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The Effect of Neighbourhood Enclosure on Property Values

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2006-11-16T10:33:10Z
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Appendix A: Area Data Sheets

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Rauch, J. (2002): Changing step: crime prevention policy in South Africa in Eric Pelser, *Crime Prevention Partnerships, Lessons from Practice*. The Institute of Security Studies

Schönteich M. and Louw A., (2001) *Crime in South Africa: A country and cities profile*, Crime and Justice Programme, Institute for Security Studies Occasional Paper No 49 - 2001

South African Insurance Association (SAIA) Press Release (2003). *Impact Of Removal Of Booms On Insurance,* (21) July

Thomas, T. (2002): Do boomed suburbs keep out crime?, *www.joburg.org.za/do boomed suburbs keep out crime.htm*. (23) April

Thomas, T. (2003): *www.joburg.org.za/Doomed booms come down.htm* (18) July

Van de Wetering, A. (2000): *Enclosed Neighbourhoods in Perspective,* BSc. Town and Regional Planning Research Report, Pretoria, University of Pretoria

Van Dijk JJM. (2001). Does crime pay? On the relationship between crime, rule of law and economic growth*. Forum on crime and society*, vol 1(1): 1-16.

Vrdoljak, M. (2002): *Place and the Politics of Subjectivity*, MA Thesis, Johannesburg, University of the Witwatersrand

Leedy, P.D. & Ormrod, J.E. (2001). *Practical Research: Planning and Design*, New Jersey: Merrill Prentice Hall

Louw, A. (1998). *Crime in Pretoria, Results of a victim survey*, August

Mabin, A. (1993). "Conflict, continuity and change: locating 'Properly planned native townships' in the forties and fifties". *Proceedings: Symposium – South African Planning History.* Pietermaritzburg, 6-7 September 1993

Mbeki, T. (2004) *State of the Nation Address of the President of South Africa at the opening of Parliament.* Cape Town, The Presidency (6) February

Moffat, R.E. (1983). Crime prevention through environmental design – a management perspective. *Canadian Journal of Criminology* 25, 1. pp. 19-31

Napier, M., du Plessis, C., Libermann, S., Kruger, T., Shaw, M., Louw, A. and Oppler, S. (1998). *Environmental Design for Safer Communities.* Pretoria, Draft CSIR Publication.

Napier, M., du Plessis, C., Meiklejohn, C. Vosloo, L. and Lungu-Mulenga, A. (1999). *The State of Human Settlements Report: South Africa 1994 – 1998.* Contract Report by the CSIR for the Department of Housing, South Africa.

Naudé, B. (2003). *Can Public Road Closures Reduce Crime Effectively? ,* Institute for Criminological Sciences UNISA, Pretoria, 2003

Naudé B. (2003). The effectiveness of public road closures in suburban areas as a crime reduction measure. *Security focus*, vol 21(6): 34-36.

Newman, O. (1973). *Defensible Space*. New York: Collier.

Poyner, B. (1983). *Design against crime*. Durban: Butterworths

Harris, B. (2001). Foreign Experience: Violence, Crime and Xenophobia during South Africa's transition, *Violence and Transition Series, Vol. 5,* August. Centre for the Study of Violence and Reconciliation

Honey, P. (2003). Private Security Industry Feeling The Pinch, *Financial Mail* (14) November

Jeffery, C.R. (1977). *Crime Prevention through environmental design.* Beverly Hills, California: Sage.

Johannesburg Roads Agency Press Release (2003). *Implementation Process Kicks-Off On Illegal Closures,* (18) July

Johannesburg Roads Agency Press Release, (2003). *Removal of illegal road closures continues,* (17) September

Kruger T. and Landman K. (2003). "The Reality of Law Enforcement: Facing common challenges to ensure Local Governance", *CSIR Building and Construction Technology Paper delivered at the Institute for Municipal Law Enforcement of Southern Africa (IMLE) Conference*, (30-31) October, Pretoria

Landman, K. (2000a). *Gated Communities: An international review*, Boutek Report Number: BOU/I 186, CSIR

Landman, K. (2000b). *An overview of enclosed neighbourhoods in South Africa*, Boutek Report Number: Bou/I 187, CSIR

Landman, K. (2002). *Gated communities in Brazil and South Africa: Comparative Perspectives*, Boutek Report Number BOU/I 210, CSIR

Landman, K, & Schönteich M. (2002). Urban Fortresses: Gated communities as a reaction to crime, *African Security Review Vol 11 No 4*

7 References

Aromaa K & Heiskanen M. (2002). Fear of street violence in Europe. *International journal of comparative criminology*, vol 2(1): 119-132.

Blakely, E J. and Snyder M G (1997). *Fortress America, Gated Communities in the United States,* Lincoln Institute of Land Policy Cambridge, Massachusetts: Brookings Institution Press Washington D.C.

Bremner, L. (1998). "Crime and the emerging landscape of post-apartheid Johannesburg" in H. Judin and I. Vladislavic, *blanc_architecture, apartheid and after*, Rotterdam: Nai Publishers.

Cilliers, S.P. (1978). Environmental design, urban planning and crime prevention. *The South African Journal of Criminal Law and Criminology 2, 2.*

Congress of South African Trade Unions (COSATU) (1997) *Submission On the Discussion Document on Local Government* Presented to the Department of Constitutional Development (21) August

Gauteng Central MapStudio Street Guide, (2004). ISBN 1-86809-737-4 Struik New Holland Publishing

Graham J & Bennett T. (1995). *Crime prevention strategies in Europe and North America.* Finland: Academic Bookstore.

Grobbelaar, M.M. (1988). Crime Prevention through environmental and architectural planning in CMB Naudé and R Stevens *Crime Prevention Strategies*, De Jager Haum

- The study is extended to include all enclosed neighbourhoods and adjacent areas in South Africa.
- The time period of the study is lengthened to include the complete property cycle. This may not be possible as since the emergence of enclosed neighbourhoods in South Africa the residential property market has been in a bull (growth) phase.

6 Conclusions and recommendations

The hypothesis that was posed was that the implementation of neighbourhood enclosure increases property values. It has been shown that the hypothesis is true. There are many complex reasons for this as detailed in the literature survey but the major reason highlighted by the email survey is that property buyers attach a higher value to enclosed areas, as they perceive them to be safer and thus more desirable.

Enclosed neighbourhoods have emerged at an enormous rate throughout South Africa driven by many reasons. This has happened in parallel to significant social problems that have worsened progressively since 1994. South Africans of most race and income groups perceive enclosed neighbourhoods as a way of dealing with these problems but in reality they simply treat the symptoms. This is sufficient to raise demand and property values in enclosed neighbourhoods by more than values in open neighbourhoods.

It was shown that the hypothesis is true across all value classes affected by neighbourhood enclosure and that banks do not consider the enclosure status of a property to grant home loans.

Neighbourhood enclosure has many positive and negative social, financial and logistical complications. The following important implications must be noted.

- Valuations whether for municipal, tax or selling purposes can be adjusted based on the enclosure status of a property.
- Potential applicants and authorities involved with neighbourhood enclosures can use the hypothesis for or against neighbourhood enclosure.

Based on the results of the research it is recommended that

conclusion to be drawn that despite all the issues and problems associated with neighbourhood enclosure the majority of residents in the middle to upper income brackets support this view.

5.3 Amount and value of bonds granted in an area

The amount of bonds granted was not influenced by whether the property was in an enclosed or open area. This statistic is misleading, as it does not indicate how many bonds a bank in a specific area rejected. It merely shows how transactions were financed. Accordingly areas of higher income show lower official lending rates as other methods of finance are used. The relevant statistic here is the value of the bond granted. Eliminating the effect of alternate collateral by ignoring all bonds greater than the value of the property, the research shows that banks appear to ignore the enclosure status of the immediate area.

properties in these enclosed areas than in the adjacent open areas. The following reasons are proposed as to why this is the case

- The buyer is extremely security conscious.

  Most buyers in the housing market but especially in the upper end of the market are extremely security conscious. They perceive that neighbourhood enclosure minimises the risk of crime (both violent and petty). This is reflected in their behaviour and was correlated by all the interviews and informal e-mail surveys conducted with buyers, residents and estate agents. It is further illustrated by the amount of properties available in the security (and golf) estates markets. This result continues to be used to good effect by property marketers.

- There is a smaller pool of sellers in the enclosed area.

  This theory though untested suggests that a smaller amount of available property stock in enclosed areas contributes to the higher demand for properties.

5.2 Increases in property prices

Increases varied considerably between areas. The overriding statistic was that in all cases, prices increased by *more* in enclosed areas than in open areas over the same period. This statistic proves conclusively the hypothesis that neighbourhood enclosure increases the value of properties within the enclosure when compared to similar properties in adjacent open areas. A corollary to this prevalent in higher value properties is that price increases in enclosed areas are larger than in lower value areas. This finding was corroborated by most of the interviews and the survey undertaken.

