

**URBAN DECAY AND REGENERATION STRATEGIES IN SMALL TOWNS:
A CASE STUDY OF THOHOYANDOU, SOUTH AFRICA**

**BY
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DISSERTATION TITLE:

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**Dissertation submitted to the Department of Urban and Regional
Planning, Faculty of Science, Engineering and Agriculture at the
University of Venda in fulfilment of the requirements of Master of Urban
and Regional Planning Degree**

DECLARATION

I Philani Magubane, hereby declare that this dissertation for the Master of Urban and Regional Planning Degree at the University of Venda, hereby submitted by me, has not been submitted previously for a degree at this or any other university, that it is my own work in design and in execution. All reference materials contained therein has been duly acknowledged.

Signed  Date 29 May 2023

Philani Magubane (21016985)

DEDICATION

To my late mom 'Nonhlanhla Fortunate Shelembe'. Qhubeka ulale ngokuthula Mzamela!
Gobimbo Khabahle!

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ABSTRACT

Evidence of urban decay in small South African towns has been increasingly discernible over the years. Undoubtedly, other small rural towns face a myriad of challenges attributable to historic apartheid planning. They are distressed and underperforming despite having urban regeneration strategies in place. Small towns are faced with high poverty, unemployment, and a lack of economic vitality and diversification, creating a high degree of stagnation and urban decay. This complexity has been exacerbated by the vulnerability to Covid-19 pandemic stress, adding new challenges affecting their liveability and vitality. This resulted in renewed interest in small towns' regeneration by the South African government to foster the developmental role of small towns. This dissertation contributes to the debate on how to improve current regeneration strategies in small towns focusing on Thohoyandou Town Central Business District (CBD). This study's objectives were threefold: firstly, to characterise urban decay through mapping, secondly, to investigate the causes and thirdly, to recommend a framework for sustainable small town urban regeneration. This study adopted a case study research design, augmented by the mixed method research approach. The SW Maps mobile application was used to gather geospatial data on urban decay in Thohoyandou Town CBD. This was complemented by questionnaire data collected from 202 participants and 3 key informants' interviews. The spatial data were analysed through ArcMap geospatial analysis tools to produce maps reflecting the spatial extent and intensity of urban decay in Thohoyandou Town CBD. The data attained from study participants were analysed through ATLAS.ti, Microsoft Excel, and Statistical Package for the Social Sciences (SPSS) using thematic analysis and descriptive statistics. The study findings are that empirically Thohoyandou Town CBD is grappling with urban decay. This is caused by several key blockages, including poor urban management and planning, poor service delivery, the Covid-19 pandemic, implementation challenges caused by political interference, lack of monitoring and evaluation system, lack of policy alignment, and poor governance and inadequate institutional capacity linked to staff shortages with appropriate expertise. The implications of these findings are that current strategies are limited and outdated. The current urban regeneration strategy needs to be revised to enhance policy alignment, considering other funding modalities and establishment of special public entities to implement the strategies. More importantly, successful regeneration of small towns requires resources, patience, and commitment. Therefore, a stronger political will, effective governance, public-private cooperation, and institutional capacity are required to enable small rural towns to remain viable and transform into viable, vibrant and liveable cities.

Keywords: *Thulamela Local Municipality, urban decay, urban regeneration, small town*

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ACRONYMS

AEDA	Amathole Economic Development Agency
CBD	Central Business District
CIDs	City Improvement Districts
COGTA	Department of Cooperative Governance and Traditional Affairs
COUD	Causes of Urban Decay (Second Objective)
CUD	Characterising Urban Decay (First Objective)
DRDLR	Department of Rural Development and Land Reform
FRG	Federal Republic of Germany
GDR	German Democratic Republic prior to amalgamation with the
IDP	Integrated Development Plan
iTrump	Inner eThekweni Regeneration and Urban Management Programme
IUDF	Integrated Urban Development Framework
JDA	Johannesburg Development Agency
LUMS	Land Use Management Scheme
MDGs	Millennium Development Goals
MSA	Municipal Systems Act
NDP	National Development Plan
NSDF	National Spatial Development Framework
P/W	Per Week
SANBS	South African National Building Standards
SDF	Spatial Development Framework
SDGs	Sustainable Development Goals
SPLUMA	Spatial Planning and Land Use Management Act
STR	Small Town Regeneration Strategy
UBE	Urban Regeneration Effort (Third Objective)
UN	United Nation Habitat
UNIVEN	University of Venda

CHAPTER 1: INTRODUCTION AND BACKGROUND OF THE STUDY

1.1. Introduction

Evidence of urban decay in small towns across South Africa is increasingly becoming discernible. The Department of Cooperative Governance and Traditional Affairs in South Africa (COGTA) (2021) admitted that, to some extent, small towns are subjected to urban decay. In Europe decaying small medium-sized towns characterised by vacant properties, demolished buildings, and escalating unemployment are common (Weaver et al., 2017; Mayer and Lazzeroni, 2022). This prevalence of urban decay in small towns across the globe is closely linked to poor development, failure to adjust to shocks, deindustrialisation, loss of service functions, and prevalence of obsolete buildings (Fertner et al., 2015). This demands urgent urban regeneration strategies to resuscitate moribund small towns across the globe. This research deliberates on these discourses focusing on a case study of Thohoyandou Town Central Business District (CBD) a small rural town located in Limpopo Province, South Africa.

Discernible traces of urban decay and degeneration have been documented across South African cities and towns by various scholars, including inter alia Stephanus, 2013; Mnikathi, 2016; Ndlebe, 2017; Mbanjwa, 2018; Swanepoel and Smallwood, 2019; Conradie, 2020). In South Africa, urban decay is the interplay ‘between’ several factors. These factors include but are not limited to apartheid spatial configuration, capital flight, decentralisation, poor urban governance, and continued financial mismanagement. Other factors also include poor law enforcement, poor service delivery, ineffective land use management systems, and depopulation (COGTA, 2016; Govender and Reddy, 2019; Kotze and de Vries, 2019; Swanepoel and Smallwood, 2019; Conradie, 2020; Goldberg and Jansen van Rensburg, 2020). These factors combined pose a great threat to the long-term sustainability, vitality and functioning of urban centres, and therefore require effective urban regeneration intervention.

1.1.1. Urban decay

The concept of urban decay refers to a condition whereby the majority or a portion of the urban area is characterised by grime, problem buildings, poor conditions of facilities (including social) and degraded built environment (Enoma and Idehen, 2018). Mutisya (2016) describes urban decay as a process associated with the constant obliteration of previously well-functioning parts of an urban area. Urban decay is caused by a combination of urban ills including excessive urbanisation, overpopulation, poor urban governance, collapsing infrastructure, poor construction material and derelict buildings (Ndlebe, 2017; Conradie, 2020) (See Section 2.2 in Chapter 2 for Chapter Two for a further dissection of the concept).

There is a positive correlation between rapid urbanisation and urban decay (Govender and Reddy, 2019). Sugrue (2005) cited in Ndlebe (2017) added that excessive urbanisation coupled with overcrowding in urban centres contributed immensely to urban decay. Poor urban governance and management exposed cities, towns, and small towns to decay (Conradie, 2020). Failed and poorly constructed infrastructure projects in small towns are cited to have contributed to decay (COGTA, 2021). The factors identified above confirmed that urban decay is the outcome of a myriad of urban maladies emanating as the result of a combination of urban ills leading to consistent obliteration of the urban milieu (Mutisya, 2016; Ndlebe, 2017).

Herbert (2016) asserts that initially urban decline was closely related to “post-industrial urban centres in the United States and parts of Europe” that were subjected to a massive population and employment prospects loss within the manufacturing sector. According to Talkhabi et al. (2021) urban decline concept has a descriptive and functional meaning. Descriptively, it refers to a significant decline in the urban core population and employment prospects. The functional aspect refers to the transformation that compromise the urban centre’s efficiency (its ability to keep functioning or servicing the needs of its population). Weaver et al. (2017) described the concept as a significant diminution in the population of a particular geographic area over a sustained period of time, which subsequently lead to massive economic shrinking. One of the obvious signs of declining urban centres is the decrease in the number of inhabitants (Talkhabi et al., 2021). More often than not urban decline is caused by disinvestment in the urban core leading to the exodus of firms and relegation of some economic activities as well as the population to the outskirts (Talkhabi et al., 2021).

The two concepts of urban decline and decay are therefore distinct. Urban decline is a product of unfavourable social change (depopulation) and an underperforming economy ensuing in unemployment (Talkhabi et al., 2021; Weaver et al., 2017). Whereas urban decay is the outcome of social (excessive urbanisation), economic (underperforming economy), environmental (grime), and built environment (neglected infrastructure, landscape, and built form) (Enoma and Idehen, 2018; Govender and Reddy, 2019; Conradie, 2020; COGTA, 2021). The main focus of this study is on the urban regeneration of small towns subjected to physical decay however, it is important to distinguish between the two concepts (urban decay and decline) as they are interrelated but different (See Section 2.2 in Chapter 2 for Chapter Two for a further dissection of the concept).

1.1.2. Urban Regeneration

Urban spaces transform over time and often this transformation is often undesired. This undesired transformation presents opportunities and challenges (Roberts, 2000). Undesired transformation within urban spaces demands integrated and holistic intervention to be addressed and enhance existing opportunities, and this process is known as urban regeneration (Roberts, 2000). Afinowi (2019) adds that urban regeneration is concerned with enhancing the physical, socio-economic, as well as environmental conditions of the deteriorated urban milieu. Kotze and de Vries (2019) defined urban regeneration as a transformative process objected to transform dire urban centres into liveable spaces. It can be inferred that urban regeneration is concerned with resuscitating and improving various aspects of urban areas that have been negatively affected by the physical, social, economic, and environmental transformation. The indication is that these improvements are critical to long-term sustainability of urban areas (See Section 2.3 in Chapter 2 for Chapter Two for a further dissection of the concept).

Urban regeneration has evolved over the years (Yiannakou, 2020). From a narrow focus on reconstructing war-ravaged urban areas in the first half of the 20th century to a broader scope concerned with revitalising all aspects of urban milieu (Roberts, 2000). Yiannakou (2020) add that modern urban regeneration has evolved from being driven mainly by central governments to include multi actors, acknowledging collaboration amongst the community, government, private sector, and non-profit organisations. Private and public backing as well as participation are central to the success and sustainability of urban regeneration initiatives (Amirtahmasebi et al., 2016). This assertion supports Robert's (2000) who claims that urban regeneration has become an integrated process of reinventing and resuscitating urban milieu that has seen significant decline and decay over a sustained period. This study seeks to investigate urban decay and explore prospects of urban regeneration focusing on a case study of a small rural town called Thohoyandou Town in Limpopo Province of South Africa.

1.1.3. Small towns

Urban centres are synonymous with the agglomeration of people, activities, and industries. This concentration results in mutual benefits for the urban centres, the people and industries (Pinto and Sablik, 2016). The well-being and sustainability of small urban centres are crucial for several reasons. Small towns are market nodes that assume a critical role in the food supply chain system linking producers/farmers to urban consumers), centres of employment (provide non-farming employment opportunities), centres of production and distribution (provide access to products for marginalised rural communities and distribution for locally produced goods)

and preferred location for government and business offices (Tacoli, 2017). Through urban regeneration, small towns' long-term sustainability and well-being can be preserved ensuring that they continue to successfully perform their functions (Ibid).

Small towns are settlements of different sizes, in terms of the number of inhabitants and geographical spread they are often too small in terms of function to be considered cities and too diverse to be classified as rural (COGTA (2021)). These settlements often straddle between urban and rural as they are characterised by urban and rural features (Atkinson, 2014). Bell and Jayne (2009), cited in Steinfuhrer et al. (2016) even describe a small town as "small urbanity" due to its dual character that has some urban elements. The lack of established and well-functioning urban core, as well as efficient governance distinguishes small towns from intermediate cities within the settlement hierarchy of cities (COGTA, 2021) (See Section 2.4 in Chapter 2 for Chapter Two for a further dissection of the concept).

White (2004) also views small towns as, "building blocks in the urban system" due to their strategic and multi-faceted role in regional development as well as within the settlement hierarchy of cities. Small towns bridge the urban-rural divide; they are centres where public and private amenities as well as services such as hospitals, police stations, magistrate courts, government offices, post offices, medical practitioners, tax practitioners, legal practitioners, commercial facilities, and business offices are accessible for surrounding hinterlands (Tacoli, 2017). Agglomeration of facilities, services, and urban infrastructure within proximity of rural communities decreases spatial inequalities, ensuring that rural communities have adequate access to socio-economic services (Dlamini, n.d.). Small towns are excellent market sites linking local farmers to consumers as well as national and export markets in turn driving up income from primary activities in surrounding villages (Ibid). Small towns provide alternative employment opportunities within the secondary, tertiary, and quaternary sectors for their population and subsequent marginalised rural communities (COGTA, 2021; Tacoli, 2017). Despite their strategic role and function within the settlement hierarchy, small rural towns are challenged by declining economies, disinvestments and poor economic infrastructure (Qayi, 2010). Challenges in small rural towns are worsened by poor policy implementation and historical neglect of rural areas (Ibid). In the contemporary world, this complexity has been exacerbated by the vulnerability to Covid-19 pandemic stress, adding new challenges affecting liveability and vitality in small towns (See Section 2.4 in Chapter 2 for Chapter Two for a further dissection of the concept).

This research seeks to understand the dynamics of urban decay and prospects of urban regeneration focusing on a case study of a small rural town known as Thohoyandou Town situated in Limpopo Province of South Africa. A study on Thohoyandou Town CBD conducted by Anyumba (2019) reveals that the CBD is characterised by unauthorised vehicle parking areas, encroachment of the ring road by taxis and buses (blocking traffic and causing congestion), parts of vehicle parking and open spaces occupied by street vendors, inadequate street furniture, poor landscaping, swarming waste and litter bins, potholes, and limited parking spaces. These urban ills compromise efficiency in the CBD and have the potential to shatter Thohoyandou Town CBD. There is therefore a need for a framework to enhance and strengthen the implementation capacity of existing urban regeneration strategies to avert further decay, and damage, and improve the status quo of Thohoyandou Town CBD and other small rural towns across South Africa.

1.2. Rationale

Much literature on urban regeneration as a remedial action for urban decay focuses on larger urban centres (Perkins et al., 2019). Contemporary research on urban decay and regeneration focused on ‘big cities’ and overlooked small rural towns (Atkinson, 2019). Servillo et al. (2017) maintained that small and medium-sized towns are under researched by academics and neglected by policy makers. This has significantly reduced the role of small towns within the urban continuum (Zerah and Denis, 2017). Much emphasis has been placed on larger cities within metropolitan areas (Servillo et al., 2017). Ndlebe (2017), Mnikathi (2016) and Stephanus (2013) focused on urban decay and regeneration of Durban’s inner city, Kotze and de Vries (2019) investigated Johannesburg’s Downtown, whilst Enoma and Idehen (2018) and Afinowi (2019) studied Nigeria’s city of Benin and Lagos respectively. Kotze and de Vries (2019) and Mnikathi (2016) displayed how cities like Johannesburg and Durban have established agents of Urban Regeneration for example eThekweni has the Inner eThekweni Regeneration and Urban Management Programme (iTrump), whilst Joburg has the Johannesburg Development Agency (JDA). These initiatives are simply partnerships between metropolitans and the private sector. The City Improvement Districts (CIDs) have also gained traction in South Africa. These CIDs focus mainly on improving safety, security, cleanliness, and overall conditions of the built environment of the area to enhance investment prospect and potential (Mnikathi, 2016; Conradie, 2020).

These studies by Stephanus (2013), Mnikathi (2016), Ndlebe (2017), and Kotze and de Vries (2019) explored urban regeneration strategies within the context of metropolitan municipalities

with the ability to generate own revenue outside central government grants, attract and retain investments. Furthermore, these cities have several locational advantages which are a significant pull force for investments, for example the Durban harbour is amongst the largest cargo ports in terms of carrying capacity in Africa (Mnikathi 2016; Ndlebe, 2017). On the other hand, the City of Johannesburg is the ‘African Giant’ and the hub of the African economy (Kotze and de Vries, 2019). However, these studies fail to account firstly for the applicability of urban regeneration strategies outside metropolitan areas particularly in small towns of category B municipalities where funding is limited with the central government as the main source of income. Secondly, the studies fail to account for the feasibility of urban regeneration initiatives in an urban-rural setting with limited capital investment, lack of investor confidence, low skill base, and the unwillingness of banks to fund urban regeneration projects as revealed by Perkins et al. (2019) on their study of New Zealand Ashburton small town. This study fills this void that exists within the South African context as the government extends its urban regeneration lenses to small rural towns through the Small Town Urban Regeneration Strategy (STR).

More importantly, this study contributes positively to the national debate and conversation on how to improve current regeneration strategies in small rural towns focusing on Thohoyandou Town CBD. Tsoriyo et al. (2021) acknowledged that Limpopo Province has a high number of small rural towns and are under researched. Furthermore, COGTA (2021) in their Small Town Regeneration Strategy (STR) and implementation plan admitted that data relating to small rural towns in Limpopo province is non-existent. Therefore, this study together with its findings add significant value to and contributes immensely to national qualitative data and geospatial dataset repository on small rural towns in Limpopo. There have not been previous studies that have investigated urban decay and regeneration strategies in Thohoyandou Town CBD.

Thohoyandou is a small rural town under the administration of Thulamela Local Municipality in South Africa. Urban decay is distinctly observable in Thohoyandou, yet the Thulamela Urban Development and Revitalisation Strategy was set as a tool for addressing decay and attaining vision 2023 of becoming a city. The Thulamela Urban Development and Revitalisation Strategy adopted in year 2011 with the primary objective to elevate the standard of living for all Thulamela Local Municipality citizens, foster integrated and functional human settlements, and regenerate the dysfunctional core urban nodes in the municipality including Thohoyandou Town CBD (Thulamela, 2011). The study aim is to investigate the state of urban decay and

recommend a framework for sustainable implementation of urban regeneration strategies in Thohoyandou Town under Thulamela Local Municipality in Limpopo of South Africa.

1.3. Statement of the problem

The built environment in Thohoyandou Town CBD is deteriorating. Thohoyandou Town CBD milieu is in a state of decay despite the adoption of Thulamela Urban Development and Revitalisation Strategy. There is a need to investigate what has subjected Thohoyandou Town CBD to decay despite the implementation of Thulamela Urban Development and Revitalisation Strategy and demonstrate why a small town urban regeneration framework is necessary to strengthen the capacity towards sustainable urban regeneration in Thohoyandou Town CBD and other small towns in South Africa experiencing similar circumstances.

1.4. Aim of the study

To investigate the state of urban decay and recommend a framework for sustainable implementation of urban regeneration strategies in Thohoyandou Town under Thulamela Local Municipality in South Africa.

1.5. Objectives

1. To characterise urban decay in Thohoyandou Town CBD through mapping.
2. To highlight the causes of urban decay in Thohoyandou Town CBD.
3. To recommend a framework for sustainable implementation of urban regeneration strategies for Thulamela Local Municipality and other small towns across South Africa to address urban decay.

1.6. The main research question

1. How does a framework for sustainable implementation of urban regeneration strategies in small town assist Thulamela Local Municipality deal with urban decay in Thohoyandou Town CBD?

1.6.1. Subsidiary research questions

Table 1.1: Subsidiary research questions

No.	The research questions	Subsidiary questions
1.	What are characteristics of urban decay in Thohoyandou Town CBD?	<ol style="list-style-type: none"> 1. Which urban decay features are affecting Thohoyandou Town CBD? 2. Which pockets of Thohoyandou Town CBD are affected by urban decay?

No.	The research questions	Subsidiary questions
		3. Which elements of the built environment are affected by urban decay in Thohoyandou CBD?
2.	What are the causes of urban decay in Thohoyandou Town CBD?	1. What has led to urban decay in Thohoyandou Town CBD? 2. What are the most prevalent decay related issues in the Thohoyandou Town CBD? 3. Who is responsible for urban decay in Thohoyandou Town CBD?
3.	How can a framework for implementation of sustainable urban regeneration strategies strengthen capacity of Thulamela local Municipality and other small towns to deal with urban decay?	1. What policy interventions has Thulamela Municipality explored to halt decay, revive, resuscitate, and regenerate Thohoyandou CBD between the year 2011 and 2022? 2. What has challenged the successful implementation of urban regeneration initiatives in Thohoyandou Town CBD? 3. What framework can be used to ensure successful implementation of urban regeneration strategies in Thohoyandou Town CBD?

Source: Author (2023)

1.7. Significance of the study

The primary beneficiary of findings of this study is Thulamela Local Municipality. The municipal council together with officials responsible for municipal spatial planning, land use planning and management and land development are expected to benefit massively through the recommended framework for small town urban regeneration to intensify and strengthen Thulamela Local Municipality's efforts to address urban decay. The findings as well as the recommendations of this study contribute positively towards the broader municipal vision of becoming a city by the year 2030 by ensuring that urban decay is thoroughly diagnosed showing its spatial coverage in the Thohoyandou Town CBD, geospatial data pertaining to decay in Thohoyandou Town CBD is available, and a framework to strengthen the implementation of the existing urban regeneration strategy in a sustainable and guided approach.

More importantly, the findings and recommendations of this research study together with the proposed framework for sustainable implementation of urban regeneration strategies are critical for strengthening the implementation capacity of the existing urban regeneration

strategy in Thohoyandou Town CBD and other small rural towns across South Africa. This study also adds significant value to the national rural development trajectory, conversation, and debate on how to improve the implementation of urban regeneration strategies in small towns. Finally, the benefits of this research study indirectly extend to residents and users of the Thohoyandou Town CBD as urban regeneration in Thohoyandou Town CBD is envisioned to improve the quality of the environment including the built environment, efficiency, safety, health, and security.

1.8. Scope of the study

This section discusses the temporal, physical, conceptual, and theoretical scope of this study.

1.8.1. Temporal scope

This research investigated urban decay in Thohoyandou Town CBD from the year 2011 to the year 2022. This period was characterised by significant legislative and policy promulgations at all spheres of government to advance section 24(a) of the Constitution Act 108 of 1996. At the national government level, legislative and policy changes included inter alia Spatial Planning and Land Use Management Act (SPLUMA) 16 of 2013 adoption of the National Spatial Development Framework (NSDF 2021), Integrated Urban Development Framework (IUDF 2017), Small Town Regeneration Strategy (STR 2021), and District Development Model (DDM 2019). At local government level, policy and legislative changes included the adoption of the Thulamela Urban Development and Regeneration Strategy (2011), Thulamela Spatial Planning and Land Use Management By-Law (2017), Thulamela Street Trading By-Law (2017), Thulamela Refuse Removal, Refuse Dump and Solid Waste Disposal By-Law (2017) and Thulamela Draft Land Use Scheme (2020). These policies and legislations have an impact on any municipal interventions at the local level such as urban regeneration.

1.8.2. Physical scope

This study's geographical focus is Thohoyandou Town CBD situated in Thulamela Local Municipality, Limpopo, South Africa. The study area is within the jurisdiction of Vhembe District Municipality. The study area is bounded by the famously known 'ring road' in Thohoyandou Town with P-east, P-west, and Block-F to the south, west and east of the study area respectively. Map 1.3 shows the study area within its local and district context.

1.8.3. Conceptual scope

In this study, core concepts were selected based on their relevance and suitability to the topic under discussion. These core concepts are urban decay, urban regeneration, and small rural towns.

1.8.4. Theoretical scope

Three theories guided this study these are Kevin Lynch's structural elements (1960), Healey's (1992) communicative and collaborative planning theory, and Porter's competitive cities theory. Firstly, Kevin Lynch's structural elements (1960) were used intensively to visualise the node, paths, edges, districts, and landmarks making up Thohoyandou Town CBD through cognitive or perceptual mapping. The perceptual or cognitive map of Thohoyandou Town CBD was used to study, investigate, and document urban decay based on the visualised and observable occurrence within or around the structuring elements. This theory was useful to determine the least and most affected structuring elements by urban decay throughout the small rural town CBD.

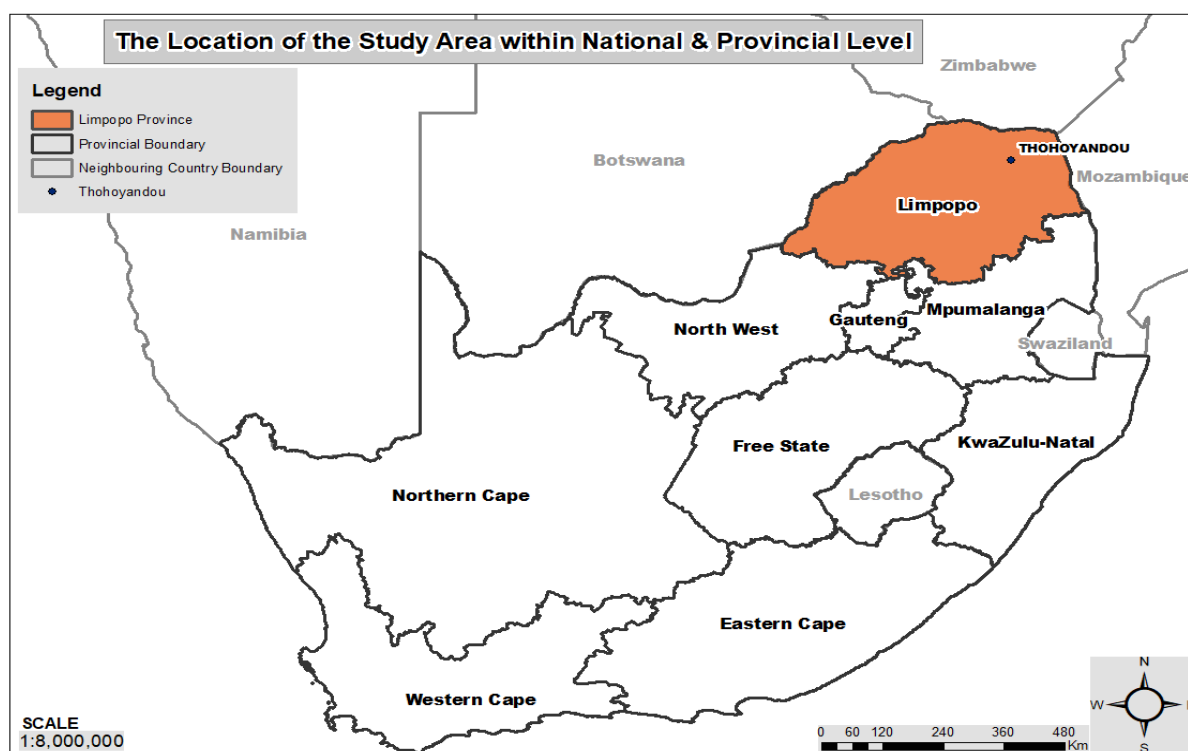
Secondly, the study adopted Healey's (1992) communicative and collaborative planning theory which primarily advocates for the involvement of a variety of voices in development (Ndlebe, 2016). Communicative and collaborative planning theory was utilised to scrutinise and understand the extent of public participation in the development, as well as the implementation of the current urban regeneration strategy. This theory was useful to enhance and integrate increased stakeholder engagement into the proposed framework for small town urban regeneration. Collaboration, communication, and participation are cornerstones of urban regeneration initiatives (Amirtahmasebi et al., 2016; Yiannakou, 2020).

Lastly, this study used Porter's competitive cities theory (1990) which advocates for growth and development through improvements in infrastructure, open space, and human capacity development in order to retain and attract further investments (Mnikathi, 2016). The lack and poor conditions of infrastructure such as roads, drainage systems, and sewerage systems negate the development of urban areas and tarnishes competitiveness. This theory was useful in understanding the core aspects of the existing urban regeneration strategy as well the ramifications of urban decay on determinants of competitive cities such as good governance, urban management, infrastructure, and urban amenities (Kresl, 2013; Thwala, 2016). Porter's competitive cities theory (1990) bears significant influence on the proposed framework for small town urban regeneration especially in terms of improving aspects such as governance

and urban management and utilising these aspects together with enhanced regeneration strategies as leverage for attracting investments. Porter’s competitive cities theory views urban regeneration as an economic and physical development initiative with the potential to overcome decay creating an improved urban environment in turn making the area more attractive to investment (Ngwabi, 2009).

1.9. Description of the study area

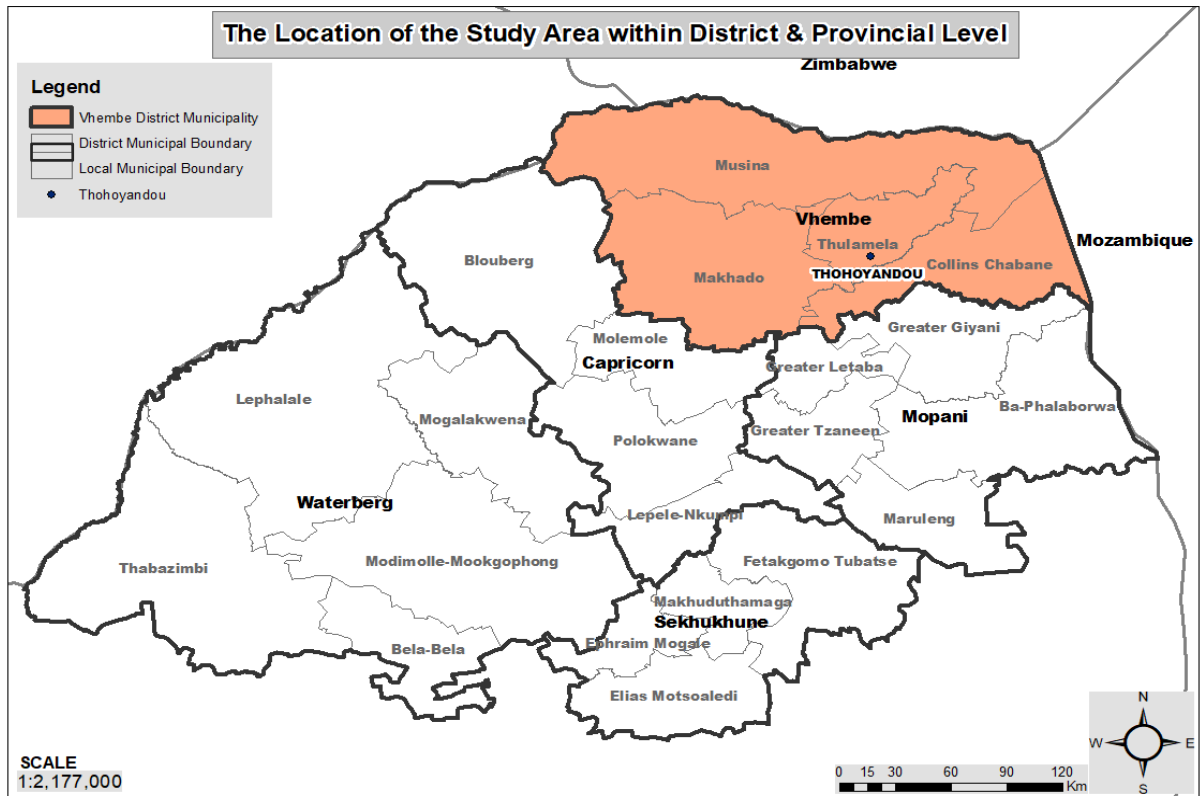
Map 1.1 shows the location of Thohoyandou Town located in the northern part of Limpopo Province of South Africa. Limpopo Province is the northernmost province sharing its southern, south-western, and south-eastern boundaries with Gauteng, Northwest, and Mpumalanga provinces respectively. Limpopo Province also shares its western, southern, and north-eastern boundaries with Botswana, Zimbabwe, and Mozambique respectively. Limpopo Province links South Africa through the inter-regional road (N1) corridor with major cities (Harare, Lilongwe, Lusaka, and Lubumbashi) of neighbouring countries Department of Rural Development and Land Reform (DRDLR), 2021).



Map 1.1: The location of the study area within the national and provincial context
Source: Author (2022)

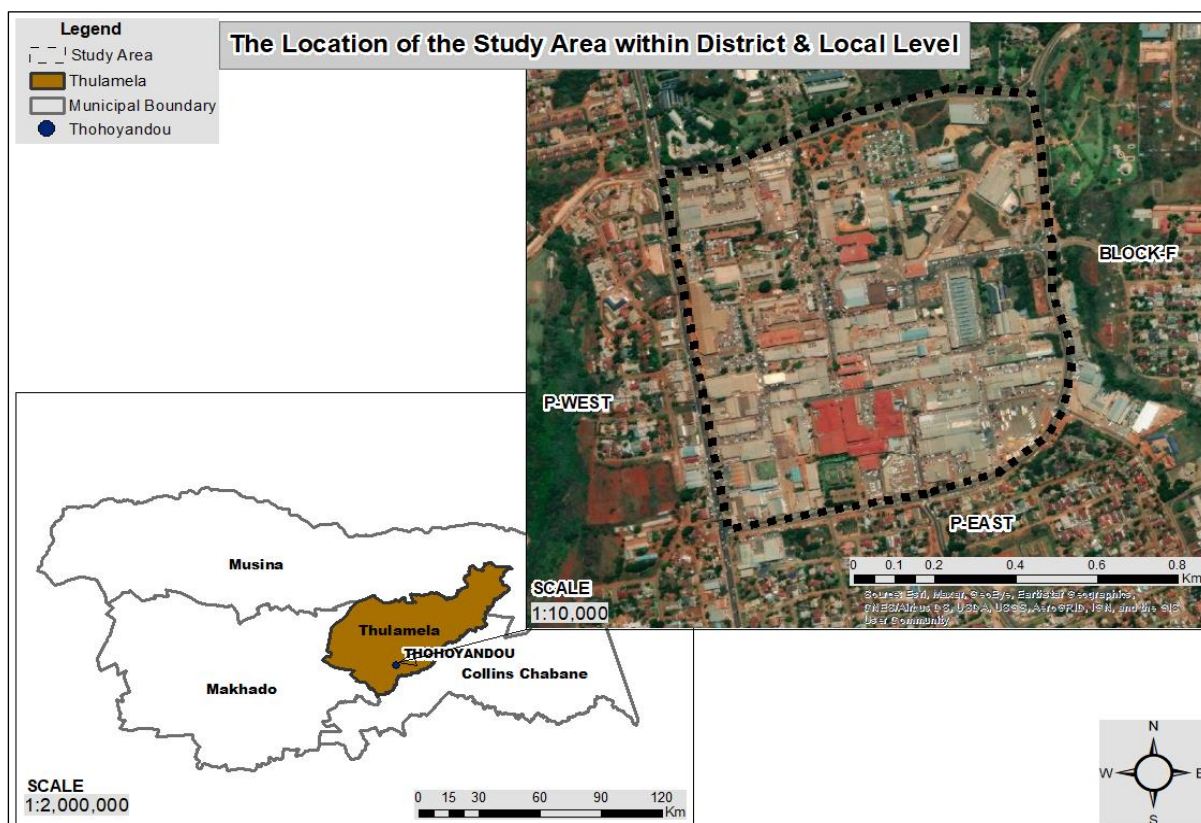
At a district level, the study area is located within Vhembe District Municipality, as shown in Map 1.2. Vhembe District is one of five districts in the Limpopo Province, and is situated in the northern part of the province, sharing its western and southern boundaries with the Capricorn and Mopani districts respectively. Vhembe District also shares its north-western,

northern, and eastern boundaries with Botswana, Zimbabwe, and Mozambique. Map 1.2 below show the location of the study area within Limpopo Province and Vhembe District.



Map 1.2: The location of the study area within the provincial and district context
Source: Author (2023)

Map 1.3 show the location of Thohoyandou Town within the local and district context.



Map 1.3: The location of the study area within the district and local context
Source: Author (2023)

Thohoyandou Town falls within the administrative boundaries of Thulamela Local Municipality, one of four local municipalities within Vhembe District. Within the local context, Thohoyandou Town is the municipal political, administrative, and commercial centre of Vhembe District Municipality (Thulamela Local Municipality, 2021).

1.10. Definition of key terms

Built environment is a network of constructed and modified structures, for example, buildings, parks, and infrastructure that complete the milieu where people live, play, and interact (Wang et al., 2019; Kaklauskas and Gudauskas, 2016)

Central Business District (CBD) is the core area of a city or town characterised by an agglomeration of people, activities, businesses, and offices (Davidson and Dolnick, n.d.).

Infrastructure is a network of man-made structures and components of the built environment needed to sustain life, for example, water, sewer lines, streets, and roads. (Davidson and Dolnick, n.d.).

Land Use Management is a technique, or a system used to facilitate efficient, sustainable use and development of land by ensuring that land development conforms to municipal land legislation (City of Cape Town, 2020)

Small Towns According to COGTA (2021), small towns are settlements of different sizes in terms of the number of inhabitants and geographical spread; they are often too small in terms of function to be considered cities and too diverse to be classified as rural.

Sustainable Development refers to improvements or development that strikes a positive balance between environmental, social, economic, and political factors (Mensah, 2019).

Urban Decay according to (Enoma and Idehen, 2018), is a condition where a majority or portion of an urban area is characterised by grime, abandoned buildings, poor conditions of facilities (including social), and the degraded built environment.

Urban Decline Russell Weaver et al. (2017) describe the concept as significant diminution in the population of a particular geographic area that occurs over a long period of time, which subsequently leads to massive economic shrink.

Urban Governance refers to how decisions, plans, and strategies are implemented by the town government and administration together with its stakeholders (Lange, 2009).

Urban Regeneration is a transformative process that seeks to change dire urban centres into liveable spaces, reversing adverse impacts (physical, socio-economic, and environmental) of urban decay, decline, and degeneration (Kotze and de Vries, 2019).

1.11. Chapters layout

This section provides the outline of this study. This section presents a brief overview of each chapter. This research study is divided into eight chapters as outlined below.

Chapter 1: Introduction and background of the study: This chapter lays out the foundation of this research study on urban decay, urban regeneration, and small towns. This chapter provide the research aim, objectives, rationale, scope, and significance of the study as well as the definition of key terms.

Chapter 2: Conceptual and theoretical framework: This chapter provide literature review of conceptual and theoretical framework of this study. This chapter provide a brief review of core theories and concepts to deepen our understanding of urban decay, urban regeneration issues and experiences in other places and as viewed by other scholars.

Chapter 3: Profiling the study area, legislative and policy framework: This chapter present a review of relevant legislative and policy framework to understand the implications of various policies and legislations on urban decay and regeneration within the context of small town as well as the study area. This chapter extended to profile the study area to enhance our understanding of the historical background, socio-economic outlook, governance and management of the study area and their implications on urban decay and regeneration.

Chapter 4: Research methodology: This chapter sets the methods and techniques for data collection to address the research problem. This chapter discusses the various aspects of research methodology including research design, research approach, data collection procedures, research-sampling techniques, and data collection and analysis procedures.

Chapter 5: Characterising and mapping urban decay in Thohoyandou Town CBD: This chapter documents, maps, and identifies features and situations synonymous with urban decay to characterise the phenomena on the built environment of Thohoyandou Town CBD. This chapter also presents the spatial coverage and distribution of urban decay in Thohoyandou Town CBD.

Chapter 6: Causes of urban decay in Thohoyandou Town CBD: This chapter identifies factors that exposed Thohoyandou Town CBD built environment to decay. This chapter looks at factors that contributed to poor conditions of paths, districts, nodes, landmarks, and edges making up the built environment of Thohoyandou Town CBD.

Chapter 7: Urban regeneration strategies towards addressing physical urban decay in Thohoyandou Town CBD: This chapter explores past and present policy interventions implemented by Thulamela Local Municipality to address decay, revive, and regenerate Thohoyandou Town CBD between year 2011 and 2023. This chapter presents and discusses the proposed small town urban regeneration framework to strengthen the implementation of urban regeneration in Thohoyandou CBD and other small towns

Chapter 8: Research summary, recommendations and conclusion: This chapter summarises the research study including summarising the study area, literature reviewed, data collection and analysis methods, theoretical framework. This chapter also details the research findings and provide recommendations.

1.12. Chapter summary

This chapter shown that small town are pillars of rural development and occupy important role within the settlement hierarchy of cities; they are service centres, employment centres outside primary sector in rural areas, and are preferred localities for government and public offices. Despite their importance within the rural-urban continuum small town are neglected in terms of policy and academic research. Urban decay affects all urban centres regardless of shape or size and there is an urgent need for academics and policy makers to develop contextual solutions to salvage the future and long-term sustainability of small towns. The following chapter reviews literature on urban decay, urban regeneration, and small towns. It further discusses relevant theories and international, as well as local experiences of urban regeneration as remedial action for urban decay in small towns.

CHAPTER 2: CONCEPTUAL AND THEORETICAL FRAMEWORK

2.1. Introduction

This chapter provides relevant theories and concepts related to urban decay, urban regeneration, and small towns. According to (Benachérine, 2019) literature review presents a chronological string of past events as well as findings related to the research problem. The following three sections after this introduction unpack core concepts, which are urban decay, urban regeneration and small towns. Section five looks at the international and local experiences of urban regeneration as remedial measure for urban decay in small towns. The sixth section presents the theoretical framework consisting of Kevin Lynch (1960) placemaking theory, Patsy Healy's (1992) communicative and collaborative planning theory and Michael Porter's (1990) competitive cities theory. Lastly, section seven provides the chapter summary.

