation Method (MAVM) and to ascertain whether it can be implemented in an area with up-market and unique property developments. It is the premise of the research that it is essential to involve property owners during the assessment stage to ensure a transparent, true and fair property valuation assessment. Kamali, M.K. & Rajabi, M.A. (2010) stated that “land valuation is the process of assessing the characteristic of a given property”. Therefore, the purpose of land and property valuation must determine the value, also called market value. Market value is also known as market

price and is the price accepted by a willing seller and willing buyer at a specific point in time.

Franzsen (2000) stated that the value of property was predominately determined by its location and unique characteristics; the Act also stated this clearly.

This research focused on the need to justify property owner participation during the valuation of properties and whether this goal is disregarded in the present property tax valuation system (Kamali & Rajabi 2010).

2.2 Hypothesis

The hypothesis of this research report is that current valuation assessment systems to assess unique properties are inadequate.

The aim of the research was therefore to investigate whether the current valuation system could satisfy the needs of the property owners regarding their individual property valuation. According to Müller, A. (2002) it is “necessary to compile a description of all the properties that were subjected to tax in order to value and tax properties”.

This research report will discuss two main ideas: the inadequacy of the present valuation assessment system, and the adverse impact this has on property owners.

2.3 Research Problem

This research will focus on the present LG: MPRA 6 of 2004 and its underlying principle of mass valuation as a fair and transparent system for the valuation of all residential properties.

In the above Act no provision was made for the property owners to partake in the fair and equitable assessment of their property valuation. This was also true of the Local Government: Municipal Systems Act 2000 (LG: MSA). According to Franzsen (2000) it should be a stipulation that the tax assessment system must be transparent, fair and comprehensible so that the efficiency and accountability of local councils may encourage a positive outcome.

The purpose of this research is to assess the need of the property owner's participation and willingness to contribute in the valuation assessment of his property. According to Section 45 (2)(a) physical inspection of the property is an option and is therefore an option for the property owner to participate in the execution of the assessment process. From Section 45 (3)(a)(b) it is clear that the above physical inspection and the property owner participations not addressed adequately.

Müller (2002) stated that three acceptable approaches could be used to value a property in both individual and mass valuation situations:

- 1 The comparable sales approach
- 2 Income approach
- 3 Cost approach.

These approaches will be further discussed in chapter 5.

2.4 Main Objective

The main objective was to study the present Municipality Property Rates Act 6 of 2004 in order to establish whether there is sufficient justification for the above concerns, and to explore the transparency of the system with regard to all property owners. This topic will be discussed in more detail in item 4.2.7.

A secondary objective was to carry out a field survey study to determine whether the research question and concerns in paragraph 2.3 are justified.

2.5 Specific Objectives

The specific objectives of this study are the following:

- To analyse and question the present Municipality Property Rates Act 6 of 2004.
- To investigate and measure the need for Midstream Estate property owners to participate in their property valuation assessments.
- To propose a valuation assessment system that property owners could use in participation with a municipal officer. This model would underpin the present assessment system to ensure a more reliable outcome.

The following research questions would be relevant:

- Is there a need for a valuation system and model?
- Would the property owners partake in the assessment undertaken by such a valuation system?
- Is there any objection to the current valuation system by the property owners as described in Section 45 of Act 6 of 2004?
- Is there a benefit for the property owner if the property is assessed according to its unique design and merits?

Important research information includes the following:

- What are the components of the Mass Appraisal System (MAS)?
- What methods for property valuation could be used to the benefit of the property owner?
- Can a valuation model or system for Midstream Estate be created?
- How will the new system improve the present valuation assessment system?

2.6 Research Design

The research design will follow the research questions and research information as indicated above item 2.5. It will underpin the transparency, fairness and consistency of such a designed system.

The research methodology will be discussed in chapter 6.

2.7 Structure of the Study

Introduction: Historical background on the South African property tax system.

Chapter 1: Background of the study area.

Chapter 2: Introduction of the various components that affect the property valuation process: research justification; hypothesis; research problem, objectives and research questions; research design; structure of the study; and limitations of the study.

Chapter 3: The justification to partake in property tax, and the characteristics and factors of concern in Midstream Estate are explored. Local Government: Municipal Finance Management Act 56 of 2003 (LG: MFMA) and LG: MPRA 6 of 2004 are reviewed.

Chapter 4: A broad literature review on the philosophy and principles of the property tax and valuation system is explored. Objections are analysed, and the need for a more comprehensive and fair valuation model and system is considered.

Chapter 5: The South African property tax assessment system and various appraisals on valuation assessments are examined.

Chapter 6: The research methodology and process of area selection are explained. Data collection and statistical analysis of results are exhibited.

Chapter 7: Conclusions and recommendations of the research are provided.

2.8 Summary

The introduction has presented the various issues and justifications pertinent to the research, a problem statement, and an outline of the research objectives. The research is justified on premise that the Local Government: Municipal Property Rates Act 6 of 2004 does not address the needs of the Midstream Estate property owners.

The author is of the opinion that there is a need for participation by property owners regarding the valuation assessment of their properties, especially where unique and up-market properties are concerned.

In addition, he argues that Section 45 does not address unique property developments with “minimal market-related data” in the present mass valuation system, and therefore questions the validity and transparency of the present mass valuation system as indicate in item 2.3 above. One such property development, Midstream Estate, can serve to illustrate these shortfalls:

1. The present property valuation in Midstream Estate is executed within the logic as presented under Section 46 of the above Act. It does not make provision for the property owner to partake in the assessment procedure.
2. Due to the uniqueness of the properties within Midstream Estate, the property owners argue that the present system is not transparent because it does not validate the true and fair value of the various properties within Midstream Estate.
3. Because the valuation assessment procedure does not allow for participation by the property owners and the quality and uniqueness of the various properties are therefore not taken into account, the owners of Midstream

Estate claim that the system is not transparent and leads to inaccurate assessment values.

CHAPTER 3: JUSTIFICATION TO PARTAKE IN PROPERTY TAX ASSESSMENT

3.1 Introduction

Property tax is a method to provide a source of revenue with which to finance municipal services and needs. Therefore a general but fair and transparent property tax valuation system is required in order to generate and collect tax revenue from property owners on a continual monthly basis in South Africa.

Section 45 of the LG: MPRA 6 of 2004 states that:

- 1 “Property must be valued within general practices, methods and standards as given below:
- 2(a) The Act states that it is optional for an officer to visit the property for valuation in person,
- 2(b) A comparative, analytical, aerial photography, Computer-Assisted Mass Appraisal (CAMA) system, Geographic Information System (GIS) or techniques and other systems or techniques may be used to compile a transparent valuation on the property. It must be taken into account that there may be changes in technology and valuation systems as well as techniques.
- 3(a) If the available market-related date of any category of rateable property is not sufficient for the property application in application (1) and (2), such property may be valued in accordance with any mass valuation system or technique approved by the municipality concerned and as may be appropriated in the circumstances as:

- 3(b) A mass valuation system or technique as stated in Section 45 that may be approved by a municipality in terms of (3a) above includes a valuation system or technique on predetermined bands of property values and the designation of properties to one of those bands on the basis of minimal market-related data”.

3.2 Midstream Estate

For the purpose of this research, Midstream Estate was selected to be the specimen and focal point for the following reasons:

- a. Midstream Estate is located within the Tembisa Customer Care Centre which is one of the 21 municipalities of the Ekurhuleni Metropolitan Municipality (EMM).
- b. Midstream Estate was proclaimed a township in 2002 and was developed during the last ten years.
- c. The Midstream Estate survey sample covers 1 140 properties with a range of property sizes between 800 m² and 1 400 m².
- d. The properties have a range of floor areas between 400 m² and 1 200 m².
- e. Properties in Midstream Estate are designed to suit every individual owner's needs and specifications.
- f. There are no identically designed properties in Midstream Estate.
- g. Midstream Estate was developed over a period of eight years. The properties have different property prices and different characteristics; therefore the

estate cannot be classified for valuation assessment within the present mass appraisal system as indicated under Section 45 of the Act.

- h. Only 1% of Midstream Estate property owners were visited by a municipal valuation officer during or after assessment. They were visited either after their property had been constructed or during the last five years, as indicated in the field survey.

Midstream Estate was selected for the study because of the above reasons as they highlighted the differences between mass development and private, individual development townships. Midstream Estate is situated within the EMM in Gauteng. The EMM has confirmed that the present MAS property valuation process was followed to assess property valuation in Midstream Estate and that the procedure of the MPRA 6 of 2004, and more specifically Section 45, were applied without an invitation to the property owners to participate in the process.

The National Property Education Committee of South Africa (2004) stated clearly which factors would influence the value of property and divided them into three categories:

- a) Physical and unique characteristics;
- b) Environmental factors;
- c) Rights of the property.

The first (physical and unique characteristics) and the second (environmental factors) categories differentiate mass developments (low-cost housing, flats and sectional title developments) from individual and unique residential properties such as Midstream Estate.

3.3 Physical Characteristics (See Annexure 6)

The Midstream Estate layout was architecturally designed to address and accommodate the needs of an up-market, high-income group, and as such offered the following services:

- Security controlled access, shopping centre, schools, medical and retirement units, fuelling station, twelve public parks and garden services.
- Midstream Estate is located on the N1 route, five kilometres south of Centurion and three kilometres east on the Brakfontein Road near Centurion. It is part of the 21 municipalities (customer care centres) of the Greater Ekurhuleni Metropolitan Municipality in Gauteng. A more detailed description of Midstream Estate is given in chapter 1.

With reference to Section 45 and other related Sections of the Act, Cooper, J.M. (1993) recommended that the selection of property comparables should be carried out on current property transactions and that they should correlate as closely as possible with the characteristics of the properties in question.

3.4 Environmental Factors Concerning Midstream Estate

From an architectural point of view, the environmental factors of Midstream Estate are in themselves different to those of mass development projects and need to be valued accordingly. These factors need to be addressed with regard to the “minimal market-related data” of Section 45(3)(b). This could be the key to resolving questions on valuation transparency within the proposed model. It was indicated by Bagdonavičius, A. & Deveikis, S. (2005) that “individual valuations are distinguished

from a detailed analysis and description of the subject property which features interpretation of legal and economic factors of value.” The above-mentioned physical characteristics and environmental factors of Midstream Estate will be discussed in more detail in chapter 1.

Bell, M.E. & Bowman, J.H. (2006) stated that in order to determine the value of an individual property, the valuers must observe the activity and performance of the market and assess the property on its characteristics and on market sales of comparable properties. Both authors also confirmed that in general, the location of the development plays a major role in determining comparability. Therefore the evaluation of property sales in the area being valued is an important factor in the process of determining the market value of a property. In Section 11(a) the Act confirmed that a rate levied by the municipality on the property must be an amount “on the market value of the property”. Because Midstream Estate is still a rather new township development and because most of the properties are still occupied by their first owners, a reliable and transparent market valuation statistically depends on the individual property owner’s input in the valuation assessment.

Shapiro, E., Davies, K. & Mackmin, D. (2010) pointed out that in accordance with Section 45, and where similar property sales data existed, the valuer might use the comparison method of valuation. However, according to the Computer-Assisted Mass Appraisal system (CAMA), the current market value of the property has to be the equivalent of the property in question as well as comparable regarding most factors. In order to determine the equivalent factors between two properties, these properties should have been inspected and the assessment valuation determined on a specific date (Suriatini, I. & Taher, B. 1998). Dillinger, W. (1991) was of the

opinion that a direct market data approach would probably be more reliable than mass appraisal because the market value of properties remained a better indicator of their true value.

3.5 National Legislation

The new national legislation, LG:MPRA 6 of 2004, has been passed to collect the taxation income on all properties within its region. Bell & Bowman (2006) confirmed that in the 1996 constitution, under Section 229(1)(a) of Chapter 13, municipalities were granted the authority to enforce “rates on property and surcharges on fees for services provided by or on behalf of the municipality”. The current constitution prohibits municipalities in South Africa from enforcing income tax, VAT, custom duties, or general sales tax. Municipalities are authorised to collect taxes such as levies and duties for appropriate services. In other words, only local property tax may be enforced by municipalities, according to Bell, M.E. (2002).

During the merging of municipalities in 1994-1995 and 2000 new municipal structures were brought into existence and, according to the law, all land within a municipality’s jurisdiction had to be taxed under a system that applied throughout the municipality. This means that new locations are continually being brought into the “property tax web” and that almost the entire country is now enlisted on the tax roll and is paying tax according to the property valuation (Bell & Bowman 2006). Bell & Bowman further stated that property tax was the most important tax available to local government and should therefore be implemented through a consistent and standardised procedure throughout all municipalities in South Africa.

3.6 The Study Area

In this paragraph a brief description of the history and characteristics of Midstream Estate will be given in order to give a general profile of the entire township development.

The photos displayed in Annexure 9 were received from a secondary source and indicate the following relevant criteria:

3.6.1 Uniqueness of the Properties (Annexure 9)

The photos indicate the following two criteria:

- c) Photos 1, 2, 3 and 4 show properties that are unique in design. The market value of these properties would be assessed according to the principle of willing buyer, willing seller and the selling price would fall in the upper price bracket.
- d) Photos 5, 6 and 7 show properties that are without doubt not at all unique and regarding market value they will fall in another category than the properties shown in photos 1, 2, 3 and 4.

The photos clearly demonstrate why owners need to participate in the valuation assessment of their properties: because the diversity among properties in the same estate is so great, the present assessment system is clearly inadequate and may even be unfair.

3.6.2 Public Parks (Annexures 7 and 10)

There are twelve parks in Midstream Estate. Annexure 7 shows the location and size of the various parks. The photos in Annexure 10 emphasise the impression of open country within the Estate. The parks are very well maintained by the Estate management. If the maintenance were left to the Municipal Council, the property value would in all likelihood deteriorate.

3.6.3 Location Area Map (Annexure 6)

Midstream Estate is situated within the jurisdiction of the EMM, the fourth largest municipality in the country and the second largest in Gauteng, Johannesburg being the largest.

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The map also shows that 60% of the estate approximately 3500 hectares has been developed; the 40% which has not been developed is located on its eastern and southern boundaries.

There are various commercial developments to the western side of the estate, such as a horse racing track and a shopping centre with shops such as Shop-rite, Woolworths and Clicks. The area used as a test sample is indicated by a red circle in the north-western section of the estate. Annexure 2 is a detailed map of this area.

3.6.3 Map of area used as test sample (Annexure 7)

The map shown in Annexure 7 indicates the specific area that was selected as the test sample. The area comprises eleven wards, but as two of these, wards 4 and 5, are separated from the others by the main entrance road from the N1, the Brakfontein Road, they were excluded from the survey sample area. There are 1 140 properties in the remaining nine wards, and from these a hundred were randomly selected for this research. The selected properties are indicated in yellow. The nine wards cover an area of ± 700 hectares, of which ± 120 hectares were developed as twelve parks (indicated in green). Midstream College is situated on the southern boundary of the Estate (centre left of the map), and covers an area of approximately 130 hectares (indicated in light green). The college is opposite the Midstream Estate shopping centre, indicated in blue.

The map shows that the development design is very well structured and that the Estate is designed to accommodate high-income property investors. The public parks point towards a large area of free space for the private use of property owners; other facilities also indicate that the development targets up-market ownership.

3.6.4 Aerial Photograph (Annexure 8)

The aerial photograph records the unique designs of the various types of properties in the estate. The map also shows two schools, a shopping centre, a filling station, a nursery, offices, and a sports centre with a golf course and club house. Not seen on the map is a twenty-four hour security system as well as a garden service to maintain the public parks.

3.7 Summary

The literature review shows clearly that the current property valuation and property tax assessment, as described in Section 46 and other related Sections of Act 6 of 2004, is done according to CAMA or MAS (mass appraisal systems) principles. Furthermore, in the present valuation system there is no method whereby property owners can cooperate with municipality officers to assess the value their residential properties.

Act 6 of 2004 does not address the following criteria in its valuation assessment system:

- a) Property owner participation during the valuation process;
- b) Square metre level or market value of the individual property especially concerning properties with unique characteristics.

The present mass valuation system can only assess properties that are of equal type, size, design, and by mass construction. Therefore uniquely designed property

developments such as Midstream Estate should be assessed with other methods, such as the area-based methods which will be discussed in chapter 5.

With reference to paragraph 3.2, the author is of the opinion that Section 45 can only be applied to standard multiple property developments such as governmental low-cost housing, blocks of flats, sectional title developments and large community housing developments. In the present mass valuation system, no allowance is made for the valuation of up-market, uniquely designed property developments such as Midstream Estate. In order to assess these up-market properties, the individual property owner has to partake in the valuation process.

With reference to paragraph 3.3, the author stated that it was evident that the present tax valuation assessment system, especially as described in Sections 30, 31, 45 and 46 of the Act, does not make provision for satisfactorily assessing Midstream Estate and other property developments with unique designs and characteristics. For this reason the current valuation system cannot be classified as a true valuation assessment under the banner of MAS.

CHAPTER 4: LITERATURE REVIEW ON PROPERTY TAX AND VALUATION

4.1 Introduction

Firstly, a review is given of the philosophy and principals of property tax assessment and valuation. This chapter includes different approaches of valuation, as well as principles of property valuations and assessments.

Secondly, special attention is given a validation of the property owner's participation in the assessment process. The chapter also highlights the hidden flaws in the present system caused by inadequate service delivery and system methodology.

4.2 The Present Valuation System

At present, property tax assessment is based on the CAMA system, which depends on correct, suitable, and up-to-date information, as well as data on properties as stated in MPRA 6 of 2004. Bell & Bowman (2006) stated that data for valuation were mainly collected from tax-payer returns and field surveys. A large amount of "spatial and non-spatial" data were handled through this method but currently there is no proper system to verify, document and identify the quality and amount of data issued.

As stated in Section 45(3)(b), property value is based on minimal market related data, but the author is of the opinion that this method can be confusing in individual cases, particularly in cases where owners occupy properties in areas with few comparable prices and characteristics.

As a result of the above, it is recommended that further research be executed to design a proper valuation assessment procedure that reduces the risk of insufficient and accurate information. The existing property valuation system can result in unfair property tax valuations. The present assessment system does not allow for collecting and calculating information from various sources and storing this information in a data bank. According to Suriatini & Taher (1998) a poor quality valuation can be identified by inaccurate, inconsistent, inefficient, and unreliable information. Mohd, H A. (1994) also confirmed that a valuation could be of poor quality if the relevant information was incorrectly and unreliably documented.