The main reason for the increased demand in enclosed areas is that South African property buyers perceive enclosed areas as safer than open areas, and are willing to pay more because of this. All estate agents and residents surveyed corroborated this view. Interpretation of the hypothesis allows the

An important distinction in methodology must be made at this point. The aim of this research is not to research the difference in value between open and enclosed areas or even the increase in value in areas before and after enclosure. The aim of this research is to ascertain the effect of neighbourhood enclosure on property values within a fixed timeframe. This would mean that all external factors affecting property values are kept constant during the research period with the following exceptions.

- Property location

  The location of the suburbs and areas researched are constrained by the following factors

  - They must be in close proximity
  - They must be in Gauteng
  - The property must fall within an enclosed or open area

- Property size

  This is factored into the calculations and is not material to the outcome.

- Property type.
  - The property must be a residential property
  - The property may be part of a sectional title scheme or security village if the adjacent open or closed area contains similar schemes or security villages

Most of the areas surveyed had either properties of similar value or the properties in the enclosed neighbourhoods had higher values. Properties were surveyed across the price ranges R193/m^2 to R2674/m^2. Property values were found to be either similar in adjacent open and enclosed areas or more expensive in enclosed areas. The latter trend was evident in higher value properties. This is surprising as the areas researched were selected on the basis that the houses were of a similar nature, influenced by the identical surrounding areas and were subject to the same rates and taxes. The immediate interpretation of this differential is that there is a higher demand for

5 Interpretation of results

5.1 Property Prices

All situations examined showed that property values in enclosed areas increased by more than those in open areas.

As seen in the results of the research, property values generally in Gauteng in all areas increased during 2003. This is reflected in the ABSA house price survey that shows that house prices in the middle class category have been increasing since the year 2000 every month.

Table 2 - ABSA Middle Class House Price Survey March 2000 - June 2004

Code	ABSAF;MJH00PPL	Month on Month % Increase	ABSAF;MER00PPL	Month on Month % Increase
Description	Middle class - Gauteng - Johannesburg: New & Old - All Sizes - Purchase Price - Smoothed (Unit: Smoothed Rand; Source: ABSA HOUSE PRICE DATABASE)	Middle class - Gauteng - Johannesburg: New & Old - All Sizes - Purchase Price - Smoothed (Unit: Smoothed Rand; Source: ABSA HOUSE PRICE DATABASE)	Middle class - East Rand: New & Old - All Sizes - Purchase Price - Smoothed (Unit: Smoothed Rand; Source: ABSA HOUSE PRICE DATABASE)	Middle class - East Rand: New & Old - All Sizes - Purchase Price - Smoothed (Unit: Smoothed Rand; Source: ABSA HOUSE PRICE DATABASE)
31-Mar-00	307390.7	3.49	222666.6	1.48
30-Jun-00	318131.5	4.52	225968.3	4.41
30-Sep-00	332519.7	6.07	235932.5	3.34
31-Dec-00	352691.5	3.06	243802.1	2.36
31-Mar-01	363467.8	3.67	249552.7	4.53
30-Jun-01	376791.9	3.80	260857.3	5.94
30-Sep-01	391095.8	4.26	276357.3	7.94
31-Dec-01	407745.5	5.52	298291.9	5.86
31-Mar-02	430235.6	6.09	315764.2	4.31
30-Jun-02	456437.9	3.48	329368	3.49
30-Sep-02	472340.6	2.04	340847.6	0.92
31-Dec-02	481954.2	1.79	343992.1	3.65
31-Mar-03	490601.8	6.02	356550.9	4.91
30-Jun-03	520153.1	5.88	374056.5	4.52
30-Sep-03	550745.8	2.75	390969.8	9.12
31-Dec-03	565893.8	5.63	426616.7	9.07
31-Mar-04	597725.5	2.47	465308.6	5.48
30-Jun-04	612495.2		490806.2	

can be made that when it come to contributing to a scheme operating in an area, residents are marginally more unlikely to participate[22].

4.2.3 Estate agents.

An informal email based survey was sent to 30 estate agents as described in 3.3 and the following identical results were obtained from 10 respondents in response to the following questions.

- Do buyers pay more to live in enclosed (boomed) neighbourhoods? (Not security villages or complexes)
  All responded that buyers are prepared to offer more to live in an enclosed neighbourhood.
- Do buyers request houses are in enclosed neighbourhoods?
  All responded that buyers do often request an enclosed area as a preference
- Do you use enclosed neighbourhoods as a marketing tool?
  All estate agents highlighted the closures as a benefit/tool in the marketing.

The following question has varying responses.

- Are more houses sold in enclosed neighbourhoods or open areas?
  Six of the estate agents who responded sold more properties in enclosed than open areas but the four others stated that in this market where there are more buyers than good properties for sale, the supply/demand factors will indicate that well priced, well maintained properties will sell whether in enclosures or not.

[22] In enclosed areas participation is always mandatory unless the area takes the form of a privately controlled security village

4.2 Interview and Email survey results

4.2.1 Residents

Informal interviews conducted amongst residents who lived in enclosed and open neighbourhoods yielded the following results. 87% of residents in enclosed and open areas believed that enclosure was an effective method to reduce crime. These residents believed that neighbourhood enclosure would increase property values, as they perceive it desirable to live in an enclosed area. Some 60% of residents living in open areas felt that if they could, they would prefer to live in an enclosed area. It must be noted that these results cannot be construed as accurately representative as the sample size of 8 interviews was too small. They merely provide a contrasting view to the results obtained.

4.2.2 Controlling bodies of enclosed neighbourhoods

Two interviews were conducted with principal members of a controlling body of a large high-income enclosed area and the following comments were received on behalf of the controlling body.

The controlling body

- Believed that neighbourhood enclosure was an effective means of controlling crime and had police statistics to prove it[21].
- Believed that property values increased significantly as a result of neighbourhood enclosure viewing this as a fortunate consequence of neighbourhood enclosure.
- Actively uses the perception that property values increase as a result of neighbourhood enclosure to encourage residents to join the enclosure scheme.
- Experienced a participation rate of 60% of residents. If this is contrasted with the results on the desirability of living in an enclosed area obtained in the informal interviews, the deduction

[21] The interviewer did not request these statistics, as they did not form part of the target research area.

4.1 Results summary

4 Presentation of results

The summary sheet on the next page presents the results of the empirical research. It is divided up into the six suburban areas surveyed. All results obtained are assessed and illustrated in the comments column. Only valid results where sufficient comparative base data was available are highlighted and used.

In each area the following is calculated and comparisons made between properties in open and closed areas.

- The price per square metre of property is compared to ensure that the types of property researched are similar in nature.
- The change in price for a time period of six months.
- The percentage number of bonds granted relative to the number of property transfers in an area.
- The percentage value of the bond relative to the property transfer price.
- The percentage value of the bond relative to the property transfer price excluding bonds greater than 100%(where bonds larger than the property transfer price are taken for loan purposes)

the perceptions this generates. This was done by examining areas that are close to each other and contain similar types of properties and owners.

- The sale may have conditions and limitations.
- Prior to the sale there may not have been a reasonable period (having regard to the nature of the property and the state of the market) for the proper marketing of the interest and the agreement of price and terms for the completion of the sale. In areas like Bedfordview where demand is high, and speculators abound, reasonable time frames may be completely ignored.
- The market in a particular area may be subject to additional bids by purchasers with special interests. These can include but are not limited to
    - Speculators
    - Developers
    - Government (e.g. for expropriation)

The actual market price reflects the following consideration given by buyers

- The alternate use value that reflects the value of the property as a vacant and available property that may be used for a purpose other than that it is currently used for.
- The existing use value where real estate will continue to be owner occupied for some time to come.
- Physical aspects about a property (the view, type of house, size of land and house, security features etc)
- Perception of the neighbourhood and suburb in terms of
    - Security
    - Access to amenities, schools, shops
    - Class of neighbourhood.
    - Location

The research is based on the premise that most of the above factors are kept as constant as possible with the exception of whether an area is enclosed and

3.8 Validity and reliability

Validity of the research report refers to the “accuracy, meaningfulness, and credibility” of the study as a whole (Leedy & Ormrod, 2001:103). The purpose of the study was to determine if property values are influenced by the enclosure status of an area. Reliability examines how consistent results are within a study (Leedy & Ormrod, 2001). For this research to be valid and reliable the accuracy and credibility are the most important features. As a way of ensuring the reliability of the research so that the same results can be obtained should the development of the research be repeated or refined, the assumptions that go into determining the range and the impact of the input have been closely documented and substantiated.