2.2. The concept of urban decay

Urban decay emerged in the 19th century when industrial revolution led to overcrowding in big cities across the United Kingdom and other parts of the world (Healey, 1992 cited in Meiring, n.d.). The increasing employment prospects within the manufacturing industry during the 19th century activated massive urban migration which was unfortunately accompanied by massive economic downturn (Mireku et al., 2021). In the global north economic crises of the 19th century accompanied by industry closures exposed cities to economic shocks (Mireku et al., 2021).. This led to massive job losses subsequently followed by a dip in property occupancy declining property occupancy meant high property vacancy ratios, which led to poor property maintenance and declining property conditions (Mireku et al., 2021). This subjected urban areas to what Mireku et al. (2021) term “physical and functional stagnation”.

The concept of urban decay describes a portion or parts of an urban area characterised mainly by grime, problem buildings, poor conditions of facilities and moribund built environment (Enoma and Idehen, 2018). Similarly, Alade et al. (2021) viewed urban decay as the obliteration of buildings and older areas as a result of several factors including neglect, crime, and inadequate financial support. Akabuilo and Okeke (2018) identify urban decay as ‘urban rot’ or ‘urban blight’ and “a process, where a previously well-functioning segment of urban area falls into disrepair and decrepitude”. From these definitions, urban decay is caused by economic, social, and physical factors that if left unattended have the potential to bring the area into disrepair (Ndlebe, 2017).

2.2.1. Causes of urban decay

Sources as well as causes of urban decay are well documented in the global south and north, whereas very little is known about the root causes of the phenomena in Africa (Mireku et al., 2021). In the global south and north three common causes are related to economic decline, deindustrialisation and suburbanisation (Mireku et al., 2021). However, there have been exceptions even in Europe, for example, in Poland and Romania urban decay is attributed to population changes, high mortality rates, and aging population (Haase et al. cited in Mireku et al., 2021). In other parts of the world especially Africa the occurrence of the phenomenon is attributed to poor urban planning, abandoned properties, poor urban infrastructure, poor amenities, physical obliteration, and unemployment (Alias et al., 2016; Akabuilo and Okeke, 2018;). Anderson (2003) cited on Alias et al. (2016) concluded that urban decay is the outcome of interaction between physical, economic, social, and environmental changes within the urban milieu.

In South Africa, urban decay is attributed to apartheid, weak governance, and government (Govender and Reddy, 2019). Ndlebe (2017) add that urban decay also emanates from a combination of urban maladies such as crime, poor living conditions as well as lack of maintenance and mismanagement of immovable property. The South African government constantly admitted that urban areas continue to suffer from the consequences of apartheid, poverty, and exclusion (social and economic) (Republic of South Africa, 2014b). Küsel (2009) add that apartheid former homelands remain under-serviced, and these areas suffer from public service and infrastructure backlogs. Basic services, housing, and infrastructure backlogs have crippled and strained local government across South Africa (Govender and Reddy, 2019). The Department of Cooperative Governance and Traditional Affairs COGTA (2021) admitted that small towns lack efficient governance compared to intermediate cities. Poor management and maintenance of existing infrastructure, as well as services in most urban areas is indicative of governance failure, and an incompetent government (Acioly, 1999). Govender and Reddy (2019) posit that, “legislation in South Africa does not address issues of degeneration of city spaces”. These inefficiencies in government combined result in physical and environmental deterioration leading to urban decay (Acioly, 1999).

2.2.2. Implications of urban decay

A positive correlation exists between urban decay and lawlessness (White et al., 2014). Social unrests and disorders, such as public drinking, drug abuse and sexual harassment seen across many urban centres are synonymous with run down parts of urban areas (Alias et al., 2016).

These social disorders according to Alias et al. (2016), lead to the advent of crime and prostitution. Decaying urban spaces are characterised by vacant properties which according to Akabuilo and Okeke (2018), are socially dangerous, attractive to criminals, and illegal activities. Economic implications associated with the phenomena include capital flight, unemployment, diminishing tax base, and sluggish economic growth (Owens III et al., 2020). This is attributed to the exodus of small businesses, industries, and manufacturers Acioly (1999). Urban decay compromises the area’s investment prospects and reduces the quality-of-life people living in the affected (Ndlebe, 2017). Table 2.1 provides a brief summary of other economic, social and physical implications associated with each dimension of urban decay as identified by (Enoma and Idehen, 2018). This study explores the physical dimension of decay looking at its causes and implications in Thohoyandou Town CBD.

Table 2.1: Economic, social, and physical implications of urban decay

Dimension of urban decay	Economic	Social	Physical
Implication	<ul style="list-style-type: none"> - Poverty - Economic disinvestment - Economic downturn - Rising unemployment 	<ul style="list-style-type: none"> - Increased crime incidents - Hooliganism - Moral bankruptcy - Political unrest - Segregation - Internal displacement - Kidnapping and assassin 	<ul style="list-style-type: none"> - Overcrowding - Squalidness/grime - Decrepit structures - Poor amenities conditions - Obliterated urban environment

Source: Enoma and Idehen (2018: 2)

In Ghana, the Land Use and Spatial Planning Act, 2016 (Act 925) provides a criterion for the identification of decaying area. The Land Use and Spatial Planning Act (2016) consider high incidences of crime, overcrowded spaces with unhealthy population density, poor sanitation, and stormwater drainage as well as lack of appropriate services as indicators of urban decay. Mireku et al. (2021) acknowledge that differences may exist in terms of identification and characterisation of decay and emphasises the importance of characterisation as it “enables a more global understanding of what urban blight could be, as well as the dynamics of its manifestation and nature”. This study therefore set aside poor management, weak governance and government, poor urban planning, abandoned properties, poor urban infrastructure, poor amenities, poor maintenance of existing infrastructure, poor sanitation, and stormwater drainage, lack of maintenance and mismanagement of immovable property as variables used to characterise and measure urban decay in Thohoyandou Town CBD.

2.3. The concept of urban regeneration

Furbey (1999), an urban sociologist views the term ‘regeneration’ as a combination of Latin and Greek words with similar meanings. In Latin it means ‘rebirth’ or ‘born again’ whilst in Greek it refers to ‘becoming new again’ or ‘reconstitution’ (Furbey, 1999). The word ‘regeneration’ is entrenched in religion, sociology, and medicine where it is linked to the notion of “rebirth, revival, and reconstitution” (Tallon, 2009). Jones and Evans (2008) note how regeneration was associated with Christianity during the 1980s in this instance regeneration was seen as “a moral crusade, rescuing not only the economy but the soul of the nation”. Furbey (1999) links the concept of regeneration to biology regarding moribund urban centres as lesions that could be treated through urban regeneration bringing urban centres to life once again. This clearly shows that regeneration is a concept with contested origin but has found its useful expression within the built environment, and is heavily associated with reinvigorating deteriorating urban spaces subjected to negative changes linked to urban decay (Akuwuah, 2015).

In addition, it is difficult to capture what encompasses urban regeneration provided its evolution over the past centuries. Yiannakou (2020) depicts urban regeneration as a complex policy that “cannot be characterised by a single set of instruments” with ever-changing scope (objectives, focus and participants) depending on context (place and time). Several authors including Mnikathi (2016) and Tallon (2009) use Roberts (2000) definition which sees urban regeneration as “a comprehensive and integrated vision and action which leads to the resolution of urban problems, and which seeks to bring about lasting improvements in the economic, physical, social and environmental conditions of an area that has been subject to change”. Roberts (2000) definition appeals to most scholars because it offers a better understanding of urban regeneration as a dynamic and evolving concept (Akuwuah, 2015). Turok (2005) cited in Tallon (2009) pointed out a vacuum in Roberts (2000) definition stating that more often than not urban regeneration is hardly ‘all-inclusive’ and sometimes urban issues cannot be sufficiently addressed practically. This means that urban regeneration can only be understood within the context it is taking place. This research therefore seeks to develop a framework for sustainable implementation of urban regeneration strategies for Thulamela Local Municipality and other small towns across South Africa to deal with urban decay. This study adopts Roberts (2000) and Yiannakou (2020) definition to adequately respond to the main research question and objectives. The definition views urban regeneration as an instrument for establishing policies and carefully thought actions intended to improve declining conditions of urban areas.

2.3.1. The evolution of urban regeneration in urban centres

The evolution of urban policy that has shaped urban regeneration since 1945 leading to the 21st century is well documented by several authors including Roberts (2000), Akowuah (2015), Yiannakou (2020) and Tallon (2009). Ngwabi (2009) concedes that the United States and United Kingdom dominate urban regeneration literature. This study draws from experiences from these countries with particular focus on the roles assumed by different stakeholders and the scope of each policy within these different eras. Table 2.2 traces the evolution of urban policy that influenced urban regeneration from the 1950s to the 1990s.

Table 2.2: The evolution of urban policy influential to urban regeneration

Period	1950s	1960s	1970s	1980s	1990s
Policy Type	Reconstruction	Revitalisation	Renewal	Redevelopment	Regeneration
Key action and stakeholders	National and local government; private sector developers and contractors.	Move towards a greater balance between the public and private sector.	Growing role of the private sector and decentralisation in local government.	Emphasis on private sector and special agencies; growth of partnerships.	Partnerships are the dominant approach.
Economic focus	Public sector investment with some private sector involvement.	Continuing from the 1950s with growing influence of the private investment.	Resource constraints in the public sector and growth of private investment.	Private sector dominant with selective public funds.	Greater balance between public, private, and voluntary funding.
Social content	Improvement of housing and living standards.	Social and welfare improvement.	Community based action & greater empowerment.	Community self-help with very selective state support.	Emphasis on the role of community.
Physical Emphasis	Replacement of inner areas and peripheral development.	Some continuation from the 1950s with parallel rehabilitation of existing areas.	More extensive renewal of older urban areas	Major schemes of replacement and new development 'flagship schemes'	More modest than 1980s; heritage and retention
Environmental approach	Landscaping and some greening	Selective improvements	Environmental improvements with some innovation	Growth of concern for wider approach to environment	Introduction of broader idea of environmental sustainability

Source: Stohr (1989) and Lichfield (1992) cited in Roberts (2000:14) modified Author (2023)

According to Mnikathi (2016), the 1960s regeneration efforts focused on improving the physical outlook and revamping older cities ravaged by the Second World War (Roberts, 2000). Barosio et al., (2016) referred to the period between 1945s and early 1970s in the United Kingdom as the 'era of the bulldozer' characterised by mass demolition of existing structures and erecting new buildings giving urban areas a completely new image. Central government

aggressively led the post-war reconstruction (Roberts, 2000) (See Table 2.2). In the United Kingdom between 1946 and 1970, approximately 28 new towns were built with more than 1.2 million houses destroyed in 1955-1974 (Tallon, 2009). The 1970s were more experimental and saw the development of an integrated approach and encouraged partnerships with the role of the private sector increasing slightly (Tallon, 2009). Flagship projects were implemented to bolster cities economic competitiveness (Qwabe, 2016). The era between the 1980s – 1990s witnessed significant growth of private sector involvement because of the economic downturn experienced by the public sector (Jones and Evans, 2008) (See Table 2.2). From the 1990s onwards, the emphasis was on the inclusion of previously excluded social groups especially the poor in development decision making, private-public partnerships amongst different players (private, public sector, urban regeneration agencies, and not for profit organisations) (Jones and Evans, 2008; McDonald et al., 2009) (See Table 2.2). A more integrated and sustainable model was initiated with the primary objective to enhance social, economic, physical, and environmental conditions (McDonald et al., 2009; Qwabe, 2016).

This evolution in Table 2.2 shows how urban regeneration has evolved to become a planning intervention and solution underpinned by principles of the collaborative and communicative theory that value participation of a variety of voices (stakeholders including the general public, private sector, government, government agencies, and voluntary organisation) in decision making. The evolution also reveals that regeneration is entrenched in competitive theory, and has evolved to become an economic, physical, social and environmental intervention creating attractive urban spaces, improves urban areas investment prospects, and enabling it to compete more effectively for investments (Ngwabi, 2009). Urban regeneration has undergone a significant revolution such that its objectives have stretched to restructuring urban fabric, urban economic renewal, and city image enhancement as well as prioritizing citizen participation (Hassan, 2012). Over the years, urban regeneration increasingly strived for a positive balance between economic, physical, social, and environmental improvements as depicted. Hassan (2012) posited that approaches to regeneration take dimensions, the economic dimension which its primary focus is on job and employment creation; social or culture which is focused on quality of life and public services. The physical or environmental dimension is primarily concerned with improvement of infrastructure and built environment as well as the natural environment; and the governance dimension entails strengthening local decision making, community engage, and leadership (Hassan, 2012)

Steenkamp (2004) cited in Qwabe (2016) stresses the importance of well-being of urban areas arguing that urban centres are engines of employment opportunities, political and social hubs accommodating millions of people. Urban regeneration thus addresses the important socio-economic components of sustainable development. Marginalised groups often occupy decaying urban parts. Improvements in these urban spaces means upgrading living conditions and standards of the disadvantaged people which responds to Sustainable Development Goal Number 11 that advocates for sustainable cities and communities (Boyle et al. 2018).

2.3.2. Negative implications of urban regeneration

On the other hand, urban regeneration has been criticised for perpetuating economic and social polarisation in urban areas (Maresce, 2013). Regeneration has accrued more economic benefits, whilst escaping social responsibility (Qwabe, 2016). This means that urban regeneration is not beneficial to all affected citizens (Ngidi, 2018). Shatkin (2007) cited in Ngidi (2018) points out that economic interests override social aspirations in most urban regeneration initiatives. More often regeneration interventions result in the displacement of the marginalised urban dwellers, as well as small businesses whilst remaining attractive to the affluent class (Qwabe, 2016; Ngidi, 2018). Mega urban regeneration projects are imposed on people with little or no consultation or any form of participation for example, the case of Durban Point Waterfront Development project (Mnikathi, 2016).

2.4. Small towns

Defining small towns within the South African context is complex considering their dynamics. Some small towns are categorised as mining towns, whilst others are tourist towns (COGTA, 2021). Jousseume and Talandier (2016) indicate that in France there is no nationally endorsed definition or characterisation of what constitute a small town. However, literature reveals that small towns are commonly classified based on size, space, function, and economy (COGTA, 2021). Steinführer et al. (2016) emphasise that the definitions of small towns should be flexible and multi-criterial. “Small towns are settlements of varying sizes existing below intermediate cities in the settlement hierarchy; creating the spatial and economic link between the cities and rural areas and serves as a local node which typically relies on natural resources and other functions; and is characterised by varying levels of resources, services, infrastructure and a limited presence of effective governance structures.” COGTA (2021).

Figure 2.1 shows the strategic location of small towns within the urban-rural continuum and depicts their important role within the settlement hierarchy. From Figure 2.1 below, small

towns provide the link between rural villages and secondary cities (COGTA, 2016). Wang et al. (2019) reiterate that small towns assume important role within the settlement systems, and are integral links between rural and larger urban centres. McKibbin et al. (2012) reaffirm Wang et al. (2019)s' point asserting that small towns execute functions that link surrounding rural areas with larger cities.

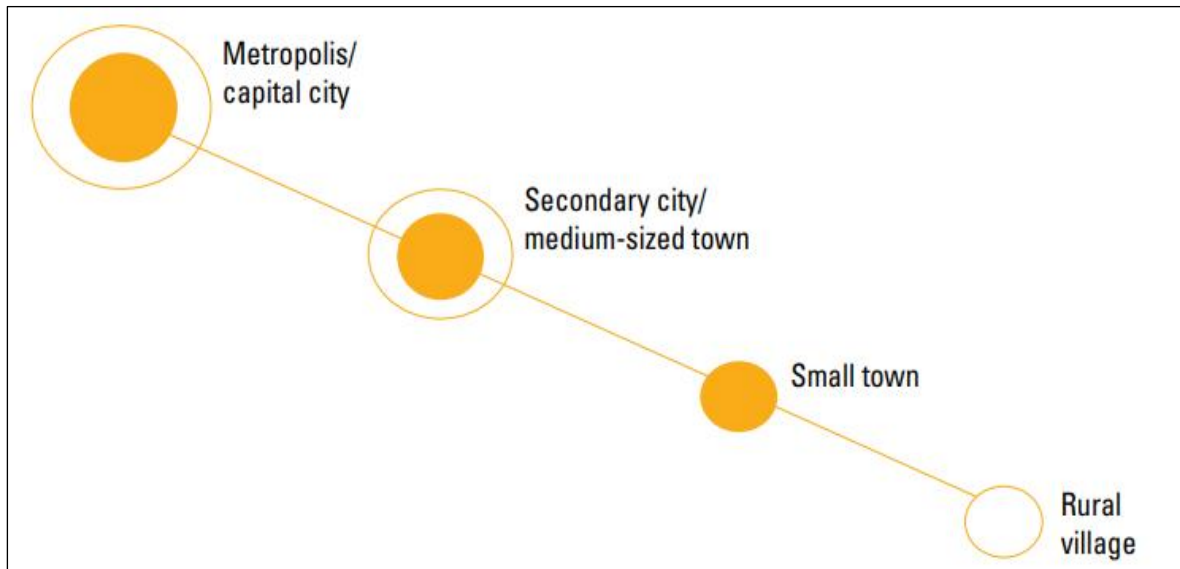


Figure 2.1: The rural-urban continuum
Source: COGTA (2016:30)

2.4.1. Characteristics and functions of small towns

Small towns are distinguishable from other settlement types characterised by lack of well-functioning core and inefficient governance (COGTA, 2021). Predominantly, small towns are characterised by lack of amenities such as concert halls, theatres, art galleries, and music scene (Visvaldis et al., 2013). Wang et al. (2019) view small towns as ‘a hub of rural and urban areas’ due to their dual character having both urban and rural features such as economic development, urban construction and industrial structure. Steinführer et al. (2016) view the notion of characterising small towns in relation to other settlements types, and posit a need for a more positive description. Steinführer et al. (2016) proposed a criteria for characterising and defining small towns without referring to other settlements types as highlighted in Table 2.3 below. Steinführer et al. (2016) acknowledge that some small towns display these properties but not all as depicted in Table 2.3. Table 2.3 view small towns as areas of reasonable size which to some extent is partly urban and have very little variety in terms of opportunities of advancement.

Table 2.3: Analytical and life world criteria of small towns

Analytical criteria	Life-world criteria
Smallness	Reasonable/manageable size
Persistence of historical urban fabric	Identity of being urban dweller
Centrality (excess importance)	Proximity to the open landscape
Formal town status (municipal rights)	Symbolic relevance of urban history and formal status (municipal rights)
Functional specialisation	Limited amount of offers and opportunities of advancement
Specific social capital	Social proximity and safety (unlike the city)
High share of long-established owner occupiers	Emotional bond with the place

Source: Adopted from Steinführer et al. (2016: 327)

Table 2.4 below summarise the roles and functions of small towns dating as far back as the pre – industrial period to the 4th Industrial Revolution (Visvaldis et al., 2013). According to Visvaldis et al. (2013) small towns evolved from being religious and administrative centres in the 1850s, to more functional industrial and business centres from the 1940s onwards. The 20th and 21st centuries saw small towns transforming into multi-functional centres occupying significant role in supply chain, housing, labour, and cultural function (See Table 2.4).

Table 2.4: Summary of the roles and functions of small towns

Period	1850/1900 Pre-industrial period	1940 onwards Post – WW II	20 th /21 st Century
Key function of small towns	<ul style="list-style-type: none"> – Religious and administrative centres; – Sales, retailing, trade, and craft 	<ul style="list-style-type: none"> – Functional centres for industrial and business development (this subjected small towns to decay of social and spatial structures) 	<ul style="list-style-type: none"> – Supply function (source of basic goods and services); – Housing function (provision of habit and building grounds), – Labour market function (provision of structures facilitating local economic activities); and – Cultural function (provision of leisure and tourism).

Source: (Visvaldis et al., 2013: 22)

2.4.2. Implication of urban decay in small towns

Small towns suffer tremendously from poor public service functions, lack of human resources, and shrinking population and this jeopardises their sustainability (Wang et al., 2019). The emergence of industrial revolutions subjected small towns to spatial and social structures decay (Visvaldis et al., 2013). Visvaldis et al. (2013) also highlight the impact of economic downturn referring to the 1980s industrial decline and the 2000 – 2008 recessions that led to escalating unemployment and depopulation in small towns. COGTA (2021: 35-42) on its Small Town

Regeneration Strategy (STR) and Implementation Plan identified several causes and implications of urban decay in small towns. These are summarised in the Table 2.5 below.

Table 2.5: Causes and implications of urban decay in small towns

Contributing factor	Implication
Poor governance, basic services and inadequate basic infrastructure	<ul style="list-style-type: none"> – Less productivity; manufacturing operations are halted by shortages in water and power supply; and – Poor roads compromise emergency service response time and the safety of citizens.
Demographic Changes and lack of employment prospects	<ul style="list-style-type: none"> – Middle class migrate to cities where there are better employment prospects; this has a stifling effect on the small town economy; and – High unemployment rate.
Lack of thriving local businesses	<ul style="list-style-type: none"> – Small towns are dominated by one or few established enterprises and shoppers prefer shopping in larger towns causing a leakage in purchasing power; and – Growing presence and dominance of foreign nationals in the informal sector has constantly sparked violent protests and clashes between locals and foreign nationals.

Source: COGTA (2021: 35 – 42) modified by the Author (2023)

From the discussions above small towns can be located in any part of the country including rural areas. This brings to the fore the concept of small rural town which this research investigated. This discussion shown that small towns are towns of reasonable sizes characterised by limited opportunities. At the same small towns occupy a strategic and crucial role within the human settlement hierarchy of cities and are important for rural development (See Section 2.4 and Table 2.4 Chapter 2).

2.5. Related case studies

2.5.1. International experience of Colditz a small town in Germany (Cudny, 2012)

Colditz is a small town located in the eastern half of Germany previously known as German Democratic Republic (GDR) prior to the amalgamation with the Federal Republic of Germany (FRG) to form Germany (Cudny, 2012). Colditz is home to an estimated population of 4 870 and covers an estimated 33 square kilometres in extent (Cudny, 2012). More interesting Colditz as a small town is located between two large cities Dresden and Leipzig. Due to pull factors from these two large cities, people (especially the young) migrate from Colditz to these two larger cities.

The former GDR therefore suffered from negative demographic changes favourable opportunities in the former FRG as a result of constant out migration of people leading to depopulation and social issues such as unemployment and lower wages (Cudny, 2012). Social issues such as unemployment and depopulation in Europe are amongst many factors underlying urban decay. In Europe, urban decay is normally attributed to economic decline,

deindustrialisation, suburbanisation, depopulation and aging population (Mireku et al., 2021). According to Cudney (2012) physical (deteriorating and abandon industrial buildings), social (depopulation, unrest and out migration) and economic (deindustrialisation and unemployment) factors combined led to urban decay in Colditz. However, the small town managed to successfully address urban decay through urban regeneration.

Between 1990 and 2009 Colditz witnessed negative population growth associated with economic turmoil including the permanent closure of several big firms and post office, lack of entertainment and leisure facilities, and unemployment (Cudney, 2012). Staddler (2005) cited in Cudney (2012) highlights that this led to further dilemmas such as the railway connection and train station closure, and a prominent high school in the area halted its operation. Lack of investment linked to deindustrialisation led to high rates of unemployment in the area, and subsequently depopulation. Cudny (2012) recounts how large industrial buildings were abandoned and some demolished to ground. This scenario is similar to the 19th century where unfavourable economic conditions exposed small towns economic shocks that had negative trickle down effects resulting in “physical and functional stagnation” (Mireku et al., 2021).

Colditz Town initiated a revitalisation and regeneration anchored on tourism due to the area’s rich history and architecture including the presence of a castle constructed from Middle Ages and later modified during the renaissance to intensify effort towards regeneration. In addition, Colditz Town adopted a revitalisation and development strategy focusing on the installation of urban infrastructure (streetlamps, greening and benches), construction of new art gallery, brewery and hotel. Other improvements included pavement and street filling/repair, construction of new parking spaces and reconstruction of the medieval town wall. In the case of Colditz, urban regeneration became an economic, physical, social, and environmental intervention with the primary objective to create more attractive urban spaces in turn improving urban areas investment prospects and enabling Colditz to compete more effectively for investments (Ngwabi, 2009). However, the regeneration of Colditz was hampered by flooding in 2002. The government funded the regeneration of Colditz Town, and an estimated 9.1 million Euros was spent on the urban regeneration projects. With improved environment through urban regeneration, the number of visitors grew from approximately 2 500 to 8 000, average tourists stay increased from approximately 2 – 3 days; and use of hotel beds reached 26,5% rising from 16,2% between year 1999 and 2009 (Cudny, 2012). The positive gains from urban regeneration efforts in Colditza Town are summarised in Table 2.6.

Table 2.6: Potential directions of the socio-economic and spatial changes in Colditz

Groups of changes			
Demographic	Social	Functional and economic	Spatial
Directions of changes			
<u>Positive:</u> –	<u>Positive:</u> – stabilised and later decreasing number of the unemployed, – development of local initiatives, e.g. social organisations (verein), activating the 'social capital' of the inhabitants.	<u>Positive:</u> – development of home and international tourism, – better use of Colditz tourist potential by developing tourist infrastructure and a better promotion of the town.	<u>Positive:</u> – further revitalisation of the town. – altering the physiognomy of the market square (greenery, new shopping gallery).
<u>Negative:</u> – persistent negative population growth rate, – further decrease in the population size, – further ageing of the community.	<u>Negative:</u> – first, persistent negative migration balance; later, possible oscillation of the migration balance value around zero, – further problems with the neo-Nazi movement, – growing dependence of a part of the town community on social care; lack of motivation to look for a job and start work.	<u>Negative:</u> – lack of new, large industrial investments; it is unfavourable because of the industrial traditions of the town and a large number of inhabitants skilled to work in industry, – shortage of new, large investments in services, – risk of monofunctional economy, based mainly on tourism; such economic structure of the town would be very sensitive to all the problems on the tourist market, – growing dependence on foreign tourists, e.g. from the UK.	<u>Negative:</u> – further degradation of some built-up areas, e.g. not revitalised privately-owned tenement houses or those with owners unknown; closed down railway station, – problems with finding an investor in the premises of the former porcelain factory, forming an urban fallow (brownfield).

Source: Adopted from Cudny (2012: 42)

The case study reveals that through urban regeneration, Colditz Town's physical, economic, and social outlook improved drastically. Colditz Town transformed from a declining industrial area into a booming tourism hub with hotels and heritage sites, and improved employment prospects. Investment into infrastructure and building improvements made the small town more appealing and attractive to tourists thereby transforming the overall image of the area. Employment, as well as working opportunities improved. It is expected that the unemployment rate takes a massive dip in future. However, the area is still presented with lack of industrial investment to revive and make use of existing industrial site and structures. This is critical for further development of Colditz Town and is required to help the small town diversify and become resilient to future economic shocks. Clearly, urban regeneration is a process critical to reversing urban decay and it takes time. Urban regeneration as a process requires patience, resources, and commitment from all parties involved.

2.5.2. South African experience: Alice Town in the Eastern Cape, South Africa (McKibbin et al., 2012 and Kienast-Duyar, 2010: 32)

Alice, a small town in Raymond Mhlaba Municipality (previously known as Nkonkobe Municipality) of Amathole District Municipality in Eastern Cape Province of South Africa experienced urban decay (McKibbin et al., 2012). Raymond Mhlaba Local Municipality is one of the poorest municipalities in the Eastern Cape Province (Ngumbela et al., 2019). McKibbin et al. (2012) linked the prevalence of poverty especially in small towns to socio-spatial legacies of the apartheid regime. Alice Town is home to more than 8 000 people, and has a fairly large catchment servicing more than 50 villages; and is home to the University of Fort Hare (McKibbin et al., 2012). More importantly, Alice Town is strategically located along the R63 linking the small town to larger urban centres in the southwest including King Williams Town and East London.

Alice Town is characterised by features synonymous with urban decay these include inter alia abandoned properties, grime, ageing town centre, and poor infrastructure (McKibbin et al., 2012). This trend is common in the Eastern Cape Province within the Amathole District Municipality. According to Ngumbela et al. (2019), infrastructure maintenance, delivery and backlogs are the main developmental challenges at both provincial and district levels in the Eastern Cape Province. Akabuilo and Okeke (2018) and Alias et al. (2016) state that more often than not urban decay is caused by abandoned properties, unemployment, poor urban infrastructure, physical obliteration, and poor amenities. It is also reported that unemployment levels are significantly high within the Amathole District Municipality which extends to Raymond Mhlaba Local Municipality (Kienast-Duyar, 2010; McKibbin et al., 2012).

Acknowledging the challenges in Alice and other small towns within the district, Amathole District Municipality established Amathole Economic Development Agency (AEDA) in 2005 which was later renamed to ASPIRE (McKibbin et al., 2012). ASPIRE is mandated to promote economic development through spatially targeted investments in corridors and the 26 small towns within the Amathole District Municipality including Alice Town (Kienast-Duyar, 2010). ASPIRE managed to draw the national government's attention to small town regeneration particularly the South African National Treasury through its Neighbourhood Development Programme which funded Amathole District regeneration efforts (Kienast-Duyar, 2010). Through Neighbourhood Development Programme funding estimated at more than R300 million in 2010 ASPIRE piloted the implementation of small town regeneration programmes in Stutterheim, Hamburg, Alice, Butterworth, and Idutywa (McKibbin et al., 2012). The

establishment of municipal development agencies tasked to execute urban regeneration is a common trend in South Africa for example the eThekweni Metropolitan has the Inner eThekweni Regeneration and Urban Management Programme (iTrump), whilst the City of Johannesburg Metropolitan has Johannesburg Development Agency (JDA).

Kienast-Duyar (2010: 32) discusses the four pillars of ASPIRE's small town regeneration programme. Firstly, ASPIRE's small town regeneration focuses on the uniqueness of each town and acknowledging different contexts, as well as challenges and potentials to explore. All Amathole District municipalities' small towns had different visions for example Alice envisioned itself as 'a university town' whilst Butterworth sought to transform their CBD into 'functional economic and transport node'. Secondly, ASPIRE used spatial projects as anchor, spatial interventions were utilised to unlock bottlenecks establishing cooperation between stakeholders. However, the anchor projects ha to align to the broader regeneration vision of each town (Kienast-Duyar, 2010). Thirdly, ASPIRE focused on forging strong relationship with all municipalities in the district considering municipalities as partners in urban regeneration and are responsible for spatial planning, community engagement and operations within their jurisdiction (Kienast-Duyar, 2010). The roles as well as challenges for each municipality were acknowledged in the process. Lastly, stakeholder management responsibilities, ASPIRE assume the role of mobilising and facilitating stakeholders and became the social facilitator (Kienast-Duyar, 2010).

The University of Fort Hare is Alice Town's main assert, is amongst the oldest institutions of higher learning in Southern Africa. Its alumna includes a list of African's most prominent leaders such as Nelson Mandela, Oliver Tambo, Govan Mbeki, Julius Nyerere, Chris Hani, and Robert Mugabe (Mckibbin et al., 2012). Similar to German's Colditz Town, Alice Town views this historical assert as its regeneration anchor. Alice Town regeneration strategy envision the small town as a 'a university town' (Kienast-Duyar, 2010). Urban Regeneration efforts in the area centred around the university as an anchor by integrating the university within Alice Town fabric and developing quality accommodation attractive to university staff and students (Mckibbin et al., 2012). Other interventions include infrastructure upgrades, improving the overall image of the town, and releasing state land. However, political interference, racial intolerance, lack of public and private buy in, and lack of participation hampered Alice Town regeneration strategy (Mckibbin et al., 2012). Alice Town continues to degenerate despite the implementation of urban regeneration strategy (Mckibbin et al., 2012). This shows that public

participation, public and private support, and political will as well as commitment are critical to successful conception and implementation of urban regeneration strategies.

2.6. Theoretical framework

This section presents the theoretical framework guiding and informing this study. This study's theoretical framework consists of Kevin Lynch (1960) placemaking theory (structuring elements), Patsy Healy (1992) communicative and collaborative planning theory and Michael Porter's (1990) competitive cities theory.

2.6.1. Structuring elements (Kevin Lynch, 1960)

Kevin Lynch had interest in fully comprehend how individuals perceive their subsequent urban settings. In his book titled 'The Image of the City' Kevin Lynch recognises that individuals construct series of mental images of their surroundings (Lynch, 1960). Lynch (1960) acknowledges that people possess the ability to read, interpret urban features and process them into vivid mental maps referred to as conceptual or perceptual maps (Al-Kodimany, 2001). According to Filomena et al. (2019), these perceptual maps are a composition of five broad elements namely districts, edges, paths, nodes, and landmarks. In general terms, Lynch (1960) posits that people create cognitive maps of their surroundings. These cognitive or perceptual maps of the urban built environment whether cities, towns, or small rural towns consist of five structuring elements namely districts, edges, paths, nodes, and landmarks (Khashim et al., n.d.).

Paths encompasses streets, passages, and walkways with the primary purpose to facilitate movement within an urban area (Khashim et al., n.d.). Paths facilitates both vehicular and pedestrian flow in cities and towns alike (Al-Kodmany, 2001). Edges refer to permeable and non-permeable borders that prevents continuity such as development edges or borders separating districts (Khashim et al., n.d.). According to (Filomena et. al., 2019) it is possible for edges to align with paths; however, edges are not regarded as paths. Districts are considered as small to large parts of the urban area consisting of similar characteristics (Khashim et al., n.d.). Al-Kodmany (2001) acknowledged that traits such as building function or form, architecture, and land use activity define districts. To some extent, districts are inclusive of nodes, edges, paths, and landmarks (Meliana et al., 2021). It is important to note that this study utilised both building function and land use to determine districts in Thohoyandou Town CBD. Nodes are referred to as "strategic spots in a city into which an observer can enter, and which are the intensive foci" (Šiđanin, 2007). In simple terms nodes are normally strategic centres of interests resulting from convergence or intersection of streets and roads (Khashim et al., n.d.).

Landmarks are physical structures significant enough in terms of size to be considered as points of references these may include physical objects such as signs, mountains, and buildings (Khashim et al., n.d.).

Normally cognitive or perceptual maps are used to study the relationship between people and their subsequent environment (Khashim et al., n.d.). This study takes a slightly different approach utilising perceptual and cognitive maps consisting of the five structuring elements to study, trace, and document urban decay in the built environment in Thohoyandou Town CBD (See Section 5.3 Chapter 5). In this study, urban decay is studied based on the occurrence of the features indicative of decay within or around the five structuring elements making up the built environment in the study area. Structuring elements are integrated with geospatial data gathered in the study area to determining elements of the built environment affected by decays in Thohoyandou CBD. Lynch (1960)'s structuring elements are central in term of tracing, recording, and documenting urban decay in the built environment of Thohoyandou Town CBD (See Section 5.3 Chapter 5). In this case, the built environment constitutes paths (streets, passages, road reserves, pavements, and walkways/frontage zones), nodes (areas of agglomeration or concentration of activities including some street intersections), districts (small to large parts of the urban area consisting of similar characteristics), landmarks (physical structure that can be used as reference including prominent building structures), and edges (study area boundary which is the ring road) (See Map 5.4 Chapter 5). From this theory the five structuring elements guided the documentation, recording and investigation of urban decay on the built environment throughout the study area.

2.6.2. Communicative and collaborative planning theory (Patsy Healy, 1992)

Communicative and collaborative planning theory has been used extensively by several scholars to study and investigate the dynamics of urban regeneration including Mnikathi (2016), Ndlebe (2017), and Romero (2017). Communicative theory emerged between the 1980s and 1990s to understanding how the real world operates shifting away from the systematic model of planning which dominated planning discourses since the 1950s (Machler and Milz, 2015).. Communicative theorists challenged scientific planning model arguing that the role of planning inquiry is to gain more understanding about social issues (Machler and Milz, 2015). The proponents of communicative theory include Judith-Innes, Lawrence Susskind, Bruce Goldstein, and Patsy Healy (Machler and Milz, 2015).

Jürgen Hebermas communicative rationality influenced and shaped communicative theory to some extent (Mnikathi, 2016). Hebermas communicative theory is premised on communication, encourages honest dialogues, and debates among different interest groups in pursuit of common consensus (Mnikathi, 2016). Critics argued that communicative theory places too much emphasis on the process of reaching outcome and fails to acknowledge existing power dynamics. Nueman (2000) posits that political forces normally override planning decisions, and this is where power dynamics come into play in development decision-making processes.

Tewdr-Jones (1998) cited in Ndlebe (2017) provide that collaborative theory was derived from communicative action. Mnikathi (2016) added that communicative planning theory embrace principles of collaborative theory in the process to reaching consensus. Collaborative planning theory promotes dialogue and debates among different role player with different interests, as well as standpoints involved in development (Healey, 1997). In general terms, communicative and collaborative theory acknowledge the voices of different actors in planning and development initiatives such as urban regeneration. Communicative theory extended to seek complete understanding of social issues.

Urban regeneration is complex to conceptualise, plan and implement successfully as it involves several role players, including municipalities, government departments, private and general public, not for profit organisations, and regeneration agencies. Furthermore, the communicative and collaborative theory strive for consideration of different groups with varying interests in the process of attaining consensus in development initiatives. Therefore, communicative and collaborative planning theory forms the basis of understanding the extent, as well as the level to which different interested and affected parties participate in the past and present Thohoyandou Town CBD regeneration initiatives. This study utilised communicative and collaborative theory intensively to scrutinise the extent of stakeholder engagement in past and current urban regeneration effort. This theory created a foundation for understanding blockages to public participation in the conception as well as implementation of the Thulamela Urban Development and Revitalisation Strategy. Communicative and collaborative theory also had a significant impact in terms of informing, guiding and entrenching increased stakeholder engagement in the recommended small town urban regeneration framework.

2.6.3. Competitive cities theory (Michael Porter, 1990)

Michael Porter's competitive cities theory rose into prominence in the early 1990s coinciding with the emergence of globalisation (Harrison, 2002). Mnikathi (2016) posit that the theory is located within the globalisation discourses. Planning and urban management within the competitive cities discourse is seen as a tool to draw and retain capital investments (Harrison, 2002). Healey (1992) conceded that improving urban areas competitiveness plays a central role towards alleviating urban poverty and improving employment prospects through the creation of good living environment. Preserving, maintaining, and improving competitiveness translates into better living conditions and improvement of the area's overall conditions of the built environment including roads, infrastructure and building structures. These improvements trickle down to enhance employment prospects as large proportions of the population stand better chances to get hired for jobs. Improved city's competitiveness also translates into improved governance, accountability and efficient service delivery necessary for preventing the infiltration of decay into an area. Therefore, preserving, maintaining, and improving competitiveness is central to reversing, as well as overcoming urban decay and ensuring long-term sustainability of small rural towns across South Africa.

Urban regeneration is concerned with enhancing urban area's economic function, social vitality, physical, and environmental conditions. All these improvements combined give the urban areas that much needed competitive edge for capital investment (Harrison, 2002). Urban regeneration ensures that urban area maintains its competitiveness through preserving and enhancing economic and strategic determinants such as infrastructure, urban amenities, good governance and urban strategies (Kresl, 2013).

2.7. Variables selected from literature to guide data analysis

The literature reviewed shows that urban decay manifests in several manners in the built environment. It also revealed that the absence or lack of certain qualities and attributes such as effective urban management, urban planning, governance, and service delivery contributes to declining, and poor conditions of built environment. The absence and lack of these qualities have negative implications on the conditions of infrastructure, building structures, and urban amenities. The documentation, tracing and recording of attributes and situations indicative of urban decay in Thohoyandou Town CBD is strictly guided by Lynch structuring elements namely nodes, edges, paths, landmarks, and districts. Table 2.7 provides a set of variables indicative of urban decay in small towns. The variables listed in Table 2.7 together with the

Lynch structuring elements were selected from the literature reviewed to inform data analysis in this research.

Table 2.7: Variables selected from literature, theories, and concepts to guide data analysis

Variable	Description and examples
Abandon properties; Property and building conditions; and problem buildings	Building structures maintenance, illegally occupied properties, old and abandon building structures, properties contravening LUMS, and properties with broken windows, doors, roofs and paint wearing out, dilapidated with cracked walls.
Quality of public services	Refuse waste collection and disposal, infrastructure (road, streets, pedestrian walkways, stormwater drains, and sewer systems) repair and turnaround time, and infrastructure and building maintenance, and infrastructure provision.
Conditions/state of built environment and infrastructure	Dysfunctional stormwater drainage catch basins, dysfunctional rainwater drain inlets, damaged streets and pavements, unsurfaced streets and pavements, invisible and absence of street markings and signs, water leakages, property maintenance levels, collapsing infrastructure and potholes.
Conditions/state of social and public facilities	Well-being and maintenance of critical social infrastructure for example ablution facilities, taxi rank, and bus rank. Vandalised ablution facilities and supporting infrastructure in taxi ranks and bus ranks.
Strategic and economic determinants of competitiveness	Conditions of infrastructure and amenities, governance, urban planning and management
Other	Political interference and service delivery standards, policy and legislation; development interventions; and public participation or stakeholder engagement

Source: Author (2023)

2.8. Chapter summary

This chapter revealed that decay negatively affects small urban centres and emerge as a result of general neglect of issues related to urban management, urban planning, urban governance, and service delivery It is possible to adequately address urban decay in small towns through the implementation of urban regeneration strategies however, literature shown that this requires patience, resources, and commitment The next chapter will provide a brief review of relevant legislations and policies and their implication for this study. Chapter 3 extends the profile of the study area.