4.2.1 Reasons for Property Tax

Property tax is associated with local government in most countries. It is general knowledge that taxes on land and property are, at best, minor revenue sources in all countries. However, these taxes play a significant role in maintaining the infrastructure of the individual municipality. According to the research of Bahl, R. (2002) the base of property tax is “invariably relatively inelastic and therefore cannot be increased automatically”. To be meaningful to both parties (property owners and municipalities), properties have to be assessed regularly, preferably on an annual basis.

Various reasons for property taxation are briefly discussed below.

- **Valuable property.** Municipalities usually re-assess residential property values every five to ten years. If sizable improvements and changes are made to an existing property, the assessor should re-assess its value.

Although updated data collection is an expensive phase of re-appraisal, it is important that properties be physically visited and individually assessed every five years. If changes have been made to a property, however, visitations and assessments should occur within one year of those changes.

- **Property valuation in a specific area.** If the overall value of property in an area increases, individual owners' taxes will also increase. For this reason it is imperative that the characteristics and location of the property be correctly updated and recorded during site valuation, as these factors will influence the property valuation assessment.
- **Government intervention.** The government may decide to increase overall property taxes and can review rates to fund their needs. According to Section 5, "the municipality must annually review, and if necessary, amend its rates policy".
- **State funds.** State schools may warrant more funds to keep them operational. Taxes on residential properties can account for a significant portion of a school's budget. Special districts such as hospitals, as well as municipal concerns such as drainage and storm water management are unique entities that can draw on property taxes if the municipalities need to increase their budgets. Improvements made by a municipality, such as new sidewalks and curbs, may also warrant additional funds. This can trigger a special assessment for property tax increases.

Section 16 of the Act allowed the Minister of Finance to give notice that the "rate must be limited to an amount and if necessary, the municipality may adjust its budget for the next financial year accordingly".

4.2.2 Principles of Property Taxation

The following sections of MPRA 6 of 2004 are applicable:

- “Section 11 states that the rate levied by a municipality on property must be on the market value of the property.
- Section 27(1) states that “the municipality must furnish the property owner liable for payment of the rate with a written account specifying ... (d) the market value of the property”.
- Section 31(2) of the Act states that the “general valuation must reflect the market value of the properties in accordance with (a) market conditions which applied as at the date of valuation; and (b) any other applicable provisions of the Act”.
- Section 30(2) and (3) states that all rateable properties in the municipality must be valued during a general valuation, and that all the properties so valued must be included in the valuation roll.
- According to Section 46(1), “the market value of a property is the amount the property would have realised if sold on the date of valuation in the open market by a willing seller to a willing buyer”.

From the above sections it was clear that the MPRA 6 of 2004 was formulated on the basis of a mass valuation system and consequently was not designed to value unique and up-market property developments. Dillinger's (1991) research stated that although one mass appraisal was appropriate for determining the mass volume of the tax base, the municipal property tax base will have to include the unique and

high value properties for which visible sales in the market do not exist. Dillinger (1991) was of the opinion that the mass appraisal technique system could not be applied, and that a more complex valuation system should be used to satisfy the needs of property owners.

Bell & Bowman (2006) supported Dillinger (1991) and acknowledged that market estimates could not be made accurately during the initial valuation phase because the values have to be determined for each property.

As defined by Shapiro *et al.* (2010), the property market value is the estimated amount for which a property should be exchanged “between a willing seller and willing buyer”, where the parties are knowledgeable about all the details regarding the specific property.

Shapiro *et al.* (2010) emphasised the point that the principal methods of valuation adopted by valuers should include the need to take the special characteristics of each property valuation case into account, especially in areas such as Midstream Estate. Shapiro *et al.* (2010) further stated that the fairness and correctness of any method depended on the comparable evidence of the properties. This evidence can be obtained by the valuers from their databanks and their knowledge of the market.

Bell & Bowman (2006) stated that valuers should observe the market activity to determine the value of individual properties. The value of an individual property should be based on the specific characteristics of the property, including market sales of comparable properties.

This research focuses on the comparative sales components that will ultimately form the basis for a tax valuation model with which to value residential properties in the upper section of the market – such as – as previously indicated – Midstream Estate.

4.2.2.1 General Property Tax System

It is general practice to value property on market value that is based on actual sales data on improved and vacant land. These data are obtainable from the Registrar of Deeds. Ball, M., Lizieri, C. & MacGregor (2007) stated that the price a buyer is willing to pay for the land or property was usually the selling price.

Section 46 of the Act agreed with the above statement of Ball *et al.* (2007) and stated that the “market value of a property is the amount the property would have realised if sold on the date of valuation in the open market by a willing seller to a willing buyer”.

Section 8 stated that municipalities might provide different rates for different categories of rateable properties. Some of the categories mentioned in the Act were the following:

- a) “Use of the property;”
- b) “Legitimate use of the property; or”
- c) “Geographical area in which the property is situated”.

Section 8(2) specified the following rateable properties in terms of Section 8(1):

- a) “Residential properties;”
- b) “Industrial properties;”

- c) “Business and commercial properties and other”.

For the purposes of this research we focus on the residential property market.

4.2.3 Validation for Property Tax System

According to Section 229(1)(a) of Chapter 13 of the SA Constitution of 1996, municipalities were granted the right to impose “rates on property and surcharges on fees for services provided by or on behalf of the municipality”. Municipalities may enforce other taxes, levies, and duties appropriated for municipalities if they are so authorised by national legislation, but the constitution bars them from imposing income tax, value-added tax, general sales tax and customs duties. In South Africa the only major tax available to municipalities is the local property tax.

Section 31(2) stated that “general valuation must reflect the market value of properties determined in accordance with (a) market conditions which applied as at the date of valuation”. With reference to Section 31(2), EMM confirmed that the current valuation roll was assessed on 1/7/2008 for implementation on 1/7/2009 – 30/6/2013, that it was assessed on a fixed basis of valuation, as set out in Section 45, for a four year period and that the roll has been reviewed annually. However, the base rate for 2011, 2012 and 2013 was increased by 10%, 11% and 10% respectively, which the author argues defeats the process of the current tax system. Bell *et al.* (2006) questioned the meaning of assessment-sales and the derivative equity measures. In addition, Bell *et al.* wondered what the results would be if “assessed values and sales prices are basically politically determined numbers”.

In Gauteng, municipal authorities have the power to impose and collect property taxes. As stated in Section 24, a rate levied by the municipality on a property must be paid by the owner of the property, subject to Chapter 9 of the Municipal Systems Act. Section 26 stated that the specific municipality may recover a rate on a monthly basis or less often as may be prescribed in terms of the Local Government: Municipal Finance Management Act (2003), MFMA (2003).

The property valuation process is usually decided by national legislation (MPRA 6 of 2004) and is given to an assessor for execution of the property assessments. Under Section 42 the Act granted the municipal valuer the authority to enter and inspect any property within the municipality boundaries for the purpose of valuation assessment.

Dillinger (1992) stated that all related data collected from taxpayers and field surveys would improve the success and effectiveness of a self-declaration system. It is therefore necessary for property owners and taxpayers to cooperate in this process, in order to rule out any future defects in the system. Dillinger (1992) further commended that in a common approach, the property owners should be 100% audited by a field survey during the self-assessment intervention. Major costs could be involved here due to additional manpower output and the time necessary for the process. As objectivity in a tax valuation system is important, a suitable methodology in the local jurisdiction should be created. In addition, the availability of market information will reduce the opportunities for dispute. Therefore, a direct market data approach would possibly be more accurate than mass appraisal because of the property owner's involvement in the self-assessment data collection. The above statement underpinned the justification and purpose of the research.

Dillinger (1992) stated that all taxpayers were legally required to annually declare the property they own to the taxing authority.

The current mass appraisal system cannot demonstrate the two values of market and mass appraisal at the same time. Market value is therefore regarded as more accurate in determining the value of an individual property, especially in an up-market development such as Midstream Estate. Mass valuation is the average taken over many properties with similar characteristics and in the same location. Müller (2002) expressed the importance to complete a description of all the properties that were subjected of the tax assessment.

Section 48(e) stated that the valuation rolls should reflect the market value of a property if it had been valued.

In the case of Midstream Estate, and with only 1% of the inspections conducted by a valuation official, it would be impossible to compile an accurate valuation roll unless a physical visit and assessment were executed. However, market value takes preference over mass appraisal when applied to the higher income area, as indicated by Dillinger (1992).

4.2.4 Identifying Tax Liability and Practices

Section 24 stipulated that the rate levied by the municipality on the property should be paid by the owner of the property. In order to do this, the municipality should furnish the property owner with a written account.

The account should specify the following in terms of Section 27:

- a) “the amount due for the rates payable”;
- b) “the date on or before which the amount is payable”;
- c) “how the amount was calculated”;
- d) “the market value of the property”;
- e) “if the property is subject to any compulsory phasing-in discount in terms of section 21, the amount of the discount; and”
- f) “if the property is subject to any additional rate in terms of section 22, the amount due for additional rates.”

Section 27(2) stated however, “that the property owner is liable for payment of a rate whether or not that person has received a written account in terms of subsection (1)”.

The statement of Shapiro *et al.* (2010) was pertinent: “Market value of a particular property can be summarised as the capital amount which can be obtained at a particular time from a person willing to pay for it”. Dillinger (1991) stated that direct market data is potentially more reliable than MAS.

Section 8(1) stated: “Subject to section 19, a municipality may in terms of the criteria set out in its rates policy levy different rates for different categories of rateable property, which may include categories determined according to: a) use of the property; b) permitted use of the property; or c) geographical area in which the property is situated.” The “geographical classification and identification” of the development will eventually define the price range according to which the property valuation tax rate will be classified. Shapiro *et al.* (2010) agreed that the location of

any property was unique. It is therefore important that the method of assessment should include direct capital comparison because it will reflect the market sales.

4.2.5 Property Assessment versus Tax Base Assessment

Property taxation is based on the following:

- a. Section 45, which determines the value of the property by way of recognised valuation practices, methods and other standards as provided in the Act and in Section 46 of the Act;
- b. Section 24, which levies a rate on properties determined by the minister as stipulated under Section 16(5).

These bases for taxation will be discussed in chapter 5.

4.2.6 Research Problem: Ekurhuleni Metropolitan Municipality (EMM)

In order to validate the research, a meeting was held with the property valuation assessment department at EMM at 09h30 on 23 November 2011. A prepared questionnaire was issued to an official of the department before the meeting. The questionnaire was discussed during the meeting to cover relevant information obtained for the research project.

The following information was obtained: Property tax was one of the major revenue sources of South Africa. In the financial year of 2011 the property tax paid to Ekurhuleni Metropolitan Municipality (EMM) was R2 747 757 billion; this amount

represents 10, 25% of the municipality's total annual budget. The fact that 16 526 out of 636 059 property owners in the current valuation assessment have objected to their tax rate and the fact that 1 422 have appealed because of ambiguity and not having had the opportunity to participate in the valuation assessment of their property, indicated that there were valid reasons for concern regarding the valuation system.

Ekurhuleni is the second largest metropolitan municipality in the country (Johannesburg being the largest), has a population of about 2 724 200 people, and covers an area of 1 924 km². The EMM 2010 Budget Report indicates a base increase rate for 2011, 2012 and 2013 of 10%, 11% and 10% respectively.

This increase in property rates cannot be justified as a representation of potential growth within the property market. The property valuation growth as indicated by ABSA Home Loans showed a 2.8% growth in 2010 and a 3.8% growth for 2011 on residential property. The EMM Report gave various calculations for electricity, water, refuse, and other service rates, showing how the municipality had designated the taxable revenue income and rates.

These taxable services are clearly explained and illustrated to the tax payer. However, it is noticeable that the property assessments and rates in the same report are not as clearly illustrated or explained and are therefore not as transparent as the aforementioned items.

According to Kitchen, H.M. (1992), the tax base can reduce or increase if unfairness in valuation assessment is applied. De Cesare, C.M.(1997) was of the opinion that property taxes were not free from imperfection and further stated that due to

inadequacies in the current system, the taxes were strongly criticised. Inefficiency together with the unfairness of property taxes could result in administrative problems and unnecessary demands involving all parties. Kitchen (1992) also admitted that the implementation of property taxes was not free from imperfection because administrators found it difficult to establish their systems. The current property tax systems have been therefore criticised for unfairness and lack of transparency.

Müller (2002) was of the opinion that valuation procedures lacked transparency, data were insufficiently documented and the administrative capacity of staff qualifications was insufficient in many developing countries. This could allow taxpayers to influence the assessment process of their properties.

McCluskey (1991) stated that the current methods of property valuation fell short when factors such as transparency and standardisation were considered. As indicated by McCluskey, property tax was calculated in many countries by the sum of the market value which corresponded to each class of value. This was multiplied by the respective rate (sliding rates) or building cost rate per square metre.

According to Wyatt, P. (1996) the rate of taxation varied between properties as well as between locations, although the properties could be similar in size and type. The tax rate depended on the accuracy of the valuation system during the assessing process of a specific property. This opinion formed the catalyst for the present research study.

The above statements supported the hypothesis that Section 45(3(b) and Section 46(1) did not allow the unknown and hidden factors in the developing South African property market to be taken into account.

4.2.7 Factors of Concern to Local Taxpayers

Section 77 of the Act states that the municipality must regularly (at least once a year) update its valuation roll regularly by way of:

- a) a supplementary valuation roll; and
- b) an amended valuation roll.

The question now arises: How does the municipality determine the percentage rate that they apply to their annual property tax assessment when their budget does not meet their expenses? It was noted by Youngman, J.M. & Malme, J.H. (1994) that within each zone, adjusted values could be derived from average values for groups of properties and would not reflect the characteristics of each individual property.

4.2.8 Important Factors in the Valuation System

Relevant factors should be addressed and put in place to ensure a true and fair valuation assessment system, in which both the property owner and the municipality will participate as partners, especially where unique properties such as those in Midstream Estate are involved.

In both systems, individual and mass valuation, there are three accepted approaches for valuation. The preferred approach is the comparable sales approach since the only direct evidence of the market value is found in sale prices. The other approaches are the income and cost approaches, which will not be assessed in this research study.

Bell & Bowman (2006) stated in their research that “in order to overcome the assessed market value in the equation, local governments should make a very serious effort to develop assessed values for tax purposes that are reasonable estimates of market values”. According to Bell & Bowman, the public should be informed once a reasonable, estimated market roll has been developed and published. This was necessary to educate the public regarding market values and possible fictitious assessment values allocated in the market. The authors further argued that it was important to look at other areas to find evidence for the way in which different property characteristics affect the market value of those properties. The additional information could then be used effectively in new taxable areas.

According to Crosby, N. Lavers, A. & Murdoch, J. (1998) a correct valuation assessment system was important, as when it is found that the system was unfairly determined, concerns are raised over the reliability of the margin of error as a test of carelessness. The above authors stated that it was important that the professional valuers be fair and transparent in the approach towards property assessment, and they also noted that courts continually look at the outcome of the valuation assessment and did not focus on the process involving the calculation when the value of a property was assessed.

Bell and Bowman (2006) argued that property characteristics should be obtained from other areas to support evidence affecting the market value of the properties.

Shapiro *et al.* (2010) stated that residential properties should be valued by direct comparables, suitably adjusted for location and size, and that this could not be accomplished on the basis of a mathematical formula. This statement by Shapiro *et al.* (2010) underpinned the justification for this research.

Bell & Bowman (2006) argued that in order to maintain a useful tax roll, sale prices should be recorded and verified with the office of the Registrar of Deeds as a legal requirement.

4.2.9 Billing and Collection of Property Rates

According to Section 26(1) and (2) of MPRA 6 of 2004 the municipality may recover a rate as follows:

- a) On a monthly basis or less often as may be prescribed in the Municipal Finance Management Act.
- b) As may be agreed by both parties, rates can be collected annually.
- c) If a rate is payable in a single amount annually, it must be paid on or before a date determined by the municipality;
- d) If a rate is payable in instalments, it must be paid on or before a date in each period determined by the municipality.

4.2.10 General Valuation of Property Rolls

Section 30 of MPRA 6 of 2004 states that a municipality intending to levy a rate on property must execute a general valuation to all properties in the municipality as determined in Subsection (2) and prepare a valuation roll of all properties determined in terms of Subsection (3). Subsection (2) stated that “all rateable properties in the municipality must be valued during a general valuation”. The subsection also stated

that the valuation must include all properties fully or partially excluded from rates in terms of Section 17.

Section 31 stated that “general valuation must reflect the market value of properties determined in accordance with (a) market conditions which applied as at the date of valuation; and (b) any other applicable provision of this Act.”

It is therefore a valid point made by Shapiro *et al.* (2010) that the valuer should seek comparable sale evidence, because the open market sale evidence would always be viewed as the better option, according to the International Valuation Standards (IVSC, 2005).

Cherry, A. (2006) stated that a consistent and reliable valuation assessment tool should be used to assess all properties and that the market value base should be carried out at all times even when the cost or fair value model is preferred.

4.2.11 Disputes and Appeals

Section 50(1) of MPRA 6 of 2004 stated that any person may, within the period referred to in Section 49, do the following:

- a) The property for valuation must be inspected and visited during office hours for the valuation roll;
- b) On payment of a reasonable fee, request to make extracts from the roll; and
- c) To lodge an objection with the municipal manager against any matter reflected in, or omitted from the roll.

Section 50(2) stated that an objection in terms of the above-mentioned subsection (1) must be in relation to a specific property and not against the valuation roll as such.

Section 50 also stated that any property tax system needed a process by which taxpayers have the opportunity to appeal their assessment if they thought it had been calculated incorrectly.

On 23 November 2011, during a visit to the EMM, which represents 21 municipalities (Custom Care Centres), an official employed by the municipality confirmed the following statistical valuation information:

- The Midstream Estate Development (MED) is situated within one of the 21 municipalities (Custom Care Centres) of the EMM.
- At the time of the interview there were 636 059 property owners who paid property taxes within the EMM. Of these, 127 211 properties (20%) had been inspected during the valuation execution period.
- 16 526 property owners out of the total of 636 059 (2.6%) had appealed against their valuation assessment. The appeal success rate was 50%; 8 263 had been successful in their appeals.
- The property tax income was R2 747 366 000 or R2 747 billion per annum, which is R747 million per month. This means an average of R4 319 per month per property owner.