3.8.1 Internal validity

According to Leedy and Ormrod (2001:103), internal validity refers to the extent to which the researcher is able to draw “accurate conclusions” from the study. This involves reducing the possibility that the research results came about due to reasons other than those concluded in the study. In order to ensure internal reliability of the results all areas have been selected from the Gauteng Central MapStudio 2004 Street guide and inspected physically to determine if the majority of the properties fall into open or enclosed areas as it extremely time consuming to inspect each property transferred.

3.8.2 External validity

External validity refers to the extent to which generalisations into other areas can be made from the results of a specific study (Leedy & Ormrod, 2001). This research has focused on actual open market property values obtained from the deeds office. These values are the actual prices paid for property. This actual data allows us to preclude the following assumptions that are made for the theoretical open market value. This assumes that a property is valued at the best price at which an interest in real estate might reasonably be expected to have sold unconditionally for a cash consideration on the day of valuation. (Schloss, Property Valuation 2002)

3.6 Data reliability

Reliability according to Leedy & Ormrod (2001) is the consistency with which a measuring instrument yields a certain result when the entity being measured hasn't changed. The data used is the original sample data obtained from the deeds office and is deemed reliable.

3.7 Data analysis procedure

- The information from the Deeds Office was converted into a comma separated values file that was transferred into a Microsoft Excel spreadsheet.
- As all the information up to this stage is in text format, all relevant text information was converted into numerical format.
- The information was then sorted according to erf number.
- Each property transfer was thereafter coded according to if it was in a boomed of area or not.
- The price per m2 was computed, to negate the varying property size for each property transfer.
- The price per m2 was copied into a date column according to when the transfer took place
- The following was computed for properties in gated and open areas.
    - Average price per m2 for that year
    - Change in price per m2 between years.
- The number and value of bonds granted for properties transferred in open and gated areas was also analysed using the following methodology
    - Percentage bond values were calculated.
    - All bonds over 100% were excluded as these are reliant on other forms of collateral
    - All the above bond related information was averaged and compared.

An e-mail based survey was also conducted amongst estate agents who were asked to respond to the following set of standard questions.

- Do buyers pay more to live in enclosed (boomed) neighbourhoods? (Not security villages or complexes)
- Do buyers request houses are in enclosed neighbourhoods?
- Are more houses sold in enclosed neighbourhoods or open areas?
- Do you use enclosed neighbourhoods as a marketing tool?

Interviews and the survey were undertaken as property values are strongly influenced by perceptions.

3.4 Data specifications

The data collected consisted of adjacent open and enclosed neighbourhoods and was made up of deeds office records from the middle of 2002 till mid 2004 for the following areas in Gauteng.

- Klevehill, Paulshof and Petervale
- Observatory, Cyrildene and Linksfield
- Moret, Malanshof, Northwold, Bromhof and Boskruin
- Lombardy East and West, Bramely Manor, Kew, Lyndhurst, Savoy Estate and Rembrandt Park
- Buccleuch and Kelvin
- Olivedale and Bloubosrand
- Edenvale
- Morninghill
- Bedfordview

3.5 Data collection

The author purchased the data at his own cost from the South African Deeds Office using the WinXfer[20] computer program.

[20] WinXfer Plus version 4.0.0 November, 2003 Copyright © WinDeed Systems, 2003

The following points were considered in selecting the areas to be analysed

- One area is enclosed and the other is not
- Contain properties of a similar size
- Contain residents who fall into a similar income bracket
- Contain houses that have similar relative values

The areas were randomly selected and analysed as described below.

A comprehensive survey of property transfers dating back as many years as is necessary was undertaken to determine

- Values (price) of property transferred.
- Size of property transferred
- Date of transfer
- Number of bonds and value of bonds granted

This allowed the computation of the following unknowns

- The value of properties in enclosed neighbourhoods vs. “open” neighbourhoods
- Perception by banks of enclosed neighbourhoods in terms of bonds granted and % value of bonds granted relative to the purchase price.
- Rate of transfer of ownership i.e. secondary market

3.3 Interviews and surveys

Interviews were conducted on an informal and formal basis to determine opinions of crime and the perceptions of the effectiveness of neighbourhood enclosure with the following respondents.

- Residents
- Controlling bodies of enclosed neighbourhoods.

3 Research methodology

The following methodology was undertaken to research property values within boomed areas.

3.1 Literature survey

A literature survey was conducted into the following relevant sections of research to provide a background for the research and verify the status of information relating to the research topic.

- Property values in enclosed neighbourhoods or gated communities. This uncovered minimal if non-existent research in this area.
- The experience of gated communities in the international community.
- The reasons behind enclosed neighbourhoods
- The South African crime and economic climate
- Issues about enclosed neighbourhoods

It is important to note that this research does not undertake to establish the effectiveness of enclosed neighbourhoods but in focussing on the main topic touches on the many other relevant issues surrounding the topic.

3.2 Empirical Research (Data collection)

The empirical research was conducted to find out if the enclosure of a neighbourhood has any effect on property values. It was conducted as follows

- Maps were obtained of target areas showing township divisions from the town planning authorities at the relevant town council.
- A physical survey of pairs of neighbouring townships was undertaken to determine the extent of gating in a selected area.

- Surveillance

Traffic Control

- Traffic calming (use of speed bumps and circles)

Community Building

- Of sustainable communities
- Of unified and active communities

2.16 Alternate research topics

Based on the literature survey conducted, the following alternate research topics are proposed.

- Blakely & Snyder (1997) note that that in the US gates are normally a futile attempt to stop in the inevitable (Crime, traffic etc). Is this the case in South Africa?
- Does neighbourhood enclosure cause the sense of community to break down, increase or does it stay the same?
- Does enclosing neighbourhoods create walls between citizens or are they (the people behind the fences) refugees that threaten quality of life?

2.17 Conclusion of literature review

The complex reasons for neighbourhood enclosure have been explored in their historical and economic context. Social consequences have been documented and are explored in detail above. The above literature review illustrates that the economic consequences of neighbourhood enclosure on property values have not been explored in any great detail by authors in the field of neighbourhood enclosure. This research attempts to address that gap.

The drivers of the growth in neighbourhood enclosure identified in the literature review are tested in the empirical research below.

In design of a neighbourhood enclosure the following environmental and architectural planning strategy is taken into account

- Territoriality
    - Creation and maintenance of boundaries
    - Reducing accessibility and opportunity for crime

This is achieved by the creation of barriers with the purposes of obstructing potential criminals in committing crime (Newman 1973:3 as reported in Grobbelaar, 1988:199)

After enclosure streets become safer as people move more freely which leads to an increase of surveillance (Poyner, 1983 as reported in Grobbelaar, 1988:203)

Methods of increasing territoriality include the use of

- Obstructions like fences, gates, and flowerbeds
- Physical barriers like fences, gates and booms
- Use of living barriers like guards and police

These cause movement to be controlled and enforce the territoriality of an area.

2.15 Alternatives to gating

The following are alternatives to gating.

Crime prevention

- Target hardening (other than gating)
- Community policing

Situating windows (guardhouses) at strategic points and/or done by residents (in being observant in their daily activities)

- Access control

  I.e. To limit access to an area. Kruger and Landman (2003:6) note that certain types of criminal events and sites are often deliberately chosen for their ease of access to escape routes by the offender prior to perpetrating the crime. Examples of this include houses or neighbourhoods near open land and hijackers making use of quick escape routes (e.g. highways). Similarly, the availability of access and escape routes also add to the safety of potential victims.

All the above points overlap to contribute to reducing the vulnerability of an object such a neighbourhood (Moffat 1983, 22-23 as reported in Grobbelaar, 1988:195). Kruger and Landman (2003:4) note that if changes are made to the built environment to reduce crime, offenders respond by

- Changing their (criminal) behaviour
- Crime shifts its locale
- Changing the type of crime

Environmental design can therefore not always be totally preventive and for this reason crime prevention measures require constant review to continue to ensure their effectiveness.

The Westinghouse National issues Centre (Poyner 1983: 10 – 11 as reported in Grobbelaar, 1988:196) makes similar recommendations to reduce neighbourhood crime. These were implemented in a study and that conclusively reduced crime. They include:

- Surveillance – To increase the criminal's risk of being observed, identified and arrested.
- Control of people's movements – By fencing, gating an access control
- Motivational reinforcement

- Defensible space

  This is a model according to which a residential area creates the impression that it protects itself and its residents exercise maximum control over the area. An example of this is for a property or area not to project the image of urban decay, which can attract crime.

- Support for crime prevention programs

  Programs designed to help residents discourage intruders and increase awareness.

- Territoriality

  Redesign of outdoor areas to foster the feeling of ownership as this improves the likelihood of passive observers intervening (as modulators of a crime).