CHAPTER 3: PROFILING THE STUDY AREA, LEGISLATIVE AND POLICY FRAMEWORKS

3.1. Introduction

This chapter is the second literature chapter and is organised as two sections. The first section provides a review of relevant legislative and policy framework pertaining urban decay and regeneration. The legislative and policy review is at three distinct scales which are international, national and local levels. International covers the Sustainable Development Goals 2030. The national scale looks at the Constitution of the Republic of South Africa Act 108 of 1996, Spatial Planning and Land Use Management Act 16 of 2013, Municipal Systems Act 32 of 2000, National Development Plan 2030, National Spatial Development Framework 2022, Integrated Urban Development Framework 2016 and Small Town Regeneration Strategy 2021. The local level cover Thulamela Spatial Planning and Land Use Management bylaw (2017), Thulamela Municipality Integrated Development Plan (2020/21), Thulamela Spatial development Framework (2010) and Draft Thulamela Land Use Scheme (2020). The second section of this chapter profiles the study area looking into aspects such as the historical background, demographics, land use patterns, governance, and accessibility of Thohoyandou Town. This chapter is important because it contextualise legislative and policy framework to the study area, small towns and urban regeneration.

3.2. Legislative and policy framework

This section reviews relevant legislative and policy framework related to urban decay, regeneration and their implications on the study areas. The legislative review is organised and discussed according to three levels the international, national and local scale (See also Section 3.1 Chapter 3)

3.2.1. Sustainable Development Goals 2030 (SDGs)

The Sustainable development goals (SDGs) consist of 17 focus areas attached to more than 60 targets. Urban planning including urban regeneration seeks to advance SDG 11 which advocates for inclusive, safe, resilient, and sustainable urban areas and human settlements (United Nations (UN), 2018). Sustainable Development Goals are underpinned by three pillars social, economic, and environmental that reflect strongly in policies, strategies, and plans (UN, 2018). As complex and broad as it is, urban regeneration addresses key components of multiple SDGs in urban areas particularly SDG 11.

The South African government is a signatory to SDGs 2030. Therefore, the SDGs reflect strongly in legislative policies and plans starting from the Constitution of the Republic of South

Africa (Act No. 108 of 1996), Spatial Planning and Land Use Management Act 16 of 2013, National Environmental Management Act 107 of 1998, National Development Plan 2030, National Development Framework 2022, and Integrated Urban Development Framework 2016. In the context of this study small town urban regeneration is informed and responds to objectives of all the above legislative policies. The regeneration of Thohoyandou Town CDB is a critical milestone towards the realisation of SDG 11 target 11 on “supporting positive economic, social, environmental links between urban peri-urban and rural areas by strengthening national and regional development planning” (UN, 2018). Thus, a framework for sustainable implementation of urban regeneration strategies for Thulamela Local Municipality and other small towns across South Africa contribute positively towards making cities and human settlements more inclusive, safer, resilient, and sustainable.

3.2.2. The Constitution of the Republic of South Africa Act 108 of 1996

The constitution is the highest law in the Republic of South Africa, and its obligations are non-negotiable. These are binding, and must be upheld by government, organisations and citizens’ alike (Republic of South Africa, 1996). Section 24 of the Constitution Act 108 of 1996 provides that all citizens have the right to an environment that is not harmful to their health or well-being and that is protected for the benefit of present and future generations.

The main objective of urban regeneration is to revive moribund urban spaces that bear negative implications on citizen’s safety and health and erode environmental integrity. Urban regeneration promotes sustainable development, economic growth, environmental protection, as well as social development. Therefore, the objectives of urban regeneration respond to constitutional imperatives especially those related to health, safety, and environmental protection. Decaying urban parts of urban areas are commonly occupied by the poorest citizens (Boyle et al., 2018). This drives the need for strategies to improve conditions in places of constitutional significance.

3.2.3. Spatial Planning and Land Use Management Act 16 of 2013

The presence of multiple spatial planning and land use management legislation across nine provinces exacerbated fragmented and unsustainable development prior to 2013. The Spatial Planning and Land Use Management Act (SPLUMA) 16 of 2013 became a single uniform and comprehensive spatial planning and land use management system in the Republic (Republic of South Africa, 2013). The Act also seek to redress injustices of apartheid spatial planning that is prevalent across the country. Central to the act is the promotion of sustainable use and

development of land as well as fostering intergovernmental cooperation (Republic of South Africa, 2013). Spatial Planning and Land Use Management Act 16 of 2013 set out development principles, norms, and standards to guide and inform spatial planning, land use management, and development in the Republic of South Africa 2013.

Smaller, detailed spatial strategies and plans such as local area plans, precinct plans, and urban regeneration strategies are guided and informed by development principles outlined in the SPLUMA 16 of 2013. Therefore, the framework for sustainable implementation of in small town's urban regeneration strategies is underpinned by SPLUMA 16 of 2013, as well as its development principles. These development principles include spatial justice, spatial sustainability, efficiency, spatial resilience and good administration,

3.2.4. The Municipal Systems Act 32 of 2000

The Municipal Systems Act 32 of 2000 regulates the executive and legislative powers of municipalities. The Municipal Systems Act 32 of 2000 allows municipalities to perform and meet their constitutional obligations for example the provision of basic services ((Republic of South Africa, 2000). Section 25 of the Act mandates all municipalities to prepare, develop, and adopt a five-year Municipal Integrated Development Plans (IDP) to guide overall planning and development within the local municipalities (Republic of South Africa, 2000). The Act informs the composition and structure of the IDP. These IDPs must reflect and integrate all municipal sectoral plans, matching available municipal resources, capacity, as well budget (Republic of South Africa, 2000).

The Act therefore provides fundamental principles, mechanisms and processes intended to promote social and economic development and ensure communities have access to affordable services. In this case, urban regeneration is a mechanism and a process driving social and economic growth in urban centres. Therefore, urban regeneration carries forward local government mandate of promoting social and economic growth and development in neighbourhoods.

3.2.5. The National Development Plan 2030

The National Development Plan 2030 (NDP) set out a developmental trajectory for the Republic of South Africa (COGTA, 2021). The NDP promotes the development of a capable state with fair and inclusive economy where citizens participate in development and enjoy quality life free from the shackles of poverty, inequality, and unemployment (Republic of South Africa, 2012). The plan through its priorities, aims to establish a coherent and holistic approach

to improve government capacity. According to COGTA (2021), the NDP recognises the significance of regional and rural governance strategies to the development of rural areas including small towns and villages. Furthermore, the NDP acknowledges the challenge facing cities, as well as small towns and villages (COGTA, 2021).

Chapter 8 of the NDP talks to the need to transform human settlements and the national space economy. This chapter advocates for creation of human settlements guided by and premised on development principles set out in SPLUMA 16 of 2013. Chapter 8 also stresses the need to create places that are liveable, equitable, sustainable, resilient, and efficient as well as support economic opportunities and social cohesion (Republic of South Africa, 2012). This study seeks to recommend a framework for small town urban regeneration to enhance the implementation capacity of urban regeneration strategies in small towns in order to address urban decay and in turn transforming towns and cities into vibrant and flourishing areas despite their size and shape. This study contributes significantly to the implementation of the NDP priorities not only in Thohoyandou Town CBD, but also in all small towns across the Republic of South Africa that are undergoing urban decay. In this manner this research has a positive impact on Chapter 8 of the NDP more especially, and the SDG11 target 11a.

3.2.6. National Spatial Development Framework 2022

The National Development Plan 2030 identified the need for a National Spatial Development Framework as a vehicle for spatial transformation, planning, land use, and to provide a guide for land development in the Republic (COGTA, 2019). Section 12 (1) and 13 (1) provide for preparation, adoption and publication of the NSDF (Republic of South Africa, 2013). According to COGTA (2021), the NSDF is a spatial expression of the NDP. The NSDF core focus areas consist of three distinct priorities (COGTA, 2021). Firstly, prioritization of environmental protection, protect and preserve the nation's natural environment, as well as ecosystem through identification and demarcation of environmental sensitive or risk areas in need of conservation and protection. Secondly, it directs public investments, inform, guide and facilitates public and to some extent private investment into spatially targeted areas. Lastly, is the promotion of nodal and corridor development, define sustainable urban form, and promote dense nodes linked to by functional corridors.

In this regard, the NSDF identifies Thohoyandou Town as part of the Mbombela Bushbuckridge-Phalaborwa-Thohoyandou-Makhado transformation corridor which has seen significant growth in population, but remains under threat due to lack of opportunities

(COGTA, 2022). The NSDF proposals for the transformation corridor include ensuring consistent upgrading and upkeep of existing infrastructure, as well as the development of context specific and sustainable, social service, infrastructure, basic service investment and delivery model in this corridor, which is possible through urban regeneration. In actual fact, urban regeneration strategies emerge as the investment and delivery models and implementation vehicles of NSDF interventions within the Mbombela Bushbuckridge-Phalaborwa-Thohoyandou-Makhado transformation corridor. More importantly, the NSDF has set out the development priorities for the transformation corridor which Thohoyandou forms part of and urban regeneration strategies becomes the implementation tool under which these development priorities are implemented in a guided and sustainable manner.

3.2.7. Integrated Urban Development Framework 2016

According to COGTA (2021) the Integrated Urban Development Framework (IUDF) is the ‘new deal’ for South African cities and towns. The framework shifts away from viewing urban and rural areas as separate entities, and instead view these areas as a continuum of settlements (COGTA, 2016). The goal of this framework is to transform the current spatial landscape of cities and towns by ensuring that urban areas are integrated, balanced and vibrant. The IUDF promotes the notion of interdependence between rural and urban area, and acknowledges that urban and rural development are intertwined hence they cannot develop in isolation. Furthermore, the importance of rural urban linkages is acknowledged as an important factor in the pursuit of regional spatial and economic development (COGTA, 2021). The main goals of IUDF for urban spaces are summarised as spatial integration, inclusion, access, and governance. The IUDF recognise the need for small town regeneration and gave birth to the national recognised intervention to address urban decay in small urban centres known as the Small Town Regeneration Strategy. This study recognised that there is no framework guiding small town regeneration hence the persistence of decay despite the implementation of regeneration strategies. Therefore, this research provides a framework for sustainable implementation of urban regeneration strategies to enhance the existing regeneration strategies in small towns.

3.2.8. Small Town Regeneration Strategy 2021

According to COGTA (2021) the Small Town Regeneration Strategy (STR) is an integrated regional approach to small town growth and development. The strategy was first piloted by the South African Local Government Association (SALGA) in year 2015. The move was prompted by the negative and unfavourable social, economic, and physical realities in small town across

the South Africa (COGTA, 2021). These negatives included inter alia the lack of employment, poverty, overdependence on single economic sector and lack of investments. The STR has since transformed and became the vehicle for promoting and facilitating the IUDF goals in small rural towns. The STR seek to provide conducive environment at local government level for driving and directing the urban regeneration discourses in small towns across South Africa through its objectives. The strategy seeks to firstly, galvanise support for government and public agencies of small town regeneration; secondly, support and strengthen regional approach to planning and development; thirdly, improve financial viability of municipalities; and lastly, to advocate for capable and enabling government (COGTA, 2021).

This study recommends a framework for sustainable implementation of urban regeneration strategies in small town in order to strengthen the implementation capacity of urban regeneration strategies reflecting on Thohoyandou Town CBD. The STR provide a conducive environment that enables and supports the proposed framework for sustainable implementation of urban regeneration strategies in small town regeneration. This environment ensures that the implementation of urban regeneration in small towns receives increased support from government and public agencies. This study utilised the momentum created by the STR to provide a clear and concise blueprint for the sustainable implementation of small town regeneration. This is necessary to ensure that there is a contextualised frameworks guiding the implementation of urban regeneration strategies in small towns.

3.2.9. Thulamela Spatial Planning and Land Use Management bylaw (2017)

The Thulamela Spatial Planning and Land Use Management Bylaw (2017) regulates spatial planning, land use management and development within the jurisdiction of the municipality including state land (Thulamela Local Municipality, 2017). The Bylaw draws its development principles from the SPLUMA 16 of 2013 as outlined in Section 2.2.3 of this research. Thulamela Spatial Planning and Land Use Management Bylaw also provide for the preparation and adoption of Thulamela Spatial Development Framework, Land Use Scheme and procedures for lodging land use development applications (Thulamela Local Municipality, 2017). Therefore, Thulamela SPLUMA Bylaw, as well as the SPLUMA (16 of 2013) guide and inform all recommendations in this study. Thulamela SPLUMA Bylaw also provide for preparation of smaller detailed spatial strategies therefore, the adoption of small town urban regeneration strategies is provided for legislatively at both local and national government (See Section 3.2.3 Chapter 3).

3.2.10. Thulamela Municipality Integrated Development Plan 2020/21

Integrated Development Plan (IDP) is the overall strategic plan guiding development within a particular municipality (Stellenbosch Local Municipality, 2017). It defines municipal vision, objectives and goals of the municipality for a period of five years (Stellenbosch Local Municipality, 2017). The Municipal Systems Act 32 of 2000 mandate all municipalities to prepare, develop, and adopt a five-year municipal IDP to guide overall planning and development within the municipality (Republic of South Africa, 2000). In general, IDPs become a service delivery vehicle of the local authority (Republic of South Africa, 2000).

Thulamela Local Municipality resolutions as reflected in the IDP set urban regeneration as the top priority and central to the ‘city status by 2030’ vision (Thulamela Local Municipality, 2017). The municipal vision as outlined in the IDP states that, “We, the people of Thulamela would like our Municipality to achieve a city status by 2030, to promote urban regeneration and comprehensive rural development whilst encouraging local economic development to improve the quality of lives of our people” (Thulamela Local Municipality, 2017). Thulamela Local Municipality vision is clear on promoting urban regeneration. Their mission also embraces communicative and collaborative theory and show commitment to sustainable development goals. Thulamela Local Municipality vision states, “We build prosperity, eradicate poverty and promote social, political and economic empowerment of all our people through delivery of quality services, community participation, local economic development and smart administration” (Thulamela Local Municipality, 2017). Therefore, urban regeneration strategies set out development priorities critical to the revitalisation of Thohoyandou Town CBD and these priorities are expressed, prioritised and delivered through the IDP of Thulamela local Municipality.

3.2.11. Thulamela Spatial development Framework 2010

According to the Republic of South Africa (2013) a Municipal Spatial Development Framework (MSDF) is an instrument used by municipalities to attain desired spatial patterns within their municipal area. The MSDF guide and inform planning land use management decisions in a municipality (Republic of South Africa, 2013). Section 20 (1) mandates all municipal councils to prepare, adopt, and publish MSDF reflecting the spatial development priorities as part of municipality IDP.

Even though the Thulamela MSDF is as old as year 2010, the challenges identified back then have not been addressed adequately instead these issues intensified. The priorities identified

by the Thulamela IDP share similarities with those identified by their MSDF in 2010 in terms of revitalisation and regeneration of Thohoyandou Town CBD together with other centres within the municipality. The regeneration of Thohoyandou Town CBD and other centres in the municipality remains top priority for Thulamela Local Municipality. The MSDF provided a concise diagnostic of maladies that have plagued the CBD as far back as 2010. With the recent geospatial data collected in the CBD and study findings combined with the Thulamela MSDF year 2010 diagnosis of issues challenging the development of Thohoyandou Town CBD this information together enabled the researcher to devise a framework for the sustainable urban regeneration of Thohoyandou Town CBD to strengthen the implementation capacity of the existing urban regeneration strategy. The framework for sustainable implementation of urban regeneration in small towns addresses long-standing developmental issues for example ensuring that the implementation of regeneration is not deferred by issues of political interference, lack of accountability, inadequate institutional capacity, lack of monitoring and evaluation system and lack of policy alignment.

3.2.12. Draft Thulamela Land Use Scheme 2020

Section 24 (1) of SPLUMA 16 of 2013 mandates all municipalities to prepare, adopt and approve one land use scheme covering the whole municipal extent (Republic of South Africa, 2013). The content of the LUMS is informed and guided by section 25 (3) of SPLUMA 16 of 2013 which stipulates that a land use scheme must include scheme regulations, zoning map, and register of all amendments. The main purpose of a land use scheme is to promote efficient development of land, a healthy and safe environment, economic growth, and protection of the natural environment (Republic of South Africa, 2013). Thulamela Local Municipality's LUMS is aligned and gives effect to the MSDF. Its mandate is to direct land uses, as well as development initiatives within Thulamela Local Municipality. It ensures that allocation of land use and development promotes economic growth, social inclusion, efficient development and use of municipal land, and sustainable development (Thulamela Local Municipality, 2020). The land use scheme is also expected to promote efficient use of resources, foster fair and good governance, as well as to prevent uncontrolled development (Thulamela Local Municipality, 2020).

The Thulamela Local Municipality LUMS is a big part of Thohoyandou Town CBD regeneration as it provides for efficient development of land, healthy and safe environment, economic growth and protection of natural environment through carefully thought zoning, development parameters and controls. Thulamela Local Municipality LUMS ensure adherence

to the South African National Building Standards (SANBS), building controls and conformance to land use provisions. Thulamela Local Municipality LUMS is part and parcel of the policies promoting the regeneration of Thohoyandou Town CBD through its objective and provisions. The Thulamela Local Municipality LUMS have positive implications on the regeneration of Thohoyandou Town CBD including promoting efficient development, healthy and safe CBD, economic growth and protection of the CBD environment.

3.3. Profiling the study area

This segment profiles the study area looking at its historical background, the socio-economic outlook, governance and management, connectivity and access and the built environment and land use patterns.

3.3.1. Historical background

Thohoyandou Town CBD was established in the early 1970s in a village known as Mbaleni at the time (Anyumba, 2019). In the year 1979, Thohoyandou Town was formally declared as the capital of the Republic of Venda (Statistics South Africa, 2011). Upon the rescission of the homelands policy in the year 1994 Thohoyandou Town was integrated into the Republic of South Africa (Statistics South Africa, 2011). Thohoyandou Town is named after the then king of VhaVenda kingdom who governed during the 1700s (Statistics South Africa, 2011). In English the name Thohoyandou means ‘the head of an elephant’ (Statistics South Africa, 2011). During inception, Thohoyandou Town CBD was envisioned as the administrative centre which later developed to house most government buildings of the Republic of Venda (Anyumba, 2019). To date Thohoyandou Town CBD has developed into an established political, administrative, and commercial centre of Vhembe District Municipality and is home to many government and retailing facilities including Thulamela Local Municipality Offices, Thohoyandou Post Office, Thohoyandou Police Station, Thohoyandou Magistrate Court, Venda Plaza, Mvusuludzo Shopping Mall, and Game Store Complex.

Historically, former homeland areas were neglected, underserved, and suffer from poor infrastructure and service delivery (COGTA, 2020). Their challenges are exacerbated by poor legislative environment, lack of investment, capital flight and poor infrastructure maintenance (Nhlapo et al., 2011). Urban regeneration strategies as a policy intervention and process is crucial towards addressing this deficit in former homelands areas improving infrastructure, governance capacity and the overall image of the area driving up investment potential.

3.3.2. Socio-economic outlook

As per Statistics South Africa (2011), Thulamela Local Municipality is home to more than 618 000 people, and accounts for almost 50 percent of the entire Vhembe District's total population. The projected annual population growth Thulamela Municipality rate stood at 0.62 % in year 2011. Therefore, to date, the total Thulamela Local Municipality population stands at an estimated 660 636 people.

Thohoyandou Town is viewed as the economic hub of the entire Vhembe District Municipality and a development node within Thulamela Local Municipality (Vhembe District Municipality, 2016/17). The economic landscape of Thohoyandou Town is centred on administrative, educational and service economic activities with agriculture as a supporting activity (Tsoriyo, 2021). There is also a strong presence of informal economy (informal trading) in Thohoyandou CBD (Thulamela, 2010). Anyumba (2019) adds that the growth and maturity of Thohoyandou CBD has positive impact on economic activities such as banking, retail, wholesale, and informal trading. Urban regeneration possess the potential to incremental elevate several key aspects of urban area including enhancing physical environment and stimulating economic growth and development (Xie et al., 2021). In summary, urban regeneration has the potential to further improve Thohoyandou Town competitive advantages as Vhembe District economic hub and development node injecting significant growth to formal and informal economy through improved conditions in the CBD.

3.3.3. Governance and management

Thohoyandou Town sits within Thulamela Local Municipality which as per the Local Government Structures Act 117 of 1998 is classified as category B municipality. Category B municipalities consist mostly of poor rural municipalities with limited ability to generate own funding and are heavily reliant on central government grants for upkeep (Oosthuizen and Thornhill, 2017). In terms of leadership Thulamela Local Municipality consists of a municipal council comprised of 81 councillors (41 elected and 40 as proportional representation) and 7 senior traditional leaders (Thulamela Local Municipality, 2020). Professional, technical and strategic planning to the council is provided through the five departments within the local municipality. These departments are Corporate Services, Budget and Treasury, Community Service, Technical Service and Planning and Development. These departments also perform administrative duties including day to day running of the municipality as well as executing and implementing council decisions (Thulamela Local Municipality, 2020). More importantly, Thulamela Local Municipality is responsible for establishment, operation, management,

control of roads, integrated planning, refuse removal, storm-water management, as well as the establishment trading by-laws within its administrative area. Whereas Vhembe District Municipality provides a guiding framework for all its local municipalities (Thulamela Local Municipality, 2020). The Planning and Development Department plays a central role in handling, leading as well as directing matters relating to spatial planning and management, integrated development, and local economic development within Thulamela municipal area (Thulamela Local Municipality, 2020).

Urban regeneration is one of the crucial urban management functions, including the management of public affairs because the improvements attached to regeneration affects urban residents directly and therefore; it objectives (Wang et al., 2022). Urban governance touches on important aspects of managing urban affairs including service provision to citizens, enhancing investment potential and employment creation (Xie et al., 2021). Therefore, Thulamela Local municipality assumes the governance role within urban regeneration including stakeholder facilitation, management and coordination.

3.3.4. Connectivity and accessibility

At provincial and regional level, the study area is accessible via R524 (P98/1) from the west as well as east. The R524 connects the study area to Louis Trichardt to the south-west, and Punda Maria and Kruger National Park to the south-east. The R524 provides direct connection to the N1, linking the study area to both Polokwane and Musina towns. Due to locational advantages, there is a high presence of commercial and community facilities, as well as services along the R524 (Thulamela, Local Municipality 2010).

Direct access to the study area is also provided by the R523 (P277/1) and the ring road. The R523 (P277/1) also links the study area with Sibasa and Makonde small rural towns to the north-east. Thohoyandou Town CBD is strategically linked to the University of Venda which is less than four kilometres away. The two are connected via the Casino Boulevard which provides direct access to both the University of Venda and Thohoyandou CBD. However, accessibility within the study area is compromised by irregular street patterns with limited interchanges and the prevalence of unnamed internal streets (Anyumba, 2019; Tsoriyo, 2021). Despite the prevalence of unnamed internal streets, it was observable that Thohoyandou Town CBD is highly accessible at both regional and local levels which may be partly attributed to its national, regional, and local importance as identified in the STR, NDP, NSDF, Thulamela Local Municipality IDP, and Thulamela Local Municipality SDF.

3.3.5. The built environment and land use patterns

In terms of built environment patterns Thohoyandou Town CBD consist mainly of one to two level buildings with very little open and green spaces (Anyumba, 2019). Thohoyandou Town CBD has grown exponentially over the years to a point that new mega land development projects leapfrogged to adjacent spaces outside the CBD (Thulamela, 2020). This exponential growth resulted in lack of land for new developments as well as expansion of Thohoyandou Town CBD (Thulamela, 2020). It is observable that Thohoyandou Town CBD witnessed uncontrolled and uncoordinated development over the past years.

Map 3.1 presents Thohoyandou Town CBD existing land use map adopted from the Thulamela Urban Development and Revitalisation Strategy.



Map 3.1: Thohoyandou existing land use map
Source: Adopted from Thulamela Local Municipality (2011)

In terms of land uses, Thohoyandou CBD is predominantly a commercial and retail district with other supporting land uses such as government/municipal, office, and educational (See Map 3.1). Commercial buildings, retail outlets, wholesale outlets and government offices such as post office, police station and courts dominate Thohoyandou Town CBD (Anyumba, 2019). These land use patterns reaffirmed Thohoyandou Town CBD as a commercial and administrative centre for the entire Vhembe District Municipality. To sustain and improve

Thohoyandou Town CBD as a functional business and government district it is important that urban decay is combated through sustainable urban regeneration strategies. This study offers a framework for sustainable implementation of the existing urban regeneration strategy in Thohoyandou Town CBD which is critical towards strengthening the implementation capacity of urban regeneration interventions.

3.4. Chapter summary

This chapter reviewed relevant legislations and policies and sets the implications for this study. Although there are many legislations and policies that are meant to influence urban regeneration to address urban decay, there is lack of a framework to guide the implementation effort to make the small town regeneration initiatives a success. The next chapter discusses the research methodology deployed in this study to collect and analyse data.

CHAPTER 4: RESEARCH METHODOLOGY

4.1. Introduction

This chapter discusses and outlines the methods and techniques employed to collect data meant to address the research problem. Research methodology is a rational approach to answering a particular research problem (Kothari, 2014). It presents a logical framework used by the researcher to investigate the research problem (ibid). Research methodology responds to several questions for example how the sample is selected, data is collected and analysed as well how it is presented (Lapan et al., 2012; Kotari, 2014). The various sections of this chapter discuss the research design, research approach, data collection procedures, research-sampling techniques and data collection and analysis procedures. The last section of this chapter provides a chapter summary.

4.2. Research design

A research design is the organisation of conditions for data collection and analysis (Kotari, 2014). Research design is viewed as an abstract structure within which research is undertaken (Kotari, 2014). Akhtar (2016) adds that research design is a plan of a proposed research work that links together all the elements of a research project. Creswell (2009) conclude that a research design is a “plan or proposal to conduct research”. In summary a research design unpacks how the researcher responds to research questions, select respondents, collect data from respondents, analyse data and how research findings are communicated (Kumar, 2011).

This study adopted a case study research design. Creswell (2009) viewed a case study as a time bound research strategy that examines a phenomenon in detail within its real-life context using a variety of data collection procedures. A case study as a detailed examination of an individual or a group or phenomenon (Starman, 2013). This research explored urban decay and regeneration within the context of small town focusing on Thohoyandou Town CBD between year 2011 and 2022. A case study design enabled the researcher to understand and perform a comprehensive examination of urban decay (the phenomenon) in Thohoyandou Town CBD (the case study area). Urban decay was examined looking at its causes and mapping features synonymous with decay in Thohoyandou Town CBD. Urban regeneration as a remedial measure for decay in Thohoyandou Town CBD was explored and examined in depth looking at the past and present strategies deployed to address decay between year 2011 and 2022.

Literature revealed that very little is known about urban decay and the dynamics of urban regeneration within the context of South African small towns especially in the Limpopo

Province. In this circumstance a case study was the preferred design which enabled the researcher to explore and understand the dynamics of urban decay and urban regeneration in the context where minimal is known about the phenomenon (Kumar, 2011). A case study design provided good basis under which new knowledge and discovery is created and later infused into policy practises to bridge the gap between existing and perceived contexts in planning (Tsoriyo, 2021). A case study was preferred because it provided a solid basis for understanding the dynamics of urban decay and urban regeneration within the context of small towns. Therefore, a case study design provided good grounds for knowledge creation which could possibly be integrated into policy practises in future.

4.3. Research approach

Creswell (2009) distinguishes between three types of research approaches to data collection which include the qualitative, quantitative, and mixed method. This research adopted a mixed method approach which integrates qualitative and quantitative approaches therefore it was pivotal to discuss approaches that are part of mixed method research approach. The three approaches are explained briefly in section 4.3.1 – 4.3.4 below.

4.3.1 The qualitative research approach

A qualitative research approach is concerned with deriving meaning and fully comprehension of real-life occurrences (Vanderstoep and Johnston, 2009). Qualitative research enabled the researcher to learn about and derive the perspectives, meanings and in depth understanding of people living in a particular social setting (Lapan et al., 2012). A qualitative research approach involves the use of soft data such as words, sentences and photographs (Neuman, 2014). Qualitative research perspective views knowledge as the outcome of communication and interaction with people tapping into their perceptions, and interpretations of real world (Vanderstoep and Johnston, 2009). The assumption from a qualitative view is that it is impossible to understand a subject by only examining its parts yet, a subject can be understood within its broader context. In short, qualitative research approach is concerned with the social construction of reality.

4.3.2 The quantitative research approach

Quantitative research approaches involve studying the relationship between two or more variables that are possible measures, and can be analysed through statistical procedures (Creswell, 2009). Neuman (2014) postulates that in quantitative research approaches meaning is derived from numerical interpretation of values derived from figures, percentages and

statistical coefficients. Quantitative approaches are concerned with understanding the influence of variables on each other, and ultimately on the outcome (Creswell, 2009). In quantitative approaches the researcher can only understand and explain the problem through observing the relationships between variables (Creswell, 2009). In quantitative research approaches research integrity is non-negotiable as the levels of validity and reliability are critical constructs (Creswell, 2014). Quantitative approaches follow a homogeneous and logical system that enables the researcher to measure and compare the magnitude of effect and effect relationships (Kabir, 2016). A more general description of quantitative approaches is the use of hard data such as numbers and numeric evidence in the collection as well as analysis of such data (Neuman, 2014).

4.3.3 The distinction between the qualitative and quantitative approaches

The major distinction between these two approaches is found in their epistemology (Vanderstoep and Johnston, 2009). The quantitative research perspective strongly believes that knowledge is out there to be explored (ibid). The assumption is that observable physical reality can further be broken down into several small parts and a detailed examination of these parts is possible and quantifiable. Quantitative research leans more towards postpositivist worldview which assumes that causes determine outcomes (Nueman, 2014). Postpositivist paradigm maintains that “the problems studied by postpositivist reflect the need to identify and assess the causes that influence outcomes” (Creswell, 2014).

On the other hand, the qualitative approaches are underpinned by interpretive social science or social constructivist worldview with more emphasis on investigating a phenomenon within its real-life context (Neuman, 2014). Social constructivists accentuate that the research should be based on the experiences and views of participants that stem from formal and informal engagements between the researcher and the sample population (Creswell, 2014). The nature of qualitative processes is more inductive than deductive as the researcher strives to create meaning from the data obtained through engagements and interaction with the sample population (Creswell, 2014). Neuman and Benz (1998) cited in Creswell (2009) emphasised that these two approaches should not be viewed as dichotomies perceptibly different (in terms of scientific principles) but unique in many ways. Each approach possesses several strengths but also has its limitations as well (Neuman, 2014).

4.3.4 The Mixed methods approach – the adopted approach

The mixed methods research approach integrates qualitative and quantitative approaches building on the strengths of the two approaches and eliminating the potential limitations (Creswell, 2009; Neuman, 2014). The mixed methods research approach combines and deploys both qualitative and quantitative approaches simultaneously in one study (Creswell, 2009). This study adopted the mixed method research approach utilising both quantitative and qualitative approaches to ensure that the study is rigorous (Kumar, 2011). This research examines urban decay and regeneration through applying the qualitative approach to understand the perceptions of those people who live and work in the CBD. The researcher engaged these people extensively through use of a questionnaire survey in the CBD to unravel the current conditions of paths, districts, landmarks, nodes and edges. The researcher sought to understand recent developments and establishments through the lens of the people who used the CBD for the past 11 years (year 2011 – 2022). Through engagement with people in the CBD the researcher gained understanding of different factors that led to the current state of urban decay.

The researcher also collected quantitative data through close-ended questions. Primary data such as number of years each participant has been using Thohoyandou Town CBD, number of days each participant visited or used Thohoyandou Town CBD per week and information relating to age groups was collected through soft questionnaires. Quantitative data was analysed qualitatively to provide meaning to the numerical values. The mixed methods research approach therefore was preferred because it provided “the richest and most complete understanding of the phenomenon under study” which in this case is urban decay and urban regeneration (Vanderstoep and Johnston, 2009). Creswell (2009) asserts that the use of both qualitative and quantitative data in mixed method is beneficial. This research took full advantage of qualitative and quantitative complementary strengths in its pursuit to investigate and understand urban decay and regeneration from a small town context focusing on Thohoyandou Town CBD.

4.4. Population of the study

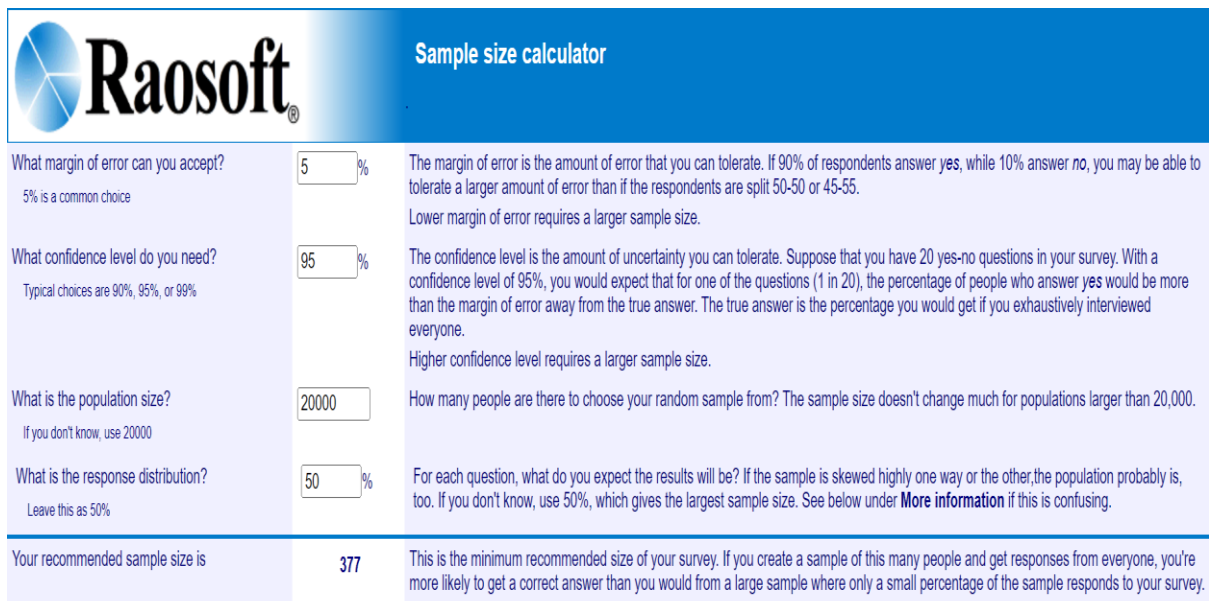
Population of the study refers to the individuals that are the main focus of the research questions and analysis (Vanderstoep and Johnston, 2009). Kothari (2014) described a study population as all the individual items that form part of a research study or inquiry. Population of the study can be summarised as the group of individuals or items onto which research findings could be generalised (Vanderstoep and Johnston, 2009). The total population of Thohoyandou Town

according to Statistics South Africa (StatSA) (2011) was estimated to be 69 000 people. It should be noted that this population is not for Thohoyandou Town CBD alone but included all residents from neighbourhoods within Thohoyandou Town. Another factor important to note is that the total population is based on 2011 census data. The population of Thohoyandou Town might have increased or decreased between then and now. As a result, the study population might be more than the estimated 69 000 because the CBD users (University of Venda students and staff, taxi drivers, bus drivers, taxify drivers' informal traders, car mechanics, retail and wholesale employees and government officials) were mobile and some resided outside of Thohoyandou Town. Thohoyandou Town CBD attracts many people because it is a commercial and administrative centre for the entire Vhembe District.

4.5. The Sampling techniques

Sampling is described as a process where a representative subset of the study population is selected. Naderifar et al. (2017) identifies two distinct sampling methods which are probability and non-probability. The former refers to sampling methods where all members of the population stand an equal chance of selection. Whereas, with the latter the participants are selected by the researcher and not all members have an equal chance of selection. Non-probability sampling methods are mostly used in case study research designs and qualitative research (Taherdoost, 2016). In qualitative research the population sample does not need to be representative. However, if that is to be the case the researcher is expected to provide the rational underpinning inclusion and exclusion of participants (Taherdoost, 2016). This research adopted non-probability sampling methods.

It is impossible to study all members of the population when the study population is relatively large (Lapan et al., 2012). There are multiple approaches and formulas to determining population size (Taherdoost, 2016). The researcher utilised Raosoft sample size calculator which is an online software that is used to determine sample sizes. The software was used because it enabled the researchers to establish the sample size where the total population is above 20 000 items or people. The Raosoft sample size calculator recommended a sample size of 377 participants. Figure 4.1 is a screenshot from Raosoft sample calculator. The accepted margin of error and confidence level for this study are 5% and 95% respectively (See Figure 4.1).



Raosoft Sample size calculator

What margin of error can you accept? <small>5% is a common choice</small>	<input type="text" value="5"/> %	The margin of error is the amount of error that you can tolerate. If 90% of respondents answer <i>yes</i> , while 10% answer <i>no</i> , you may be able to tolerate a larger amount of error than if the respondents are split 50-50 or 45-55. Lower margin of error requires a larger sample size.
What confidence level do you need? <small>Typical choices are 90%, 95%, or 99%</small>	<input type="text" value="95"/> %	The confidence level is the amount of uncertainty you can tolerate. Suppose that you have 20 yes-no questions in your survey. With a confidence level of 95%, you would expect that for one of the questions (1 in 20), the percentage of people who answer <i>yes</i> would be more than the margin of error away from the true answer. The true answer is the percentage you would get if you exhaustively interviewed everyone. Higher confidence level requires a larger sample size.
What is the population size? <small>If you don't know, use 20000</small>	<input type="text" value="20000"/>	How many people are there to choose your random sample from? The sample size doesn't change much for populations larger than 20,000.
What is the response distribution? <small>Leave this as 50%</small>	<input type="text" value="50"/> %	For each question, what do you expect the results will be? If the sample is skewed highly one way or the other, the population probably is, too. If you don't know, use 50%, which gives the largest sample size. See below under More information if this is confusing.
Your recommended sample size is	377	This is the minimum recommended size of your survey. If you create a sample of this many people and get responses from everyone, you're more likely to get a correct answer than you would from a large sample where only a small percentage of the sample responds to your survey.

Figure 4.1: Raosoft sample size calculator
Source: Raosoft (2023)

This study adopted convenience-sampling technique to select the CBD Users representative of the study population in order to generalise findings. This study targeted 374 CBD users and 3 key informants from local municipality (Local Thulamela Municipal Spatial Planning and Development Officials). The total sample size amounted to 377 as recommended by Raosoft sample size calculator. These key informants from the local municipality were targeted because they are the individuals responsible for spatial planning and development in Thulamela Local Municipality. Therefore, they are well versed with the status quo of the CBD, they understand past and present policy interventions implemented to improve the CBD and challenges as well as factors that led to poor conditions of the built environment. The CBD Users were targeted because they are familiar with Thohoyandou Town CBD. The CBD Users know the conditions of the CBD built environment as they visit and use Thohoyandou Town CBD on regular basis (See Section 6.3 Chapter 6).

This study adopted convenience sampling technique for the selection of CBD Users. Convenience sampling was preferred because it is inexpensive to conduct provided the limited financial resources and time for data collection. This sampling technique became convenient in terms of access to participants since selected based on availability and willingness to participate (Taherdoost, 2016). To distribute the link to online questionnaires to the University of Venda community the researcher approached the communication department at the university and the link was and the link was distributed. The link to the online questionnaires was distributed to Thohoyandou Town CBD Users via emails and WhatsApp upon request and

acceptance to participate in the study. This study also adopted the snowball sampling technique for the selection of key informants from the municipality. A letter to request consent to conduct research in Thohoyandou CBD and municipal officials to participate through interviews in the study was sent to Thulamela Local Municipality (See Appendix 4). The researcher was then directed to the first key informant from the municipality and requested to participate in the study. This first key informant from the local municipality recommended other members that added value to the study (Lapan et al., 2012). This technique became useful in the identification of the 3 key informants from the local municipality responsible for spatial planning and development. Snowball sampling is preferred because it is efficient (less time consuming) and enabled the researcher to locate relevant municipal officials with ease. Since the selection is through referral this facilitated better communication between the researcher and the key informants from the local municipality (Naderifar et al., 2017).

4.5.1. Study sample

This study recommended sample is distributed between two categories that constitute the entire research sample as indicated in Table 4.1. The Raosoft sample size calculator recommended 377 participants for this study (See Figure 4.1). The study sample is organised in two categories namely key informants from the local municipality and Thohoyandou CBD Users (See Table 4.1).

Table 4.1: Two categories of samples

No.	Category	Sample size	per	Percentage representation
1.	Key Informants from the Local Municipality	3		1.5
2.	Thohoyandou Town CBD Users	374		98.5
Total research sample		377		100

Source: Author (2023)

4.6. Data collection procedures

Data collection is a process of collating information related to a specific research problem in order to respond to the research questions and evaluate outcomes (Kabir, 2018). There are two types of data collection methods which are primary and secondary data collection procedures. The former is seen as information that is collected afresh and for the first time, and thus happens to be original in character (Kothari, 2014). For example, information obtained by the researcher through conducting interviews, questionnaire administration, personal observations and geospatial data collected throughout the study area. The latter refers to information that exist already, created by other people and is documented in existing sources such as books, journal

articles, internet sources, and newspapers (Kothari, 2014). This research used both primary and secondary data collection methods to gather quality information that was later converted into rich data for analysis enabling the researcher to construct a convincing and credible response to the research questions and objectives.

