

An exploration of the role of waterfront development in urban regeneration: Mossel Bay as case study

R le Roux
21621772

Dissertation submitted in fulfilment of the requirements for the degree *Magister Artium et Scientiae* in **Urban and Regional Planning** at the Potchefstroom Campus of the North-West University

Supervisor: Dr JE Drewes

Co-supervisor: Me K Puren

May 2015

Acknowledgements

I wish to express my gratitude to the following persons:

- God, for guiding me and providing me with the much needed strength and determination to complete this dissertation.
- My supervisor, Dr. Ernst Drewes, and my co-supervisor, Karen Puren, for providing me with much needed leadership and guidance to complete the dissertation study successfully.
- My parents, Jurie and Ronel, and the rest of my family for their continued support throughout my studies.
- Jean Du Toit for assisting me through the ups and downs during this research.
- My acquaintances and friends for all their support during my studies.

Abstract

This study evaluated the role of waterfront development in urban regeneration, as waterfronts are used as the element that re-establishes the physical links between parts of the city. Consequently, waterfront development is an essential open resource where visitors can carry out diverse social and cultural activities on a daily basis. Furthermore, CBDs benefit from lively waterfronts, which become popular tourist attractions. There is a dire need for urban regeneration.

The study focuses on the evolution of waterfront development through the urban morphology model to identify the starting point of central places and the factors that may have an effect on the growth of a city. Just as urban regeneration forms part of the evolution of cities and waterfronts, and as the cities and waterfronts developed so did the term urban regeneration evolve to its present form. Thus, one has to understand what components have an influence on the term urban regeneration and what the benefits are. Thereafter, the different aspects of urban development and urban regeneration are incorporated into waterfront development to understand the role of waterfront development in urban regeneration.

As waterfront development took place, the first port was developed to ensure transportation of goods from one place to the next. Subsequently, the role of the waterfront became economically driven. As time passed and the old harbour fronts fell into disuse, a new role for the waterfront was needed, and the new role came with waterfront regeneration. Historically, waterfront regeneration was only seen as imperative when a waterfront area is critical for the growth of the city. Notably, when there is no use for the area and the city is in the decline period, waterfront regeneration will be a priority.

Consequently, the empirical study focused on exploring this role of waterfront development by means of two international case studies (Baltimore Inner Harbour, Toronto Harbour Front) and two national case studies (V& A Waterfront, Mossel Bay CBD and Port Precinct Plan). A qualitative approach was selected because it focuses on collecting and analysing information in as many forms as possible. Furthermore, a qualitative approach aims to achieve an in-depth understanding of the matter, which is important to allocate the role of waterfront development in urban regeneration. As the study focuses on understanding the role of waterfront development as part of urban regeneration within cities, it explores the methodological framework of case studies.

The case study approach involves one or more circumstances within a bounded system. As some of the case studies can be irrelevant to a study, the qualitative approach was appropriate

for this study, because it focuses on eliminating unwanted case studies. This is important to ensure that case studies do not influence the result. To ensure that the relevant information is selected, the multiple case study design was used.

The study concludes that waterfront development has three primary roles in urban regeneration and that these roles have evolved over time. In conclusion, the role of waterfront development is not only economically motivated, but also environmentally and socially significant.

Keywords: waterfront, waterfront development, urban regeneration, central business district (CBD), agglomeration, land rent, shopping centres, urban morphology models

Opsomming

Hierdie studie het ten doel gehad om die rol van waterfront-ontwikkeling as deel van stedelike vernuwing te evalueer. Een voorbeeld daarvan is wanneer waterfronte gebruik word as die element van hervestiging wat die fisiese skakeling tussen die dele van die stad bemiddel. Waterfront ontwikkeling is dus 'n noodsaaklike hulpbron waar besoekers op 'n daaglikse basis aan diverse sosiale en kulturele aktiwiteite deelneem. Verder baat SBDe by lewendige waterfronte en word dit gewilde gebiede vir toerisme-aantreklikhede in gevalle waar daar 'n hoë behoefte aan stedelike vernuwing is.

Daarom fokus die studie op waterfront-ontwikkeling aan die hand van die stedelike morfonologie-modelle, wat help met die uitkenning van die beginpunt van sentrale plekke en die faktore wat 'n uitwerking op die groei van 'n stad het. Soos stedelike herlewing deel vorm van die evolusie van stede en waterfronte, en die stede en waterfronte ontwikkel, so het die term stedelike vernuwing ontwikkel tot sy huidige vorm. Die studie poog dus ook om te verstaan watter aspek 'n invloed het op die term stedelike vernuwing en wat die voordele daarvan mag wees. Daarna word verskeie aspekte van stedelike ontwikkeling en stedelike vernuwing in waterfront ontwikkeling geïnkorporeer om die rol van waterfront ontwikkeling in stedelike vernuwing te verstaan.

Waterfront-ontwikkeling het begin toe die eerste hawe ontwikkel is om goedere te vervoer van een plek na die volgende. Dit het aanleiding daartoe gegee dat die rol van waterfronte aanvanklik ekonomies gedrewe was. Met die verloop van tyd en ou hawens in onbruik geval het, het 'n vraag ontstaan na 'n nuwe rol vir die waterfront, en die nuwe rol het saam met waterfront-hernuwing gekom. Histories is waterfront-vernuwing slegs nodig geag wanneer die waterfront in die belang van die groei van die stad is. Veral wanneer daar geen gebruik vir die gebied is nie en die stad 'n tydperk van veral beleef, is waterfront-herlewing 'n prioriteit beskou. Daarom was dit nodig om 'n nuwe rol deur die gebruik van waterfront-vernuwing te ondersoek.

Die empiriese studie het gevolglik gefokus daarop om hierdie nuwe rolle van waterfront-ontwikkeling te ondersoek deur die gebruik van twee internasionale gevallestudies (Baltimore Inner Harbour, Toronto Harbour Front) en twee nasionale gevallestudies (V & A Waterfront, Mosselbaai CBD en die Port Precinct Plan).

Die studie het 'n kwalitatiewe benadering gevolg omdat dit fokus op die insameling en ontleding van inligting in soveel vorme as moontlik. Verdere rede is dat 'n kwalitatiewe benadering gefokus is daarop om die doel van die studie in diepte te verstaan, wat baie

belangrik is as deel van 'n ondersoek na die rol van waterfront-ontwikkeling in stedelike vernuwing. Omdat die studie daarop fokus om die begrip van die rol van waterfront ontwikkeling in stedelike vernuwing te verstaan, is die studie se metodologiese raamwerk gefokus op die ondersoek van gevallestudies.

Die gevallestudie benadering bestudeer een of meer omstandighede binne 'n geslote stelsel. Aangesien sekere gevallestudies irrelevant kan wees vir hierdie studie, is die kwalitatiewe benadering geskik, omdat dit daarop fokus om die gevallestudies uit te skakel. Dit is belangrik om te verseker dat gevallestudies nie die resultaat beïnvloed nie. Om verder te verseker dat die relevante inligting gekies is, is die veelvuldige gevallestudie as metode gebruik.

Die studie toon aan die hand van die gevallestudies dat waterfront ontwikkeling drie primêre rolle vervul in stedelike vernuwing, en dat hierdie rolle met die verloop van tyd ontwikkel het. Uiteindelik vervul waterfronte nie slegs 'n ekonomiese rol nie, maar ook omgewings- en sosiale rolle.

Table of Contents

Acknowledgements	i
Abstract.....	ii
Opsomming.....	iv
Chapter 1: Introduction	1
1.1 Research orientation.....	1
1.2 Problem statement	1
1.3 Purpose and aims of the study	2
1.4 Methodology	3
1.4.1 Literature review	3
1.4.2 Empirical study	4
1.5 Structure and argument of the study.....	4
Chapter 2: The use of urban development theories in waterfront regeneration	7
2.1 Introduction.....	7
2.2 Central place theory.....	7
2.3 Economic factors that have an influence on the location of the business or marketplace.....	9
2.3.1 Transportation	10
2.3.2 Land rent	11
2.3.3 Labour	12
2.3.4 Infrastructure	12
2.3.5 Market area	12
2.3.6 Agglomeration	13
2.4 Urban morphology models.....	15

2.4.1	The star-shaped city	15
2.4.2	Concentric zone model	16
2.4.3	Sector model	17
2.4.4	Multiple nuclei concept	19
2.4.5	The South African model (Apartheid era model)	21
2.5	Land use planning	23
2.5.1	Land use zones	23
2.6	Conclusion.....	25
Chapter 3: Urban regeneration paradigms.....		27
3.1	Introduction.....	27
3.2	Urban regeneration paradigms	27
3.2.1	The first paradigm: Reconstruction (1950's)	32
3.2.2	The second paradigm: Revitalisation (1960's)	34
3.2.3	The third paradigm: Renewal (1970's)	35
3.2.4	The fourth paradigm: Redevelopment (1980's).....	39
3.2.5	The fifth paradigm: Urban regeneration (1990's).....	41
3.2.6	Summary of the evolution of urban regeneration	43
3.3	What is meant by the term urban regeneration?	43
3.4	New integrated urban regeneration paradigm.....	44
3.4.2	Role players of the integrated urban regeneration paradigm.....	45
3.4.3	Urban regeneration principles for the integrated era	46
3.5	Conclusion.....	48
Chapter 4: An overview of waterfront development with reference to urban development and urban regeneration		52

4.1	Introduction.....	52
4.2	Constructing the term waterfront regeneration	52
4.2.1	Waterfront.....	53
4.2.2	Waterfront development	53
4.2.3	Waterfront regeneration.....	53
4.3	The development of waterfronts	54
4.3.1	Origin of waterfronts	54
4.3.2	Waterfront and urban development.....	55
4.3.3	Waterfront regeneration.....	64
4.4	Role players in waterfront regeneration	67
4.5	Advantages and disadvantages of urban waterfront regeneration	69
4.6	Conclusion.....	71
Chapter 5: Case studies: International and South African waterfront developments		74
5.1	Introduction.....	74
5.2	Background of case studies as a research method.....	75
5.2.1	Case studies as research method.....	77
5.2.2	Process of selecting and evaluating a case study	79
5.3	Case studies selected.....	81
5.4	International case studies	82
5.4.1	Case study one: Baltimore –inner harbour, Maryland – USA	82
5.4.2	Case study two: Toronto Harbour Front – Canada.....	91
5.5	South African waterfronts	98
5.5.1	Case study three: Victoria and Alfred Waterfront Development – Cape Town.	98

5.6	Conclusion.....	105
Chapter 6: Case Study of Mossel Bay Central Precinct Plan		107
6.1	Introduction.....	107
6.2	Background on Mossel Bay	107
6.3	National and provincial policies and legislation	111
6.4	Proposed phases of improvement and development	116
6.4.1	Phase one: Short-term goals – 1-3 years.....	120
6.4.2	Phases Two: Medium-term goals – 3-8 years.....	123
6.4.3	Phase Three: Long-term goals – over 8 years	124
6.5	Role players in the formulation of the Mossel Bay CBD and Port Precinct Plan (MBCPPP).....	124
6.5.1	Public organisation	126
6.5.2	Public enterprises	126
6.5.3	Public welfare organisations	126
6.5.4	Private enterprises.....	127
6.6	Advantages and disadvantages of the Mossel Bay CBD and Port Area Precinct Plan	127
6.7	Land use proposals and parameters.....	132
6.8	Economic, social and environmental improvements	133
6.8.1	Proposed economic improvements.....	134
6.8.2	Proposed environmental improvements.....	136
6.8.3	Proposed social improvements.....	137
6.9	Mossel Bay case study exploration.....	139
6.10	Conclusion.....	142

Chapter 7: Synthesis and planning recommendations	143
7.1 Introduction.....	143
7.2 Synthesis.....	143
7.2.1 The economic role of waterfront development in urban regeneration.....	143
7.2.2 The environmental role of waterfront development in urban regeneration.....	144
7.2.3 The social role of waterfront development in urban regeneration.....	145
7.3 Planning recommendations	147
7.3.1 Proposals for ensuring optimisation of the multi-faceted role of waterfront in urban regeneration	148
7.3.2 Recommendations when one or the other roles of the waterfront are absent..	152
7.4 Implementation	153
Bibliography	159
Annexure J: Current and proposed land uses.....	173

List of Tables

Table 3. 1:	The evolution of urban regeneration paradigms	29
Table 3. 2:	Role players to include in the modern era of urban regeneration.....	45
Table 3. 3:	Robert and Sykes Principles	46
Table 4. 1:	Waterfront development time frame in relation to urban development theories	59
Table 4. 2:	Social qualities of waterfront regeneration.....	66
Table 4. 3:	Advantages and disadvantages of urban waterfront regeneration	70
Table 4. 4:	Phases of waterfront regeneration	73
Table 5. 1:	Types of case studies	77
Table 5. 2:	Baltimore Inner Harbour integration tools	90
Table 5. 3:	Toronto Harbour Front integration tools.....	97
Table 5. 4:	V& A Waterfront integration tools	104
Table 6. 1:	Relevant Policies and Legislations of South Africa.....	112
Table 6. 2:	Implementation tools - Annual and 5-year budgets.....	117
Table 6. 3:	Multi-Disciplinary Team.....	125
Table 6. 4:	Advantages and disadvantages of MBCPPP	128
Table 6. 5:	Mossel Bay CBD and port precinct plan integration tools	140
Table 7. 1:	Factors that should be present in waterfront development in urban regeneration.....	148
Table 7. 2:	Factors to consider when one role is absent	152

List of Figures

Figure 1. 1:	Structure of the dissertation study (Source: Own construction)	5
Figure 2. 1:	Central Place Theory (Source: Beavon, 1977: 29)	9
Figure 2. 2:	Concentric circles of transportation cost (Source: Adapted and constructed from Sinclair, 1967: 73)	10
Figure 2. 3:	Agglomeration benefits (Source: Weber, 1929: 133)	14
Figure 2. 4:	Star-shaped city (Source: Adapted from Bollens and Schmandt, 1965: 159)	16
Figure 2. 5:	Concentric zone concept (Source: Adapted and constructed from Burgess, 1925: 51)	17
Figure 2. 6:	Sector model (Source: Adapted and constructed from Harris and Ullman 1945: 13)	18
Figure 2. 7:	Multiple nuclei concept Source: Adapted and constructed from Harris and Ullman (1945: 13)	19
Figure 2. 8:	The apartheid city model Source: Simon (1989: 193)	22
Figure 3. 1:	Neighbourhood schemes housing Source: City of Bradford MDC (2012: 7)	36
Figure 3. 2:	Europe Real GDP, 1950-89 Source: Backhouse (1991: 4)	38
Figure 3. 3:	The growth of the European GDP during the 1950s-1990s from Backhouse (1991: 5).	40
Figure 4. 1:	Settlement of the port Source: Adapted and constructed from Wrenn (1983: 10-11).	55
Figure 4. 2:	Establishment of the port Source: Adapted and constructed from Wrenn (1983: 10-11).	56
Figure 4. 3:	City- waterfront detachment (Source: Adapted and constructed from Wrenn, 1983: 10-11).	57

Figure 4. 4:	Decline of the waterfront (Source: Adapted and constructed from Wrenn, 1983: 10-11).....	58
Figure 4. 5:	Rediscovery of the harbour front (Source: Adapted and constructed from Wrenn, 1983: 11).	65
Figure 4. 6:	Role players and their responsibilities Source: Huang <i>et al.</i> (2011: 385).	67
Figure 5. 1:	Illustration of the comparison between qualitative and quantitative research approaches Source: Adapted and constructed from Creswell (2007) and Kumar (2014: 379).	76
Figure 5. 2:	Baltimore Harbour Front location Source: Adopted and construction from Google Maps (2015a).	82
Figure 5. 3:	Baltimore Inner Harbour before Charles Centre & Harbour place Source: Urban Tick (2011)	83
Figure 5. 4:	The positive effects on the Baltimore C.B.D. identified through hot spots (Source: Schumacher & Leitner, 1999)	87
Figure 5. 5:	Harbour Place Amphitheatre (Source: Anon, 2014).....	88
Figure 5. 6:	Existing and the new simulation of the proposed redevelopment of the Oliver neighbourhood (Source: Cavicchia, 2004: 115)	89
Figure 5. 7:	Toronto Harbour Front (Source: Adapted from Google Maps, 2015b).	92
Figure 5. 8:	Toronto Harbour 1870 (Source: Flack, 2011)	93
Figure 5. 9:	Toronto Music Garden (Source: Harbour Front Centre, 2014).....	96
Figure 5. 10:	Cape Town harbour front (Source: Adopted and construction from Google Maps, 2015c).....	99
Figure 5. 11:	The old V & A Waterfront - Union Castle 1905 (Source: Coetzee, 2015)....	100
Figure 5. 12:	Different zones in waterfront development (Source: Adopted and construction from Google Maps, 2015m).....	106
Figure 6. 1:	Mossel Bay CBD and harbour front (Source: Adopted and construction from Google Maps, 2015d).....	108

Figure 6. 2:	Decentralised nodes in the Mossel Bay area (Source: Adapted from Urban-Econ: Development Economist (2012: 18) and Google Maps (2015e).	110
Figure 6. 3:	Urban design proposal (Source: WM de Kock Associates & DPTPS, 2013).....	121
Figure 6. 4:	Waterfront and pedestrian walkways (Source: Adopted and constructed from Google Maps, 2015f).....	134
Figure 6. 5:	Walkways guiding pedestrians to the sea.....	135
Figure 6. 6:	Proposed pedestrian walkways (Source: WM de Kock Associates & DPTPS, 2013).....	137
Figure 6. 7:	Park located next to Diaz Museum (Source: Adopted and constructed from Google Maps, 2015g).....	138
Figure 6. 8:	The different roles in balance (Source: Own construction)	140
Figure 7. 1:	Different zones in waterfront development (Source: Adopted and constructed from Google Maps, 2015h).	147
Figure 7. 2:	Waterfront area zones (Source: Adopted and construction from Google Maps, 2015i)	154
Figure 7. 3:	Different uses of within the area of linkage (Source: Adopted and construction from Google Maps, 2015j).....	155
Figure 7. 4:	Area of transition (Source: Adopted and construction from Google Maps, 2015k).....	156
Figure 7. 5:	Different areas within the CBD (Source: Adopted and construction from Google Maps, 2015l).....	157
Figure 7. 6:	Different policies and legislation working in unity (Source: Own construction)	158

Chapter 1: Introduction

1.1 Research orientation

Most coastal towns historically had harbour fronts that formed part of the Central Business District (CBD). Having these harbour fronts was seen as a competitive advantage for businesses and industries since they could locate along the harbour front (Marshall, 2001: 5). Thus, CBDs benefit from lively waterfronts that become popular areas for tourist attractions especially where there was a substantial need for urban revitalisation. In general, the harbour front was economically driven, but through the centuries this function has changed, influencing the growth of harbour cities. When a harbour was no longer active, the city's CBD declined and detached from the harbour front. For instance, Baltimore Inner Harbour lost its role as an economic sector, resulting in its decline and detachment from the city (Waterfront Partnership of Baltimore, Inc., 2015). The Toronto Harbour Front took a similar path when it was cut off from the rest of the city by a railway line (Lehrer & Laidley, 2008: 789). Therefore, a new role had to be found for the harbour front and over the years regeneration led to this new role, namely waterfronts. The waterfront comprises of social, environmental and economic components, leading to a more integrated city. This steered development in the direction of waterfront regeneration to provide integration with regeneration of the city. In both of these cases, the waterfronts played a significant role in the success of regenerating the city.

Therefore, the study explores the role of waterfront development in urban regeneration by specifically using Mossel Bay as a case study. Three main themes are investigated, namely urban development theories, urban regeneration and waterfront development. The growth of a city is influenced by various factors, as explained by urban development theories. The term urban regeneration evolved to describe the social, economic and environmental components affecting a city's growth especially in the case of coastal cities, waterfront development could impact the growth of the city.

1.2 Problem statement

The major problem defined in this study revolves around the role of waterfront development in urban regeneration, because waterfronts are essential open resources where visitors can carry out diverse social and cultural activities on a daily basis (United States Environmental Protection Agency, 2013: 1).

Waterfronts as tools for urban regeneration seem to be underutilised in the South African context. In a national context, South Africa has sixteen port terminals that are in use (Transnet, 2013). The Victoria and Alfred (V& A) waterfront is seen as a first link between the harbour front and the CBD. This waterfront is a proper South African example of how a waterfront can influence the urban regeneration of a city. The V& A Waterfront was used in the re-establishment of a physical link between the Cape Town CBD and the V& A Waterfront. The link assisted in creating a quality and lively environment using social, environmental and economic facilities as focus points (Van Zyl, 2005: 12). Dewar (2012: 97) argues that the V& A Waterfront was one of the most significant developments to be included in the regeneration of the Cape Town CBD. Furthermore, Pirie (2007: 9) states that the V& A Waterfront project focused on the urban regeneration of the CBD of Cape Town, and not so much on the harbour front. This need for urban regeneration is common in South Africa because of the problem that the CBD loses its value and purpose.

These secondary centres are becoming more and more popular in cities. Day (2004: 133) explains that the area has to evolve, or the area will become uninteresting and lifeless, that is currently the case in several South African harbour fronts. Therefore, the main problem statements for this study are: Waterfront development (ports) has become detached from the CBDs and; in the past, the cities depended on the CBD as the element of providing for economic growth and social interaction.

It is clear that waterfront development has become an important resource to ensure that the physical link between the CBD and the harbour front is in place. Therefore, it is critical to understand the role that urban regeneration of waterfronts plays in the development of the city.

1.3 Purpose and aims of the study

The purpose of the research is to explore the role of waterfront development in urban regeneration in South African cities, with special reference to Mossel Bay waterfront. The aim is to focus on the fact that waterfronts are used to re-establish physical links between parts of the city.

The following are secondary objectives of the study:

- To give an overview of urban development theories and urban regeneration to contextualise the link between these theoretical concepts

- To give a historical overview of the development of waterfronts in cities and to understand the growth of waterfronts;
- To determine the role of waterfront development in urban development;
- To determine the link between waterfront development and urban regeneration;
- To identify specific zones within waterfronts development and areas surrounding them;
- To do an in-depth study of Mossel Bay's waterfront as a case study to explore its role in the development of the city;
- To formulate a possible strategy for Mossel Bay waterfront development as instrument for urban regeneration.

These objectives and aims will create a better understanding of the role of waterfront development in urban regeneration in South Africa. The following themes are explored based on the above-mentioned aims: the linkage between the different theoretical concepts, the historical overview of waterfronts, the different zones within waterfront development, the role of Mossel Bay on the development of the city; and lastly, the formulation of a possible strategy for urban regeneration.

1.4 Methodology

The study will include a literature review and an empirical study.

1.4.1 Literature review

The theory and background of urban regeneration and development are examined by means of a literature study. The following databases and sources were assessed to establish the availability of material for this dissertation: (i) EBSCO's Academic Search Premier (ii) SA-ePublications (iii) Google Scholar (iv) ScienceDirect (v) NWU Library Catalogue (vi) Newspaper articles via SAMedia and (vii) Mossel Bay CBD and Port Precinct Plan.

The literature review includes an overview of waterfronts and the role in urban development. The history of national and international waterfronts is described, as well as the role of waterfronts in urban development(1), the use of urban development theories like deindustrialisation, economic and agglomeration factures (2), and the concept of urban regeneration (3), as well as the evolution of waterfronts (4).

Subsequently, the literature study will lay the foundation for the empirical study using the above-mentioned resources.

1.4.2 Empirical study

1.4.2.1 Research approach

A qualitative approach is used in this dissertation. The reason for using this type of approach is that it focuses on collecting and analysing information in as many forms as possible, although this approach is primarily non-numeric (Kanbur, 2001:12). A qualitative approach aims to achieve an in-depth understanding of the study, rather than a general overview (Blaxter *et al.*, 2010:61). The study explores the role waterfronts play in cities and the surrounding environment. The methodological framework selected for this dissertation study is case studies.

1.4.2.2 Research method

The case study involves the study of an issue that is explored through one or more circumstances within a bounded system (Creswell, 2007: 73). Case studies can have a quantitative or qualitative approach, of which the qualitative approach is appropriate for this study because it focuses on eliminating unwanted case studies (Creswell, 2007: 73). This approach is essential to ensure that uninformative or case studies with no value do not influence the result. Case studies can take the form of instrumental, intrinsic or multiple case studies, and a multiple case study design is used (Herriott & Firestone, 1983) for this research.

The main case study is the Mossel Bay harbour front. This city was selected because it is the most recent waterfront development that is taking place in South Africa. It implies that the case study is considered as an instrumental study.

1.5 Structure and argument of the study

The research consists of eight Chapters. These Chapters are arranged as follows: The first four Chapters form the literature study, including this Chapter. The subsequent three Chapters form the empirical study, which focuses on providing the methods and approaches to the case studies and the case studies following that. Finally, the last Chapter offers the planning recommendations and findings of the research (refer to Figure 1. 1).

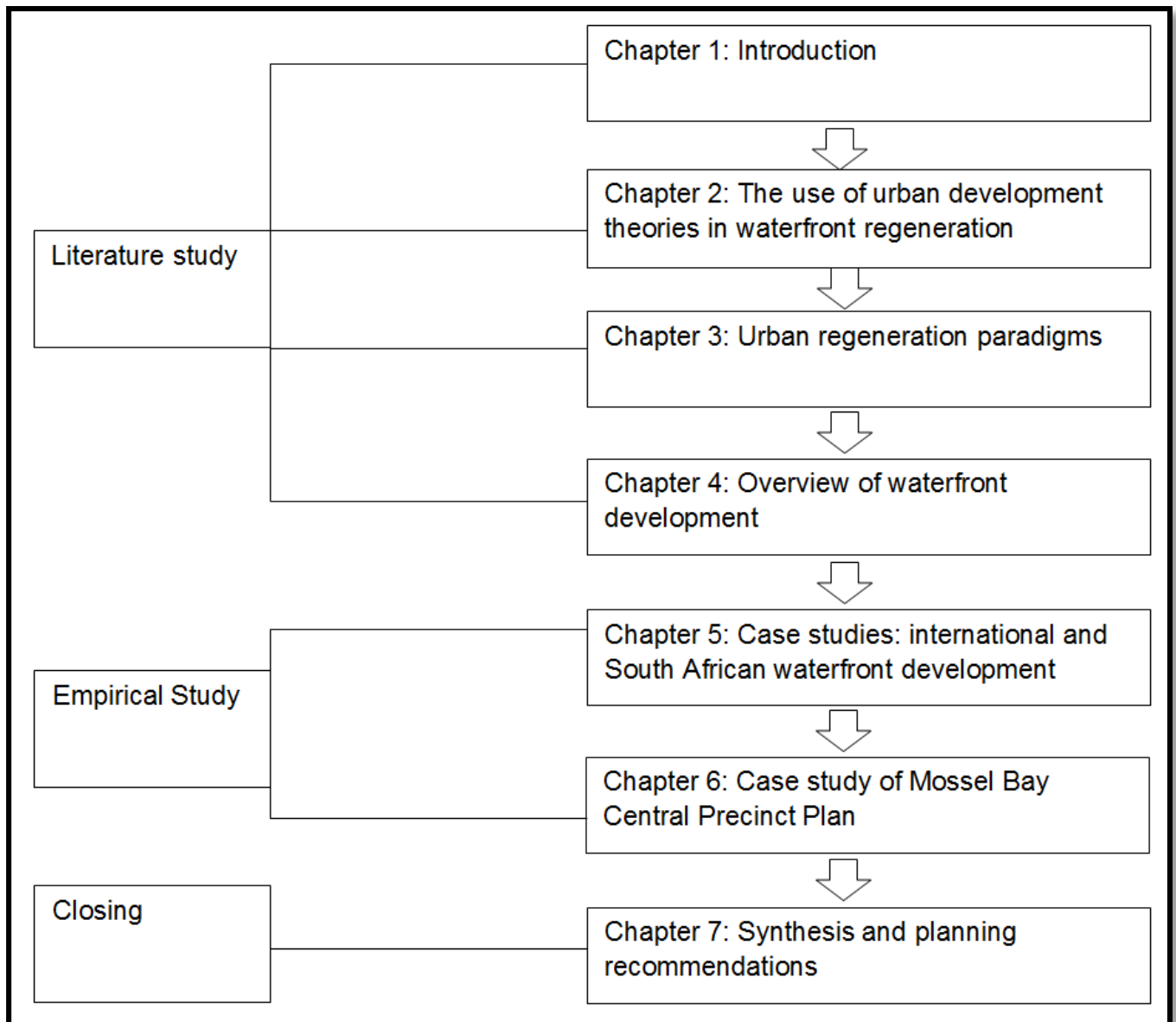


Figure 1. 1: Structure of the dissertation study (Source: Own construction)

As mentioned, Chapter two lays the foundation of urban development theories used to understand the physical growth of a city. In order to clarify the role of a waterfront in urban growth of the city, the focus is firstly on the term *central place*. Secondly, the focus is on the economic factors that have an influence on the location of the marketplace. The overall focus is on the development of cities and waterfronts as a whole through the urban morphology models. One example is the star-shaped city of Hurd, as well as the different land use zones that are located within the urban development of waterfronts. This foundation will assist with an

understanding of where the term urban regeneration originated from and how it connects with the urban form of cities and waterfronts.

The third Chapter focuses on the evolution of the term urban regeneration through different paradigms by taking a look how the term evolved, and by examining how to understand the components that are involved. The term urban regeneration is thoroughly defined, as well as the role of urban regeneration in the new integrated urban regeneration of the new millennium. Finally, the link between urban regeneration and waterfront development is established.

Chapter four is the core of the literature study. This Chapter explains the development and history of waterfronts, as well as the components that contributed to the decay of waterfronts until urban regeneration was introduced to the city. This Chapter also includes the difference between waterfronts; waterfront development and waterfront regeneration. Subsequently, the focus is to identify the different role players, advantages and disadvantages of waterfront development. Finally, the literature study provides much-needed information of how cities and waterfronts can evolve through urban regeneration.

Chapter five is the empirical study and first focuses on the different research methods and the approach that best fits the dissertation study. The first point will be to distinguish between qualitative and quantitative research, to identify which approach will be the most beneficial, and to retrieve information for the selected case studies dissertation included as part of this research. Additionally, the different methods of selecting the correct case studies are also explored. Thereafter, the Chapter focuses on the different case studies that were selected through the research methodology. The case studies consist of two international case studies and one national case study. These case studies show how urban regeneration takes place in the real world and how waterfront development can assist in the urban regeneration of cities. Consequently, they will contribute to the understanding of the Mossel Bay case study.

Chapter six is the Mossel Bay case study, which forms the core of the study. It portrays the implementation of urban regeneration in Mossel Bay through waterfront development. It will also explain the role that the waterfront can play in the urban regeneration of a CBD of a city.

The final Chapter concludes and summarises the main issues and findings of each Chapter. The interdependence of all the Chapters is included to illustrate how each Chapter contributed to the study. The findings and proposals include how waterfront development can be used in urban regeneration, and if the Mossel Bay waterfront project could contribute to regenerate the Mossel Bay CBD.

Chapter 2: The use of urban development theories in waterfront regeneration

2.1 Introduction

This Chapter focuses mostly on the structural form of cities by using the theory of central place and morphological theories and models. The concept of a CBD assists with a better understanding of the physical growth and the way cities evolve. Thereafter, the focus shifts to understanding the different economic factors that have an effect on the physical growth of the city. Furthermore, it includes various factors that are important in generating life in the city.

The next part of the Chapter focuses on understanding and formulating the different urban morphology models. These models denote the growth of the city from the CBD to the outer rims of the city. This model illustrates how the role of the city has changed through the years and where waterfront development has a role.

The focus shifts from urban morphology models to different land use types. The different land use types have a significant effect on the growth of a city, since it determines restrictions as to what may and may not be located in a certain area and the location of the different business areas. This Chapter explains each land use type to investigate the placing of a waterfront in the urban developmental area. Before identifying each different land use type, there must be an understanding of the meaning of a central place, including where a central place is located and which factors have an effect on the central place.

2.2 Central place theory

The term *central places* originated from urban places. Urban places were first seen as central places to provide a variety of different human activities that served the surrounding countryside (Beavon, 1975: 3). This concept can be explained as that every central place has to play a certain role in the functioning of the hierarchy of the city. Each function of a central place is determined by the products and services it supplies. The businesses that perform these functions are located close together to benefit from each other. This location ensures that the cost of products decreases. Small businesses are located around bigger business to benefit from the businesses activities. Dennis *et al.* (2002: 1) state that Christaller's central place theory is still used to explain the development of the emergence of shopping centres. Consequently, it is clear that the term is still significant.

As Christaller further explains, the central place is determent by the economic distance that people will travel to make use of certain functions. For instance, cost of shipment, insurance, storage, and time of transport. In the case of the passenger or traveller, the cost of transportation, the time required or lost and the discomfort of travel plays a part (Christaller, 1966: 22). Notably, it means that people will travel to the area where these functions are all available to decrease the problem of discomfort and the other mentioned factors. Consequently, it is better for businesses to group together and to benefit from one trip. People will rather use the shortest distances to benefit from all of these functions. Therefore, Christaller (1966: 34) explains that a central place consists of an inner and outer limit. The inner limit consists of the area that surrounds the central place. This includes just enough people needed to satisfy the supply of the product and service. The outer limit of the central place is the maximum distance clients will travel to make use of the services and products in a central place (Berry & Garrison, 1958: 304).