- Reducing the vulnerability of an object

  This is also known as target hardening. It is achieved by placing of obstacles in the way of potential criminals (e.g. fences). I.e. it makes it physically more difficult for the criminal to commit a crime. Unfortunately as Kruger and Landman (2003:2) note, this form of control has many adverse consequences that need to be considered and weighed up against possible benefits. These are best illustrated by examples such as high walls that may prevent crime from happening but may also assist it by preventing observation and action from passers-by.

- Formal surveillance

  E.g. Cameras, neighbourhood watches[19], security patrols

- Natural or passive surveillance

[19] System whereby members of the community take turns in patrolling their neighbourhood

2.13.2 Theory of defensible space

Jeffery 1977:41 (as reported in Grobbelaar 1988:191) notes that, “It is better to drain a swamp than to swat the flies in it.” This applied to neighbourhood enclosure implies that that the larger area that is controlled around the area where crime is feared, the better chance there is of having it controlled. This introduces the concept of defensible space. Cilliers (1978:119) as reported by Grobbelaar (1988:192) define this as:

“Physical structuring in the environment by means of layout, planning and design such that a normative system of social control can assume its rightful place in community life.”

Defensible space makes use of symbolic, physical barriers and improved surveillance opportunities. It refers to an area in which a latent territoriality is created at the same time as a sense of community. I.e. Any potential criminals are made aware that residents (and /or a security company) control an area.

Defensible (territorial) space in a neighbourhood is comprised of (Newman 1973:3 as reported in Grobbelaar, 1988:192)

- Territoriality – Recognisable boundaries
- Natural surveillance – Windows, guardhouses
- Image – The design must work against the impression that residents are vulnerable to crime.
- Milieu – Positioning of buildings

2.14 Environmental Planning Strategies followed by communities implementing neighbourhood enclosure

Moffat (1983:22-23) as noted by Grobbelaar (1988:193-195) proposed the following strategies for the prevention of crime by means of environmental planning

attempt to adhere and take into account the following principles when they are being planned. Grobbelaar (1988:188)

- People and their physical environment cannot be separated.
- Crime prevention by means of environmental planning (application of preventative measures in the living environment)
- Installation and use of equipment that obstructs and impedes the intrusion of unauthorised people. This equipment can form either a symbolic (E.g. flowerbed) or a physical barrier like booms and fences. These are designed to prevent street based or street emanating crime. E.g. Hijacking, loitering, theft.

2.13.1 Crime Perception

Grobbelaar (1998:189) further notes that a person's perception of crime will determine his attitude to it. This is influenced by

- Age
- Place of residence
- Friends
- Occupation

Many people perceive crime is increasing as many media sources sensationalise and exaggerate crime. The opposite perception is that it is decreasing, through sources such as government publications. Often as a result reality is not always represented correctly. One of the consequences is that booms may be erected or removed on this basis

communities is not a sustainable option to fight crime. The Brazilian experience shows that long-term disadvantages outweigh short-term benefits.

2.13 The theory on why neighbourhood enclosure prevents crime.

Grobbelaar (1988:187) reveals how crime can be prevented through environmental and architectural planning. He notes the following

"Prevention of crime through architectural and environmental planning can be defined as the provision of clearly demarcated areas or structures, which by means of design or construction of physical and /or of symbolic obstructions are of such a nature that people can be part of the planning. These obstructions must be designed to allow observation and thus control of people's actions."

It is relevant to note that the government through the National Crime Prevention Strategy (NCPS) tacitly supports the principle of reducing crime through environmental design. (Rauch, 2002:9)

Kruger and Landman (2003:1) note that environmental planning in South Africa is encompassed by

- Physical planning and the planning approaches used at the strategic level;
- Detailed design of the different elements - for example, the movement system and the roads, the public open space system, individual buildings on their separate sites, etc
- The management of either the entire urban system or the different elements and precincts that make up the urban area.

Neighbourhood enclosure is a technique that makes use of this definition. Fences, guardhouses and booms clearly demarcate areas that allow observation and clearly control people's actions. Neighbourhood enclosures

2.12 Long-term impact of neighbourhood enclosures

Landman notes the following long-term effects caused by neighbourhood enclosures. (Landman, 2002:29)

- Change in urban development patterns
- Changes in urban use patterns
- Change in daily activities and way of life
- Spatial and social impact

  This takes the form of fragmentation exacerbated by physical boundaries. The following consequences arise
  - Privatisation of public space
  - Emphasis of separation and division
  - Increasing distances between social groups
  - Discrimination against the majority users of public space (typically the poor)
  - Stereotypes are created between social groups and crime
  - Compact developments (E.g. High rise flats)
  - Accessibility problems
  - Social repercussions such as
    - Higher fear levels
    - Suspicion amongst the “enclosed” and the “unenclosed”. Naudé (2003) notes that Graham and Bennet (1995:68) corroborate the point that ‘the use of situational measures on their own can lead to a kind of ‘fortress’ mentality, as residents become increasingly security conscious and withdraw from the social environment which in turn can lead to increased feelings of isolation and fear.
    - Vulnerability of those who live in unenclosed areas.

In South Africa there is a need to balance short-term needs with long term planning and social visions and costs. In the light of the above Landman (2002) notes that in her opinion based on the Brazilian experience, gating

2.10 Spatial Trends

The following are spatial trends (Landman 2000b, Napier et al, 1999:3) typical to regions containing enclosed neighbourhoods. They give an indication of the prevailing conditions that may lead to neighbourhood enclosure.

- Well developed Central Business Districts (CBD)
- Well developed white suburbs
- Poorly developed black suburbs
- Numerous informal settlements

In South Africa development is regulated by the Integrated Development Plans that are in place in most municipalities.

2.11 Responses to Crime

Those who can afford the measures below in response to crime, undertake the following reactions

- Target hardening that takes the following forms
    - Fencing
    - Intercoms
    - Cameras
    - Alarms
    - Burglar bars and security gates
    - Public and Private space hardening by means of neighbourhood enclosure typically done with the use of fences, booms and guards.
- Moving to heavily fortified domiciles (enclosure) such as security villages
- Neighbourhood watches
- Foot patrols (guarding)

that there have been very few instances where crime has been proven to have been reduced.

Enclosure of a neighbourhood revolves around restricting access to the area to achieve the principle of defensible space[18]. This can be done by many methods as described below.

2.8 Types of barriers

The following types of barriers are used to enclose neighbourhoods.

- Fences
- Road layout - Through the use of town planning schemes roads are set out so that there are limited entrances to suburbs allowing access to either be controlled or monitored.

2.9 Similarities between the United States and South Africa

As noted by Blakely & Snyder (1997) in the US and in South Africa there are many instances of enclosed communities being bordered by communities of lower incomes. Blakely & Snyder further note that gates simply shield but do not address underlying problems (crime or social).

Blakely & Snyder (1997) have noted that typically in the US there are two responses to crime or fear of crime. Either residents leave an area or barricade their areas. In South Africa this theory of leaving an area can be extended to include the phenomenal growth of security village developments. (Landman and Schönteich, 2002). This growth takes place in new and existing areas and has been driven (and continues to be) by huge demand.

[18] This principle states that if a space is defined it can be protected (defended)

agents and insurance companies also seem to propagate this view, which can contribute to inflated property prices and a distortion of the property market (Naudé 2003). Naudé (2003) further notes that the tremendous escalation in the number of public road closures and security villages may eventually even have a negative influence on South Africa's economy as a whole.

A South African Insurance Association (SAIA) press release (21st July 2003) notes that the practice of insurers charging less to clients in enclosed areas may be affected if the enclosures have been removed. The release goes on to acknowledge that insurers do perceive enclosure to contribute to the lowering of the risk of crime.

2.7.8 Threats and Perceptions

What perceived threats drive residents to enclose their neighbourhoods?

- The threat of crime (especially violent crime) occurring in the neighbourhood
- Changing crime patterns and socio economic conditions in South Africa.
- Safety
- High levels of spiralling violent crime
- Shelter from social deviations (Social Issues)
- Convenience
- Traffic reduction
- Insulation from problems
- Inadequate police protection
- Fear – Worry about becoming a victim

Enclosure of neighbourhoods has been touted as a counter to the above trends of increasing crime but this has not been comprehensively proven in South Africa. In the United States Blakely and Snyder (1997:100) have noted

2.7.6 Management of neighbourhood enclosures

Management of neighbourhood enclosure is typically done through the following schemes (Landman 2000b: 23-24)

- Residents Associations
- Section 21 (not for profit) companies
- Security companies
- City Improvement Districts (CID)

Normally a scheme is chosen to achieve a combination of the following

- Power
- Legal capacity
- Level of representation
- Participation
- Levies (finances)

As mentioned above if these schemes become too powerful they could affect local government through

- Micro-government structures
- Private municipal services
- Withdrawal of rates and tax payments by residents

2.7.7 Financial Benefits

Residents in gated areas in the US have called for and are receiving tax benefits based on the services they have taken over (privatised) (Blakely & Snyder, 1997).