4.6.1. Primary data collection methods

Primary data refers to the information that has never been published before or undergone any form of alteration (Kabir, 2018). Primary data was collected through questionnaires, face-to-face interviews, SW Maps mobile application (direct observations) and photography. These are discussed in detail below.

4.6.1.1. Questionnaires

A questionnaire is a data collection instrument with logically organised questions which respondents respond to (Kabir (2018). The respondent is handed out a set of questions, interpret and then write down their responses based on their understanding of each question (Kumar, 2011). The downside of questionnaires is that respondents interpret the questions as they understand them there is no one to further unpack or provide clarity where it is needed (Kumar, 2011). Online or soft questionnaires were used to collect data from Thohoyandou CBD Users and each participant provided feedback by answering a set of questions. A link to participants was shared via email to the UNIVEN community, and other participants were requested contact details (email addresses, cell phone/WhatsApp numbers) when approached. Online or soft questionnaires were suitable because they were less intensive and required little administration compared to other methods (Kabir, 2018). This study questionnaires consisted of four different sections A – D (See Appendix 7). Section A collected socio-economic data of participants for example place of resident, age group, gender and home language. Section B – D were linked to the three research questions as outlined in Section 1.6 Chapter 1. Table 4.2 presents the number of valid responses from questionnaires and interviews against the initial target.

Table 4.2: Valid responses

No.	Category	Target sample size	Valid responses	Percentage representation of valid responses to the target size
1.	Key Informants from the Local Municipality	3	3	100
2.	Thohoyandou CBD Users	374	202	54.0
Total research sample		377	205	54.4

Source: Author (2023)

The initial recommended target by the Raosoft sample size calculator was 377 participants and 374 Thohoyandou CBD Users were targeted to participate through completing the online questionnaires. However, due to time constraints only 202 questionnaires were administered which translate to 54% of the target for Thohoyandou CBD Users as reflected in Table 4.2. Recent studies with response rate as low as 20% produced credible results when compared to studies with response rate ranging between 60% - 70% (Morton et al., 2012). Therefore, the 54% response rate attained for this study is satisfactory and maintained.

4.6.1.2. Face-to-face interviews

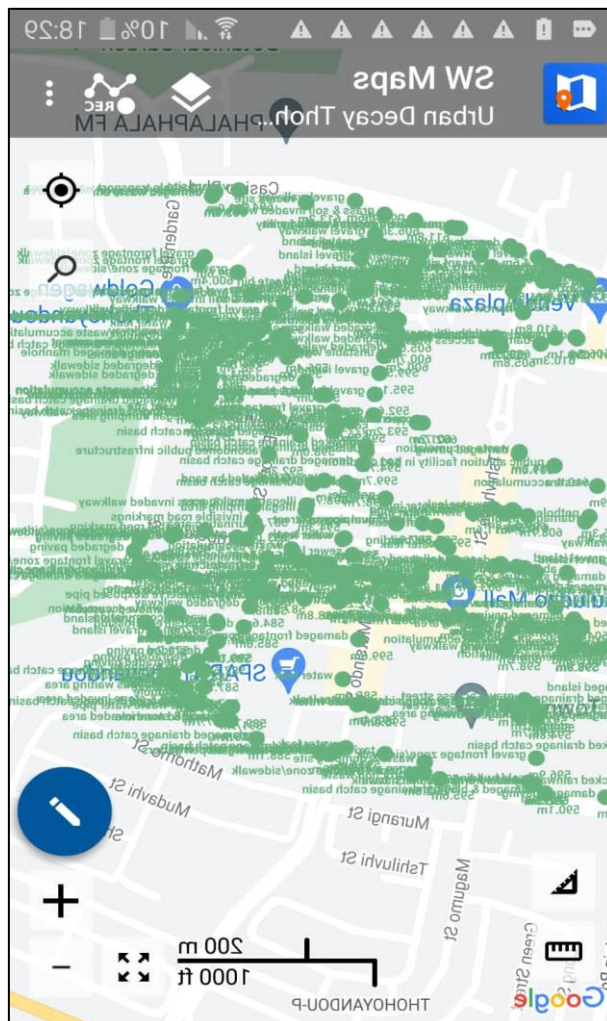
In face-to-face interviews the researcher engaged with key informants from the local municipality responsible for spatial planning and development. These participants turned out to be the key informant's interviewees who were engaged in a structured interview and responded to interview questions (Kothari, 2014). All 3 structured interviews were conducted with key informant from the local municipality. In these structured interviews the researcher used a set of prearranged and logical questions in a prescribed order (Kothari, 2014) (See Appendix 6). Structured interviews were suitable because they enabled the interviewer to engage with interviewees physically, observe the interviewee body language, and expressions (Kumar, 2011). The conversations from the structured interviews were recorded through a mobile cell phone as a narrative and later saved into google drive for safe keeping as well as use for analysis.

The researcher conducted several informal interviews and these ad hoc engagements between the researcher and CBD users without pre-arranged questions (Muhammad, 2018). The informal conversation enabled the researcher to understand the social arrangement and dynamics in the study and gain understanding of the area and understand existing problems that led to the current state of Thohoyandou Town CBD. For example, the researcher asked the reason for charging R2 – R5 to use public ablution facilities by individual that sit at the entrance of these public ablution facilities.

4.6.1.3. Personal observation

This study used observation as part of data collection methods. Observation is viewed as a systematic approach to data collection (Kabir, 2018). Observation enabled the researcher to collect and record features, attributes and situations associated with urban decay within their natural setting of the study area (Kabir, 2018). The SW mobile application was used to capture, record and document features, attributes and situations associated with urban decay throughout

the study area. The SW mobile application is a free mobile phone geographic information system application used to collect, present and share geospatial data across phones and computers in different format including keyhole markup language files (KMZ) and shapefile layers (SHP) (Softwel, 2016). Shapefiles contain information or attribute that describe a geospatial feature (Esri, 1998). The SW mobile application is integrated with the functionality of taking photographs and store them in the application, allows you to make comments or describe the photographed feature, it tells you the distance to the feature and the geospatial coordinates for easy reference contained in the attribute of the shapefile layer (shp) (See Map 5.2). Photograph 4.1 below shows an extract reflecting the interface of SW mobile application during the field data collection phase of this research study. The green dots on Photograph 4.1. represent all the urban decay features and situation recorded through SW mobile application in the study area.



Photograph 4.1: A screenshot from the SW mobile application
Source: Author (2023)

Through the SW mobile application, a total of 371 points representing features and situations indicative of urban decay were recorded throughout the study area (See also Table 5.1 in Chapter 5). The recorded features, attributes, and situations associated with urban decay were later converted to geospatial data in the form of shapefiles through SW mobile application. This became useful because it enabled the researcher to document the location of features, attributes, and situations associated with urban decay and showed the spatial distribution, concentration, spread, extent, and coverage of urban decay in Thohoyandou Town CBD.

4.6.1.4. Mapping

Mapping involves drawing of physical layout of the site to locate activities, people, and areas of concern where features related to urban decay were observable and captured through SW mobile application (Lapan et al., 2012). Maps were utilised to show the study area within its national, provincial, and local contexts (See Map 1.1 – 1.3). Mapping is used also to illustrate existing land uses and analysis of the structural elements that depicted the cognitive map for Thohoyandou Town CBD (See Map 3.1, Map 5.1, Map 5.4 and Map 7.1). Mapping is utilised vastly in this research study to characterise and spatially trace urban decay in Thohoyandou Town CBD from year 2011 – 2022. The geospatial data reflecting features, attributes, and situations associated with urban decay was transformed into Kernel Density maps to illustrate the spatial distribution, concentration, spread, extent, and coverage of urban decay in Thohoyandou Town CBD (See Map 5.3). Mapping was also utilised to integrate Kevin Lynch (1960) cognitive map with geospatial data to depict features, attributes and situations associated with urban decay affecting each structuring element (nodes, landmarks, paths, edges, and districts) (See Map 5.4).

4.6.1.5. Photographs

The researcher through the SW mobile application captured photographic evidence of features, attributes, and situations associated with urban decay of urban decay in Thohoyandou Town CBD. Photographs indicative of urban decay throughout the study area were captured these included images of old buildings, aging and unmaintained buildings, and infrastructure conditions including stormwater, drainage, streets, and urban amenities (See Map 5.2). Photographs provided visual evidence demonstrating the urban decay and the current state of the built environment in Thohoyandou Town CBD in real moments it occurred.

4.6.2. Secondary data collection method

Secondary data as the information gathered and has already undergone statistical analysis by another person's (Kothari, 2014). It comprises information that is already out there sitting in the public or even private literature domains. Secondary data was sourced from journal articles, books, legislative policies (SDGs, SPLUMA, MSA, NDP, NSDF, and STR), government publications, municipal package of plans (IDP, SDF, and LUMS), dissertations and thesis and newspaper articles. The researcher found secondary data most useful in all chapters of the study. Figure 4.2 is a summary of data collection methods adopted by in this study.

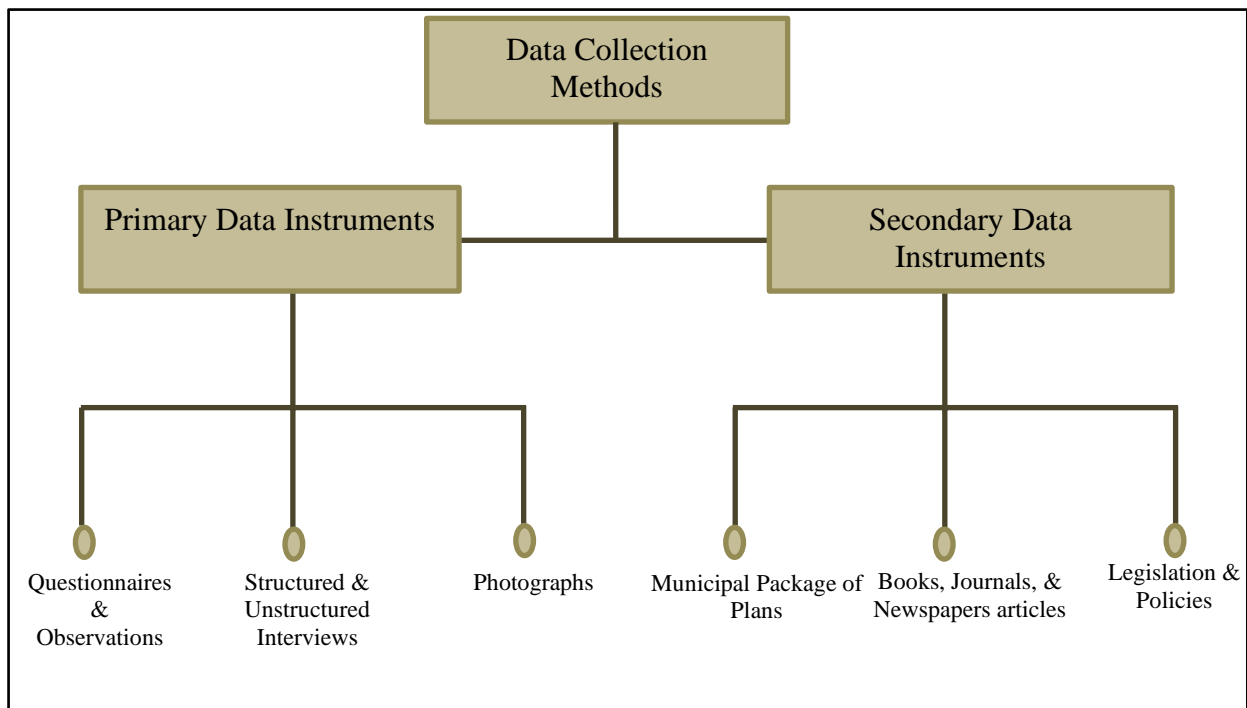


Figure 4.2: Summary of data collection methods

Source: Author (2023)

4.7. Data analysis

Data analysis is a process where collected information is summarised, organised and categorised accordingly to identify and establish themes and patterns for ease of interpretation and understanding of the phenomena under study (Kawulich, 2004). The primary objective of data analysis is to provide a logical interpretation of the phenomenon under investigation from the perspective of study population or participants (Kawulich, 2004). This research study adopted a triangulation of research methods to collect and analyse data. In order to analyse data, the researcher reflected on themes from the theoretical perspectives adopted in this study (See Section 2.7 Chapter 2).

4.7.1. Qualitative data analysis

The study adopted thematic content analysis and spatial analysis methods to make sense of qualitative variables such as abandoned properties, immovable property and building conditions, quality of public services, conditions of or state of social and public facilities and conditions or state of the built environment and infrastructure. Thematic content analysis method enabled the researcher to identify, analyse and report themes from the data collected (Braun and Clarke, 2006). The thematic content analysis enabled the researcher to organise and describe the dataset in depth reflecting on theoretical underpinnings (Braun and Clarke, 2006). Large chunks of data are difficult to analyse, however grouping and categorising data by themes made analysing and reporting findings less complicated. These themes are poor urban management, derelict and abandoned properties, and collapsing and abandoned infrastructure projects. This data analysis method proved important in identifying, categorizing, and grouping factors that contributed to urban decay in Thohoyandou Town CBD into different themes. To some extent, qualitative data relating to places of residents of participants was analysed through ATLAS.ti qualitative data analysis tool (See Figure 6.1). This became important as it provided a clear picture of the number of villages and places that are serviced by the study area or Thohoyandou Town CBD catchment area (See Section 6.3 Chapter 6).

The spatial context is an integral part of this study. Spatial analysis in social research improves and enhances qualitative analysis (Rucks-Ahidiana and Bierbaum, 2015). Therefore, spatial analysis was used to complement, support and heighten qualitative analysis. Spatial analysis was conducted through ArcMap geospatial analysis to provide an in depth understanding of geographical, as well as spatial spread, coverage and concentration of features, attributes, and situations associated with urban decay in Thohoyandou Town CBD. Through spatial analysis pockets and parts of the CBD where urban decay was concentrated were identified using ArcMap (ArcGIS software). The outcome of the spatial analysis is a heat map (Kernel Density Heat Map) depicting pockets or parts of Thohoyandou Town CBD where decay is most and least intense (See Map 5.3).

The SW Maps mobile application data was converted into Geographic Information System (GIS) shapefiles and analysed through ArcMap and presented in the form of general maps, heat maps, tables, and graphs. This means that data from spatial data was converted to numerical values to quantify urban decay attributes and situations in Thohoyandou Town CBD. Some attribute tables of shapefiles were summarised and later converted into dbase tables. These were also converted into Microsoft Excel spread sheets for the purpose of numerical

presentation of findings and further analysis including calculating percentages, creating detailed graphs, and tables (See Table 5.1). This process was essential towards determining the structuring elements that were least and most affected by urban decay as well as the dominant decay features, situations and attributes in Thohoyandou Town CBD (See Figure 5.3). The aerial photographs aided qualitative analysis by enabling the researcher to reflect and show urban decay issues arising from the analysis of data within their natural settings throughout the study area. Photographs complemented qualitative analysis by presenting the visualisation of urban decay to ensuring that qualitative analysis is evidence based.

4.7.2. Quantitative data analysis

Quantitative data collected through online questionnaires was processed through the Statistical Package for the Social Sciences (SPSS) software. This includes data pertaining demographic information of participants, number of years using Thohoyandou CBD and frequency of visiting Thohoyandou Town CBD per week (See Section 6.2 Chapter 6). Prior to analysis the data collected using google forms were exported as Microsoft Excel file. Data in Microsoft Excel were cleaned and coded then transferred to SPSS to perform analysis. The coding of data is simply representing the data collected in numbers (codes) to enable SPSS to read and analyse data. This software was suitable for this research because it enabled the researcher to process, transform and present the data into tables, charts, and graphs easy to interpret and analyse. The tabular and graphical presentations generated from SPSS enabled the researcher to identify relationships amongst variables and to perform descriptive analysis for example use of percentages.

Quantitative analysis is used extensively to ascertain the validity and reliability of research instruments and conduct normality test for research instruments. Skewness and kurtosis values were used to check normality of research constructs whereas Alpha Cronbach reliability scores were used to ascertain validity and reliability of research instruments. Normality test for study constructs was performed to ascertain that the study findings and conclusions are reliable and accurate. Validity and reliability of research instruments were central towards ascertaining dependability and preciseness of research instruments prior to commencing to data analysis (See Section 4.8 below).

4.8. Testing for validity and reliability of research instruments (questionnaire)

De Bruin (2010) viewed validity as central to any form of assessment that is dependable and precise. Validity is a “concept concerned with the extent to which a set of indicators measures the concept they intend to measure” which in this case is urban decay (Catalan and Gordon,

2019). Golafshani (2003) adds, that validity ascertains the extent to which the research measures what it is purported to measure, as well as the extent to which the research outcomes are said to be true and meaningful.

Joppe (2000) cited in Golafshani (2003) views reliability as “the extent to which the results are consistent over time and are an accurate representation of the total population under study”. A test is deemed reliable provided that it is possible to be repeated over time, under the same circumstance and yield the same results (De Bruin, 2010). Therefore, if the same research outcomes are replicable over time using the same method and under similar circumstances, the research instrument is deemed to be reliable. In simple terms, reliability shows consistency and reliability over time. Moffat (2017) states that reliability analysis is critical for any research because it is not possible to attain validity without conducting reliability analysis.

To examine and measure validity and reliability of the variable construct for the first two objectives) in the questionnaires this research utilised Alpha Cronbach levels of reliability (See Table 4.4). The Alpha Cronbach values were obtained by transferring the 202 responses from google forms to Microsoft Excel spread sheet. The responses were then transferred to SPSS and coded before reliability analysis was performed using Alpha Cronbach. Relatively low Alpha Cronbach scores or levels (0.20 – 0.40) indicate unacceptable or low internal validity whereas high Cronbach Alpha scores above 0.7 reflect acceptable internal reliability (Moffat, 2017). Further interpretation of Alpha Cronbach’s Alpha levels of reliability and their associated values are provided on the Table 4.3.

Table 4.3: The measures of Alpha Cronbach scores’ levels of reliability

Alpha Cronbach Score	Level of Reliability
0.0 – 0.20	Less Reliable
>0.20 – 0.40	Rather Reliable
>0.40 – 0.60	Quite Reliable
>0.60 – 0.80	Reliable
>0.80 – 1.00	Very Reliable

Source: Hair et al. (2010) in Adjika (2017:178)

The Alpha Cronbach outcomes of objective one and two constructs are presented in Table 4.4. CUD is the abbreviation or the SPSS code for variable constructs corresponding to the first objective of this research concerned with characterising urban decay (CUD) and the corresponding question number in the questionnaire (See Appendix 7). COUD is the abbreviation or the SPSS code for variable constructs corresponding to the second objective of

this research concerned with causes of urban decay (COUD) and the corresponding question number in the questionnaire. (See Appendix 7).

Table 4.4: Cronbach's Alpha results for the variable constructs of objective one and two

Research objective	Variable construct	Number of items	Alpha Cronbach	Reliability level
Objective 1	CUD7	6	0.813	Very reliable
	CUD8	5	0.823	Very reliable
	CUD9	9	0.867	Very reliable
	CUD10	5	0.842	Very reliable
	CUD11	10	0.902	Very reliable
Objective 2	CUOD12	5	0.801	Very reliable
	CUOD13	7	0.894	Very reliable
	CUOD14	6	0.856	Very reliable
	CUOD15	6	0.883	Very reliable
	CUOD16	10	0.916	Very reliable
	CUOD17	6	0.922	Very reliable

Source: Author (2023)

The outcome of Alpha Cronbach levels for the objective one and two show that the study constructs are very reliable (See Table 4.4). The levels or scores of Alpha Cronbach in Table 4.4 are all above 0.8 which according to Adjika (2017) show that study constructs for the first two objectives are reliable. This outcome means that the first two objectives of this research have acceptable internal reliability therefore, the study constructs adequately measure urban decay and the research outcomes are true and meaningful (Golafshani, 2003; Nájera Catalán and Gordon 2019).

To examine and measure validity and reliability of the variable constructs for the third objective this research utilised test re-test reliability because Alpha Cronbach requires more than one variable construct (See Table 4.5). According to Aldridge et al. (2017) test-retest is a systemic way of that assist to understand the level of trustworthiness of a measurement instrument. It is also an alternative way for checking consistency and the extent to which same result can be reproduced by different people provided that the circumstances remain the same. The test-retest use internal correlation coefficient to measure validity and reliability of instrument where internal correlation coefficient values or scores < 0.40 = poor instrument reliability and validity, $0.4 - 0.75$ = fair instrument reliability and validity, > 0.75 = excellent instrument reliability and validity, and 1 = perfect reliability instrument reliability and validity (Gravesande et al., 2019). UBE is the abbreviation or the SPSS code for the variable construct

corresponding to the third objective of this research concerned with urban regeneration efforts (UBE) and the corresponding coded question number on the questionnaire (See Appendix 7).

The results for the validity and reliability of the variable construct for the third objective presented on Table 4.5. The test re-test outcome demonstrated a perfect reliability with an internal correlation coefficient equalling to 1 for the third objective variable construct.

Table 4.5: Test re-test results for objective three variable constructs

Variable Construct		UBE1_TEST	UBE1_RE_TEST
UBE1_TEST	Pearson Correlation	1	1.000**
	Sig. (2-tailed)		.000
	N	202	202
UBE1_RE_TEST	Pearson Correlation	1.000**	1
	Sig. (2-tailed)	.000	
	N	202	202

** . Correlation is significant at the 0.01 level (2-tailed)

Source: Author (2023)

The validity and reliability findings for this study revealed that the variable constructs have acceptable or perfect internal reliability as confirmed through Alpha Cronbach level of reliability and validity as well as test-retest correlation coefficient (See Table 4.4 and 4.5) Therefore, the research instruments were validated and proved suitable enough to measure the urban decay in Thohoyandou Town CBD. This also means that the research outcomes are dependable, consistent and are an accurate reflection of the total population of the study area and are therefore generalizable (Golafshani, 2003; De Bruin, 2010). Generalisability of the study findings entails that the findings from this study can be generalised across the town itself and across other small rural towns experiencing similar problems.

4.9. Normality test for study constructs

Normality tests are important parameters that ensure accurate and reliable conclusions are drawn about reality (Ghasemi et al., 2012). Normality assumption strives to depict that the data or population from which a sample is drawn is normally distributed (Orcan, 2020). Prior to data presentation and analysis, it is of utmost importance that normality test is performed to confirm the reliability of data (Ghasemi et al., 2012).

This study preferred skewness and kurtosis values as means of checking normality. According to Kim (2013) “skewness is a measure of the asymmetry and kurtosis is a measure of ‘peakedness’ of a distribution”. Normality is assumed when skewness and kurtosis coefficient

values range within ± 2 and ± 3 respectively (Moffat, 2017). Table 4.6 provides the normality test outcomes for the study constructs across the three research objectives.

Table 4.6: Normality test outcomes for study constructs measuring the three research objectives

Research Objective	Study constructs measuring research objectives	Standard Deviation	Skewness		Kurtosis	
			Statistics	Standard Error	Statistics	Standard Error
Objective 1	CUD7	1,551	-0,872	0,172	0,849	0,341
	CUD8	1,707	-0,581	0,849	0,448	0,341
	CUD9	1,234	0,543	0,341	0,051	0,341
	CUD10	1,217	0,523	0,172	0,168	0,341
	CUD11	1,184	0,255	0,172	-0,116	0,341
Objective 2	COUD12	1,555	-1,117	1,555	1,060	0,341
	COUD13	1,549	-1,167	0,172	1,199	0,341
	COUD14	1,604	-1,145	0,172	1,026	0,341
	COUD15	1,643	-1,034	0,172	0,483	0,341
	COUD16	1,535	-1,276	0,172	1,563	0,341
	COUD17	1,347	0,678	0,172	0,361	0,341
Objective 3	UBE1	1,276	-0,007	0,172	-0,212	0,341

Source: Author (2023)

The outcome of the normality test carried out for this research constructs show that skewness and Kurtosis coefficient values fall within the accepted ranges of ± 2 and ± 3 (See Table 4.6). This confirmed that the data is normally distributed and therefore, accurate and reliable conclusions can be drawn from the data collected Orcan (2020).

4.10. Research limitations

The researcher was involved in a car accident on 31st January 2022 that delayed the progress on data collection and compilation of the research findings. The researcher had to perform light tasks in order to keep abreast with the research plan. Sadly, after the car accident, the researcher lost his mother on 31st May 2022. This was the most painful experience because a mother is always a pillar of strength to their children. The loss of a parent caused a little delay but was rather motivated to complete the study in memory of a dear and most precious parent now in heaven. Apart from these negative personal social experiences, the language barrier presented a few challenges. The native language in Thohoyandou Town is Tshivenda and the researcher comes from a predominantly Nguni and Zulu background. The researcher had voluntary research assistants who were handy and helpful in translating and interpreting some of vernacular Venda responses to English and vice versa. It worked!

4.11. Ethical considerations

This research was guided and informed by the University of Venda Policy on Research Ethics (2022). Therefore, the research embraced all the University of Venda Policies on research inter alia the Research and Innovation Policy, Anti-Plagiarism Policy, Intellectual Property Policy, Conflict of Interest Policy, Community Engagement Policy, and adhered to the Guidelines for Classification of Prospective Research with respect to Research Ethics.

This research attained ethical clearance certificate from the University of Venda Ethical Clearance Committee prior to the data collection phase (See Appendix 1). The researcher approached Thulamela Local Municipality for permission to conduct research in Thohoyandou Town CBD and interviewed 3 staff members (See Appendix 4). The municipality granted the permission to permission to conduct this research in Thohoyandou Town CBD and interview 3 staff members (See Appendix 5). For both questionnaires and interviews participants were asked for consent to participate and it was stated that the data collected is strictly for academic purposes and its use is limited to this study. No personal information such as identity numbers and personal names was collected. The data collected including recorded interviews, questionnaire responses and geospatial data is stored in a password protected hard drive.

More importantly, this research conformed and adopted the ethical research principles set forward by the University of Venda Policy on Research Ethics. These principles embraces "autonomy, which fosters importance of respecting the right and dignity of participants; beneficence in terms of the importance of positive impact of researchers on the welfare of people; informed consent with regards to the importance of transparency, disclosure of all relevant research information, and voluntary participation in research; non-maleficence whereby the researcher must not subject participants to harm of any nature; and justice, the benefits as well as risk should be fairly distributed among participants" UNIVEN Policy on Research Ethics (2022).

4.12. Methodological summary of data collection and analysis

This research design matrix depicts the relationship between the research questions, variables, data collection methods, and data analysis methods adopted in this study. These relationships are summarised in Table 4.7 below.

Table 4.7: Research design matrix

No.	The research questions	Subsidiary questions	Variable (See Section 2.7 Chapter 2 for detailed description of variable)	Data collection technique	Data analysis	Outcomes
1.	What are characteristics of urban decay in Thohoyandou Town CBD?	Which urban decay features are affecting Thohoyandou Town CBD? Which pockets of Thohoyandou Town CBD are affected by urban decay? Which elements of the built environment are affected by urban decay in Thohoyandou CBD?	Abandon plots/properties; Condition/state of public services; Condition/state of social facilities; Condition or state of built environment; Condition or state of properties and buildings; Problem buildings; and Grime or waste accumulation.	Formal and Interview; Questionnaires; Observations; SW Maps Application; Photographs; and Document review (SDF, IDP, LED, Thulamela Urban Development and Revitalisation Strategy, books, journal articles)	Spatial Analysis SPSS Google forms Thematic content analysis Microsoft Excel	A list or table reflecting all features, attributes and situations associated with urban decay in the CBD. A map showing all features, attributes and situations associated with urban decay in the CBD. A map showing pockets of Thohoyandou CBD that are mostly affected by urban decay. Least and most affected structuring elements in the CBD

No.	The research questions	Subsidiary questions	Variable (See Section 2.7 Chapter 2 for detailed description of variable)	Data collection technique	Data analysis	Outcomes
2.	What are the causes of urban decay in Thohoyandou CBD?	<p>What has led to urban decay in Thohoyandou Town CBD?</p> <p>Why is Thohoyandou Town CBD subjected to urban decay?</p> <p>Who is responsible for urban decay in Thohoyandou Town CBD?</p>	<p>Urban governance;</p> <p>Immovable property and building conditions</p> <p>Quality of public services;</p> <p>Condition or state of social facilities or amenities;</p> <p>Condition/state of built environment;</p> <p>Condition or state of property and building conditions;</p> <p>Problem buildings; and</p> <p>Grime/waste accumulation;</p>	<p>Interview;</p> <p>Questionnaires;</p> <p>Observations;</p> <p>Photographs; and</p> <p>Document review (SDF, IDP, LED, books, journal articles, newspapers and internet)</p>	<p>SPSS</p> <p>Google forms</p> <p>Thematic content analysis</p> <p>Microsoft Excel</p> <p>ATLAS.ti</p> <p>qualitative data analysis tool</p>	<p>Causes of urban decay in Thohoyandou Town CBD.</p> <p>Authorities, organisations, institution, and individuals that are assumed to be responsible for urban decay in Thohoyandou CBD.</p>
3.	How can a framework for implementation of sustainable urban regeneration strategies strengthen capacity of Thulamela local Municipality and	<p>What policy interventions has Thulamela Municipality explored to halt decay, revive, resuscitate, and regenerate Thohoyandou CBD between year 2011 and 2023?</p> <p>What have challenged successful implementation of urban regeneration initiatives in Thohoyandou Town CBD?</p>	<p>Policy and legislation;</p> <p>Spatial planning and development interventions; and</p> <p>Public participation or stakeholder engagement</p>	<p>Document review (SDF, IDP, Thulamela Urban Development and Revitalisation Strategy books, journal articles, newspapers and internet);</p>	<p>SPSS</p> <p>Thematic content Analysis</p>	<p>Past and present strategies as well as plans that have been deployed in attempt to address urban decay in Thohoyandou CBD.</p> <p>A set of challenges that have impeded urban regeneration efforts in Thohoyandou Town CBD.</p>

No.	The research questions	Subsidiary questions	Variable (See Section 2.7 Chapter 2 for detailed description of variable)	Data collection technique	Data analysis	Outcomes
	other small towns to deal with urban decay?	What framework can be used to ensure successful implementation of urban regeneration strategies in Thohoyandou Town CBD?		Interview; Questionnaire; Observation; Mapping; and Photography		A framework for sustainable implementation of urban regeneration in small towns.

Source: Author (2023)

4.13. Chapter summary

This chapter discussed the methodology employed by the researcher to address the research problem. The chapter outlined the research approach, data collection procedures, study population and research sample as well as data analysis procedures. The following chapter provides an in-depth analysis of the first objective of this study. It characterises urban decay within the study area.

CHAPTER 5: CHARACTERISING AND MAPPING URBAN DECAY IN THOHOYANDOU TOWN CBD

5.1. Introduction

This chapter provides the analysis of spatial data collected from the study area in response to the first research objective together with its subsidiary questions as outlined in section 1.5 and 1.6.1 of Chapter. This chapter characterises urban decay in Thohoyandou Town CBD through mapping. The following section after this introduction discusses the spatial distribution and coverage of urban decay in Thohoyandou Town CBD. Section three looks at urban decay from the perspective of Kevin Lynch's guided by structuring elements within Thohoyandou Town CBD built environment. The last section of this chapter provides the chapter summary.

In order to fulfil the demands of the first objective of the study, the researcher used data collected through soft or online questionnaire and SW Maps mobile application including geospatial data and photographs captured in the study area. The data including geospatial data is analysed categorised according to themes through content analysis method. To some extent the geospatial data is analysed through ArcMap as well as Microsoft Excel and presented as tables, pie charts, graphs, and maps.

5.2. The spatial distribution of urban decay features in Thohoyandou Town CBD

This section is guided by Lynch (1960) structuring elements in visualizing the spatiality of urban decay in Thohoyandou Town CBD. It presents an overview of the spatial coverage, extent and distribution of urban decay in the study area.

5.2.1. Visualisation of Kevin Lynch's (1960) structuring elements in Thohoyandou Town CBD

People construct perceptual or cognitive maps of their surroundings consisting of districts, edges, paths, nodes, and landmarks making up the built environment (Lynch, 1960; Filomena et. al, 2019). The researcher constructed and utilised the perceptual or cognitive map of Thohoyandou Town CBD to study, investigate, and document urban decay (See Map 5.1).

5.2.1.1. The district(s)

In this research, districts were determined as a function of their land uses. The commercial and retail district, that is, the CBD houses notable landmarks, paths, nodes and landmarks. The CBD also houses minor districts in form of complexes, and shopping malls; as well as government offices. These include inter alia the Game Store Complex, the famous Venda

Plaza, Mvusuludzo Mall, Thohoyandou Magistrate Court and the massive abandoned short and long-distance taxi rank as shown in Map 5.1.

5.2.1.2. The Landmarks

In general, landmarks are used to orientate users of urban spaces (Filomena et. al, 2019), and in this case, landmarks were used as reference points for documenting and recording features associated with urban decay. Some of the landmarks in Thohoyandou Town CBD include the Venda Plaza, Game Store Complex, Thohoyandou Magistrate Court, Game Store Complex, Thulamela Local Municipality Building, Mvusuludzo Mall, abandoned short and long-distance taxi rank and bus rank (See Map 5.1).

5.2.1.3. Paths

Lynch (1960) envisaged paths as continuous conduits (streets and passages) that facilitate both vehicular and pedestrian movement. Thohoyandou Town CBD consists of several paths including streets, passages, road reserves, pavements, and walkways/frontage zones. Combined, these paths facilitate both vehicular and pedestrian movement throughout the study area. The paths provide direct access to the study area and facilitate access to districts and nodes. Paths also connect the different nodes and districts as shown in Map 5.1.

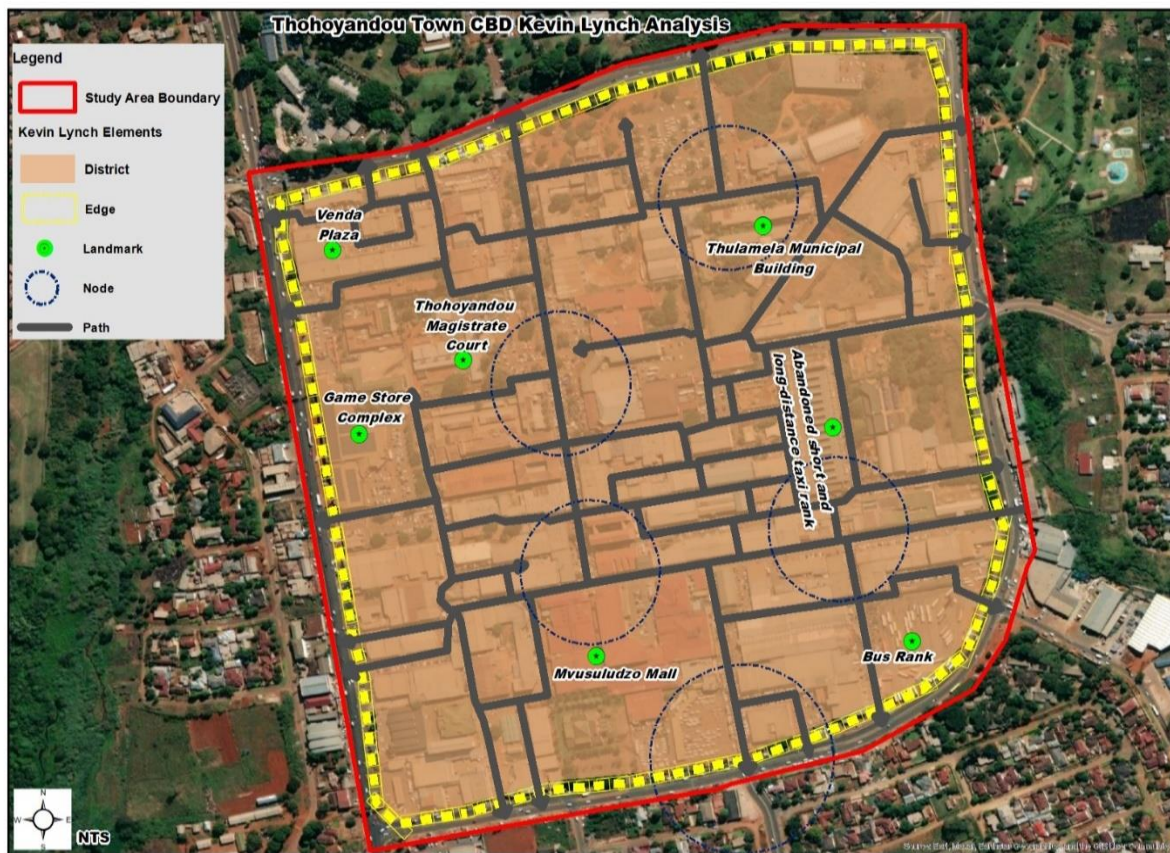
5.2.1.4. The nodes

Nodes are areas of agglomeration or concentration of activities within the urban setting (Lua et. al, 2020). People travel through or enter these strategic areas of agglomeration of land use activities (Al-Kodmany, 2001). Several nodes were observable within the study area as depicted in Map 5.1. The most notable node was the southern nodal area which was the primary node in the study area. This particular node consisted of several land use activities including the taxi rank, a mini-SPAR shopping complex, automatic teller machine points, bank (First National Bank branch), informal trading (street vending), food outlet (Kentucky Fried Chicken), Thohoyandou Town Hall, and Thohoyandou Market. Similar and related land use activities were observable within the other secondary nodes in the study area. These included the Mvusuludzo Mall node and Thulamela Taxi Rank node in the northern part of the study area (See Map 5.1).

5.2.1.5. The edge

The eastern, southern, western, and northern parts of the R52, Casino Boulevard, Garden Route (the eastern boundary), and Garden Route (the southern boundary) road reserves forms an edge

that separate Thohoyandou Town CBD with adjacent neighbourhoods. Traces of urban decay were recorded on these parts of road reserves bordering the study area as (See Map 5.1).



Map 5.1: Kevin Lynch Analysis of Thohoyandou Town CBD
Source: Author (2023)

Map 5.1 is a perceptual or cognitive map of Thohoyandou Town CBD reflecting the five elements as identified by Lynch (1960). The perceptual map confirm that the entire Thohoyandou Town CBD is a commercial district. This is attributed to its primary function; being the administrative and commercial centre of the entire Vhembe District Municipality.

5.2.2. The structural elements and features associated with urban decay in the CBD

Table 5.1 below provides a quantitative summary of all the urban decay features recorded in the study area. These features were collected using the SW mobile application throughout the study area and later integrated to ArcMap and converted to Microsoft Excel Spread sheet. Geospatial data collection specifically focused on features and variables indicative of deteriorating and poor conditions of built environment. A total of 51 different individual features indicative of urban decay were recorded throughout the study area. These 51 individual features accumulated to a combined total of 371 features associated with urban decay including potholes, damaged street crossings, gravel frontage zone, walkways, damaged and blocked

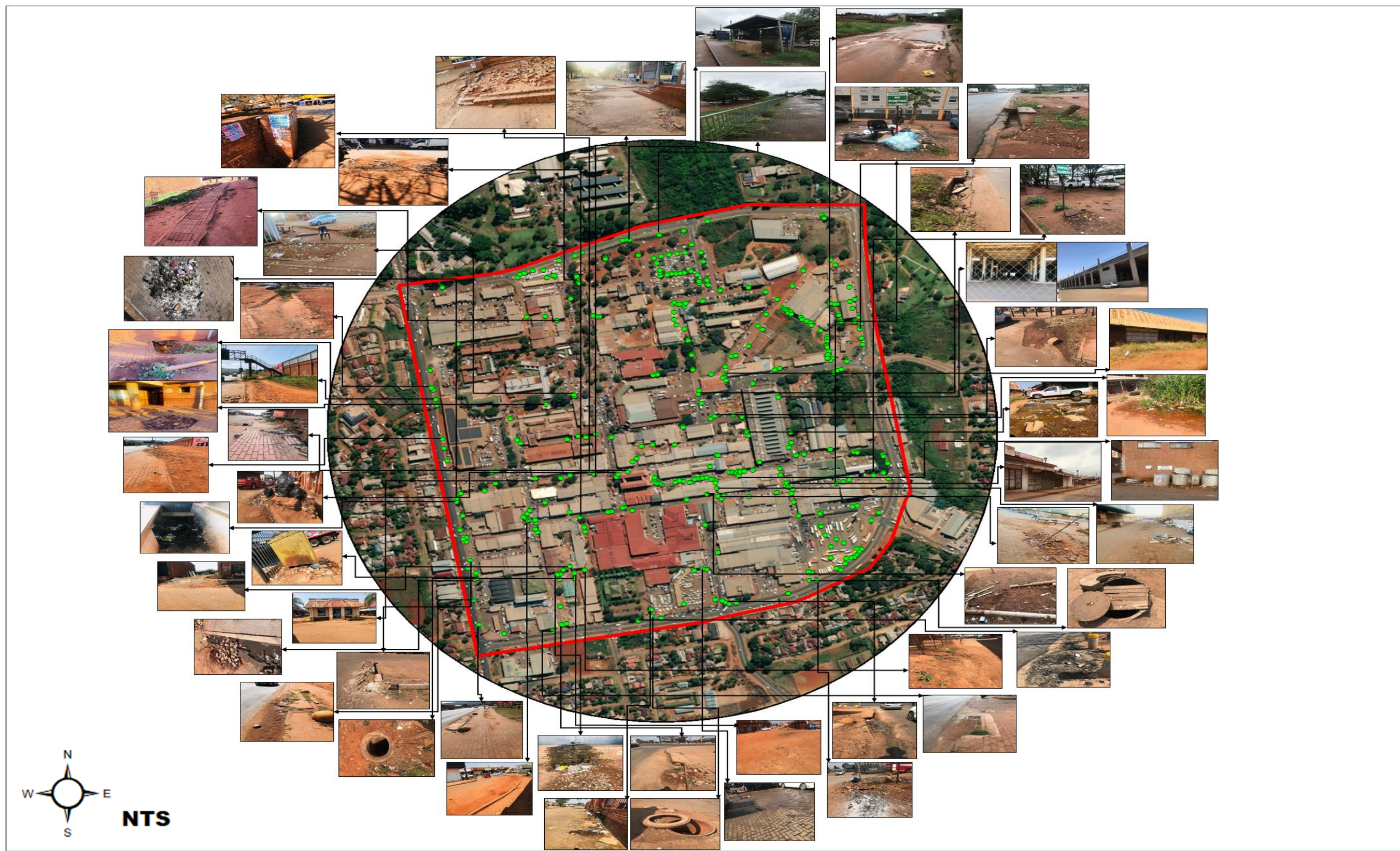
drainage catch basins, blocked water drain inlets, construction waste accumulation, unusable transport waiting areas, illegal dumping spots, water leakages, old buildings, damaged waste bins, open and damaged manholes and damaged electricity box and urinating spots as shown in Table 5.1.