According to Bell (1999) to correct “factual errors and differences, the appeal process should include an informal review by the valuation office”. Bird, R.M. &

Slack, E. (2002) stated that any property tax system was in need of a process by which the property owners reserved the right of appeal when they questioned the assessment values on their properties.

Bell (2002) stated that property valuation data based on authentic sales data for inner-city, low-cost developments could be obtained from the Registrar of Deeds. These properties were suitable examples of mass valuation assessment methods as described in Section 45 of the Act. Improvement on the valuations for land was determined by obtaining market sales data and by subtracting land value from the total value as received from the Registrar of Deeds. The above author recommended shorter time cycles in the re-assessment, where property values were changing the value-based system, to ensure an improved current market situation.

4.2.12 Review of Rates

The municipal council must, in accordance with Section 5(1), review its rates policy annually and if required amend its base rates. Section 16 stated that the Minister may, by way of notice in the Gazette, issue guidelines to assist municipalities in exercising their power to levy rates in order to correct their budget shortfall.

Therefore, if the Minister of Finance has to intervene in this process of internal local government affairs, specifically by changing the base rate to meet the year on year budget, then property valuation assessment and market value will become a bureaucracy of manipulation of the individual property owner's investment rights. It becomes a "pie in the sky philosophy" and hence property owners will regard the

property valuation assessment system as neither transparent nor fair (Bell & Bowman 2006).

4.3 Property Identification

It is important to identify a specific property and its owner's responsibility for tax liability. The following information is required:

- a description of the individual property;
- definition of the boundaries, which should include maps and relevant information;
- proof of property ownership;
- the value of the property, including that of improvements;
- purchased date and purchase price;
- location of the property.

To identify the specific property, maps with boundaries are essential. This is in order to assign a unique property identification number to each parcel, which is necessary for the tracking of all parcels. A complete register of all properties must include the requirements of existing and updated information within the jurisdiction. The information must also include the address, the owner's information, and the area in square metres, the age of the unit, and whether renovations to the said property have been undertaken. The linking of valuation assessment, billing, and property transfer records must also be included. The collected data must be kept in one location for convenience and be recorded in a consistent manner. The regular updating of these data is of great importance.

4.3.1 Fairness on Benefits

The above literature shows that the present valuation assessment system is a matter of great concern. This is a result of property owners having to pay the tax rates on the value of their properties but having no input as to whether the municipal valuation assessment had been correct, justified, or transparent. Property owner participation in the assessment process will, however, promote confidence in a clear and fair valuations system. The International Association of Assessing Officers (IAAO) (2010) stated that to maximise fairness and understanding in a property tax system, it is important that the assessments be based on 1) current market value, and 2) correct data collected from individual properties if the valuation assessment is done by way of mass valuation. This means that mass valuation does not take into account that every property might be different, which could have either a positive or negative impact on the property value, be it for a considered sale price, insurance, or taxation value. Unique and up-market properties will not benefit from this method, as shown in this research.

4.3.2 Fairness on Ability

Rappa (2008) claimed that the “actual and fair cash value or market value” of a property involved similarities of the properties when they are sold, the current replacement cost at the time of the sale, and what financial factors, such as interest rates, might affect the real estate market. Bell & Bowman (2006) supported Rappa’s (2008) view by stating that the quality of data in a newly taxable area was not comparable to the quality of data in areas formerly established and already paying

tax. This could be due to the inability of finding a meaningful quality valuation assessment method. Müller (2002) supported the philosophy of Rappa (2008).

Section 31 of the Act stated that “the general valuation must reflect the market value of the properties determined in accordance with (a) market conditions which applied at the date of valuation; and (b) any other applicable provisions of this Act.”

Section 4 of the Act stated that before a municipality adopts its rates policy, it should follow a process of community participation in accordance with the Municipal Systems Act, and comply with the following conditions:

- Display the draft rates policy for 30 days
- Advertise in the media
- Take all comments and representations received into account when considering its draft rates policy.

Müller (2002) was of the opinion that when the market value of some properties increased considerably more than the other properties, property tax became unfair, as property owners would then pay taxes based on values which had not been updated correctly.

4.3.3 Fairness on Payment

Section 24 stated that a rate levied by the municipality on a property must be paid by the owner of the property, subject to Chapter 9 of the Municipal Systems Act.

Section 11 stated that the rate levied by a municipality on property must be an amount in the Rand value and based on the market value of the property. The study of Bell (1999) indicated that a good quality assessment was required to ensure fair property taxes. This should include annual revaluation to reflect changes during the market cycle because frequent valuations maintained the authenticity of the tax. This would also reduce the risk of a sudden and dramatic shift in tax burdens and could arise from large increases in assessed values. It is therefore essential that the valuation cycle be fairly short. Bird's study (2002) indicated that by simply increasing the annual tax rate to accommodate the municipal budget shortfall was not fair to the property owner. Bell (1999) agreed on this point. According to Rappa (2008) municipalities in the UK taxed all kinds of assessed properties on a single rate basis. The municipalities assessed the properties at "70% of their fair market value" and taxed the properties at a single rate that changed over time. Rappa (2008) continued that over time different kinds of property would increase or decrease in value at different rates. This was due to market sales and the rise and fall of the economy. For this reason municipalities should re-assess properties every year to ensure that the valuation assessment reflects the actual fair market value.

The research sample of 100 owners in Midstream Estate represented 8,77% of the 1 140 property owners and only 1% of the sample reported that their property had been inspected or visited for valuation assessment. The owners indicated that they had little confidence in the current valuation system because of such a low inspection rate. Fairness is not achieved when property assessments are merely increased by a common factor on an annual basis, as indicated in Sections 45, 46, and 16(2)(b) and 16(5). The aforementioned Section 16 authorises the Minister to

adjust the rates at will to accommodate the municipalities' budget for the next financial year.

4.3.4 Neutrality

Revaluation of properties is important and needs to be carried out at regular intervals if property tax is based on the market value of the said property.

Section 5 stated that “the municipal council must annually review, and if necessary, amend its rates policy. Prior to the implementation of Section 5, the municipality must follow a process of community participation in accordance with the Municipal Systems Act.”

In Midstream Estate, only 9% of property owners partook in the valuation assessment done by the municipality in the Midstream Estate area, according to the field research.

Müller (2002) stated that there were two kinds of problems that could arise if the interval between revaluations was too great:

- Property tax revenue was poor because of the unsteadiness of the property market values and the fact that taxable property values did not increase with inflation. Müller (2002) stated that by increasing the tax rates, or by indexing the taxable property values according to inflation, the problem could be resolved. Property tax revenue could also be recovered according to estimates of increases in property values.

- Another possible setback, according to Müller (2002), was that in the case where some properties increased more in market value than other properties, taxation became unfair as similar properties in different locations will then have different values and a different tax base. In the case where properties in older locations exchanged ownership over a period of time, the new owner would then pay taxes that were based on the old values.

During the field survey the property owners made it clear that the individual properties were different in type and style, and those valuations should therefore differ accordingly.

Section 3 of the Act stated that “the council must adopt a policy consistent with the Act on the levying of the rates on rateable property in the municipality”. It further stated in subsection (2) that the “policy takes effect on the effective date of the first valuation roll and it must accompany the municipality’s budget for the financial year concerned”. Valuation must therefore be specified in the laws that control the property tax or valuation.

According to Norell, L. (2008) market value could only be assessed or estimated and not calculated for a given property. Norell (2008) also argued the point and stated that market value was a fabricated value, related to an imaginary sale of a property at a specific point in time.

4.3.5 Stability

Section 30 of the Act states that all rateable properties in municipalities must be valued during a general valuation, including all properties fully or partially excluded from rates.

Section 31 (2) stated that the general valuation must reflect the market value of properties determined in accordance with (a) market conditions that are applied at the date of valuation, and (b) any other applicable provision of the Act.

The results of market analysis determined the type of valuation models according to Müller (2002). The analysis could be recorded in mathematical tables or graphs showing the values per square metre for different types of properties and land. The above research showed that the taxable value of each property could only be calculated if well-defined and structured standards have been recognised and implemented.

4.3.6 Accountability

The Act “makes provision for municipalities to implement a transparent and fair system that is equitable for the valuation of properties; and to make provision for objections and appeals process; to amend the Local Government: Municipal Systems Act, 2000, and to make further provision to amend or repeal certain legislation for matters connected therewith.”

The above statement indicated that the system should be transparent and fair, but the “implication of implementation” raised concerns as to how justified and

transparent the present tax system was with regard to property values and base rates. Concerning the Act, the question was asked as to the degree to which the public could be held accountable if the above statement was found to be unjustified at Midstream Estate.

According to Section 26 of the Act, the municipality may recover a rate “(a) on a monthly basis or less often as may be prescribed in terms of the Municipal Finance Management Act; or (b) annually, as may be agreed to with the owner of the property”.

In order to receive the above tax rate from the property owner, the municipality has to comply with Section 27 of the MPRA 6 of 2004. However, the municipality has an obligation under Section 4, 5, 27, 30, 31, 45, 46, and 48 to provide the property owner with the abovementioned information on a regular basis. This is to ensure a fair and transparent report and to avoid potential disputes.

4.3.7 Administration of the Tax

The method in which land and property taxes are administered does not only impact the revenue. It also affects the equity and efficiency of a municipality. Bird’s report (2002) stated that “poor tax administration is a barrier to implement property tax and that local authorities do not always have the capacity to administer the tax effectively”. One of the many reasons might be the fact that administrative tasks were performed manually; the process had not been computerised. This might result in misplaced data or the capturing of incorrect information.

To ensure a high collection of rates, the revenue base should include all taxable properties. According to Bird (2002) there were three steps involved in the process of taxing real property:

- 1 Identify the taxable properties in question;
- 2 The preparation of a tax roll which include the description of the property and the amount of assessment, as well as responding to appeals;
- 3 The method of collecting tax must be clear, including the structures dealing with tax debts and issuing of tax bills.

The execution of the above three indicators were mentioned in the MPRA 6 of 2004.

4.4 Possible Reasons for making Value Updates

Generally, market movement determines the value of individual properties. Location and comparables play an important role and are based on the characteristics of the property and market sales of comparable properties. Bell & Bowman (2006) stated that properties should be revisited on an annual basis to ensure a reliable and truthful assessment data base. Gloudemans, R.J. (1999) was in agreement with Bell & Bowman (2006) that data should be regularly updated. When sales take place, they often do not meet the definition of market sales, for instance when the transaction is made by a well-informed, willing buyer and willing seller who agree on a market-level price. Bell & Bowman (2006) argued that these sales methods lead to sales prices that fluctuate extensively from the true market value because there was insufficient market value related information.

4.4.1 Relevant Factors when Dealing with Unique Properties

In the research of French, N. & Mallinson, M. (2000) it was argued that the designed features of a property could cause uncertainty in the property valuation, especially if there were insufficient data available at the time of the valuation assessment.

In the case of unique properties uncertainties are likely to arise in the following instances:

- a) An unusual location
- b) The property has specific characteristics
- c) There are few or no comparable characteristics or sales that relate to the property.

These instances are relevant for most of the valuation approaches, but one or more may be more applicable to the property in question. This topic is examined in chapter 5.

4.4.2 The Need to Partake in Valuation Assessment

Since 1994 there have been few or no valuation assessments conducted with the participation of a property owner. In fact, when building plans are submitted to the local municipal offices for approval, property valuation is determined on the calculated value. Gloudemans (1999) stated that properties should be visited annually and a field survey conducted to establish the accuracy of valuation assessment data. This also applied to cases where changes to existing properties were made. It was not a transparent procedure to increase property taxes by simply

adding a percentage to property values in order to overcome a shortfall in the municipal budget.

The Act specified in Section 77 that the valuation roll should be updated once a year. This was presently accomplished by adding a percentage to the rate roll. In order to review the valuation roll, however, the municipal valuer has to fully acquaint himself with the properties by means of a physical inspection. This was one of the options given in Section 45. The reasons are explored in detail in chapter 5.

Valuation of property could be used as a method to identify and qualify value factors. Azhari, H & Mohd, G.H. (1992) stated that some of the factors that could contribute to the valuation of a property were property characteristics, location, construction cost, and sale price.

The collection, documentation, and investigation of the evidence of values are crucial to accurately value any property in an effective assessment system. It is therefore important to remember that comparable evidence is essential to all valuation methods. Azhari & Mohd (1992) further stated that a lack of information was an important factor and could affect property valuation.

4.4.3 Transparency and Participation in the Assessment Process

In mass valuation, the valuation of a large amount of property was accomplished by applying standardised statistical data processing. According to Bagdonavičius, A. & Deveikis, S. (2005) it would be difficult to point out the individual and unique characteristics of every property unit when a large number of properties are assessed. Attention should be given to defining the similar features of all properties

being valued. Mass evaluation does not verify the specific features and characteristics of single units.

Bagdonavičius & Deveikis (2005) also differentiated mass from individual valuation by stating that in the “process of individual valuation, it is important to find several comparable properties corresponding to the description of the property under valuation”. With mass valuation, one needs a greater number of comparable properties and diversity of characteristics in order to apply statistical methods efficiently.

4.4.4 The Need for an Optional Valuation System

From the research questionnaire it is apparent that the property owners in Midstream Estate have concerns regarding the present property valuation assessment system. The need to partake in the present assessment system is obvious to all parties concerned, but this can currently only be done by way of tax payments, objections, and values appealed.

The valuation system should include an option that makes it possible for property owners to partake in the assessment process if they so prefer. Correct information gathered by means of the participation of the property owners will improve the present valuation assessment system. It will also initiate a partnership of understanding, trust and transparency and so ensure a more legitimate taxation, which at present does not exist.

Currently, mass appraisal methods have to be used because of the time factor and cost implications involved, according to Müller (2002). For this reason, a very large

number of properties were valued at the same time. However, the IAAO (2011) stated that the valuer should collect and maintain sufficient and accurate property data in order to make an assessment on a property. It is therefore imperative that a physical inspection be done to obtain initial property characteristics and data.

Franzsen (2000) indicated that the CAMA could not be utilised because it required “legal physical inspection of each rateable property”.

Mass appraisal is suitable for a specific type of property in a particular area where large numbers of properties are similar in their design appearance. In Midstream Estate all property designs differ in appearance and characteristics. The MAS system has one estimate valuation assessment that is similar for many properties, whereas Midstream Estate should have many different estimated valuation assessments, as there are different variables to take into account.

Introducing an optional valuation system will enhance the accuracy of the assessor’s database by providing more up-to-date and reliable information relevant to an environment such as Midstream Estate.

Tanzi (2001) stated that “the lack of personnel to make field inspections of each property in Hungary means that verification is inadequate”.

4.4.5 Proposed Valuation System

It was not the purpose of this research to formulate a property valuation model to accommodate the owners of the Midstream Estate in their tax assessment. It is recommended that further research be undertaken to formulate a model to enhance

the present system. Grant, C.A. & Mc Tear, M.F. (1992) research showed that a comparison method was more acceptable for residential properties. It was proposed that certain information be noted in such a valuation system. However, Bannerman, S. (1993) stated that valuation was determined by the availability of regular information which should be structured to be compatible with spatial information.

This proposed model or system would be suitable to achieve the information required to ensure a reliable database, and should give the following information:

Name of owner as registered in the deeds office;

Name of township;

Location of property and stand number;

Land size, size of improvements, and approved plans for the development;

Date of purchase of land;

Date of purchase of property;

Full history of land and development cost in Rand;

Independent and dependent variables of development such as:

- | | |
|-------------------------------|------------------------------------|
| <i>1. Number of bedrooms</i> | <i>2. Number of living rooms</i> |
| <i>3. Number of bathrooms</i> | <i>4. Number of staff quarters</i> |
| <i>5. Number of playrooms</i> | <i>6. Swimming pool</i> |
| <i>7. Number of garages</i> | <i>8. Tennis court</i> |
| <i>9. Type of floor cover</i> | <i>10. Type of ceilings</i> |
| <i>11. Garden finishes</i> | <i>12. Paving finishes</i> |
| <i>13. Market value</i> | <i>14. Assessment value</i> |

14. Base rate

16. Present market value

17. Assessment value

18. The “Y” Factor

Date of assessment;

Owner signature and date;

Assessor signature and date.

Lehmbrock, M. & Coulmas, D. (2001) documented various independent property valuation models. One of the models was chosen and adapted to make allowance for the “Y” factor (unique characteristics % rate), which should be included in the proposed research model.

The Proposed research model:

Property Tax Amount in Rand =

1. Basic rate of land (0.01 R/m^2) x plot size (m^2) plus
 2. Basic rate of buildings (0.015 R/m^2) x floor space (m^2) plus
 3. Basic rate of unique characteristics (“Y” factor) (0.015 R/m^2) on the above two points
- the local property tax rate (%)

Kummerow, M. (2000) stated that the “Y” factor should be determined by the individual property owner’s assessment of the uniqueness of the property. The “Y” factor value (no. 3 above) should be determined and added to numbers 1 and 2 above as a total assessment value multiplied by the local tax percentage rate.

Dillinger (1991) and Kummerow (2000) agreed that unique internal and external design characteristics data should be recorded for valuation assessment in order to

establish a fair and accurate value. This will also ensure an acceptable and taxable assessment by the property owner as well as the tax official of the “Y” factor.

The proposed model is only a guideline to add value to the GIS via the assessment of the variance of individual property characteristics. Bagdonavičius & Deveikis (2005) were of the opinion that “the use of GIS was vital for the improvement of individual valuations”.

In addition to the above it is important that:

- The system should be transparent;
- Consistency should be ensured to avoid disputes;
- Methodology should be suitable for all to use;
- Values should be indexed to reduce possible negative effects of transparency.

The transfer tax rate in South Africa is rather high, which tends to discourage the correct documentation of sales. The present valuation system therefore does not ensure the true valuation of individual properties.

4.5 Summary

This chapter has reviewed the present Municipal Property Rates Act 6 of 2004, and found sufficient grounds for the notion that the present valuation assessment system should allow property owners to partake in the assessment of their own property valuation.

Firstly, knowledgeable and professional officials will enhance the system by collecting truthful property data, which in turn will assist the official to determine and calculate the correct property valuation for tax purposes.