An excellent example of this theory of central place is small towns where consumers live in and around the town. Consumers will use the local products and services that the closest city provides, and the people on the outskirts of the city use the local products of the town unless the distance of travelling to the town is too far. In such a case, they will use the town closest to them, as seen in Figure 2. 1 and explained in the subsequent paragraphs.

Christaller goes further than discussing the inner limit and the outer limit by developing a theory of areas of different order. Beavon (1977: 22-28) remarks on Christaller's area of lower order and the different central places by explaining the theory as follows: Christaller's theory states that when the central area has a maximum range of 21km, this central place is an isolated B-place. Christaller then explains that it is not possible for a place to be located 20km from the B-place because the area that has a range of 20km will be supplied by all B-places. Subsequently, there is a need for additional central places. Hence, in the theory that Christaller created, the K-, A-, and M-places that are of lower order have different ranges of supplying the users with goods, services and activities. It is crucial to understand that the lower order place will not supply the higher order place, although the lower order place can be supplied by the higher order place. This mechanism creates boundaries between the different high/lower order places. Subsequently, the result is a structure where all of the different central places fill all the spaces between the central areas and in the middle of these places is the G-place that is the metropolis. The G-place is the B-place that becomes an area of high order. Figure 2. 1 illustrates places of a different order satisfying the market area (Beavon 1977: 22-28). As the

inner and outer limits of a central place have an effect on the market area, so the economic factors will also have an effect on the location of the market place.

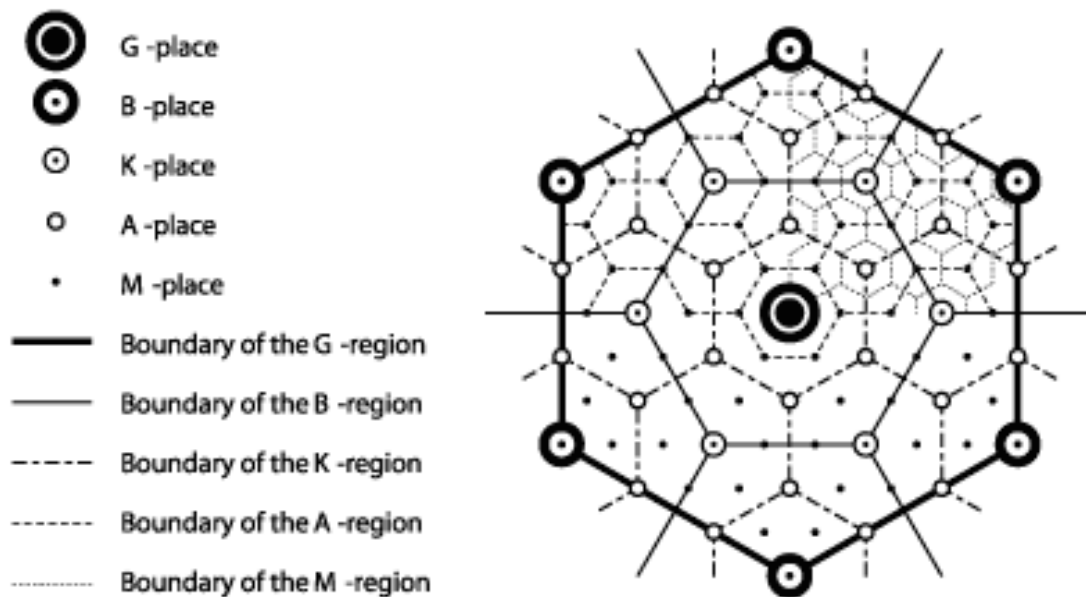


Figure 2. 1: Central Place Theory (Source: Beavon, 1977: 29)

2.3 Economic factors that have an influence on the location of the business or marketplace

According to Smith (1971: 104), the preferences of businesses more often depend on existing infrastructure and other functions that support businesses that are already established in the city. These factors are determined by the sort of product the business offers. In general, this can be seen when high order market places open a new high order market area. The small businesses then use the opportunity to locate close to the high order market area to use the infrastructure and customers. A combination of factors has to be present: labour, power, capital, agglomeration benefits, land rent, transportation and materials. The above-mentioned factors can help to create the optimal location for new businesses.

When these factors are spread out too far, businesses will spend too much money on transportation and other costly components, which will increase the cost of the product or service. The clients are in turn attracted to the central place, which is located closer to high order businesses.

2.3.1 Transportation

The above-mentioned factors indicate that transportation has a direct effect on where a business will establish itself. As illustrated by Durmusand Turk (2014: 271), transportation in the form of railways, rivers and routes had an effect on the location of businesses in the central place. Transportation as an influential factor should be included in the study.

According to Sinclair (1967: 73), transportation cost is directly linked to the travelling distance from the market. The further the business moves away from the central place (supermarket), the higher the transportation cost will be, leading to a decrease in the profit of the product. Sinclair (1967: 73) refers to this as concentric circles. In the following figure (Figure 2. 2) of transportation cost, every circle represents the maximum transportation cost added to the cost of the product as the distance from the market increases.

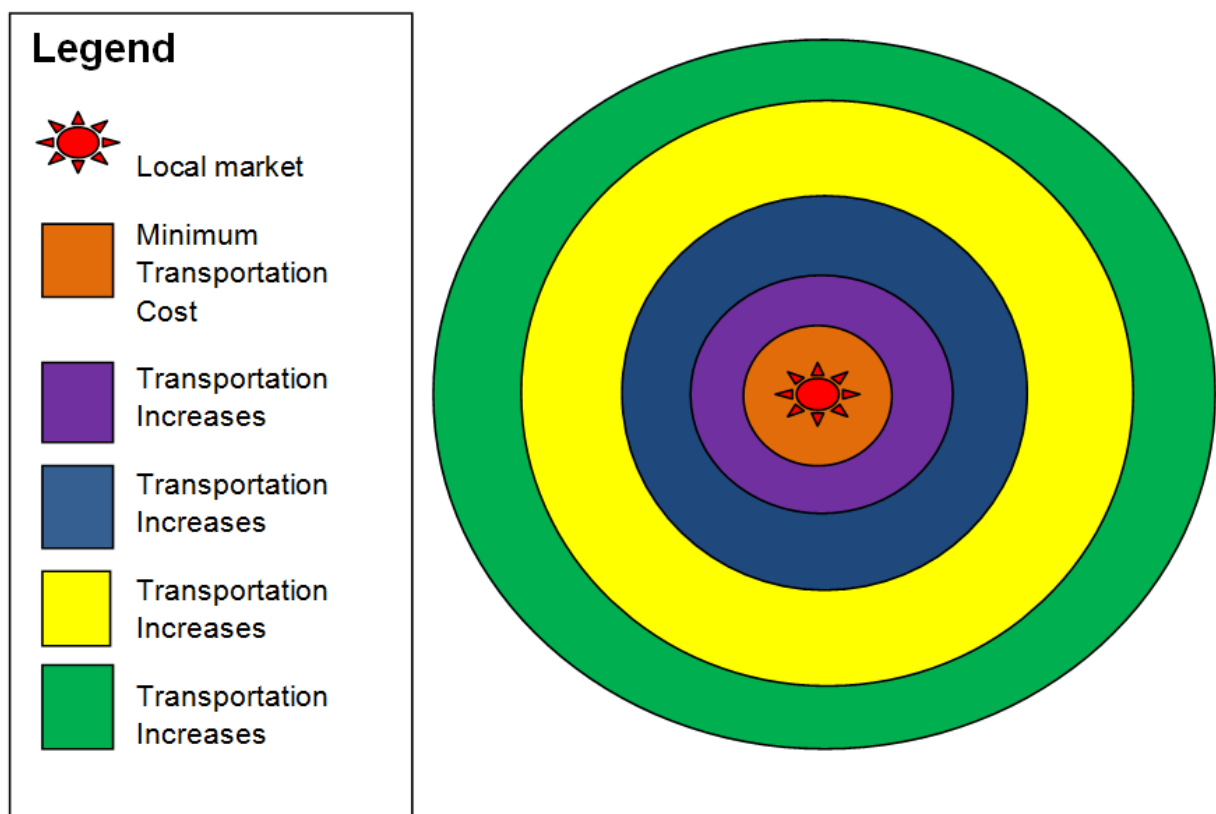


Figure 2. 2: Concentric circles of transportation cost (Source: Adapted and constructed from Sinclair, 1967: 73)

The less the transportation cost, the less expensive the product will be for the consumer. For instance, the products used by restaurants will be less expensive if the restaurant is located

close to the product provider, thus decreasing the cost of the product. Weber (1929: 85) states that transportation cost is the single most important aspect in determining the location of the business in an industry. Significantly, businesses or industries establish themselves where the transportation cost is the lowest (Weber, 1929: 85). This is especially visible in coastal towns where the business area is located close to the harbour front to benefit from the goods transported through the harbour.

To conclude, transportation cost has a direct effect on the cost of the product or service. Hence, the cost has to be kept to a minimum to ensure the maximum profit for the product or service. If transportation has an effect on the profit of the business, so will the location of that business.

2.3.2 Land rent

Transportation is one of the major components that influence business. A business's location in a certain area is another major aspect. Closely linked to location, land rent is also an influential factor. Land rent includes elements like rent increasing due to landowners demanding rent, advantages in production, and the abundance of nature influencing land rent (Park, 2014: 90). Land rent has an effect on the total cost, because if the rent goes up, so do the product prices, which means that less expensive land is needed.

Smaller businesses are unable to afford high rent. In addition, smaller businesses look for a less expensive location that is still as near as possible to the central place. Since the price depends on economic rent, and rent on location, and location on convenience, and convenience on distance, the price depends on the distance (Hurd, 1903: 11-12). Therefore, a business will pay the land rent required to locate it as close to the central place for the maximum price possible to remain profitable. If the business is located close to the central place, it directly saves transportation cost, because a prospective occupant gains the use of the site by outbidding competing users (Alonso, 1964: 6).

In order to understand the effect of land rent or distance, it can be said that the cost of the building has a direct effect on the profit the business will make. That is why businesses relocate to shopping centres. The shopping centre offers the business less expensive land rent and the area is close to their market area. Considering the above, it appears as if areas closer to the waterfront or harbour front are more expensive than the areas further away.

2.3.3 Labour

Without labour, a business is unable to supply any product or service, because every business depends on a form of labour. It may only be one person, but that person can play a fundamental role in the profitability of a business.

According to Isard (1972: 78), if the transportation of products remains the same, the influence of less expensive labour will mean that a business will need to be located closer to the labour area so that the product cost can decrease. Likewise, businesses or industries are still locating in areas where less expensive labour is available, such as in China where industries establish to make use of cheaper labour (Wang, 2006: 69-82).

Labour is also affected by transportation because cheaper transportation cost benefits employees. When a larger number of people travel to the same location, it is cheaper to travel. This mechanism can be seen in shopping centres where the employees use the same form of transportation to travel to and from work.

2.3.4 Infrastructure

Businesses and industries require Infrastructure to be efficient in providing the best quality of a product or service. Access to water and electricity is critical to businesses and industries (Isard, 1972: 94).

Infrastructure is expensive, and therefore most businesses establish in an area where infrastructure already exists. According to Hirschman (1958: 82), the process of developing infrastructure is called social overhead capital because no business or industry can survive without these basic services. New reports state that infrastructure can be seen as a barrier between different business and locations. As revealed by McCann (2010: 309-316), businesses are divided into different levels of income, namely low, medium and high-income groups. Consequently, businesses are divided into different affordability classes regarding forms of infrastructure and infrastructure upgrades.

2.3.5 Market area

Market area is an important aspect to consider before locating or establishing a new business or industry. The market area plays an important role in determining the prices of goods and services and the number of consumers the business will benefit from.

There is much competition in the industry market, because the same businesses supply the same products and services. Consequently, competition can only be overlooked when a business has monopoly in the market area (Smith, 1971: 116). Therefore, if businesses or industries do not have a monopoly, they influence each other's markets and consumers. Subsequently, businesses strive to keep the cost of the product as low as possible to beat their competitors. Costs can be lowered by lowering the cost of transportation, labour, rent and lower product cost (Smith, 1971: 118). The business with the least expenses could have a larger market area than their competitors. On the other hand, as these expenses have an effect on the number of consumers, so does the effect of travelling by the consumers. Hence, consumers will continue to use both businesses' products.

When considering the exact place for a business or industry, it is of utmost importance to consider the target market, which refers to the consumers of the product or service. If a business mostly relies on a low-income consumer group, the market area should be located close to the low-income groups. Whereas, some businesses relocate when their target market change.

2.3.6 Agglomeration

Finally, the last factor that may have an effect on the location of a business is agglomeration (Aguilera, 2003: 43). Agglomeration explains why some businesses are located closer to other businesses, and has a direct impact on the decision where to locate. It is simply identified as the fact that people and business in general tend to gravitate towards cities or industrial core regions to gain from advantages such as lower prices and variety (Hoover, 1937; Dicken & Lloyd, 1990). Marshall (1920) explains that there are three sources of positive overflow that can be identified; locating near each other provides businesses with access to specialised input from suppliers and customers, a shared pooled market for skilled labour, technological spill over through facilitating information exchange, and land cost. Agglomeration can consequently have an indirect effect on the business or industries to decentralise rather than to centralise. Decentralisation has a positive effect on the income of industries and businesses (Weber, 1929: 133). Subsequently, businesses can relocate closer to consumers, and still benefit from the agglomeration benefits. This trend can still be observed today. As revealed by McCann and Shefer (2004: 188), the only difference is that technology has helped to increase the use of the agglomeration benefits in more locations.

This explains why businesses use areas where the agglomeration benefits are accessible. Figure 2. 3 explains how these agglomeration benefits can help establish new businesses.

Every circle represents an already established business (point Q, R and P) and the areas where these circles overlap are the best areas to establish a new business or industry. Points Q, R and P provide business agglomeration benefits like low transportation cost, clients and products. Notably, when different companies in the same area order or transport goods, at the same time, it will cost less to transport goods with the same transport service. In the circumstance that a new business wants to establish itself, point A provides the optimal location. This gives the business a chance to use an additional agglomeration benefit from the other business.

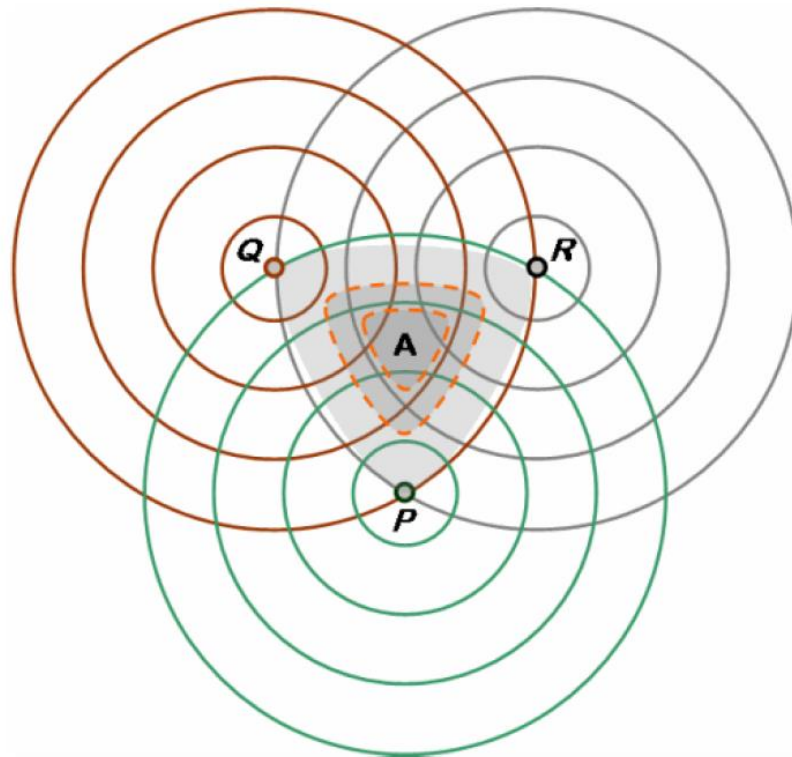


Figure 2. 3: Agglomeration benefits (Source: Weber, 1929: 133)

Furthermore, small businesses relocate closer to large businesses. For instance, a business of lower order locates close to the shopping centre that attracts clients. According to Isard (1972: 83), different agglomeration benefits result from different locations.

Infrastructure can be seen as an instrument that will have an impact on which business will be established first. The business that is willing to supply the infrastructure will give the other businesses a less expensive start and make the future of the business more certain. On the other hand, it means that some agglomeration benefits have a large influence on where businesses are located. Consequently, businesses with corresponding products tend to locate

within the same area. Shopping centres are pertinent examples of the use of agglomeration benefits.

As all the factors that may influence the location of the market place have been discussed, the research continues to investigate theories that explain how cities are shaped. Knowledge of these theories improve the understanding of the different morphology models.

2.4 Urban morphology models

The following urban morphology models contribute to a better understanding of the development of a city and identify certain forces that have an effect on the morphology of the city.

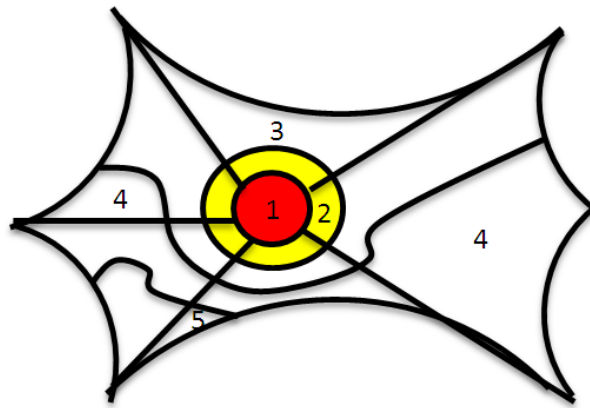
2.4.1 The star-shaped city

Hurd developed the star-shaped city model and according to him (Hurd, 1903: 15), the growth of a city consists of constant movement that takes place away from the inner core (CBD) in every direction. This movement is caused by constant pressure from the aggregation that takes place on the outer edges of the city. Secondly, central growth also occurs from the core area, as well as from each sub-centre of the city. This axial growth pushes growth to the outlying territories of the city (Hurd, 1903: 15).

To clarify his theories, Hurd (1903: 16) proposes that the growth of the city is directly influenced by the value of the land. Additionally, the value of the land will influence certain functions located in the city. Furthermore, Hurd (1903: 22) argues that available land may be used for speculative purposes and these speculative purposes are directly affected by the location of the land. In addition, the most valuable land is located along the waterfront because the first line of growth is normally along the shoreline and growth then leads to outlying territories (Hurd, 1903: 56).

Hurd's star-shaped city shows that the value of land is important for growth, and the most valuable land is located in the inner city or the central business district. However, in cities located along the shoreline, those properties along the shoreline are more valuable. This is evident from the many historical buildings that are located in the CBD's of older cities, with the newer buildings that area located to the outer areas of the city. According to the Land and Water Development Division, the second point of growth is on the linear points of the city, such as corridors (2003: 17). The only difference is that land has become a stream of future income,

consisting of the volume of goods, services and satisfactions that accrue to the owner (Land and Water Development Division 2003: 17).

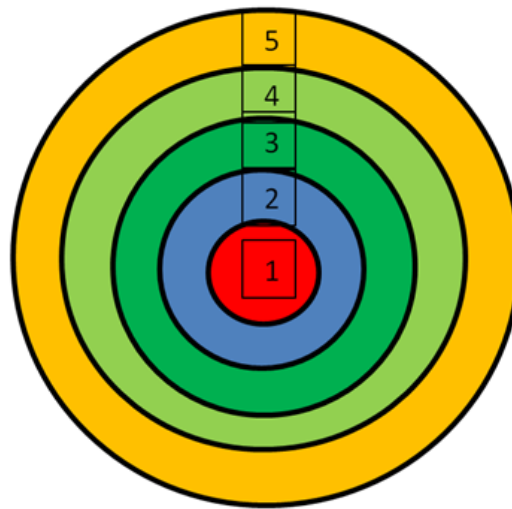


1. CBD
2. Transition zone of residential decay
3. Low income residential
4. Middle income residential
5. High income residential

Figure 2. 4: Star-shaped city (Source: Adapted from Bollens and Schmandt, 1965: 159)

2.4.2 Concentric zone model

The concentric zone model was formulated by Burgess. Burgess (1930: 159) designed a model that displayed the theories of Hurd and Haig in a geometric form.



1. Central business district
2. Zone of transition
3. Zone of workingmen homes
4. Zone of better residences
5. Commuter's zone

Figure 2. 5: Concentric zone concept (Source: Adapted and constructed from Burgess, 1925: 51)

Burgess conceived the city as five concentric zones. The inner circle is called the core (CBD) and it is made up of shopping areas, theatre districts, hotels, office buildings and other businesses that seek a central location. Businesses that fan out to the outer areas of this circle are those with commercial functions. When the city is situated on the edge of a body of water, its port's functions are in most cases intertwined with these functions. The second zone is the area of transition. Transition can be identified by the range of uses and the process of transition from one use to the other. Thus, it can be seen as the start of the residential areas. The third zone mostly consists of working residents' homes or the so-called working class. The fourth zone is mostly residential areas of middle-class residents. The outer zone is the commuter residential zone. In this area, the suburban communities are found along the arteries of transportation. This area is where the middle-class and upper-income group reside (Chapin, 1965: 16).

2.4.3 Sector model

The sector model was formulated by Hoyt (1978) to improve on the concentric zone model by Burgess. The theory states that the different income groups of a city tend to be concentrated in

distinct areas describable in terms of concentric circles around the CBD. Meanwhile, high-rent areas can be identified as particular sectors, and from there on, the rent value decreases in all different directions. The middle-rent sectors can be identified between the areas of high-rent and low-rent, whereas, the low-rent areas are located in all of the sector areas of the city and on the periphery (Chapin, 1965: 17) (Refer to figure 2. 6).

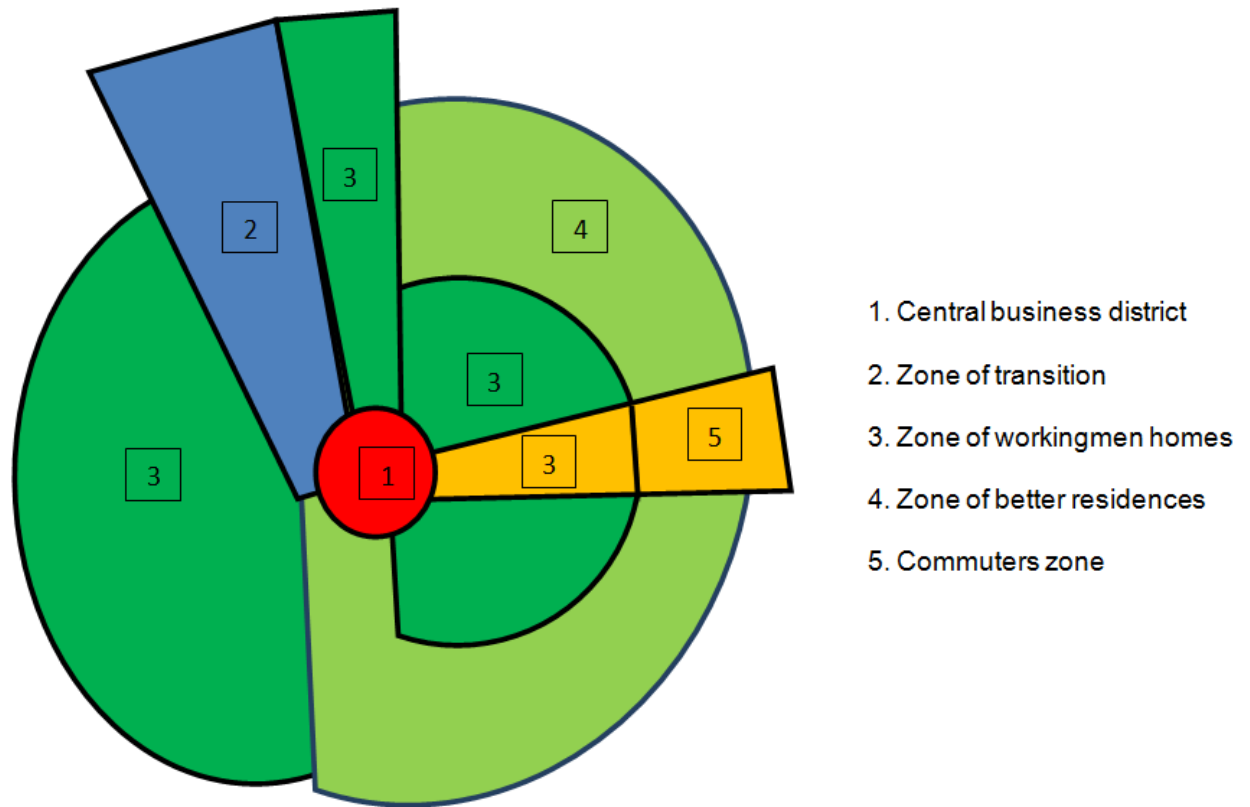


Figure 2. 6: Sector model (Source: Adapted and constructed from Harris and Ullman 1945: 13)

It is clear that the value of land plays an important role in shaping the city, and the movement of businesses will pull higher value residential areas in the same direction. Transportation also plays a role in the growth of the city, because residential areas tend to develop along the fastest existing transportation lines. High-rent apartment areas tend to establish near the business centre in old residential areas (Chapin, 1965:18). For instance, in metropolis areas cities often boast skyscrapers with high rental value. The latter is as prevalent adjacent to waterfronts.

2.4.4 Multiple nuclei concept

The multiple nuclei concept was first suggested by R.D. Mckenzie in 1933 and was developed because of the observation that there is frequently a series of nuclei in the patterning of urban land uses, unlike in the previous theories that included only one central core area (Chapin, 1965: 19 & Wilson, 1976: 2). Metropolitan areas are constantly growing and forming new central core (CBD) areas. Shopping centres, industrial areas, universities and so on can be seen as these new central core areas, since they are located along important transportation roads to provide services to more than one city (Chapin, 1965: 19) (Refer to figure 2. 1).

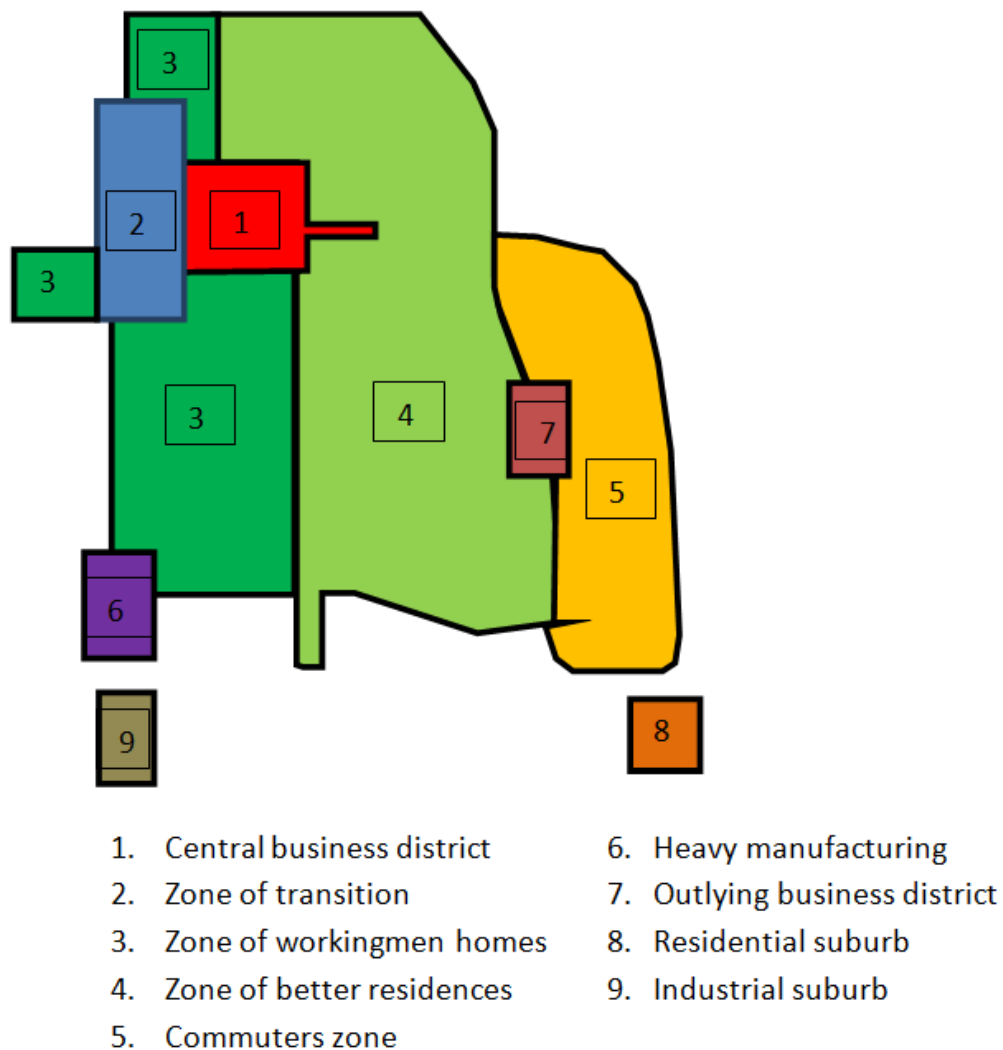


Figure 2. 7: Multiple nuclei concept Source: Adapted and constructed from Harris and Ullman (1945: 13)

According Hawley (1950: 270) there may be more than one sub-centre within a metropolitan area. These sub-centres depend on each other and on the main centre because of the shared

complex and entangled nature of the layout, consequently linking the centres. The largest or major centre forms the core (See figure 2. 7). The sub-centres mostly focus on communication agencies, financial and legal services, and the administrative offices of political, recreational, religious, and other services, as well as those of industries and businesses.

Although the metropolitan areas have several core areas, they all form part of the metropolitan area or multiple nuclei area. Over time, it may happen that the secondary core overtakes the primary core (nucleus) area due to population growth, migration, specialisation and the area's growth rate. This can be seen in London, where development took place in separated core areas divided by open spaces. One area is seen as the centre of the business world, while the other is the centre of political life (Harris & Ullman, 1945: 14).

According to Harris and Ullman (1945: 14), there are factors that may influence the increase of secondary core (nuclei) areas that explain why some metropolitan areas have secondary nuclei. These factors are:

- (1) Certain businesses require specialised facilities that are not common in every location. A retail district, for example, is attached to the point of substantial accessibility and interest, from a port area to a suitable waterfront area, and manufacturing districts to large blocks of land and water or rail connection (Harris & Ullman, 1945: 14).
- (2) Businesses with similar interests group together, since they profit from each other. These activities or retail districts benefit from grouping together, which increases the concentration of potential customers. In the case of financial and office-building districts, they depend on facilities of communication among offices that is located within the district (Harris & Ullman, 1945: 14).
- (3) Different businesses on different properties are harmful to each other. It is well known that factory development close to high-class residential development is frowned upon. This is due to heavy concentrations of pedestrians, automobiles, and streetcars in the retail district that are incompatible with railroad facilities. Furthermore, the street loading required in the wholesale district and associated with the railway facilities and the space needed by large industrial districts create clashing needs (Harris & Ullman, 1945:14-15).
- (4) Certain businesses are unable to afford the high rent of the areas that are the most desirable. In addition, this works in conjunction with the previous factors. For example, bulk wholesaling and storage activities require much space, but may not be able to afford the high rent (Harris & Ullman, 1945: 15).

The above-mentioned factors explain why new secondary core areas are developed. It is important to understand that the multiple nuclei model is not present in every metropolitan area. It can have a significant effect on the growth of the city and explains the reason why some metropolitans or cities have more than one nucleus in their radius. Furthermore, Pekelharing (2005: 15) states that the models explained here form part of the South African model. Hence, it is important to investigate the South African model and the present form of South African cities.

2.4.5 The South African model (Apartheid era model)

The Apartheid era had a significant impact on the physical form of South African cities. It is therefore important to include this urban morphology model. The model was developed to place different racial groups in different areas, not necessarily with their consent

Segregation was therefore enforced by means of the urban structure, and the structure was racially exclusive and consisted of unequal residential segments. The facilities and services of every racial area were located within that group's segment. Furthermore, between every segment there was a buffer zone created to ensure minimal contact between the different racial groups (Kotzé & Donaldson 1998: 467). The growth of every segment occurred outwards from each segment, thereby preserving the urban pattern (Simon, 1988: 191). Figure 9 below illustrates how these areas were divided into their different segments.

All the urban morphology models show how the city evolved and which factors had an influence on the growth of the city. It demonstrated that the city form is not only a form, but also a living organism.