In addition to Table 5.1, Map 5.2 provides a pictorial and spatial representation of all individual features indicative of deteriorating built environment and urban decay recorded within Thohoyandou Town CBD. The images reflecting the location of some of the recorded urban decay features and situations throughout the study area including ablution blocks in bad conditions, abandoned project, abandon bulk infrastructure, potholes, damaged frontage zone/walkways and passages, damaged and blocked drainage catch basins, unusable transport waiting areas, illegal dumping spots, water leakages, old buildings, open manholes and damaged electricity box (See Map 5.2).

Table 5.1: Quantitative summary of all the urban decay features in Thohoyandou Town CBD

No.	Urban Decay Feature	No. of Urban Decay Features Recorded	Percentage	No.	Urban Decay Feature	No. of Urban Decay Features Recorded	Percentage
1	Abandoned Building	1	0,27%	27	Gravel Access Street	4	1,08%
2	Abandoned Bulk Infrastructure	2	0,54%	28	Gravel Frontage Zone/Walkway	26	7,01%
3	Abandoned Project	1	0,27%	29	Gravel Island	27	7,28%
4	Blocked Drainage Catch Basin	13	3,50%	30	Gravel Parking Area	1	0,27%
5	Blocked Rainwater Drain Inlet	4	1,08%	31	Gravel Transport Waiting Area	1	0,27%
6	Blocked Roadside Water Gutter	2	0,54%	32	Illegal Dumping Spot	9	2,43%
7	Collapsed Retaining Wall	2	0,54%	33	Illegal Waste Burning Spot	3	0,81%
8	Collapsing Retaining Wall	1	0,27%	34	Invisible Road Marking	3	0,81%
9	Construction Waste Accumulation	11	2,96%	35	Narrow Walkway	1	0,27%
10	Damage Electricity Box & Illegal Urinating Spot	7	1,89%	36	Old Building (Dilapidated Buildings)	5	1,35%
11	Damaged & Blocked Drainage Catch Basin	4	1,08%	37	Open Manhole	5	1,35%
12	Damaged & Rusty Gutters at Taxi Rank	1	0,27%	38	Open Rainwater Drain Inlet	2	0,54%
13	Damaged Drainage Catch Basin	14	3,77%	39	Plant Invaded Frontage Zone	1	0,27%
14	Damaged Frontage Zone/Walkway	1	0,27%	40	Poorly Constructed Building	1	0,27%
15	Damaged Island	2	0,54%	41	Pothole	85	22,91%
16	Damaged Manhole	3	0,81%	42	Public Ablution Facility in bad Condition	3	0,81%
17	Damaged Paving	28	7,55%	43	Sand & Grass Invaded Frontage Zone	2	0,54%
18	Damaged Road Sign	1	0,27%	44	Sand & Stone Invaded Area	2	0,54%
19	Damaged Street Crossing	3	0,81%	45	Sand Invaded Parking Bay	1	0,27%
20	Damaged Waste Bin	6	1,62%	46	Sewer Leak	3	0,81%
21	Degraded Access Walkway	1	0,27%	47	Soil & Grass Invaded Walkway	4	1,08%
22	Degraded Parking lot	1	0,27%	48	Unusable Transport Waiting Area	7	1,89%
23	Degraded Walkway	24	6,47%	49	Waste Accumulation	16	4,31%
24	Exposed Wastewater Pipe	2	0,54%	50	Wastewater Spillage	2	0,54%
25	Grass & Plants Invaded OPS	2	0,54%	51	Water Leak	17	4,58%
26	Grass & Soil Invaded Walkway	3	0,81%	Total		371	100%

Source: Fieldwork (2023)



Map 5.2: The spatial representation of urban decay features in Thohoyandou Town CBD
Source: Author: (2023)

5.2.3. Dominant urban decay features within Thohoyandou CBD

Figure 5.1 summarise the twenty most prevalent features that contributed to the deteriorating built environment throughout the study area. This is done to inform the prioritisation as well as focus of urban regeneration interventions. The 20 most prevalent urban decay features were deduced by summarising the attribute table of the urban decay features shapefiles created from the spatial data collected throughout the study area using the SW Map mobile spatial data collector application through and ArcMap. The Dbase table generated from the summarised attribute table of urban decay features shapefiles was then processed through Microsoft Excel calculating percentages of all the urban decay features recorded within the CBD. These percentages of each urban decay feature were then ranked from highest to lowest percentage and a pie chart ranking by order the twenty most prevalent urban decay features was generated through Microsoft Excel.

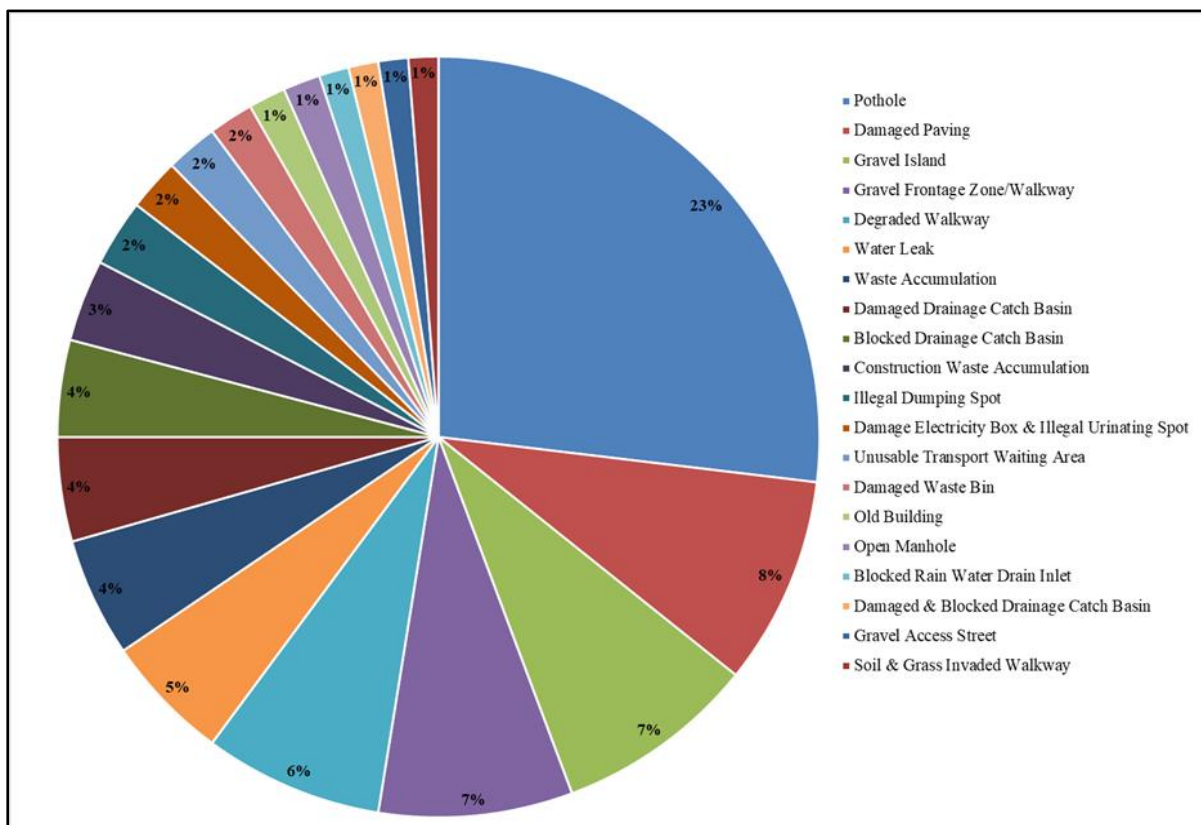


Figure 5.1: Summary of 20 most common urban decay features in Thohoyandou CBD
Source: Fieldwork (2023)

Amongst the twenty most prevalent features recorded within the study area were potholes (23%), damaged paving (8%), gravel island (7%), gravel frontage zones/walkways (7%), degraded walkways (6%), water leakages (5%), waste accumulation (4%), damaged drainage catch basins (4%), and blocked drainage catch basins (4%) (See Figure 5.1). The presence as well as visibility of multiple urban decay features throughout the study area reveals that urban

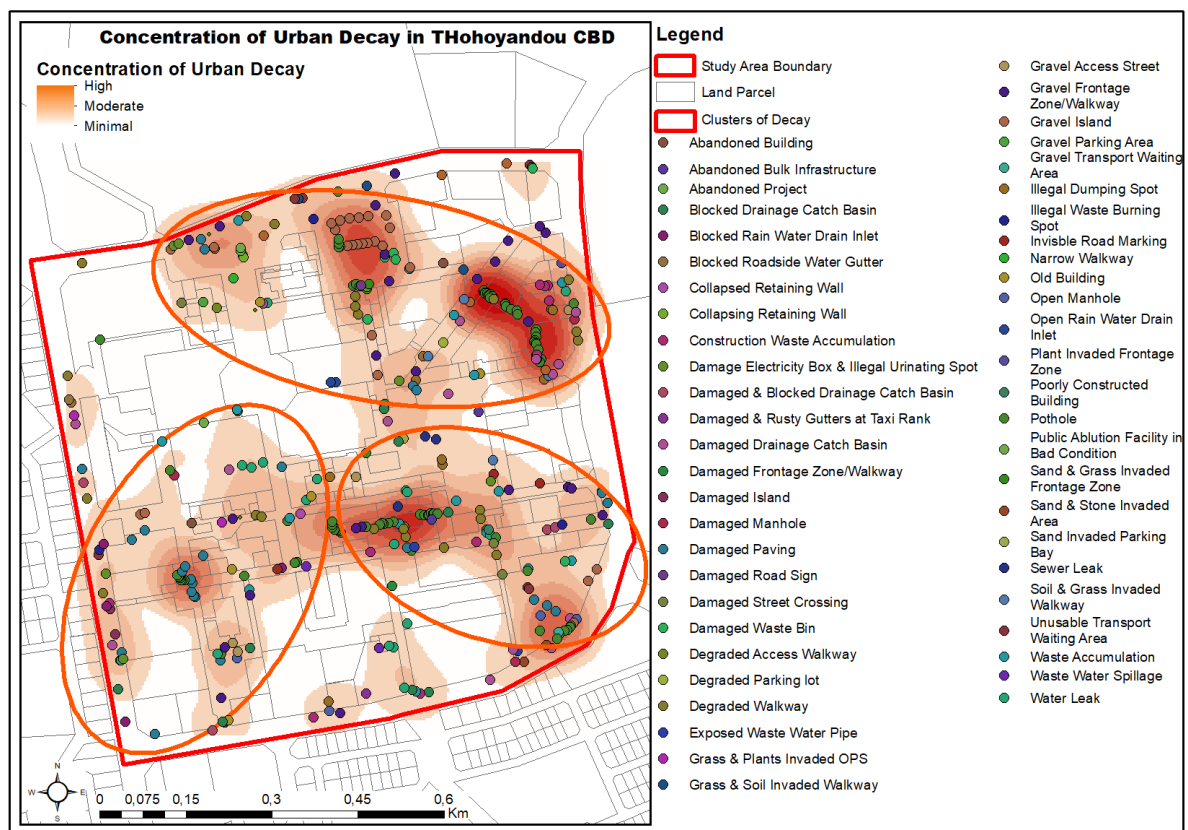
decay stems from myriad of urban maladies (Ndlebe, 2016). These urban maladies include contextual as well as historical issues considering that Thohoyandou Town CBD falls within former homelands area. Former homelands areas are subjected to massive urbanisation whilst they remain largely underserviced with massive public service and infrastructure backlogs (Küsel, 2009). This is evident in the case and context of Thohoyandou Town CBD whose public infrastructure facilities are most affected by urban decay.

The dominance of urban decay features such as potholes, gravel frontage zones, walkways, and degraded walkways compromises the ability of the structural elements to perform their primary functions. For example, the failure of paths to facilitate vehicular and pedestrian movement compromises circulation of traffic in the entire Thohoyandou Town CBD. Potholes are mainly caused by several factors including poor road design, excessive surface runoff, lack of maintenance and use of poor road construction materials (Naveen et al., 2018). In case of emergencies potholes tend to slow down the performance of emergency vehicles and compromises the ability of emergency workers to prevent damages or injuries (Anyumba, 2019). The prevalence of potholes causes damage motor vehicles, traffic congestion, accidents and may result in fatalities (Naveen et al., 2018).

The majority of Thohoyandou CBD users confirmed that most roads, streets, bus and taxi ranks, public parking areas, frontage zones, walkways and passages are not usable in the event of heavy rainfalls. The prevalence of damaged and blocked drainage catch basins is indicative of poor stormwater and drainage systems incapable of withstanding heavy rainfalls exposing the entire built environment of the CBD to flooding. The repercussion of such failure may result in the damages to public and private properties, infrastructure as well as other disaster related consequences (Nurashikin et al., 2019). Any damage to public and private property and infrastructure incurs financial implications for the already financially strained category B municipalities of small towns across the Republic. In general, damages inflicted as a result of urban decay on various components (building/properties, infrastructure, walkways and streets) that make up districts bears negative financial ramification. Part of the negative consequences is disinvestment. According to Porter (1990) competitive cities theory availability of and well-functioning infrastructure is part of the conditions that enhance urban centres competitiveness (Choe and Roberts, 2011).

5.2.4. Spatial concentration of urban decay in Thohoyandou CBD

Urban decay is a condition whereby the majority or a portion of the urban area is characterised by grime, problem buildings, poor conditions of facilities (including social), and degraded built environment (Enoma and Idehen, 2018). The spatial concentrations, clusters, and pockets of urban decay in the CBD were determined by performing a spatial analysis on ArcMap using Kernel Density. Kernel Density is a spatial analysis function on ArcMap capable of generating densities or clusters using point data location (Krisp et al., 2009). Kernel Density is widely used in the analysis of trends with its most recent application being determining Covid-119 hotspots (Elson, 2021). This research used Kernel density heat maps to show pockets where decay is most intense (See Map 5.3). The purpose of identifying spatial concentrations or clusters of urban decay features is to establish which parts or pockets of Thohoyandou Town CBD are mostly affected by urban decay and what features are most prevalent in these parts or pockets. This is useful as it can be used to inform future urban regeneration strategies in terms of establishing focus areas (parts of the CBD) and priority issues within these areas. Map 5.3 below show clusters or concentrations of urban decay in Thohoyandou Town CBD.



Map 5.3: Concentration and spatial coverage of urban decay features in Thohoyandou CBD
Source: Fieldwork (2023)

Map 5.3 shows that urban decay is concentrated in three clusters or pockets: one cluster in the north-eastern part overlapping slightly to the upper north eastern side of the study area. Another cluster starts from the centre and covers the south eastern part of the study area. The last cluster covers some parts of the south western pocket of Thohoyandou Town CBD. The south-eastern parts of the north eastern cluster are dominated by light industrial and retail related land uses such as vehicle part retailers, building material suppliers, offices and wholesale shops. The presence of building material suppliers, vehicle parts retailers and wholesale shops within this sphere of the study area attracts increased volume of traffic and heavy vehicles in general. The impact of presence as well as movement of heavy vehicles results in diminishing conditions of paths within this part of the study area. Streets within this sphere of the study area are characterised by heavy presence of potholes especially those located within vicinity to building material suppliers and next to wholesale shops.

The central-south-eastern cluster mainly consist of land use activities such as a shopping mall, vehicle part retailers, building material suppliers, offices, wholesale shops, fast food outlets, taxi rank and bus rank. The commercial and retail related land uses as well as the presence of public transport facilities draws high number of people and vehicles. This cluster is densely populated by both people and vehicles. Due to observable neglect and lack of maintenance, the built environment in this cluster may succumb to pressure and slowly obliterate as evident throughout this section of the study area.

The south-western cluster sits along the R523 attracts significant traffic volumes. This cluster enjoys significant locational advantages as a result of the R523 bordering the western side of the study area. This attracted land use activities such as petrol filling stations (Shell and Caltex). High traffic volumes exert significant pressure on the built environment especially on paths. Several small-scale car mechanics and small car repair workshops are visible on the roadsides. The car repairs take place in the parking lots, pavements and walkways. To some extent these activities cause significant damages to paths which is evident throughout this cluster. Interestingly, south of the south-western cluster boundary urban decay features recorded were minimal. One of the key informants indicated from the local municipality provided that “the two complexes (Venda Plaza and Game complex) are privately managed, and thus the managing companies are swift to respond to issues negatively affecting the built environment.”

5.3. Conversations with Kevin Lynch and Urban Decay in Thohoyandou Town CBD

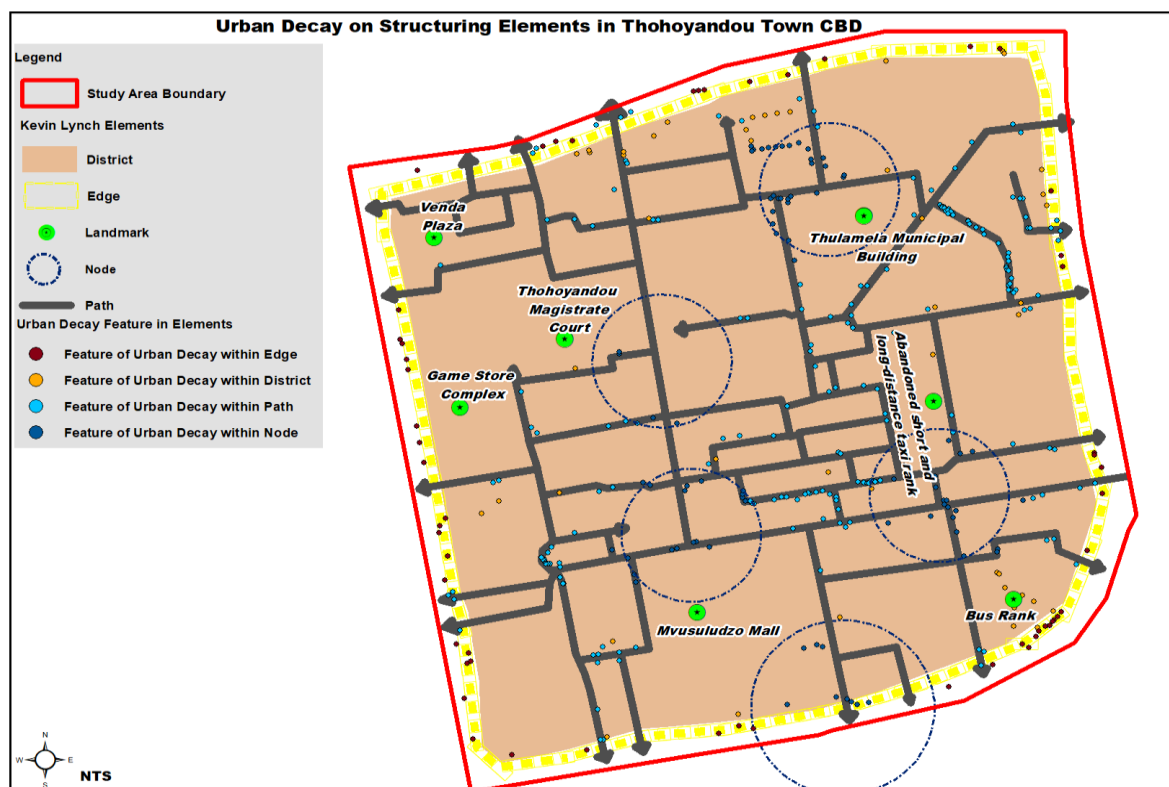
The urban decay features in the CBD are investigated based on their occurrence on the built environment and reduced to three variables as informed by literature reviewed. Urban decay in Thohoyandou Town CBD is studied within three categories of variables emerging from literature reviewed in conjunction with structuring elements (See Figure 5.2). These variables are poor urban management, derelict and abandoned buildings, and collapsing infrastructure and abandoned projects.

The spatial data collected is reduced and categorised into the above mentioned three broad categories (See Figure 5.2). Thematic content analysis enabled the researcher to organise and describe dataset in depth (Braun and Clarke, 2006). The reduction of spatial data into categories or themes made analysing and reporting findings less complicated. The black arrows in Figure 5.2 link each urban decay feature with one or more structuring elements where the feature occurs or was recorded within Thohoyandou Town CBD. A single urban decay feature may occur or is recorded in one or more than one structuring element. For example, blocked drainage catch basins were recorded on nodes, paths, districts, and edges. The red arrows link each urban decay feature with one category under which the specific urban decay feature is reduced to. The integration of nodes, landmarks, paths, edges and districts with variables derelict and abandoned buildings; poor urban management and collapsing infrastructure and abandoned projects enhanced the visualisation of variables (See Figure 5.2).

Furthermore, the integration testifies that urban decay in Thohoyandou Town CBD emanates from or is a result of derelict and abandoned buildings; poor urban management and collapsing infrastructure and abandoned projects. Therefore, the traits of urban decay in Thohoyandou Town CBD falls within these three broad themes. This shows that decay in the study area is underpinned by issues related to derelict and abandoned buildings; poor urban management and collapsing infrastructure and abandoned projects. In general terms, the spatial data points out that urban decay in Thohoyandou Town CBD is attributable to and headlined by derelict and abandoned buildings; poor urban management and collapsing infrastructure and abandoned projects. Figure 5.2 shows the integration of the five structuring elements with the three broad categories of variables indicative of built environment subjected to urban decay which are poor urban management, derelict and abandoned buildings, and collapsing infrastructure and abandoned projects.

5.3.1. Manifestation of urban decay from Lynch's (1960) structuring elements

Features associated with urban decay and the structuring elements are mapped in Map 5.4 the occurrence or manifestation of urban decay on structuring elements throughout the study area. The spatial location and geographic spread of urban decay features are shown on the map in relation to the structuring elements on which they occur on the built environment within Thohoyandou Town CBD. Map 5.4 below shows the occurrence of urban decay features and situation on nodes, landmarks, districts, edges and paths in the study area.



Map 5.4: Integration of structuring elements and urban decay features in Thohoyandou Town CBD
Source: Author (2023)

Urban decay features collected using the SW Maps mobile application were exported into shapefile layer and inserted into ArcMap. From ArcMap the shapefile layer containing features of urban decay were overlaid and integrated with the structuring elements into a single map to enable quantitative analysis and visualisation of the location where these urban decay features and situations are found within the structuring elements. The quantification of urban decay features within structuring elements from which they occur enabled the researcher to determine the most and least affected elements in the study area. The quantification of urban decay features within each element is made possible by the integration of ArcMap and Microsoft Excel functions. Map 5.4 is the outcome of this integration showing the occurrence of urban decay features on the structuring elements nodes, paths, edges, landmarks and districts

throughout the study area. More importantly, Map 5.4 show that urban decay manifest and affect the various structuring elements of the built environment within the study area. Furthermore, Map 5.4 directly link urban decay and the structuring element such as nodes, landmarks, edges, paths and districts which are used in this study to investigate urban physical decay of Thohoyandou Town CBD built environment.

Figure 5.3 is the outcome of ArcMap and Microsoft Excel produced by clipping the features of urban decay (geospatial data) into each structuring element (nodes, paths, and edges) where these features occurred and were recorded. Urban decay features recorded on district and landmarks were selected manually on ArcMap, and a layer was created since these features could not be clipped like those recorded within nodes, paths, and edges. Secondly, the attributes of each of the resulting layers were then summarised on ArcMap. The outcome of the summary were four different tables (Dbase tables) each with all the features (feature name and quantity) recoded within nodes, paths, edges, and districts and landmarks. Lastly, the four Dbase tables containing urban decay features (feature and quantity) corresponding to each structuring element were transferred to Microsoft Excel. Sums of each structuring elements were calculated and later converted into percentages. These percentages were converted into a bar graph as reflected in Figure 5.3.

Figure 5.3 below provides a summary of the most and least affected structuring elements by urban decay within Thohoyandou Town CBD. The spatial data analysis revealed that paths in Thohoyandou Town CBD are the most affected amongst the five elements followed by nodes, and edges respectively (See Figure 5.3). An estimated 54% of the total recorded features and situations indicative of deteriorating built environment occurred on paths. This indicated that urban decay constricts the movement of both pedestrians and vehicles in the CBD. Approximately 21% of the total documented features of urban decay were recorded on nodes. This shows that nodes are the second most structuring elements affected by urban decay within the study. Edges, districts, and landmarks are least affected by urban decay as they accounted for 13% and 12% respectively (See Figure 5.3).

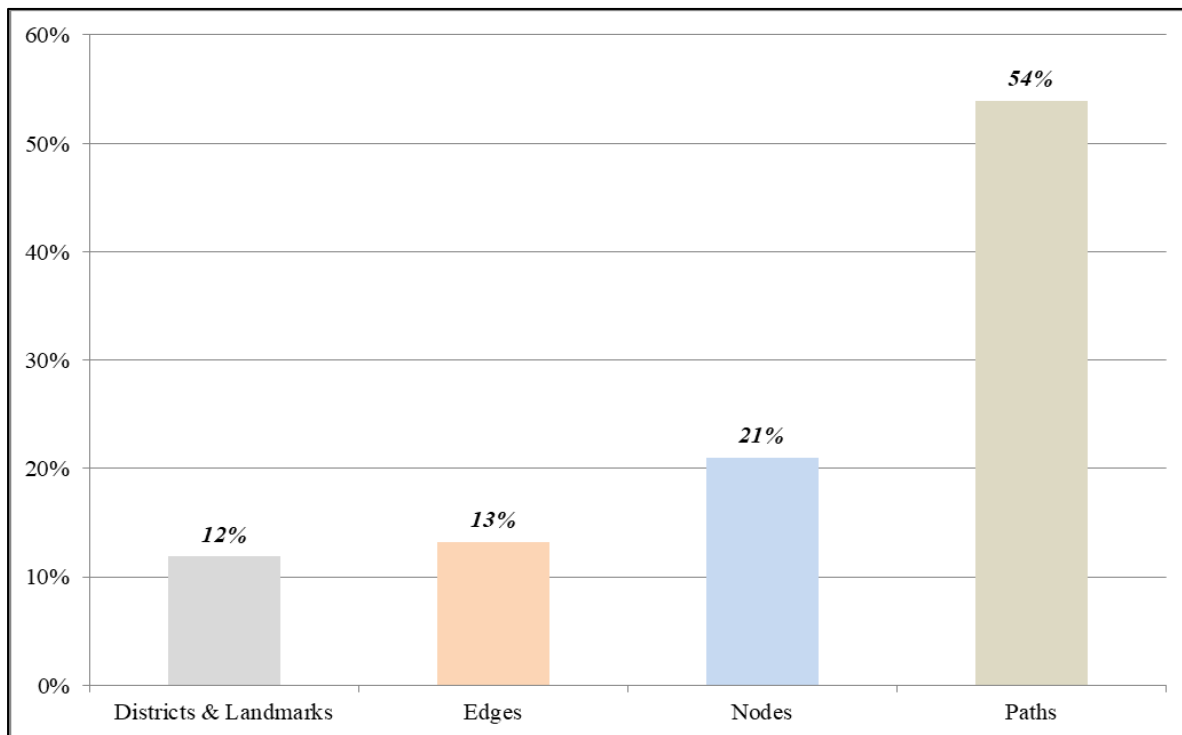


Figure 5.3: Summary of the most and least affected structuring elements by urban decay within Thohoyandou Town CBD
Source: Author (2023)

The data provided in Figure 5.3 corresponds with the perception held by the majority of respondents as they indicated that the level of maintenance of some of the paths is very poor. A significantly high proportion of respondents noted that the majority of paths (streets and roads) are poorly constructed with potholes, invisible road markings and signage. Bulk proportion of respondents also attested that majority of the paths (walkways/frontage zones, pedestrian sidewalks and passages) were poorly constructed, un-surfaced and narrow whilst others are dissolute and unusable in events of heavy rainfall. Deteriorating and unfavourable conditions of the majority of paths in Thohoyandou Town CBD were attributed to the lack of maintenance and poor construction according to key informants from the local municipality. Poorly maintained roads limit vehicular and pedestrian movement, increase vehicle operating costs, increase accidents, and contribute to poor health and poverty (Burningham and Stankevich, 2005). One of the key informants from the local municipality expressed that “the local municipality has not paid attention to maintenance as a key urban management task”. Roads are public assets and their well-being accrue significant benefits including improved access to districts and nodes for example markets and public facilities; and increased safety and comfort; and decreased vehicle operating costs (Burningham and Stankevich, 2005). Within the competitive cities’ theory, urban management play a significant role in retaining

and attracting investment as well as business. Generally poor and lack of urban management diminishes urban areas competitive edge.

Photograph 5.1 reflect conditions of some paths with their GPS coordinate for ease of locating the features and situations in Thohoyandou Town CBD. Plate A on Photograph 5.1 shows a degraded passage in the CBD with damaged paving. Some of the parts of the paving are wearing out and there is visible poor landscaping on both sides of the paved area. Plate B on Photograph 5.1 shows a gravel access street in poor conditions during a rainy day. Poor gravel access streets become difficult to use for both vehicles and CBD users in the event of rains.



Photograph 5.1: Conditions of some paths within Thohoyandou Town CBD
Source: Author (2023)

Plate C on Photograph 5.1 shows a passage in bad conditions with degraded paving and has developed a pothole. These potholes like holes in passages with degraded paving expose CBD users to serious injuries. Plate D on Photograph 5.1 shows a street with several potholes and patches during a rainy day. It becomes a daunting task for vehicles to manoeuvre in streets with potholes. Potholes slow vehicular movement, and this hampers the performance of emergency vehicles in the event of emergencies (Anyumba, 2019). Potholes may also cause significant

damage to vehicles. These images are a clear indication that it is not a coincident that the spatial data collected revealed that majority of the paths within Thohoyandou Town CBD have deteriorated and are subjected to decay.

5.3.2. Poor urban management

Figure 5.4 below provides a thematic summary of all the 51 individual urban decay features recorded within Thohoyandou Town CBD. The 51 features and situations associated with urban decay in the study area were reduced to three broad categories namely poor urban management, collapsing infrastructure, and abandoned projects. The thematic summary shows that urban decay in Thohoyandou Town CBD may well be attributed to poor urban management (85%), collapsing infrastructure and abandoned projects (13%) and derelict and abandoned buildings (2%) (See Figure 5.4).

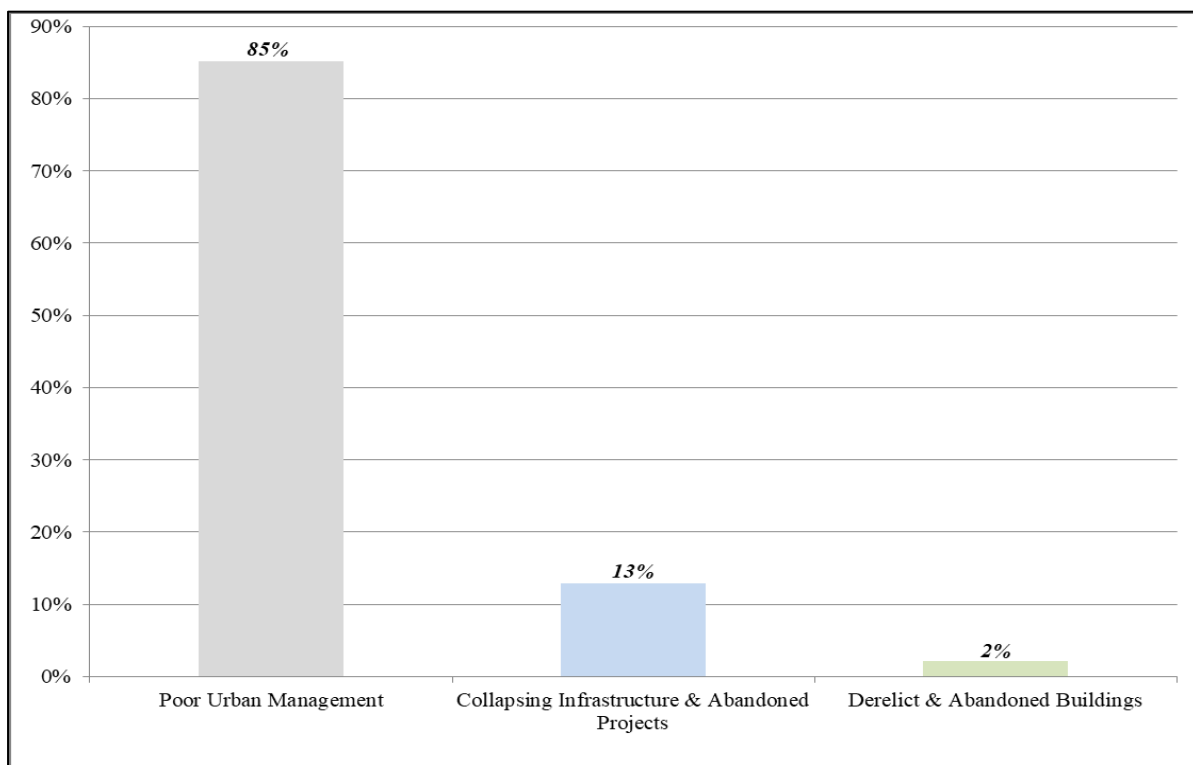


Figure 5.4: Thematic summary urban decay features recorded in Thohoyandou Town CBD
Source: Fieldwork (2023)

Figure 5.4 above show that majority of urban decay features and situation recorded, present and affecting some parts of the study area are those related to, emanate from, and because of poor urban management. Poor urban management accounts for an estimated 85% of factors reflective of deteriorating built environment within Thohoyandou CBD (See Figure 5.4). Issues such as construction waste accumulation on roadsides, open spaces invaded by grass and sand, invisible road markings, potholes, damaged and invisible road signage, parking areas invaded

by sand, sewerage leaks and water leaks. Other issues that reflected poor urban management included wastewater spillages, unusable transport waiting facilities, illegal dumping areas, frontage zones invaded by grass and soil, blocked roadside gutters, blocked rainwater drain inlets and blocked drainage catch basins. Poor management and maintenance of existing infrastructure and services in urban areas signals governance failure, poor urban management and incompetent government (Acioly, 1999). These are main determinants of cities competitiveness according to (Kresl, 2013; Thwala, 2016); and their lack or absence has negative implication on cities investment prospects and living conditions by extension. Photograph 5.2 illustrates some of the urban decay issues present in the study area emanating from poor urban management. The GPS coordinates are provided for ease of locating the features and situations within the study area.



Photograph 5.2: Urban decay issues and situations emanating from poor urban management in Thohoyandou Town CBD
Source: *Fieldwork (2023)*

Plate A on Photograph 5.2 shows a blocked and dysfunctional rainwater drain inlet surrounded by a pool of water in a pedestrian passage. The dysfunctional rainwater drain inlet has caused surface water to accumulate around it instead draining and directing the surface water into the drainage system for proper disposal. In the event of heavy rainfalls, the rainwater drain inlets are unable to perform the primary function resulting in excessive surface run-off impeding the

movement of pedestrians in some passages. Poor drainage and excessive accumulation of surface run-off deteriorate pavement and road conditions resulting in premature failure of the movement network (Abhijit and Patil, 2011; Naveen et al., 2018). In addition, in the event of heavy rainfall surface run-off slops into nearby shops.

Plate B on Photograph 5.2 show a street with invisible marking to separate the two lanes going opposite in directions. There are no visible pedestrian markings throughout the length of the street. Road marking and signs dictate driving behaviour, provide warnings and precautions. Therefore, the absence of street markings compromises the ability of paths to dictate the flow of both vehicular and pedestrian in the CBD. This may result in accidents and possibly deaths. Plate C on Photograph 5.2 shows solid waste accumulation in an area where waste dumping is prohibited. The majority of the respondents indicated that scores of uncollected waste throughout the CBD are common. This is reflective of an inefficient waste collection, disposal, and management system. As a result of this failure people tend to resort to dumping waste in areas where it is prohibited when solid waste collection is not provided efficiently. Improper solid waste disposal has negative implication on both people and the environment for example solid waste block drains contaminating surface water in rainy seasons whereas burning of solid waste result in pollution (Omang et al., 2021). Plate D Photograph 5.2 show a pond that has grown matured reed at a corner of private property. The established pond is the outcome of the nearby water and sewer leaks. The presence of the established pond with mature reed indicates that the nearby water and sewer leaks have been there for quite a long period of time and have not been attended to or fixed. This confirms the perception of the majority of the respondents that the local municipality responsiveness to maintenance and repair of sewer and stormwater infrastructures is very poor. Efficient urban sewer systems promotes public health and safety, offers protection against the spread of waterborne disease and decreasing vulnerability to flooding (Ducci et al., 2023). Therefore, a dysfunctional urban sewer system compromises public health and safety exposing urban settlers to environmental and health hazards.

5.3.3. Collapsing infrastructure and abandoned projects

The second most recorded urban decay features affecting parts of Thohoyandou Town CBD are those related to collapsing infrastructure and abandoned projects. Collapsing infrastructure and abandoned projects account for approximately 13% of the total features associated with urban decay documented in Thohoyandou Town CBD as indicated in Figure 5.4 in Section 5.3.2. This category includes features and situations such as but not limited to public ablution facilities in bad conditions, abandoned infrastructure, damaged drainage catch basins, exposed

waste water pipes, damaged electricity boxes, damaged manholes and damaged waste bins. Some of these features are illustrated and discussed on Photograph 5.3. Infrastructure is crucial to combating urban poverty, improving living conditions and standards, and is a necessary condition for economic growth and development (Hassan et al., 2017). The GPS coordinates are provided for ease of locating the features and situations within the study area.



Photograph 5.3: Urban decay features related to collapsing infrastructure and abandoned projects in Thohoyandou Town CBD
Source: *Fieldwork (2023)*

Plate A on Photograph 5.3 show an abandoned short and long-distance taxi rank project. The project is fenced and guarded by security personnel during the day and at night. From the outside the project looked fairly recent and complete. However, the taxi rank was not occupied or operational. Failed infrastructure projects contributed significantly to decay of most small towns across the republic (COGTA, 2021). Plate B on Photograph 5.3 show a public ablution facility in bad conditions with broken windows. Leaking water formed a mini pond adjacent to the facility and some of the bathrooms inside the facility were unusable. As a result of generally poor conditions of public ablution facilities across the CBD people often use undesignated spaces to relieve themselves. However, there were people that have assumed the responsibility of maintaining cleanliness of entrances and some bathrooms that were still functional in these

public ablution facilities. The public was then charged from as little as R2 – R3 to use the bathrooms or public ablution facilities by those maintaining the facilities.

Plate C on Photograph 5.3 show a damaged drainage catch basin with a removed top situated adjacent to a pedestrian walkway and street. Plate D on Photograph 5.3 show a damage manhole with a removed top lid and waste can be seen inside. Damaged drainage catch basins and manholes may subject both pedestrian and vehicles to harm and damage especially in an area with limited or insufficient lighting during the night in Thohoyandou Town CBD. According to key informant from the local municipality the cause of prevalence of damaged drainage catch basins and manholes in the CBD was attributed to lack of consistent maintenance of infrastructure throughout Thohoyandou Town CBD.

5.3.4. Derelict and abandoned buildings

Several derelict and abandon buildings within districts of the study area accounts for at least 2% factors reflective of the built environment subjected to decline constant (See 5.4 in Section 5.3.2). The conditions of buildings within different districts in the study area are also declining while some are abandoned (See Photograph 5.4). The issues recorded within this category are limited to three individual urban decay features; abandoned buildings, poorly constructed buildings, and old buildings. These issues are illustrated and discussed in Photograph 5.4 with their GPS coordinates for ease of locating in the CBD.

Plate A on Photograph 5.4 shows a row of poorly constructed buildings within Thohoyandou Town CBD. Observation revealed that these buildings do not conform to the South African Building Regulations (SANBS) both in term of construction and safety. Some of the structures within these buildings are constructed with corrugated irons which gives the inside of the built structures a slum like appeal and feel. Plate B and C on Photograph 5.4 is an illustration of two old and dilapidated buildings in Thohoyandou Town CBD. The building in Plate C of Photograph 5.4 has broken windows and grass invading the front part. Outside this building sits a group of men sharing cigarettes that refused to be included in the image. This confirms Akabuilo and Okeke (2018)'s assertion that degenerated urban spaces are socially dangerous and an attractive environment to dodgy and illegal activities.