Secondly, by introducing a process of participation, issues such as uncertainties, transparencies, objections, and potential disputes will be clarified and addressed. This will lessen appeals. Dillinger (1991) confirmed that the “direct market information approach was potentially more accurate than mass appraisal” and continued that comprehensive data and annual site visits were important to ensure a reliable and transparent valuation assessment.

Thirdly, the need for an effective property participation model will improve the collection and documentation of information in a databank. This will encourage the public to improve their knowledge of property investments by tendering a joint venture with the municipality in assessing their own property valuation. The author is of the opinion that if the information regarding property valuation is published, people will understand the property assessment system and will be willing to pay their accounts.

The literature study on the present property valuation system leads to the conclusion that a field study be executed to determine which percentage of Midstream Estate property owners are in favour of a self – assessment valuation system.

In order to find a successful model and system, several field studies and research analyses are required.

Lastly, the literature also indicated that the EMM was not able to execute an assessment that property owners feel was transparent and accurate. This statement

was supported by Dillinger (1992), who stated that property tax was difficult to manage, especially in developing areas. It is therefore important that the EMM move towards an approach of participation with Midstream Estate residents and others in the present system of valuation assessment.

To help overcome this problem, the government should make an effort to develop assessed values for tax purposes that are reasonable estimates of market values.

With reference to paragraph 4.2, the author is in agreement with the statement of Bell & Bowman (2006) that the current property tax assessment system is based on insufficient true and recorded information. This will lead to a faulty and unfair estimated value.

With reference to paragraph 4.2.2, the author supports the statement of Dillinger (1991) and Bell & Bowman (2006), that Sections 11, 27, 30, and 31 of the Act are impractical and illogical, and that Section 46 cannot be executed in an upper and unique property market. This is proven in the research study.

With reference to paragraph 4.2.3, the author recommends the following ruling concerning a new property assessment system:

- The municipal official issues a notice to the property owner to visit the property for valuation assessment purposes at a date and time agreed upon by both parties;

With reference to paragraph 4.2.4, it is the author's opinion that Section 24 of the Act can only be relevant to the present system as identified in Section 45, where mass valuation is applicable. Furthermore, Section 27(1)(d) cannot be valid or justified as it contradicts the "market value" definition. The assessment values cannot be

estimated with an objective view without taking real market sales values into consideration when calculating up-market property valuations.

With reference to item 4.2.10, the author argues that Section 31 cannot reflect the relevant market value on unique and upmarket properties due to the following facts:

- Development cost, environmental facts, location, as well as the present valuation assessment, a mass valuation system, as stated in Section 45(3)(a).

The author questions Section 30(2) on the basis that all properties cannot be valued during a general valuation. This can only be done by a method of mass valuation that generalises the system of valuation into a “one for all and all for one” assessment model. Shapiro *et al* (2010) stated that valuation should be based on “direct comparison or investment practice that is liable to be accepted”. (Bell & Bowman 2006). The author of this research study argued that if the individual has the right to substantiate financial income assessments (PAYE) prior to submission to SARS and defend any disputes that might arise before filing his tax return, then the same rule should apply to the property valuation assessment.

According to paragraph 4.2.12, the author argues the point that if the Minister of Finance can intervene in property valuation processes of internal local government affairs, specifically by changing the base rate to meet the year on year budget, then the property valuation assessment and market value will become a bureaucracy of manipulation in regards to the individual property owner’s investment rights. This is stipulated in Section 16 (5) of the MPRA 6 of 2004. The property valuation assessment system remains a grey area, which the property owner will view as neither a transparent nor a fair tax assessment system. This notion was supported

by Bell & Bowman (2006), as indicated in this study in item 4.2.12. The author states that if the individual had the right to substantiate financial income assessments (PAYE) prior to submission to SARS, and the right to defend any disputes that might arise before filing his tax return, then the same rule should apply to the property valuation assessment.

The author further states that the property owner receives a monthly account for the property's rates and taxes, and therefore notification regarding the valuation amount on a property should also be given with the rates and tax accounts. This would give the owner the opportunity to respond in case of any disputes or disagreements.

CHAPTER 5: THE PRESENT PROPERTY ASSESSMENT SYSTEM IN SOUTH AFRICA

5.1 Introduction

South Africa has a long history of taxing property, which is its prime source of local revenue. Franzsen (2000) stated that this was true for many other countries in the world. The context for a property tax reform in South Africa was that the property tax laws for the current nine provinces were fundamentally the same as those of the original four provinces that existed before the new government in 1994. “The racially segregated and fragmented local governments of the previous government’s era have undergone two major reforms and demarcations, during 1998 and again at the end of 2000” (Franzsen 2000).

According to Franzsen (2000) property taxation was now extended into all areas, including traditional tribal areas where private property ownership and property taxation had not existed previously. New legislation has therefore been developed to deal with local governmental and structural issues such as the *Property Rates Bill*, which will deal with property taxation, and the *Municipal Finance Management Bill*, which describes, among other things, the nature of the local tax base and the scope of property tax relief. The new property tax has come under review as newly merged cities move toward a uniformed property tax system. This can be achieved by means of bringing tax rolls into agreement. By updating out of date rolls and moving towards rate consistency throughout the municipality, new locations will be incorporated into the existing tax web.

Midstream Estate is one of the new areas that have been developed in the last ten years and that cannot be valued within CAMA system unless certain additional individual property characteristics and information are taken into account.

The objective of this chapter is to assess the various options available in order to establish a model to accompany the present valuation system.

5.1.1 Property Tax Systems

The present valuation system is conducted in accordance with Section 45, which allows the municipality to execute a “mass valuation system” or technique in terms of subsection 3(a). This included “predetermined bands” of property values and the designation of properties to one of these bands on the basis of “minimal market-related data”. McCluskey (1999) argued that the characteristics of an individual property would not reveal its uniqueness when groups of properties within a specific zone were assessed.

Bell & Bowman (2006) stated that it was complicated to establish the assessed values in new locations because these values were supposed to be estimated market values of the properties and market information supporting the valuation assessment values was often insufficient and outdated. Bell & Bowman (2006) also stated that in new locations, a number of values and techniques were used in order to make the first assessment value estimate and that the accuracy in “approximating the market value was uncertain”.

Rappa (2008) stated that a fair market value on a property would involve finding the similarities of properties and determining the cost of replacing these properties in the

same area. Rappa (2008) was further of the opinion that upmarket residential properties should be valued and assessed in a different way than low cost mass development properties. It was suggested that each property be visited and assessed annually. The present mass valuation system was the most cost-effective method for the municipalities to determine the valuation of properties, but it could not address the underlying of owners of upmarket properties regarding their property assessments. To achieve a more reliable and effective system, attention should be given to the collection of regularly updated property data by means of regular visits and participation by the owners.

In order to establish what information and descriptions were necessary to ensure sustainable property tax assessment systems, the following principles are discussed in this chapter:

- a) Property valuation and assessment;
- b) Property taxation;
- c) Mass appraisal versus self-assessment.

5.1.2 Physical Inspection

Section 45(2)(a) and (b) stipulated that a physical inspection of the property to be valued was optional and that other systems or techniques might be used. Section 46(1) stated that the “market value of a property is the amount the property would have realised if sold on the date of valuation in the open market between a willing seller and a willing buyer”.

In South Africa, property tax is calculated by the sum of the market value corresponding to each class of value multiplied by its respective rate. This happens in many countries and is called sliding rates.

In reality, according to McCluskey (1999), there are a number of variables that explained the difference between the market value of individual properties:

- a) Land size in square metres;
- b) Floor size of building in square metres;
- c) Overall condition of property;
- d) Architectural design;
- e) Quality of finishes;
- f) Location;
- g) Topography;
- h) Neighbourhood;
- i) Proximity to main roads and other facilities.

The CAMA system can include any of the above combinations of variables, as well as other variables, but these variables need to be assessed and valued by a physical inspection or visitation of the property, as stated in section 45(2)(a) and (b). Section 31 states that the general valuation (GV) must reflect the market value of the properties as determined in Section 31(2)(a).

5.1.3 Property Taxation

Property taxation is based on the principal that the amount of tax paid should be based on the market value at the time of the assessment of the property, as specified under Sections 24 and 27(1). This amount is then multiplied by the taxable rate of the subject area.

Section 2 stated that the local municipality might levy a rate on property that was in its area or district of management. Section 5(2) stated that the Minister of Local Government and the Minister of Finance were authorised to set a limit or rate cap on the amount. The municipality has the right to levy a rate on the property subject to the applicable provisions of Section 229 of the Constitution. As most tax assessments are based on income or sales valuations, this is often an opportunity for conflict between the taxpayer and tax authority. This will exist even though there is quantifiable economic activity on the basis of which the tax is levied.

It was suggested by Bird, R.M. & McKenzie, K.J. (2001) that local government should assess local property taxes in the following manner:

- 1 A decision should be made to tax or not. According to Section 2 of the Act, the local municipality may levy a rate on properties within its jurisdiction. According to Sections 18 and 19, the municipality may also exempt owners from the levy on a property.
- 2 The nature of the tax should be defined. Section 8 describes the various terms and conditions under which property owners will be held responsible for the rate payable on their properties.

- 3 The base on which to tax every taxpayer should be determined. Section 3 establishes the criteria according to which municipalities may tax properties within their jurisdiction.
- 4 Tax rates should be determined. Section 3(b)(1) explains the different rates for diverse categories of properties. This rate should be based on the date of valuation, as Section 31 prescribes.
- 5 The tax policy should be implemented: Section 24 states that a rate levied by the municipality must be paid by the owner of the property, subject to Section 9.

Bird & McKenzie (2001) recommended that tax rates be determined locally by property owners and not by the municipality or local government, as stated in Section 16(5). Currently, the South African property tax system is based on the Municipal Systems Act (2000), whereas the Constitution entitles municipalities to impose rates on property in their areas, as long as these are subjected to regulation in terms of national legislation.

Property tax was regarded by Eckert, J.K., Gloudemans, R.J. & Almy, R.R. (1990) as the “fairest possible tax base”. The tax on property needs to be carefully considered as it is a vital source of local revenue with which to finance the local services of municipalities and to fulfil their constitutional obligations. This is the most important justification for property tax. Section 2 of the Act states that it is “essential that municipalities exercise their power to impose rates within a statutory framework that not only enhances certainty, but also uniformity and simplicity across the nation

which will also take into account the historical imbalance and the burden on the poor.”

Bell & Bowman (2006) supported the above statement and referred to newly developed locations, stating that market available sales data were not sufficient for the municipalities to determine true assessed values. Bell & Bowman (2006) further stated that this situation should be addressed by reforming the process and setting boundaries for the municipality.

5.1.4 Tax Base Rate

Generally, the tax base rate can be defined as the market value of a property, which is the price that a property would sell for in an open and competitive market, and on condition that the seller and the buyer are in agreement and have all the facts regarding the specific property. McCluskey (1991) pointed out that the tax base rate was often the component upon which the tax on properties was calculated. This eventually established the market value.

In order for the municipalities to levy tax payments on property owners, the following components are required:

- a) Property type;
- b) Property location;
- c) Area-based assessment or tax base rate value;
- d) Value-based assessment or market value.

The above four components are all relevant and are explored elsewhere. However, of these four components, the tax base rate and market value assessment are the most critical in determining the amount the property owner has to pay on a monthly basis.

The tax base rate is therefore the object that is being taxed, as is stated by both IAAO (2010) and Eckert *et al.* (1990). Section 3(3)(i) and Section 8 confirmed the statement made by these authors; according to Section 3(3)(i), and also declared that a rates policy should determine the criteria applied by the municipalities if it “levies different rates for different categories of properties”.

The value tax rate may be the market value, which is the highest price a property will be sold for in a competitive and open market, as stated in Section 11(1)(a).

5.1.5 Area-based Assessment

Youngman & Malme (1994) and McCluskey (1999) defined area-based assessment as a charge levied per square metre of land area or building, or both. The above authors stated that area-based assessment systems were most of all “adjustment factors”, and that these should be obtained from average values taken from groups of properties within their own diverse zones. The assessed values might disagree with the description of each individual property in the location.

Area-based assessment will result in a greater burden on low income taxpayers than on high income taxpayers. One of the many reasons could be that the average household income in highly valued neighbourhoods is much higher than in lowly valued neighbourhoods. Youngman & Malme (1994) stated that older properties

with large floor areas might yield high taxes and that a relatively poor neighbourhood became “richer” over time due to lack of updated property data. Therefore, when a tax system failed to take property changes into account, the result over time was an unfair valuation assessment.

CAMA, which determined market value on an everyday basis, is relevant to the following formula:

$$\text{Market value} = (\text{Land value}) + (\text{Building cost of improvements})$$

Other important related factors are not taken into account in this formula.

Therefore, the market value of Midstream Estate properties cannot be valued by the general valuation (GV) and CAMA methods of valuation because of the variation of individual property designs and their uniqueness in finishes.

5.1.6 Area-based versus Market-based Assessment

Property taxes are monthly or annually levied taxes that, by definition, are *ad valorem* or “based on and in proportion to the underlying value of the property being taxed”. To maximise fairness, assessments should be based on current market values. It was the opinion of Youngman & Malme (1994) that the market value should be regarded as a more favourable tax base. The benefits obtained from services such as schools and transport were more closely reflected in property values than in the size of the property, and so a higher property tax should be calculated in this instance. Taxes should reflect the value of the services to the property. Youngman & Malme (1994) were of the opinion that it would be a great

advantage if the market value incorporated services to the neighbourhood that were obtained from government expenditures and policies.

5.1.7 Unit Value Assessment

Youngman & Malme (1994) regarded the unit value assessment as cheaper to manage for single family residential properties than for multi-residential properties such as condominiums, especially where the real estate market was not well developed.

Youngman & Malme (1994) asked the following question: “What should be included for tax purposes?” For example: should spaces such as atrium floors, service shafts and elevator spaces, and structural elements outside the glass-line, such as decorative beams, be included? Should they be taxed even though they are not revenue-producing spaces? In this case shared facilities, such as common entrances and halls used by apartment owners in apartment buildings will also fall under the spotlight.

5.1.8 Property Valuation versus Value, Cost and Price (VCP)

As has been seen, the literature confirmed that the value of a property was the price that was agreed upon by a willing and well-informed buyer and seller for a property at the time of valuation. Although the above statement reflected the market value at the time of the sale, it did not mean that the property could be rebuilt for the same price at the time when the valuation of the property was assessed or even sold.

Wyatt, P. (1996) stated that “property valuation is a process of forming an opinion of value-in- exchange under certain assumptions which requires that it be established in an open market situation”. The IAAO (2010) defined market value primarily as the basis of the ability to pay.

Therefore, economy and location and the time of assessment play vital roles in determining the correct and fair value of a property during its assessment and sale.

5.2 Principles of Mass Appraisal

Both task and appraisal judgments are required in mass appraisal across many properties. The mass appraisal method must indicate the supply and demand patterns of large groups of similarly designed property developments, such as low-cost or sub-economical housing. The method does not relate to small but unique properties, as found in the Midstream development. Statistical methods are used to measure deviations of all sales within the population database from their mass appraised values. Dillinger (1992) stated that mass appraisal systems represented a set of logical and systematic methods to gather data and to process and analyse those data in order to generate well-reasoned value estimates. Dillinger (1992) continued by saying that mass appraisal could also improve the valuation correctness because it was a formula-driven valuation method. However, this system can only be applied to mass properties with similar characteristics and locations, such as condominiums. This statement can be justified by looking at the data collected in Midstream Estate, which revealed the unfairness of applying the mass appraisal system in order to determine property valuation.

Dillinger (1992) stated that this was a disadvantage of the mass appraisal system that eroded confidence in the assessment made by the valuers and its truthfulness as recorded by taxpayers. This system could not estimate the variations in different properties, especially those with unique characteristics and designs. Section 45(3)(b) referred to “minimal market-related data”, which in fact was a suitable environment to implement a self-declaration valuation process.

5.2.1 Components of Mass Appraisal

Section 45 recorded standards for mass appraisal techniques, with the emphasis on “a valuation system or technique based on predetermined bands of property values and designation of properties to one of those bands on the basis of minimal market-related data”. The system therefore will perform its purpose within the following four sub-systems independently of the property owner:

- A data management system;
- A sales analysis system;
- A valuation system;
- An administrative system.

The mass appraisal system consists of the following three steps (Dillinger 1991):

- 1 To obtain a sample of the recent property transactions and information from the Deeds Offices or a reliable databank to identify the physical characteristics.
- 2 To reduce the calculated assessment values to a specific method or table.

- 3 To yield individual valuations, the method is then applied and the physical characteristics of each property are recorded in the jurisdiction's tax base.

According to Dillinger (1991), the advantage of this system did not depend on any input from the property owner because the physical characteristics of comparable properties could be measured.

5.2.2 Mass Appraisal

The National Property Education Committee (2004) indicated the list of activities in the standard on mass appraisal of real property that should be applied (the list is provided below). However, the question may be asked whether the various municipalities are equipped with knowledgeable and professional staff to perform an accurate property valuation service. It is possible that this service should be contracted out to professional valuers in the property market as indicated in Sections 33 and 35 of the Act.

Here follows the lists of activities in the standard on mass appraisal of real property that should be applied:

5.2.3 Appraisal and Data Collection

- a) Geographic data;
- b) Property characteristics data;
- c) Data entry;
- d) Cost and depreciation data.

5.2.4 Valuation Analysis

- a) Valuation models;
- b) Cost approach;
- c) Sales comparison approach;
- d) Income approach;
- e) Land valuation;
- f) Consideration of property type;
- g) Reappraisals.

5.2.5 Data Management System

The present mass appraisal assessment system has a large amount of data consisting of: admission, editing, control, organisation, change, storage. In Gloudemans' study (1999), quality control revealed that the accuracy of valuation depended on the reliability of the data collected. Property characteristic data were used to conduct proper research and to generate values. Gloudemans (1999) stated that when a valuation system was designed, one must decide which data elements should be collected and maintained in order to generate proper values. If this was not properly controlled and adhered to, it could lead to the mismanagement of the collected data obtained from different sources and recorded by different individuals. This possibility was one of the disadvantages of the mass appraisal assessment system.

5.2.6 Sales Analysis System

The sales analysis system is a valuable tool for monitoring appraisal results, identifying revaluation priorities, adjusting valuation to the market, and assisting management in planning and scheduling. Gloudemans (1999) stated that the mass system was a vital tool to analyse components for sales data collection, sales screening and processing, ratio studies, and sales reporting. Ratio studies generally provided the best available measures of appraisal performance.