2.5 Land use planning

Cities can be divided into different urban areas because urban areas have different natural advantages, different fiscal capabilities and different concepts of convenience, amenity and liveability. Therefore, Chapin (1965: 371) created the three major functional land use principles relating to the location of land uses in the urban complex:

- **Major work areas:** These areas consist of those parts of the city devoted to manufacturing, trade, and the provision of services.
- **Living areas:** The residential communities and accessory community facilities such as neighbourhood stores, playgrounds, local parks and elementary schools.
- **Leisure-time areas:** Generally consists of the main educational, cultural and recreational facilities in the urban centre. It includes colleges, museums, concert halls, libraries, coliseums, golf courses, large public parks and wildlife reserves.

In this study, the focus will be on all three areas as they all are present in the land use of the waterfront area.

2.5.1 Land use zones

The following land use zones can be present and fall in the above-mentioned land use areas, and are relevant to this study. The following zones will be used to focus on waterfront development zones.

2.5.1.1 Major work areas: Commercial zones.

- **Local Business Zone 1:** Permits low intensity commercial, office and service uses along major roads next to residential areas. Residential and automobile-oriented uses are discretionary (EFCL, 2003).
- **Mixed-use zones:** Permits more intensive commercial activities like offices, services, guesthouses, places of instruction, places of entertainment, hotels, hospitals and places of

worship. Low intensity business zones require larger sites and accessibility along or next to major roads (EFCL, 2003).

- **Highway Corridor Zone:** encourages high quality commercial development along roads serving as city entrance routes (EFCL, 2003). Additionally, this includes industrial subzones that provide service stations, motor repair garages, restaurants and several other businesses. Overall more intense business.

2.5.1.2 Living areas: Residential zones

- **Medium Rise Apartment Zones:** Permits apartment buildings or stacked row housing to a maximum of six stories and to a maximum of 224 dwellings/ha on suitably sized sites. Similar developments may take place on larger sites. These uses are common as part of waterfronts (EFCL, 2003).
- **High Rise Apartment Zone:** Permits apartment or stacked row housing to a maximum height of 45 m, developed to a maximum of 325 dwellings/ha on suitably sized sites. Similar developments on larger sites, single detached, semi-detached and duplex housing, personal service shops, convenience retail stores, professional offices, and clinics. Residentially related uses are discretionary (EFCL, 2003).

2.5.1.3 Leisure-time areas: Urban service zones

- **Public Parks Zone:** Permits active and passive recreation, and uses landscaped buffers. Community, cultural and recreational uses are listed as permitted and/or discretionary (EFCL, 2003).
- **River Valley Activity Node Zone:** This Zone allows for limited commercial development within activity nodes in designated areas along the rivers, creeks and ravines, for active and passive recreational uses, tourism uses, and environmental protection. River valley activity node zone area could be present in the urban regeneration programmes (EFCL, 2003).

2.5.1.4 Special areas

The following zone is commonly used when the urban development plan of the city does not provide for uses such as for waterfronts.

- **Special Areas** are specifically defined geographic areas of the city where a unique blend of uses and regulations that are not available in the conventional zones of land uses of the

area are available. This is common in new zones, since they can be created within special areas to achieve the planning objectives, for instance through an Area Structure Plan (ASP) or an Area Redevelopment Plan (ARP) (EFCL, 2003).

The above described land use zones include all the relevant urban land use zones that will play a role in the urban regeneration of a waterfront area.

2.6 Conclusion

Several economic factors have an influence on the location of a central place and businesses. Transportation has a pertinent effect on the location of a business. For instance, when transportation comes into play it has an effect on the market area. Subsequently, business seeks agglomeration benefits. Meanwhile, if these functions are not present in a central place or CBD, the business will seek to locate where all these factors are present and can play a positive role. Consequently, they relocate to new shopping centres where the above-mentioned factors are all present, which leaves the CBD vulnerable to decline.

The urban morphology models illustrated that the urban form of developed through several phases. Furthermore, every urban morphology model contributed to an understanding of the growth of the city. Starting from the central business district and growing to the outer limits of the city, except in certain cities where the factors explained above are present in similar areas located within the urban structure of the city. For example, where the factors are present in several places and subsequently create multiple nuclei area. Additionally, the multiple nuclei concept explains possible reason why waterfronts were created and why they can be seen as new urban centres or business districts.

As Harris and Ullman (1945: 14) explain, for an area to become a new urban centre it needs specialised facilities. Waterfronts comprise these specialised facilities that provide the urban centres with the ability to create new urban centres. Although cities can have more than one nucleus or CBD, it has been illustrated that these areas cannot develop without the correct land use zones. Subsequently, a waterfront development cannot take place without the correct land use zoning. Finally, the Chapter addressed the fact that there are already land use types that are selected to accommodate special areas like waterfronts. With waterfronts, all the above-mentioned land use types are present. As a result, it is possible for waterfronts to be seen as one of the central areas of a city or one of the nuclei of the city.

The following Chapter will investigate urban regeneration paradigms and explain how cities' urban structures have changed over the years and which urban regeneration components can be significant for waterfront development.

Chapter 3: Urban regeneration paradigms

3.1 Introduction

Even though urban regeneration is widely experienced, role players have the ability to understand the phenomenon itself. The term is relatively new in the South African context because of a general lack of understanding and an inability to grasp the potential of cities. In South Africa, the concept is used as an instrument for sustainable housing development or urban housing problems, but it has more to offer than merely housing.

According to Mumford (1968: 1), the city is a place where multiplying chances can be used to make the best of the unplanned experiences. These unplanned experiences that occur can be dealt with through urban regeneration. Therefore, the term urban regeneration is an essential part of the study. The Chapter is divided into three main parts: (i) the urban regeneration paradigms, (ii) the term urban regeneration, (iii) and finally the new integrated urban regeneration paradigm.

Urban regeneration underwent a process of evolution arriving at the term urban regeneration in its present form. This Chapter focuses on the different paradigms that shaped the term urban regeneration, to understand what components influenced the term urban regeneration and what the benefits are. Thereafter, the focus will be on understanding and defining the term urban regeneration.

Finally, the Chapter will re-introduce the term to a new era. This section focuses on the aspect that provided the need and demand for urban regeneration within the new integrated urban regeneration paradigm. Secondly, the research provides the different principles that should form part of every urban regeneration development, and finally it examines the different role players that could positively influence urban regeneration.

3.2 Urban regeneration paradigms

The term urban regeneration is seen as a modern concept, but it has been in use from the beginning of 1900's, when the concept originated. The term refers to the rebuilding of an unwanted building or area Robert and Sykes (2005: 13). While the aim to rebuild is a rather consistent theme in urban regeneration, the focus shifted from 1950s to the 1990s. Various paradigms are evident and include the reconstruction, revitalisation, renewal, redevelopment and regeneration, as differentiated by Robert and Sykes (2005: 13). The following section will investigate these paradigms to understand the term urban regeneration in more depth. The

different paradigms are explored below by using the primary structure of Robert and Sykes (2005: 13) of the evolution of urban regeneration. Table 4. 1 provides an outline.

Table 3. 1: The evolution of urban regeneration paradigms

The evolution of urban regeneration paradigms					
	1950s Reconstruction	1960s Revitalisation	1970s Renewal	1980s Redevelopment	1990s Regeneration
Origin and background	Remonstrations of the post-war damage of the cities	Residents refuse to stay where planners assumed and provided housing	The rediscovery of inner city potential, growth periphery	Encouragement of private investors to invest in redevelopment of neighbourhoods, by focusing on areas that provide high development potential	New policies focus on integrated treatments. Better understanding of urban regeneration
Major strategies used	Master plan	Continue with Master plan	Renewal and neighbourhood schemes	Numerous schemes: like a flagship scheme	Environmental sustainable policies
Primary focus	Reconstruction of inner city after World	Continued from 1950s	Job creation and public housing	Focus on the image of the city (industries,	Beginning of sustainable development

	War II and housing in outer areas			port-related industries)	
Spatial level of focus	Focus on reconstruction of the areas on a local level	Focus on local level and start regional level	Began with regional level and moved back to local level	Specific points located within the urban structure	Move back to more consensual style of policies and the growth of the regional activities
Economic focus	Government provided incentives to public business and private business to invest in areas	Economy growth, residents pursue private housing	Private sectors provide the economic growth	Private sectors dominates	Economic development and growth is in balance
Key role players	<ul style="list-style-type: none"> • National Government. • Local Government. • Private sector • Contractors 	<ul style="list-style-type: none"> • Almost perfect balance between all different role players • Beginning of public and private investors 	<ul style="list-style-type: none"> • Private sector dominate the growth of the city 	<ul style="list-style-type: none"> • Public-private investors dominate the growth of the city for the first part • Government dominate development for the last part 	<ul style="list-style-type: none"> • Perfect balance between all different role players

Source: Adapted and constructed from Robert and Sykes (2005: 14).

3.2.1 The first paradigm: Reconstruction (1950's)

3.2.1.1 Origin and background

The reconstruction paradigm began after World War II, which ended in 1945 (Diefendorf, 1989: 130). It was after the war that countries could start focusing on rebuilding the post-war damage. The problem mainly was the slums created by the war. Most large cities had been demolished, thus reconstruction was needed (Hall, 1997: 83).

The residents of slums lived in severe poverty. Consequently, the residents placed their hope in the government to provide new homes. In addition, people in and outside the cities lived in public housing before the government decided to clear the entire slum area. This may sound extreme, but with the large extent of poverty, and houses that were unfit for residents, it was needed. Therefore, the residents looked at the government to provide in their housing demands (Stokes, 1962: 188-189). In addition, reconstruction was needed to provide for the pressing housing needs after the war.

3.2.1.2 Major strategies used

The first strategy created to address this problem was called the master plan (Robert & Sykes, 2005: 14). The plan included the rebuilding of the badly-bombed metropolis (Diefendorf, 1989: 131). The strategy was applied at different spatial scales, from neighbourhood units to entire new towns (Hall, 1997: 83).

The plan was formulated by old masters in the field, which included the leading architect-planners of the time. They included Patrick Abercrombie and William Holford. The plan was to reconstruct the city through a series of medium to high-density neighbourhood units. Furthermore, the plan contained a mixture of low-rise terrace housing and high-rise points. The two areas were devised by means of a series of public open spaces, and they had a direct link with the district centre for shopping needs (Hall, 1997: 83). The master plan's focus, among other things, was to provide housing for the residents who had lost their homes during the World War II.

3.2.1.3 Primary focus

The focus was to reconstruct the inner parts of the cities that were destroyed during the war. Secondly, to provide the residents with new homes, and to provide economic growth within the city (Robert & Sykes, 2005: 14).

3.2.1.4 Spatial level of focus

In October 1945, the European government made the statement that all properties and land within the city's boundaries are municipal property (Diefendorf, 1989: 134). Thus, every local government was responsible for its own spatial boundaries and every local government was controlled by the national government.

The beginning of the 1950s the local government focussed on providing housing and economic growth within the city after World War II on a local level. Meanwhile, the first step at the local level was to co-ordinate rubble clearance before reconstruction at a local level could begin (Diefendorf, 1989: 131). Thereafter the focus was on specific locations within the local government's spatial boundaries (Hall, 1997: 83), for instance modernising the transportation network and building more modern housing within the city (Diefendorf, 1989: 132).

3.2.1.5 Economic focus

The focus was on providing housing, and the economic functions provided the financial support. Subsequently, the economic focus had to play a role to provide in housing needs. The government provided incentives to local businesses to invest in the areas rather than the mainstream economic policy. However, the technological development did not stop after the war. Subsequently, the reconstruction of the 1950s created an economic atmosphere with a demand for the increase of high physical investment, which was favourable to economic growth in the 1950s (Smolny, 2000: 590).

Above all, this created a period of rapid growth with about doubling of the capital stock, output and labour productivity. The most outstanding stylised facts of the economic development since the 1950s are the extraordinary high growth rates of labour productivity (Smolny, 2000: 590). Thereafter, the public sectors show the opportunity to invest in neighbourhood growth and activities (Weaver & Dennert, 1987: 431). The period's main goals were to provide and achieve economic growth.

3.2.1.6 Role players

The national and local government were seen the starting role players in reconstruction in the 1950s after the war. In addition, the government was also in control of the decisions during this period, notably because people were reliant on the national and local government to provide housing and economic growth (Vale, 2003: 47).

The second group of role players were the private developers and contractors. They included the architect-planners that were the leading planners of their time. For example, Patrick

Abercrombie, William Holford, and also the most important role player of this period, Howard, the creator of the Garden City concept (Hall, 1997: 83). As mentioned above, the public investors were also present, since they used the government incentive programme.

3.2.2 The second paradigm: Revitalisation (1960's)

3.2.2.1 Origin and background

In the 1960s the paradigm shifted from reconstruction to revitalisation. It was clear that most of the immediate post-war problems simply changed location and appearance to other urban problems (Saunders, 1984: 202-204). For instance, people started to refuse to stay where planners assumed they would want to stay, since people strived to obtain their own private homes. In addition, people also desired their own private transport, placing pressure on the government to provide roads (Saunders, 1984: 202-204).

Secondly, government tried to control the location of the industries without providing the much needed services they required, whereas the industries were the main source of employment growth in the 1960s (Saunders, 1984: 202-204). Finally, revitalisation was needed in the 1960s as the housing needs of the 1950s were still present, and several new problems were revealed as mentioned above (Saunders, 1984: 202-204). In addition, attempts were made to revitalise the older central cities as well (Teaford, 2000: 444).

3.2.2.2 Major strategies used

During the 1960's developers continued with the master plan of the 1950s.

3.2.2.3 Primary focus

The physical emphasis only continued from the 1950s through the 1960s and some parallel rehabilitation of existing areas (Robert & Sykes, 2005: 14). There was limited focus on areas within the region.

3.2.2.4 Spatial level of focus

After focusing on the local level the government changed their direction and expanded the focus to include the regional level (Robert & Sykes, 2005: 14). This became necessary as people refused to stay in the area where planners thought they would want to stay. According to Rosen and Sullivan (2012a: 1) the reason for this is that housing prices during the 1960s were too high. Consequently, people moved to different regions to pay less for housing. In addition, planners had to rezone regional areas. By the end of the 1960s planners realised that planning

at a regional level is not possible since the planning or problem area is too large (Robert & Sykes, 2005: 14).

3.2.2.5 Economic focus

The beginning of the 1960s until the early 1970s was seen as the “Golden Age” of economic growth; since the economy grew at an annual rate of nearly 3 percent (Crafts & Toniolo, 1996: 8; Crafts, 2003: 2). This provided the opportunity for economic growth and for development to take place.

Labour was cheaper after the war, and there was less political influence that prevented employers from having permanent contracts with labourers. It brought labour costs down and the products could trade for less (Crafts, 2003: 3). This labour cost is explained in Chapter Two with reference to what the effect of labour is on the price of goods.

As capital has a substantial effect on a development, and the 1960s was seen as the golden era, development and growth take place. This had an effect on the growth of private investments, with continued growth in the economy and private investments. This brought about higher incomes, causing a demand for private housing and cars, therefore providing economic growth in the cities at local and regional level. The local European government still had a considerable influence on the economic growth of various areas (Saunders, 1984: 202-204).

3.2.2.6 Role players

Throughout the 1950s the government was the main provider of projects. By the 1960s the revitalisation of cities was mostly in a balance between the government and the private and public sectors (Robert & Sykes, 2005: 14). This was the first step in the right direction; if one role player has more control than the other, problems occur, for example where the government plans areas without considering the public. As a result, people locate in areas that are more fitting to their needs and argument.

The combination of private and public investors brought new and stronger growth and revitalisation within the city. Consequently, the role players moved into the right direction of perfect balance between the different role players.

3.2.3 The third paradigm: Renewal (1970's)

3.2.3.1 Origin and background

During the 1970s the government realised that housing within the city was too expensive and change was needed. The answers came from neighbourhood and tenant organisations,

bringing resident housing needs to the city's attention. These groups were originally focused on maintaining housing affordability in the communities and preventing the displacement of families from neighbourhoods disturbed by the city's urban development (Rosen & Sullivan, 2012b: 1).

In addition, the city centre was rediscovered, leading to renewal projects and growth within the inner city. The first tentative steps towards the generation of urban policies led to major expansion of the creativity of cities in the 1970s. These policies of the 1970s continued into the 1980s (Robert & Sykes, 2005: 16).

3.2.3.2 Major strategies used

Since the 1970s neighbourhood schemes were the focus of development and continued to the outskirts of the city (Robert & Sykes, 2005: 14). The scheme used different forms of housing, like semi-detached and detached housing, to provide for the housing needs (City Of Bradford MDC, 2012: 7) (see Figure 3. 1).



Figure 3. 1: Neighbourhood schemes housing Source: City of Bradford MDC (2012: 7)

Within the neighbourhood scheme, the focuses were to encourage local government to take an area-based approach to housing renewal. In addition, the local government introduced renewal areas where they could focus resources to deal with housing and development problems in areas of predominately private sector housing (Cambridge City Council, 2009: 13). In the 1970s the first strong approach was established to address the housing need after the war.

3.2.3.3 Primary focus

Throughout this period the focus was on developing apparatus to guarantee existing jobs and to provide public housing for employees without destroying the physical structure of the community

(Roberts & Sykes, 2005: 15). Furthermore, the goal was to narrow down the aims to focus on those aims that are related to poverty. These included improving income distribution, increasing employment and fulfilling the basic needs of the residents (Morawetz, 1977: 7).

3.2.3.4 Spatial level of focus

The spatial level of focus was at the beginning of the 1970s mostly directed to a regional level and a local level. It was soon realised that it is not possible to focus on both a regional and local level. Therefore, planners took a step back by focusing only on a local level to ensure pertinent quality of public housing (Robert & Sykes, 2005: 14-15).

The focus later expanded to include community development. The mission was the preservation and development of affordable community housing and resident services to meet the changing demographic needs of families, to maintain the city's diversity, and to mitigate the exclusive effects of the rising cost of market housing within the city. Dedicated and zealous community advocacy, strategic development and allocation of funding sources, and responsiveness to market changes and political opportunities resulted in a system of strong housing preservation and production policies (Temelova, 2007:169-170).

3.2.3.5 Economic focus

The private sector became more and more important at the beginning of the 1970s, although the local government still had considerable influence on economic growth. At the end of the 1970s, the government only contributed about 10.5 percent of the gross domestic products (GDP) in Europe. Consequently, the private sector took control of the economic growth of cities (Vickers & Yarrow, 1991: 121).

This led to stronger economic growth within the 1970s. As revealed by Backhouse (1991: 4), the growth rate was much faster than in the previous years, because the economy was stronger and re-established (see Figure 3. 2).

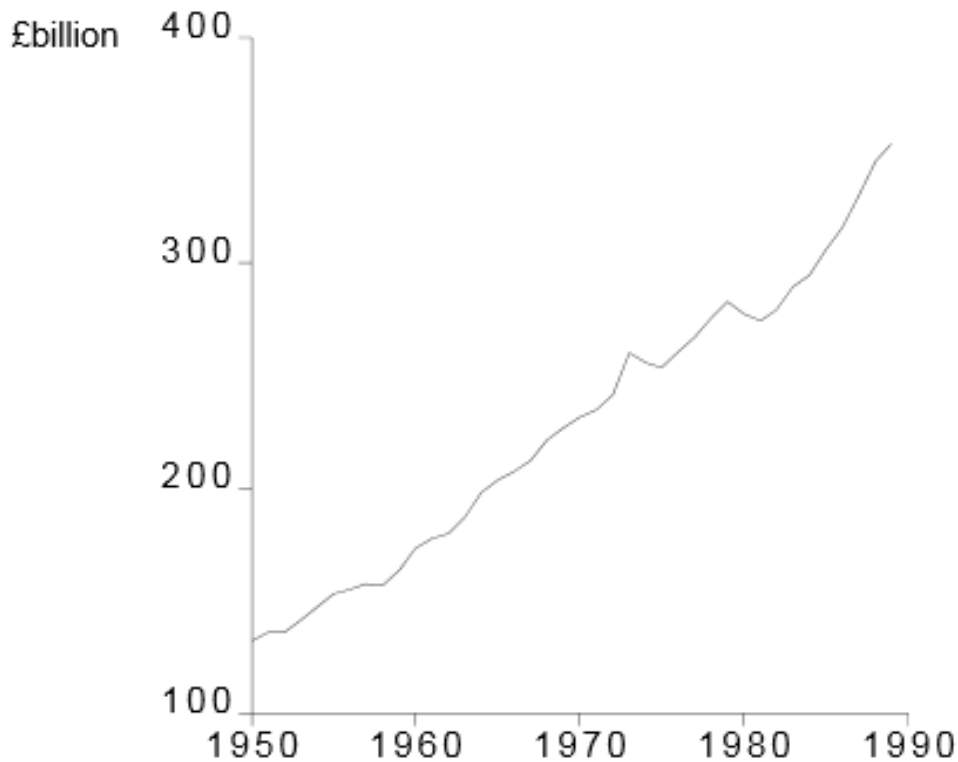


Figure 3. 2: Europe Real GDP, 1950-89 Source: Backhouse (1991: 4)

The economy had the strongest growth in the 1970s, simply because the private and public sectors started to invest in Europe. As a result, growth could take place in the form of renewal of the city.

3.2.3.6 Role players

In the 1970s, the private sector increasingly became a key role player, as within the previous paradigms. Consequently, decentralisation started to take place (Vickers & Yarrow, 1991: 121). Subsequently, stronger development could take place on the periphery. The private investors did not take control of the total renewal of the city and growth. The government was still present in the development and control of where development would take place, and was part of several projects to renew the city (Robert & Sykes, 2005: 14). In this paradigm role players aimed to reach a perfect balance with each other. Not only one role player was in total control of where development will take place and how (Robert & Sykes, 2005: 14).

3.2.4 The fourth paradigm: Redevelopment (1980's)

3.2.4.1 Origin and background

The 1980s was seen as a high development period. Meanwhile, Europe was in a recession at the beginning of the 1980 until the mid-1980s (Backhouse, 1991: 4). As a result, the government turned the focus to the private and public investors to continue with the redevelopment of the city. Subsequently, government encouraged private companies to invest in the redevelopment of neighbourhoods (Temelova, 2007: 170). Communities started to help themselves, because the government could not provide support.

After the recession, the economy and development re-established. The first step was to change the physical appearance of the inner city environment, as it needed to be redeveloped to ensure that economic development will take place (Temelova, 2007: 170). To achieve this, the European government decided to put several schemes in place, as seen in the following argument.

3.2.4.2 Major strategies used

The flagship project began through public-private partnerships. Such partnerships became an important component of the physical redevelopment strategies of many cities. These schemes mostly focused on areas with a high development potential, such as the city centres (CBD), areas of heritage and waterfronts (Loftman & Nevin, 1995: 301-302).

While many major schemes aimed to improve the city's image, encouraging investment and changing the perceptions of business decision-makers at a national and international level, the flagship project was on a smaller scale and geared towards changing the local area's perceptions about some particular urban areas that are located outside the city. Flagship projects can be seen as important instruments of the redevelopment of the 1980s (Ozcevik *et al.*, 2008: 183).

3.2.4.3 Primary focus

The primary focus was to establish project schemes and most major schemes were focused on improving the image of cities and developing the areas that had to be redeveloped, such as the global restructuring of industries and port-related industries through the flagship scheme. In addition, the need for new urban development arose through these schemes (Loftman & Nevin, 1995: 301-302).

3.2.4.4 Spatial level of focus

At the beginning of the 1980s the focus was on a local level, and as development took place and successes were achieved, planners soon realised that it will be more progressive if the focus shifted to precise locations at the local level (Robert & Sykes, 2005: 14). These focus areas within the local level are located within the urban structure of the city, for instance the city centres, heritage sites and waterfront areas that were developed through the flagship projects. This special level of focus created the opportunity for the focus to move to a local level (Temelova, 2007: 170).

3.2.4.5 Economic focus

From the beginning of the 1980s, the private sectors started to dominate the economic development, with some public sectors contributing thereto because the government limited the public sectors' borrowing from them, thus limiting the contribution of the public sectors (Vickers & Yarrow, 1991: 119). However, the government responded in this manner to save on the capital due to the recession of the beginning of the 1980s.

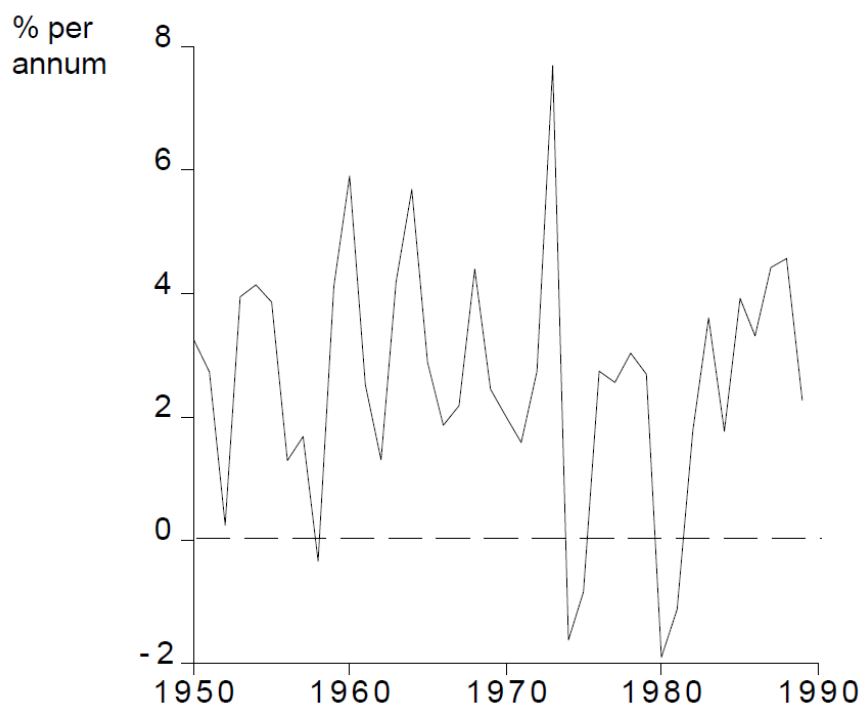


Figure 3. 3: The growth of the European GDP during the 1950s-1990s Source: Backhouse (1991: 5).

The European GDP of the 1980s re-establish and growth could take place in a positive manner, as seen in Figure 3. 3. Plans for redeveloping the city centre were back on track, providing economic growth, as well as housing using redevelopment of the city.

3.2.4.6 Role players

As mentioned above, the focus of the 1980s was to create public-private investment partnerships to redevelop several areas in the city. By attracting the private sector to invest in the new developed plans of the city centre, the focus shifted to the private sector (Temelova, 2007: 170). The government was not able to avoid a recession in the first part of the 1980s. Subsequently, the government placed the development in the hands of the public-private investors (Backhouse, 1991: 4), thus providing them the opportunity to develop as they preferred. At the end of the 1980s the recession was over, and the government was able to react on development and to control it moving back in the direction of perfect balance.

3.2.5 The fifth paradigm: Urban regeneration (1990's)

3.2.5.1 Origin and background

The 1990s were the beginning of the new understanding of what urban regeneration is. It moved towards a more comprehensive form of policy and practice with more emphasis on integrated treatments (Roberts & Sykes, 2005: 14). The flagship scheme approach went out of fashion. Consequently, a new understanding and meaning of urban regeneration policy came to life. The new understanding was to regenerate community environment and not only the land and the property markets (Loftman & Nevin, 1995: 311).

Consequently, the first step to sustainable development lays within the paradigms, rather than only in economic factors. In addition, the first steps were taken to incorporate the communities, who have since come to play a role in the development of the city. The focus has changed from only being economically driven to socially and environmentally driven.

3.2.5.2 Major strategies used

Within the 1990s several strategies were used and the key strategies were focused on the environment and sustainable development. These strategies came into focus when the political climate in Britain started to change. As a response, the government dedicated itself to a new environmental agenda. The environmental agenda was included in all areas of the government policies (Healey & Shaw, 1994: 432).

This led to the formulation of new planning policies, which placed pressure on the local planning authorities to take account of the environment, such as concerns for landscape quality, nature,

the heritage of old buildings and conservation of certain areas. Furthermore, planning for healthier cities and consumption of non-renewable resources formed part of the planning approaches (Healey & Shaw, 1994: 432). In the end, all major strategies of the 1990s strived to be sustainable through the inclusion of environmental and social components.

3.2.5.3 Primary focus

The primary focus of the 1990s was on establishing policies to include sustainable development. Sustainable development was not yet fully utilised in the functioning of urban areas. Sustainable development will have a big influence on urban regeneration in the future (Robert & Sykes, 2005: 16). The 1980s were more modest and focused on the heritage and preservation of the cities (Robert & Sykes, 2005: 14).

3.2.5.4 Spatial level of focus

After the war, the main aim of planning from the spatial viewpoint was to look at the country as a whole. From the early 1990s onwards, the regional level came to be considered equally valuable in the spatial reference (Getimis & Kafkalas, 2007: 129).

This led to the reintroduction of previously planned perspectives through the growth of regional activities (Robert & Sykes, 2005: 14). As a result there were adjustments to the operation of the urban policies that were in use during the 1990s. It was clear that it would be better to move back to a more consensual style of policies for planning gradually (Robert & Sykes, 2005: 16).

3.2.5.5 Economic focus

A recession started at the beginning of the 1970s and ended in the late 1980s. The economy had re-established at the beginning of the 1990s, and within the period between the 1995 and 2000, the economy grew at a rapid pace, approximately three and a half percent a year.

The above-mentioned period was partly supported by the strength of exports of financial and business services, as well as structural development. However, the main economic drivers through this period were, firstly, the recovery of activity overseas, leading to a significant acceleration of world trade. Secondly, a positive growth incentive price of developments, which reinforced self-confidence and indirectly increased property and stock market prices (Martin, 2010: 5). Subsequently, economic growth was the strongest since the 1950s, and therefore development could take place.

As an economic summary of the 1950s to the 1990s, the following occurred. From the first paradigm to the fourth, one of the role players controlled or had more control over the economic development. By the end of the 1980s and throughout the 1990s, there was more balance

between the public, private, and voluntary sectors. All the mentioned parties contributed more or less the same funding to the economic development (Robert & Sykes, 2005: 14-15). The economy was strong, which made this balance possible.

3.2.5.6 Role players

During the 1990s, all the role players were in balance. Since the role players shifted from the private sector, special agencies formed partnerships between all those involved in or affected by a given project. These partnerships included the community, which emphasises that social aspects became important to include (Walzer & Jacobs, 1998: 98).

The partnerships also included shareholders, service providers, employees, consumers. These role players helped to achieve success within urban regeneration projects (Walzer & Jacobs, 1998: 98). For example, a waterfront development should include all the relevant role players in a balanced manner.

3.2.6 Summary of the evolution of urban regeneration

The evolution of urban regeneration had several positive influences on the growth and development of cities and neighbourhoods. However, the term had not been defined thus far. Although the new challenge of environmental and sustainable development has not yet been fully enforced, the positive influence in the urban areas of the 1990s has been introduced. This creates the foundation of urban regeneration for the future.

The term urban regeneration has evolved through several stages, and therefore the next step is to understand the term in a new integrated form. It is essential to understand and define the term urban regeneration to set the foundation for the integrated urban regeneration paradigm.

3.3 What is meant by the term urban regeneration?

Urban regeneration means the rebuilding of a town or city by cleaning of unwanted buildings or unused areas. It also entails finding appropriated uses for unoccupied areas or cities through new urban designs (Hornby, 2012: 1238). Furthermore, it is a comprehensive vision or action that leads to the solution of urban problems with regard to the economical, physical, social and environmental condition of an area that is outdated and needs to evolve (Robert & Sykes, 2005: 17).

Robert and Sykes (2005: 17) defines urban regeneration as follows: “comprehensive and integrated vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change. ”

Urban regeneration is aimed at improving areas in cities that are inadequately developed or underdeveloped or have development problems (Robert & Stykes, 2005: 17-18). These areas lack some of the factors mentioned in the previous Chapter, such as infrastructure and/or, poorly sustained transportation systems. Urban regeneration can be seen as a tool for reconstructing these facilities, since there are areas that are in desperate need of transformation, because of economic changes in the city (CBD).

Urban regeneration in a CBD will take place by means of redevelopment, preservation and rehabilitation. The term redevelopment, for the purpose of this study, include the clean-up of the remaining buildings and the re-use of buildings through new ideas and ways. Preservation refers to the protection of old and historical buildings through new design. This includes the repair of old buildings and rehabilitation of buildings that have fallen victim to the decay of the city (Mitchell, 2001: 115).

3.4 New integrated urban regeneration paradigm

It is clear that urban regeneration has gone through several stages, and throughout these stages certain lessons have been learned that can be used in the integrated urban regeneration paradigm. It can be said that development is at a stage where the next paradigm has not been completed. Thus, only guidelines can be given of how urban regeneration is applied in the modern area.

Although the above-mentioned paradigms first focused on identifying the strategies that were involved in the selected paradigms. In the integrated urban regeneration paradigm the strategies differ between locations, countries and districts (Healey, 1993: 83-104). Hence, exploring the four conditions that created the need and demand for urban regeneration will help to understand the above-mentioned argument.

3.4.1 Four conditions that create the need and demand for urban regeneration in the new integrated urban regeneration paradigm

All projects have conditions that need to be addressed or considered, since they have conditions that create the need and demand for urban regeneration. Robert and Sykes (2005: 24) suggest four conditions that will create a need and demand for change.