The effect of neighbourhood enclosure on property values is the subject of this discourse. It has not been studied in this country although in the US Blakely and Snyder (1997:154) find no evidence of greater price premiums or stability. Many Americans perceive that prices are more stable and higher. It is thought that there are similar perceptions in South Africa. Many estate

2.7.5 Urban Planning and Management

Blakely & Snyder (1997:156) note that gating has the following effects on urban planning and management.

- Emergency and police response times
- Nature of roads
- Traffic congestion

  Traffic patterns are changed as road users who once drove through suburbs are forced onto main roads or secondary roads not designed for heavier usage.
- Maintenance of roads due to over or under utilisation also becomes a problem.
- Urban maintenance

  Rubbish trucks, emergency vehicles and services maintenance is affected by road closures.

Blakely and Snyder (1997:158) note that the continuing gating (privatisation) in some areas in the US has led to the haphazard formation of virtual cities[17] controlled by powerful residents associations. Residents in these areas see their contributions changed from voluntary to compulsory.

It can be seen that in South Africa through the altering of urban planning and the increased fragmentation that a new urban landscape and culture has been produced. This landscape typically emphasises security, fortification, privatisation, segregation and militarization (Bremner 1998). Bremner (1998) also notes that the following consequences are already prevalent wherever gating has taken place.

- Restriction of movement
- Chance contact with other South Africans is eradicated or reduced
- Public interaction is limited to self-defined and homogenous groups

[17] Where councils only have a watching brief

specific legislation governing gates and the constitution[16] to prevent this. However there are exceptions where strict closures of public roads prevent pedestrians from accessing these roads unless they have a specific reason to visit a resident.

2.7.4 Urban Segregation and Fragmentation

Blakely & Snyder (1997:148) note the following

- When communities are gated there is a significant impact on daily activity patterns and urban form and functioning. This was backed up by findings in the US that spatial fragmentation by race, class and land values occurred when communities were gated. In terms of land values this research will either back this up or disprove this last point, namely that enclosing of neighbourhoods affects land (property) values.
- Traffic patterns both motorised and pedestrian are affected by road closures.
- Traffic use patterns of residents and passers by are changed.
- Lifestyle patterns of residents are changes
- Cutting off the enclosed community from the community at large (macro-community) – i.e. promoting macro fragmentation of the community

Naudé (2003) notes that Landman & Schönteich (2002:82) have postulated that the restriction of access to public roads is probably also a violation of individuals' constitutional right to freedom of movement and is possibly also a transgression of the Development Facilitation Act of 1995 which advocates integrated and mixed-use settlements and precludes low density, segregated, fragmented and mono-functional development of land.

[16] These are enshrined in Constitution of the Republic of South Africa (Act No. 108, 1996), which must be considered in any decision on whether or how to balance the security desires of one group against the freedom of movement of others. This is contained in Chapter 2, The Bill of Rights

According to Blakely & Snyder (1997:155-156) surrounding areas are impacted negatively by the social dynamics of exclusion (fragmentation) and traffic.

Landman (2000b) notes that often, general users of urban space are excluded from enclosed neighbourhood. These can be

- Certain classes of people like the poor may be discriminated against as pedestrian routes are cut off or access is denied to them to a particular area.
- Municipal workers
- Emergency personnel. Naudé (2003) notes that public road closures are problematic for emergency services such as the police, ambulances, fire brigade and private security services, which can endanger life. Naudé asks the pertinent question," Whose right to life is the most important: those who want to protect themselves and their property from crime or those who need emergency life saving services?"
- Cyclists
- Pedestrians
- Residents of surrounding and enclosed neighbourhoods.
- Cause barriers to
    - Social interaction
    - Social networks
    - Economic activities. Naudé (2003) notes that if a road closure encompasses or is adjacent to a business that changes to the flow of traffic may affect that business.

From the above it can be seen that an individuals right to public space in the above circumstances may be impeded.

Control of neighbourhoods through enclosure has been likened to Apartheid era influx control. This is usually not the case in South Africa as there is

Landman (2000a) reports that Blakely & Snyder (1997) have observed the following effects that enclosures have been found to have in the United States of America. (US)

- Enclosures lead to a false sense of security and often to negligence as they can create false feelings of safety, which can increase inhabitants' crime risk as they are inclined to become complacent resulting in a decrease in their vigilance, observation and surveillance of their environment. (Naudé, 2003)
- Only opportunistic criminals are deterred.
- Enclosure leads to crime displacement or fear of crime displacement amongst surroundings to enclosed neighbourhoods.
- They often lead to a short term temporary reduction in crime
- Cause further gating to occur around gated areas.
- Rapid response times by emergency services are negatively affected.

Whatever the actual crime statistics in an area are, the fear of crime is probably the biggest driver of neighbourhood enclosures.

2.7.3 Social Exclusion (Control)

Blakely & Snyder (1997:154-155) have noted that enclosing neighbourhoods is contributing to the trend towards physical and territorial control in the US. The following elements of control are exercised with the enclosure of neighbourhoods shared by both South Africa and the United States.

- The flow of strangers (non-residents and neighbours). This is often done by visitors having to sign-in to enclosed neighbourhoods and is applied to pedestrian and vehicular traffic.
- The entrance and exit of criminals
- The control of traffic
- The control of public space within enclosed neighbourhoods

Blakely & Snyder (1997:3) note the following typical tensions manifested in gated communities

- Exclusionary aspirations
- Fear
- Protection of privilege
- Values of civic responsibilities
- Symbolic of trend of privatisation
- Personal community control of the environment

This is backed up by Naudé (2003) who notes that enclosure can also lead to feelings of 'us' and 'them', which can create fear, suspicion and feelings of inequality. A build-up of such negative feelings can eventually manifest in violent crimes and the destruction of property by those who feel excluded and marginalised.

2.7.2 Safety and Security

Blakely & Snyder (1997) note that in the US gating has proved inconclusive finding the following

- In some areas crime came down significantly.
- In some areas crime came down marginally
- In some areas there was no change. (In some areas resident criminals rather than "externally based" criminals proved to be problematic)

Naudé (2003) notes that from a criminological perspective public road closures (and also large access controlled security villages) have a limited success rate (Naudé 2003:35ff). Naudé shows that neighbourhood enclosure can reduce some opportunistic or impulsive crimes, particularly theft, burglary/housebreaking, vandalism and street crimes (e.g. pick-pocketing and snatch-and-grab crimes) which are mostly committed by opportunistic and impulsive criminals who simply use the opportunity to commit crime while in an area. He further notes that neighbourhood enclosures appear to have very little impact on the overall crime rate at city, regional or national level.

Supporters of neighbourhood enclosures or gating often tout the following as reasons why neighbourhood enclosure must proceed. (Blakely and Snyder (1997), Vrdoljak (2002))

- Strengthening of the feeling of community and neighbourliness
- Developing a sense of identity and security
- Clear definition of neighbourhood borders
- Enclosed neighbourhoods are
    - More open and friendly
    - Cohesive

Blakely & Snyder (1997:135) note that in their opinion gated communities do not experience community as at least one of the above elements is always missing. Does neighbourhood enclosure cause the sense of community to break down, increase or does it stay the same? Naudé (2003) notes that South Africa only recently moved away from apartheid and segregation and the different race groups are still struggling to socialise and interact with each other. He feels it is tragic that there is now a focus on social and economic segregation, which can result in polarisation, social exclusivity and social disengagement.

Blakely & Snyder (1997:106) also note the following neighbourhood characteristics as to why gating is opposed

- Tension and hostility
- Privatisation of public areas
- Prevent interaction with surrounding communities
- Increased conflict
- Reduction in the sense of community and an increase in the sense of isolation.

- Similar Gross Domestic Product (GDP) per capita
- A high gini coefficient[15]
- Having recently undertaken major political transformation
- High crime rates or rapidly increasing violent crime.
- Share similar urban development patterns

2.6 Who gates?

Landman (2000b) notes that gating is a trend that occurs across all income levels although people in low-income areas generally cannot afford gates. Blakely & Snyder (1997:112) have also noted that typically in suburban enclosures there is not complete unity in the support for enclosure. This support normally ranges between 80 and 90%.

2.7 Issues concerning neighbourhood enclosure

2.7.1 Sense of community

Definition of community (Blakely and Snyder, 1997:33)

Elements of

- Shared territory
- Shared values
- Shared public realm
- Shared support structures
- Shared destiny

[15] The Gini index measures inequality over the entire distribution of income or consumption. A value of 0 represents perfect equality, and a value of 100 perfect inequality

informed of the current status of the enclosure and contact details on the managing body.