5.2.7 Valuation System

The IAAO report (2010) emphasised the fact that a valuation system should be designed to maximise fair play among property taxpayers. It must be designed to identify the variables that could influence the assessed market value of the property. The present system consists of a mass appraisal application of the sales comparison, cost, and income approaches to value. The valuation system utilises property characteristics that are already maintained in the data management system, along with sales data and ratio study results from the sales data analysis system. This system is most effective and suitable for property types with similar characteristics and designs and within a specific area.

5.2.8 Mass Appraisal System (MAS) of Property Valuation

Almy, R.A., Gloudemans, R.J. & Jacobs (1996) stated that the earliest documented proof of valuation was found in Europe, in documents from the 18th century. At the

beginning of the 20th century valuation of all taxable properties was assessed by means of an *en masse* appraisal system, which eventually changed to the term of “mass appraisal”. In the late 1960s, when computerised systems began to be used, mass appraisal began to be referred to as “computer-assisted mass appraisal” (CAMA). Bagdonavičius, A. & Ramanauskas, R. (2004) defined MAS as a specific valuation of groups of properties with similar characteristics, performed on a certain date and in a specific location.

The present valuation criteria, as described in Section 45, defined MAS as a system for properties classified with the “same design outline blueprint and characteristics”. This meant that assessment of one property will determine the rest of the properties in a specific location or zone with its own tax base rate. In the case of Midstream Estate, with a higher value “band zone” and where a higher tax base rate exists, the system cannot be applied. The philosophy of different tax base rates and “higher band zones” is not the barrier. What is of concern is how the jurisdiction manages to determine the base values without the property owner’s input or participation in the assessment procedure.

Bagdonavičius & Ramanauskas (2004) stated that mass property valuation meant that the estimated value margins could not be applied concerning the unique individual property. Value margins were estimated by employing the analysed information collected on all properties being valued.

5.2.9 Management Considerations and Data Maintenance

The following activities formulate the basis upon which MPRA 6 of 2004 functions in various jurisdiction areas:

- a) Synopsis;
- b) Field staff and the contracting of appraisal services;
- c) Data processing support;
- d) Benefit of cost considerations;
- e) Valuation rolls;
- f) Assessment and objections;
- g) Appeal valuation boards.

The activities are used to execute the valuation assessment as stated in Section 45(3)(b) of the Act "...includes a valuation system or technique based on predetermined bands of property values and designation of properties to one of those bands on the basis of minimal market-related data." and confirmed in Sections 16, 31, 41, 46, and 48.

As indicated in the IAAO (2011), "mass appraisal models *attempt* to represent the market for a specific type of property in a specified area".

According to IAAO (2011), valuers must identify the variables that influence property values.

In the research executed in Midstream Estate, it was found that only one of the properties out of the sample of 100 had been inspected by the municipal official (1%). This means that the present system overlooked a large number of variables

(minimising market-related data) on many properties. This information is relevant for the assessment of the area tax base and the market value. The field survey also revealed that the mass appraisal approach was applied while the property assessment values in Midstream Estate were based on predetermined bands of property values, as stipulated in Section 45(3)(a).

5.2.10 Administrative System

The administrative system has a variety of functions and activities, and focuses on varying degrees of computerisation techniques. Each activity requires information from various sources, such as sales analysis, valuation, and assessment values, or data management systems and products used by one or more of these other systems.

5.2.11 Limitations of Mass Appraisal

Although this system is widely used in South Africa by municipalities, the main limitation of the traditional mass appraisal system is location and property position representation. Similar features and a single location are the major factors that are needed in order to apply the assessment system effectively. For this reason, it is an effective system for valuing low-cost housing, flats, and similar property locations. McCluskey & Franzsen (2000) stated that there were various methods to include location as a factor within the mass appraisal technique, for instance the demarcation of neighbourhoods or sub-markets. The authors continued that it was possible to obtain individual models for each distinct sub-market, or to employ an

overall model encompassing several neighbourhoods, where each neighbourhood entered into the model as a “dummy” variable.

5.3 Property Valuation

Lawrence, D.M., Rees, W.H., Britton, W. (1971) defined property valuation as the “estimation of the market value of a property” and considered it economically important for, for example, governmental policies. Property valuation involved multiple underlying factors to be considered; and all of them could affect the value of property. Valuation of any property depended on the type and specific comparables of the specific property. Lawrence *et al* (1971) considered the Comparative Method to be the most reliable system at present.

Shapiro *et al.* (2010) stated that market value was considered to be the estimated amount for which a property should be exchanged. The date of valuation was also an important factor to consider between a willing buyer and a willing seller (RICS Valuation Standards 2008). It is also important that the valuer identify a particular base for the value before assessing the value of a property. Market value is the most common theory currently in use. It forms a basis to underpin the concept of value.

5.3.1 Methods of Property Valuation

Wooton, J. (1989) defined property and land that was owned and which consisted of multiple land parcels, a single parcel or part of a parcel, and argued that a parcel

could be defined as the “smallest piece of land that has clear boundaries and that is able to be separately transferred with any property development”.

Nind, C. (2002) stated that the following two entities were important to validate the value that was the cost and price (VCP) component for tax, sale, market, insurance, and other transaction purposes:

- a) Land or site value was considered the value before improvements were made. Any building material used to the benefit of the land was also considered as site value.
- b) Capital improved value was the sum of the buildings and land capital value. Most municipalities were using this method in 2001.

5.3.2 The Three Common Approaches for Valuation

There are five recognised valuation methods, as described by Shapiro *et al.* (2010), of which the following three are relevant to the research and are discussed to fit the purpose of the research:

- a) Cost approach;
- b) Sales comparison approach;
- c) Market approach.

5.3.3 Cost Approach

This valuation technique enables the assessment of built structures and of improvements, and is one of the most logical valuation methods for assessing property value. The approach is important when the construction cost for all new structures has to be determined. In the case of existing properties, the cost should be estimated first. The approach depends upon data regarding the property, its age and its unique characteristics. According to Brueggeman, W.B., Fisher, J.D., & Stone, L.D. (1989), the disadvantage of the cost approach came to light when it became necessary to make adjustments for depreciation. Usually a charge is levied per square metre of land area or per square metre of building floor area, or both. Brueggeman *et al* (1989) further stated that “The assessment of the property is the sum of an assessment rate per square metre multiplied by the size of the land parcel. The measure of area is used for land and buildings, as well as in the assessment rate per square metre multiplied by the size of the building”. It was important that the valuer use the same applied rates for land and building assessment. It must be taken into account that the adjustment factors are derived from average values for groups of properties within a specific zone. The cost approach will not, however, reflect the characteristics of each individual property.

According to Kitchen (1992), the cost approach method of assessing property market value can be calculated by using the formula below:

$$MV = LV + BC,$$

where MV is market value, LV is land value and BC is the building value on which the property tax was levied in the year of assessment.

The assessment performance involves a comparison of assessed values and market values. Sale prices are used to indicate market values. The actual base is considered to be the assessed value for each individual property.

Kitchen (1992) stated that the building replacement costs as well as improvements to existing buildings could be calculated on the property value by the “subtraction of the depreciation sustained by improvements”, providing that a detailed inventory of all improvements and buildings within the boundaries be accurately documented.

This approach focuses on the buildings on the property as well as the type and quality of the land. The cost approach can also verify valuations collected through other methods. A disadvantage of the approach is that the actual cost data required for market valuation purposes is not controlled or available for the sale agency’s records.

The cost approach system can be used as a method for determining the replacement cost, but the actual sale price of the property may be different to the market value when the said property is sold in an open market between a willing buyer and a willing seller.

Section 41(1) stated that “subject to any legislation that restricts or prohibits entry to any specific property, the valuer of a municipality, assistant municipal valuer, data-collector or other person authorised by the municipality in writing may (a) between 07:30 and 19:00 or any day except a Sunday or public holiday, enter any property in the municipality that must be valued in terms of this Act; and (b) inspect that property for the purpose of valuation.” According to Section 42(1)(a), a valuer may require the property owner “...to give the valuer access to any document or information in

possession of the owner, tenant, occupier or agent which the valuer reasonably requires for purpose of valuing the property.” The owner would therefore be in a more favourable position to support the property valuer if the owner has all the relevant information and knowledge regarding his property, such as the purchase price, building cost, selling price, and cost of any additions that may have an impact on the assessment value. It is vital for property owners to participate in the assessment process together with the municipal official designated to the area so that they can become acquainted with the tax valuation process.

Property owners need to be able to supply the following information:

- 1 The market value of the land must be estimated by a comparing it to the amount for which the land was purchased.
- 2 Construction cost for new buildings. This will include all exact expenditures.
- 3 The property’s accumulated depreciation is subtracted from the sum by using market-related factors.
- 4 The indicated market value of the property will include land value, construction costs and finance costs.

The value of the property should be calculated by taking into account the cost of replacing each component of a building at a specific time as well as the depreciation of the building over time. The cost of the land must also be taken into account. This approach is therefore more effective when it is used to value relatively new buildings, but less effective when used to value older buildings.

5.3.4 Sales Comparison Approach

In the sales comparison approach sale prices of previous sales, as determined by valuers and property buyers, are obtained from a data bank or the Deeds Office and examined. This approach can be used in an active market, especially when similar properties are sold. Youngman & Malme (1994) agreed with this statement and stated that for accurate comparison the properties selected for this approach should have characteristics similar to those of the subject property. By using the comparable property differences recorded from the selected area, including the necessary calculated adjustments, the valuer would be able to determine the valuation or sales price of the subject property more accurately. This method depended on the availability of sales data and the presence of a large number of properties with similar characteristics. Walker, J. (1994) stated that a period of time must lapse before these sales could affect the degree of comparison made between properties, especially in the case of unique areas.

It is therefore more difficult to use the sales comparison approach as a comparison method for unique properties in an upmarket location in comparison to the mass valuation system where there are a large number of properties of the same design and size.

5.3.5 Market value comparison approach

Wiltshaw, D. (1991) argued that “the comparison method is statistically flawed, primarily because of the small number of comparable transactions used in many valuations.” The above author also stated that as the quantity of comparables was

reduced, the prospect of statistical insignificance was increased. The approach involved the analysis of data from sales of similar property units and the proper adjustment of collected data. This provided value estimates for groups of property units that have been valued.

Wyatt, P. (2009) stated that the principal of comparison underpinned all valuation methods. This principal of comparison could also be seen as a valuation method on its own, provided that comparable properties with similar characteristics were selected. As such, it depended on data collected from recent sales. The comparison method was therefore suitable when comprehensive and up-to-date records of transactions exist.

5.3.6 Factors Influencing Property Value

There are various factors that can influence the value of property according to the National Property Education Committee (2004). Wyatt, P. (2009) suggested that “valuation uncertainty can arise because of the inherent features of the property, due to the market similarities or the information available to the valuer”. Shapiro *et al.* (2010) were in agreement with the valuation factors as indicated below.

The following are examples of where uncertainty regarding valuation factors are likely to arise. These uncertainties will have an influence on the property valuation:

- Socio-economic specifications of a neighbourhood, location, standard of neighbourhood, quality of the property adjacent to the property in question, and physical characteristics of the property market cycles.
- The property size, number of rooms and bathrooms, etc.

- Environmental factors such as air and noise pollution, crime levels, the presence of an airport and highways.
- The convenience and accessibility to schools, markets, bus and train routes, and other amenities such as hospitals.
- The taxation zone of the neighbourhood.
- Temporal attributes such as the time of the property sale and inflation.
- Age and state of repair.
- Property market investment cycle.

Some of the above-mentioned factors are not currently taken into account (see Section 45(3)(a)), and property may be valued in accordance with any mass valuation system or technique. This does not address the physical characteristics or the environmental factors mentioned above.

5.4 Market Value

Market value is defined by Section 46 of the Act as the “amount the property would have realised if sold on the date of valuation in the open market by a willing seller to a willing buyer”. Shapiro *et al.* (2010) stated that when market evidence was not sufficient, the valuer might consider other comparable market sales. However, the location will always play an important role in determining the market value of a property. As referred to in Section 46(1) and according to Eckert *et al.* (1990), some countries had only one property tax; the tax base was the market value of land and improvements:

- In the United Kingdom there is only one property tax system, with the annual rental value of land and buildings as its base.
- France has three different property taxes and all are based on annual rental values.
- Denmark has a land tax that is based on market value of the land alone but this tax is supplemented by a service tax based on the market value of buildings.
- Japan uses market value as the base for taxes for both land and improvements.

Franzen, R. (2000) indicated a Tax Base with three choices that are spread evenly throughout the country:

- 1 Site rating (rating land only).
- 2 Flat rating (rating improved capital values).
- 3 Composite rating (rating land values and the value of improvements).

All these ratings result in different tax rates, as indicated in Section 3(3) of the Act.

From municipality to municipality, there are different opinions about which tax base and valuation system is best: a composite rating (land and improvements) or annual rental value or market value. According to Franzsen (2000) municipalities usually set their own tax rates and further states that the Minister for Local Government, in agreement with the Minister of Finance, may set a limit or rate cap on the tax rate. Section 11 of LG: MPRA 6 of 2004, stated that the rate levied by the municipality must reflect property market value. However, in terms of Section 229(2)(a) of the

Constitution, a municipality was given the authority to exercise its power to levy rates on property, as noted above. Franzsen (2000) said that it was not possible to utilise the CAMA system because physical inspections of each rateable property were legally required and therefore a national framework legislation regarding property tax was required.

Section 16(5) of the Act stated that the municipalities were given the authority to levy rates, if necessary, in order to adjust their budget year on year.

Bahl, R. (2002) stated that the “tax rates are invariable, relative, and inelastic and that the tax base will increase automatically over time”. Some countries value all property at a current value. Countries such as South Africa and the United States of America, as well as several countries in Europe maintained a valuation standard for certain types of property, such as the uniqueness and types of properties as specified in Section 8 of LG: MPRA 6 of 2004.

5.4.1 Assessment of Market Value

The assessment of market value calculates the approximate value that the market places on individual properties and is the price agreed upon by a willing buyer and willing seller at the time of the sale. This method regulates the selling price of comparable properties. This produces a market-related value to the property against other comparable properties, which is not the case in the present tax valuation assessment system. This approach is widely accepted as the fairest system.

Bell, M.E. (2002) stated that characteristics such as differences in location, depreciation, and age of the property were important and relevant.

According to Bell & Bowman (2006) local governments should make a serious attempt to develop a more suitable valuation assessed system for tax purposes with reasonable estimates of market values. The above authors also felt that the public should be educated in terms of a market value assessment philosophy.

Bell & Bowman (2006) thought that when “reasonable market value assessments are obtained, it should be captured in the tax roll and publicised”. This would further inform the public and allow the public to educate themselves in terms of market value prices. A possible disadvantage is that by the time these assessments are to be found on the roll or in a data base, it will be too late for the property owner to debate the philosophy of the system used.

Bell & Bowman (2006) stated that “administratively determined sales prices” could generate very low assessment sales ratios in new locations. Inadequate market sales data could not produce truthful market-related values and therefore reliable value assessments.

5.4.2 Valuation Specification Technique

As stated in Section 4 of LG:MPRA 6 of 2004, site visits and interviews with property owners are necessary for obtaining property information for analysis, if suitable data are not otherwise available. This time spent collecting accurate site data will improve the usefulness of computerised techniques.

According to Section 36 and 45 of the same Act different statistical procedures and techniques were required to assist in rating valuation specimens. This information must be obtained to achieve a reliable data bank of market valuation information. This is important to determine the accuracy of current market values.

This procedure should provide a series of methods with which to estimate property valuation results for all possible variations of property criteria. This will ensure consistency and accuracy in property valuations, reporting procedures and property data storage in all municipalities. The system must also be able to clarify the standards of deliverables submitted during the valuation assessment process.

Gloudemans (1999) stated in his study that for assessment purposes market value was determined by the application of mass appraisal techniques and methods. This was the process for valuating groups of properties by using general practices and standard methods.

5.4.3 Manual Valuation Method

Definite principles and outlines should be used when this method is used.

Baxter, J. & Cohen, R. (1997) indicated in their research that the accuracy of a property value was influenced by the data gathered from the valuer and the number of similarities of properties used in the comparable sale analysis. To develop a reliable model, automated techniques can influence the available data and the different methods that have been applied.

5.4.4 Principles of Self-Assessment

Sufficient information of a specific property is required to enable the property to be effectively assessed. Section 30(2) of the Municipal Property Rates Act stated that all assessable properties in a specific location should be valued during a general valuation period. Section 31(2) stated that the general valuation must reflect the market value of properties determined in accordance with the market conditions.

In order to achieve a reliable valuation assessment, the valuer will have to execute and collect the following information:

- a Identify the property and verify the owner or the person liable for paying tax before levying the property.
- b Establish a complete register of all properties and assign a unique property identification number to each property for future reference. It is important to review the current available information on the property and its suitability for use as the basis for a property tax.
- c In most cases, there are limited or no accurate data about the real estate market. To overcome the shortfall of insufficient property data, current available data should be tested taking all sources into account. The systematic collecting, verifying, and analysing of property data is vital in the process of considering alternative property taxation methods.

Information that must be collected for each property includes:

- A number allocated to each property;
- The address or stand number and area of the property;

- The owner's details verified with the Registrar of Deeds Office;
- Latest purchase or selling price of the property;
- Present market value;
- Specific information about the property;
- The type of building and design type;
- Cost at date of construction;
- Total floor area in square metres;
- Number of bedrooms;
- Number of other rooms;
- Number of floors;
- Number of garages;
- Age and condition of buildings;
- Building plans.

These data can be collected through a self-assessment information system and should include a visit to the property by the valuer. Section 42 of the Act gave the valuer the authority to access any documentation held by the property owner for the purpose of assessing the property. Dillinger (1991) agreed in his study that all property owners were legally required to declare on a regular basis the property that they own to the relevant valuer. It was important to select the most appropriate tax base. This should in turn identify the specific property information necessary for each taxable property when compiling valuation lists and verifying supporting evidence for valuation.

Mohd (1994) suggested the following factors that could influence residential property value:

- Purchased date;

- Location;
- Position of land or stand size;
- Design finishes;
- Age of property;
- Land surrounding the property;
- Building extensions and renovations.