- **Negative economic transition and employment change:** Crime and pollution always create problems, especially in the economic processes that take place in the urban

environment. Naturally, this weakens the urban economy. When infrastructure is unable to adapt to the new requirements, a 'locked-in' decline results (Robert& Sykes, 2005: 24-25).

- **Social and community issues:** Through the years migration to urban areas increased, resulting in pressure to provide more work opportunities. This migration leads to a breakdown of traditional families to the extent that families stay together to save capital and there is a decline in community structures (health services). These issues change the nature of urban policies that have an effect on the family unit, changing social values, thus making crime a way of life. Lastly, there is a concentration of communities in the urban core (Deaton, 1990: 64-65).
- **Functional obsolescence of buildings:** The neglect of buildings and the outdated infrastructure have to change for the urban users, as does the environmentally contaminated land (Robert& Sykes, 2005: 27-28).
- **Poor environmental quality and sustainability:** There is growing awareness of unsustainable urbanisation and the impact of city development on economic goals and cities that continue to produce environmental impacts that outweigh the benefits. For instance, excessive energy consumption through the inefficient use of raw materials; the neglect of open space and the pollution of land, water and the atmosphere (Robert& Sykes, 2005: 28-29).

If these conditions are present, there is a high demand for urban regeneration before the problem passes the point of no return. To prevent the point of no return, planners and the different role players have to jump into action to address the problem.

3.4.2 Role players of the integrated urban regeneration paradigm

For urban regeneration to successfully take place, several role players should be involved. For example, the economic situation does not make it possible to have the necessary financial support for programmes like urban regeneration. Table 3. 2 shows that the following role players are needed:

Table 3. 2: Role players to include in the modern era of urban regeneration

Role Players	
Non-governmental organisations	Governmental organisations
Key business cooperation is needed from the influential financial leaders in the area to attract tourists and to revitalise the area.	Local level: Long-term partnerships have to be created between the public and the local government.
Co-operation with public participants ensures that the area will be utilised successfully.	Regional level: There is a need for strategies to which local level role players could relate to and for a bridge between national and local level.
Harbour organisations (when waterfronts are involved).	National level: Develop strategies that promote broader long-term development, as well as financial support.

Source: Adapted and constructed from Panteleev (1992: 18-19)

For urban regeneration to take place different role players should be present or the programme will not be a success. As a response, Robert and Sykes developed urban regeneration principles to ensure that the development will be successful.

3.4.3 Urban regeneration principles for the integrated era

Robert & Sykes (2005: 18-19) revealed that there are principles that should be used in urban regeneration. According to them these principles are listed as follows (refer to table 3. 3).

Table 3. 3: Robert and Sykes Principles

The Principles of Robert and Sykes	
Principle	Explanation
All urban regeneration plans should include a detailed analysis of the urban area, and not only a small urban area, but the total urban area.	When the plan only focuses on one reduced area, important information and resources can be lost, which could have improved or uplifted the area.
When urban regeneration is being implemented, it is essential to implement instantaneous adaptation of social structures, the economic base and environmental conditions of the urban area.	It means that not one of these should be implemented before the other, because if one is implemented before the other the development will only be economically driven, the social and other essential points.
The strategy should be complete and integrated.	The urban regeneration project should be complete to avoid problems in the future and should integrate all possible projects and plans for the future.
The strategy should aim to be sustainable.	Sustainability is a high priority, Therefore, all urban regeneration developments should strive to be sustainable.
The urban regeneration project aims should be measurable.	It implies that the project aims should not be too comprehensive. Instead, the project aims should be divided into smaller timelines to ensure that the project aims are met.
Strategies should make the best use of environmental, social, economic resources.	The resources within an urban regeneration area can be seen as one of the best resources for planning. These resources can unlock the benefits of the area and the area's beauty.

In a balance with different role players.	As seen throughout this Chapter, it is clear that the different role players all play a strong role in the development of the project. Therefore, full participation and co-operation of stakeholders and the different partnership should be in balance.
The strategy should recognise the importance of measuring progress and monitoring change.	When urban regeneration is implemented it is important to measure the progress of the development. On the other hand, when change is needed while development is taking place, it is essential to monitor the changes and provide for suitable alternatives
Accept the likelihood that initial implementation programmes will have to be revised.	As seen in the previous argument, the probability of changes when urban regeneration is implemented is strong. This will have an influence on the plan as well. Thus, there should be acceptance of the likelihood that the plan will have to be revised to connect with the changes in the development.
Recognise that various elements of the plan will make progress at different speeds.	Some parts of a plan can take years before it can be implemented and others may take only days.

Source: Adopted and constructed from Robert & Sykes (2005: 18-19).

3.5 Conclusion

The focus of this Chapter is to understand the term urban regeneration and the historical background of the different paradigms that played a role in the development thereof. In concluding a summary of the various paradigms is provide below:

- **Major strategy and orientation:** At the beginning of the 1950s the focus and strategy were to reconstruct the cities that were destroyed the World War II and to provide housing for residents.

In the 1960s planners realised that without the inclusion of the communities, the reconstruction strategy of the cities will not be successful and adopted a revitalisation strategy.

After understanding that the community is an important aspect of any strategy, planners considered a renewal strategy. The focus was to develop the inner cities, as well as the neighbourhoods at the periphery of the city, using the neighbourhood scheme.

In the 1980s the government realised that without private companies, the projects will not be economically sustainable. This led to the flagship strategy with public-private partnerships. Government also realised that focusing on multiple projects it is not sustainable, so they started focusing only on areas of high development potential.

At the end of the 1990s the first understanding of what urban regeneration means and how to use it, emerged.

- **Key role players**

All the paradigms emphasise that key role players should be in balance and that governmental and non-governmental organisations are equally important.

For example, at the beginning of the 1950s, the government financed all urban regeneration growth projects. Throughout the 1970s the government realised that they cannot be the only provider. They started including the private sector and by the 1990s realised that the government, private sectors, community, and social sectors should be included in all urban regeneration projects.

- **The spatial level of focus**

The 1950s the government used normal consensual style policies, and through the years moved away from these policies. In addition, the government soon realised that these new policies will not work. Therefore, they moved back to the consensual style of policies. The lesson learnt was that when something did not work; go back to when it did, until a new option presents itself.

- **Economic focus**

From the beginning of the 1950s to the 1980s one of the role players would either fully control or have more control than other role players. In the end the 1980s and throughout the 1990s there was more balance between the public, private and voluntary sectors. All of the investors contributed more or less the same funding to economic development. Consequently, creating balance between the different investors and showing that without equal opportunity to invest in a project, the economy will not be sustainable.

- **Social components**

Throughout the 1950s and 1960s the focus was placed on providing the majority of residents with housing and increasing the social standard of the community. This increase in social standard was only provided by the government. By the 1980s the aim had become to improve the historicity of the city without the help of the communities. By the end of the 1990s, it was clear that the community plays a significant role in the success of urban regeneration. Therefore, it is of high importance to include communities in urban regeneration projects from the beginning.

- **Primary focus**

In the 1950s and 1960s the goal was to provide housing for communities due to the large backlog following World War II. In the 1970s, the goal became to provide more work opportunities and improve the economy. In the 1980s and 1990s the prime focus was to increase the image of the cities and to ensure that all projects are sustainable. This was one of the most important components of the revolution of the term urban regeneration.

- **Environmental approach**

The environmental aspect was absent from all the paradigms until the 1990s when the first environmental components were included into the projects to ensure that all urban regeneration projects are sustainable. The environmental aspect had an effect on the growth of the term urban regeneration.

The different paradigms bare evidence of how the term urban regeneration evolved over time. Secondly, the paradigms show which components have an important effect on any urban regeneration project and which components to include or to consider when focusing on urban regeneration.

The Chapter has provided the building blocks of what to include when focusing on urban regeneration. Furthermore, it has shown that the participants or role players have a large role to play to achieve success in an urban regeneration programme. On the other hand, without the right financial help a project is doomed to failure. In addition, the Chapter also showed without the correct planning approach, the project would not succeed either.

In the end, it showed that without the correct urban regeneration principles a project would not even succeed the beginning stages. Subsequently, waterfronts need to include all the relevant role players.

Chapter 4: An overview of waterfront development with reference to urban development and urban regeneration

4.1 Introduction

At the beginning of this dissertation, the different urban models investigated were to illustrate different factors that cause a city to grow, subsequently influencing the morphology of different areas in the city, such as the agglomeration benefits that attract businesses to sub-centres to benefit from better transportation costs. The evolution of cities eventually culminates in the multiple nuclei model where a city has more than one sub-centre. This model forms the basis of this Chapter.

The Chapters on urban development and urban regeneration provided the foundation for this Chapter; especially through identifying the important components to consider when endeavouring waterfront regeneration. The preceding Chapters also highlight the importance of understanding the role of waterfront development within urban regeneration.

As indicated, most waterfronts in South African cities are experiencing a steady decline. However, through regeneration these waterfronts could be restored and secured as economic hubs that include the social and environmental components. The focus of this Chapter is divided into three sections, namely the origin of the term waterfront regeneration; the development of waterfronts and finally waterfront regeneration itself. Within waterfront regeneration the focus will be the understanding of what the main role of a waterfront is, secondly to understand the problem of detachment and finally how regeneration can influence the role of the waterfront.

The origin and development of the waterfront can be linked to urban development by looking at the different stages of port development. Consequent to the decline of waterfronts, urban regeneration comes into play; especially with regard to the social and environmental factors. Through the involvement of several role players, regeneration can become a reality. However, there can be both advantages and disadvantages to regeneration. This may have an effect on waterfront regeneration. The first step will be to define and construct the term waterfront regeneration.

4.2 Constructing the term waterfront regeneration

The term is divided into three different components namely: waterfront, waterfront development and waterfront regeneration.

4.2.1 Waterfront

According to Carta (2006: 88) and Dong (2004: 7) a waterfront is defined by a stretch of land or area located along or in direct contact with a body of water, or a stretch of land fronting on sea (rivers, lakes, oceans, bays and creeks). It can be a harbour district of a town or a city of any size (Timur, 2013: 170). Furthermore, a waterfront should not only be seen as a line along the water's edge, but rather a network of places, functions and additional uses. A waterfront should be a centre between the shoreline and the city, as well as between the harbour activities and urban activities. Moreover, waterfronts should be seen as a concentration of functions including production, cultural, relational, recreational and residential functions and an area of public use.

4.2.2 Waterfront development

Waterfront development is defined by development directly adjoining water for any purpose. Furthermore, water components can include river deltas, coastal plains, wetlands, beaches and dunes, lagoons and other water features (Tekalign, 2013:11; Yassin *et al.*, 2009: 1). The primary purpose of a waterfront development is for the waterfront to serve as an area for the transportation of goods through water (Yassin *et al.*, 2009: 4).

Waterfront development started when local residents, sailors and traders settled along the water's edge, and started to develop industrial waterfront areas. Consequently, industrial buildings and warehouses were developed along the waterfronts to supply trading services in the main economic cities.

4.2.3 Waterfront regeneration

Waterfront regeneration recently became a high priority (Sairinen & Kumpulainen, 2005: 121) to provide the public with access to the shoreline and to protect the waterfront's biodiversity. This creates positive influences within waterfront areas. Furthermore, waterfront regeneration became a high priority given the fact that waterfronts have lost their function as an economic hub.

The term waterfront regeneration can be defined as the rediscovery of old city harbours (Wiegman & Louw, 2011: 575). For instance, it can include buildings and areas that are not directly adjacent to the water, but are otherwise linked or tied visually, historically or ecologically to parts of the city or town.

Waterfront regeneration currently embodies the historic alteration of land and water along the edges of thousands of cities, large and small, throughout the world (Sairinen & Kumpulainen, 2005: 121). It is clear that waterfront regeneration became more important. The definition

developed into something more comprehensive as waterfront regeneration gained a more significant place. Therefore one must look at how waterfronts developed and evolved over time and the role it plays in coastal development.

4.3 The development of waterfronts

The development of waterfronts underwent several phases that can be divided into three main themes, namely the origin of waterfronts; waterfront and urban development; and waterfront and urban regeneration. These main themes led to the coining of the term urban regeneration.

4.3.1 Origin of waterfronts

It is important to understand the origin of waterfronts as they were embedded in economic trade goods. The history of trade started between individuals within villages, and later between different villages (Curtin, 1984: 2). Seaports developed at a later stage to improve the quality of goods and the time that traders took to transport goods from one place to another, which included silk, gold, silver, spices, jewels, porcelains and medicines (Bernstein, 2008: 1). Furthermore, travellers transported goods on common roads that were easy to access in all directions (Curtin, 1984: 3). History shows that the geographic landscape determined the trade routes. As revealed by Curtin (1984: 3) the first trade routes were down the Rhine and then eastward along the coast of the North Sea and the Baltic, laying the foundations of the trading towns.

As the foundations were laid, the only problem was the time it took to transport goods from one place to another. Consequently, a cheaper and safer method to transport the goods was needed. The solution came through the exploration of water transportation. Soon after these new transport methods were identified, the need for resting locations arose. Travellers discovered new locations to rest and re-stock their supplies before continuing on their journey. Finally, the only thing needed was for an area to remove their cargo and passengers from the ships, resulting in the establishment of a port along the coast (Bernstein, 2008: 4).

Waterfront areas were established to address the increase in the economic needs of the travellers and the transportation of goods. Waterfronts underwent several developmental phases to establish a safe harbour where inhabitants have an area of safe despatch, as well as direct contact with the natural shoreline (Seattle's Waterfront Design Collaborative, 2010: 5). The following section focuses on the urban development phases of waterfront development.

4.3.2 Waterfront and urban development

Waterfront development and urban development have several similarities, not only due to the physical structure of the city or the growth of the cities, but through the different periods. It is more a link of the economic, social and environment components, which has been shown to be important components of urban regeneration.

(a) Settlement of the port

As explained in the above-mentioned origin of waterfronts, there was a need and demand for an area where explorers can offload cargo and replenish their supplies, leading to the first port settlement along the coast.

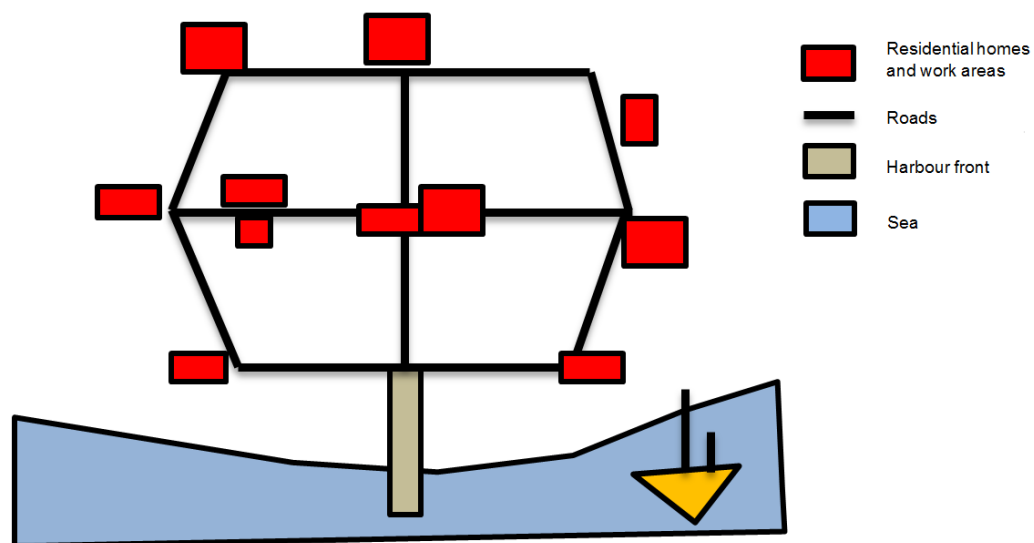


Figure 4. 1: Settlement of the port Source: Adapted and constructed from Wrenn (1983: 10-11).

Figure 4. 1 illustrates how development occurred. First the working areas were developed (CBD), secondly the port area was developed and implemented, forming part of CBD, and thirdly the area of transition developed as a result of residential growth. Furthermore, a port settlement was established in a safe harbour where inhabitants could still have direct contact with the natural shoreline. Nevertheless, this period of development was economically driven. In the meantime, the main function was to help with the transportation of goods and to cater for the social needs of the travellers that stop at the port.

(b) Establishment of ports

During this period the ports transformed into important economic areas with industries, services, businesses and strong harbour activities. As a result, the settlement became a port authority, which included docks made of stone, and harbour trade that stimulated urban development, leading to the development of roads and transport facilities that provided goods and services to the area.

Over time the harbour front or waterfront became more and more economically driven. It expanded and this created a need for specialists and special port activities. An increase in uses for waterfronts came with the arrival of the steamships and warehouses, blocking the water's edge from the rest of the city (Wrenn, 1983:561). Furthermore, the need arose for easier transportation in the form of railroads and areas that can service the harbour fronts (Wrenn, 1983:10).

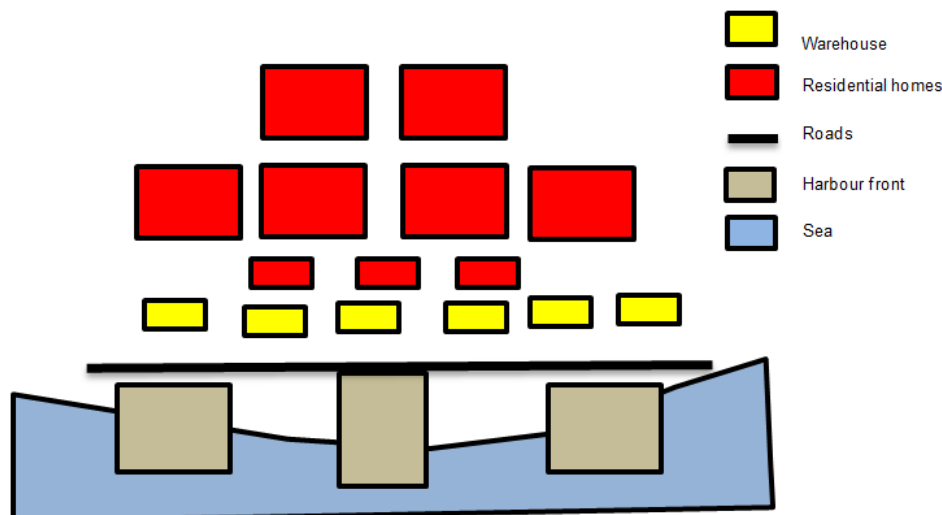


Figure 4. 2: Establishment of the port Source: Adapted and constructed from Wrenn (1983: 10-11).

According to Letourneur (1993: 11), transportation, industry and transports of goods became the only use of waterfronts. The construction of warehouses (indicated in yellow in Figure 4. 2), railways and highways created a barrier between the public and the water. Due to the industrial pollution, the waterfront deteriorated and indirectly caused the waterfront to lose its natural attraction for many urban residents. Finally, economic activities affected development so severely that the city and the harbour front lost its link to the rest of the city. Therefore, the role has changed from economic and social, to only economically.

(c) Detachment from the city

Waterfronts eventually started to detach from the surrounding urban environment (Wrenn, 1983: 10-11). This detachment mostly happened due to three reasons: (a) development of new ports; (b) environmental reasons such as pollution; (c) and the development of the railroad.

- Development of new ports: New ports were developed after World War II to provide for larger container ships (steamships) and maritime industries (Centre of Military History United States Army, 1992). Subsequently, port activities moved to new areas, resulting in the detachment from the urban environment (Wrenn, 1983: 10-11). Above all, ports moved outside the city, while they initially played a central role in the development of the city (Figure 4. 3 - New port seen in brown). The ports consequently lost their role of transportation and hosting industrial sectors (Zhang, 2002: 11).
- Environmental reasons such as pollution: Pollution also played a role in the neglect of waterfronts, because residents no longer desired to live in these areas. Residents moved to other locations further away from the harbour front and the CBD, contributing to the detachment of the waterfront from the urban environment (Zhang, 2002: 11).
- Development of railroads: With the development of alternative forms of transportation, for instance railroads, the city was divided into two separate zones, preventing interaction between the city and the waterfront (Wrenn, 1983: 10-11). Figure 4. 3 shows how the roads have divided the city into two separate zones.

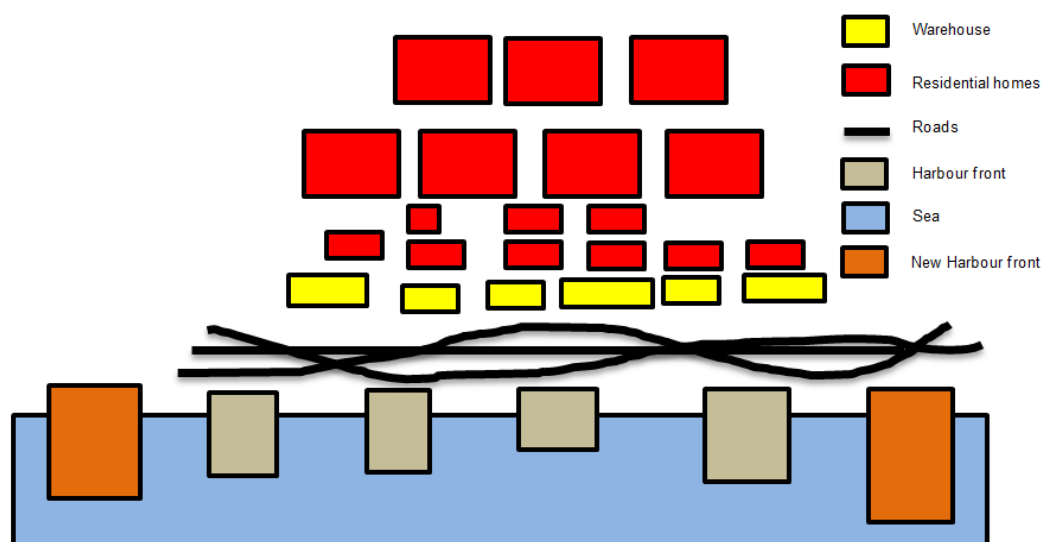


Figure 4. 3: City- waterfront detachment (Source: Adapted and constructed from Wrenn, 1983: 10-11).

The priority of cities slowly developed into a more economically driven one, resulting in the detachment from the harbour front. The waterfronts became isolated separated zones in cities.

(d) The decline of waterfront

The detachment and decline of the waterfront normally takes place almost at the same time. Decline occurred at the same time the waterfront was detaching from the city core. Consequently, a need existed to accommodate new, larger and more modern ships and new locations for ports were chosen. Finally, the role of the old port has now changed from an economic hub to an abandoned area of no use.

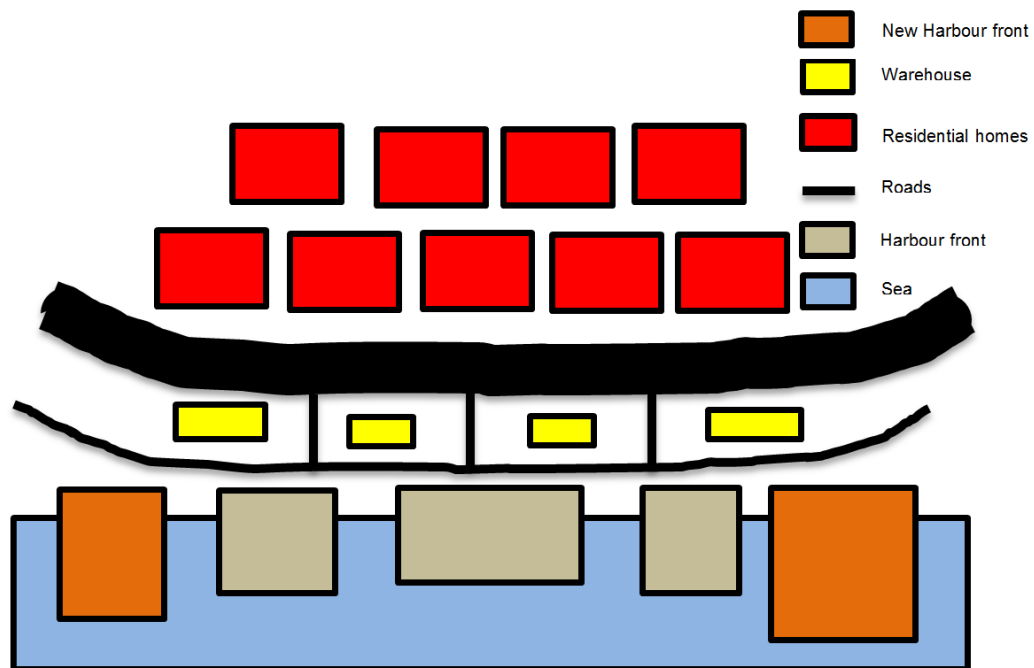
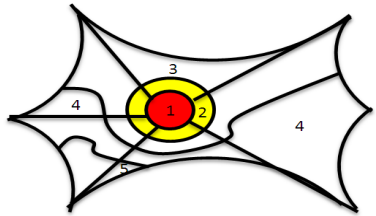
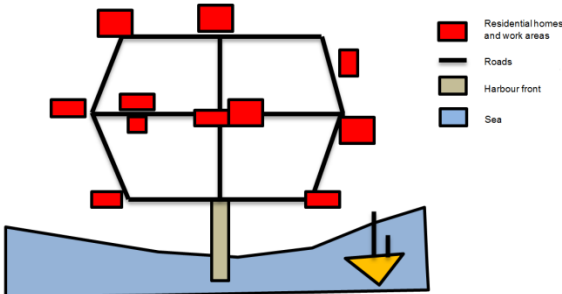
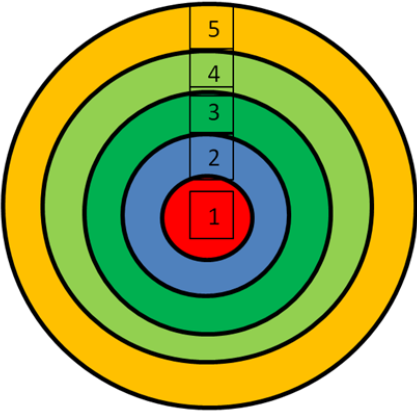
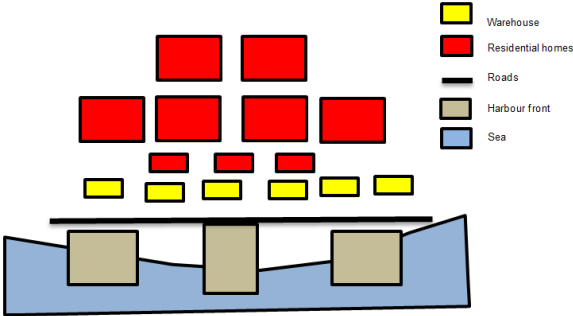


Figure 4. 4: Decline of the waterfront (Source: Adapted and constructed from Wrenn, 1983: 10-11).

Approaches need to be combined to determine how development commences, how development takes place and how the different factors (economic, social and environmental) and the role of the waterfront in the city have changed. The urban development of the city and the urban regeneration has influenced the development of the waterfront, as is illustrated in Table 4. 1.

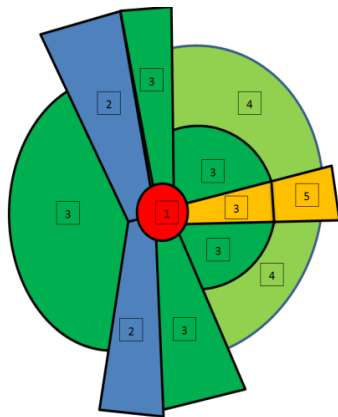
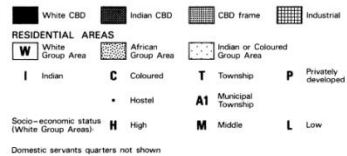
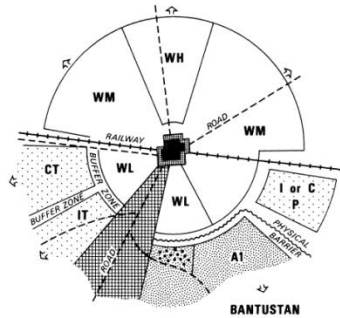
Table 4. 1: Waterfront development time frame in relation to urban development theories

Waterfront development timeframe through the use of urban development theories				
Phases	Urban development theory	Waterfront regeneration phase	Urban regeneration	Relation/Connection
(a) Phase 1	<p>Star-shaped city</p>  <ol style="list-style-type: none"> 1. CBD 2. Transition zone of residential decay 3. Low income residential 4. Middle income residential 5. High income residential 	<p>Settlement of ports</p>  <p> ■ Residential homes and work areas — Roads — Harbour front — Sea </p>	Reconstruction paradigm (1950s)	<ul style="list-style-type: none"> • Urban regeneration tool for urban reconstruction. • Linked to star-shaped city • One CBD • Economically, socially driven

<p>(b) Phase 2</p>	<p>Concentric zone model</p>  <ol style="list-style-type: none"> 1. Central Business District 2. Zone of Transition 3. Zone of Workingmen Homes 4. Zone of Better Residences 5. Commuters Zone 	<p>Establishments of ports</p> 	<p>Revitalisation paradigm (1960s)</p>	<ul style="list-style-type: none"> • Economically driven • CBD increased in function linking to concentric zone model • Area of transition next to road • Middle income residential areas with warehouses in between. Transition takes place within this area. • Local/Regional level: Expand to outer limits of the city
--------------------	---	--	---	--

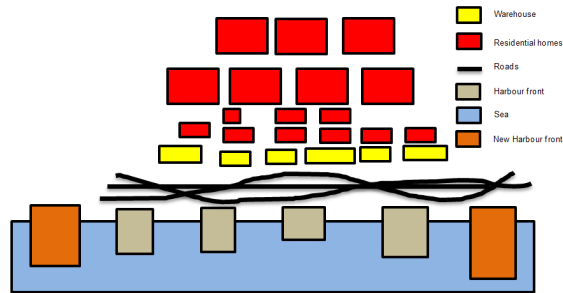
(c) Phase 3

Sector model & Apartheid model



1. Central Business District
2. Zone of Transition
3. Zone of Workingmen Homes
4. Zone of Better Residences
5. Commuters Zone

Detachment from the city

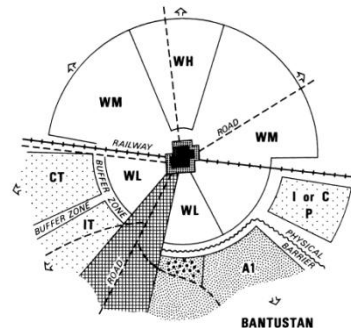


Renewal paradigm (1970s)

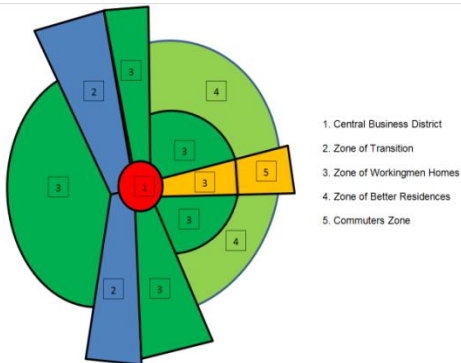
- Major economic growth
- Expansion on local level
- Stronger transportation networks
- Detachment linked to the sector model and the apartheid model due to road networks that separate the different areas.
- Different zones link to harbour front.
- Residents move to outer limits of the city
- Old port decay
- Waterfront and CBD are divided

(d) Phase 4

Sector model & Apartheid model

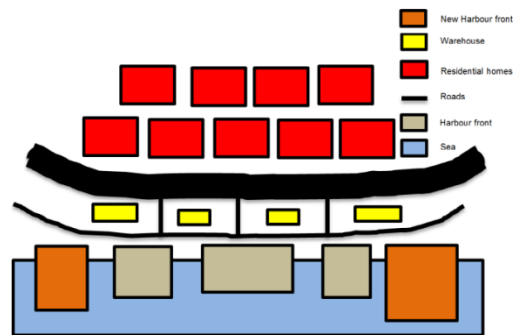


White CBD Indian CBD CBD frame Industrial
 Residential Areas
 W White Group Area African Group Area Indian or Coloured Group Area
 I Indian C Coloured T Township P Privately developed
 • Hostel A1 Municipal Township
 Socio-economic status (White Group Areas)
 H High M Middle L Low
 Domestic servants quarters not shown



1. Central Business District
 2. Zone of Transition
 3. Zone of Workingmen Homes
 4. Zone of Better Residences
 5. Commuters Zone

The decline of waterfronts



New Harbour front
 Warehouse
 Residential homes
 Roads
 Harbour front
 Sea

Redevelopment paradigm (1980s)

- All points in phase 3, although intensified.
- Harbour front is not part of the CBD or the rest of the city

Source: Adapted and constructed from Wrenn (1983: 10-11), Bollens and Schmandt (1965: 51) and Chapin (1965: 14-15).

Considering the above table, the following is emphasised:

- (a) **Phase 1:** Urban regeneration can be used as a tool for the reconstruction of demolished cities. In addition, the reconstruction can be linked to the restart and growth of cities, linking the star-shaped city and the settlement of ports together. For example, when the reconstruction began in the 1950s, the ports and/or harbour front were reconstructed as well.