- Public liability insurance
- The role of the local authority that has to maintain all normal council functions unless these are also privatised[13].

2.5 A brief history and evolution of the gated (enclosed) community

Since the beginning of civilisation humans have been fortifying settlements to protect themselves. This can be seen by the Romans in 300BC in England building gated communities to protect themselves against the recently conquered English. In later times this manifested itself from simple fortifications to intricate ones like castles and forts. This trend of fortification was carried through to modern times and has now appeared in suburbs.

Typical suburbs were often based on the suburbs created by the architects and planners like Frank Lloyd Wright and Frederick Law Olmstad. They developed as a result of urbanisation driven by industrialisation. Suburbs typically have the following features

- Proximity to nature
- Safety
- Good education in close proximity
- Shelter their residents from social deviations

When any of these features relating to safety are compromised or perceived to be compromised a typical reaction is fortification[14]. This often takes the form of neighbourhood enclosure. Bremner (1998:60) notes that this is often seen in middle class suburbs but it is evident in upper class suburbs too. This is not typical only to South Africa but can be found all over the world. Landman (2002:1) notes that in many other countries around the world forms of neighbourhood enclosure occur. These are typically countries like Brazil that share numerous characteristics with South Africa. These are

[13] Not common in South Africa. Very common in the US (Blakely & Snyder, 1997)
[14] The laager mentality (as used by early Afrikaners)

    - Claims of damages caused by the enclosures
- Road enclosures are more common in larger cities.

Enclosed neighbourhoods in South Africa are defined by various rules and regulations as legislated by various local authorities[11]. This legislation refers to the constitution in guaranteeing right of way and access to all citizens in the country. This means that at all times the public are entitled to use enclosed neighbourhoods as they see fit. The legislation gets around the constitutionality of the argument (to guarantee access at all times) by making the road closures temporary at all times[12]. There are other methods for enclosing neighbourhoods. These take the form of rezoning and land purchase and transfer.

2.4.1 Legal Consequences

The following legal consequences need to be addressed when neighbourhoods are enclosed.

- Type of closure undertaken
- The application process (and financing it)
- The objection process
- The type and function of the managing body (E.g. Section 21 company). Typically the managing body
    - Collects fees
    - Installs and manages fencing and gating
    - Is not for profit
    - Employs any private security companies needed
- The role and obligations of the South African Police Service (SAPS). This is important as all enclosure must approve closures and be kept

[11] E.g. Johannesburg Metropolitan Council, Ekhuleleni Metropolitan Council. Since 5 March 1999, the Rationalisation of Local Government Affairs Act, No 10 of 1998, enabled communities to apply to the local authority for the restriction of access to public places for security and safety purposes.
[12] Normal renewals are done on an annual basis

2.4 Overview of enclosed neighbourhoods in SA

Landman (2000b: 9) has noted the following trends in neighbourhood enclosure in South Africa.

- It is a growing phenomenon. According to the Johannesburg Roads Agency in July 2003 there were 1127 illegal Boom Gates. (JRA Press Release, July 1997)
- Her research has ascertained that
    - 47% of neighbourhoods have been confronted with potential road closures
    - 45% of these (above) neighbourhoods were granted approval. The following are reasons why approval was not given
        - Local authorities did not support the closure
        - The closure caused urban management and maintenance problems
        - The local authority had no formal road closure policy in place
        - Objections from surrounding residents
        - Objections from other role-players (E.g. Police, Fire Brigade and other emergency service)
- The following reasons were cited by applicants relating to their own communities
    - Lack of support
    - The closure did not have council approval
    - The proposed closure deviated from the approved proposal
    - Public areas were to be closed that would inconvenience residents.
    - There were objections taking the form of legal proceeding from residents (surrounding and resident)
    - Political pressure
    - Prohibition of public access by security companies

2.3.8 Economic extremes between rich and poor.

President Mbeki (2004) in his state of the nation address talks about a second economy that constitutes the structural manifestation of poverty, underdevelopment and marginalisation in South Africa. These symptoms are largely reflected geographically in certain areas. This has positive and negative connotations, which are not the subject of this research, but it must be noted that these problems are the main indirect drivers of neighbourhood enclosures in this country. In many places are informal settlements juxtaposed against luxury suburbs. Hence one of the major reasons for enclosed neighbourhoods can be plainly seen.

Residents view lower income areas as sources of crime and violence. Even when informal settlements and areas that are viewed as sources of crime are not nearby, they are still used as a reason for justification of the enclosures (Landman 2000b: 7). Residents wanting to control and contain urban blight compound this. The result is that many neighbourhood enclosures are erected on this pretext serving only to maintain and emphasise patterns of economic segregation.

2.3.9 Security of house values (Preservation of economic position).

This is the subject of this research. Blakely & Snyder (1997:110) note that this is one of the reasons cited by Americans for neighbourhood enclosure.

Enclosure of neighbourhoods has been touted as a counter to the above trends of increasing crime but this has not been comprehensively proven in South Africa[10]. In the United States Blakely and Snyder (1997) have noted that there have been very few instances where crime has been proven to have been reduced.

[10] Research to confirm or disprove this is currently underway in South Africa

White suburbs were based on the American "garden city" concept, which promoted low densities and planted open suburbs (Dewar et al as reported in Landman 2000a). Until the Group Areas Act was repealed it largely shielded white suburbs from undesired social deviations (poverty, crime etc). The repeal of the act led to changing demographics all over the country. Black people could now live in white areas. The majority of demographic changes were restricted mainly by income as white low and middle-income areas undertook gradual but substantial demographic changes.

2.3.7 Large differences in existing facilities and services accessible to certain sectors exist in many parts of South Africa.

This has led to a large increase in urban blight. This is especially prominent in certain white areas as income and attention was now fairly allocated to all communities. These areas are typically white, low and a middle-income area as they received substantially less money than was previously allocated. Ironically high-income areas did not suffer much as municipalities ensured a sustainable policy of cross subsidisation. This policy was extended through aggressive rate increases as municipalities took advantage of huge property value increases using the new municipal rates Act[9] that applied a consistent valuation method throughout South Africa.

Suspicion towards the capacity and delivery of local government. As mentioned above, social advancement of the poorer sector of society and service delivery to all sectors has not improved and in some instances got steadily worse since 1994 (COSATU Policy Submission: August 1997).

[9] No. 6 of 2004: Local Government: Municipal Property Rates Act, 2004.

and as a threat to confidence. They respond to this by insulating themselves from the threat by hardening themselves as targets[7] or if they can afford it, leaving the country. Security becomes a way of life as residents become obsessed with protecting themselves.

2.3.6 A history of fragmented and separated urban environments resulting from previous planning policies

From 1911 the government actively undertook racial segregation in their planning of South African towns and cities. The government in the 1920's extended this concept further as they adapted similar strategies from England (Mabin 1993 as reported in Landman 2000b).

During the years of apartheid, social problems were restricted to poorer areas strategically placed on the outskirts of major towns to provide cheap sources of labour for mines and industries. This was strictly enforced with the Group Areas Act (No. 41 of 1950) and the generous open or industrial buffer zones between white and black areas[8]. It allowed the government of the time to restrict movement of poorer black and coloured people to these areas and provide industries with a cheap and plentiful labour supply. This was within the context of the migrant labour system and legislation such as Influx Control that controlled the movement of African people from rural areas to urban areas.

The housing delivery system subsidised the white and to a lesser degree 'coloured' and Indians, and relegated the black majority to either homelessness or to rental status without security of tenure as well as extreme overcrowding arising out of shortages of accommodation. As a result there was little development of black business, and these areas lacked an economic and fiscal base. (COSATU Policy Submission: August 1997)

[7] Installing security systems, burglar bars, electric fencing etc
[8] Alexandra Township in Johannesburg was an exception

have experienced an increase in the fear of crime although not all people are affected to the same extent. This is corroborated by Vrdoljak (2002). This is difficult to quantify although an attempt will be made with interviews to be conducted with residents of enclosed and "open" neighbourhoods. Louw (1998) also notes that the biggest fear of crime in residents of suburbs was loss of life.

ii) Increase in the number of vigilante groups[6]

iii) Growth in the security sector as security becomes a way of life in South Africa. Peter Honey of the Financial Mail (14 November 2003) notes that South Africa now spends more on private security as a share of GDP than any other nation - about R14bn during 2003. This equals about 2% of global security spending, which is roughly the same as in Australia and Spain.