Plate D on Photograph 5.4 shows an abandon and dilapidated building which is one of the most striking features located on the western part of Thohoyandou Town CBD. The roof paint of the subject building is wearing out, there is grass growing on the roof top, inside furniture visible through the windows.



Photograph 5.4: Urban decay features related to collapsing infrastructure and abandoned projects in Thohoyandou Town CBD
Source: *Fieldwork* (2023)

Operating hours in Plate D on Photograph 5.4 were visible on the aluminium glass door and with what seem to be fencing steel stacked in front of the building. Reading from the operating hours on the door the indication is that a business once operated in this now abandoned building. This is evident that some businesses tend to leave deteriorating parts of urban centres (Acioly, 1999).

5.4. Chapter summary

This chapter has detailed the analysis of spatial data collected in the study area in response to the first research objective together with its subsidiary questions. This chapter provided a visualisation of the Kevin Lynch structuring elements as well as their interconnection throughout the CBD. A general overview of the spatial distribution and spread of urban decay throughout the study area was presented and discussed. This chapter also discussed the integration of the three categories or themes with the five Kevin Lynch structuring elements to study urban decay in the study area. The next chapter discusses the causes of urban decay in the study area from the perspective of Thohoyandou Town CBD users and key informants from the local municipality.

CHAPTER 6: CAUSES OF URBAN DECAY IN THOHoyANDOU TOWN CBD

6.1. Introduction

This chapter responds to the second research objective and its subsidiary questions as outlined in section 1.5 and 1.6.1 of Chapter 1 which seek to investigate the causes of urban decay in Thohoyandou Town CBD. The section after this introduction provides the socio-demographic profile of the study sample. The third segment of this chapter presents the catchment of villages and places serviced by Thohoyandou Town CBD. The factors exposing Thohoyandou Town CBD built environment to decay are presented in the fourth section. Section five of this chapter discusses the overall causes of urban decay in Thohoyandou Town CBD. The final segment provides a chapter summary.

6.2. Socio-Demographic Profiling of the Sample Population

In this study, demographic data such as gender, age, and home language were collected. According to Connelly (2013) cited in Brown (2022) demographic information provides a detailed description of the study participants. Thohoyandou Town CBD attracts people from various ethnic groups, gender and age groups. TshiVenda speaking people dominate Thohoyandou Town CBD followed by XiTsonga, SePedi and other languages including isiZulu, isiSwati and English-speaking people (See Table 6.1). The dominance of the vhaVenda people is attributable to the historical background considering that Thohoyandou Town was the capital of the former Republic of Venda prior to its integration to the Republic of South Africa in 1994 (Statistics South Africa, 2011) (Also See Section 3.3.1 of Chapter 3). Table 6.1 below provides the socio-demographic profile of the study sample.

Table 6.1: Demographic background of respondents

Gender	Female	Male				
	57%	43%				
Home Language	Tshivenda	Xitsonga	Sepedi	Other		
	66%	13%	9%	12%		
Age Group	18 - 24 years	25 - 34 years	35 - 44 years	45 - 54 years	≥ 55 years	
	29%	35%	14%	11%	11%	

n = 202

Source: Author (2023)

The majority of the participants fell within the 18-24 years and 25-34 years age groups (See Table 6.1). These age groups account for approximately 29% and 35% of the total sample population in terms of age groups respectively. This depicts a largely youthful population which is excellent for future growth and development prospects of Thohoyandou Town. The evidently young population is attributed to the presence of the University of Venda within vicinity of Thohoyandou Town CBD. More females (57%) than males (43%) participated in the study this indicate that decaying parts of Thohoyandou Town CBD are mostly used and frequented by females and this negate the realisation SDG 11 of making urban spaces safe especially for woman (United Nations, 2015).

6.3. Thohoyandou Town CBD catchment area

This section presents the place and village serviced by Thohoyandou Town CBD. To better describe the relationship of participants and comprehend the extent of Thohoyandou Town CBD catchment area data such as place of residence, number of years using Thohoyandou Town CBD, and frequency of visiting or using the CBD per week were collected from each participant. Information regarding place of resident collected through online or soft questionnaire from the 202 participants was transferred to ATLAS.ti qualitative data analysis tool and generated a word cloud to reflect Thohoyandou Town CBD catchment area. Figure 6.1 below provides the summary of Thohoyandou Town CBD catchment area.



Figure 6.1: Thohoyandou Town CBD catchment area
Source: Author (2023)

The ATLAS.ti qualitative data analysis tool indicated that Thohoyandou Town CBD services more than 45 villages and places in addition to different section units or suburbia that fall within the Thohoyandou catchment area. This analysis shown that Thohoyandou Town CBD catchment area stretches as far as Elim and Louis Trichardt towns approximately 70 kilometres away from Thohoyandou Town CBD. This shows that Thohoyandou Town services other smaller nodal towns, and peri-urban villages. The analysis found that the CBD is mostly frequented by people residing in section units or suburbia of Thohoyandou Town, University of Venda and other peri-urban villages including Maungani, Sibasa, Makwarela, Manini and small town such as Louis Trichardt, Elim, Makhado, and Sibasa (See Figure 6.1). Thohoyandou Town is the municipal political, administrative and commercial centre of Thulamela Municipality and this act as a major pull factor that sustains and maintains this massive catchment area as well as importance of Thohoyandou Town CBD (Also See section 3.3.1 of Chapter 3). Thohoyandou Town CBD provide access to private and public amenities as well commercial and business facilities servicing people from surrounding villages. To some extent, small towns including Thohoyandou Town CBD provide access to employment opportunities outside the primary sector for their population and surrounding places (COGTA, 2021). Approximately 69 000 people from surrounding villages, places and sections or units utilise Thohoyandou Town CBD to access variety of essential services and functions including the post office, retail, government services, municipal functions. Thohoyandou Town CBD in this case is regarded as a centre for public and private amenities such as police stations, magistrate courts, government offices, post offices, medical practitioners, tax practitioners, legal practitioners, commercial facilities and business offices (Tacoli, 2017).

Table 6.2 below reflects the number of years participants have been using or visiting Thohoyandou Town CBD.

Table 6.2: Number of years study participants have been using or visiting Thohoyandou Town CBD.

Number of years using Thohoyandou Town CBD p/w				
Number of years	1 - 3 years	4 - 6 years	7 - 10 years	> 10 years
Participant percentage	17%	20%	8%	55%

n = 202

Source: Author (2023)

Table 6.2 above show that large proportion (55%) of the study sample participants used Thohoyandou Town CBD for periods exceeding 10 years and an estimated 20% used the CBD

for more than 4 years (See Table 6.2). This show that the study participants are familiar with the CBD, its conditions, development challenges and how it has developed or regressed between year 2011 and 2022 as they have used it for a long period of time as reflected in Table 6.2.

Table 6.3 below provides the number of days the study participants used or visited Thohoyandou Town CBD. This data ascertains the extent to which the study participants are familiar with various parts the study area as participant use or visit the CBD frequently.

Table 6.3: Number of days the study participants use or visit Thohoyandou Town CBD

Frequency using/visiting Thohoyandou Town CBD p/w				
Number of days p/w	Once p/w	2 - 3 times p/w	4 - 6 times p/w	Daily
Participant percentage	32%	38%	8%	22%

n = 202

Source: Author (2023)

Table 6.3 show that at least 38% of the study participants used the CBD 2 - 3 times per week and 22% used the CBD daily between year 2011 and 2022. The statistics provided in Table 6.2 and 6.3 confirm that significantly large proportion of the study sample population is well versed and very much familiar with the status quo, past and present developments, and transformation (positive and negative) of Thohoyandou Town CBD between year 2011 and 2022. This show that the data provided by participants is credible enough to enables the researcher to learn about and derive the perspectives, meanings, and gain in depth understanding of people lived experiences in Thohoyandou town CBD (Lapan et al., 2012).

6.4. Factors exposing Thohoyandou Town CBD built environment to decay

This section discusses factors that led to decay of the different components of the built environment focusing on the structuring elements in Thohoyandou Town CBD. These structuring elements are nodes, districts, landmarks, edges and paths (Lynch, 1960).

6.4.1. Building structures in the form of landmarks within or around districts and nodes

A building structure in poor conditions and subjected to physical decay is identifiable by several observable attributes these include but not limited to the state or conditions of walls, doors, windows, roofs, and floors (Ndlebe, 2017). There were several factors behind the consistent dilapidation of these components of building structures within districts in Thohoyandou Town CBD as quoted by respondents these include factors such as poor

construction, use of inferior construction material, and vandalism. Table 6.4 shows the different factors that led to poor conditions of some building structures making up the various districts of Thohoyandou Town CBD. Table 6.4 also indicates the extent to which each of the factors contributed to deteriorating conditions of some building structures in the CBD as perceived by study participants. The percentage of respondents considering each factor as the cause is calculated by adding the percentages in column 5 – 7 these consist of respondents that are positive that the factors that were identified contributed to poor conditions of building structures in the study area.

Table 6.4: Factors contributing to poor conditions of some building structures in various districts of Thohoyandou Town CBD

Factors contributing to poor condition of building structures		1	2	3	4	5	6	7	TOTAL	Percentage of respondents considering each factor as the cause
		Extremely unlikely	Unlikely	More or less unlikely	Neutral	More or less likely	Likely	Extremely likely		
1	Lack of maintenance	5%	1%	3%	3%	13%	25%	50%	100%	88%
2	Poor construction	4%	3%	3%	4%	16%	32%	37%	100%	86%
3	Use of inferior construction material	2%	3%	3%	9%	17%	31%	34%	100%	82%
4	Natural disasters	16%	12%	12%	24%	27%	5%	3%	100%	35%
5	Vandalism	3%	6%	8%	13%	32%	25%	13%	100%	71%

Source: Author (2023)

Lack of maintenance (88%) was identified as the highest factor followed by poor construction (86%), use of inferior construction material (82%) and vandalism (81%) to have contributed to declining conditions of building structures in the study area. The least contributing factor to deteriorating conditions of building was natural disasters (35%) (See Table 6.4). For the purpose of this research, the factors perceived to have contributed to urban decay were those that at least 51% of respondents viewed to contribute a significant negative impact on the conditions of Thohoyandou Town CBD built environment. The natural disasters could have contributed the least because these are seasonal or rather occur occasionally in Thohoyandou Town but not always (Chikoore et al., 2021). For example major rainfalls that resulted in flooding in the area were recorded in year 2017 and 2019 (Chikoore et al., 2021).

The lack of building maintenance was identified as the root cause of poor building structures conditions in the CBD as reflected in Table 6.4. Approximately 88% of the respondents asserted that the main driver behind the constant decay of building structures in the CBD was

the lack of building maintenance with only 3% opposing this view (See Table 6.4). Photograph 6.1 displays a poorly maintained building in the CBD and its GPS coordinates for ease of reference and location.



Photograph 6.1: Poorly maintained building and undesignated dumping of waste in Thohoyandou Town CBD
Source: Author (2023)

The poorly maintained building in Photograph 6.1 has grass growing over the paving adjacent to it, the roof paint is wearing out and construction waste accumulation and glasses disposed in the building frontage. These features are indicative of lack of maintenance, neglect with no regular maintenance and upkeep undertaken. Lack of maintenance and improper management of immovable property as seen in Photograph 6.1 leaves building structures vulnerable to decay (Ndlebe, 2017). Key informants from the local municipality attributed poor condition of buildings to lack of regulatory policy regulating property maintenance and upkeep in Thohoyandou Town CBD.

More than three quarters of respondents 86% and 82% pointed out that poor construction and the use of inferior construction material were possible causes of unfavourable building conditions in the CBD (See Table 6.4). Photograph 6.2 show the front end of a cluster of poorly constructed buildings in the CBD. The internal walls of this building cluster were mainly constructed and divided by roof sheets or corrugated irons. The external walls were constructed of the normal bricks and mortar. The integrity of this building cluster was questionable, and it raised concerns in terms of compliance to building regulations including the South African

National Buildings Standards (SANBS). Based on personal observations, this building cluster is not fit for use as it presented a great health risk or hazard to the small businesses operating within this cluster. Key informants from the local municipality indicated that some of the buildings in Thohoyandou Town CBD were constructed without municipal approval which compromised the standard and quality of buildings. According to (Alade and Ongukan, 2021) non-compliance to building regulations may subject urban users to health and disaster risks which may result in injuries and fatalities.



Photograph 6.2: Cluster of poorly constructed buildings in Thohoyandou Town CBD
Source: Author (2023)

Vandalism of building structures in the CBD is identified amongst the contributing factors with approximately 71% of respondents' attaching poor building conditions to it. According to the data collected a small proportion (35%) linked bad building conditions to the prevalence or occurrence of natural disasters over the past eleven years. According to Thulamela officials, the underlying factor to the lack of property maintenance (building structures) is the lack of regulatory policy and legislative framework regulating property maintenance in the CBD. The lack of such regulatory policy and framework has led to a negative trend of little or no investment into property maintenance and upkeep which has led to poor conditions of some building structures evident throughout Thohoyandou Town CBD. The lack of regulatory policy and legislative frameworks especially policies regulating buildings maintenance in the CBD limited Thulamela Local Municipality to enforce regular building maintenance. Key informants from the local municipality highlighted that due to lack policies regulating buildings

maintenance Thulamela Local Municipality was unable to take appropriate actions against property owners. “The challenge is exacerbated by land and property ownership patterns. The majority of properties in Thohoyandou Town CBD are privately owned and without legal regulatory policy or legislative framework it becomes a daunting task to ensure that privately owned buildings are maintained regularly and in accordance with standards set by the local authority” said one of the key informants from the local municipality.

6.4.2. Factors contributing to poor conditions of public amenities within districts

This section looks at the factors that have led to poor conditions of public facilities in the CBD. According to Enoma and Idehen (2018) urban decay manifests physically in the built environment through poor conditions of amenities. Therefore, it is critical that the conditions of public amenities and facilities in Thohoyandou Town CBD are considered in this investigation of urban decay.

Table 6.5 below displays factors viewed to have contributed to deteriorating conditions of public facilities and amenities. The percentage of respondents considering each factor as the cause is calculated by adding the percentages in column 5 – 7 these consist of respondents that are positive that the factors that were identified contributed to deteriorating conditions of public facilities and amenities in the study area.

Table 6.5: Factors contributing to poor conditions of public facilities in various districts of Thohoyandou Town CBD

Factors contributing to poor condition of public facilities and amenities (taxi ranks, bus ranks, and ablution facilities)		1	2	3	4	5	6	7	TOTAL	Percentage of respondents considering each factor as the cause
		Extremely unlikely	Unlikely	More or less unlikely	Neutral	More or less likely	Likely	Extremely likely		
1	Lack of maintenance	4%	5%	1%	1%	8%	35%	46%	100%	89%
2	Poor construction	2%	6%	3%	5%	13%	36%	35%	100%	85%
3	Use of inferior construction material	3%	4%	2%	7%	13%	35%	35%	100%	83%
4	Natural disasters	15%	17%	8%	30%	19%	6%	4%	100%	30%
5	Poor/inadequate stormwater systems	4%	5%	3%	14%	38%	22%	13%	100%	73%
6	Vandalism	3%	9%	3%	11%	33%	25%	15%	100%	73%
6	Littering	2%	2%	3%	4%	20%	29%	38%	100%	88%

Source: Author (2023)

Within the cities competitive theory urban amenities contribute significantly to the urban area's competitive edge (Kresl, 2013). Public facilities and amenities in this case refer to taxi ranks, bus ranks and ablution blocks found within Thohoyandou Town CBD. The respondents were asked to what extent each factor contributed to poor conditions of public facilities in the CBD. The most contributing factor is lack of maintenance (89%), followed by littering (88%), poor construction (85%), the use of inferior construction material (83%), poor and inadequate stormwater systems (73%) and vandalism (73%) (See Table 6.5 above). Lack of maintenance and littering were major challenges in Thohoyandou Town CBD that extend beyond just public facilities.

Photograph 6.3 shows litter and waste accumulation behind the newly constructed and abandoned taxi rank facility in the CBD.



Photograph 6.3: Litter and solid waste accumulation adjacent to taxi rank facility
Source: Author (2023)

The litter and solid waste accumulation in Photograph 6.3 has damaged the adjacent fence and caused rust on the fence foundation. The space is not appealing aesthetically due to littering. Photograph 6.3 also reflect issues related to lack of maintenance as the uncut grass grew onto the fence of the taxi rank facility and clogged the fencing on the nearby property. The state of other public facilities and amenities such as taxi ranks, bus ranks and ablution blocks in Thohoyandou Town CBD are depreciating significantly.

Above 80% of respondents categorically attributed poor conditions of public facilities in the CBD to poor construction and use of inferior construction materials. According to COGTA (2021) failed and poorly constructed infrastructure projects contributes massively to decay in small towns. Similar to most small towns across the Republic poorly constructed infrastructure projects exposed Thohoyandou Town CBD to urban decay. Photograph 6.4 is multi-million-rand taxi rank facility in Thohoyandou Town CBD completed in 2013 (Chiguvare, 2022). The taxi rank facility has remains not operational 8 years later since its completion in year 2013. The taxi rank facility has structural defects rendering it not fit for use (Chiguvare, 2022). This is indicative of poor construction and use of inferior construction materials which in turn compromised the integrity of the taxi rank facility.



Photograph 6.4: Poorly constructed Taxi Rank Facility in Thohoyandou Town CBD

Source: Author (2023)

Approximately 73% of respondents linked poor conditions of public facilities to poor or inadequate stormwater systems and vandalism. In Photograph 6.5 is a partially vandalised public ablution block with broken windows and doors. The internal infrastructure of this public facility is vandalised to the extent that some of the bathrooms are unusable, and some are without doors. The majority of the CBD users no longer utilised this facility for its primary function.



Photograph 6.5: Partially vandalised public ablution block in Thohoyandou Town CBD
Source: Author (2023)

6.4.3. Paths and edges within and around nodes districts in Thohoyandou CBD

Section 5.2.2 and 5.2.4 in Chapter 5 mapped the spatial distribution and coverage of features associated with urban decay throughout Thohoyandou Town CBD. These sections displayed that paths and edges in the study area are in poor conditions. This section discusses the cause and factors that led to declining conditions of paths and edges based on the perceptions of respondents. Paths in this section encompasses roads, streets, pedestrian sidewalks, walkways and passages found in the CBD.

Poor conditions of roads and streets in Thohoyandou Town CBD are strongly associated with poor construction (85%), the use of inferior construction materials (85%), lack of maintenance (84%) and poor and inadequate stormwater systems (81%) as reflected in Table 6.6 below. The least contributing factors were poor and inadequate sewer systems (58%) and natural disasters (47%). This shows that natural disasters do not contribute much to urban decay in Thohoyandou Town because these are uncommon. The percentage of respondents considering each factor as the cause is calculated by adding the percentages in column 5 – 7 these consist of respondents that are positive that the factors that were identified led to poor conditions of some roads and street in the study area.

Table 6.6 show that a combination of four factors contributed immensely to the deteriorating conditions of roads in the Thohoyandou Town CBD. These include lack of roads and streets

maintenance, poor construction, the use of poor construction materials and poor and inadequate stormwater systems. Over 80% of respondents concurred that each of these individual factors led to unfavourable conditions of roads and streets in the CBD (See Table 6.6). Photograph 6.6 reflects the generally poor conditions of the majority of roads and streets throughout the study area.

Table 6.6: Factors contributing to poor conditions of some roads and streets in parts of Thohoyandou Town CBD

Factors contributing to poor condition of roads and streets		1	2	3	4	5	6	7	TOTAL	Percentage of respondent considering each factor as the cause
		Extremely unlikely	Unlikely	More or less unlikely	Neutral	More or less likely	Likely	Extremely likely		
1	Lack of maintenance	3%	5%	3%	5%	8%	23%	52%	100%	84%
2	Poor construction	3%	5%	1%	6%	12%	32%	40%	100%	85%
3	Use of inferior construction material	4%	3%	3%	5%	15%	34%	36%	100%	85%
4	Natural disasters	12%	14%	8%	20%	30%	9%	7%	100%	47%
5	Poor/inadequate stormwater systems	3%	4%	4%	8%	35%	32%	13%	100%	81%
6	Poor/inadequate sewer systems	8%	4%	8%	21%	19%	23%	16%	100%	58%

Source: Author (2023)

Photograph 6.6 is a typical example depicting the state of roads and streets in the study area which is generally poor and underwhelming. In Photograph 6.6 below is a patched road or street during a rainy day. This road had several potholes filled by with surface run-off because of the rain. It can be seen on Photograph 6.6 that the bitumen or the top layer of the road is coming out as a result of water. The prevalence of multiple patches indicate that the road has been subjected to several repairs however due to poor construction using inferior construction material the road continues to deteriorate. The road in Photograph 6.6 was previously patched on several times and this is indicative of a low-quality road or street. The encroaching grass on the edges of the road reveal lack of regular grass cutting as part of maintenance.



Photograph 6.6: Road/street in poor condition in Thohoyandou Town CBD
Source: Author (2023)

The prevalence and occurrence of natural disasters have had minimal negative impact on the conditions of roads or streets in Thohoyandou. Approximately 47% of respondents considered natural disasters to have caused poor roads or streets conditions (See Table 5.5). This suggested that the deteriorating conditions of buildings and roads or streets had very little to do with natural disasters because heavy rains rarely occur in Thohoyandou Town (Chikoore et al., 2021).

There is significantly high presence of heavy vehicles in some parts of Thohoyandou Town CBD. High traffic volumes on poorly constructed roads and streets using inferior construction material where little or no investment in roads and streets maintenance is done engender potholes and invisible road markings. Poor roads and streets dominated by the prevalence of potholes and invisible markings bear negative ramifications for both pedestrians and vehicles. The worst-case scenario is pedestrian fatality or damage to private property (Naveen et al., 2018). Adding to poor roads and streets conditions is the poorly defined road hierarchy in the CBD which consistently fails to restrict the movement of heavy vehicles in some parts of the study area. This failure subjected internal roads and streets not constructed or suited to facilitate heavy vehicle movement to serious damages.

Table 6.7 presents findings from data collected through questionnaires regarding factors contributing to poor conditions of some of the pedestrian sidewalks, walkways, and passages in the study area. The findings in Table 6.7 show that some of the pedestrian sidewalks, walkways and passages were poorly constructed using inferior construction material which in turn compromised their structural integrity and quality. According to the study participants the use of inferior construction materials (83%) and poor construction (83%) contributed the most to poor conditions of some pedestrian sidewalks, walkways, and passages in Thohoyandou Town CBD. The second most contributing factor is lack of maintenance (80%) followed by poor/inadequate stormwater systems (74%), and vandalism (69%).

Table 6.7: Factors contributing to poor conditions of some pedestrian sidewalks, walkways, and passages in parts of Thohoyandou Town CBD

Factors contributing to poor condition of pedestrian sidewalks, walkways, and passages		1	2	3	4	5	6	7	TOTAL	Percentage of respondents considering each factor as the cause
		Extremely unlikely	Unlikely	More or less unlikely	Neutral	More or less likely	Likely	Extremely likely		
1	Lack of maintenance	3%	6%	4%	6%	10%	29%	41%	100%	80%
2	Poor construction	3%	6%	4%	3%	9%	28%	46%	100%	83%
3	Use of inferior construction material	2%	8%	1%	6%	13%	34%	36%	100%	83%
4	Natural disasters	11%	16%	9%	22%	25%	12%	6%	100%	43%
5	Poor/inadequate stormwater systems	4%	6%	4%	11%	36%	28%	10%	100%	74%
6	Vandalism	4%	9%	5%	11%	30%	25%	14%	100%	69%

Source: Author (2023)

Overwhelmingly high percentage 83% of sample population expressed that poor construction and the use of inferior construction materials headlined the poor conditions of pedestrian sidewalks, walkways, and passages seen throughout Thohoyandou Town CBD. This confirm that majority of pedestrian sidewalks, walkways, and passages in the small rural town CBD are in dire conditions. Photograph 6.7 show the poor conditions of some pedestrian sidewalks, walkways and passages throughout the CBD. The poor conditions in Photograph 6.7 reflected most pedestrian sidewalks, walkways, and passages in Thohoyandou Town CBD. In Photograph 6.7 is a damaged passage in the CBD with torn paving and potholes. The prevalence several other pedestrian sidewalks, walkways, and passages similar to the one depicted in Photograph 6.7 reflected poor construction and poor maintenance and to some extent vandalism. Key informants from the local municipality revealed that amongst the silent

factors attributed to the use of inferior construction materials and poor-quality pedestrian sidewalks, walkways and passages or paths in general included nepotism and corruption. One of the key informants from the local municipality highlighted that “the tendering system in the local municipality is infiltrated by nepotism and corruption which led to awarding infrastructure and development projects to inexperienced unqualified construction and development firms”. This has had negative ramifications on the quality and integrity of the end product as well as the overall development of Thohoyandou Town CBD.



Photograph 6.7: Passage in poor conditions in Thohoyandou Town CBD
Source: Author (2023)

Approximately 80% of the respondents stated that lack of maintenance exposed pedestrian sidewalks, walkways, and passages to damages. Key informant from the local municipality indicated that over the past years minimal effort was channelled towards regular maintenance and upkeep of pedestrian sidewalks, walkways, and passages. Respondents expressed that some of the pedestrian sidewalks, walkways, and passages were exposed to damages due to poor and inadequate stormwater systems and to some extent vandalism. Approximately 74% and 68% of the respondents pointed out that poor and inadequate stormwater systems and vandalism sits fourth and fifth amongst the factors identified as responsible for poor conditions of some pedestrian sidewalks, walkways, and passages.

Thohoyandou Town is the municipal political, administrative and commercial centre of Vhembe District Municipality (also See Section 3.3.1 Chapter 3). Therefore, attract large number of people which is a good condition for small businesses including informal trading. Competition for trading lots and spaces tightens as small businesses and informal traders Seek to occupy strategic areas with good location as well as access to potential market. Key informants from the local municipality indicated that trading spaces and lots allocation is the responsibility of Thulamela Local Municipality and sits with the Traffic Department within the municipality. Other departments within the municipality for example the Planning and Development Department is of the view that trading spaces and lots allocation falls under their responsibilities as the office concerned with planning and development in the municipality. Key informants from the local municipality also posited that the poor allocation of tasks within the municipality saw traders allocated spaces and lots on pedestrian sidewalks, walkways pavements, and loading bays. This compromised efficiency, limiting pedestrian movement, and blocking heavy vehicle delivery points. The constant presence of traders on pedestrian sidewalks and walkways has negative implications on the aesthetic of the CBD. The erection of trading tents supporting poles into the ground also causes significant damages to pedestrian sidewalks, walkways and passages.

6.5. Overall causes of urban decay in Thohoyandou Town CBD

The focus of the preceding section was mainly on each individual element of the built environment. This section looked at the overall factors that have exposed the entire CBD built environment to decay. As shown in the literature urban decay emanate from a combination of urban maladies (Ndlebe, 2017).

Figure 6.2 presents factors perceived to have underlined the poor conditions of the built environment in some parts of the CBD. The overall poor conditions of the built environment synonymous with urban decay in Thohoyandou Town CBD may well be attributed to poor planning, poor service delivery, lack of maintenance, poor construction, use of inferior construction material, poor governance, Covid-19 pandemic, and abandoned buildings. The most contributing factor to Thohoyandou Town CBD decay was lack of maintenance (90%) followed by poor governance (89%), poor service delivery (88%), poor construction and use of inferior construction material (86%), poor planning (86%), Covid-19 pandemic (75%) and abandoned buildings (65%) (See Figure 6.2). The two least contributing factors were natural disasters and unoccupied buildings at 38% and 47% respectively. For the purposes of this

research, these two least contributing factors had little impact on the conditions of the built environment regarded as insignificant and minimal. Figure 6.2 show factors understood to have caused the poor conditions of the built environment in some parts of the CBD.

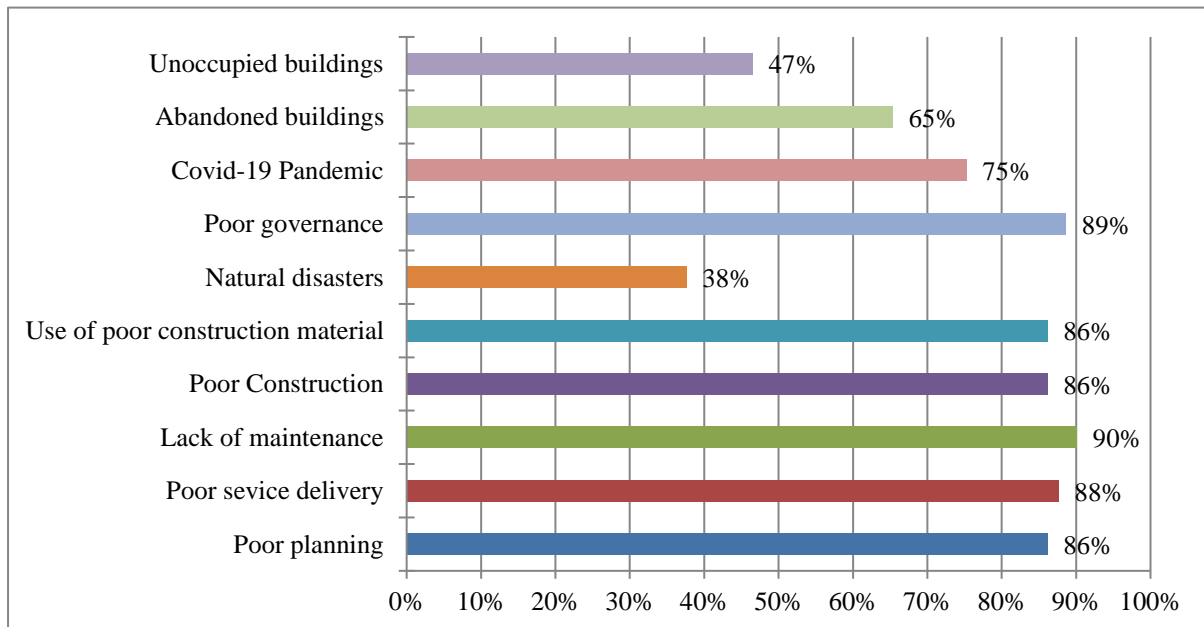


Figure 6.2: Overall causes of urban decay in Thohoyandou Town CBD
Source: Author (2023)

6.5.1. Lack of maintenance

Overall, approximately 90% of the respondents attached poor condition of the built environment in Thohoyandou Town CBD to the lack of maintenance (See Figure 6.2). Poor conditions of structuring elements making up the CBD's built environment were mostly attributed to the lack of maintenance. Above 80% of respondents across all five structuring elements maintained that the predominantly poor conditions of building structures, roads and streets, pedestrian sidewalks, walkways, passages and public facilities were due to lack of maintenance. Key informants from the local municipality expressed that Thulamela Local Municipality had insufficient resources and capacity to conduct regular infrastructure maintenance and efficiently respond to breakdowns. Key informants from the local municipality also pointed out that infrastructure maintenance declined as a result of resources reallocation during the Covid-19 pandemic with approximately 75% of participants suggesting that the pandemic exposed the CBD to decay. Infrastructure maintenance remains a major challenge in developing countries because infrastructure such as buildings and roads are exposed to decay due to lack of maintenance strategy (Oyedele, 2015).

6.5.2. Poor governance

Poor governance continues to expose urban areas to urban decay (Conradie, 2020). Thohoyandou Town CBD is no exception, approximately 89% of respondents held the view that poor governance led to poor conditions in some parts of the CBD (See Figure 6.2). Small towns across the Republic continue to suffer from urban decay due to inefficiencies in local governance which is seen through failure of local authorities to maintain, manage, service existing infrastructure, and provide services (COGTA, 2021; Acioly, 1999). The Department of Cooperative Governance and Traditional Affairs (COGTA) (2021) posited that small towns are characterised by weak and poor governance in South Africa.

6.5.3. Poor urban planning approaches

Akabuilo and Okeke (2018) attributed urban decay to issues related to poor urban planning. Approximately 86% concurred that poor urban planning led to poor conditions in some parts of the CBD. Key informants from the municipality indicated that to some extent urban decay in Thohoyandou Town CBD emanated from poor urban planning. These key informants added that Thulamela Local Municipality's failure to act swiftly on land use contraventions led to lack of compliance to Thulamela LUMS provisions. "Thohoyandou Town CBD was established ages ago with little or no planning, no proper layout, no provision for informal traders, irregular road and street configuration and no east – west link", said one of the key informants from the local municipality.

Withstanding general lack of planning at inception it is no coincident that Thohoyandou Town CBD built environment is succumbing to decay due to past planning flaws. Key informants from the local municipality revealed that Thohoyandou Town CBD was not designed to accommodate a population as large as the current population estimated over 64 000 people. Therefore, excessive population also added significant strain on the CBD's built environment. Key informants from the local municipality also revealed that the current planning approaches were more reactive than proactive. The current planning approaches were seen to react to the challenges emerging as a result of past poor planning. Urban planning challenges were also exacerbated by the small extent of the CBD. Thohoyandou Town CBD is generally small in extent and there is no land available for future expansion in such a manner that new greenfield developments occur outside the CBD (Anyumba, 2019). Key informants from the local municipality also highlighted that urban planning challenges were exacerbated by the emergence of Covid-19 pandemic.

6.5.4. Poor service delivery

Poor conditions in some parts of the Thohoyandou Town CBD were attributed to poor service by approximately 88% of respondents (See Figure 6.2). The radar chart in Figure 6.3 reflects on Thulamela Local Municipality service delivery standards and performance across six key areas. These key areas include services such as waste collection, pothole repair, waste collection, walkways and pavements repair and maintenance, roads and streets signage, marking repair and maintenance, sewer infrastructure repair and maintenance and stormwater drainage infrastructure repair and maintenance in the CBD.

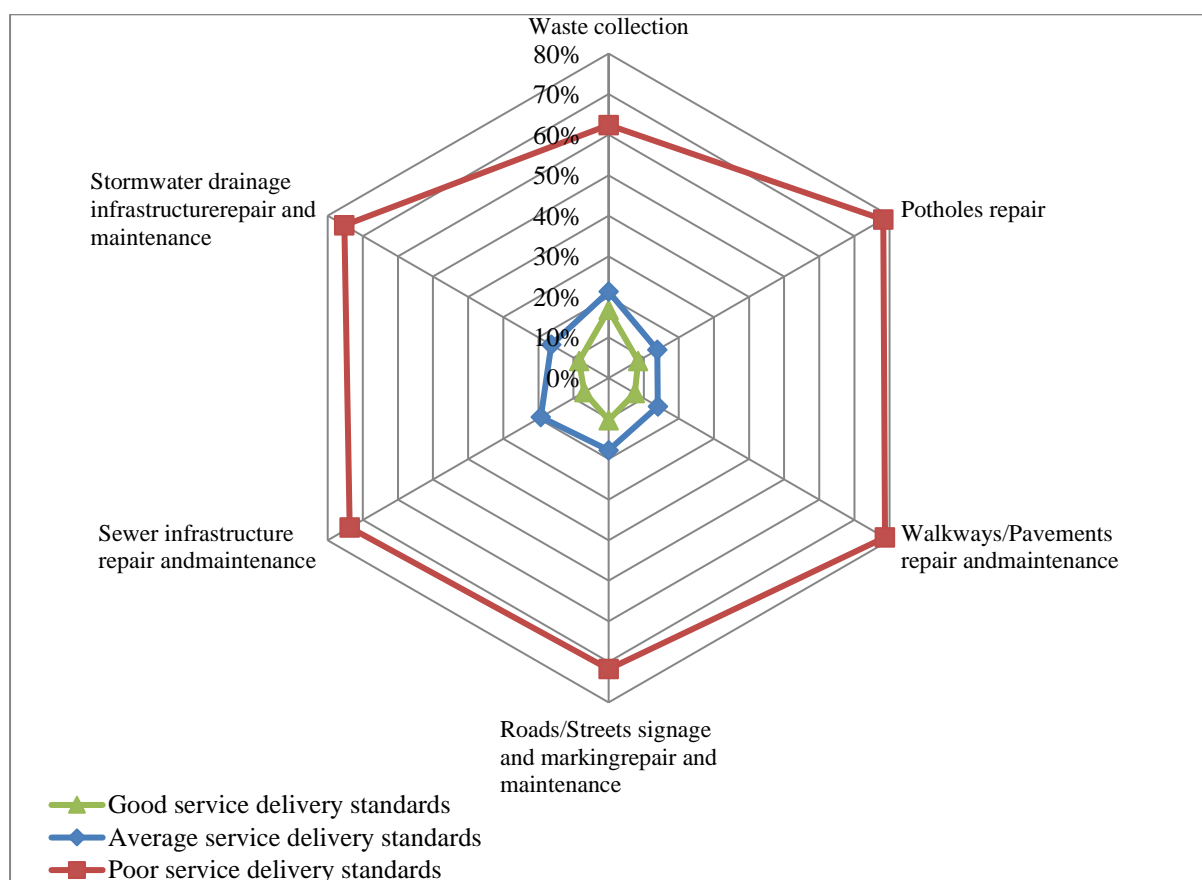


Figure 6.3: Thulamela Local Municipality in Thohoyandou CBD service delivery standards across six key areas
Source: Author (2023)

Key informants from the local municipality attributed poor service delivery to limited resources and capacity. In addition, key informants from the local municipality indicated that resource and capacity issues worsened during and post Covid-19 pandemic. According to key informants from the local municipality poor service delivery also linked to planning and governance. Issues of corruption and political interference were quoted by key informants from the local municipality as major impediments that challenged efficient service delivery in Thulamela. Figure 6.3 show that majority of respondents; between 60% – 80% expressed that

Thulamela Local Municipality performed poor across the six key service delivery areas. On the other hand, less than 20% of respondents regarded Thulamela Local Municipality service delivery and performance standards in Thohoyandou across the six key service delivery areas to be good. Less than 21% of the participants indicated that Thulamela Local Municipality service delivery and performance standards were average across all the six key service delivery areas (See Figure 6.3). These statistics suggested poor performance by the local authority in terms of service delivery and provision across all the six key service delivery areas in Thohoyandou Town CBD. Poor service delivery is the outcome of several factors including inter alia corruption, lack of accountability, poor planning, political interference, poor public participation, and staff shortages (Makanyeza et al. 2013; Kalonda and Govender, 2021). Poor service delivery compromises the quality of citizen's lives, constrict economic development, and deters the municipal relationship with its citizens (Kalonda and Govender, 2021).

The perceived poor service delivery standards and performance displayed in Figure 6.3 across the six key service delivery areas partially explained the poor conditions of the built environment in some parts of Thohoyandou Town CBD. Key informants from the local municipality attributed poor service delivery to Covid-19 pandemic acknowledging that the pandemic shifted the municipal focus toward health-related issues. In general, Thulamela Local Municipality poor service delivery standards explained the prevalence of potholes, damaged walkways and pavements, damaged manholes, damaged rainwater inlets, damage drainage catch basins, and scores of uncollected waste in the CBD. More importantly, the generally poor service delivery standards and performance trend partially explained the predominantly poor conditions of the built environment associated with urban decay in some part of the CBD.

6.5.5. Poor construction and the use of inferior construction material

Urban decay emanate as the a result of several urban maladies leading to consistent deterioration of the built environment including collapsing infrastructure, poor construction material and derelict buildings (Mutisya, 2016; Ndlebe, 2017; Conradie, 2020; COGTA, 2021). In Thohoyandou Town CBD poor construction and the use of inferior construction material has contributed heavily to the poor conditions of the built environment (See Figure 6.2 in Section 6.5.4). Key informants from the local municipality claimed that the persistence of potholes despite consistence of road repairs was indicative of the use of inferior construction material. Therefore, the use of poor construction material exposed majority of paths, districts and landmarks in the CBD to decay.

Photograph 6.8 depicts a typical example of poor construction and use of inferior construction material in Thohoyandou CBD. Photograph 6.8 show an abandoned multi-million rands public infrastructure project due to structural deficiencies according to Chiguvare (2022). This project commenced in year 2011 and reached practical completion in year 2013 but has never been occupied or handed over (Chiguvare, 2022).



Photograph 6.8: Abandoned public infrastructure project
Source: Author (2023)

Key informants from the local municipality provided that weaknesses within the Thulamela Local Municipality supply chain and management opened loopholes for nepotism and corruption. In some instances, service providers were not appointed on merits and track record which compromised the quality of the end product. Lack of thorough monitoring and quality assurance measures in public infrastructure projects was cited amongst the causes of substandard construction and use of inferior construction material. Key informants from the local municipality added that non-compliance to South African National Building Standards (SANBS) resulted in prevalence of poorly constructed buildings in the CBD. Key informants from the municipality also revealed that some of the buildings in the CBD are constructed without relevant municipal approval. Therefore, some of the buildings are substandard, of poor quality and structural integrity.

6.6. Chapter summary

This chapter discussed the courses of urban decay in the study area from the perspective of Thohoyandou Town CBD users, and key informants from the local municipality. These factors include poor service delivery, lack of maintenance, poor construction, use of inferior

construction material, poor governance, Covid-19 pandemic, and abandoned buildings. The next chapter focuses on urban regeneration efforts and strategies deployed to address urban decay in Thohoyandou Town CBD.