The role of the reconstruction, settlement of ports and the star-shaped city was economically driven. For example, urban development takes place when cities first develop and the city has one CBD, if the land value is the same for the harbour, the city and the neighbourhood, as seen in the star-shaped city. In addition, all areas within the city and harbour front were used as major work areas for travellers and traders.

Finally, as seen within the star-shaped city, port development took place from the core to the outer area. This can also be seen in the reconstruction phases where reconstruction also took place from the core to the outer limits.

- (b) **Phase 2:** The primary role was economically driven throughout all three phases to provide work opportunities through the increase of the industries and port facilities. This period can therefore relate to the concentric zone model, since the central business district increased in functions, for example, the CBD comprised new hotels and other economic functions. The area changed in the area of transition. The area of transition became the area next to the road where new market areas and the residential areas (low-intensity business zone) have formed. However, these areas developed through agglomeration benefits. The small residential areas next to the warehouse are the areas where working residents live and small shops are found, and further out one finds the middle-income residential areas.

On a spatial level, the city started to expand to the outer limits as seen in the concentric zone model where development took place further away from the centre. It took place in the period of port establishment because the development took place further and further away from the harbour front. It can be linked to revitalisation as well, since the focus was not only at a local level, but also at a regional level.

Phase 3: The focus throughout this period was on major economic growth, subsequently leading to the expansion of the city and economic growth on a local level. As the economy becomes stronger, so does the need for better transportation networks, such as bigger and better port facilities and road linkages. A period of detachment can be linked with the

sector model in Chapter Two. Here transportation plays a role, hence the high rent areas located close to the roads to ensure easier access to the roads and the city centre.

The sector model and Apartheid model show strong similarities, because the different zones for the different uses are similar. For example, the sector model had different zones for different residential and business zones, whereas the Apartheid model had different zones for different cultural groups. The harbour front is divided into four areas, namely port areas, warehouses, residential homes and road facilities.

As residents move out of the city to avoid the environmental problem, they move to the high-rent area. This area is located on the outskirts of the city in the Apartheid and sector models. In these areas the living standards are better because of lower pollution, which means that people move away from the residential areas, leaving them to decay, similar to the harbour front areas.

Finally, during this phase the waterfront and the CBD is totally isolated from one another, as with the Apartheid model and sector model. All the zones are divided and split from each other through physical boundaries.

- (c) Phase 4:** During this phase all of the points explained in phase 3 intensified and the city has totally “rejected” the waterfront area. Consequently, the waterfront is no longer part of the CBD and the rest of the city, and the waterfront has lost its initial purpose.

The role of the waterfront has changed significantly. It was once part of the CBD, and became the main provider of economic growth as part of the economic hub, until it finally no longer played any part in the city centre. Consequently, a new role for the waterfront is needed that could be obtained through urban regeneration.

4.3.3 Waterfront regeneration

Some obstacles have to be overcome to implement urban regeneration, such as the pollution caused by industrial activities, the quality of the infrastructure and all the abandoned warehouses and storehouses. In order to achieve this, the city and the waterfront have to be re-joined and it is deemed to be feasible through urban regeneration. It is especially vital for the potential economic, environmental and social benefits it holds for the area. These benefits include public use, as well as recreational, residential, and commercial uses. Figure 4. 5 illustrates the reintroduced public uses located within the new and old harbour fronts.

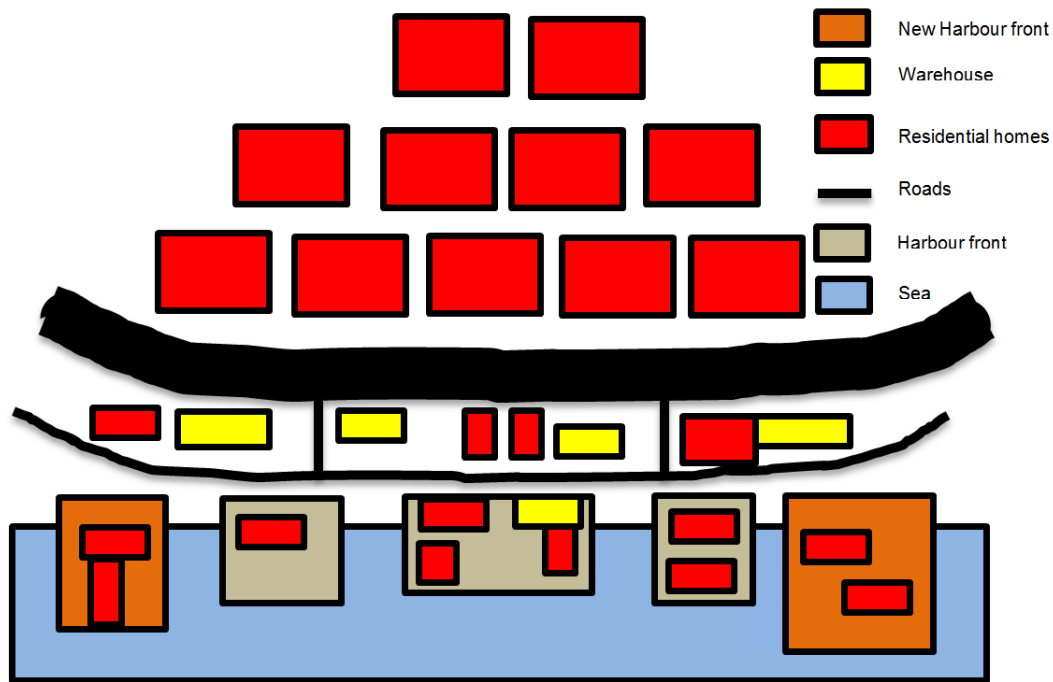


Figure 4. 5: Rediscovery of the harbour front (Source: Adapted and constructed from Wrenn, 1983: 11).

To reintroduce the social and economic uses in the waterfront, there has to be some interrelated qualities such as the right history and size, the right location, land structure and climate, the diversity of water-related uses and city's management status. Waterfronts are mostly dramatically changed due to the influence of social and technological factors. As a result more and more areas are regenerated and regained for social use (Wrenn, 1983; Zhang, 2002: 26-31).

(a) The social impact of waterfront regeneration

As previously mentioned, some integrated qualities are needed for a waterfront. Sairinen and Kumpulainen's (2006: 125) table aims to address the social impact of a waterfront. The most significant focus of the social impact assessment is to ensure that the main goals of the waterfront regeneration project are met, such as the different social and environmental benefits the waterfront should offer the community (the physical appearance of the area, recreational benefits, the history of the area, employment creation for the local residents and environmental protection) as revealed by Sairinen and Kumpulainen (2006: 124).

The different social qualities of waterfront regeneration are divided into four categories, namely resources and identity; social status; access and activities; and the waterfront experience (Sairinen & Kumpulainen, 2006: 125). The qualities were recognised through a number of waterfront regeneration plans and projects that were completed. The waterfront qualities are explained in the following table.

Table 4. 2: Social qualities of waterfront regeneration

The different social qualities of waterfront regeneration	
Resources and identity	Characteristics and strengths of the area can be a link to the environmental, cultural or historic values, such as the nature parks or specific marine life. This increases the ability to achieve the aims of the waterfront.
Social status	Social status focuses on those for who the waterfront is developed, including the different residential zones mentioned in Chapter Two, for instance different age groups, specific ethnic groups or gender.
Access and activities	<p>The waterfront areas should be accessible to the public, and not only focused on private business or tourists. There should be activities in which people can engage.</p> <p>Access to the waterfront entrance should be accessible and nothing should prevent the residents from accessing the area. There should be clear directions to the location of the waterfront as well as transport and parking systems.</p>
Waterfront experience	A feeling of the presence of water or contact with the water, sea, lake or river should add to the waterfront experience. Furthermore, the presence of a restorative experience is important. The sensory experience should be positive, be it visual, physical, tastes and sounds.

Source: Sairinen and Kumpulainen (2006: 125)

Using the social quality assessment table above, a waterfront regeneration project could be evaluated to reflect if the waterfront development will be able to fulfil its role in the city. The evolution of the city and the waterfront has undergone several phases of development. The waterfront's first role was economically and socially driven, since it was part of the city centre.

Over time, as the city changed, the waterfront's priority changed to be strictly economically driven. However, the waterfront started to lose its economic role due to outdated dock facilities and became less important for the city and it ultimately started to detach from it. Hence, a new role for the waterfront had to be discovered and urban regeneration is seen as a viable option to restore and establish a purpose for these derelict areas in cities.

The waterfront has regained a role and purpose in the city through urban regeneration. The role has changed from only focusing on economic factors to including environmental and social factors. In the case of urban development, the cities' form has changed from an area with one centre to an area with multiple centres. This process of evolution of waterfronts seems to be complex and involve numerous stakeholders (Sahin *et al.*, 2013: 284). It is thus necessary to investigate which stakeholders to include and how.

4.4 Role players in waterfront regeneration

Huang *et al.* (2011: 385) emphasise the importance for any waterfront regeneration project to decide which investors and parties to include in the project and what their responsibilities are. With the wrong parties, the project will not succeed. Huang *et al.* (2011: 385) developed the following figure (Figure 4. 6) that illustrates the different responsibilities of role players.

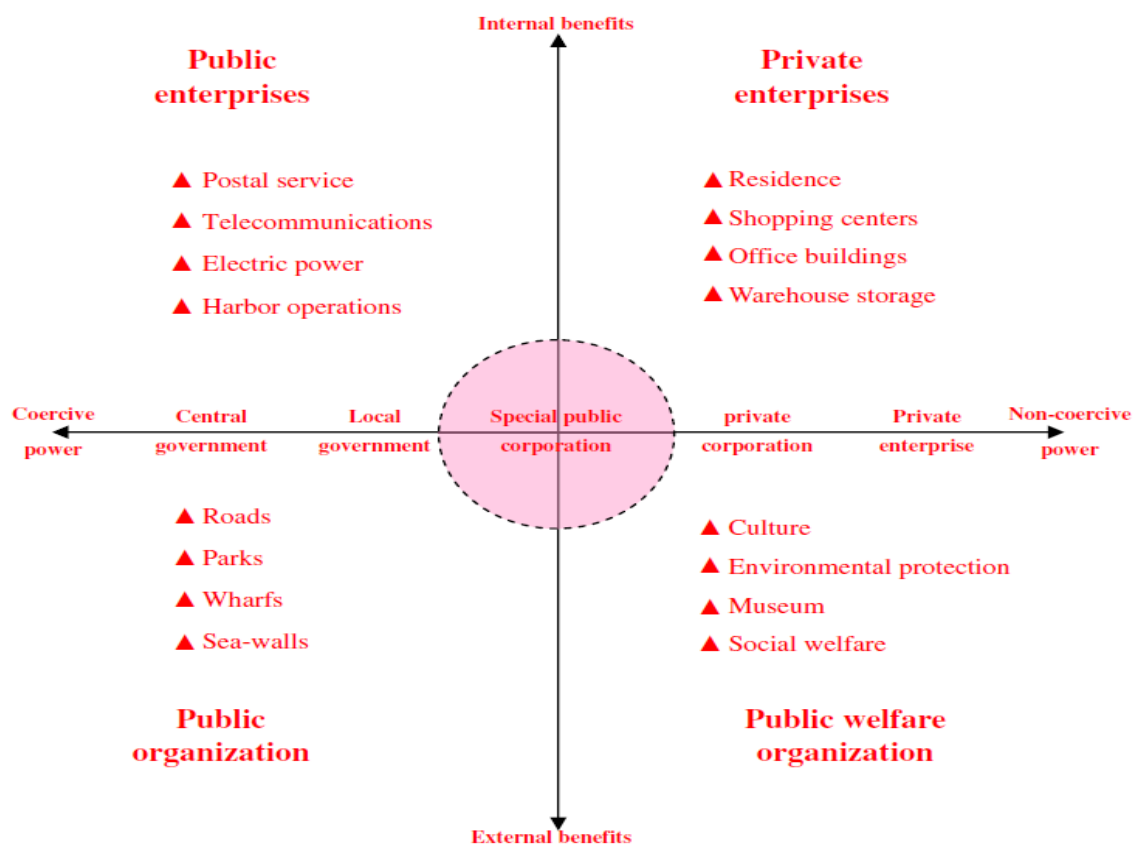


Figure 4. 6: Role players and their responsibilities Source: Huang *et al.* (2011: 385).

The horizontal axis represents coercive power and non-coercive power. Starting from the beginning of the project, the closer it is to the left, the higher the coercive power will be. The vertical axis demonstrates that the further development moves away from the special public corporation, the lower the coercive power will be (Huang *et al.*, 2011:385).

Figure 4. 6 also provides other role players, only at different levels: the central government; local government; special public corporation; private corporations; and the private enterprise, whereas the special public corporation with dotted lines represent the needs of different development items. They are given some degree of coercive power and autonomy. On the other hand, the role players on the left are public organisations that possess a higher level of coercive power. Finally, the private bodies on the right have the highest level of autonomy (Huang *et al.*, 2011:385).

The vertical axis represents internal benefits and external benefits to all the role players and the closer it is to the top, the more prominent the internal benefits. These role players' main goal is profit. Notably, the closer it is to the bottom, the more significant the external benefits are. The main goal of these role players is not to make a profit.

Finally, the diagram explains structures of four types of role players in waterfront development, namely public organisations, public enterprises, public welfare organisations and private enterprises. Each role player performs different functions, depending on their features (Huang *et al.*, 2011:385). These role players also perform different functions in waterfront regeneration:

- **Public organisations:** A public organisation exercises coercive power, which includes searching for external benefits; their main goal is to provide mandatory, non-exclusive and non-rival public facilities. Market regeneration may be necessary for social fairness and wealth to be achieved in the long run. The role players' developmental role is to provide roads, parks, jetties and sea walls (Huang *et al.*, 2011: 385). The public organisation is important to ensure that the social components are included in decision-making. The public organisations are more focused on providing a service to the area, than to create revenue (Sairinen & Kumpulainen, 2006: 122). Therefore, they are important role players in the project, because they ensure that the social and environmental components are taken into account.
- **Public enterprises:** The public enterprise is a coercive power. Their priorities are to maximise internal benefits or profits within the limits of the law. In addition, they exist to provide local services to the customers and avoid market speculation. The role players' developmental role is to provide postal service, telecommunication, electric power and harbour operations (Huang *et al.*, 2011: 385). Hence, the public enterprises can be seen as

the government that provides the facilities, but with a price attached to it. They are more economically driven than socially or environmentally motivated.

- **Public welfare organisations:** A public welfare organisation exercises independence and prioritises the search for external benefits. Importantly, their goals are to create social benefits and services that are non-profitable. Many public organisations are unable to engage in operations like a waterfront regeneration project and the private enterprises are unwilling. These operations are then handed over to the public welfare sector, and in the end becomes a financial burden on local government. Therefore, their developmental role is to provide culture, environmental protection, museums and social welfare, etc. (Huang *et al.*, 2011: 386). The public welfare organisation's focus is the environmental and social aspect, whereas the social aspect focuses on the communities (Sairinen & Kumpulainen, 2006: 124). Consequently, their role is to ensure that the social and environmental components are taken into account, and they cannot be successful without the investment of the private enterprises.
- **Private enterprises:** The private enterprises remain independent and prioritise the search for internal benefits. Their main goal is to make profit and private enterprises have relatively higher operation efficiency (Carroll, 1991: 46). By using private enterprise participation, public organisations may reduce financial risks, subsequently decreasing development efficiency. Thus, their developmental role is to provide residences, shopping centres, office buildings and warehouse storage, etc. (Huang *et al.*, 2011: 386).

There should be a balance between these four role players. The different role players should focus on their responsibilities. Unfortunately, it is not always possible and in most cases one or more role players try to benefit the most from the project. This is mostly the private enterprises, because they focus only on improving their profits (Huang *et al.*, 2011: 386). Meanwhile, the national and local government usually tries to control the project. However, it is important that the four role players are in balance. It is also important to understand the goals of the project and fully agree with the goals (Huang *et al.*, 2011: 386) to ensure that the aim of the waterfront is achieved.

4.5 Advantages and disadvantages of urban waterfront regeneration

Waterfront development was seen as a tool for urban regeneration within the city. To change the role, the advantages and disadvantages should be weighed up against each other to ensure that the project will be achievable. With all urban development projects there are advantages and disadvantages to take into account when considering the project. The advantages of urban waterfront regeneration are that it improves social, economic and environmental conditions in

the community. According to Jones (2010: 434-439) and Morena (2011), the advantages and disadvantages of waterfront development can be summarised as follows (refer to table 4. 3):

Table 4. 3: Advantages and disadvantages of urban waterfront regeneration

Advantages	Disadvantages
An increase in the value of estate property	If there is currently any project under way in order to upgrade the CBD without the inclusion of the waterfront, it can lead to further detachment between the city and the waterfront
The preservation of historical and local heritage in the area	The culture of the city could be lost
The re-use of historic buildings for new economic growth	The value of the land and properties may be so expensive that the total meaning of the open spaces and waterfront area may be lost
The improvement of water quality	The life expectancy of the waterfront can be short making it a failure
New work opportunities and activities for the area	Commercial tourism could dominate the waterfront area
Offering new economic regeneration opportunities for city centres that have lost their purpose	The aim of the waterfront is important. Providing a high-quality area can be overshadowed by making profits
Attracting tourists at a national and international level	Free access to the waterfront can be lost
Providing new residential areas	Safety of the area is critical and can fail, especially in third world countries
The improvement of environmental conditions that may be awakened	
The improvement of social services such as	

transport	
Providing relationships between water and the city	
Providing new economic investment opportunities in degraded areas	
Advancement of the city's overall image, providing favourable marketing opportunities	

Source: Adapted and constructed from Jones (2010: 434-439) and Morena (2011).

Advantages and disadvantages should be considered when developing a waterfront area. Advantages can be used as a guideline to ensure that the project has a positive influence on the city. Furthermore, it is important to ensure that the advantages outweigh the disadvantages before starting the project. If the disadvantages outweigh the advantages the private enterprises will not invest in the project, and it will not be possible to address the social and environment components.

4.6 Conclusion

It is clear that waterfront regeneration is a relatively new term, although it has been in use previously and was recently rediscovered (Sairinen & Kumpulainen, 2005:121). Importantly, the term was first understood as merely a body of water that is in direct contact with the land. When waterfront development took place, the port was developed to ensure transportation of goods from one place to the next. The role was seen as economically driven. The old harbours fell into disuse and a new role for the waterfront was needed. The new role came with waterfront regeneration to develop waterfronts to social and environmental areas.

Historically, waterfront regeneration is only required when the waterfront area is critical for the growth of the city, notably when there is no use for the area and the city is in the decline period. Thus, a new role has to be rediscovered using waterfront regeneration, not only with regard to economic components, but also through social and environmental components. A lack of one of these components, the waterfront regeneration project will receive negative criticism from the role players that will place the waterfront regeneration project at risk.

This Table 4. 4 illustrates the similarities (between urban development, urban regeneration and waterfront development), interaction and integration of a new role through urban development; waterfront regeneration and a new integrated form of urban regeneration. For example, all three

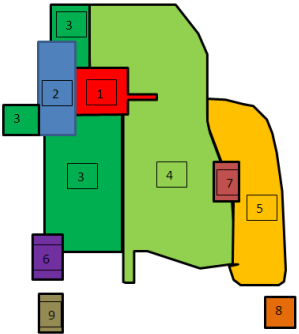

has changed their role from strictly economically driven to economically, social and environmentally driven. The city developed more than one core centre, as seen in the multiple nuclei model and waterfront regeneration (refer to table 4. 4). In addition, all different core areas are linked with each other, ensuring interaction of the city and the water's edge.

The role of the waterfront has changed from not only being economically driven, but addressing environmental and social components as well. It is important to use the correct social assessment factors and to ensure that the waterfront regeneration project will have the correct role and contribution to the city. Additionally, the disadvantages should be minimised using the social assessment factors.

If the social assessment factors are not correctly implemented, the role players will not be correctly selected. It is essential to select the correct role players after the social assessment factors have been considered. Without the correct role players, the above-mentioned aspect will be difficult to implement, and the waterfront regeneration and the project's role in the urban development will be criticised.

The next Chapter introduces the empirical research for this study. The initial focus is firstly to understand how the research approach is used and how the relevant case studies were selected.

Table 4. 4: Phases of waterfront regeneration

Phases of waterfront regeneration				
Phases	Urban development	Waterfront regeneration	Urban regeneration	Relation/Connection
Phase 5	<p>Multiple nuclei concept</p>  <p>1. Central Business District 2. Zone of Transition 3. Zone of Workingmen Homes 4. Zone of Better Residences 5. Commuters Zone 6. Heavy Manufacturing 7. Outlying Business District 8. Residential Suburb 9. Industrial Suburb</p>	<p>Waterfront regeneration</p>  <p>New Harbour front Warehouse Residential homes Roads Harbour front Sea</p>	New integrated form of urban regeneration	<ul style="list-style-type: none"> • New centres developed • New function • Integration of economic, social and environmental factors. • Linked with additional core areas

Source: Adapted and constructed from Wrenn (1983: 10-11), Bollens and Schmandt (1965: 51) and Chapin (1965: 14-15).

Chapter 5: Case studies: International and South African waterfront developments

5.1 Introduction

The literature study clearly showed that the role of the waterfront has changed from not only being economically driven, but also environmentally and socially driven. Furthermore, waterfronts have a remarkable resemblance to urban regeneration and urban development. Additionally, waterfront regeneration should include role players, which ensure that a waterfront regeneration project will have a positive influence on the city. To understand and relate to the above-mentioned themes, an empirical study was done through case studies via a qualitative research approach.

The first part of the Chapter focuses on clarifying the difference between the qualitative and quantitative approaches. The reason for choosing the qualitative approach is that it focuses on collecting and analysing information in as many forms as possible (Kanbur, 2001: 12). Furthermore, a qualitative approach aims to achieve an in-depth understanding of the study, which is important to allocate the role of waterfront development in urban regeneration (Blaxter *et al.*, 2010: 65).

The case study approach involves the issue of one or more circumstances within a bounded system (Creswell, 2007: 73). To ensure that the relevant information is selected, the multiple case study design will be explored (Herriott & Firestone, 1983: 5). In addition, the following case study approaches will be explored: instrumental and multiple case studies.

The second part of the Chapter focuses on investigating two international and one South African waterfront projects that contributed to the role of waterfront development. The main focus of this Chapter is to highlight the key lessons and challenges that emerge from each case study and to understand the role of waterfront development in urban regeneration of cities.

- (a) **Background and development phases:** The history of the waterfront development and the process of how urban regeneration took place within the waterfront are explained.
- (b) **Role players:** The role players that contributed to the “success” of “failure” of the waterfront development are identified and explained.
- (c) **The economic, social and environmental influences:** These factors were identified in Chapter four as components that have an influence in the success of waterfront

development. The contribution of these components to the waterfront development is explained.

- (d) Case study evaluation:** After the case studies have been thoroughly investigated, aspects applicable to this study are outlined.

At the end of this Chapter findings are used to understand the role of waterfront development in urban regeneration of cities.

5.2 Background on case studies as a research method

Before focusing on different case study approaches, the focus will be on clarifying the difference between qualitative and quantitative approaches. Mack *et al.* (2005: 3) state that there are fundamental differences between quantitative and qualitative research approaches. Quantitative research is in most instances expressed by numbers, proportions and statistics, and is less valuable for measuring people's attitudes, emotions, behavioural states and philosophies. Consequently, quantitative research is less flexible. For instance, the quantitative researcher works with statistics and questionnaires, where participants answer identical questions, leaving little room for flexibility.

Qualitative research is more flexible and allows for considerable spontaneity and adaptation for interaction between the researcher and the participant or the studied area. Consequently, qualitative research methods set more open-minded questions that allow for more flexible answers from participants. Furthermore, these answers tend to be more complex than the casual 'yes' or 'no', which sets it apart from quantitative research methods. Qualitative approach is more powerful than quantitative research, since the data has been gathered over a long period, making it more holistic than quantitative research (Miles *et al.*, 2014: 11). In addition, the emphasis is on people's experiences of/in life, including the social aspect, whereas the quantitative approach only focus on numbers, and not on the social components. All of these components are important because a case study will not reveal simple 'yes' or 'no' questions, and case studies provide a more in-depth experiences of the study and the social factors that may come in to play throughout the study.

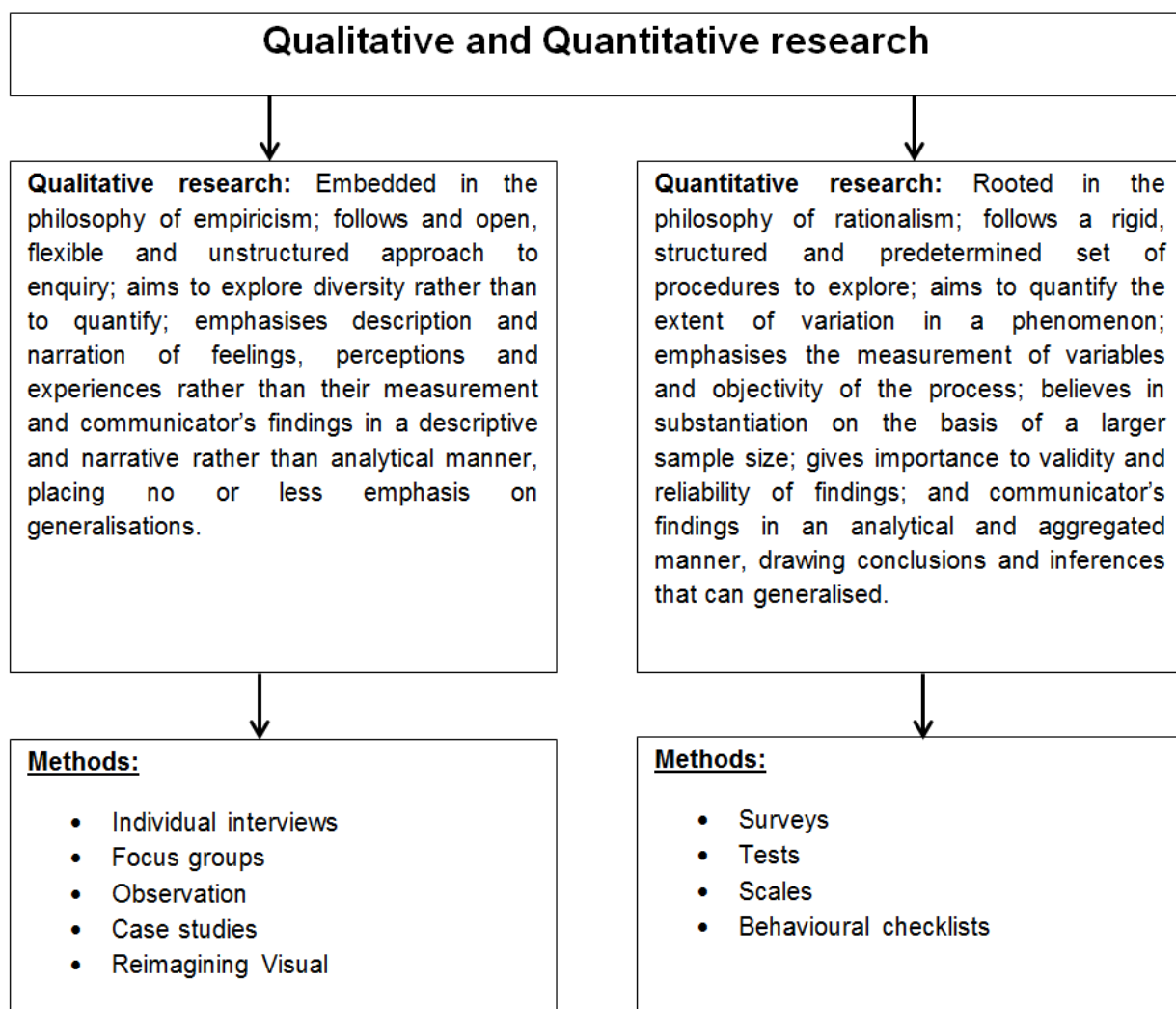


Figure 5. 1: Illustration of the comparison between qualitative and quantitative research approaches Source: Adapted and constructed from Creswell (2007) and Kumar (2014: 379).

According to the comparison between quantitative and qualitative research, qualitative research seems to be more appropriate for this study, as this study is explorative in nature and seeks to explore the role of waterfront development in regeneration of the city (see Figure 5. 1). The case study approach will be used to explore different points of view and to explore different impacts of certain circumstances.

Qualitative research provides an opportunity to focus more in-depth and it is a more descriptive form of research for this study. The last reason for selecting the qualitative approach is that qualitative research is devoted to the elimination of unwanted information or case studies. This implies that three to five case studies are selected for example, rather than ten, where in-depth information can be obtained (Creswell, 2007: 73).

5.2.1 Case studies as research method

Case study research involves the study of an issue explored through one or more cases within a bounded system (Creswell, 2007: 73). It is imperative to understand the history of the case study method and what is meant by case study research. The case study method was developed by Stake (1995:110-113). He recommends the triangulation of information when searching from the convergence of information that has a direct link to “data situations” in developing a case study.

Furthermore, it is important to understand how a case study is defined: Tracy (2013: 90) defines a case study as follows: “A special participative training method that involves in-depth group of case reports- factual and accurate word pictures (or visualisations using videocassettes) of a situation that portrays people acting, interacting, and reacting. It requires reading, study, analysis, discussion, and free exchange of ideas as well as decision making and the selling of decisions to others. ” Kumar (2014: 155) states that a case study is about an individual, a group, a community, an instance, an episode or an event that happened, a subgroup of a population, or a town or a city.

5.2.1.1 Case studies focus differs

As revealed by Creswell (2007: 74), case studies can be distinguished by the size of the bounded case, for instance whether the case involves one person or several, or a group, or an entire programme, or a specific activity. It can also be determined through a case study analysis. Therefore, all of the above-mentioned terms can be divided into seven different case study types. These different types are explained below, after which the best options will be selected for this dissertation (Table 5. 1).

Table 5. 1: Types of case studies

Types of case studies	
Intrinsic case study	Intrinsic case study simply means that there is an intrinsic interest in the subject and that the results have limited transferability. If the intent is to gain insight and understanding of a particular situation or phenomenon, then this case study method is not the correct one to use (Baxter & Jack, 2008: 550)
Instrumental case study	In the instrumental case study the researcher focuses on one issue or problem and focuses on the area of the study (Creswell, 2007: 74).
Collective case study	In a collective case study the researcher focuses on multiple case studies from different sources (Creswell, 2007: 74). For example the study is in South Africa, but the researcher will use different South African case studies, as well as different international case studies to ensure a broader understanding of the study that is been studied researched.
Explanatory case study	The explanatory case study should be used when the researcher seeks to answer a question explaining the presumed causal links in real-life interventions that are too difficult to use a survey or experimental strategies (Yin, 2003, as cited to by Baxter & Jack, 2008: 548).
Exploratory case study	The exploratory case study type is used to explore those situations in which the intervention being investigated has no clear, single set of outcomes (Yin, 2003, as cited by Baxter & Jack, 2008: 548).

<p style="text-align: center;">Descriptive case study</p>	<p>The descriptive case study type is used to describe an intervention or phenomenon and the real-life context in which the case study occurred (Yin, 2003, as cited to by Baxter & Jack, 2008: 548).</p>
<p style="text-align: center;">Multiple-case studies</p>	<p>Multiple case studies assist the researcher to explore differences within and between different cases. The goal is to replicate findings to different cases. Because comparisons are drawn, it is imperative that the cases are chosen carefully so that the researcher can predict similar results across these different cases, or predict contrasting results based on a the study (Yin, 2008: 65-67).</p>

It is clear that most of these case study types can be used in this study, since each offers an element that can be useful. Two main types were selected to guide the research.

Firstly, **multiple case studies** are selected because the focus is on understanding and exploring the differences between case studies from various contexts, including international and national contexts. Therefore, the approach touches on collective case study approaches as well, but not in depth. In addition, a multiple case approach is used for this study since the study seeks to understand the role of waterfronts in different contexts.

Furthermore, an exploratory case study approach is used because the case studies that are explored have no clear or single set of outcomes. The main case study approach is a multiple-case study approach with an exploratory focus.

Mossel Bay as a case study is primarily an **instrumental case study**, because an instrumental case study focuses on one area and one single problem. For instance, the Mossel Bay Central and Port Precinct Plan (MBCPPP) focuses on one problem and area.

5.2.2 Process of selecting and evaluating a case study

A process is required to ensure that unwanted case studies are eliminated. According to Yin (2008: 200) the greatest challenge is defining an exemplary case study or relevant case study.

However, the following five steps (a) to (d) will ensure that the case studies are exemplary and relevant:

- (a) The case study must be significant:** The significance of a case study is difficult to evaluate when the researcher has limited sources from which to choose. The researcher needs a broader range of sources that must be interesting and of national importance. The case studies should meet all the mentioned conditions of the study (Yin, 2008: 201).

The Baltimore Inner Harbour- was the first waterfront regeneration project, as mentioned in an earlier Chapter. Its contribution in the area of social factors has shown that the Baltimore Inner Harbour had to be explained in more detail. The significance of the Toronto Harbour Front development, in turn, is that it addresses social and environment components first and then economic factors. The V& A Waterfront development was the first South African waterfront and is seen as the most successful.