2.3.5 Low levels of trust in the police in many communities

This is especially prevalent in the black community as the police were used as a tool by the previous government to oppress and control the black community. Louw (1998:25) notes that in a survey conducted amongst Pretoria's residents in 1998 that less than thirty-six percent of respondents were satisfied with the way the police dealt with their crime reports. Bremner (1998:53) notes that in black townships crime is viewed as a symptom of social blight while in white suburbs crime is viewed as a threat to democracy. This is symptomatic of the economic differences between white and black. White people view crime as a threat to their (sic) perceived crime free comfortable status quo and black people as a hindrance to them improving their quality of life. This is discussed further below under the gap between rich and poor.

Bremner (1998:56) also notes that people in the middle-income bracket view crime as a result of a breakdown of policing standards

[6] E.g. Mapogo A Mathamaga – A country-wide vigilante group

(Bremner 1998:53). Since then crime levels have increased drastically in previously white areas and by less in black areas. In a recent survey conducted on victims of crime in the Pretoria area it was found that 20% of all crime occurred in residential streets and 35% in private homes (Louw, 1998:59). Louw (1998:61) also notes that 45% of vehicle theft in Pretoria occurred in a residential driveway or garage. The net effect though is a significant total increase in crime that has been used as the major reason for enclosing of neighbourhoods.

Uncertainty about crime rates was compounded by a moratorium on crime statistics to facilitate more accurate gathering of crime statistics. This also coincided with the opening up of the countries borders and the influx of immigrants from the rest of Africa, illegal and legal. The large demobilisation of formal and informal armed forces on both side of the struggle and in neighbouring countries led to an influx of weapons and military skills to the crime underworld. This can be seen by the huge increase in violent crime executed with deadly military precision and weapons (Bremner 1998:56). The reaction to the increase in crime can be seen in the following

i) Proportionately high levels of fear of crime

Naudé (2003) notes that Aromaa & Heiskanen (2002:121) define fear of crime as a general concern, anxiety, worry or subjective assessment of one's victimisation risk. Naudé (2003) comments that research indicates that fear is not always related to victimisation experiences.

Crime rates (especially violent crime) together with the fear of crime have increased significantly in urban areas over the last 10 years (Landman 2000b, Napier et al 1998). Schönteich & Louw (2001) note that between 1994 and 1999, violent crime increased by 22%. Shaw and Louw (1998) noted that crime affects all income groups and consequently all income groups

2.3.3 Social contact

South Africa since 1994 has experienced phenomenal immigration (both legal and illegal) mainly from other countries. Approximately 52 000 asylum seekers and 16 000 refugees live in South Africa (Harris, 2001). Foreigners are frequently treated as a homogeneous category of "illegal aliens". Xenophobic discourse prevails around this category and forms the basis for hostility, conflict and violence between South African citizens and (predominantly black) foreigners. (Harris, 2001). This fear of foreigners has contributed towards the fear of crime in general which is one of the major reasons for the growth of neighbourhood enclosures. Harris (2001) notes that any causal link between illegal entry and crime is firmly rejected by all of the undocumented respondents in her research.

2.3.4 Unique crime patterns and a high crime rate

Van Dijk (2001:2) as commented on by Naudé (2003), reports that the UN International Crime Victims Survey (ICVS), based on the data of 50 countries, shows that

- Crime rates are higher in developing countries than in developed countries
- Two out of three urban dwellers of large cities were touched by crime over a five year period
- African and Latin American cities are the most vulnerable.

Naudé (2003:1) further notes that the South African Police Service shows crime as having increased by 25% (from 2.02 million to 2.52 million) between 1994/5 and 2001/02. Bremner (1998:53) notes that this increase is illustrated in the increase of instances of violent crime in urban areas all over South Africa. " Our faces have been rubbed raw by crime". (Bremner 1998:53)

Unfortunately skewed historical crime statistics make this difficult to prove although the following theory has been widely accepted. During the years of apartheid crime was largely confined to black areas

the social problems prevalent in South Africa. These social problems can be summarised as

2.3.1 Division and fragmentation (Race / income divisions)

Race divisions were an issue in the old South Africa but now race has clearly merged with income in defining social problem areas. Most "black[5]" areas are poorer and experience the majority of problems. The state of racial and economic conditions is discussed further below.

2.3.2 Segregation

- Racial

  The only visible racial spatial segregation that occurs today is what remains from the years of apartheid when a policy of racial segregation was applied in town planning. The majority of racial groups still live in the same areas as they did 10 years ago. This is mostly maintained through economic segregation.

- Economic

  Although racial groups no longer have legal restrictions on where they live or work, economic restrictions force people of various income levels to live in the same areas and work in certain jobs (if they can find them). That these coincide with racial divisions is symptomatic of the history of our society. These restrictions include

  - Income
  - Job opportunities
  - Level of education
  - Level of economic activity of an area

[5] And some "White, Coloured and Indian" areas

Table 1 Summary of average annual household expenditure according to income group

Expenditure	Weighted average spent on each item for each income category					
	R 0 - R 6 480	R 6 481 - R 11 090	R 11 091 - R 19 440	R 19 441 - R 41 484	R41 485 and above	TOTAL
A. Number of households	222	442	812	1274	1212	3962
B. Items	R	R	R	R	R	R
1. Food	1986	3336	5107	7358	15175	8841
2. Drinks	110	176	368	677	1398	776
3. Tobacco	353	474	736	1376	2183	1416
4. Clothing	92	250	542	1028	2397	1262
5. Footwear	51	150	297	531	1075	602
6. Housing	366	919	1588	3476	21685	8849
7. Fuel and power	265	292	347	289	219	275
8. Furniture and equipment	8	109	252	737	2762	1222
9. Household operation	158	232	322	466	964	565
10. Servants	117	319	692	1313	3063	1613
11. Medical services & requirements	30	46	118	320	5334	1940
12. Transport	161	336	962	1748	14798	5792
13. Communications	27	111	235	531	3873	1536
14. Recreation, sport, etc	2	40	53	102	1774	649
15. Reading matter	9	44	84	236	1128	476
16. Education	28	117	240	640	3929	1589
17. Personal care	319	534	804	1206	3183	1678
18. Restaurants, bars, etc	4	7	16	31	72	38
19. Holidays (accommodation, transport)	5	120	159	379	3563	1986
20. Income tax	1	15	74	688	8876	3241
21. Other	143	571	1093	3662	15969	6813
TOTAL	4245	8208	14099	26805	113431	51169
C. Average income						
1. Regular income	2996	6616	11831	23024	113242	48623
2. Other income	665	607	1138	2208	6411	3168
TOTAL	3661	7224	12970	25233	119653	51792

Table 1 - Summary of average annual household income according to income group in Gauteng[3]

- South Africa has a specific political and socio-economic environment. Are enclosed neighbourhoods a reaction to change in South Africa? In the USA Blakely and Snyder (1997) have postulated that neighbourhood enclosure occurs as a reaction of socio-economic and political change in the respective or surrounding areas. They further note that gated communities are a manifestation of broader social forces unleashed in an unstable metropolitan system. I.e. they are an indication of larger trends and patterns in our society.

  In South Africa since 1990 there has been significant political change. In 1994 the majority of people in South Africa were empowered to vote and elect a democratic government. Government at the time instituted various social reforms[4] but these failed to comprehensively address all

[3] Statistical release P0111.7 Income and expenditure of households 2000 Gauteng, Statistics South Africa

[4] E.g. RDP Reconstruction and Development Program

Vrdoljak's (2002) definition of a "gated community" is that gating is a form of spatial fortification and community is a kind of social relationship. This encompasses both of the above definitions.

Definition: Enclosed neighbourhoods (Karina Landman 2000b: 3)

Enclosed neighbourhoods refer to existing neighbourhoods that have controlled access through gates or booms across existing roads. Many are fenced or walled off as well, with a limited number of entrances and exits with security guards at these points (in some cases). The roads within these neighbourhoods were previously or still are public properties depending on the type of closure. In many cases the local council is still responsible for public services within.

2.3 Reasons for neighbourhood enclosure

Landman (2000a) notes the following South African characteristics and reasons commenting further that gated communities are increasing in number all over the world, typically in areas that have experienced an increase in violence, insecurity and fear. A country with similar circumstances is Brazil that has also experienced an increase in enclosure of neighbourhoods.

- There is a unique diversity of urban residents living together in South African Cities. A mix of all income distributions typifies this, race groups and non-citizens all living in one area. This occurs on a micro and macro level in the various cities in South Africa

new areas. Gating precludes or hinders access to previously accessible public space.