CHAPTER 7: URBAN REGENERATION STRATEGIES TOWARDS ADDRESSING PHYSICAL URBAN DECAY IN THOHOYANDOU CBD

7.1. Introduction

This chapter provides the analysis of data collected through interviews held with key informants from the local municipality with 3 – 10 years of working experience at Thulamela Local Municipality. This chapter responds to the third objective of this study together with its sub-questions outlined in section 1.5 and 1.6.1 Chapter 1. The third objective recommends a framework for sustainable implementation of urban regeneration strategies for Thulamela Local Municipality and other small towns across South Africa to deal with urban decay. This chapter explores past and present policy interventions that Thulamela Local Municipality utilised to halt decay, revive and regenerate Thohoyandou Town CBD between year 2011 and 2022. Emphasis is also placed towards understanding numerous factors that have impeded the implementation of Thulamela Development and Revitalisation Strategy together with its supporting policy interventions.

After this introduction the second section focuses on the existing urban regeneration strategy and supporting policies currently put in place by Thulamela Local Municipality to halt urban decay. The third segment explores obstacles that have impeded successful implementation of Thulamela Urban Development and Revitalisation Strategy. The fourth section put forward the proposed framework for sustainable implementation of urban regeneration strategies in small towns intended to strengthen the implementation of urban regeneration in Thohoyandou Town CBD. The final section provides the chapter summary.

7.2. The existing urban regeneration strategy and supporting policies at Thulamela Local Municipality

This segment discusses Thulamela Urban Development and Revitalisation Strategy as an urban regeneration intervention and its supporting policies adopted to salvage Thohoyandou Town CBD from decay between year 2011 and 2022. This section is intended to demonstrate the status quo in terms of municipal effort to curb urban decay in the small rural town CBD.

7.2.1. Thulamela Local Municipality Urban Development and Revitalisation Strategy

According to key informants from the local municipality “the initial policy adopted to address urban decay by Thulamela Local Municipality is the Thulamela Urban Development and Revitalisation Strategy. Thulamela Local Municipality Council adopted Thulamela Urban Development and Revitalisation Strategy on 11th July 2011. The strategy was primarily

intended to kick start the redevelopment and regeneration of four major nodes within the municipal area including Thohoyandou Town CBD”.

The main objective of the strategy was to improve the living condition of Thulamela Local Municipality residents, promote integrated and functional human settlements and regenerate the dysfunctional urban areas with economic development (Thulamela, 2011). To some extent, the strategy embraced some core aspects of the competitive cities’ theory and regeneration concepts such as the creation of good living environment, reviving degenerated urban areas and integrated and functional urban human settlements (Roberts, 2000; Mnikathi, 2016; Yiannakou, 2020). Within the Kevin Lynch perspective the strategy centred Thohoyandou Town CBD regeneration on improving and upgrading structuring elements to revive the entire built environment. This shows the local municipality’s commitment to addressing urban decay concerns and the acknowledgement of the presence of urban decay in the small rural town.

7.2.1.1. Urban Development and Revitalisation Framework – Diagnosis in year 2011

In relation to Thohoyandou Town CBD the then status quo analysis conducted in the Urban Development and Revitalisation Strategy confirmed that some pockets of the CBD were subjected to decay. Table 7.1 presents decay issues in diagnosed in year 2011 affecting the CBD in 2022.

Table 7.1: Urban Development and Revitalisation Framework decay issues in 2011 affecting the CBD in 2022

No.	Framework Findings/Issues in year 2011	Interpretation
1.	Undefined road hierarchy	Insufficient higher order roads to facilitate heavy vehicular movement in the CBD. Some of the roads were in bad shape due movement of heavy vehicles on secondary road network, displayed signs of poor maintenance.
2.	Neglected pedestrian movement network	Majority of walkways and pedestrian sidewalks were in dire conditions and neglected in the CBD. Majority of the walkways and pedestrian sidewalks showed signs of being poorly maintained.
3.	Buildings in dire condition	Majority of the privately and government owned buildings were in poor conditions, neglected, and badly managed in the CBD.
4.	Illegal land uses	Illegal land uses were prominent, and businesses such illegal motor repairs and hardware stores were mostly operated in parking lots in the CBD. Some of the buildings were constructed on road reserves.
5.	Poor waste management and collection	Poorly disposed waste resulted in waste being burnt on the spot which to some extent resulted in significant damages to the built environment.

Source: Adopted from Thulamela Urban Development and Revitalisation Framework (2011)

According to key informants from the local municipality some of the findings and issues diagnosed in year 2011 continued to affect the CBD in year 2022. For example, issues such as

poor road conditions, neglected government and private buildings and illegal land uses continue to plague the CBD. This show that key informants from the local municipality concede that the local municipality has not recorded significant progress towards addressing the urban decay issues diagnosed in year 2011 as reflected in Table 7.1. Urban decay issues raised in Table 7.1 are linked mostly to the built infrastructure which is a key determinant of competitiveness within Porter (1990) competitive cities theory.

In response to the issues diagnosed in Table 7.1 the Thulamela Urban Development and Revitalisation Strategy devised ten development priorities to address urban decay related issues in the CBD. Figure 7.1 below summarised the seven out of the ten proposed development priorities that are relevant to this study. The ten priorities are numbered according to their ranking in the Thulamela Urban Development and Revitalisation Strategy.

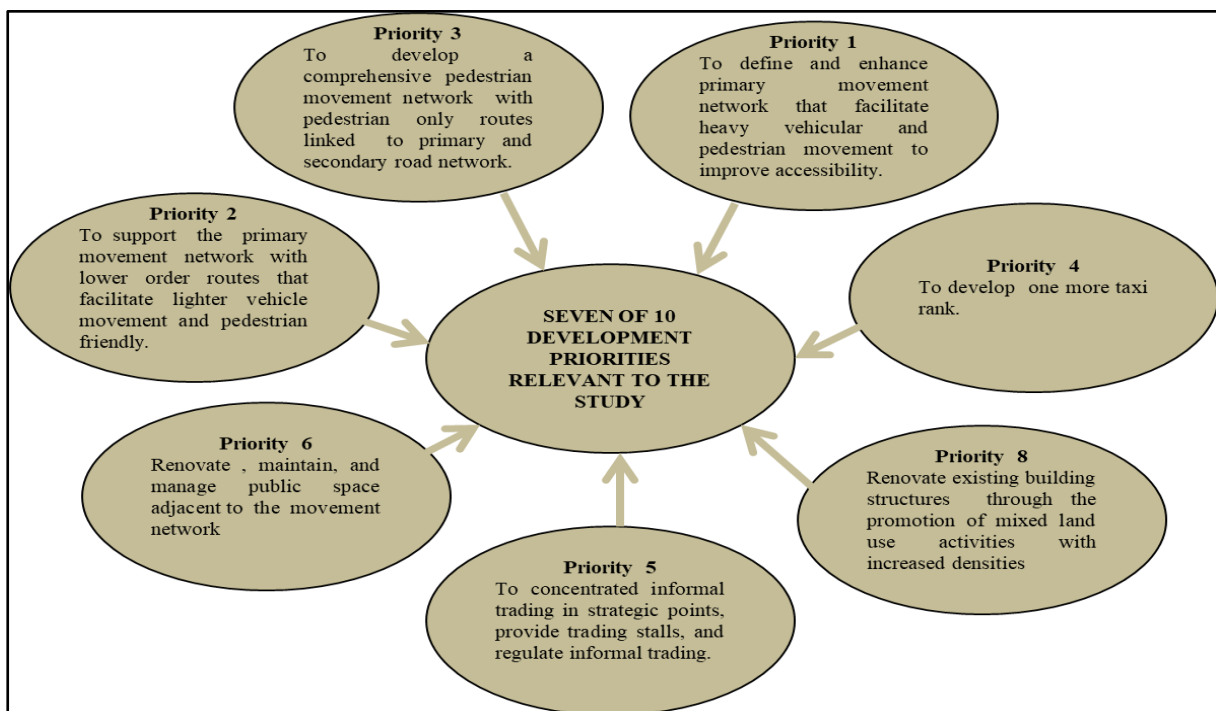


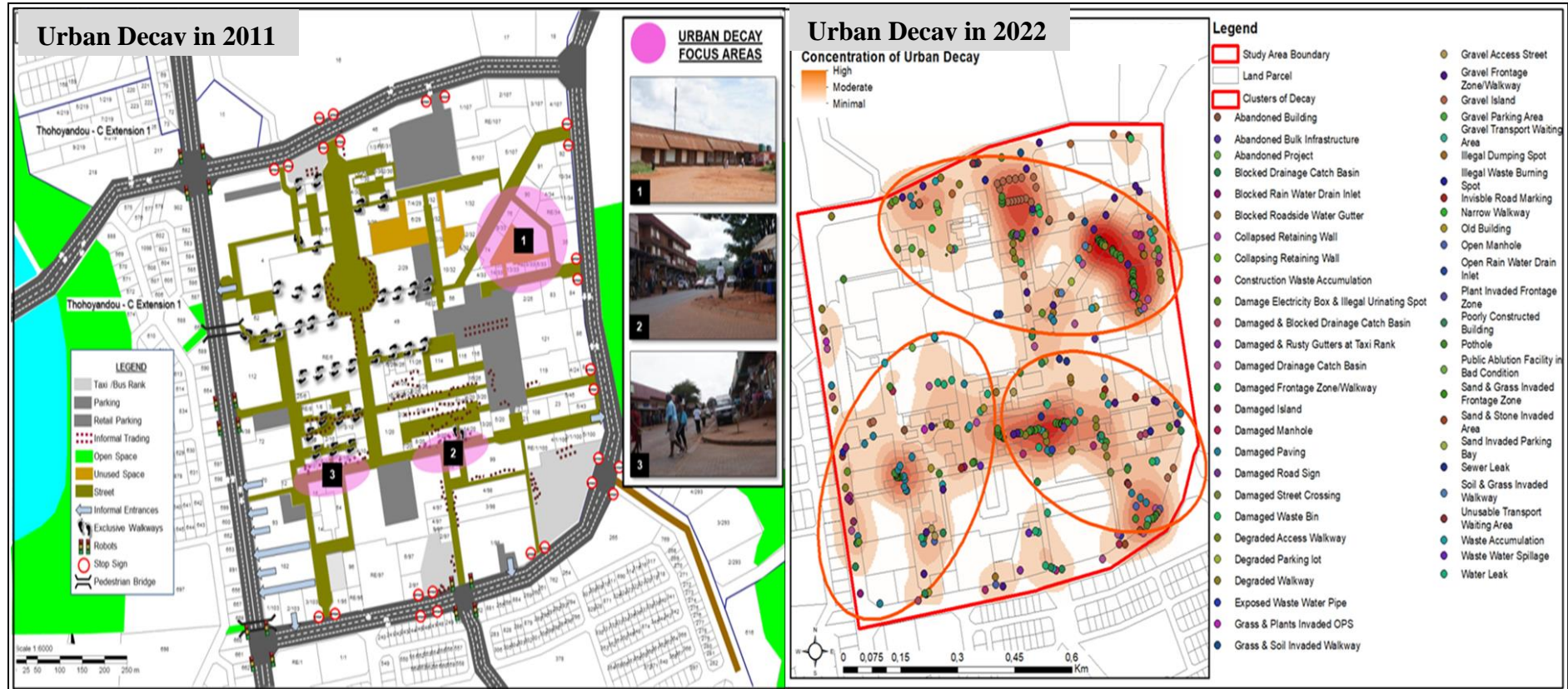
Figure 7.1: Summary of Urban Development and Revitalisation development priorities
Source: Adopted from Thulamela Local Municipality (2011)

The seven most relevant development priorities (to this study) primarily focused on strategies that can be useful to improve, enhance and upgrade the movement network (primary and secondary road network as well as pedestrian movement network). Part of the seven priorities also included the development of a new transport facility, renovating, upgrading, and repurposing existing buildings and relocating informal traders from sidewalks to strategic points in the CBD. From Lynch (1960) perspective the primary focus of these development priorities centred on improving, enhancing, and upgrading paths, edges and landmarks within

nodes and districts in the CBD. Thus, the assumption is that when obstacles preventing paths from facilitating movement are removed and conditions of building structures are improved districts become functional land uses. According to competitive cities theory the improved conditions of the Lynch (1960) structuring elements are therefore expected to catalyse attraction and retention of capital investments, creating job opportunities and creating a good living environment (Harrison, 2002; Mnikathi, 2016). All these improvements combined were envisioned to improve the CBD's competitive edge in terms of competing for capital investments (Harrison, 2002).

The conditions listed in Table 7.1 were diagnosed in year 2011. The Thulamela Urban Development and Revitalisation Strategy was put into place to better position Thulamela Local Municipality to address urban decay in Thohoyandou Town CBD. The strategy proposed a set of development priorities deemed as catalytic development initiatives to revive the CBD from the year 2011 onwards (See Figure 7.1). However, eleven years later (2011 – 2022) from the adoption of the Thulamela Urban Development and Revitalisation Strategy together with its development priorities urban decay persists in the CBD and to some extent worsened (See Table 7.1 and Map 7.1).

According to Thulamela Local Municipality (2011) urban decay was limited to pockets labelled 1, 2 and 3 in Map 7.1 in year 2011. Based on year 2022 geospatial data the spatial coverage of urban decay has expanded to the north-eastern part of the town overlapping slightly to the upper north-eastern side of the CBD; centrally extending over to the south eastern part of the CBD and extended over the south western pocket of CBD (See Map 7.1). The comparison of spatial coverage of urban decay in Thohoyandou Town CBD between year 2011 and 2022 is presented in Map 7.1. Map 7.1 depicts the spatial coverage comparison of urban decay between year 2011 and 2022 in Thohoyandou Town CBD. The spatial coverage comparison of urban decay in the study area presented in Map 7.1 show that the spatial coverage of urban decay has expanded to affect other parts of Thohoyandou Town CBD that were not affected in year 2011 when Thulamela Urban Development and Revitalisation was adopted by Thulamela Local Municipality Council.



Map 7.1: Urban decay spatial coverage year 2011 versus year 2022
 Source: Thulamela Local Municipality (2011); Author (2022)

The spatial coverage comparison of urban decay spatial coverage between year 2011 and 2022 show that decay has extended to parts of the CBD that were not affected in year 2011. This is despite the adoption and implementation of the Thulamela Urban Development and Revitalisation Strategy from year 2011. A key informant from the local municipality also expressed that “despite the adoption of the framework poor conditions have worsened because the regeneration of Thohoyandou Town CBD has not been prioritised by the local authority”. The conditions of paths, edges, and landmarks within nodes and districts in the CBD of the small rural town has deteriorated significantly and urban decay continue to expand to other parts of the study area as shown in Map 7.1. Map 7.1 testifies that over the past eleven years urban decay in Thohoyandou CBD intensified despite the adoption and implementation of the Thulamela Urban Development and Revitalisation Strategy. Clearly, intelligent strategies and plans can fail to achieve their primary objectives where implementation effort lacks.

7.2.2. Policies supporting Thulamela Urban Development and Regeneration Strategy

This segment of this chapter provides a brief summary of Thulamela Municipal By-Laws that complemented the strategy as indicated by key informants. These municipal by-laws and policies include the Thulamela Draft Land Use Scheme (LUMS) (2020), Thulamela Spatial Planning and Land Use Management By-Law (2017), Thulamela Street Trading By-Law (2017), and Thulamela Refuse Removal, Refuse Dump and Solid Waste Disposal By-Law (2017).

A notable observation is that all the by-laws were adopted in 2017 six years after the adoption of the Thulamela Urban Development and Revitalisation Strategy. Thulamela Land Use Management Scheme (LUMS) was drafted in year 2020. According to key informants from the local municipality the policies provided on Table 7.2 “were adopted to improve the overall conditions of the built environment within Thulamela Local Municipality including Thohoyandou Town CBD. However, these policies together have failed to achieve their objectives especially in Thohoyandou Town CBD. The policies had minimal impact on Thohoyandou Town regeneration effort”. The impact policies supporting Thulamela Urban Development and Revitalisation Strategy in the regeneration of the small rural town CBD is summarised in Table 7.2 below.

Table 7.2: Impact of supporting policies on Thohoyandou CBD regeneration

No.	Policy/By-Law	Impact on Thohoyandou CBD Regeneration
1.	Thulamela LUMS (2020) and Thulamela Spatial Planning and Land Use Management By-Law (2017)	The Draft LUMS & SPLUMA By-Law have had minimal impact; the following challenges persist: <ul style="list-style-type: none"> • Land use contraventions; • Some buildings are constructed without municipal approval; • Some buildings are constructed on road reserves; and • Development controls/parameters provided in the scheme not adhered to.
2.	Thulamela Street Trading By-Law (2017)	The policy has had minimal positive impact; the following challenges remained; <ul style="list-style-type: none"> • Some informal traders were issued licences to operate on parking and loading bays; • Liquid waste such as oil and water continue to spill over roads to polluting and block drainage catch basins; • Informal trading continues to occur on pedestrian sidewalks blocking pedestrian movements; and • Supporting pillars of trading stalls put through the ground damaging pavements.
3.	Thulamela Refuse Removal, Refuse Dump and Solid Waste Disposal By-Law (2017)	The By-Law has not enjoyed major success; the following challenges persist in the CBD: <ul style="list-style-type: none"> • Non collection of waste to the extent that some waste burnt on pavements and side of the roads; and • Non-compliance by building constructors abandoning construction waste on pavements.

Source: Author (2023)

Thulamela LUMS (2020) and Thulamela SPLUMA By-Law (2017) are intended to promote efficient and sustainable development however, land use contraventions continue to rise and the erection of buildings without relevant municipal approvals continue (Also see section 6.5 Chapter 6). The application of Thulamela Street Trading By-Law (2017) fails to curb uncoordinated informal trading as informal traders continue to trade on paths and in parking and offloading spaces within various districts of the CBD. Scores of uncollected refuse waste and construction waste remain visible throughout the CBD despite the adoption of Thulamela Refuse Removal, Refuse Dump and Solid Waste Disposal By-Law (2017). Clearly, this is a demonstration that brilliant policies can fail to attain the primary objective when minimal implementation effort is invested.

7.3. Obstacles to successful implementation of small-town urban regeneration strategies

This section identifies hurdles and impediments that have challenged Thulamela Urban Development and Revitalisation Strategy. This section provides an account of the blockages

that have hindered the progress of the Thulamela Urban Development and Revitalisation Strategy. These blockages are twofold; the first barrier is poor public participation which emerged at regeneration strategy development phase and continued throughout the life cycle of the strategy. The second barriers are those factors that impeded the implementation of the regeneration strategy in Thohoyandou CBD.

7.3.1. Poor public participation

According to Roberts (2000), urban regeneration is complex, and its success depends on the participation of different groups as well as contributions. It is important that different views of different actors are considered, acknowledged, and appreciated in development (Roberts, 2000). The Constitution (108 of 1996) together with the White Paper on Local Government (1998) advocates for the involvement of citizens in local government development matters (Republic of South Africa, 1996; Republic of South Africa, 1998). The Republic of South Africa (1998) also promotes collaboration in the pursuit of sustainable social and economic solution to upgrade living conditions. According to key informants from the local municipality public and stakeholder participation was conducted in two forms in the development of the strategy. The public and stakeholders were engaged via public hearings held in community halls (physical meetings) and newspaper advertisement for comments on the draft Thulamela Urban Development and Revitalisation Strategy.

The public together with interested and affected parties participated in several public hearings and focused groups meetings in the development of the strategy indicated key informants from the local municipality. Key informants from the local municipality indicated that several stakeholders participated including Thulamela Business Forums, Thulamela Taxi Association and Thulamela Informal Traders Association. The University of Venda, Vhembe District Municipality, government departments and the public also participated. Public hearings and focus groups meetings were held at community halls to gather inputs and provide feedback on the proposed Thulamela Urban Development and Revitalisation Strategy. However, key informants from the local municipality reported that stakeholder attendance was very poor in most cases. A key informant from the local municipality stated that “People were not attending the public consultation meetings in the envisaged numbers”. Poor attendance in public consultation meetings was attributed to lack of public confidence and trust in the municipality and timing of the meetings (Mogilevsky, 2019). Moseti (2010) posited that public participation in development cultivates trust, openness, ownership of decisions and programs, good governance and curtails corruption. Therefore, this notion creates an impression that the

general public abandoned Thulamela Urban Development and Revitalisation Strategy due to the lack of public ownership of its development proposals. The poor attendance of public consultation meetings also might have compromised the entire public consultation process. Therefore, poor public participation and consultation opened loopholes for corruption and lack of transparency in the implementation of the strategy. This might also extend to explain the generally slow progress and implementation of some if not all the recommendations as well as proposals of the strategy in the CBD.

In addition to physical engagements, the public together with interested and affected parties were invited to register their comments on the first draft strategy in writing. Figure 7.2 is the invitation for public comments issued by Thulamela Local Municipality.

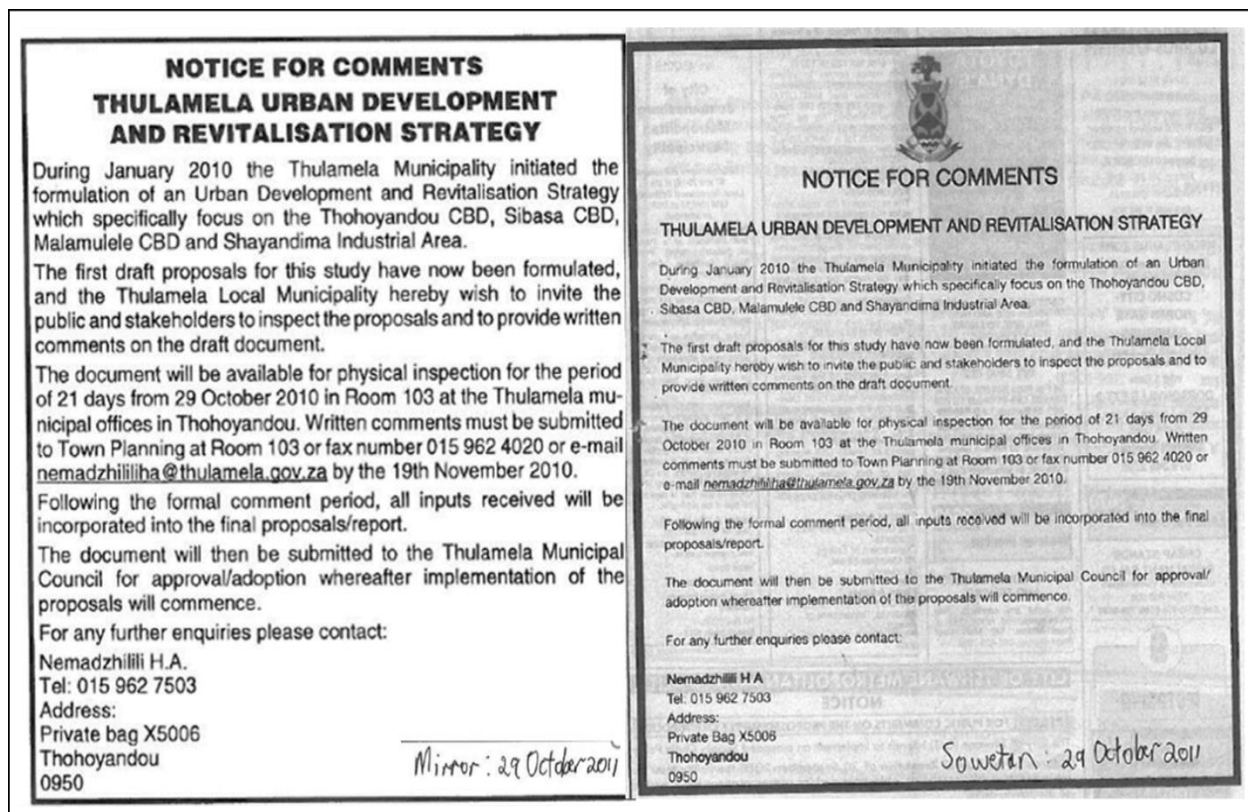


Figure 7.2: Public notice inviting comments for the Urban Development and Revitalisation Framework
Source: Thulamela Local Municipality (2022)

It is evident on the published notice that the document was only available for physical inspection at Thulamela municipal office building (See Figure 2). The document was not made available electronically to the public on the municipal website for wider access (See Figure 7.2). The document was also available at a single centre at the Thulamela municipal office building. In general, there were limitations and barriers to public participation and consultation which resulted in minimal public participation that had the potential to compromise the efficacy

and the overall objectives of public participation. Together, the above obstacles were possible barriers that might have blocked the public and the interested and affected parties from registering comments. Within the communicative and collaborative theory's perspective adequate public participation enhances ownership of development decisions, accountability and good governance Moseti (2010).

7.3.2. Implementation blockages of the Thulamela Urban Development and Revitalisation Strategy

The expansion of the spatial coverage of urban decay in the CBD despite the adoption of the Development and Revitalisation Strategy depict presence of implementation blockages that hampered Thulamela Urban Development and Revitalisation Strategy. Key informants from the local municipality identified four blockages to have impeded the implementation of the strategy in Thohoyandou Town CBD which included political interference, lack of monitoring and evaluation system, lack of policy alignment and poor governance and institutional capacity linked to shortage of staff with appropriate expertise.

7.3.2.1. *Political interference*

Similar to Alice Town as presented in in Section 2.5.2 of Chapter 2 Thohoyandou Town CBD regeneration progress was hampered by political interference (Mckibbin et al., 2012). Political meddling in the administration of service delivery at local government level led to poor service delivery across many municipalities in South Africa (Mngomezulu, 2020). Political interference had negative implications on the implementation of Thulamela Urban Development and Revitalisation Framework. Usang and Salim (2016) acknowledge that political meddling at local government level negatively affects the performance of most municipalities. Similarly, political interference has seen Thulamela Local Municipality fail to successfully deliver the obligations and development priorities of the Development and Revitalisation Strategy according to key informants.

7.3.2.2. *Lack of monitoring and evaluation system*

Key informants from the local municipality pointed out that the general lack of monitoring and evaluation systems hindered the implementation of the strategy in the CBD. The inability to monitor and to evaluate progress of the Thulamela Urban Development and Revitalisation Strategy on a regular basis was detrimental to Thohoyandou Town CBD redevelopment according to key informants from the local municipality. Rasila (2019) states that the absence of as well as ineffective monitoring and evaluation systems in government contribute to policy

failures. In the case of Thohoyandou Town CBD not a single review of the Thulamela Urban Development and Revitalisation Strategy was conducted by Thulamela Local Municipality since its adoption in year 2011 and not even after the adoption of SPLUMA in year 2013 and the Thulamela SPLUMA Bylaw in year 2017. The failure to review the framework despite multiple policy changes epitomised the general lack of monitoring and evaluation system at Thulamela Local Municipality.

7.3.2.3. Lack of policy alignment

To some extent, key informants from the municipality understood that the lack of policy alignment in government (national, provincial, and local) is one of the challenges faced by the adopted strategy. The South African Cities Network (SACN) (2013) acknowledges that as much as the re-structuring of government into three spheres was thought with the notion to foster intergovernmental cooperation in pursuit of better alignment; this has not been attained. Thulamela Local Municipality regeneration efforts suffered and continue to suffer immensely as a result of lack of policy alignment as well as integration of planning at local, provincial and national government sphere. Non-review of the existing regeneration strategy despite the adoption of SPLUMA (16 of 2013) further entrenched misalignments with other plans and policies of the local municipality such as and Thulamela SPLUMA By-Law (2017) and Thulamela MSDF. Key informants from the local municipality also stated that lack of alignment extended to infiltrate into municipal packages of plans despite the presence of the IDP. Over the years, there was very little alignment between Thulamela Urban Development and Revitalisation Strategy and other municipal packages of plans and policies. Some key informants from the local municipality viewed these misalignments between municipal packages of plans as part of the blockages that prevented successful implementation of Thulamela Urban Development and Revitalisation Strategy. Misalignments in policies and plans; whether in terms of objectives or content might have negative implication on the end goal (Savage and O'Connor, 2018).

7.3.2.4. Poor governance and institutional capacity

Poor governance and institutional capacity linked to shortage of staff with appropriate expertise was noted amongst the obstacles that challenged the implementation of the strategy according to key informants from the local municipality. For example, based on Thulamela 2021/22 financial year organisational structure the Spatial Planning and Land Use Management and Tribunal sections has three staff members. The lack of governance capacity refers to two dimensions which are mobilisation capacity that entails the ability of the local authority to

raise and commit financial resources for services and functions and decision making in terms of the ability of the municipality to allocate those resources efficiently (Setiawan et al., 2022). Thulamela Local Municipality failed to establish Thohoyandou Town CBD Coordinator's office as recommended in the Urban Development and Regeneration Strategy. According to Thulamela Local Municipality (2011) the Coordinator's office was meant to track and report progress on the implementation of the regeneration projects and programmes, conduct bi-annual assessments determining if targets (aim and objectives) are met and recommend amendments as where and when required. The failure of Thulamela Local Municipality to prepare the strategy implementation plan is amongst the weakness that signalled poor governance and institutional capacity. The indication was that the municipality did not have the required staff personnel to successfully execute this strategy. The inability to establish the Thohoyandou CBD Coordinator's office together with its staff complement, lack of expertise, and shortage of staff personnel to execute the urban regeneration strategy undermined Thulamela Local Municipality's CBD regeneration. Key informants from the local municipality revealed that efforts to regenerate Thohoyandou Town CBD yielded minimal success due to these implementation blockages. These implementation blockages together limited and reduced the impact of Thulamela Urban Development and Revitalisation Strategy on the overall development and regeneration of Thohoyandou CBD.

7.4. A proposed small town urban regeneration framework

This section details the proposed small town urban regeneration framework envisioned to strengthen Thulamela Local Municipality capacity towards the implementation of Thulamela Development and Revitalisation Strategy in Thohoyandou Town CBD. The proposed framework responds to the national objectives of the Small Town Regeneration Strategy (STR) including lobbying support for government and public agencies of small town regeneration, strengthening regional approach to planning and development, improve financial viability of municipalities and to advocate for capable government (See Section 3.2.8 Chapter 3).

7.4.1. Proposed small town urban regeneration framework

The proposed framework provides a clear and concise blueprint for small town regeneration to enable municipalities to successfully execute urban regeneration and retain urban vitality of small rural towns. The proposed framework consists of five components namely the establishment of a municipal urban regeneration entity, the urban regeneration strategy and plan development, municipal council, comprehensive urban regeneration strategy implementation and review of the comprehensive urban regeneration strategy (See Figure 7.3).

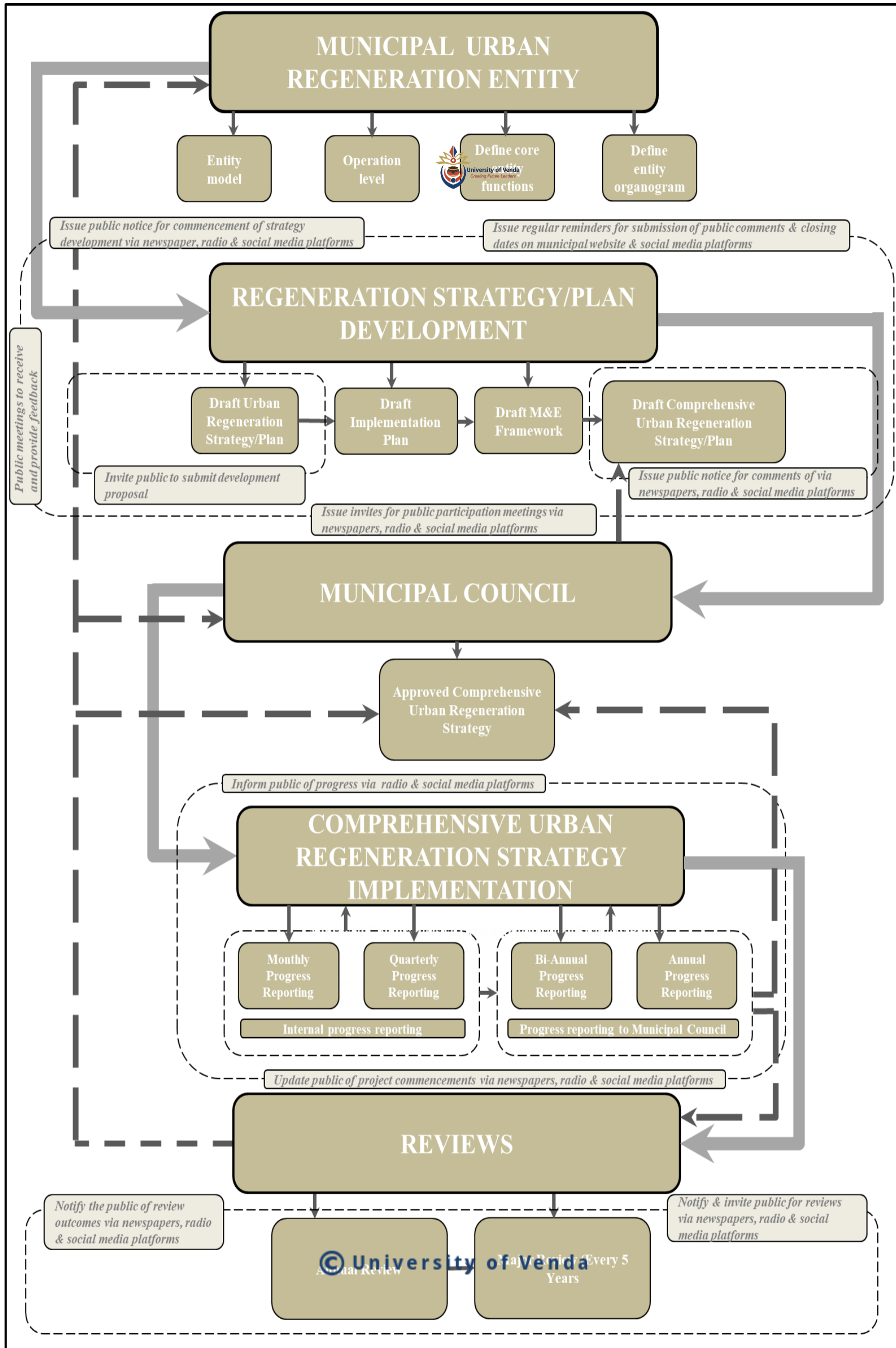


Figure 7.3: Proposed Small Town Urban Regeneration Framework
 Source: Author (2023)

7.4.1.1. Small town urban regeneration framework process flow

The proposed framework for sustainable implementation of urban regeneration in small towns proposes that small town regeneration commences with the establishment of a municipal urban regeneration entity; a public entity or government business enterprise (See Figure 7.3). Public entities depending on the model are free from political interference, promote good governance, capable of attracting and retaining scarce skills and capable of generating own funding and improves accountability and policy alignment (COGTA, 2021). Government owned entities have sufficient strengths to overcome implementation challenges such as inadequate capacity, poor governance and political interference. The municipal entity undertakes all tasks relating to regeneration and development of the small rural town CBD including urban management, policy development and have its own suitably qualified staff complement. The municipal urban regeneration entity may operate at district or local level depending on the number, size and spatial extent of small rural urban centres and capacity of the municipality. The establishment of a municipal urban regeneration is critical towards facilitating successful small rural town regeneration because its establishment has the potential to resolve most of the barriers and blockages plaguing small town regeneration

The second component entails the actual development of the urban regeneration strategy by the appointed service provider. The outcome of this phase is the draft comprehensive urban regeneration strategy (See Figure 7.3). The draft comprehensive urban regeneration strategy consists of the draft urban regeneration strategy, draft implementation plan and draft monitoring and evaluation framework prepared by the municipal urban regeneration entity in conjunction with the appointed service provide. The draft urban regeneration strategy is the collaborative outcome of the municipality, its citizens, municipal regeneration entity, service provider and other interested and affected parties. Stakeholder engagement is embedded to this phase. From Healey (1992)'s communicative and collaborative theory values such as increase involvement of the public in development decision making, debates and feedback are upheld. The stakeholders are engaged through traditional and modern forms of participation including community radio stations, social media platforms and newspaper publications. The integration of old and modern forms of participation are necessary to ensure increased public the involvement, constant engagement and feedback (See Figure 7.3). Consistent public engagement in development cultivate transparency, accountability, good governance, openness, curtails corruption and build ownership of decisions and programmes (Moseti, 2010).

The third component of the framework involves the more intense engagements with the municipal council, the service providers and the municipal urban regeneration entity regarding the draft comprehensive urban regeneration strategy. The participation of the municipal council as a key decision maker in the local municipality is central to galvanising political support and harnessing common understanding of the strategy, its proposals and priorities within the municipal council. The inputs and feedback from the municipal council are integrated to draft comprehensive urban regeneration strategy. A public notice is published for further public participation via official newspapers, government gazette and other modern communication platforms. Upon conclusion of public consultation, the amended draft comprehensive urban regeneration strategy is returned to the municipal council for final approval and adoption (See Figure 7.3). The inclusion of a credible implementation plan and monitoring and evaluation framework becomes part of the conditions for attaining council approval.

The fourth component of the small town urban regeneration framework involves the actual implementation of the comprehensive urban regeneration strategy by the municipal urban regeneration entity approved by municipal council. The comprehensive urban regeneration strategy is strictly implemented in accordance with the implementation plan. The municipal urban regeneration entity tracks and report progress in accordance with the approved monitoring and evaluation framework. Internal progress reporting (within the entity) is reported once a month and detailed progress is reported quarterly internally (See Figure 7.3). Brief bi-annual progress is reported to the municipal council whilst detailed progress report is presented annually. The official progress reports become part of the comprehensive urban regeneration strategy and inform the annual and major reviews. The public is kept abreast of the implementation progress via community radio stations, municipal website and social media platforms. The regular public updates issued via the different platforms include announcements of and invitation for tenders, project commencements, project statuses and employment opportunities from the regeneration projects.

The final component involves conducting reviews of the comprehensive urban regeneration strategy (See Figure 7.3). The reviews of the comprehensive urban regeneration strategy are led and championed by the municipal urban regeneration entity which then reports to the municipal council. The monthly, quarterly and bi-annual progress reports determine the need for minor annual reviews as well the kind of adjustment required to be effected in the comprehensive urban regeneration strategy. Annual and major reviews of the comprehensive urban regeneration strategy are conducted during which progress is reported to the public,

public comments are attained, and changes are effected as agreed. The reviewed comprehensive urban regeneration strategy is then tabled to the council for approval. The municipal urban regeneration entity continues with the implementation of the reviewed comprehensive urban regeneration strategy.

7.4.2. Critical drivers of success of the Small Town Urban Regeneration Framework

The success of the proposed small town urban regeneration framework requires and is dependent on the presence of the conditions below:

- (i) Strong political will – successful policy implementation is largely dependent on presence of political will (Nguyen, 2019). The success of this framework largely depends significant on buy-in and support from key decision makers within government with shared vision and commitment to small town regeneration.
- (ii) Good governance – is the necessary condition for enabling accountability, transparency, effectiveness, and citizen participation in development decision-making processes. The presence of these core aspects of good governance is critical to the success of the framework.
- (iii) Adequate institutional capacity (across all three spheres of government) – executing the proposed framework requires “(1) the potential ability; and (2) the commitment of an institution to exercise the powers and perform the functions assigned to it in terms of the Constitution and other legislation efficiently, effectively and sustainably” Scheepers and Schwella (2015). National and provincial government is required to supplement local municipality capacity in the phase of establishing the municipal entity as well as when and where required.
- (iv) Increased cooperative governance – the success of the proposed framework requires the three spheres of government to work closely together and not in silos.

7.5. Chapter summary

This chapter provided the measures set in place to combat and curtail urban decay in Thohoyandou Town CBD through the existing urban development strategy. This chapter identified that the implementation of the existing urban regeneration strategy is blocked and challenged by poor public participation, political interference, lack of monitoring and evaluation systems, lack of policy alignment and poor governance and institutional capacity. This chapter also provides the proposed Small Town Urban Regeneration Framework

envisioned to strengthen the capacity of Thulamela Local Municipality towards the implementation of the existing urban regeneration strategy. The following chapter summarises the findings, provides recommendations and concludes the study

CHAPTER 8: RESEARCH SUMMARY, RECOMMENDATIONS, AND CONCLUSION

8.1. Introduction

This chapter summarises the entire research study. After this introduction the first segment of this research offers a brief summary of the study area together and the literature reviewed. The second and third segments provide the summary of data collection and analysis methods and theory respectively. Fourth section provides a summary of the findings of this study. The fifth section makes recommendations envisioned to strengthen the implementation capacity of urban regeneration strategy in Thohoyandou Town CBD and other small rural towns across South Africa. The sixth segment make suggestions pertaining future research areas and the final section of this chapter provides the research conclusion.

8.2. A revisit of the study area

Thohoyandou Town CBD is located in Limpopo Province within Thulamela Local Municipality one of five local municipalities in Vhembe District Municipality (See Section 1.9 Chapter 1). Thohoyandou Town CBD is the administrative and commercial centre of Vhembe District Municipality (Thulamela, 2020). Thohoyandou Town CBD houses mainly government, commercial and retail facilities including Thulamela Local Municipality Offices, Thohoyandou Post Office, Thohoyandou Police Station, Thohoyandou Magistrate Court, Venda Plaza, Mvusuludzo Shopping Mall and Game Store Complex (See Section 3.3.1 Chapter 3). As Vhembe District administrative and commercial centre Thohoyandou Town CBD have a fairly large catchment area servicing approximately 69 000 people from more than 45 village and places stretching as far as 70 kilometres (See Section 6.3 Chapter 6).