- (b) The case study must be complete:** Completion of a case study is important, since the completeness defines the experiment. Yin (2008: 202) explains that there are three ways in which the completeness can be characterised:

- A case study is complete when the researcher pays thorough attention to the boundaries of the case study (Yin, 2008: 202). The case studies that were selected have a timeframe of when the development was started and ended, except the Mossel Bay waterfront development, which has not yet been completed. The reason for the discussion of this case study is to ensure that the role of this waterfront will make a positive contribution to the growth of the city through the lessons learned from all the other selected case studies (Baltimore Inner Harbour, Toronto Harbour Front and V& A Waterfront).
- The second way to identify if a case study is complete is through the amount of evidence collected. A complete case study should demonstrate convincingly that the researcher made an exhaustive effort to collect all the relevant evidence. For instance, a lack of evidence in a case study causes the study to be incomplete (Yin, 2008: 203).
- The last point is the absence of certain artificial conditions. The study is incomplete when it is ended only because of the lack of time and restrictions within the research (Yin, 2008: 203). This is one of the main reasons why Baltimore Inner Harbour, Toronto Harbour Front and V& A Waterfront were selected. They were the most complete case studies.

(c) The case study must consider alternative perspectives: According to Yin (2008: 203) alternative perspectives should also be included into the case study researched. For instance, examining of the evidence from different perspectives increases the chances that a case study will be an exemplary case study. Thus, explaining when a descriptive case study fails to account for different perspectives, it can bring some doubt into the readers mind. For example, if the research did not collect all the relevant evidence and only attended to the evidence supporting a single point of view (Yin, 2008: 204). The selected case studies show the positive and negative influence waterfront regeneration has on the city.

(d) The case study must display sufficient evidence: This simply presents the most effective and most relevant evidence that was selected for the study, for example, the way in which the data was collected and interpreted to ensure that the information is of a high standard (Yin, 2008: 205). Yin (2008: 205) illustrates how to ensure that these standards are met:

- The information that was collected from the case study should not only support the researchers' conclusion, but also have a neutral collection of information (positive and negative) that gives both a supporting and challenging point of view.

The four selected case studies all show positive and negative points, which can ultimately change the outcome of the study, especially the Mossel Bay waterfront development. This instrumental case study has not been implemented; and as a result the case study can lead to changes in the recommendations of the study.

- The researcher should have studied sufficient case studies to ensure that the reader is confident, that the researcher has a complete understanding of the research area

This is an important point for this study, since the Mossel Bay waterfront has not been studied before. The only way to address this is through studying case studies that are applied and have changed the role in the city, such as the Baltimore Inner Harbour, Toronto Harbour Front and V& A Waterfront.

The above-mentioned points assist in selecting the following point which is explained and identified from here on.

5.3 Case studies selected

The following case studies were explored by means of the case study approaches and methods:

- Baltimore – Inner Harbour, Maryland - USA
- Toronto Harbour Front – Canada
- Victoria and Alfred Waterfront Development – Cape Town

5.4 International case studies

The international case studies are imperative, since valuable lessons can be learned from them. These waterfronts have contributed to the role within the city using urban regeneration for a number of years. The first international case study is the Baltimore Inner Harbour.

5.4.1 Case study one: Baltimore –inner harbour, Maryland – USA

Baltimore was one of the first waterfronts in the world. The waterfront is located within the City of Baltimore, Maryland, along the Patapsco River, in the United States of America, as shown in Figure 5. 2. The first proposed development was 121 hectares, and over the years increased as development was required (Miller, 2011: 47 & Waterfront Partnership of Baltimore, 2013:1).

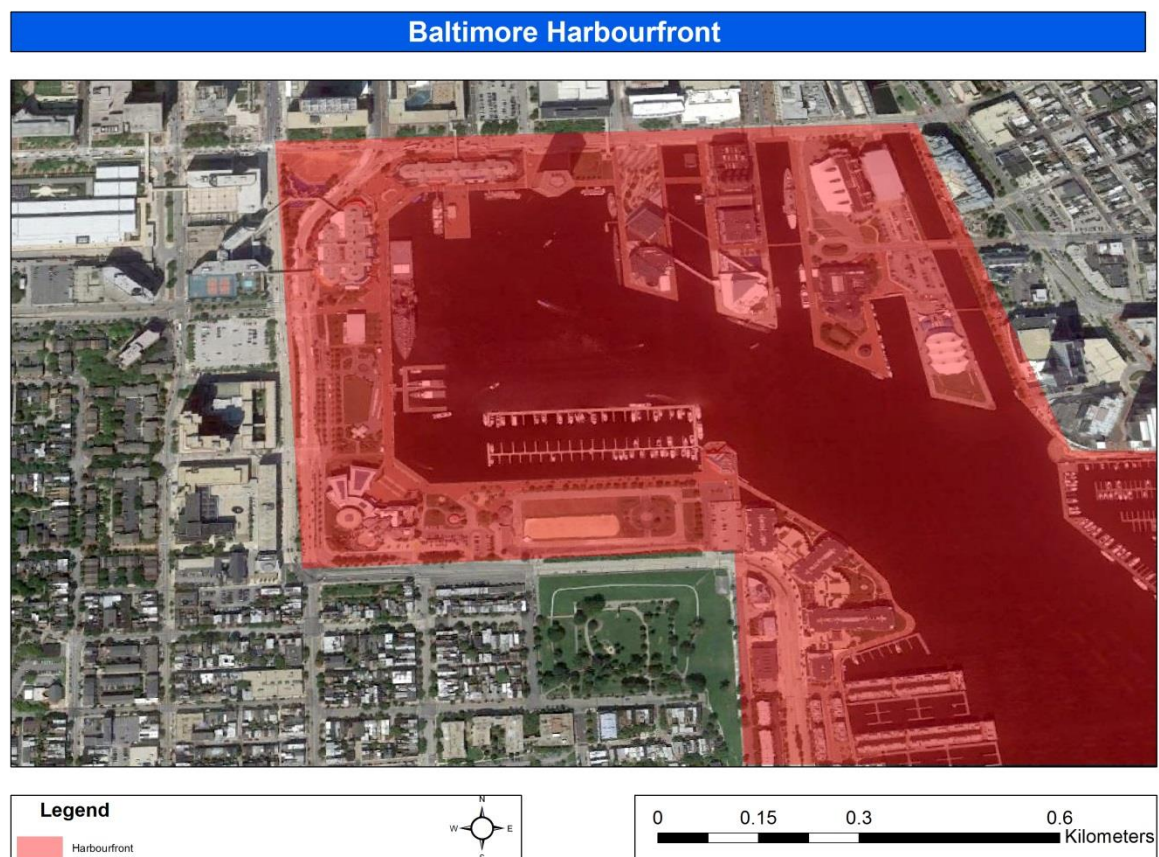


Figure 5. 2: Baltimore Harbour Front **Source: Adapted from Google Maps (2015a).**

(a) Background and development phases

The history of the Baltimore Inner Harbour began in 1729 when the area was discovered. The harbour's first role was for the trade of tobacco from nearby plantations to the harbour (Encyclopaedia Britannica, 2014). This period marks phase one of the development of the Baltimore Harbour Front (see Section 4.3.2). Over time, the harbour was also used for shipping several products (e.g., wheat, iron and sugar) and was a centre for shipbuilding (Newman, 1992:131). This period can be seen as phase two of the development process.

Nevertheless, the Baltimore Inner Harbour continued to manufacture and trade until the harbour was destroyed by a fire in 1904. The docks and downtown district were immediately rebuilt (phases three Section 4. 3. 2). However, no attempt was made at the time to modernise the infrastructure and dock facilities (Miller, 2011: 47).



Figure 5. 3: Baltimore Inner Harbour before Charles Centre & Harbour place Source: Urban Tick (2011)

In addition to the outdated dock facilities the Baltimore Inner Harbour started to lose its attraction and purpose. Eventually, the harbour fell into a decline after World War II, caused by the lack of improvements to the docking facilities. This decline led to the abandonment and run-down of the industrial port (Waterfront Partnership of Baltimore, 2013: 1). The abandonment also had an effect on the residents of Baltimore, since they migrated from the city searching for new and more affordable suburbs. This exacerbated the overall decline of the city of Baltimore and the harbour area (Miller, 2011: 47). By the 1950's and 1960's travel agents, as well as its residents, considered Baltimore as "the ruins of a once-great mediaeval city" (Millspaugh, 2003: 36). It was clear that Baltimore was in substantial need of urban regeneration. The waterfront was in the period of decline and fell into the fourth phase as explained in Section 4. 3. 2.

The Charles Centre Inner Harbour Management, under contract with the Mayor, started to change the role of the Baltimore Inner Harbour in 1952, through urban regeneration. The project started by focusing on the following phases:

Phase 1: CBD Master Plan - 1957

At the beginning of the planning process the council's idea was to regenerate the whole 300-acre area of the Baltimore Inner Harbour and central business district (CBD). With the CBD master plan they realised that it will not be possible, since the chances of the project not succeeding was evident (Global Harbors, 2008 & Mizerova, 1995: 46-50).

Phase 2: Charles Centre - 1958

The planning council decided to set aside the CBD master plan and to focus on starting the planning of a single project that is large enough to make a difference to the area. On the other hand, the project had to be small enough to be completed within approximately ten years and not longer. The starting point was the Charles Centre Project, which comprised 13 hectares allocated as office space (Kostopolou, 2013: 4582, & Millspaugh, 2003: 37).

Phase 3: The original Inner Harbour Master Plan - 1963

After the success of the Charles Centre Project, the public and private sectors gained confidence. They started with the planning of the regeneration of the downtown waterfront area. This area was eight times larger than the Charles Centre and the scheme focused on mixed uses. The scheme was pioneered by a non-profit company since the local businesses were under pressure (Falk, 1986:146).

Phase 4: Three thrusts – 1968

The company plans were constructed through three main thrusts. The first one was a row of significant sites for office buildings along Pratt Street facing the waterfront. Second, was multifamily housing in the eastern and western sectors. Finally, the third took place within the centre, namely the public playground for Baltimoreans along the shoreline of the inner harbour (Global Harbors, 2008).

Phase 5: Open spaces - 1971

The focus next moved to the rebuilding of the new bulkheads to define an open space proposed in the master plan. The streets were redesigned as wide boulevards surrounding the circle of parkland (Millspaugh, 2003: 38; Global Harbors, 2008).

Phase 6: Public spaces – 1976

Finally, during phase six the focus was on floating attractions that could activate the public spaces. For example, there were planned docking areas for the working boats of residents and travellers. A World War II submarine and a coastal steamer converted into a restaurant were also added to increase attractions (Millsbaugh, 2003: 38).

Finally, this was the process through which the Baltimore Inner Harbour was developed to change the waterfront's role within the city. This regeneration process began after the port was founded in 1729 and was used for the transportation of goods to the era when the harbour front was abandoned, and urban regeneration was needed in the 1950s and finally to a national success story in 1984. Nevertheless, as the role of the waterfront changed, several role players were involved

(b) Role players:

Waterfront development includes several role players and it is important to identify role players because they can determine the success of the waterfront development as explained in Section 4. 4.

The Baltimore Inner Harbour project began with Mayor Theodore McKeldin's vision of transforming the old and run-down harbour at Baltimore's waterfront into an urban centre (Global Harbor, 2008). Meanwhile, to implement this vision two groups were established in 1945 and 1955. The first was the Greater Baltimore Committee, which played central role in the promotion and acceptance of the new vision of the waterfront. Second was the Committee of Downtown, which was developed to include private and public investors (Mizerova, 1995: 47).

Finally in 1965, the Charles Centre Inner Harbour Management was created; a private non-profit corporation for the purpose of establishing an exclusive contract with the Mayor and City Council for the planning and development of the Inner Harbour Projects (Global Harbor, 2008 & Greater Baltimore Committee, 2003). Meanwhile, the Charles Centre Inner Harbour Management was under control of the Baltimore City's Urban Renewal and Housing Commissioner (Greater Baltimore Committee, 2003).

(c) The economic, social and environmental influences

The following three factors changed the role of waterfront development.

- **Economic**

Economic influences were illustrated to be an important aspect in the city's growth. If a project is unable to generate income, private and public investors would not invest in the development as explained in Chapter Three and Four. It is significant to explore the economic influence that the Baltimore Inner Harbour had on the city and its residents.

One of the ways in which the Baltimore Inner Harbour aided in creating awareness and generating visitors was through events such as 'Sunny Sundays' that was launched in 1970. The 'Sunny Sundays' event enticed visitors to spend the majority of the day in the waterfront area, thus spending money in the area and consequently stimulating the economy (Forward Analytics, 2011: 5).

The next change to the Baltimore waterfront income came from the arrival of the "Tall Ships". It attracted visitors from all over the world, which contributed to the construction of the tall buildings (Forward Analytics, 2011: 2). For instance, buildings such as Harbour Place that has up to 140 tenants caused a demand for restaurants and small stalls that provided food and several other products. This ultimately gave the local residents the opportunity to start their own businesses, increasing the overall income and economic standard of the area (Falk, 1986: 147).

It is clear that the Baltimore Inner Harbour generates substantial income every year. The 6.5 million tourists from all over the world improved the economy of the city (Millspaugh, 2003: 36). The waterfront also generated jobs, most of which were given to the local people of the city. Meanwhile, the scheme generates over \$4 million in taxes every year that can be used to upgrade to the city (Falk, 1986: 145).

Other major income generators were the aquarium that was built in 1981, which cost the city \$21 million, but is generating sufficient income (Falk, 1986: 148). For instance, in 2012 the aquarium contributed to \$319.6 million to the annual economy of the city, and created 3,347 new jobs (Sage Policy Group, Inc. , 2012: 2)

These positive growths in the economic sector have led to the expansion and upgrade of the Baltimore CBD. As revealed by Schumacher and Leitner's (1999) survey, the use of "hot spots" (A hot spot is an area where positive economic growth led to the upgrade of the Baltimore CBD area) aided the development of the Baltimore Inner Harbour area. It led to development within the CBD and to other areas surrounding the Baltimore Inner Harbour.

According to the data, the largest area was just north-west of the inner harbour waterfront in the heart of the old CBD along Charles Street and surrounding the Charles Centre office

park (see Figure 5. 4). The second largest hot spot was located north of the largest cluster, while the remaining, smaller hot spots were scattered to the east and west (Figure 5. 4). A similar pattern was found in 1990 (Schumacher & Leitner, 1999).

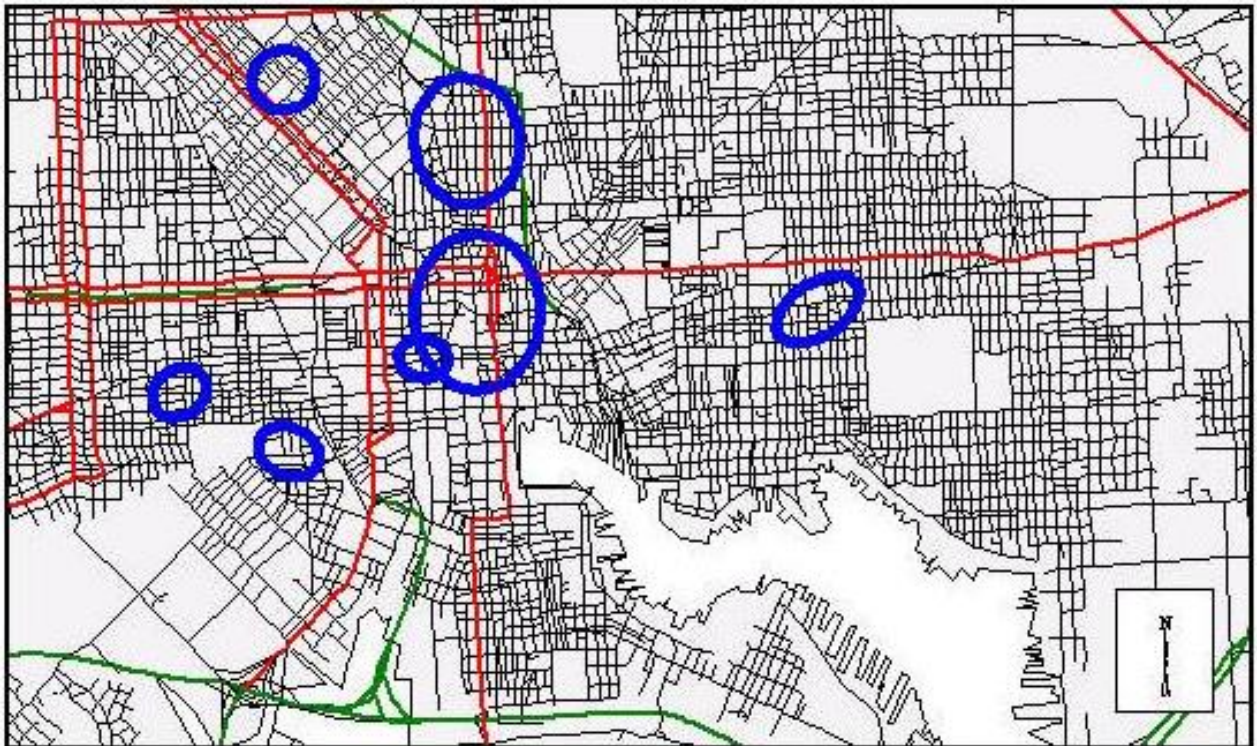


Figure 5. 4: The positive effects on the Baltimore C.B.D. identified through hot spots
(Source: Schumacher & Leitner, 1999)

Waterfront regeneration is not possible without economic incentives. These incentives take high priority, since the primary role of waterfront development is economy driven. Waterfront development will be unsuccessful if social and environmental components remain untouched.

- **Environmental**

Environmental factors were addressed in Baltimore Inner Harbour by focusing on several components. Firstly, the physical structures received attention, since this improved the environment. The Charles Centre and the warehouse on the harbour front were rebuilt and upgraded (Falk, 1986: 146).

Secondly, the natural resources within the area was utilised by focusing on the rehabilitation of the wetlands. The wetlands provided a habitat for different animal and plant species and a

nursery grounds for fish and birds. The shoreline was cleaned up, since the area had become an area of waste. Litter, abandoned hulks and run-down structures diminished the appearance of the harbour front (Regional Planning Council, 1982: 4).

Finally, the marine life in the Baltimore area was improved through the development of submerged aquatic vegetation for fish and birds to feed on, as well as the creation of artificial reefs to re-establish fish (Regional Planning Council, 1982: 4). After all of these economic and environmental components were addressed, the focus shifted to the social components.

- **Social**

For a waterfront regeneration development to be successful, it is essential to include social aspects into the waterfront. The role players worked with the idea of people having direct access to the water's edge. They created attractions by bringing local artists to the area. Minimal landscaping was also introduced, through sculptures to provide an attractive setting for outdoor festivals. The aquarium also enhanced the social standard of the area (Falk, 1986: 147-148). This success of the project was founded on the ability to use the area's resources and identity (as mentioned in Section 4. 3. 2.)



Figure 5. 5: Harbour Place Amphitheatre (Source: Anon, 2014)

Regarding social employment, the Baltimore Inner Harbour project employed between 15 and 25 percent of the local residents of the area during development (Falk, 1986: 147), increasing the social standards of the local residents in the area.

However, the success of the Baltimore waterfront was criticised after the development was completed as the work opportunities that were created were absorbed by the suburban residents rather than the low-income residents of the area. This led to the displacement of low-income residents, because investors increased the rent value of the area (Wang, 2002: 3). Consequently, the Baltimore Inner Harbour project failed in one area of a waterfront's goals, which is to increase the social standards of the local residents in the area.

Regardless of the above-mentioned, the Baltimore Inner Harbour waterfront had a positive effect in several areas in Baltimore. Besides, having a positive effect on the CBD, it also had a positive effect on nearby neighbourhoods in the area. For example the Oliver neighbourhood (Cavicchia, 2004: 115) that was abandoned, but was rebuilt, which increased the social standard of the area (see Figure 5. 6).



Figure 5. 6: Existing and the new simulation of the proposed redevelopment of the Oliver neighbourhood (Source: Cavicchia, 2004: 115)

(d) Case study evaluation

This case study is an example of how a waterfront can contribute to urban regeneration. Furthermore, the case study showcases several tools for the integration of the above-mentioned influences of economic, environmental and social role of the urban regeneration of cities through waterfront development (refer to Table 5. 2).

Table 5. 2: Baltimore Inner Harbour integration tools

Integrations tools for urban regeneration of cities through waterfront development			
Tools	Economic	Environmental	Social
Vision	√	√	√
Balance	√	√	√
Community participation			√
Investors	√		
Communication			√
Future vision	√	√	√

Source: Own construction

- **Vision:** Vision focuses on the ability to see what the end results are going to be, through the knowledge that there are risks involved that can lead to an economic disaster and having the ability to see that there are alternative options available. Furthermore, to have a vision to bring people from different backgrounds together. For example, before the Baltimore Inner Harbour project started the role players realised that the vision for the project was too comprehensive and that there is an alternative option, such as to start with one project that is smaller, for example the Charles Centre.
- **Balance:** Balance focuses on the ability to see that there should be a balance between the need and demand for service provision and the design of the area. A design should include financial factors, because the area must have something for everybody. However, it should

not be a liability for the area. For instance, the Baltimore aquarium's design and service is not a liability, since it generates revenue.

- **Community participation:** This is essential as explain throughout this dissertation. Consequently, without the participation of the community the project will be a failure.
- **Investors:** Investors are a critical aspect of an urban regeneration project. A project can have a substantial vision, but without investors that are willing to contribute to the project, it will not succeed. Investors must be willing to take the risk.
- **Communication:** Communication is needed between the different role players of the urban regeneration project. Notably, if decisions are made without the consent of the other role players, trust and investors will be lost, thus leading to the failure of the regeneration of a waterfront.
- **Future vision:** The future of any development should be a high priority. The role players must constantly pursue improvement of the urban development with the areas surrounding it.

The above aspects will have an effect on the success of an urban regeneration project. These have been some of the main components that led to the success of the Baltimore Inner Harbour waterfront, finally, changing the role of the waterfront from an economic hub to a multiple diverse area that includes economic, environmental and social components.

5.4.2 Case study two: Toronto Harbour Front – Canada

The Toronto Harbour Front is located in the western half of the Toronto Central Urban Waterfront (see Figure 5. 7). The area measures 37 hectares in extent, and was built in 1920 as a port facility (Sweeney, 2005).



Figure 5. 7: Toronto Harbour Front (Source: Adapted from Google Maps, 2015b).

(a) Background and development phases

The Toronto Harbour Front was built in the 1920s the gateway to northern Ontario, and to assist the CBD of Toronto and therefore connecting the Toronto Harbour Front. The Toronto Harbour Front was in phase one, as explained in Section 4. 3. 2. Furthermore, the name “Toronto” originated from the old American-Indian word “meeting place” (Yokohari & Amati, 2005: 54). In the 1960s, the harbour front was threatened by the development of the railway and the expressway development. Chapter Four (see Section 4. 3. 2) explains that the Toronto Harbour Front was at phase three during this period, ultimately at the period of detachment. Notably, the development goal was to assist the industrial areas, which were located close to the waterfront (Lehrer & Laidley, 2009; 789). The Toronto community was almost cut off from enjoying the primary waterfront area for almost two generations.



Figure 5. 8: Toronto Harbour 1870 (Source: Flack, 2011)

The community lost contact with the harbour, and to add to the problems, the activities of the port started to move to the eastern end of the harbour front, leading the harbour to further decay. The buildings became run down and abandoned. The Toronto Harbour Front was at phase four. Meanwhile, the government soon realised that there was a problem and in the 1970s the government bought the harbour front. This, land was valuable since it was located within a major city. It was a challenge to recycle the old abandoned buildings and the area (Gounden, 2010: 40). As regeneration took place the Toronto Harbour Front was in phases five, which is the waterfront regeneration period.

The Toronto federal government developed an independent agency, namely the Harbour Front Corporation. The company was established to develop a mixed-use urban waterfront area.

Phase 1: Cut off from the water edge – Before 1970s

Before the 1970s, the government realised that there is interest in developing the waterfront. The interest could be attributed to the industrial practises and railway, which isolated the rest of the city from the water edge (Gounden 2010: 40). The government therefore started the urban regeneration programme.

Phase 2: Tall buildings – the beginning of 1972

The Harbour Front Corporation saw the potential of providing two privatised high-rise commercial development and residential buildings along the water's edge, while protecting the interests in the marine operations of the harbour (Greenberg, 2013: 197). This area is on the eastern side of what was going to be the Harbour Front Area (Fisher *et al.*, cited by Gounden 2010:40).

Phase 3: Response with open space – the late 1970s

Within the late 1970s, the public became concerned about the tall buildings blocking the physical and visual access to the water edge. Furthermore, that the project would become private domain only in order to gain private profit. The government responded to the public concern and acquired 37-hectares of the land, which ultimately became the Harbour Front Area (Spafford, 2001: 2).

Phase 4: Harbour Front Development Framework –after the 1970s

To ensure that the private and public development do not over crowd the water's edge, the government developed the Harbour Front Development Framework. It was developed to guide design, programming, regarding both public and private investment. The framework was more flexible than a master plan, giving it the ability to evolve as the area developed and as the areas needed change. For example, the urban park was planned to be a passive green space. However, it ended up to be an active space with cultural, recreational, commercial and residential activities (Gounden 2010: 41). This flexibility is related to the urban regeneration paradigms of Chapter Three. When a project is flexible, it has better odds of being successful.

Phase 5: Harbour Front Corporation - 1978

The development of the Harbour Front was delayed for several years. This delay was due to the land attained without consulting provincial and local government. The community demanded to be part of the planning and implementation of the project (Gounden 2010: 41). Consequently, the government established the Harbour Front Corporation in 1978, which were aimed to manage the development of Toronto's waterfront park (Michael, 2002: 7).

(b) Role Players

Several role players were involved in the development. Nevertheless, development could not have taken place without the role players as seen in Chapter Three.

The Toronto Harbour Front began with the Regional and Provincial Government, which soon realised there is a need for the residential areas and the CBD to be linked with the water's edge. As a result the Toronto Harbour Commission was developed, and later on the Central Waterfront Planning Committee (Gounden, 2010: 44, Lehrer & Laidley 2009: 490-491 & Spafford, 2001: 1-2).

As the development took place the public asked for open space. The government developed the Intergovernmental Waterfront Park Committee (IWPC) to develop a 37-hectare waterfront park. Thereafter, several mistakes were made by the federal agency. Consequently, the Harbour Front Corporation was approached in 1978 (Gounden, 2010: 44, Lehrer & Laidley, 2009: 490-491 & Spafford, 2001: 1-2).

The role players who took part in this development succeeded in all four areas of the Haung model as explained in Section 4. 4.

(c) The economic, social and environmental influences

The following three factors have changed the role of the Toronto Harbour Front development and are explained in the order in which they changed the role of the Toronto Harbour Front.

- **Economic**

The Toronto harbour front economy factor was reasonably strong. According to a survey conducted after the harbour was completed, the harbour front centre returned \$132 million to the region per annum, which can be used for further improvement to the area (Fisher *et al.* , cited by Gounden, 2010: 44).

The harbour front centre also provided 1240 career opportunities, consequently improving the living conditions of the residents of the surrounding area. Besides the 1240 career opportunities, it also provided \$24 million in taxes for the local government, eventually used to strengthen the economy, as well as the standards of the city (Fisher *et al.* , cited by Gounden 2010: 44). The Toronto Harbour Front excelled in the area of economic growth, improving the role of the waterfront within the city, through creating a secondary economic centre.

- **Environmental**

According to the Stockholm Resilience Centre (2013: 3), humans (social) and nature (environmental) are strongly coupled and should be seen as one system that works together. The Toronto Harbour Front's environmental aspect was a central focus and remains as such. For example, the first goal was to create public destinations with a vibrant

public and cultural space to provide a variety of experiences and amenities for the visitors (Dhanraj *et al.*, 2012:11).

The Toronto Harbour Front achieved this by using open spaces, such as the Canada Square and Urban Square. However, all these places formed part of the Water's Edge Revitalisation Program. The developers also focused on the social aspect and this is explained in more detail in the ensuing section (Dhanraj *et al.*, 2012:11).

- **Social**

The social aspect of waterfront development or any project is the factor that is most neglected and the most complicated to address. In Toronto, most of the social components are located in the eastern end of the harbour front centre. The area has a selection of cultural, education and recreational programs for people of all ages. Whereas, the southern side of the harbour front centre, which is the Queen's Quay west area, comprises a variety of parks and open spaces. Providing the community with a social aspect, as well as direct access to the waterfronts edge. These areas form part of the environment aspect as well. Importantly, the Toronto Harbour Front project showed the ability to connect the environment and social aspect. Thus not only addressing one problem or changing one role, but two in one step (Dhanraj *et al.*, 2012:10). One of these parks is the Toronto Music Garden that was built in 1999 (see Figure 5.9.)



Figure 5. 9: Toronto Music Garden (Source: Harbour Front Centre, 2014)

A negative aspect is that the harbour front and the CBD are not fully integrated. The railway is still underdeveloped and the road networks are not yet completed. This leaves unattractive open spaces. The express way is still as a boundary between the water's edge and the community. Although Toronto still has a boundary between the water's edge and the community, (Gounden, 2010: 41) it succeeded the best according to Sairinen and Kumpulainen (2005: 120-135) in involving the different social qualities of waterfront regeneration (refer to Table 4).

(d) Case study evaluation

This case study has also shown several tools for the integration of the above-mentioned influences of the economic, environmental and social role of the urban regeneration of cities through waterfront development (refer to Table 5. 3).

Table 5. 3: Toronto Harbour Front integration tools

Integrations tools for urban regeneration of cities through waterfront development			
Tools	Economic	Environmental	Social
Ability to change	√	√	√
Identity	√		√
Originality	√	√	√
Ability to intervene	√	√	√

Source: Own construction

- **Ability to change:** The Toronto Harbour Front development used an essential model of planning. They used a framework rather than a plan, since a framework gives the role players the ability to change the plans for the area as the area changes. For example, the Harbour Front Development Framework that changed through the years from urban park to be a passive green space. Nevertheless, it evolved and ended up to be an active space with cultural, recreational, commercial and residential activities.

- **Identity:** The identity of the area is important since all components create a “feeling”. The Toronto waterfront does not “feel” like an area on its own, it feels as though it is part of the CBD.
- **Originality:** Creativity is needed to give the waterfront something unique that other waterfronts that helps its identity to attract tourists and residents to the area. For instance, the music garden is an attraction that no other waterfront has. This originality will ultimately help with the economic improvements of the area as well.
- **Ability to intervene:** In this instance the government realised that the Toronto Harbour Front development was going in the wrong direction. The role players established the Harbour Front Corporation in 1978 to help with the development. This ensured that neither one of the role players became dominate.

Finally, all of these points have been fully intergraded into the Toronto Harbour Front development. Therefore, the Toronto Harbour Front is seen as one of the leading waterfronts in the world. The Toronto Harbour Front is seen as a social and environmental hub, instead of being one of the economic centres of the city, as was the case with the previous case study.

5.5 South African waterfronts

South African waterfronts had a significant effect on the cities and provided urban regeneration within these cities. Although there are limited waterfront developments in South Africa, one had enough impact to consider it for this study.

5.5.1 Case study three: Victoria and Alfred Waterfront Development – Cape Town.

The Victoria and Alfred Waterfront (V& A Waterfront) is located within the working harbour of the Cape Town Metropolitan (see Figure 5. 10) (Kilian & Dodson, 1996: 497-498). The area is estimated to be 123 hectares in extent (Gounden, 2010: 75).