Karina Landman (2000b: 3) defines gated communities in South Africa slightly differently. She explains that gated communities refer to a physical area that is fenced or walled off from its surroundings either controlling or prohibiting access to these areas by means of gates or booms. In many cases the concept can refer to a residential area with restricted access so that the normally public spaces are privatised or use is restricted. This is not limited to residential villages but may also include controlled access villages for work[2] and /or recreational purposes. Gated communities can include both enclosed neighbourhoods and security villages as shown below. (Landman, 2000b: 3)

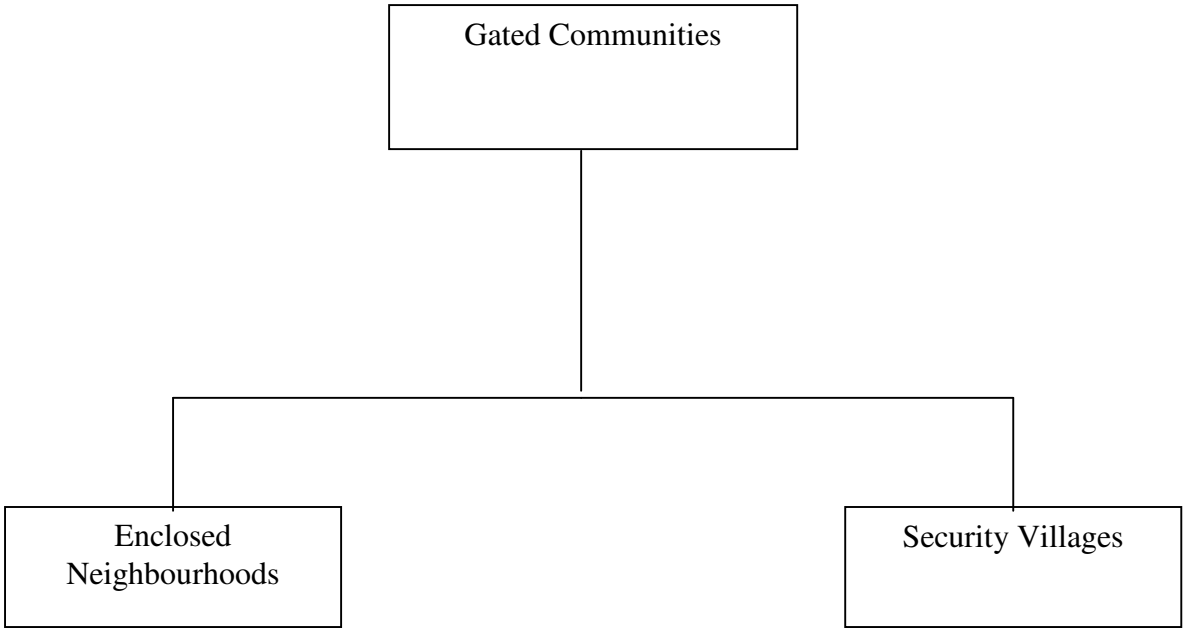


Figure 1: Flow chart of gated communities (Landman, 2000b: 3)

[2] E.g. Office parks

2 Literature Review

2.1 Introduction

The literature review seeks to develop the background of the research and place the research in context. An historical and economic picture of South Africa is compiled to illustrate the circumstances and reasons that lead to the growth of the phenomenon. A short overview is then presented of the state of neighbourhood enclosure in South Africa followed by a comparison with the situation elsewhere in the world where gating has occurred.

Issues around neighbourhood enclosure are explored to illustrate effects and consequences of the practice with specific reference to crime prevention. Alternatives to gating are explored and alternate research topics presented.

2.2 Definitions

Definition: Boundaries

Blakely and Snyder (1997:1) note that boundaries separate elements. I.e. There is an inside and out. Boundaries change the definition of space, i.e. where there was previously public, it becomes private or restricted by the boundary. They further note that boundaries create and alienate space to facilitate the activities and purposes of political, social and economic life.

Definition: Gated Community

Blakely and Snyder (1997:2) define gated communities as communities with restricted access in which public spaces are privatised. They maintain that communities seek to counter the trends of crime, vandalism and decay by maintaining the exclusivity of the suburb. This access control is typically achieved through the use of physical barriers in the form of fences or walled perimeters. In enclosed neighbourhoods these can be retrofitted or installed in

1.6 Assumptions

- Buyer behaviour over a period of 14 months during a period of property price inflation can be applied to support or reject the research hypothesis.
- Map and survey information is sufficiently accurate to determine the enclosure status of the areas researched.

1.7 Research Methodology

The hypothesis was researched using the following methodology. A detailed literature review was undertaken to develop the background of the research and place the research in context. The objective of the empirical research was to assess property values in adjacent boomed and open areas. These areas were first identified and the values of properties transferred were analysed over a period of time. This research was supplemented by interviews and surveys conducted with estate agents, residents and controlling bodies of the boomed and open areas.

1.4 Delimitations and limitations

The scope of the study was limited to twenty-six open and enclosed areas to minimise time and cost constraints.

The limitations of the study are

- Focus on a few typical areas as opposed to the entire province. (Small sample size)
- The use of dated information in a fast changing environment.
- The time span of the study. Areas were only examined in detail over the period of 14 months.
- The availability of information especially if it is of a commercially sensitive nature.

1.5 Significance of the study

The study is significant for the following reasons

- Justification of development prompted by neighbourhood enclosure would be ascertained.
- It will verify or discredit claims by applicants for suburban closures that property values do increase.
- If the hypothesis is correct it will encourage non-participants in access control schemes to contribute as it will prove they are benefiting from the effect of the closures.
- Municipalities can match property values to services and rates.
- Those dependants on the primary and secondary resale market (E.g. estate agents, conveyancers etc) can identify target markets that show higher levels of property transfer activity.
- The study can be used as a motivation for or against suburban closure applications.

1 INTRODUCTION

1.1 Context of study

Spiralling violent crime in South Africa has led to the increased use of access control to restrict access to suburbs and thus make it more difficult to perpetrate violent crime against residents. Landman (2000b: 9) indicates how requests for enclosure have spiralled with 47% of a sample of 100 municipalities receiving requests for enclosure. In recent times municipalities like Johannesburg have promulgated by-laws that restrict the erection of enclosures as many illegal enclosures have been erected.

Neighbourhood enclosure normally takes the form of booms, palisade fences and security guards to close off entire suburbs that were once or still are public property (Landman 2000b: 3). This has had many implications for the affected areas and those directly adjacent. These include increased traffic congestion, changing crime patterns and what many[1] perceive as changes in property value. An extensive literature survey at the beginning of 2003 prior to the commencement of this research has revealed that minimal research exists on this subject.

1.2 Purpose of the study

The purpose of this study was twofold

- To compare the rate of property transactions and activity in enclosed neighbourhoods with adjacent uncontrolled areas.
- To ascertain the effect of neighbourhood enclosure on property values.

1.3 Hypothesis

The hypothesis of this research is that the implementation of neighbourhood enclosure increases property values.

[1] These include estate agents and residents of open and enclosed areas

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ACKNOWLEDGEMENTS

I wish to express my sincere thanks to:

- Bode Akindele, my supervisor, for his guidance and direction throughout the process
- Karina Landman for her insight and verification of the research opportunity.
- My entire family (Papa, Mamma, Claudia, Gianna, Leonardo, Lucia and Luca), for putting up with my foibles.

But most of all Leah Talocchino, for her patience, support and understanding throughout the process.

DECLARATION

I, Gaetano Riccardo Altini declare that this research report is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Master of Science in Property Development at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Gaetano Riccardo Altini
29 November 2004

ABSTRACT

Spiralling violent crime in South Africa has led to the increased use of access control to restrict access to suburbs and thus make it more difficult to perpetrate violent crime against residents. This neighbourhood enclosure normally takes the form of booms, palisade fences and security guards to close off entire suburbs that were once or still are public property. This study examines the effect of the implementation of neighbourhood enclosure on property values. The primary methodology used to research this concentrated on the analysis of residential property values, bond approvals and relative amounts of property transferred within the period of late 2002 and mid 2004. Analysis was based on information available at the deed's office. Limitations included the small sample size and the availability of information. Applicants for suburban closures can use the results of the study to verify or discredit claims of property value increases. Municipalities can match property values to services and rates.

Results showed that property values that were found to be either similar in adjacent open and enclosed areas or more expensive in enclosed areas. The latter trend was evident in higher value properties. This illustrates a higher demand for properties in these enclosed areas than in the adjacent open areas. Further analysis of prices showed that, in all cases over the same period, prices increased by more in enclosed areas than in open areas. This statistic proves the hypothesis, that neighbourhood enclosure increases the value of properties within the enclosure when compared to similar properties in adjacent open areas. Analysis of the value of bonds granted in an area showed that banks appear to ignore the enclosure status of the immediate area.

Keywords: Neighbourhood enclosure, booms, gates, gated neighbourhood, property values

The Effect of Neighbourhood Enclosure on Property Values

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A Research Report submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Science in Property Development

November 2004