Bell and Bowman (2006) argued that it would always be a problem to value newly taxable properties unless a well structured property tax assessment system was put in place.

The above statements were further supported in the IAAO (2010) Standard on Property Tax.

5.4.5 Recommended Valuation Assessment Process

As indicated in LG:MPRA 6 of 2004, that all properties should be valued and assessed using the Capital Improved Value Method (CIVM) for site value or net annual value. The specific legislation defined the procedures to be adhered to with regard to collecting property rates and administering changes to the valuation system. It is also important to document the methods for collecting rates from property owners. Each municipality must adhere to the above-mentioned Act for managing property taxes.

- The first stage is to determine the valuation for each rateable property. It is important that a consistent, reliable, and accurate property database be documented, and that it should include the rate payers' details and the details

of each property in the municipality's jurisdiction. Consistent and reliable data in the proposed valuation system are important to ensure transparency and creditability in the assessment system. Statistical analysis can be undertaken through sales ratio testing, as well as the examination of similar properties within the same location by using previous valuations as a measure instrument (RICS, 2005).

- The second stage investigates the current sales information prior to field regarding the valuations that have been determined after the field visits.
- In stage three final valuations for residential property are conducted using statistical techniques and a questionnaire to evaluate the results with the property owners.
- Stage four involves the submission of the valuation assessment system, including other key elements (RICS, 2005). Mapping outputs will show the location of sales and value shift maps. It also shows the change in values between different dates, as well as the change (in percentages) between previous site valuations and the current valuation.
- Step five comprises a large part of the valuation process through more computerised means, such as spreadsheets, GIS mapping for reporting, and the analysis of results.

5.4.6 Merits of the Self-Assessment Valuation System

Property taxes are levied on all properties. Property owners and the tax administration should understand the philosophy behind the system and also know what is required to achieve an efficient and transparent self-assessment model. This will also deter municipalities from periodically imposing levies on the tax base. Bird & McKenzie (2001) stated that local government should determine the following before imposing levies on the tax base: (1) whether or not to levy the tax, (2) the kind of property in question, for example whether it is a church or residential property, (3) the tax rate base assessment for the individual property owner, and (4) the method of collecting tax. Bird & McKenzie (2001) stated that these factors would determine the specifics and nature of the property to be assessed and to determine the correct levies.

A self-assessment valuation system must be efficient and transparent to successfully capture the relevant assessment information, which at present is not fully recorded.

5.4.7 Self-Assessment of Property Valuation

Self-assessment valuation is the focus point of this research and requires the property owners' participation on an annual basis to document the assessment value and description of their own property.

Self-assessment by means of property owner participation will encourage the property owners to submit true and correct data. An assessment questionnaire should be completed by the property owner and then submitted to the jurisdiction

area officer for further investigation in order to determine the final assessment value with the owner.

Tanzi (2001) stated that property owners should assess their own properties and then submit the assessment to the respective jurisdiction area. The author continued that self-assessment could lead to inaccurate estimates of property values due to the lack of knowledge on the part of the property owner. It was therefore vital that property owners return a true and objective self-assessment valuation of their property, as indicated in Section (3)(b)(1). The valuer and property owner should communicate and debate the outcome the final assessment.

5.4.8 Reliability of Self-Assessment

Turkey is one of the few countries to have managed to obtain a reasonable success rate for owner self-declaration by enforcement of a combination of field audits and tax clearances. In Dillinger's study (1991), the survey audits used indicated that coverage was broad enough to increase reliability levels. Turkey also implemented property tax clearance systems that require the owner to submit his tax clearance and selling value (true market value) before submitting the application to the Registrar of Deeds when selling his property. The self-assessment method ensured participation by the property owner, which was important to establish a fair value while at the same time "up-dating the municipal tax roll with the market value via the selling price" (Dillinger 1991).

In the Times of India newspaper, Coleman Bennett (2012) reported that New Delhi implemented a self-assessment system in 2002. This was a computerised method

of random analysis of returns documented by the property owners and used by the Bruhat Bengaluru Mahanagara Palike (BBMP), (Greater Bangalore Municipal Corporation, is the administrative body responsible for the civic and infrastructural assets of the Greater Bangalore metropolitan area). The property tax will be assessed on the basis of the property unit value within the jurisdiction of the metropolitan municipality. A property is classified according to the cost of construction value as a current market value rate. The rates for different zones were determined according to several criteria such as location, built-up area, use of property, and age of building. (From the internet S.M Krishna Government 2003 Bangalore Delhi: The Times of India).

5.5 Summary

The fundamental concepts of property taxation, mass valuation system, and valuation assessment approaches and their limitations were comprehensively examined. The tax base rate, area base rate, and property valuation assessment approaches are all used as means to source revenue with which to finance local services.

It has been found that the present valuation assessment system, as described in Sections 16, 31, 41, 45, 46 and 48 of MPRA 6 of 2004 has its limitations and should be reviewed.

Bell & Bowman (2006) questioned the purpose and meaning of “assessment-sales ratios and the derivative equity measures if the assessed values and sales prices were politically determined numbers”. It is also noted that the quality of the data

collected is not sufficiently comparable to the quality of information collected in newly developed areas.

This chapter places emphasis on the need for a more effective and true assessment value system regarding township developments with unique designs such as Midstream Estate. It is therefore suggested that properties other than mass production properties (such as low-cost housing and flats) should be assessed by means of an effective self-assessment valuation system whereby the property owner participates in the valuation assessment of his property. Such a partnership between the municipal official and the property owner will enhance transparency, confidence and will strengthen the valuation assessment system.

With reference to 5.1.2, the author states that physical differences between the subject properties and their comparables are also vital factors to be considered, as observed in the sample. The CAMA system is therefore unsuitable for Midstream Estate because individual property valuation cannot be assessed by merely choosing a property from a map and accessing the relevant data collection from a previous time slot.

The author is of the opinion that when the assessment is made within a specific property zone, it is not possible to capture the diversity of alternative options which are invested in the area-based assessments. The reason for this is that not all relevant aspects can be taken into account, such as the location and the unique characteristics of the properties that are contained within the field study.

With reference to item 5.2, and as noted during the physical visits and distribution of the field survey Questionnaire (Addendum 1) in Midstream Estate, participation and

the implementation of a self-declaration valuation system will be accepted by the property owners as a fair and trustworthy system.

To qualify the point made by Dillinger (1991) in paragraph 5.2.1, the author refers to the field survey, which revealed that 80% or more of the properties in the subject area could not be compared to one another because of their different architectural designs, characteristics, and finishes. This institutes a set of variables as are described above.

With reference to item 5.2.5, it is the author's opinion; however, that the valuation system should be reconsidered and redesigned to select a final value for assessment purposes to include property characteristics and current sales data.

With reference to paragraph 5.2.8, the question arises as to how the market value and the assessment value of the 1 240 upmarket and unique properties in the Midstream Estate area were determined, given the variety of sizes and designs, and the scarcity of recorded market sales with which to prove these values.

The author is of the opinion that the need for Midstream Estate property owners to partake in the valuation assessment system could play a vital role in achieving transparency and trust between both the property owner and local municipality. Bird & Slack (2004) supported this statement in their literature.

CHAPTER 6: RESEARCH METHODOLOGY

6.1 Introduction

Whenever research is conducted, it is for a specific reason, such as to answer a specific question or to solve a particular controversy or issue. As is mentioned previously, the purpose of this study was to assess the level at which property owners should partake in the property valuation assessment of their properties, which would almost certainly be an important investment for most of them.

This chapter describes the research methodology and methods used for data collection. It gives a description and analysis of the target population, the measurement (field survey) and the data analysis needed to accomplish the research objectives. The statistical parameters and techniques used to analyse the data are also explained.

6.2 Purpose of the Research

In order to assess whether the proposed field survey is warranted, an in-depth study on the principles on which LG: MPRA 6 of 2004 is based was done in Chapters 4 and 5. The information in these chapters confirms that a field survey was warranted to validate the objectives.

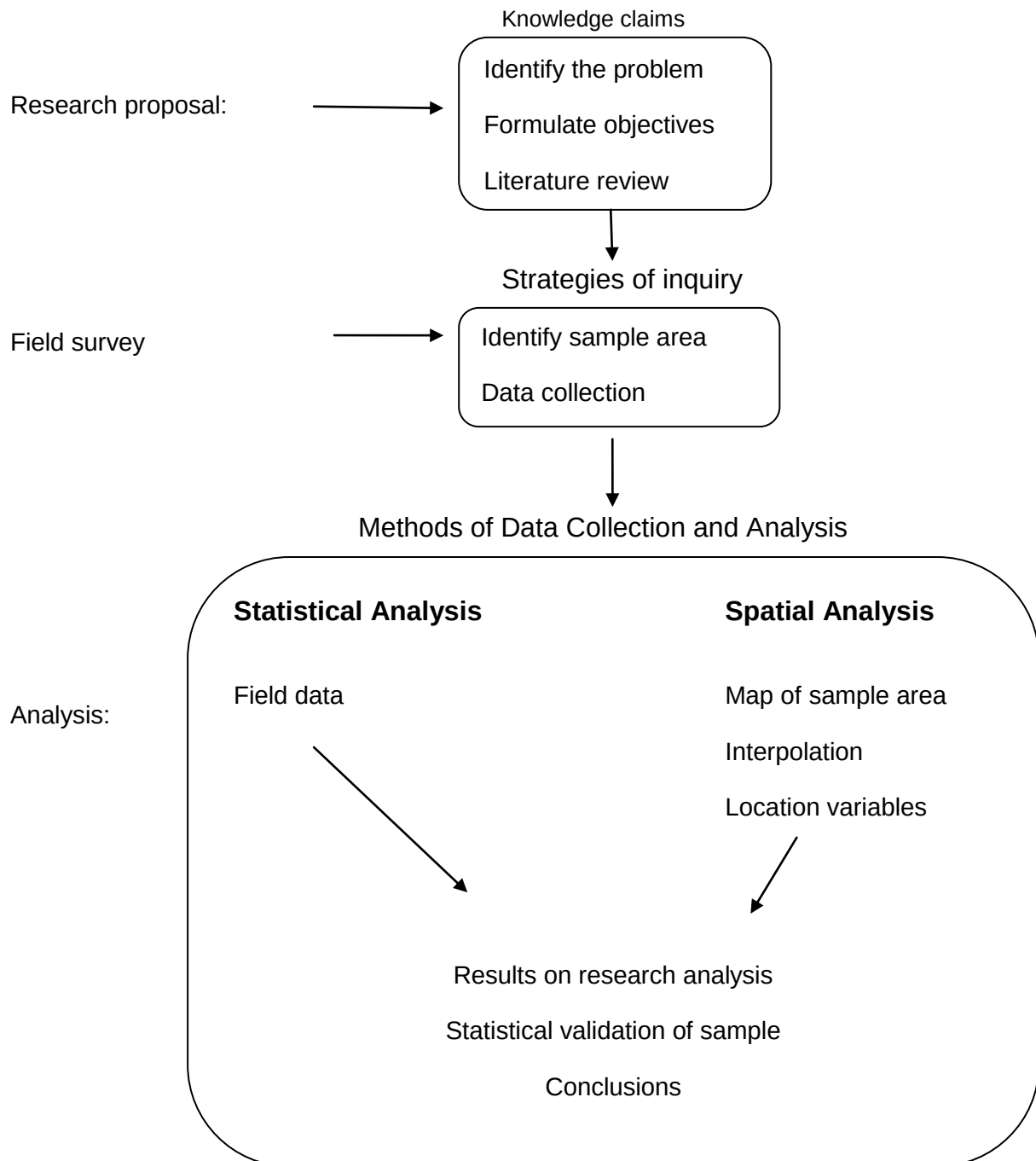
Midstream Estate was used for this research. The field survey questionnaire therefore focused on the objectives, as indicated in paragraph 2.4 and 2.5, to determine the following:

- a) Whether there are sufficient reasons to justify the participation of the property owner in the valuation of his property assessment;
- b) And whether or not these reasons and objectives are disregarded in the present property tax valuation system.

6.3 Research Approach

The research approach diagram (see Fig. 6.1) identifies three main stages, each with its own sub-sections. The three main stages are: research proposal, field survey and analysis with conclusions.

Fig. 6.1: Diagram for the method of data collection



6.4 Research Process

The field survey was conducted by means of a multiple choice questionnaire. It formed the basis for the research process and the results were analysed by means of a quantitative methodology procedure. The field survey (questionnaire) was delivered randomly to the property owners by the author in person and returned directly to the author.

Creswell, J.W. (1994) suggested the following elements that should be identified in a research model:

- Research proposal which includes knowledge claims;
- Field survey which identifies the strategies of inquiry;
- Analysis which identifies the methods of data collection as supported by Rossman, G.B. & Rallis, S.F. (1998).

6.5 Data Collection Procedure

Gloudemans (1999) indicated the following procedures of data collection, quality control, data documentation and property inspection including the characteristics of the property.

The research procedure implemented the following steps:

- a) The researcher administered the questionnaire in person;

- b) Respondents were assured of the confidentiality of the information;
- c) Respondents were asked to complete the Property Valuation Tax Rate (PVTR) questionnaire. The author explained to the respondents that the questionnaire consisted of questions related to specific sections in the PVTR and asked them to answer the ten questions truthfully. See Annexure 1 for a copy of the questionnaire.
- d) The author explained to the respondents in person that the ten items required a numerical response between 6 and 1, where a high degree of agreement would warrant a 6 and a low degree of agreement a 1.
- e) The author delivered and collected the field survey questionnaires in person to make sure that all the questions were answered, so that a high degree of accuracy could be achieved.

6.6 Data Valuation Process

Hoaglin, D.C., Mosteller, F. & Tukey, J.W. (1983) stated that to reveal patterns of features of the data, the sample should undergo investigative data analysis.

The valuation process was developed by means of a descriptive statistical analysis method, which describes what is shown by the field data and how the objectives in the research questionnaire were achieved. Midstream Estate has a total of 1 140 property owners. Of this total, a random sample size of 100 residents was

approached to complete a questionnaire that was then statistically analysed. The results are examined in more detail in items 6.8 and 6.9 below.

Chapter 2 gives a description of Midstream Estate in order to verify the results obtained.

6.7 Selection of Sample Area

Midstream Estate was selected as a research study area for the following reasons:

- a) It is located within the jurisdiction of the Ekurhuleni Metropolitan Municipality (EMM), which is the second largest municipality in Gauteng and is administratively divided into 184 wards;
- b) Midstream Estate was selected as the study area because of its unique property designs and characteristics;
- c) This study area was further selected because it does not fit into the current mass appraisal system, as defined in Section 45 of the Municipal Property Rates Act;
- d) Midstream Estate was developed in the last ten years and is therefore a relatively new township. As a result, market sales are still very low. This calls into the question the reliability factor of the property market value, area base rate, and therefore also the tax assessment rate.

Tse, R.Y.C. (2000) stated that each residential unit had its own unique characteristics which included structural design, environmental and neighbourhood features, and accessibility to work, transport and services.

6.7.1 Selection of Property (Annexure 1)

In this survey study, the residential properties were selected randomly to exclude any bias or doubt when validating the research, and to insure that the questionnaire and the sampling would meet the research objectives, as indicated in chapter 1.

Goodman, A.C. & Thibodeau, T.G. (1998) indicated that valuation models depended on the exogenous variables included in the unique characteristics of the property (the “Y” factor),

Because of their architectural design variation, it was decided to randomly select the property samples. The various property owners were visited without any notification and were asked whether they would partake in the sample questionnaire on the property valuation tax rate. Only three property owners were unwilling to participate. This field survey was carried out in person and at random, and each property owner was visited in turn.

6.8 Population Target and Sample Area

According to Oswald, S.L., Mossholder, K.W. & Harris, S.G. (1997), sampling was the technique of observing a portion of some total set of evidence. Midstream Estate

comprises 11 sub-wards with a population of 1365 property owners. The survey was carried out in nine of the 11 sub-wards that cover 1 140 properties, of which 100 properties were randomly selected.

Van der Colff, L. (1999) stated that a good sampling procedure fulfils two basic criteria:

- a) The sample should be representative. This means that the residents, their comments, and the significant relationships between them should be carefully defined;
- b) The sample should be large enough to create confidence in the validity of its characteristics.

Standard on Ratio Studies (2010) stated that statistical studies, samples are selected randomly from the selected areas to maximize representation of the sample.

6.9 Summary

In the above chapter, the research methodology and research procedure was described. A sample of 100 property owners was randomly chosen in a specific study area, Midstream Estate, in order to survey and collect a descriptive sample.

CHAPTER 7: INTERPRETATION OF SURVEY DATA

7.1 Data Exploration: Interpretation of Statistical Survey Data

The survey data was analysed by using the application of Edelman, D.B. (1986): “Descriptive Statistical Methods”. The descriptive analysis models by Kryvobokov & Wilhelmson (2007) was also studied for this research model.

To analyse the results a descriptive statistical analysis programme was used and the following was found:

The first three questions on the questionnaire provided respondents with the option of YES or NO, and revealed the following:

- a) The second question asked the respondents whether a municipal official had ever viewed their property for an assessment value. One person 1 out of 100 (1%) had been visited.

- b) In response to the question of whether property owners were allowed to participate in the assessment of their property, 91% strongly supported participating in determining their own valuation assessment. A mere 9% was unwilling to participate in the field study.