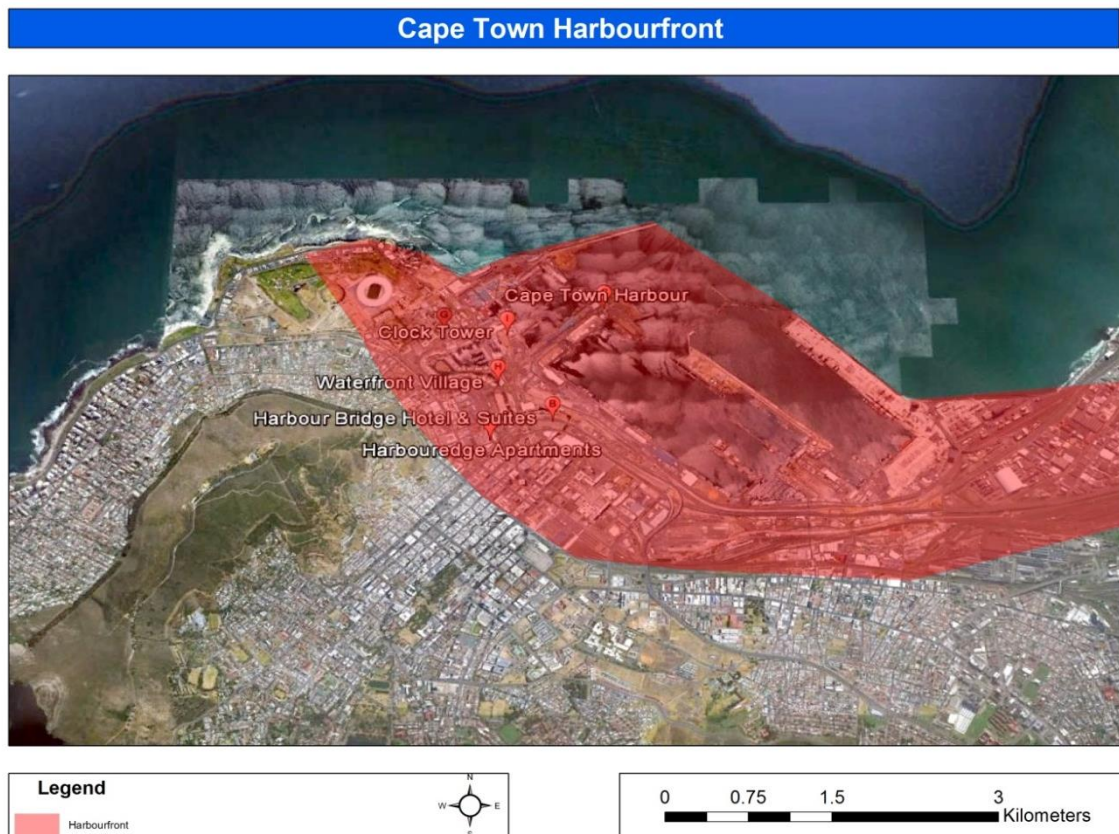


Figure 5. 10: Cape Town harbour front (Source: Adopted and construction from Google Maps, 2015c)

(a) Background and development phases

The V& A Waterfront is a South African success story. However, before focusing on all the positive aspect of the V& A Waterfront one must first understand the history of the Waterfront. The V& A Waterfront started as a small jetty that was built in 1654 by Jan van Riebeeck as part of his goal to establish a refreshment station for the travellers from the Dutch East India Company. Additionally, the port was used as a resting point for the sailors travelling to India and the Far East in order to transported goods (Abrahams, 1985: 9).

In 1858, a storm wrecked more than 30 vessels, which put pressure on the transport system. The Midshipman HRH Prince Alfred, the second son of Queen Victoria placed the first stone to start the construction of Cape Town's first harbour (van Zyl, 2005: 4). Importantly this can be seen as phase one, explained in Section 4. 3. 2.



Figure 5. 11: The old V & A Waterfront - Union Castle 1905 (Source: Coetzee, 2015)

With the discovery of diamonds and gold from 1860s a new docking area was built (V & A Waterfront, 2013). The first section of the Alfred Basin was added, and the second Victoria Basin was added between 1860 and 1920, creating more docking facilities. The area is well known for its outstanding heritage buildings (V & A Waterfront, 2013). Significantly, this period can be seen as phase two and later phase three (see Chapter 4).

In the late 1980s, the V& A Waterfront port authority realised that the area was in need of change, since the harbour front area had gradually been abandoned as changing technology relocated port functions and industry to a new area. The V& A Waterfront was at phase four as explain in Section 4. 3. 2. The waterfront area was isolated from the rest of the city centre due to highways and railway lines later built. Ultimately, the V& A Waterfront port authority realised that the Pier Head Precinct (a historical centre of the waterfront) had potential. Attributable to the attraction of the recreational boats and fishing fleets, public services for instance boat repair activities were necessary (Gounden, 2010: 74). The V&a Waterfront of Cape Town has undergone several phases to change its role within the city. The different role players decided to focus on dividing the development into the following phases:

Phase 1: Repair of historical buildings and harbour area - 1990

The first phase focused on the repair of Pier Head Precinct, which was the original Port Captain's offices, and several other smaller old buildings, as well as the working harbour of

Cape Town, including the port's stone walls and the timber wharfs, which now offers one of the most romantic settings in Cape Town. Meanwhile, the focus point of the V& A Waterfront became the Pier Head Precinct. The new repaired buildings offered new uses like restaurants, taverns, speciality shops, the V& A Hotel, a theatre, an arts and crafts market, and the national Maritime Museum (Pirie, 1993: 150).

Phase 2: Victoria Wharf speciality retail and entertainment centre - 1992

The second phase was the completion of the Victoria Wharf speciality retail and entertainment centre at the end of the 1992. These essentials ensured that the V& A Waterfront turned into the most visited shopping and entertainment centre in Cape Town, attracting national and international visitors and local residents (Ferreira & Visser, 2007: 233).

Phase 3: Creation of social areas – 1994 and 1995

Different mixed land uses and tourist attractions area were developed during 1994 and 1995, such as the IMAX theatre and two Oceans Aquariums (Van Zyl, 2005: 7).

Phase 4: Completion of major projects – 1996 and 1997

Projects that were completed during 1996 and the first quarter of 1997 comprised over 18,000m² extensions to Victoria Wharf Shopping Centre, Cape Grace Hotel and a five star Table Bay Hotel (Ferreira & Visser, 2007: 233).

Phase 5: V& A residential development and mixed-use development - 1999

Cape Town City Council guided the first phase to develop the first sector of the V& A residential development, as well as a mixed-use development in the Clock Tower Precinct. Furthermore, Robben Island was rebuilt and was declared a World Heritage Site at the end of 1999, and still use to attract tourist from all over the world (Van Zyl, 2005: 7-8).

Phase 6: V& A Waterfront project was completed - 2006

The V& A Waterfront project was completed in 2006. Meanwhile, the second sector of 2006 the V& A Marina residential development and the extension to the Victoria Wharf Shopping Centre (Van Zyl, P. S. 2005: 8) was constructed.

The development along the V& A Waterfront continued until 2011. None of these developments would have taken place without the correct role players. On the contrary, if the role players did not intervene with the development of the V& A Waterfront the development would not have been a success. Therefore, the following role player will be identified.

(b) Role Players in the V& A Waterfront

V& A Waterfront development places began in 1985 when the Minister of Transport and Environmental Affairs appointed the Burggraaf Committee, to consider the plans for the V& A Waterfront. This led to the establishment of the Victoria and Alfred Waterfront Company in 1989 (Van Zyl, 2005: 3-5).

The company was owned by Transnet Limited, which included Mr David Jack the Managing Director of the City Planning department of Cape Town and also three Transnet representatives, and a Cape Town City Council representative, who were chaired with Prof. Bruin Kantor (School of Economics of the University of Cape Town). However, as development took place, the private and public participants were included into the project (Blain, 1992: 410).

(c) The economic, social and environmental influences

The previous case studies have shown that these three components have a fundamental role to play within the city.

- **Economic**

Numerous economic studies have been done regarding job creation in the V& A Waterfront development. According to these studies, the waterfront has contributed to Cape Town's regional economy since 1992 (Van Zyl, 2005: 12). The most recent survey was done in 2004. It indicated that the total permanent employment within the V& A Waterfront without the industrial activities and fishing industry was about 111 100 jobs. Whereas, eighty percent of the above-mentioned jobs were newly created working opportunities (Van Zyl, 2005: 12). The number of permanent jobs at the V& A Waterfront was predicted to grow to 112 270 by the completion of the development (Van Zyl, 2005: 12).

The area of construction employment of the V& A Waterfront showed that from 1990, 15 850 annual jobs were created, increasing the economy of the city of Cape Town instrumentally. The total employment of the development was amount 21 000 jobs. The research showed that out of three new jobs that were created in the Cape Town's economy, one is created at the V& A Waterfront (Van Zyl, 2005: 12).

Job creation are not the only thing that the economic can benefit from. There has been a range of multi-billion rand redevelopment projects, such as the V& A Waterfront area, the Foreshore and CBD that are being transformed into new spaces for living and working. The holiday industry has also gripped the public's imagination, both nationally and

internationally. This contributes to the economy of Cape Town through the thousands of tourists that visit the waterfront (Visser, 2002: 421).

- **Environmental**

Environmental improvements include the upgrading of the historical buildings, warehouse and the overall surrounding structures in the area (Pirie, 1993: 150). For instance, shareholders invested R30 Million in energy efficiency, water savings and waste recycling across the 123-hectare property and introduced a number of other greening initiatives across the area from 2008 (V& A Waterfront, 2013). The shareholders invested in a programme to render the whole V& A Waterfront environmentally sustainable using electricity tariff structures, power, lighting and temperature control (V& A Waterfront, 2013).

- **Social**

The environmental components influenced the social qualities of the residents living in the area because of the upgrading of conditions within the area. Examples include the rebuilding of the warehouses and the overall cleaning projects in the area, as well as the energy efficiency, water saving and waste recycling projects (V& A Waterfront, 2013). The social benefits can also be linked to the economic growth of the V& A Waterfront. Job creation clearly shows that the local communities have benefited from the waterfront (Van Zyl, 2005: 12).

The wider initiative to upgrade Cape Town's inner core from 2000 onwards included transforming of rundown buildings, deserted historic squares, period office blocks and empty working spaces into a myriad of different types of apartment buildings, hotels, hostels, restaurants, clubs, bars and cafés. The infrastructural upgrading attempted to transform the inner city from merely a place of work to a 24-hour city to live, work and play (Pirie, 2007b). The continued success of the adjacent V& A Waterfront made it a popular tourist attraction in South Africa, being transformed "from port to playground" (Ferreira & Visser, 2007: 227). This successful landmark serves as the physical link between the waterfront and the inner city, resulting in positive spill-over for new commercial developments in the surrounding areas (Rogerson, 2012: 82-83). This improved the social conditions of the visitors and residents in the area and the surrounding areas.

It is clear that the influence has helped the V& A Waterfront development to become an international success. All these factors played a role in ensuring that the area is not only used as an economic area, but also as an area with social and environmental benefits.

(d) Case study evolution

During the past four decades, many towns and cities around the world have embarked on waterfront regeneration, especially to change the role of waterfronts within the city. The V& A Waterfront experience provides some strong points with which a waterfront regeneration development should comply. This will ensure that the project is successful and has a positive role to play within the city. The following tools for the integration of the above-mentioned influences of economic, environmental and social role of the urban regeneration of cities through waterfront development will be allocated within the Table (5. 4).

Table 5. 4: V& A Waterfront integration tools

Integrations tools for urban regeneration of cities through waterfront development			
Tools	Economic	Environmental	Social
Location	√	√	√
Research	√		
Phases	√	√	
Integration	√	√	
Environmental and cultural sensitivity		√	√

Source: Own construction

- **Location:** The location of a waterfront development is critical. Especially when the waterfront is not located close to the CBD it will not have a positive role to play within the city. Thus, it will have no effect on the economy, environment or the social aspect of the area.
- **Research:** Research on what makes a respectable waterfront is necessary. The V& A Waterfront Company constantly conducted research and visited different waterfronts to establish what makes a waterfront a success. The successes and failures of different case studies contributed to knowledge on how waterfront generation works. Waterfronts studied included those in San Francisco, Boston, Baltimore, Vancouver and Sydney (Van Zyl, 2005: 15).

- **Phases:** The V& A Waterfront development used the project research of previous waterfront developments to determine how to start the project. However, they realised that it was best to start a project in small phases rather than starting with the whole project. For example, the Pier Head Precinct started small and grew from there on in the most integrated and sustainable way possible.
- **Integration:** The waterfront should not dominate the role of the city and the areas surrounding it. The area should serve as integration measure to change or uplift the city.
- **Environmental and cultural sensitivity:** In Cape Town the historical buildings were re-used and the old dock buildings created a special character, role and atmosphere, giving the V& A Waterfront a specific cultural value.

The above ensured the success of the V& A Waterfront development and contributed in changing the waterfront's role within the city through urban regeneration and ensured the enhancement of the city of Cape Town.

5.6 Conclusion

Indeed the components described within this Chapter have contributed to the development of these remarkable waterfronts. Above all, it changed their role and contributed to the urban regeneration of the cities in which they are located.

It is clear that the waterfront developed as indicated in Section 4. 3. 2. For instance, the city was established in phase one, after which the harbour front activities increased until the harbour front started to detach from the city during phase four. Ultimately, waterfront regeneration was needed to reconnect the city and the harbour front.

Several roles of waterfront development in urban regeneration were identified, such as providing trade, increase economic standards, increasing the income tax, growth of the city, improving the physical environment, rehabilitation of the environment, environmental sensitivity, providing balance between environment and city, access to water's edge, community participation in the area, job creation and finally, historical sensitivity.

The Chapter has shown that the development of waterfronts normally have specific zones (refer to Figure 6.11).

- C. B. D – Central Business District;
- Area of Transition;

- Waterfront area.

These areas have a significant role to play in the development of waterfronts within the city and are explained later in the study.

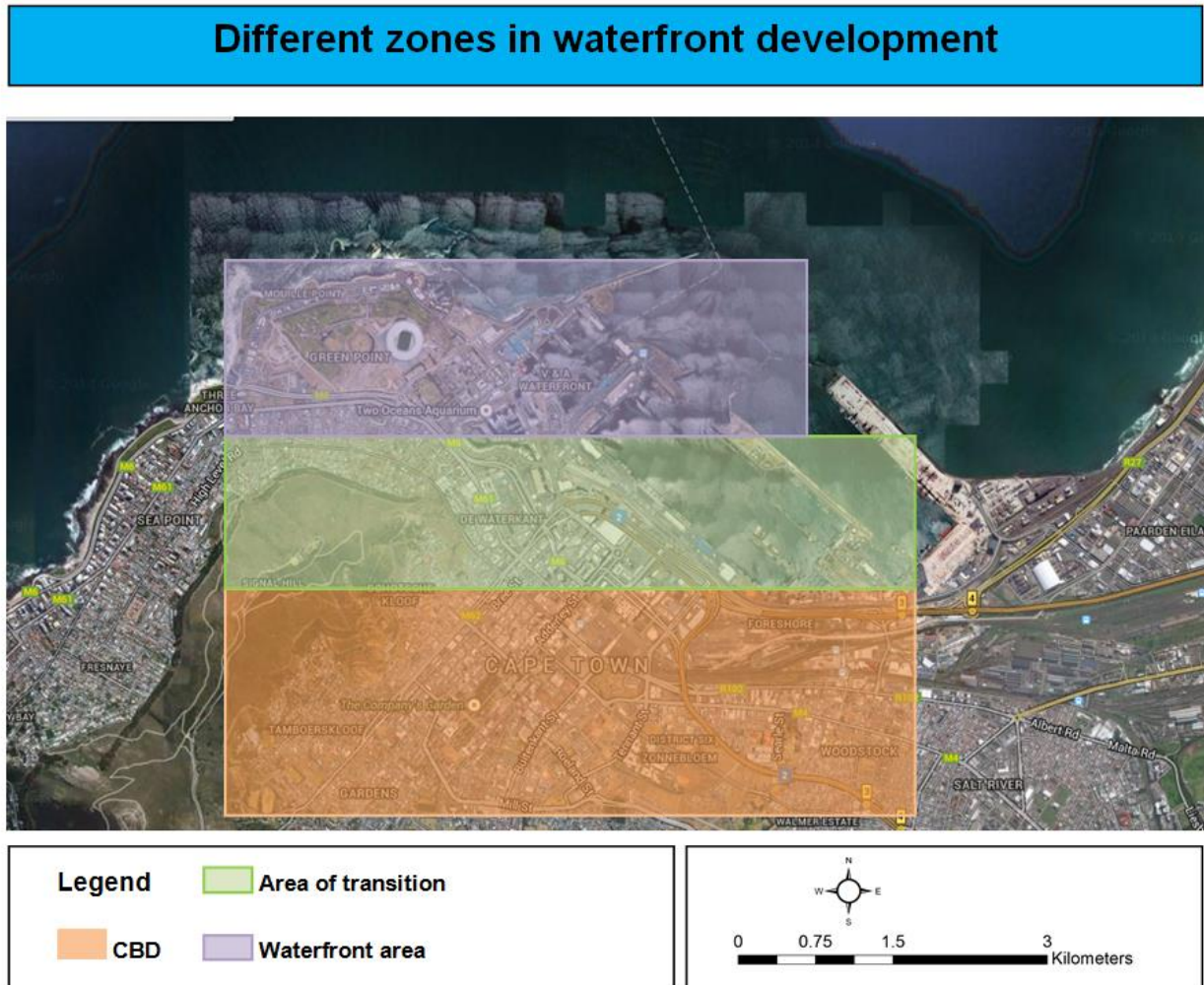


Figure 5. 12: Different zones in waterfront development (Source: Adopted and construction from Google Maps, 2015m)

It is, in conclusion, clear that the different case studies have contributed in one way or another to elucidate the effect that a waterfront can have on the city, for example on the environmental, social or economic improvement of the city. The next chapter offers a more in-depth case study of the Mossel Bay waterfront development.

Chapter 6: Case Study of Mossel Bay Central Precinct Plan

6.1 Introduction

The previous case studies provided insight in the development, growth and understanding of the role of waterfronts. It is essential to understand what factors may have an influence on the development of the waterfront and the CBD before the waterfront is developed. Therefore, the following case study is a waterfront development that has not yet been fully implemented.

Firstly, the focus is on understanding the history of the Mossel Bay area and how detachment problems increased as time progressed. In addition, it is important to link the different policies and legislation which had an effect on the Mossel Bay CBD and Port Precinct Plan (MBCPPP).

Secondly, this chapter aims to investigate the physical phases of development proposed for the Mossel Bay CBD and Port Precinct Plan (MBCPPP). Importantly, the Chapter examines if the Mossel Bay development phases are the correct approach for changing the waterfront's role within the city. In addition, the Chapter aims to identify the role players involved with the waterfront development.

Thirdly, it has to be determined if waterfront regeneration can be implemented within the Mossel Bay area by examining its advantages and the disadvantages. The focus will then be shifted to the land use proposals and parameters.

Furthermore, the focus will be on the economic, social and environmental improvements that the MBCPPP will have on Mossel Bay CBD and how these components will improve the role of the waterfront within the city. Finally, the focus is on evaluating the case study to recognise which aspects will have an effect on future waterfront regeneration projects.

6.2 Background on Mossel Bay

Mossel Bay is situated halfway between Cape Town and Port Elizabeth (Mossel Bay, 2014). It is a coastal town, comprising a harbour and located along the famous Garden Route, one of the most historically significant towns in South Africa. According to Google Maps (2015d), the harbour front is estimated to measure approximately 18 hectares in extent.

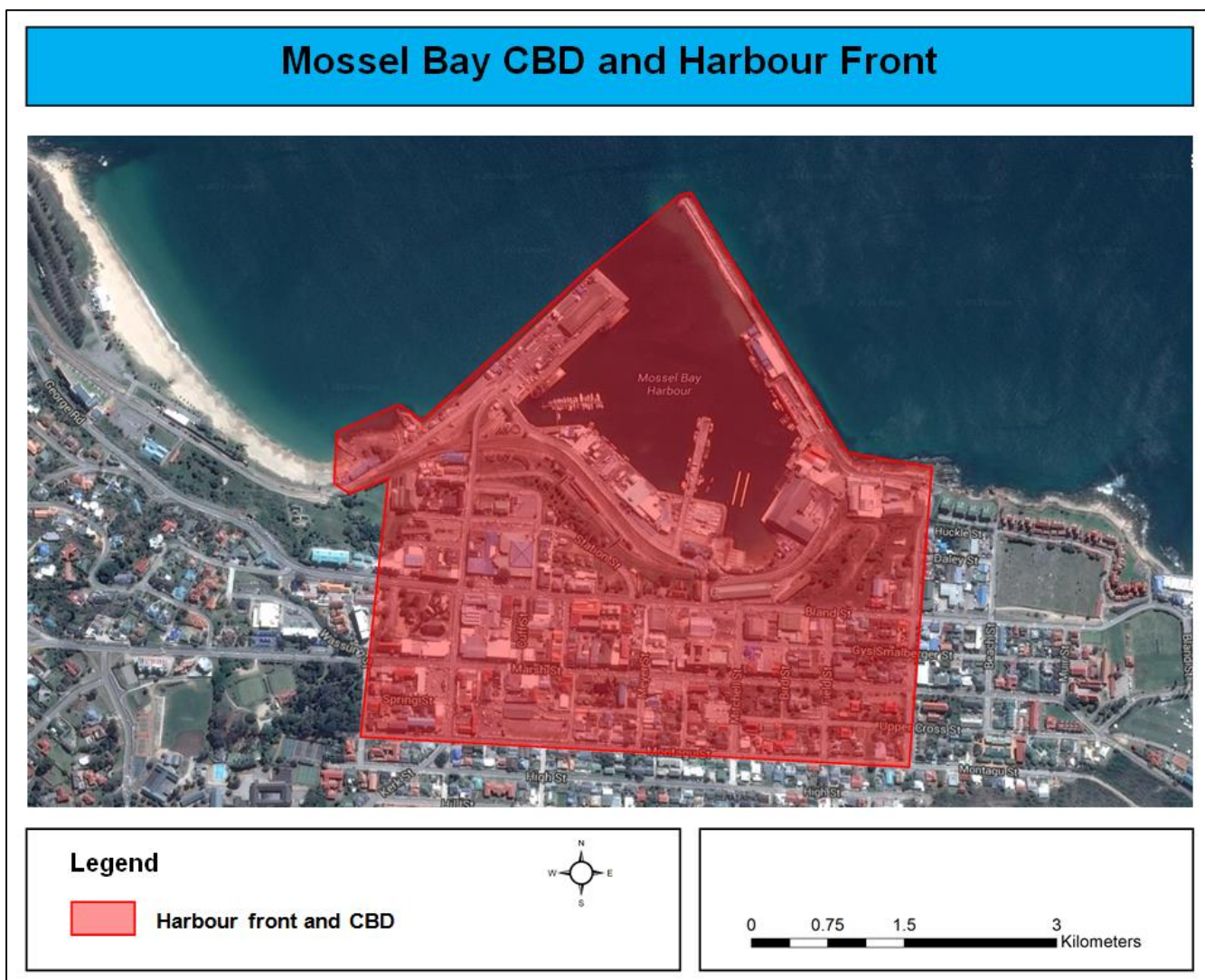


Figure 6. 1: Mossel Bay CBD and harbour front (Source: Adopted and construction from Google Maps, 2015d).

The first known mention of Mossel Bay recounts how Bartolomeu Dias travelled past the southern-most point of Africa in 1488 (Nell, 2003: 21). Due to strong wind, Bartolomeu Dias did not see the coast and sailed past Cape Point and sailed northwards in search of the coast, landing along what is now Mossel Bay coast (South African History Online, 2014). As a result, Mossel Bay became a pit stop where explorers and travellers would replenish their water and food supplies, for instance by trading rice and other goods with the Khoi inhabitants and other explorers within the area. This was phase one of the waterfront.

In 1501, the commander of one of Cabral's ships, Pedro d'Aitaideon, placed a letter of significant importance under a large Milkwood tree, creating the first Post Office in South Africa (Bartolomeu Dias Museum Complex, 2014 & Steyn, 1945: 8). In 1601 Paulus van Caerden

gave the town its name after he could not find anything other than mussels to replenish his supplies, subsequently naming the town Mossel Bay (Holmes, 1988: 12-13).

The first settlement recorded in the Mossel Bay was on the farm Hartenbosch in 1733(WM de Kock Associates & DPTPS, 2013: 18). In 1787 the Governor, Cornelis van de Graaff, gave the order to start with the construction of the granary after the farmers in the area had a good grain harvest (Holmes, 1988: 19). Development of the town started due to the sizeable harvest. Thereafter, the port was developed to serve the Southern Cape and Karoo and to transport grain to Cape Point (At this stage the waterfront was at phase two, as explained in Section 4. 3. 2). However, transport was in jeopardy because of the strong South Easter winds and the Agulhas Banks. Eventually, transport of grain through shipping was stopped. In 1792 private enterprise trade started, which launched the fisheries. Furthermore, restrictions on internal trade were terminated, resulting in economic growth in the town (WM de Kock Associates & DPTPS, 2013: 18).

The first stone pier was built in 1854 on the eastern side of the bay, and the second wooden pier in 1860 (WM de Kock Associates & DPTPS, 2013: 18). Mossel Bay gained municipal status in 1856 (Holmes, 1988: 25). However, most of the stone buildings in the town were built between 1870 and 1920. Through the 1900's Mossel Bay served as a prime holiday destination. Meanwhile, in 1905 the city and harbour expanded, because ostrich feathers were in high demand (Holmes, 1988: 42). The railway line to Cape Town was completed and it was in the end extended to the north in 1907 (WM de Kock Associates & DPTPS, 2013: 18). In 1914 the ostrich feather trade collapsed, since the need for ostrich feathers had declined (Nell, 2003: 167).

By the beginning of the 1980s the port served as the fifth most important harbour in South Africa because of the discovery of the offshore petroleum gas fields in the sea near Mossel Bay (WM de Kock Associates & DPTPS, 2013: 18). However, in the new millennium the harbour became detached from the rest of the town, since new business centres were developed in the Mossel Bay area. (See Figure 6. 2.)



Figure 6. 2: Decentralised nodes in the Mossel Bay area (Source: Adapted from Urban-Econ: Development Economist (2012: 18) and Google Maps (2015e).

Figure 6. 2 illustrates that there are six other economic nodes located within a radius of 10 kilometres, leading to the decentralisation of activities that were previously located within the CBD of Mossel Bay (Urban-Econ: Development Economist, 2013: 19). These centres provide alternative activities and specialities, since businesses were previously located within the Mossel Bay area. The businesses decentralised to these centres to benefit from their agglomeration benefits (as explained in Section 2. 3. 6.) Examples of alternative centres are the Langeberg Mall, which is located in Voor Bay (see Figure 6. 2.) Most of the main business first located within the CBD, have relocated to the area of best agglomeration benefits. The N12 and the Louis Fourie corridor that stretches from Heider to Dana Bay only resulted in more decentralisation (Urban-Econ: Development Economist, 2012: 19).

The process of decentralisation led to the total decay of the city's centre and waterfront. Mossel Bay reached phase four of the phases described in Section 4. 3. 2. The municipality realised that there is a demand for urban regeneration within the city and they appointed a multi-disciplinary team that formed part of a range of role players to address the problem.

6.3 National and provincial policies and legislation

South Africa has specific legislation to consider prior to any development. Development should adhere to legislation to ensure that it meets social, environmental and economic standards to ensure that no unwanted development is implemented. It also contributes to the protection of the environment. The MBCPPP should comply with the policies and legislation (see Table 6.1.)

Table 6. 1: Relevant Policies and Legislations of South Africa

	Economic		Environmental		Social	
Department of housing, the White paper.	√	<p>The White paper states that the public environment should be stable for private investors to invest (South Africa. Department of housing, 1994: 25).</p> <p>The focus of the White paper is to regenerate the economy (South Africa. Department of housing, 1994: 4).</p> <p>The White paper states that development should continuously improve public and private environments (South Africa. Department of housing, 1994: 22).</p>	√	<p>The environment is dependent on economic development, because the incentives are used for environment protection (South Africa. Department of housing, 1994: 25).</p>	√	<p>Development provides housing for people, increasing their living standard (South Africa. Department of housing, 1994: 25).</p> <p>The White paper is aimed at rebuilding the social structure of South Africa (South Africa. Department of housing, 1994: 4).</p>
Cape Land Use Planning Ordinance	√	<p>The ordinance's purpose is to lay down guidelines for future development, such as urban</p>	√	<p>The development should comply with the preservation of the natural and developed environment</p>	√	<p>Development should consider the relevant members of the community and the property</p>

(LUPO)		<p>renewal, urban design or preparation of development plans (Western Cape. 1985: 7).</p> <p>The ordinances can replace exiting zones when the area needs new zoning (Western Cape. 1985: 8).</p>		(Western Cape. 1985: 37).		rights involved (Western Cape. 1985: 37).
Spatial Development Framework (SDF)	√	<p>The Spatial Development Frameworks (SDF) is used to stimulate economic opportunities in rural and urban areas (South Africa. Department of Rural Development and Land Reform, 2008: 2).</p> <p>Channelling resources to areas of significant need for potential development (South Africa. Department of Rural Development and Land Reform, 2008: 2).</p> <p>The SDF considers the consent</p>	√	<p>Improving sustainable use of land and water (South Africa. Department of Rural Development and Land Reform, 2008: 2).</p> <p>Reasonable access to environmental resources to meet people's basic needs (South Africa. Department of Rural Development and Land Reform, 2008: 5).</p> <p>Controls and protects highly dynamic or stressed ecosystems, such as coastal shores, wetlands (South Africa. Department of Rural</p>	√	<p>Channelling resources to areas with significant need, such as social investment (Rural Development & Land Reform, 2008: 2).</p> <p>The SDF is formulated to consider the consent of the municipality with regard to Social development and problems (South Africa. Department of Rural Development and Land Reform, 2008: 6).</p>

		<p>of the municipality regarding economic development (South Africa. Department of Rural Development and Land Reform, 2008: 6).</p> <p>The SDF identifies growth nodes, investment areas and areas of decay (South Africa. Department of Rural Development and Land Reform, 2008: 9).</p>		<p>Development and Land Reform, 2008: 5).</p> <p>The SDF considers the consent of the municipality regarding the environment (South Africa. Department of Rural Development and Land Reform, 2008: 6).</p>		
<p>Environmental Impact Assessment (EIA)</p>	√	<p>Development of capital projects should be in line with the Environmental Impact Assessment (EIA). Consequently, an application should include EIA and Integrated cumulative impact assessments (Ethekwini Municipality, 2010:8)</p>	√	<p>Development should indicate the footprint of the development and be in line with the existing environment. (Ethekwini Municipality. 2010: 6)</p>	√	<p>The EIA should identify and predict the probable environmental, social and other related effects of the application (South Africa. Department of Environmental Affairs and Tourism, 2004: 11)</p>

Social Impact assessment (SIA)	√	SIA focuses on balancing the economic development with the Social and environment (UN, Centre for Good Governance, 2006: 1)	√	SIA is focused on primary focus is to provide sustainable development (UN, Centre for Good Governance, 2006: 4)	√	As economic development takes place it has a harmful effect on humans and the natural resources. Therefore, the SIA is focused on measuring the impact the development will have on the human environment (UN, Centre for Good Governance. 2006: 1)
Economic Impact Assessment	√	Focus on improving the national economic levels, which is in line with nature (Tassey, 2003: 64)	√	Provide finance for environmental projects , and the factors affecting the nature (Tassey, 2003: 70)	√	The Economic Impact Assessment focus on providing finance for social projects (Tassey, 2003: 5)

Source: Adapted and constructed from South Africa. Department of Rural Development and Land Reform (2008), Ethekwini Municipality (2010). , South Africa. Department of Environmental Affairs and Tourism (2004), South Africa. Department of housing (1994) & Western Cape (1985).

It is important to state that the MBCPPP has complied with the relevant policies and legislations, since the focus of the development is to address the economic, environment and social problems of the area.

6.4 Proposed phases of improvement and development

The MBCPPP is divided into three main implementation phases, namely the short-term, medium-term and long-term projects (see Table 6. 2.) The short-term plans are estimated to take one to two years, and the medium term three to eight years and the long-term plans will take longer than eight years.

Table 6. 2: Implementation tools - Annual and 5-year budgets

IMPLEMENTATION AND STRATEGY PHASES: ANNUAL AND 5-YEAR BUDGETS			
Phase of development	Phase one: Short-term goals (1- 3 Years)	Phase two: Medium-term goals (3 – 8 Years)	Phase three: Long-term goals (Over 8 Years)
(e) Commencement and monitoring of Plan	<ul style="list-style-type: none"> • Start with Mossel Bay Central Precinct Plan • Align with the amended zoning scheme 	<ul style="list-style-type: none"> • Monitoring and adjustment of MBCPP 	<ul style="list-style-type: none"> • Monitoring and adjustment of MBCPP
(f) Pedestrianisation and Street improvements	<ul style="list-style-type: none"> • Commence with Bland and Market Street redesign and construction • Upgrade Montagu street and taxi rank 1st phase • Pedestrianisation plan upgrade 	<ul style="list-style-type: none"> • Upgrade Upper Church Street • 2nd phase of pedestrianisation plan • Continue and finish all movement system proposals 	

(g) Market Squares and Parks	<ul style="list-style-type: none"> • Market Square redesign and Vincent Building internal upgrade • Improve movement system through Diaz park 		
(h) Branding	<ul style="list-style-type: none"> • Start branding and marketing strategy 	<ul style="list-style-type: none"> • Continue with branding and marketing 	<ul style="list-style-type: none"> • Continue with branding and marketing
(i) Harbour Front development	<ul style="list-style-type: none"> • 1st phase of implementation of harbour development opportunities – awarding of tenders and commencement • Master plan design for Area 1 (invite development proposals) • Commence with new harbour road 	<ul style="list-style-type: none"> • 2nd Phase of implementation of harbour opportunities 	
(j) Landscaping	<ul style="list-style-type: none"> • Landscaping improvements 	<ul style="list-style-type: none"> • Continued landscaping along all streets 	<ul style="list-style-type: none"> • Continued landscaping along all streets

(k) Commence LED	<ul style="list-style-type: none"> • Implement local economic development strategy as per LED proposals 	<ul style="list-style-type: none"> • Continue with implementation of local economic development strategy as per LED proposals 	<ul style="list-style-type: none"> • Continue with implementation of local economic development strategy as per LED proposals
(l) Formulate incentive scheme	<ul style="list-style-type: none"> • Formulate and implement incentives scheme. 		

Source: Adapted and constructed from WM de Kock Associates & DPTPS (2013: 57)

Table 6. 2 is explained below by focusing on each implementation and strategic phase. The first is the short-term implementation and strategy phase.