The built environment in Thohoyandou Town CBD is deteriorating. Thohoyandou Town CBD milieu is in a state of decay despite the adoption of Thulamela Urban Development and Revitalisation Strategy. There is a need to investigate what has subjected Thohoyandou Town CBD to decay despite the implementation of Thulamela Urban Development and Revitalisation Strategy and demonstrate why a small town urban regeneration framework is necessary to strengthen the capacity towards sustainable urban regeneration in Thohoyandou Town CBD and other small towns in South Africa experiencing similar circumstances (See Section 1.3 Chapter 1).

Small towns occupy a strategic role within the urban continuum; they are building blocks in the settlement hierarchy (See Section 2.4 Chapter 2). Within regional development, small

towns bridge the urban-rural divide. Small towns are preferred localities for public and private amenities such as hospitals, police stations, magistrate courts, government offices, commercial facilities and business offices (See 1.1.3 Chapter 1). Small towns are service centres for their large and predominantly rural catchment. However small rural towns such as Alice Town in the Eastern Cape Province continue to deteriorate despite the implementation of urban regeneration strategies as a result of political interference, racial intolerance, lack of public and private buy in and poor public participation (See 2.5.2 Chapter 2). Poor governance, lack of basic services and inadequate basic infrastructure combined with poor policy implementation and historical neglect subjected small towns to decay (See Section 1.1.3 Chapter and 2.4.1 Chapter 2). The vulnerability to Covid-19 pandemic stress added new challenges affecting liveability and vitality in small towns. In the context of this study, urban regeneration is viewed as an intervention and a process to reverse physical decay resolving challenges plaguing and derailing redevelopment of small towns. Urban regeneration is a policy instrument and carefully thought actions undertaken to improve conditions of urban areas previously affected by decay (See Section 2.3 Chapter 2). The lens of urban regeneration changed significantly over the years broadening its focus to enhancing all aspects of the urban areas and involving public, private and government in this process (See Section 2.3.1 Chapter 2). As much as urban regeneration is seen as a positive action towards remedying decay, it has been heavily criticised for creating socio-economic division, neglecting social issues in pursuit of economic gains and skewed benefits. Urban regeneration receives criticism for perpetuating displacement of small businesses and marginalised communities. Poor public participation and consultation continue to dominate urban regeneration initiatives (See Section 2.3.2 Chapter 2).

8.3. Summary of data collection and analysis methods

This study adopted a case study research design augmented by the mixed method research approach (See Section 4.2 and 4.3.4 Chapter 4). The SW Maps mobile application was used to gather geospatial data on urban decay in Thohoyandou Town CBD (See Section 4.6.1 Chapter 4). This was complemented by questionnaire data collected from 202 participants and 3 interviews with key informants from the local municipality (See Section 4.6.1 Chapter 4). The spatial data was analysed through ArcMap geospatial analysis tools to produce maps reflecting the spatial extent and intensity of urban decay in Thohoyandou CBD (See Section 4.12 Chapter 4). The data attained from study participants were analysed through ATLAS.ti and SPSS using thematic analysis and descriptive statistics (See Section 4.12 Chapter 4).

8.4. Theoretical summary

Kevin Lynch (1960) placemaking theory was central in studying and documenting physical decay in the built environment of Thohoyandou Town CBD. Perceptual and cognitive mapping was applied extensively to study, investigate and document urban decay based on the occurrence of the features associated with the phenomenon on the built environment. Kevin Lynch (1960) perceptual and cognitive mapping became crucial towards identifying various structuring elements making up the built environment of Thohoyandou Town CBD. Through perceptual and cognitive mapping as well as spatial analysis the researcher was able to determine the least and most affected structuring elements in Thohoyandou Town CBD. Furthermore, cognitive mapping played a significant role in terms of determining what factors associated with decay were affecting each structuring element of the built environment in the small rural town CBD. This was attained by integration and overlaying of spatial data and structuring elements in ArcMap. Kevin Lynch placemaking theory was instrumental in studying decay and its associated impact that led to prevalence of poor conditions of paths, nodes, edges, landmarks, and districts in Thohoyandou Town CBD.

Healey's (1992) communicative and collaborative planning theory was essential in evaluating the level, extent and nature of stakeholder engagement and public participation in the development and implementation of the existing urban regeneration strategy. Communicative and collaborative planning was pivotal in identifying loopholes related to public participation which contributed to the general failure of the Thulamela Urban Development and Revitalisation Strategy. The role of communicative and collaborative planning extended to informing, guiding and entrenching public participation into the proposed framework for small town regeneration framework. Healey's (1992) communicative and collaborative planning was used to reflect the importance stakeholder engagement and public participation to the success of urban regeneration initiatives. Porter (1992)'s competitive cities theory was used to highlight that poor conditions associated with urban decay compromises Thohoyandou Town CBD competitiveness which in turn contribute to declining built environment and poor living conditions. These included issues such as poor urban management, poor governance and poor infrastructure which contributed to overall poor conditions of the CBD. Porter's competitive cities theory (1990) assisted to comprehend core aspect of Thulamela Urban Development and Revitalisation Strategy and the negative impact of decay on determinants of competitive cities such as good governance, urban management and infrastructure. The theory was also used to constantly highlight that the current conditions of the CBD were not good for attracting and

retaining investments. Porter (1992)'s competitive cities theory influenced the proposed framework for small town urban regeneration especially in terms of improving aspects such as governance, urban management and using these aspects together with enhanced regeneration strategies as leverage for attracting and retaining investments to improve employment prospects and living conditions through improved built environment. Variables including governance, urban management, state of infrastructure, and condition of buildings were therefore isolated from theories adopted in this study. These provided critical constructs to measure urban decay in data analysis.

8.5. Summary of the research findings

This segment of the chapter details the research findings in response to the main research question which sought to investigate what has subjected Thohoyandou Town CBD built environment to decay despite the adoption of Thulamela Urban Development and Revitalisation Strategy (See Section 1.6 Chapter 1). The findings are presented according to the three research objectives of this research study as set in Section 1.5 Chapter 1).

8.5.1. Characterising and mapping urban decay in Thohoyandou CBD

This study found that empirically Thohoyandou Town CBD is grappling with urban decay. This study established that since year 2011 urban decay has intensified spreading to other parts of the CBD (See Map 5.3 Chapter 5). The study found 51 individual features accumulating to a combined total of 371 features indicative decay (See Table 5.1 Chapter 5). Urban decay is concentrated within three clusters in Thohoyandou Town CBD; the north-eastern, central south-eastern and south-western parts of the CBD (See Section 5.2.4 Chapter 5). These three decay clusters represented pockets of the CBD where urban decay is most intense. Poor conditions of the built environment within these clusters negatively affect environmental quality and conditions of urban amenities which are important factors of competitiveness (UN, 2015). This research determined that the intensity of decay was closely linked to land use activities within each decay cluster in the CBD. The industrial land use activities in the north-eastern cluster with heavy presence of building material suppliers and wholesale shops. Commercial related land use activities such as taxi and bus rank, shopping malls, building material suppliers, and wholesale shops dominated the central-south eastern cluster (See Section 5.2.4 Chapter 5).

Urban decay in Thohoyandou CBD manifested in three forms through firstly, poor urban management; secondly, derelict and abandoned buildings; and lastly, collapsing, abandoned

infrastructure and projects. Poor urban management accounted for an estimated 85%; collapsing, abandoned infrastructure and projects (13%); and derelict and abandoned buildings (2%) (See Figure 5.5 Chapter 5). These three forms were evident through the prevalence of potholes, damaged paving, gravel frontage zones/walkways, degraded walkways, water leakages, waste accumulation, damaged drainage catch basins, and blocked drainage catch basins. Other features include construction waste accumulations, damaged electricity boxes, unusable transport waiting areas, damaged wasted bins, old dilapidated buildings and damaged manholes. All these factors are clear pointers to a deteriorating built environment that translate into urban decay. Literature shows that urban decay emanates from several urban maladies including to poor urban planning, abandoned properties, poor urban infrastructure, poor amenities, physical obliteration, lack of maintenance and mismanagement of immovable property (Alias et al., 2016; Ndlebe, 2017; Akabuilo and Okeke, 2018). According to (Harrison, 2002), the competitive cities theory identifies planning and urban management as key to a place's competitiveness and therefore lack or absence of proper urban management tarnishes Thohoyandou Town CBD competitive edge in turn compromising the quality of life and diminishes employment prospects. In contrast, the above-mentioned features were minimal if not present at all in the south-eastern district of the study area. This study determined that private property management in the south-eastern district of the study area shielded the built environment within this part from exposure to decay. Property and infrastructure maintenance were conducted on a regular basis compared to the three clusters of decay. Therefore, regular property and infrastructure maintenance is a key preventative measure against physical decay of the built environment.

Spatial analysis, participants, and key informants from the local municipality confirmed that urban decay affected paths the most in Thohoyandou Town CBD. Approximately 54% of features and situations indicative of decay were found to be affecting paths (See Figure 5.4 Chapter 5). This led to deteriorating and generally poor conditions of roads, streets, walkways and frontage zones, pedestrian sidewalks and passages was enormous. The overall condition of paths was generally poor to an extent that these passages became dissolute and unusable in the event of heavy rains. This research identified several negative implications attached to poor conditions of paths on private property and CBD users. Potholes may subject vehicles to damages, slow traffic movement, may cause congestion, may cause accidents, and may expose CBD users to injuries. The spatial analysis found that to some extent, urban decay negatively affected the built environment within nodes. Approximately 21% of features and situations

indicative of decay were documented within nodes paths (See Figure 5.4 Chapter 5). Nodes are generally areas of intense activities including intersections dominated by land uses that attracted increased traffic volumes and people alike. This reflects that the intensity of urban decay and the influence of land use activities in the study area had a positive relationship. In general, decay mostly affected paths and nodes leading to the overall underwhelming conditions of the built environment within the three clusters of decay in the CBD paths (See Figure 5.4 Chapter 5).

8.5.2. Causes of urban decay in Thohoyandou Town CBD

This study found that the overall underwhelming conditions of the built environment in the three clusters of decay were underpinned by the lack of maintenance (90%) followed by poor governance (89%), poor service delivery (88%), poor construction and use of inferior construction material (86%), poor planning (86%), Covid-19 pandemic (75%) and abandoned buildings (65%) (See Section 6.5 Chapter 6). Floods and disaster have little influence on urban decay largely because they rarely occur in Thohoyandou CBD (Chikoore et al., 2021). However, the other factors combined led to poor conditions of paths, nodes, edges and districts in Thohoyandou Town CBD. This reaffirms Ndlebe (2017) assertion that urban decay is caused by many factors.

Lack of maintenance caused poor conditions of building (private and public) including public amenities within several districts in the study area (See Section 6.5.1 Chapter 6). The absence of property maintenance regulation and enforcement of such regulations led to the prevalence of poorly maintained buildings in the CBD. This research established that capacity and resource constrained led to poor maintenance of public infrastructure and facilities in Thohoyandou CBD. Lack of maintenance was further entrenched by resource reallocation due to Covid-19 pandemic. Resource reallocation limited Thulamela ability to fulfil some of its service delivery obligations including conducting regular maintenance and attending infrastructure breakdowns. This sudden reallocation of resources had negative implications on general maintenance.

In this research it was found out that decaying built environment in the small rural town CBD was underpinned by poor governance, planning and service delivery (See Section 6.5.2 and 6.5.3 Chapter 6). Corruption and political interference in governance affairs challenged service delivery which in turn exposed the built environment to decay. According to communicative and collaborative theorist's issues such as corruption are attributed to poor public participation

which diminishes accountability and transparency. Poor planning at inception of CBD was found to have had several planning and urban design flaws. Minimal provisions were made for informal trading, future CBD expansion and parking and loading spaces; and irregular street pattern with no east – west link. Excessive population had negative implications on the built environment in Thohoyandou Town CBD. The current Thulamela planning trajectory was found to be more reactive and limited by resource and capacity related issues hence the expansion of decay spatial coverage (See Map7.1). The general lack of law enforcement on matters pertaining to land use contravention in the CBD led to a culture of non-compliance to Thulamela LUMS developments parameters according to key informants from the local municipality.

Poor service delivery and Covid-19 pandemic led to overall poor condition of Thohoyandou Town CBD built environment (See Section 6.5.4 Chapter 6). This research established that urban decay in Thohoyandou CBD was further exacerbated by Covid-19 pandemic. Thulamela Local Municipality reallocated resources and invested most of its resources into Covid-19 preventative and relief measures. The sudden reallocation of resources had negative implications on service delivery which in turn exposed the built environment in Thohoyandou CBD to decay. This research found that Thulamela Local Municipality performed very poor across six key areas in public service delivery within Thohoyandou Town CBD ((See Section 6.5.4 Chapter 6). These areas included refuse removal and waste collection, potholes repair, pedestrian walkways and pavements repair and maintenance, roads and streets signage and marking repair and maintenance, sewer infrastructure repair and maintenance, and stormwater drainage infrastructure repair and maintenance (See Figure 6.2 Chapter 6).

Poor construction and the use of inferior construction material exposed majority of the paths within the three clusters of decay in the study area (See Section 6.5.5 Chapter 6). This research found that, the conditions of paths deteriorated within a short span of time after repairs were conducted signalling use of inferior material. Lack of stringent quality assurance and monitoring measures in public infrastructure projects contributed to poor end product. The abandonment of the multi-million rands public transport facility exemplified and epitomised non-adherence to South African National Building Standards (SANBS), the lack of stringent quality assurance and monitoring measures (See Section 6.5.5 Chapter 6). It was found that some of the buildings were constructed without relevant municipal approvals leading to prevalence of poorly constructed buildings. This research determined that weak supply chain and management systems were infiltrated by corruption. This led to the appointment of

inexperienced service providers which in turn compromised the quality, integrity and standard of end product.

8.5.3. Urban regeneration strategies towards addressing physical urban decay in Thohoyandou CBD

The findings of this study are that the Thulamela Development and Revitalisation Strategy was adopted by Council in year 2011. Thulamela Development and Revitalisation Strategy sought to better living conditions of Thulamela residents, create functional and integrated human settlements as well as revive dysfunctional urban centres with economic development (Thulamela, 2011) (See 7.2.1 Chapter 7). The strategy was supported by Thulamela Draft Land Use Scheme (LUMS) (2020), Thulamela Spatial Planning and Land Use Management By-Law (2017), Thulamela Street Trading By-Law (2017) and Thulamela Refuse Removal, Refuse Dump and Solid Waste Disposal By-Law (2017) (See 7.2.2 Chapter 7). However, despite the adoption of Thulamela Development and Revitalisation Strategy together with its supporting policies decay continued unabated spreading to other parts of the Thohoyandou Town CBD (See (See Map7.1). This reaffirms Qayi (2010) assertion that to some extent, development in small rural towns is stagnated by poor policy implementation. This study established that Thulamela Development and Revitalisation Strategy and its supporting policies failed to accomplish their primary objectives due to poor public participation, political interference, lack of monitoring and evaluation systems, lack of policy alignment and poor governance and institutional capacity (See Section 7.3 Chapter 7). Mckibbin et al. (2012) found that Alice Town regeneration suffered as a result of political interference, poor public and private support and poor stakeholder engagement. This shows that intelligent strategies fail to accomplish their primary objectives when minimal implementation effort is invested.

This study established that poor public participation contributed to failure of Thulamela Development and Revitalisation Strategy (See Section 7.3.1 Chapter 7). This research found that poor attendance and limited access for the public to the draft strategy document to register comments compromised the efficacy of public participation during the development the strategy. People did not attend public consultation hearing meetings in envisaged numbers and attendance was generally poor throughout the process. Within the communicative and collaborative discourse, adequate public participation fosters and heightens ownership of development decisions, accountability and good governance (Moseti, 2010). Poor public participation in the development of Thulamela Development and Revitalisation Strategy

opened loopholes for corruption, lack of accountability and poor governance which together derailed the implementation of the strategy.

This research found that political interference stagnated implementation of Thulamela Development and Revitalisation Strategy development priorities (See Section 7.3.2 Chapter 7). Political interests continually tempered with the administration of programs and projects which halted progression towards realisation of the overall development priorities. This research also established that the lack of monitoring and evaluation systems disadvantaged the implementation of the strategy (See Section 7.3.2 Chapter 7). Thulamela Local Municipality was unable to track, monitor and evaluate the implementation of its development priorities. The study established that eleven years later post adoption of Thulamela Urban Development and Revitalisation Strategy not a single review of the strategy was conducted. Provided several policy direction changes at local and national spheres of government this research determined that Thulamela Urban Development and Revitalisation Strategy was out-dated. This lack of monitoring and evaluation systems reflected poor governance which according to the United Nations (UN) is amongst the leading factors that deteriorate city's competitiveness (UN, 2015).

This study found that policy alignment in government (national, provincial, and local) halted the implementation of Thulamela Urban Development and Revitalisation Strategy (See Section 7.3.2 Chapter 7). The Development and Revitalisation Strategy was also found to be on different wavelengths even with other municipal packages of plans in term of alignment. The lack of alignment was mainly attributed to the lack of review in order to foster increased policy alignment. Lastly, the implementation of Thulamela Urban Development and Revitalisation Strategy was challenged by poor governance and institutional capacity linked to shortage of staff with appropriate expertise (See Section 7.3.2 Chapter 7). Thulamela was unable to establish the office of CBD Coordinator together with its supporting staff personnel responsible for urban regeneration as recommended by the strategy. The study found that Thulamela Local Municipality also failed to credible develop a credible implementation plan of Thulamela Urban Development and Revitalisation Strategy due to lack of staff with relevant expertise and know how (See Section 7.3.2 Chapter 7). Thulamela Local Municipality adopted policies supporting the regeneration strategy very late. The By-Laws that supported the regeneration strategy were adopted six years after the regeneration strategy was gazetted. The Thulamela LUMS has not been adopted by council and was still in draft by year 2022. The study findings shown that supporting policies were not successful as challenges they were primarily intended to address continued to subject the CBD to further decay (See Section 7.2.2 Chapter 7).

8.5.4. A SWOT analysis

Table 8.1 provides a brief snapshot of the strengths, weaknesses, opportunities and threats (SWOT). This SWOT is based on the literature reviewed and the study findings. One of the qualities of Thohoyandou Town CBD is that it is the political, administrative and the commercial centre of Vhembe District and is home to several crucial urban amenities.

Table 8.1: SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Thohoyandou Town CBD remains Vhembe District municipality political, administrative, and commercial centre; • Availability of urban amenities for example commercial/retail facilities, police station, and magistrate court; • Thohoyandou Town CBD has a large catchment area with sufficient threshold; and • Proximity to University of Venda. 	<ul style="list-style-type: none"> • Lack of political will • Inadequate institutional capacity • Poor policy implementation and alignment; • Poor governance and urban management; • Irregular street pattern with limited no east – west link; • Heavy reliance on central government funding and grants; and • Limited land for greenfield developments.
Opportunities	Threats
<ul style="list-style-type: none"> • There is an existing urban regeneration strategy which could be strengthened and reviewed; • Thohoyandou Town is part of the Mbombela Bushbuckridge-Phalaborwa-Thohoyandou-Makhado transformation corridor earmarked for infrastructure social service, infrastructure, basic service investment; and • There are existing policies to support the implementation of urban regeneration in Thohoyandou CBD. 	<ul style="list-style-type: none"> • Political interference in the administration of service delivery and development programmes; • Corruption; and • Resurgence of Covid-19 and emergence other pandemics

Source: Author (2023)

Thulamela Local Municipality has the Thulamela Urban Development and Revitalisation Strategy which can be strengthened through a review to ensure successful revitalisation of Thohoyandou Town CBD and other urban centres within the municipality. However, lack of political will, inadequate institutional capacity and poor governance and urban management remains Thulamela Local Municipality weaknesses. Furthermore, the development of Thulamela Local Municipality including Thohoyandou Town CBD is threatened by corruption, lack of political interference in the administration of service delivery and possible resurgence of Covid-19 or emergence of other pandemics.

8.6. Recommendations

This segment presents the study recommendations intended to strengthen the implementation capacity of urban regeneration strategy in Thohoyandou Town CBD and other small rural towns across South Africa.

8.6.1. Establish a Municipal Urban Regeneration Entity

This study recommends that small town urban regeneration begin with the establishment of a Municipal Urban Regeneration Entity (a public entity/government business enterprise) (See Section 7.4.1.1 Chapter 7). The primary function of the municipal urban regeneration entity will be to undertake and oversee all tasks relating to development in the small rural town CBDs (See Section 7.4.1.1 Chapter 7). The municipal urban regeneration entity will operate as outlined in Section 7.4.1.1 Chapter 7. The implementation of Thulamela Development and Revitalisation Strategy was challenged by political interference, lack of monitoring and evaluation systems, lack of policy alignment and poor governance and institutional capacity. Public entity and government business enterprise have adequate qualities, strengths and resilience to withstand and overcome these challenges (See Section 7.4.1.1 Chapter 7).

8.6.2. Review the current urban strategy to enhance policy alignment

The study found that the current urban regeneration strategy is limited and out-dated, never reviewed since its adoption in year 2011 despite numerous policy changes at local and national government and was not aligned with other policies and plans. The implications of the study findings are that current strategies are limited and outdated. The current urban regeneration strategy needs to be revised to enhance policy alignment and identify other funding modalities. More importantly, urban decay in the CBD has expanded to other parts affecting paths and nodes mostly. Therefore, the development proposals, policy interventions and focus areas of the regeneration strategy need to be re-looked and adjusted. This will ensure that development proposals and policy interventions become responsive to current and future challenges. To ensure and enhance policy alignment this study recommended that the regeneration strategy be subjected to review. This research also recommends that annual reviews of the comprehensive urban regeneration strategy be conducted for minor adjustment whilst more intensive and rigid reviews are recommended to take place every five years (See Section 7.4.1.1 Chapter 7).

The review of the strategy should note or focus on identification or consideration of other funding modalities to fund regeneration, policy development, clusters of urban decay in the CDB and key issues to be addressed within these three clusters of decay. Policy development may entail the development of policies such as but not limited to immovable property maintenance framework, infrastructure maintenance framework and monitoring and evaluation framework. In terms of key issues, the strategy may focus on issues such as but not limited to infrastructure maintenance including roads, streets, drainage catch basins, stormwater and drainage inlets; and landscaping including improvement of pedestrian movement network.

8.6.3. Mandatory inclusion of implementation plan and monitoring and evaluation framework
This study found that the implementation of Thulamela Development and Revitalisation Strategy was impeded by the lack of implementation plan and monitoring and evaluation systems (See Section 7.3.2 Chapter 7). To address these shortfalls this study recommends a mandatory inclusion of the urban regeneration strategy implementation plan and monitoring and evaluation framework. The municipal council may make the determination that the urban regeneration strategy only be approved provided that a credible implementation plan together with its monitoring and evaluation framework are annexed to the strategy. The mandatory inclusion of the urban regeneration strategy implementation plan and its monitoring and evaluation framework is instrumental towards ensuring that activities are implemented and completed according to agreed timeframes and progress is monitored accordingly. The monitoring and evaluation will also provide for annual review and major reviews every five years to ensure progression towards the realisation of urban regeneration strategy aims, objectives and goals.

8.6.4. Integrate old and new forms of stakeholder engagement

The study established that there was poor stakeholder engagement during the preparation of the Development and Revitalisation Strategy (See Section 7.3.1 Chapter 7). This resulted in relatively poor public buy-in and ownership of the strategy together with its development priorities. This research recommends an integrated approach to stakeholder engagement and involvement during preparation as well as implementation of the strategy. In addition to the traditional modes of public participation such as community meetings and newspaper advertisements, the study recommends the integration of these traditional modes with modern modes of engagement. Public engagements should extend to explore the use of community radio stations and social media platforms such as Twitter, Instagram and Facebook. It may also extend to include incentivising participation by calling for development proposals and awarding prizes to most exciting or promising proposals. The study recommends that during implementation public announcements be made to notify and update the public of project commencement, progress and status via Twitter, Facebook and Instagram. In this manner, the public will be interested, aware and informed of urban regeneration initiatives.

8.6.5. Explore the use of technology to track, record, and report decay

This study made use of the SW Maps mobile application; a free mobile geospatial data collector to record urban decay in Thohoyandou Town CBD. This study recommends that free technologies such as the SW Maps mobile application and other spatial applications be

integrated into the urban management system of Thulamela Local Municipality. These new mobile technologies are important tools that can be used to track, trace and record decay as well as report contraventions and infrastructure breakdowns. This research recommends that land use monitors and building inspectors in the municipality are equipped and utilise mobile geospatial data collector to record and report decay, contravention and poorly constructed buildings. This is a critical move towards curbing land use contraventions and lack of adherence to South African National Building Regulations (SANBS) and Thulamela Draft LUMS (2020). The mobile geospatial data collector application is user friendly and easy to integrate with ArcMap. This might prove significant beyond tracking decay but extend to monitoring progress of urban regeneration projects and urban management. However, the use of technology will prove fruitless without proper enforcement of By-Law and hefty penalties.

8.6.6. Introduce incentives for establishment of CBD improvement districts (CBD IDs)

This research found that the south-eastern district of the study area was not subjected to decay due to being privately managed. Therefore, this research recommends that private property owners within different districts of the CBD be encouraged to establish CBD IDs. The municipality may consider incentivising CBD IDs through property levy rebates and reduced property rates. Modern urban regeneration has evolved from being driven governments to acknowledging collaboration amongst the community, government, private sector and non-profit organisations (Yiannakou, 2020). This will potentially address issues of lack of property maintenance that have plagued the CBD for the past eleven years. Furthermore, this move will contribute positively towards improved levels of property maintenance as well as the overall well-being of the CBD.

8.7. Future Research Areas

This study explored a single dimension of decay which physical decay of the built environment. However, urban decay is multi-dimensional and bears with it social and economic implications for small towns. Therefore, future studies may look to explore socio-economic implications of urban decay in small rural towns. In terms of small town urban regeneration other studies may explore the overall socio-economic benefits ensuing from the implementation of urban regeneration strategies in small towns.

8.8. Conclusion

This research aimed to investigate the state of urban decay and recommend a framework for sustainable implementation of urban regeneration strategies in Thohoyandou Town CBD under

Thulamela Local Municipality in South Africa. The scope of this study stretched from the year 2011 to 2022. During this period (2011 – 2022) this study determined that empirically Thohoyandou town CBD grappled with urban decay despite the implementation Thulamela Urban Development and Revitalisation Strategy. The current urban regeneration strategy is out-dated and limited due to poor public participation, poor urban management and planning, poor service delivery, Covid-19 pandemic, implementation challenges caused by political interference, lack of monitoring and evaluation system, lack of policy alignment, and poor governance and inadequate institutional capacity linked to staff shortages with appropriate expertise. Evidently, urban decay is an abstraction which manifests despite intelligent policies and plans. Thulamela Local Municipality has brilliant policies and plans, but urban decay persists. This shows that overcoming decay is not about intelligent policies only but institutional implementation capacity, political will and commitment. To regenerate small rural towns attention needs to be directed towards strengthening urban competitiveness focusing on strategic determinants such as enabling effective governance (including cultivating political will), public-private cooperation, institutional flexibility and urban strategy. More importantly, successful regeneration of small towns requires resources, patience and commitment. This calls for a stronger political will, effective governance, public-private cooperation and institutional capacity to enable small rural town to remain viable and transform into viable, vibrant and liveable cities.

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APPENDIX 1: ETHICS APPROVAL CERTIFICATE

ETHICS APPROVAL CERTIFICATE

ETHICS APPROVAL CERTIFICATE

FACULTY OF SCIENCE, ENGINEERING AND AGRICULTURE
RESEARCH ETHICS COMMITTEE

NAME OF RESEARCHER/INVESTIGATOR: Philani Magubane

STAFF/STUDENT NO: 21016985

PROJECT TITLE: Urban Decay & Regeneration Strategies in Small Towns: A Case Study of Thohoyandou, South Africa

ETHICAL CLEARANCE NO: FSEA/22/URP/08/1707

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr E. Ingwani	University of Venda, Department of Urban and Regional Planning	Supervisor
Ms. S. Nyamwanza	University of Venda, Department of Urban and Regional Planning	Co-supervisor
Dr. F. Moffat	University of Venda, Department of Urban and Regional Planning	Co-supervisor

Type: Student research

Risk: Minimal risk to humans, animals, or environment (Category 1)

Approval Period: September 2022-May 2024

The Faculty Research Ethics Committee (FREC) of the Faculty of Science, Engineering and Agriculture hereby approves your project as indicated above.

General Conditions



University of Venda

PRIVATE BAG X5050, THOHOYANDOU, 09501, LIMPOPO PROVINCE, SOUTH AFRICA
TELEPHONE (015) 962 8504/8313. FAX (015) 962 9060
"A quality driven financially sustainable, Comprehensive University"

ETHICS APPROVAL CERTIFICATE

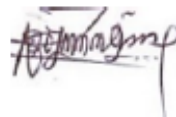
While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following.

- The project leader (principal investigator) must report in the prescribed format to the REC:
 - Annually (or as otherwise requested) on the progress of the project, and upon completion of the project
 - Within 48hrs in case of any adverse event (or any matter that interrupts sound ethical principles) during the project.
 - Annually, research projects may be randomly selected for auditing.
 - The approval applies strictly to the protocol as stipulated in the application form. Should a change to the protocol be deemed necessary during the project, the project leader must apply for approval of these changes before their implementation. Should there be a deviation from the study protocol, without the necessary approval for the change, the ethics approval is automatically forfeited.
 - The date of approval indicates the earliest date that the project may begin. Should the project have to continue after the expiry date; a new application must be made, and a new approval received before or on the expiry date.
 - In the interest of ethical responsibility, the FREC retains the right to:
 - Request access to any information or data at any time during the course or after completion of the project,
 - To ask further questions; Seek additional information; Require further modification or monitor the conduct of your research or the informed consent process.
 - withdraw or postpone approval if:
 - Any unethical principles or practices of the project are revealed or suspected.
 - It becomes apparent that relevant information was withheld from the REC or that information has been false or misrepresented.
 - The required annual report and reporting of adverse events was not done timely and accurately,
 - New institutional rules, national legislation or international conventions deem it necessary
-

ISSUED BY:
FACULTY OF SCIENCE, ENGINEERING AND AGRICULTURE RESEARCH ETHICS COMMITTEE

Date considered: September 2022

Chairperson: Prof. P.O Bessong



PRIVATE BAG X5050, THOHoyANDOU, 09501, LIMPOPO PROVINCE, SOUTH AFRICA
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APPENDIX 2 TURNIT IN REPORT

Urban Decay and Regeneration Strategies in Small Towns: A Case Study of Thohoyandou, South Africa

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APPENDIX 3: LANGUAGE EDITING REPORT

Language Editing Report

Date: 26 May 2023

To whom it may concern.

This letter serves to confirm that I, B N Rumutsa proofread and edited a dissertation entitled: “**URBAN DECAY AND REGENERATION STRATEGIES IN SMALL TOWNS: A CASE STUDY OF THOHOYANDOU, SOUTH AFRICA.**”, by Philani Brandon Magubane (Student Number, 21016985), to be submitted to the Department of Urban and Regional Planning, Faculty Of Science, Engineering And Agriculture, University of Venda.

I carefully read through the dissertation focusing on language and grammatical construction errors that needed corrections to the best of my ability. Neither the dissertation content nor the author’s intentions were altered in any way during the editing process.

Yours sincerely



B. N Rumutsa
(Language editor)

Email: brendarumucha@yahoo.com

APPENDIX 4: REQUEST TO CONDUCT RESEARCH IN THULAMELA LOCAL MUNICIPALITY

FACULTY OF SCIENCE, ENGINEERING, AND AGRICULTURE

Department of Urban and Regional Planning

To: The Municipal Manager
Thulamela Local Municipality

Date: 17 November 2022

**SUBJECT: REQUEST FOR PERMISSION TO CONDUCT A DISSERTATION
RESEARCH IN THE THULAMELA LOCAL MUNICIPALITY**

I refer to the above-mentioned subject and humbly request that you grant permission for Mr. Magubane P. Student Number:21016985 from the Department of Urban and Regional Planning, School of Environmental Sciences, to undertake dissertation research in your municipality. His research title: Urban decay and regeneration strategies in small towns: A case study of Thohoyandou, South Africa.

We will very much appreciate it if you allow him to conduct his research and request the help of other staff members to assist him.

Thank you in advance.



Dr. Emaculate Ingwani
Head, Urban, and Regional Planning



Private Bag X5050, Thohoyandou, 0950. Limpopo Province, South Africa
Telephone (015) 962 8635. Fax (015) 962 8597 Cell: 073 519 1522
Telephone (015) 962 9213. Fax: 086 569 7904 Cell: 073 965 6305
Email: emaculate.ingwani@univen.ac.za
Email: azwidowi.mashangu@univen.ac.za
Website: www.univen.ac.za

APPENDIX 5: PERMISSION TO CONDUCT RESEARCH IN THULAMELA LOCAL MUNICIPALITY



External Memo

Private Bag X5066
Thohoyandou
0950
Limpopo Province
Tel: 015 962 7500
Fax: 015 962 4020

Enq : Mbedzi T.A
Email : mbedzita@thulamela.gov.za
Ref : 7/5/2
Date : 02/05/2023

TO: University of Venda
Department of Urban and Regional Planning
Private Bag X5050
Thohoyandou
0950

Tell : 015 962 8585

RE: REQUEST FOR PERMISSION TO CONDUCT AN ACADEMIC RESEARCH IN THULAMELA LOCAL MUNICIPALITY.

With the reference to the above-mentioned matter, kindly note that Thulamela Local Municipality has acknowledged the receipt of your request of permission for Mr. Magubane P to conduct his Master's degree research within the Department of Planning and Development, Thulamela Local Municipality.

1. Please note that your request has been granted to assist Mr. Magubane P on his research dissertation titled: Urban decay and regeneration strategies in small towns: A case study of Thohoyandou, South Africa.
2. Wishing the student all the very best for her research dissertation
3. If you need more clarity on the above matter, please feel free to consult Thulamela Local Municipality, Planning and Development on 015 962 7518
4. Hoping you find the above in order



MAKUMULE M. T
MUNICIPAL MANAGER



Date

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APPENDIX 6: KEY INFORMANTS FROM LOCAL MUNICIPALITY INTERVIEW GUIDE

FACULTY OF SCIENCE, ENGINEERING AND AGRICULTURE DEPARTMENT OF URBAN AND REGIONAL PLANNING INTERVIEW GUIDE

1. What are general urban management and development challenges, issues, and problems that have left Thohoyandou Town CBD vulnerable to decay?
2. In your opinion, what has caused urban decay in Thohoyandou Town CBD?
3. In your opinion, do you think the historical background of Thohoyandou Town has exposed Thohoyandou Town CBD to decay?
4. Previously, have there been any urban regeneration plans or strategies for Thohoyandou Town CBD?
5. Please name and provide the objective of past and present urban regeneration intervention including supporting policies for Thohoyandou Town CBD.
6. Were these urban regeneration plans or strategies implemented successfully?
7. What were the main challenges during conception, formulation, and implementation of these plans or strategies?
8. Who were key stakeholders identified in these urban regeneration plans or strategies?
9. Was the general public involved in conceptualisation and implementation of these plans or strategies and how was public participation conducted?
10. What were challenges during public participation processes?
11. In your view, have the interventions to regenerate Thohoyandou Town CBD been successful in some or all aspects?
12. Do you think Thulamela municipality has prioritised addressing urban decay in Thohoyandou Town CBD?

THANK YOU FOR YOUR PATICIPATION.

APPENDIX 7: QUESTIONNAIRE

QUESTIONNAIRE FOR THOHOYANDOU CBD USERS

My name is Philani Magubane, a Master's Degree student in Urban & Regional Planning at the Faculty of Science, Engineering & Agriculture, University of Venda. You are kindly requested to participate in my study titled 'Urban decay and Regeneration Strategies in Small Towns: A Case Study of Thohoyandou, South Africa.' The study is conducted in partial fulfilment of the above-mentioned master's degree. The objective of the questionnaire is to explore your personal view and perspective of urban decay and regeneration in Thohoyandou Town CBD. Please note your participation is voluntary and you can withdraw at any given time. The data collected will be treated with utmost confidentiality and its use is limited to this study. The target audience for this questionnaire are Thohoyandou Town CBD Users.

Kindly indicate by selecting "YES" below that you give consent to participate in the study.

Yes

No

Section A: Socio-Demographic Information

Instructions: Please select the appropriate response where options are provided

1. Gender

Female

Male

2. Age group

18 - 24 years

45 - 54 years

≥ 55 years

25 - 34 years

≥ 55 years

3. Home Language

Tshivenda

Sepedi

Xitsonga

Other (Please specify below)

4. Where do you reside?

5. For how long have you been using Thohoyandou CBD?

1 - 3 years

7 - 10 years

4 - 6 years

> 10 years

6. How often do you visit/use Thohoyandou Town CBD per week?

Once a week

4 - 6 times a week

2 - 3 times a week

Daily

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Section B: Tracing, characterising and spatially mapping areas mostly affected by urban decay in Thohoyandou Town CBD

7. To what extent do you agree/disagree that roads/streets are displaying the following characteristics in Thohoyandou Town CBD?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Gravel roads/streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissolute roads/streets (unusable and abandoned roads/streets)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poorly constructed roads/streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potholes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invisible or no road markings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invisible or no road signage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. To what extent do you agree/disagree that pedestrian sidewalks, walkways, and passages are displaying the following characteristics in Thohoyandou Town CBD?

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Poorly constructed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unsurfaced/gravel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissolute and unusable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Narrow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissolute and unusable in event of heavy rainfall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. How good/poor is the level of maintenance of the following in Thohoyandou Town CBD?

	Very poor (1)	Poor (2)	Somewhat poor (3)	Average (4)	Somewhat Good (5)	Good (6)	Very good (7)
Public and private buildings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public and private properties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads and streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stormwater drainage infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus ranks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxi ranks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestrian sidewalks, walkways, and passages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public open spaces (parks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public ablution facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Please comment on the usability of the following public infrastructure in the event of heavy rains in Thohoyandou Town CBD

	Very poor (1)	Poor (2)	Somewhat poor (3)	Average (4)	Somewhat good (5)	Good (6)	Very good (7)
Roads and streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus ranks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxi ranks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public parking areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestrian sidewalks, walkways, and passages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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11. Please comment on the overall conditions of the following in Thohoyandou Town CBD

	Very Poor (1)	Poor (2)	Somewhat poor (3)	Average (4)	Somewhat good (5)	Good (6)	Very Good (7)
Public and private buildings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public and private properties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads and streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stormwater drainage infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sewer infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus ranks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxi ranks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestrian sidewalks, walkways, and passages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public ablution facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section C: Causes of urban decay in Thohoyandou CBD

12. How likely that the following contributed to the poor conditions of some building structures in Thohoyandou Town CBD?

	Extremely unlikely (1)	Unlikely (2)	More or less unlikely (3)	Neutral (4)	More or less likely (5)	Likely (6)	Extremely likely (7)
Lack of maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of inferior construction material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vandalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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13. How likely that the following contributed to the poor conditions of some public amenities such as taxi ranks, bus ranks, and ablution facilities in Thohoyandou Town CBD.

	Extremely unlikely (1)	Unlikely (2)	More or less unlikely (3)	Neutral (4)	More or less likely (5)	Likely (6)	Extremely likely (7)
Lack of maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of inferior construction material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor/inadequate stormwater systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vandalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Littering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. How likely that the following contributed to the poor conditions of some roads/streets in the CBD?

	Extremely unlikely (1)	Unlikely (2)	More or less unlikely (3)	Neutral (4)	More or less likely (5)	Likely (6)	Extremely likely (7)
Lack of maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of inferior construction material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor/inadequate stormwater drainage systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor/inadequate sewer systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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15. How likely that the following contributed to poor conditions of some pedestrian sidewalks, walkways, and passages in Thohoyandou Town CBD?

	Extremely unlikely (1)	Unlikely (2)	More or less unlikely (3)	Neutral (4)	More or less likely (5)	Likely (6)	Extremely likely (7)
Lack of maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of inferior construction material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor/inadequate stormwater systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vandalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. How likely that the following contributed to poor conditions in some parts of Thohoyandou Town CBD?

	Extremely unlikely (1)	Unlikely (2)	More or less unlikely (3)	Neutral (4)	More or less likely (5)	Likely (6)	Extremely likely (7)
Poor planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor service delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of poor construction material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor governance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Covid-19 Pandemic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abandoned buildings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unoccupied buildings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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17. Please rate Thulamela overall service delivery standards and performance in Thohoyandou Town CBD across the following key public service delivery areas

	Very Poor (1)	Poor (2)	Somewhat poor (3)	Average (4)	Somewhat Good (5)	Good (6)	Very Good (7)
Waste collection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potholes repair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walkways/Pavements repair and maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads/Streets signage and marking repair and maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sewer infrastructure repair and maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stormwater drainage infrastructure repair and maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. In your opinion, are there other factors that might have contributed to poor conditions in Thohoyandou CBD? Please list these factors, if any

Section D: Urban regeneration efforts

19. Please rate the development and improvement of Thohoyandou CBD over the past 12 years

- Very Poor (1)
- Poor (2)
- Somewhat poor (3)
- Average (4)
- Somewhat good (5)
- Good (6)
- Very Good (7)

20. Are there any other issues or problems related to urban decay and regeneration in Thohoyandou Town CBD that you would like to share? Please share below.