The second part of the questionnaire comprised seven questions, with multi-choice answers. The following can be deduced from the answers:

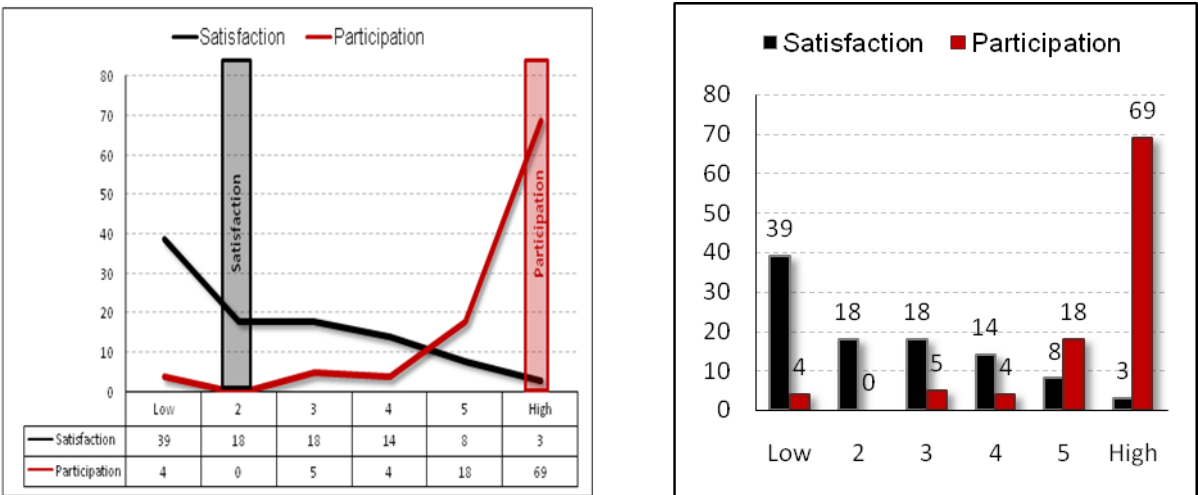
Questions 2, 3, and 5 indicate an average of 86% which is higher than the total average of the seven questions of 82% average. This shows that the majority of the residents of Midstream Estate are positive about participating in a property valuation

assessment system and that they do not approve of the present valuation assessment system. (See Annexure 2, 3, 4, 5.)

Question 7 revealed that the residents disagreed with their rates being increased on an annual basis in order to meet the municipal_budget.

Question 1: To what level are you satisfied and in agreement with your present assessment tax value?

Fig. 7.1: Perception of Annual Increase of Rates: Satisfaction and Participation



Line Graph 1

Line Graph 2

Bar Graph 1

Bar Graph 2

The above line and bar graphs show the answers to questions 1 and 2 in the questionnaire (Appendix 1).

Line Graph 1 in Figure 7.1 which indicates respondents' satisfaction with their assessment tax value. It has a "very high rate" of 39/100 within the low range of 1, with a median value of 2.00, which emphasizes that this area covers the highest

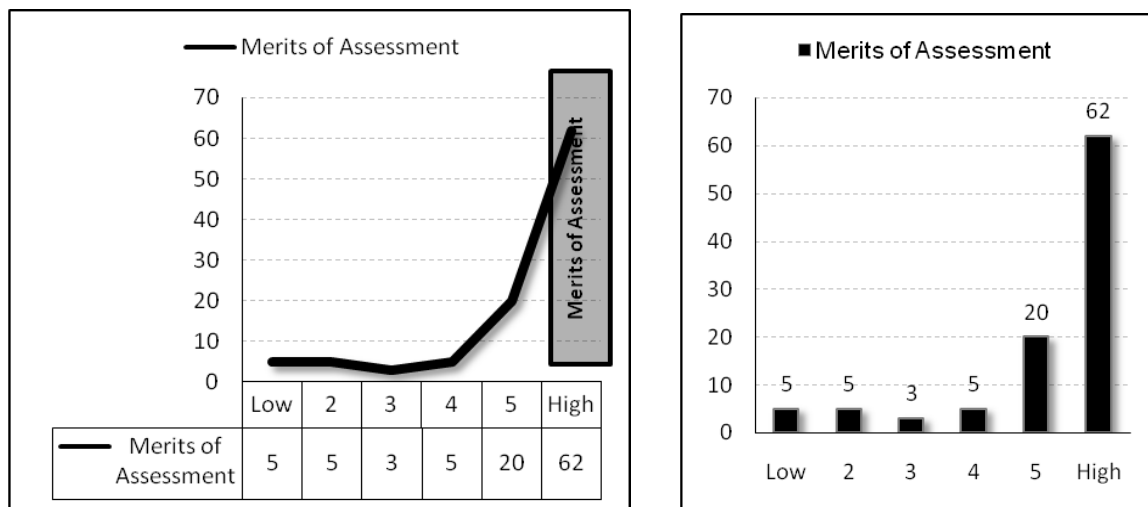
number of *unsatisfied samples* taken during the field survey. The Standard Deviation of 1.472 is the second lowest out of the range of seven questions. This indicates that the largest number of the population of the 39% is allocated in this quarter of the field survey sample area. This statement is also visible on Bar Graph 1 in Figure 7.1, where bars 1, 2, and 3 indicate 39, 18, and 18 respectively, with an average of 24. This is much higher than the second half of the graph, which indicates 14, 8, and 3 respectively, with an average of 12.5.

Question 2: To what level should the property owner partake in the assessment rate value?

Line Graph 2 in Figure 7.1 indicates the highest positive value of 69/100 samples recorded with a median value of 6.00. It has a Standard Deviation of 1.197, which is the lowest standard deviation value recorded. The low Standard Deviation of 1.197 indicates that most of the data points are centred on the mean/average of 5.39. Both the line and the bar graph in Figure 7.1 clearly indicate the property owners' desire to partake in the assessment of their property valuation. It is evident from the above data that Question 2 has the most positive supporters, namely 69%.

Question 3: To what level should each property be assessed due to its unique design and merits?

Fig. 7.2: Perception of Annual Increase of Rates: Merits of Assessment



Line Graph 3

Bar Graph 3

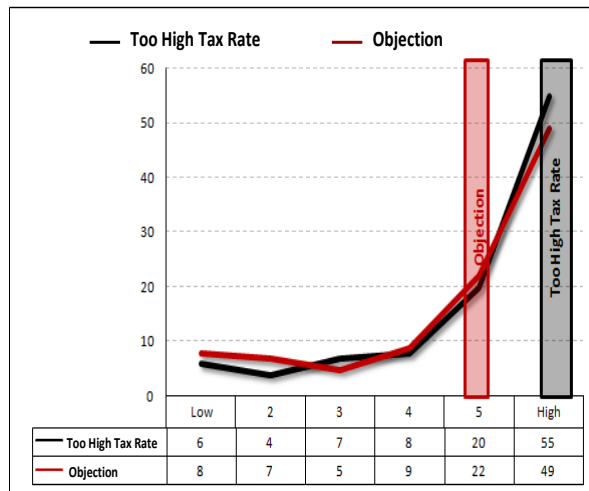
The above line and bar graphs in Figure 7:2 show the response to question 3 in the questionnaire (Appendix 1).

The above two graphs in Figure 7:2 are very similar to the line and bar graphs of Question 2, with the only difference seen in the Standard Deviation of 1.426. This is one of the reasons why fewer data points cluster around the mean/average. This result was influenced by the lower recorded number of 62/100 samples.

Question 4: Rate the level of dissatisfaction concerning the high tax rate payment, (Section 16) and;

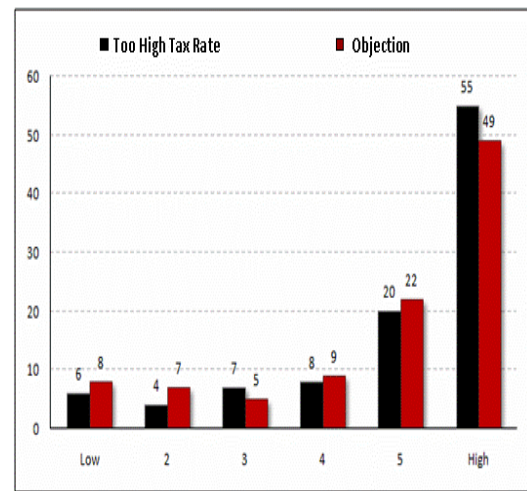
Question 5: To what level are you objecting to the current valuation / assessment system? (Section 50)

Fig. 7.3: Perception of Annual Increase of Rates: Objection



Line Graph 4

Line Graph 5



Bar Graph 4

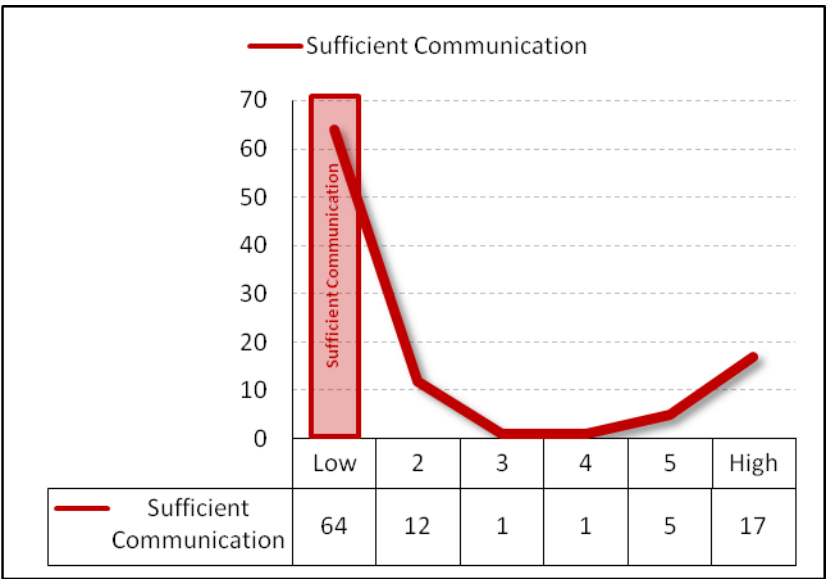
Bar Graph 5

The above line and bar graphs in Figure 7.3 show the response to questions 4 and 5 in the questionnaire (Appendix 1).

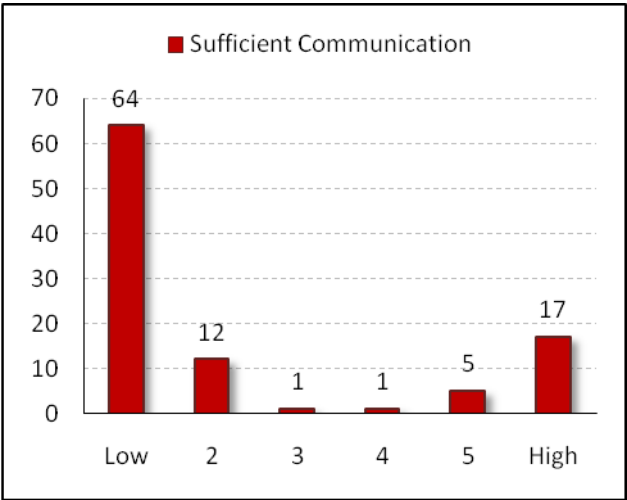
The above line and bar graphs in Figure 7.3 are symmetrical except for the median values of 6.00 and 5.00 and Standard Deviation value of 1.501 and 1.632 respectively which show which of the two questions has preference above the other. The line graph in Figure 7.3, with a median value of 6.00 and a vote rate of 55/100, has a preference of obtaining a broader range of responses in the study field, with more data points centred on the mean/average than the objecting criteria, as indicated above in red.

Question 6: To what level does the Municipality communicate sufficiently with the property owners prior to implementing the tax rate policy? (Section 4)

Fig. 7.4: Perception of Annual Increase of Rates: Communication



Line Graph 6



Bar Graph 6

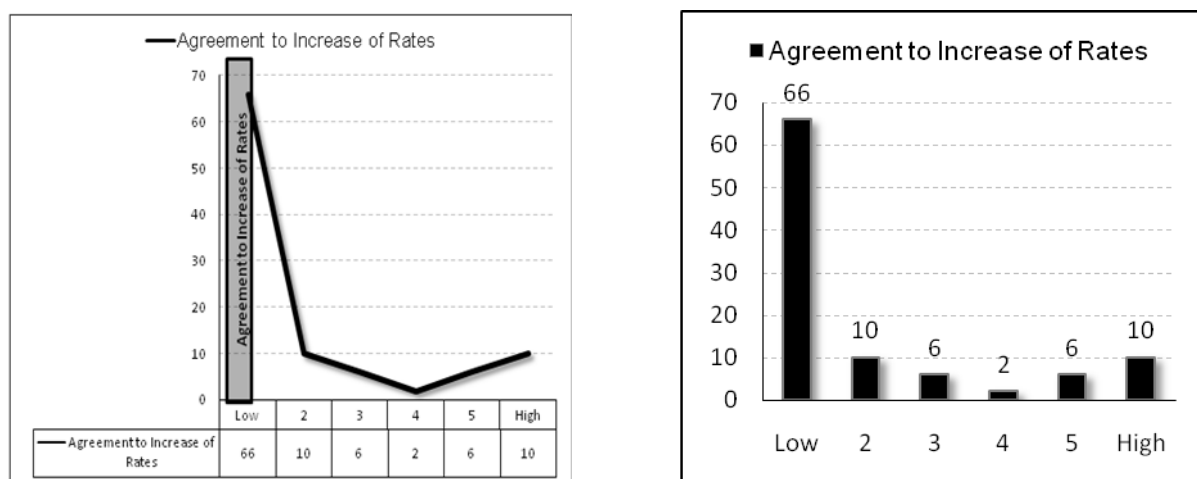
The above line and bar graphs in Figure 7:4 show the response to question 6 in the questionnaire (Appendix 1).

It is evident from these graphs in Figure 7:4 that the mean value of 1.00 is in the centre of the “Bell curve” and that the highest Standard Deviation recorded in the

survey analysis is 1.962. However, with a recorded rating of 64, this high Standard Deviation will have the least spread of data points around the mean/average point. It is also evident that the area that indicates insufficient communication is in the chimney of the “Bell curve”.

Question 7: To what level would you agree that your rates be annually increased to meet Municipal budget according to Section 16 of the Act?

Fig. 7.5: Perception of Annual Increase of Rates: Property Owner’s Agreement



Line Graph 7

Bar Graph 7

The above line and bar graphs in Figure 7.5 show the response to question 7 in the questionnaire (Appendix 1).

Line Graph 7 in Figure 7.5 indicates a median of 1.00, with the lowest mean value of 2.02 recorded, and a Standard Deviation of 1.723, which emphasizes that the

majority of respondents are located within the chimney of the “Bell curve”. This is the second largest objection recorded, namely 66%, on the survey analysis.

The survey data was analysed by applying the descriptive statistical methods of Edelman, D.B. (1986). The descriptive analysis models described by Kryvobokov, M. & Wilhelmson, M. (2007) were also studied for this research model.

7.2 Summary

The interpolation on the survey data was statistically analysed and it was found that all the objectives were successfully addressed. The field survey indicates that property owners experience a desire to partake in their own property valuation assessment. The research found that only 1% of the property owners were visited by a jurisdiction officer for the purpose of the valuation assessment.

CHAPTER 8: CONCLUSIONS AND RECOMMENDATION

8.1 Conclusion

The primarily purpose of this research was to do a literature study on the present valuation assessment system in order to justify the need for property owners to participate in a valuation assessment of their property. Conclusions drawn from the literature study were then verified by means of an empirical study.

It is evident that both the jurisdiction offices and local authorities have an inadequate number of qualified officials with which to assess property valuations effectively. Slack, E., LaFaver, J. & Shpak, I. (1998) stated that “In many countries, poor tax administration is an impediment to implementing the property tax. Often, local authorities do not have the capacity to administer the tax.” Müller (2002) supported the above comment and further added that administrative competence and staff qualifications were insufficient. It is noted that the four most reliable valuation methods are mass appraisal, cost approach, sales comparison, and market comparison. However, these systems are inadequate when it comes to addressing or overcoming the underlying concerns in achieving a transparent valuation assessment. The above statement was contested on the application and enforcement of Section 16, which proved that the present assessment system was in need of modification in order to deliver and enhance a more transparent service.

8.2 Justification of the research

The conclusions are based on the literature study of chapter 4 and chapter 5, which validate the conducting of a field survey analysis. The research and field survey

analysis, with its above frequency graphs, support and validate the success rate of the field survey and its questions. The synopsis that follows discusses the results of the questionnaire.

8.3 Synopsis

Question 1: Satisfaction with the present tax value

Kitchen (1992) stated that property owners could lose confidence in the tax system when unfairness in the valuation assessment reduces or increases the base rate value of the property valuation assessment. McCluskey (1991) stated that the current methods of property valuation fell short of transparency and consistency. Bird & Slack (2004) stated that property owners should participate in the property assessment valuation of their property because of inadequate municipal officials. These statements are corroborated by the results of the Field Survey Questionnaire (Annexure 1). The author is of the opinion that a satisfied property owner will initiate a proactive contribution towards tax payment deliveries, with fewer objections and fewer appeals.

Question 2: Participation in the assessment valuation

Shapiro *et al.* (2010) stated that the location of any property was unique and therefore required a valuation assessment by way of direct capital comparison. This should reflect true market sales. Dillinger (1992) argued that the direct market data

approach was potentially more accurate than the mass appraisal system. This was due to the property owner's involvement during the assessment of his property. Bell & Bowman (2006) stated that because of insufficient and inaccurately recorded sales data in a newly developed area, it was difficult to determine true property value.

Although the present assessment system is in principal the most acceptable system, results of the empirical research show that the property owners of Midstream Estate are convinced (and the author agrees) that the present system can be improved by way of the property owners participation. This will also improve the reliability and accuracy of the present data bank of the local municipal administration system.

Question 3: Merits of assessment on unique properties

Dillinger (1991) stated that there were insufficient visible sales data for unique and upmarket properties available. The mass appraisal assessment system could not determine the true value of the properties and therefore could not be applied. A more complex assessment system is required. Shapiro *et al.* (2010) emphasized that valuation assessment methods should indicate the necessity of taking the special characteristics of each property valuation assessment into account. Bell & Bowman (2006) stated that the value of the individual property was determined by its characteristics and relative market sales. McCluskey (1999) stated that there would always be neighbourhood differences between the subject property and its comparables.

The author supports the above statements and is of the opinion that sufficient field survey interventions with property owner participation are required to accommodate the property valuation process. There is valid reason within the present system for improvement by way of property owner participation. This will ensure a reliable and transparent assessment system.

Question 4: Tax rate too high

Bell & Bowman (2006) stated that properties should be regularly revisited to verify the accuracy of the assessment data. Crosby *et al.* (1998) stated that the correct valuation assessment was vital, otherwise there would be “concerns over the reliability which could change the margin of error as a test of negligence”. Youngman & Malme (1994) stated that property changes should be taken into account when a tax system fails and that this could result in unfair valuation assessments. The author proposes that this problem be addressed by requesting the property owner to submit an updated, standardised information assessment questionnaire on an annual basis. This will address the problem of incorrect data collection in the present system.

Question 5: Objection to current assessment system

Youngman & Malme (1994) and McCluskey (1999) stated that adjusted factors could be derived from average values for groups of properties within a specific location.

These values will not, however, “reflect the true characteristics” of each individual property.

The IAAO (2010) stated that property tax assessments should be based on current market value. The collection of correct and sufficient data was important. Bird & Slack (2002) stated that “poor tax administration was a barrier to implement property tax and that local authorities do not always have the capacity to administer the tax system effectively”.

The author argues that the current assessment system is of little value if the Minister of Finance has the authority to increase the tax rate annually in order to balance the budget. Therefore, it is imperative that a more suitable valuation assessment system be instituted in order to rule out unnecessary increases, which at present defeat the purpose of the entire assessment system.

Question 6: Insufficient communication

The author argues that the percentage value of 1% of property owners in Midstream Estate who had been visited by a valuer indicates that the present system does not communicate sufficiently with the property owners. Mass appraisal assessment is used regardless of whether or not it is applicable to a property. Therefore, field visitations with the property owners’ participation are relevant and important. The field survey conducted for this research study is evidence of the poor communication of the assessment officials in Midstream Estate.

Question 7: Agreement to increase of rates

Bell and Bowman (2006) asked the question what the significance of the property assessment was if the assessed values and sale prices were just political determined numbers and the Minister of Finance was free to annually increase the tax base rate to complement the budget. After the mass assessment was executed the EMM increased its tax rates for three consecutive years by 10%, 11%, and 10% respectively. Bird & Slack (2002) supported Bell's statement and continued that this initiated unfairness. Bird & McKenzie (2001) recommended that tax rates be assessed by residential owners and not by the municipality or the government.

The objections and research questions were reviewed in the research literature and contested by way of a field survey. The statistical analysis of the field survey clarifies the success rate and concerns in the present assessment system. The literature study and statistical analysis indicate that the present property valuation assessment system needs to be amended in order to accommodate the needs of ratepayers. It is found that the current assessment system defeats the purpose of transparency and reflects a philosophy of bureaucracy. This results in the unfairness of the assessment system.

8.4 Recommendation

The research finds sufficient grounds to justify the need for the present property valuation assessment system to be amended in order to accommodate various circumstances, which are presently not attended to.

The various sections in LG:MPRA 6 of 2004 including the research study in the Midstream Estate that relate to the seven questions of the questionnaire (Annexure 1) indicate the following recommendations.

A further research study should be executed in order to establish a sustainable and reliable self-assessment valuation model. This valuation model will accommodate the property owners and will address the shortfalls of the present valuation assessment system as follows:

- a) Satisfaction and transparency will be resolved when property owners partake in their own valuation assessment. This intervention will firstly release the pressure from the local authorities, which at present have too little experienced officials in the field to address the property valuation assessments effectively. Secondly, the participation of the property owners will update the property valuation data, which is currently probably not up to date, as evidenced by the small number of field inspections that were recorded by the field survey.
- b) The assessment of unique properties will be resolved by the implementation of a self-assessment valuation model.
- c) When participation is initiated by way of a self-assessment valuation process, and property owners are allowed to participate in the process, there will probably be fewer objections and appeals, and more transparency in the process.
- d) With this intervention, all parties will be allowed to communicate and this should ensure an equitable valuation assessment outcome.

- e) Lastly, with the above scenarios in place, the unexpected annual increases should be limited due to the fact that a more accurate value assessment system will be recorded than is possible in the case of the present mass assessment system.

The proposed model should address all related questions as identified in the questionnaire. The model should underpin the present system, justify the tax valuation assessment in its administrated procedures and ensure that the unanticipated increase in tax rates, as indicated in Section 16, be limited to locations that are assessed without self-assessment models.

The research indicates that there is a need for property owners to partake in the assessment of their own properties. It is the author's opinion that this intervention will result in a more stable local government budget that is suitable for all municipalities.

It is recommended that should a further research study be executed on this subject matter, it be executed in Midstream Estate, as this area formed the basis of research for the present study. The proposed advanced research should contain a more comprehensive field study and model than is present in this research study, and should focus on an intervention between the appropriate parties.

This intervention will alleviate the need for a greater number of qualified assessors to accommodate and support the local municipal officials and the property owners within the new system. In addition, this is an opportunity for universities to offer property valuation courses that educate the public on the value assessment of their

properties. This research and intervention could result in work in the lower, upmarket, and educational arenas.

It is recommended that should such a need be present in local municipalities, an advanced research study should be executed in order to develop a suitable self-assessment valuation model which could lead to a PhD study.

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ANNEXURE 1: Field Survey Questionnaire

MIDSTREAM ESTATE:

PROPERTY VALUATION TAX RATE

Dear Property Owner:

February - March 2012

STAND NO: NAME AND SIGNATURE:

The present **property tax system** does not make allowance for the property owner to partake in his/her own valuation / assessment process. The current system is not transparent and clear to all property tax rate owners. The Municipality use "aerial photographic and computerized mass appraisal systems" and apply it to all areas and all types of homes. Furthermore, the Municipality annual assessment is based to meet their annual budget (According to Section 16 of 2004: Municipal Property Rates Act).

This **Research** is focused to assist the property owner to partake in a fair and transparent valuation assessment for his/her property tax rate according to his/her knowledge and estimation. According to Section 4 of the above act, it further states that the Municipality has to follow a process of community participation in the rates assessment.

Were you allowed to participate in the valuation assessment of your property? ☐ YES ☐ NO

Has a Municipal officer ever viewed your property for an assessment value? ☐ YES ☐ NO

Do you know that you can debate your property assessment rate? ☐ YES ☐ NO

	QUESTION:	Low					High
	TO WHAT DEGREE / LEVEL :	1	2	3	4	5	6
1	To what level are you satisfied and in agreement with your present assessment tax value?						
2	To what level should the property owner partake in the assessment rate value?						
3	To what level should each property be assessed due to its unique design and merits?						
4	Rate the level of dissatisfaction concerning the high tax rate payment (Section 16)						
5	To what level are you objecting to the current valuation / assessment system? (Section 50)						
6	To what level does the Municipality communicate sufficiently with the property owners prior to implementing tax rate Rand value? (Section 4)						
7	To what level would you be in agreement that your rates are annually increased to meet Municipal budget according to Section 16 of the Act?						

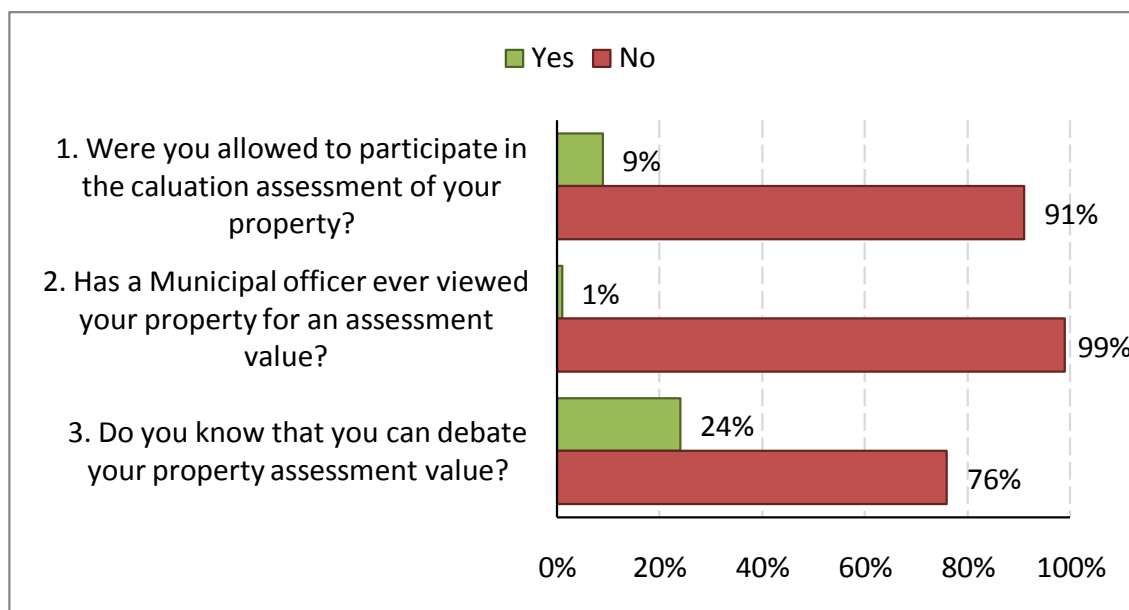
ANNEXURE 2: ANALYSIS: Original variables

		Low	2	3	4	5	High	Total
1. To what level are you satisfied and in agreement with your present assessment tax value?	Count	39	18	18	14	8	3	100
	Row N %	39.0%	18.0%	18.0%	14.0%	8.0%	3.0%	100.0%
2. To what level should the property owner partake in the assessment rate value?	Count	4	0	5	4	18	69	100
	Row N %	4.0%	0.0%	5.0%	4.0%	18.0%	69.0%	100.0%
3. To what level should each property be assessed due to its unique design and merits?	Count	5	5	3	5	20	62	100
	Row N %	5.0%	5.0%	3.0%	5.0%	20.0%	62.0%	100.0%
4. Rate the level of dissatisfaction concerning the high tax rate payment (Section 16)	Count	6	4	7	8	20	55	100
	Row N %	6.0%	4.0%	7.0%	8.0%	20.0%	55.0%	100.0%
5. To what level are you objecting to the current valuation / assessment system? (Section 50)	Count	8	7	5	9	22	49	100
	Row N %	8.0%	7.0%	5.0%	9.0%	22.0%	49.0%	100.0%
6. To what level does the Municipality communicate sufficiently with the property owners prior to implementing tax rate Policy? (Section 4)	Count	64	12	1	1	5	17	100
	Row N %	64.0%	12.0%	1.0%	1.0%	5.0%	17.0%	100.0%
7. To what level would you agree that your rates be annually increased to meet Municipal budget according to Section 16 of the Act?	Count	66	10	6	2	6	10	100
	Row N %	66.0%	10.0%	6.0%	2.0%	6.0%	10.0%	100.0%

ANNEXURE 3: Statistics

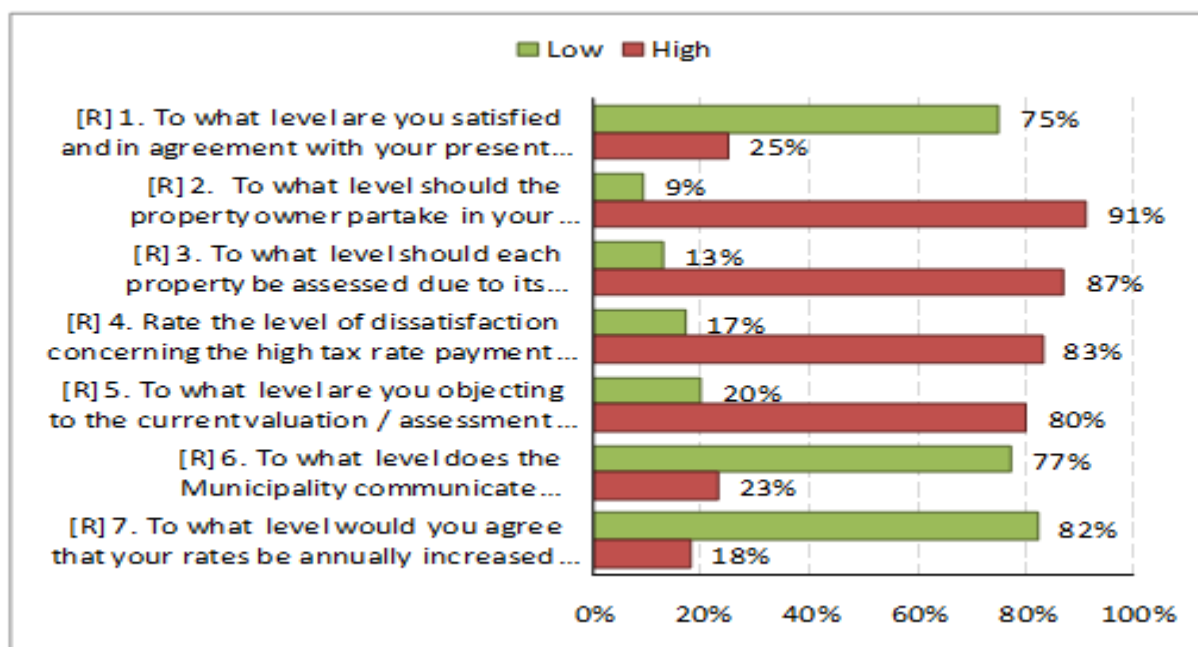
		Yes	No	Total
1. Were you allowed to participate in the calculation assessment of your property?	Count	9	91	100
	Row N %	9.0%	91.0%	100.0%
2. Has a Municipal officer ever viewed your property for an assessment value?	Count	1	99	100
	Row N %	1.0%	99.0%	100.0%
3. Do you know that you can debate your property assessment value?	Count	24	76	100
	Row N %	24.0%	76.0%	100.0%

ANNEXURE 4: ANALYSIS: Original variables



ANNEXURE 5: Recoded variables: 1 – 3 = Low 4 – 6 = High

		Low	High	Total
[R] 1. To what level are you satisfied and in agreement with your present assessment tax value?	Count	75	25	100
	Row N %	75.0%	25.0%	100.0%
[R] 2. To what level should the property owner partake in the assessment rate value?	Count	9	91	100
	Row N %	9.0%	91.0%	100.0%
[R] 3. To what level should each property be assessed due to its unique design and merits?	Count	13	87	100
	Row N %	13.0%	87.0%	100.0%
[R] 4. Rate the level of dissatisfaction concerning the high tax rate payment (Section 16)	Count	17	83	100
	Row N %	17.0%	83.0%	100.0%
[R] 5. To what level are you objecting to the current valuation / assessment system? (Section 50)	Count	20	80	100
	Row N %	20.0%	80.0%	100.0%
[R] 6. To what level does the Municipality communicate sufficiently with the property owners prior to implementing tax rate Policy? (Section 4)	Count	77	23	100
	Row N %	77.0%	23.0%	100.0%
[R] 7. To what level would you agree that your rates be annually increased to meet Municipal budget according to Section 16 of the Act?	Count	82	18	100
	Row N %	82.0%	18.0%	100.0%



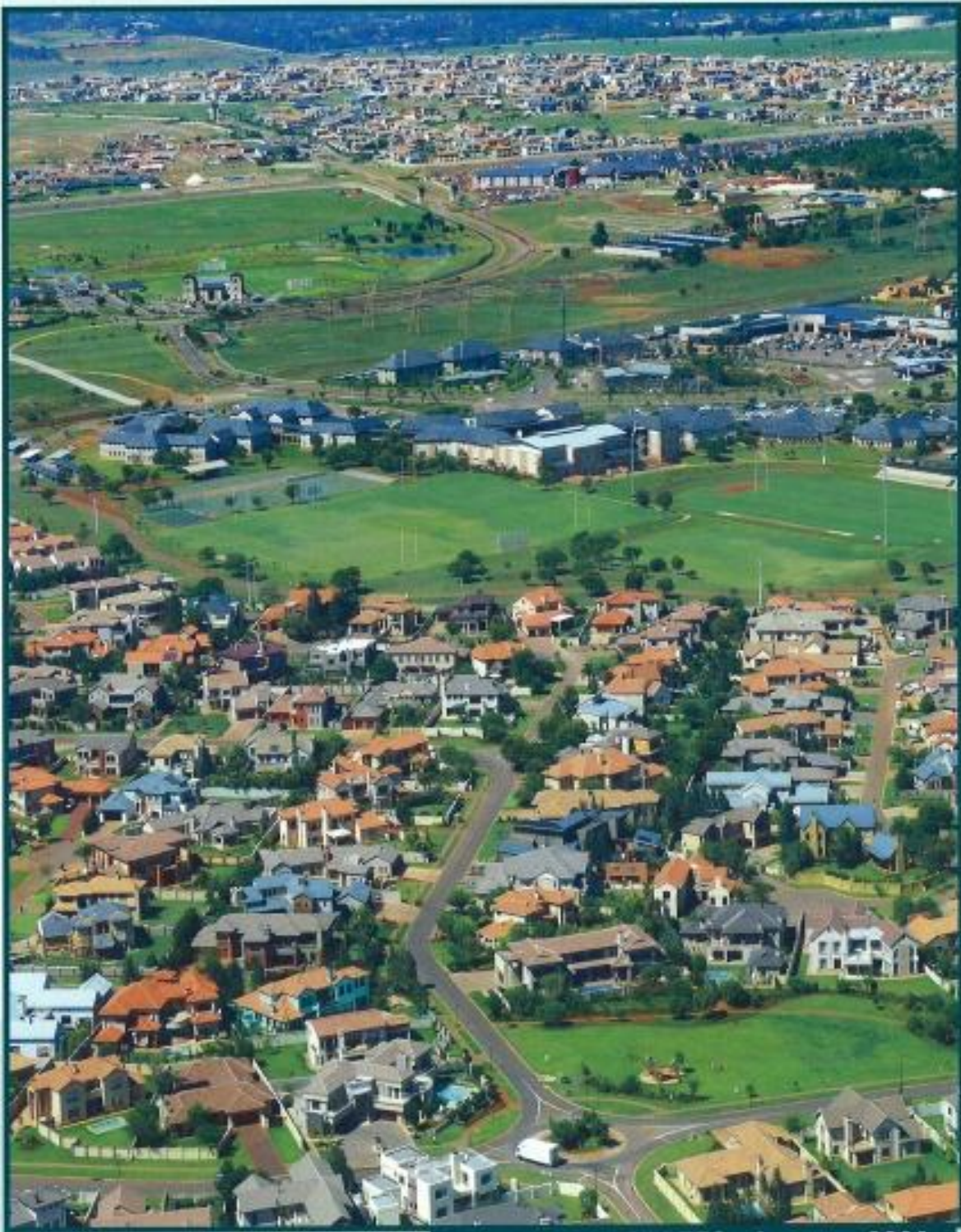
ANNEXURE 6: Location area map of Midstream Estate.



ANNEXURE 7: Location area surveyed of randomly properties selected in research questionnaire of Midstream Estate.



ANNEXURE 8: Sky map: Location of Midstream Estate.



ANNEXURE 9: Photos to follow: indicate ordinary and extreme unique properties:



ANNEXURE 10: Photos to follow show parks in Midstream Estate.