6.4.1 Phase one: Short-term goals – 1-3 years

- (a) Commencement and monitoring of plan:** This is the starting point of the implementation of the MBCPPP. Short-term goals are goals that can be implemented immediately with the lowest cost and within the shortest time. The first short-term goal is to provide guidelines that can prevent any threat or competition that can jeopardise the CBD any further. It seeks to ensure that Mossel Bay maintains its use, and to prevent further nodal development in the surrounding areas. One of the first goals was to align the amended zoning scheme with the MBCPPP (WM de Kock Associates & DPTPS, 2013: 34).
- (b) Pedestrianisation and street improvements:** As the focus of the MBCPPP is to link the CBD and the harbour front as an intergraded unit, the role players have to address the negative aspect of the area to attract visitors. One of these negative points is that the hub of activity in the CBD is separated by busy, vehicle intensive streets. To regenerate the core business area, the plan proposes that Bland Street should be remodelled to generate a space that is favourable to pedestrian movement (WM de Kock Associates & DPTPS, 2013: 47). Informal trade areas will be allocated and additional parking provided. Furthermore, the arcades crossings these blocks will link with the pedestrian walkways for example the port developments and residential developments located along the edge of the CBD. The proposed urban design concept is illustrated in Figure 6. 3 (WM de Kock Associates & DPTPS, 2013: 47).

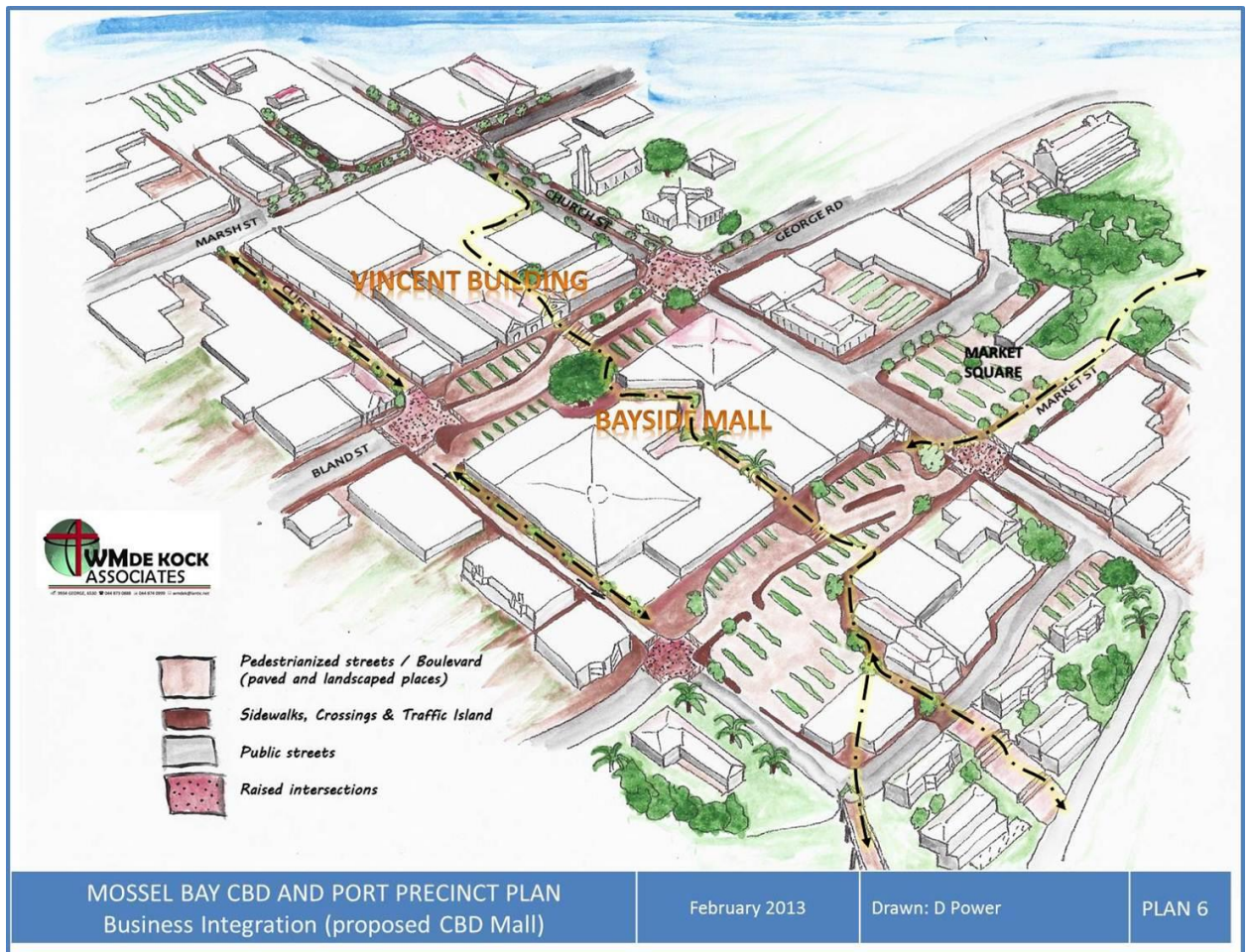


Figure 6. 3: Urban design proposal (Source: WM de Kock Associates & DPTPS, 2013).

The plan is to re-design Market Square to a place or square where pedestrians have will choice to use first. Furthermore, the open space will connect Church Street (Annexure A and F), with Market Street (Annexure F) continuing to the Vincent Building, creating a pedestrianised zone with successful links to the waterfront and the water's edge. This will provide stronger and better pedestrian accessibility along Montagu Street (Annexure B), Cook Street (Annexure C), Cuff Street (Annexure D) and within the Taxi rank (Annexure E). The parking space for vehicles and tour busses will be accommodated in the square (WM de Kock Associates & DPTPS, 2013: 47-57).

- (c) Parks:** The open spaces mentioned in point b form part of the parks, which stretch from Church Street into Market Street, continuing to the Vincent Building. Furthermore, Diaz Park will be integrated into the total open spaces by providing easy access through the park, since access is currently difficult. Additionally, the plan proposes the development of a fountain at the Diaz Museum grounds to attract tourists to the park. To extend on the park's use, the plan proposes an improvement on the Diaz festival (Urban-Econ:

Development Economist, 2013: 19). The festival showed that the port and the park grounds around the Posboom can be used for events and festive activities (WM de Kock Associates & DPTPS, 2013: 40-57).

- (d) **Branding:** According to the (WM de Kock Associates & DPTPS, 2013: 43), Mossel Bay already has a name and logo. The next step is to create a unique urban branding for the city to create an area that is distinct from its competitors. Urban branding will not only be about beautification of the urban area, it will rather be focused on a strategic urban identity redesign and strategic communication for the target markets. Branding of the CBD will form part of the branding of Mossel Bay.

The plan proposes that if the branding is flourishing, it will create the awareness that there is no area such as the Mossel Bay CBD and port area (WM de Kock Associates & DPTPS, 2013: 43).

- (e) **Harbour front development:** Development opportunities along the waterfront should commence within this period, as seen in Annexure G, linking the water's edge or waterfront with the CBD. The same problem occurred within the Toronto Harbour Front (see Section 5.4.2.) However, the link will be achieved through the new harbour road and by linking the different areas with the railway line and the pedestrian walkways (WM de Kock Associates & DPTPS, 2013:13). Development will also take place along the waterfront with residential zones on vacant land. In addition, the harbour front's fencing will be removed to link it to the CBD with the waterfront.
- (f) **Landscaping:** Specific guidelines will influence the design of the streets and open spaces to attract visitors and improve the overall sense of the area. A series of plans with the landscape proposals are attached as annexures.

Specific areas and streets will be upgraded as time and finances become available. For instance, landscaping will be useful at the March Street servitudes from Louis Fourie Ave, George Road exit from Louis Fourie Ave and the T-junction between Church and High Street(WM de Kock Associates & DPTPS, 2013: 48 & 57).

- (g) **Commence LED:** The Local Economic Development (LED) report focuses on the findings of the so-called Participatory Analysis for Community Action (PACA) participatory process with the reason to develop the strategy. The results of the PACA showed that Mossel Bay must pay special attention to the art and cultural sector the local area (WM de Kock Associates & DPTPS, 2013: 12).

- (h) **Formulate incentive scheme:** The incentive scheme encourages local residents to develop and conduct economic development within the area by providing some incentives. However, some conditions of operation may be imposed on public lease agreements by the municipality or the Port Authority. Future development on Transnet land may be allocated through a lease agreement (WM de Kock Associates & DPTPS, 2013: 45 & 57).

The scheme will provide incentives for local businesses, like the goods, fresh fish and produce sold in the area through tax-incentives. Apart from providing incentives for local business, the plan will provide incentives for business to upgrade historical buildings and participate in the upgrade of the landscaping in the area.

6.4.2 Phases Two: Medium-term goals – 3-8 years

- (a) **Commencement and monitoring of plan:** The MBCPPP states that the project's success depends on the monitoring of the progress and implementation of the plan. The different role players that form part of the plan will go through a self assessments process. However, there is no insurances that the recommendations of the structure plan are implemented. Therefore, the responsibility rests with the role players (WM de Kock Associates & DPTPS, 2013: 55).

A range of other mechanisms that do not only depend on the role players will be put into place, such as an adequate monitoring and review system by a task team to counter the effects of loss of funding, political influences and changes in market trends (WM de Kock Associates & DPTPS, 2013: 55).

- (b) **Pedestrianisation and street improvements:** The second part of the street improvements will focus on upgrading Church Street by upgrading the pedestrian walkways and landscaping. This will create a link between the different streets for pedestrian movement as mentioned in the short-term goals as part of the pedestrianisation plan (WM de Kock Associates & DPTPS, 2013: 57).
- (c) **Branding:** Throughout the process, branding and marketing should continue, because marketing is an essential part of every waterfront or tourist destination. The waterfront should offer an attraction to be sustainable for many years to come (WM de Kock Associates & DPTPS, 2013: 43-57).
- (d) **Harbour front development:** Continue with implementation of harbour opportunities, as explained as part of phase one (WM de Kock Associates & DPTPS, 2013: 57).

- (e) **Landscaping:** Continue with the proposed landscaping along the streets as mentioned in the short-term goals and in the above-mentioned medium-term goals of point b (WM de Kock Associates & DPTPS, 2013: 57).
- (f) **Commence LED:** Continue with implementing the local economic development strategy (LED) (WM de Kock Associates & DPTPS, 2013: 57).

6.4.3 Phase Three: Long-term goals – over 8 years

- (a) **Commencement and monitoring of plan:** The last phase is a long-term goal, since the timeframe of when the projects will be completed is not fully deterrent. The MBCPPP should be monitored and adjusted as needed, otherwise the development will move in the wrong direction and end up having problems, as seen within the Baltimore Harbour Front development (WM de Kock Associates & DPTPS, 2013: 55-57).
- (d) **Branding:** The marketing of the area should not end at phase one or two, since marketing provides the visitors a reason for exploring the area and attracts tourists, as explained as part of the medium-term goals (WM de Kock Associates & DPTPS, 2013: 57).
- (f) **Landscaping:** Landscaping forms part of this phase as well, since the landscaping is not planned only for short and medium term. Development in the area of landscaping continues throughout. The local economic development strategy will continue to ensure that the area will have a positive role to play within the city (WM de Kock Associates & DPTPS, 2013: 57).
- (g) **Commence LED:** Continue with the LED proposals, since it will ensure that the area has a positive role to play within the city, whereas if the LED improvements stop, the area will become unusable (WM de Kock Associates & DPTPS, 2013: 57).

6.5 Role players in the formulation of the Mossel Bay CBD and Port Precinct Plan (MBCPPP)

The main role players in the urban regeneration of the city are the Municipality and the Transnet National Ports Authority. The role players appointed a multi-disciplinary team to investigate and recommend the most suitable strategy for urban regeneration of the CBD and harbour front (WM de Kock Associates & DPTPS, 2013: 7). The multi-disciplinary team includes the following role players:

Table 6. 3: Multi-Disciplinary Team

Multi-Disciplinary Team		
The four groups	Profession	Responsibility
Public organisation	<ul style="list-style-type: none"> Local Authority 	Implement rezoning, roads and pedestrian walkways. Provide access to the water's edge.
Public enterprises	<ul style="list-style-type: none"> Transnet Authority 	The responsibility of providing access to the harbour front, and continuing with harbour activities.
Public welfare organisations	<ul style="list-style-type: none"> Provincial Authority 	Museum protection and restoration and control of historical buildings
Private enterprises	<ul style="list-style-type: none"> Town Planners Market Researchers Urban Designers Traffic Engineers Civil Engineers Electrical Engineers Community and Tourism Entrepreneurs 	Contraction of the plan and implementing the plan

Source: Adapted and constructed from WM de Kock Associates & DPTPS (2013:7)

The multi-disciplinary team was informed by the findings of the specialist team which are the Municipality and Transnet. Information provided by the specialist team was discussed in workshops held with the municipality and the Transnet. The precinct plan will not be successful if all the role players in the implementation do not cooperate fully and monitor the development

(WM de Kock Associates & DPTPS, 2013: 54). The role players are divided into four role player groups, namely public organisations, public enterprises, public welfare organisations and private enterprises and these role players will be explain hereafter.

6.5.1 Public organisation

- Mossel Bay Municipality is responsible for the rezoning of the proposed areas. Furthermore, they have the ability to control unwanted land use in the area and implement the Local Economic Development Strategy (LED). Additionally, the municipality has the ability to provide incentives for investors that are willing to invest in the urban regeneration of the CBD and Port area (WM de Kock Associates & DPTPS, 2013: 15, 45 & 55).

6.5.2 Public enterprises

- Transnet National Ports Authority has a creative responsibility according to the MBCPPP. For example, if the National Ports Authority does not provide access to the harbour front, the plan will not be successful (WM de Kock Associates & DPTPS, 2013: 55). The focus of the plan is to use the sea and access to the sea as the connection point between the CBD and the harbour.

6.5.3 Public welfare organisations

- The Western Cape Provincial Administration Department of Culture and Tourism and the Western Cape Provincial Administration Department of Public Works chamber has the responsibility to ensure the success of the plan and organise meetings. However, as seen in the discussion of the history of Mossel Bay the area is rich in historical buildings. Furthermore, the history is one of the main attractions of Mossel Bay. Thus, without easier access to these facilities and protection of the historical history of the area the plan will also be unsuccessful (WM de Kock Associates & DPTPS, 2013: 39 & 47).
- City Improvement District (CID). The CID was established to ensure that the MBCPPP is implemented in the correct manner. They form part of the investors and service providers who are not part of the municipality. They form part of the majority property owners in the CBD. The same form of committee was established in the development of the Toronto Harbour Front to ensure that the development and plans are implemented correctly (WM de Kock Associates & DPTPS, 2013: 2013: 55).

6.5.4 Private enterprises

- The Business Chamber and property owners are also stakeholders and ultimately part of the role players. The business property owners have the ability to recheck the plan and invest in the plan (WM de Kock Associates & DPTPS, 2013: 2013: 7). This is important, because if they do not see to the potential of the plan and agree with the plan, it could lead to further decline.
- Entrepreneurs have to see the future potential that the area has and the ability to invest in the plan. Consequently, they have the ability to change the role of the waterfront (WM de Kock Associates & DPTPS, 2013: 54).
- Mossel Bay Tourism has the responsibility to convince tourists and potential investors to visit this historical area. This will influence the success of the waterfront and its role within the city (WM de Kock Associates & DPTPS, 2013: 30 & 54).
- Furthermore, the implementation and monitoring task team comprises representatives from the organisations listed above and their planning representatives. Their specific task is the revision of the implementation of the project (WM de Kock Associates & DPTPS, 2013: 55).
- According to the WM de Kock Associates & DPTPS (2013: 55), the team should meet constantly during the course of implementation of the project (proposed semi annually) to report on the MBCPPP.
- If these role players are present and contribute to the implementation of the MBCPPP, the plan will be successful. The future of the waterfront and its role within the city will be a positive contribution. Meanwhile, before the MBCPPP can be implemented, the advantages and disadvantages should be weighed to determine if the development will be feasible.

6.6 Advantages and disadvantages of the Mossel Bay CBD and Port Area Precinct Plan

The MBCPP has the financial support and much needed technical support to implement the waterfront regeneration project. However, before any role players will be willing to invest in the development, they should be sure that the advantages outweigh the disadvantages. As explained in Section 4. 5, if the disadvantages outweigh the advantages, the chance of the development being sustainable is slim (refer to Table 6. 4).

Table 6. 4: Advantages and disadvantages of MBCPPP

Advantages and disadvantages of Mossel Bay CBD And Port Precinct Plan	
Advantages and Opportunities	Disadvantages
<ul style="list-style-type: none"> • Coast Locality on safe bay • Scenery • Presence of Post Tree and Museums • Accommodates working harbour • Harbour is point of departure of tourism excursions • Accommodates historic sand stone buildings • Tidiness • Accommodates most good restaurants • Accommodates most good hotels • Blue flag beach (Santos) • Caravan parks • Tourist bus destination • Passenger ship destination • Accommodates Harry Giddey Park • Accommodates Municipal offices • Accommodates historic graveyard • Railway connection to CBD 	<ul style="list-style-type: none"> • Decrepit Appearance • Vacant business sites • Poor traffic flow/ compact streets • Imperfect parking • Uncontrolled motor car attendants • Poor security • Unfavourable / obsolete town • Planning ordinances • Poorly managed taxi-terminus • Untidy environment at taxi-terminus • Poor indications to parking areas • Inadequate directives to CBD/Point from Louis Fourie Road • Management of Dias Museum • Absence of national shopping groups • Shortage of niche shops • Increase in low-quality shops • No access from CBD to Santos beach • Poor used lighthouse facilities

	<ul style="list-style-type: none"> • Difficult access to the lighthouse • Dilapidated condition of St Blaise caves • Unhygienic conditions at Point due to feeding of rock-rabbits • Inadequate opportunity (events) to lure people • Municipal red tape • Inconvenient refuse containers • Unused/dilapidated station buildings • Advertising disorder on buildings • Provincial control of Marsh Street • Inconvenient placing of direction indicators to harbour, SAPS, etc. • Unattractive appearance, due to lack of trees/shrubs in central city. • Inadequate marketing • Inadequate residential component
Opportunities	Threats
<ul style="list-style-type: none"> • Harbour development • Encourage establishing of niche shops, consulting rooms, honeymoon, activities such as IT businesses, call centres, etc. • Re-use of old goods-shed at harbour 	<ul style="list-style-type: none"> • More CBD-undertakings • Declining feet to the town • Increase in low quality-ships in CBD • Loss of investors belief • Less tourism

<ul style="list-style-type: none"> • Accelerate the development by exclusion of red tape • Development of Pinnacle Point/St Blaize complex as tourist destination of international standard • Obtaining of International or National heritage status for Pinnacle Point/St Blaize complex • More open area recreational facilities at Point to lure more visitors • Partnership with CBD-property owners by means of Town Improvement District Concept (TIDC/CID) • Revised tourist strategy to improve marketing (events) • Market Mossel Bay as water sport mecca • Market Mossel Bay as tourism destination by means of advertising boards on main routes • Encourage and support organisations who wish to present events in Mossel Bay. For instance, Buffalo-motorbike gathering • Obtain icon status for Point area • Development of lighthouse to tourist attraction • Create pedestrian streets through portions of Marsh Street, closing off 	<ul style="list-style-type: none"> • Increasing decline of buildings, streets and pavements in CBD • Decreasing property values • Decreasing revenue from property rates, services • Creation of shanty town • Job losses • Inadequate funds for upgrading projects • Increasing of popularity of R62 Resulting in less traffic on N2 past Mossel Bay • Harbour authorities obtain management which is less inclined to Mossel Bay development • Apathy of property owners • Property owners reject CID-partnership • Further decline of Dias museum as tourist attraction • Removal of caravel from Museum • Increase in crime and undesirable elements in CBD/Point area • Flooding of undesirable elements to CBD.
--	---

<p>certain side streets</p> <ul style="list-style-type: none"> • Re-establish certain municipal departments in CBD. • Revised and amended ordinances to stimulate development and/or redevelopment of CBD or expedite as well as increase in the residential component CBD • Control over Dias Museum • Town beautifying of CBD by means of tree or shrub plantings, plants in pots and encourage owners of buildings to beautify their buildings • Developing and implementation of advertising board theme for CBD. • Facilitate access to CBD to Santos Beach via museum grounds • Create “national foundation monument” at fountain museum grounds • Establishing of tram or steam train service, or both on the railway line between CBD and Hartenbos. • Removal of taxi-terminus and creation of present taxi-terminus site to park or town plain • Create facilities for selected informal trading in CBD. 	
--	--

Source: Adapted and constructed from Urban-Econ - Development Economists (2012: 34-36).

The table above shows that the advantages outweigh the disadvantages because of the opportunities that the development provides. Table 6.4 shows that one of the main opportunities provided is the area's historical significance. The next step is to explore the physical phases of the proposed development.

6.7 Land use proposals and parameters

The Mossel Bay area has a unique environment and diverse land uses. Due to this unique environment, Mossel Bay's land use should be controlled and preserved to prevent unwanted land uses. Land uses should contribute to the overall vision of the MBCPPP. The Plan has indicated that the land use sectors with specific functions in specific areas should be identified to minimise conflict between competing land uses. The MBCPPP proposed a new Integrated Land Use Scheme. The current Land Use Schemes are compared and thereafter a new Integrated Land Use scheme is identified (refer to Annexure J, include Annexure H and I with Annexure J.)

Annexure J clearly illustrates that the Mossel Bay Zoning Scheme Regulation of 1984 was too basic for the current need; therefore the task team developed the new Integrated Zoning Scheme that identified new uses for specific areas within the Mossel Bay and waterfront area. The new uses will be incorporated into four sections, namely Business, Residential, Mixed use and Waterfront area. The different uses are defined as follows:

- (a) Business:** Business land use is restricted to the area designated within the business development edge, as seen in Annexure I. Buildings should not exceed three storeys and may include residential development (WM de Kock Associates & DPTPS, 2013: 42). In the core business area and prime activity areas along the harbour front residential development is only allowed from the first floor and upwards in order not to affect the tourism potential in these areas. Residential developments are only permitted on the areas allocated within the MBCPPP (WM de Kock Associates & DPTPS, 2013: 50).
- (b) Residential:** Sufficient residential areas are provided and there are provisions for residential development both on ground floor level and above businesses (medium density, high density, and business with residential). Buildings are limited to a height not more than three storeys. However, higher buildings can be permitted surrounding larger areas where development will not affect the business area, such as open spaces overlooking the port and beach areas. (WM de Kock Associates & DPTPS, 2013: 42-50).

The deviations in densities are planned for the area to blend developments within its surrounding areas. For instance, these developments may include group housing to three

storey apartment buildings (WM de Kock Associates & DPTPS, 2013: 50). New residential developments are allocated in areas A and E on Annexure I. The residential buildings in and around the CBD are intended for work residents. The permanent residents will add investment and a sustainable demand for retail and services in the CBD. The government will provide incentives for property owners that offer long-term rental agreements rather than holiday accommodation (WM de Kock Associates & DPTPS, 2013: 50).

- (c) **Mixed use:** The plan allows for a wider variety and assistance with the complimentary functioning of the market mechanism. It also permits for residential areas close to work. Identification of several mixed-use zones would allow the market to expand within boundaries. This would still encourage land uses that correlate with the environment (see Annexure I) (WM de Kock Associates & DPTPS, 2013:51). The above-mentioned mixed-uses include the following: Artworks, open air markets, kiosks, stalls, displays, tables and seating, including those used in association with food and beverage activities, indoor markets, offices, retail, yachting, boating and port administration, ticketing facilities, auctioning of fish, shellfish, fish by-products, fruit, vegetables and flowers, charter boats and ferry and marina operations (WM de Kock Associates & DPTPS, 2013: 51).
- (d) **Waterfront area:** Annexure I shows that only a small part of the port area has been allocated for waterfront activities with links to the Yacht Club. However, this area suggests very little connectivity with the water's edge and the CBD (WM de Kock Associates & DPTPS, 2013: 51). The MBCPPP suggests that more areas be rezoned for development or for public and recreational uses, which would provide better accessibility to the water's edge and port activities. (WM de Kock Associates & DPTPS, 2013: 51).

The port and Transnet grounds are enclosed by palisade fencing, thereby limiting access. The plan proposes that the fencing be removed to use the full potential of the waterfront area. If the fencing is not removed, the waterfront cannot play a significant role within the city (WM de Kock Associates & DPTPS, 2013: 51).

The new Mossel Bay Integrated Zoning Scheme will lead to integration with the waterfront and CBD since the role of the waterfront has changed from an industrial harbour to a mixed-use area. The plan has the capacity to change the function of the city to a tourist destination.

6.8 Economic, social and environmental improvements

There are factors (economic, environment and social) that play a significant role in the success of any urban regeneration development. The following three points are addressed in reference to the MBCPPP to ensure that they are present and are able to change the role in the city.

6.8.1 Proposed economic improvements

As this plan is still to be implemented, there has not been any improvement in the economy of the city. However, the plan's main goal is to provide an area where businesses will want to invest. The focus will therefore have to be on how to attract business to the CBD and port area (Urban-Econ: Development Economists, 2012: 52).

- **Creating pedestrians to support business**

As the physical structures of the business are already located within the Mossel Bay CBD, the focus of the MBCPPP is to provide pedestrian areas that will provide customers easier access to the local business within the area (Urban-Econ: Development Economists, 2012: 52).

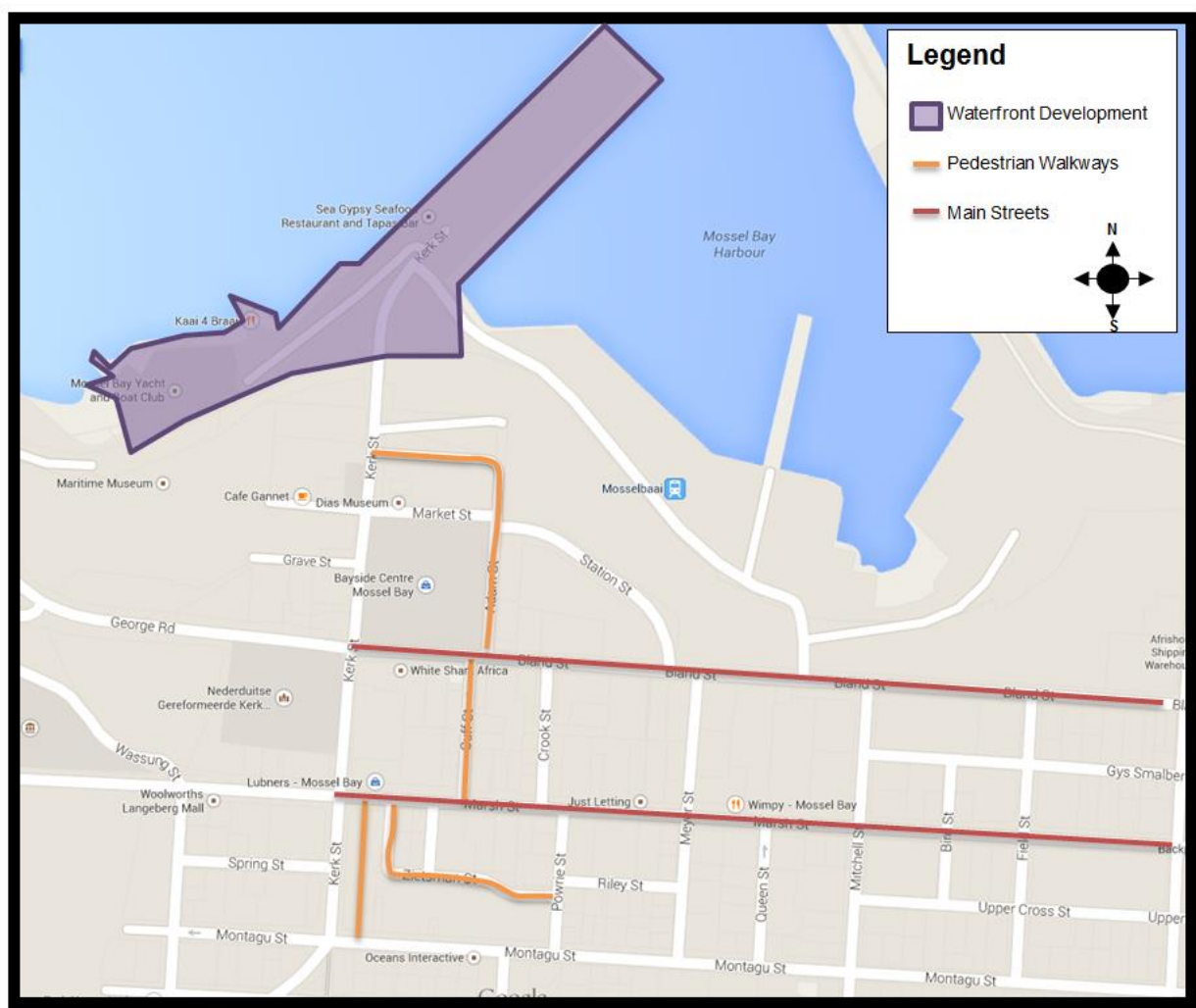


Figure 6. 4: Waterfront and pedestrian walkways (Source: Adopted and constructed from Google Maps, 2015f).

To achieve the pedestrian walkways the plan proposes to develop Matfield Street, Crook Street, Church Street, Montagu Street, Zietsman Street, Cuff Street and Adam Street as pedestrianised streets. Since the streets will have lighting and surveillance, the pedestrians can enjoy the pleasure of the area and the businesses without worrying about safety. The streets are shown as orange in Figure 6. 4. The streets also lead to the waterfront, ensuring safer access to the waterfront (Econ: Development Economists, 2012: 27 & WM de Kock Associates & DPTPS, 2013: 14-57).

The streets that are shown in red (see Figure 6. 4) will be emphasised and designed to create an impression that the walkways continue into the rest of the area. For example, the pedestrian movement across Bland Street will be effortless so that pedestrians find themselves in a pedestrian friendly environment where they can benefit from the preferences in the area (Urban-Econ: Development Economists, 2012: 49). All the pedestrian walkways will be integrated with the area, which includes the waterfront and the CBD, guiding pedestrians in the direction of key attraction and activity areas (Urban-Econ: Development Economists, 2012: 23).

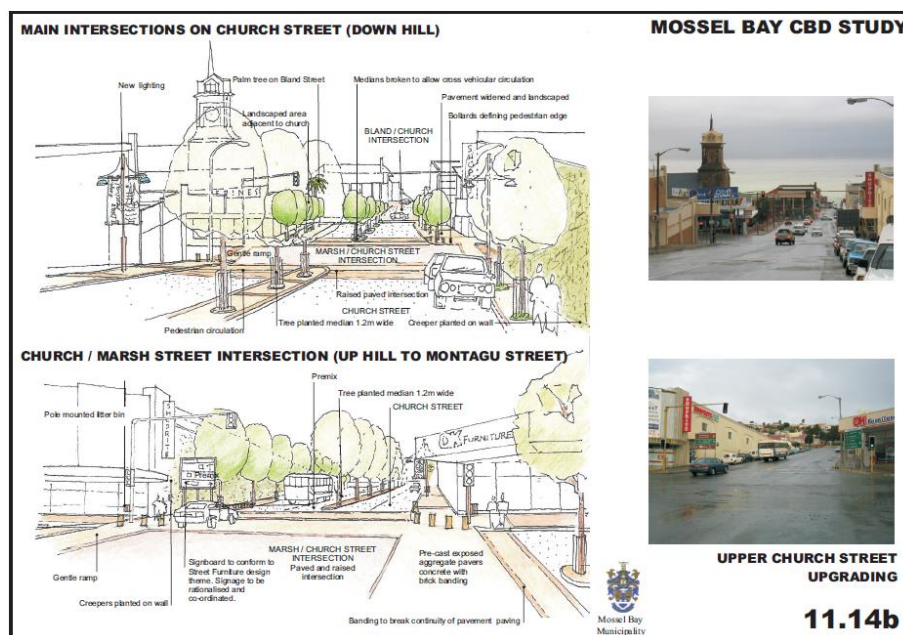


Figure 6. 5: Walkways guiding pedestrians to the sea

Source: WM de Kock Associates & DPTPS (2013)

- **Attracting investment by upgrading**

The second economic improvement that the plan proposes for attracting tourists and residents to the area is the creation of the waterfront. The waterfront will make use of the development of the vacant and under-utilised land in and around the harbour. The waterfront regeneration will

include offices, trade, recreational and residential uses, which are permanent and will have temporary accommodation available. To ensure that the waterfront area serve as an urban regeneration measure, the plan recommends that the waterfront development should serve as an extension of the CBD and include recreational areas. To provide free movement along the water's edge and accessible boarding facilities for the recreational boats (Urban-Econ: Development Economists, 2012: 24-25).

- **Incentives of business**

According to WM de Kock Associates & DPTPS (2013: 28& 32), the plan will provide incentives to attract investors to the area through the municipality so that they relocate to the CBD and remain within the area. The incentives scheme's goal is to encourage growth within the area by creating job opportunities and motivating construction within unutilised areas, which will create long term positive tax income (WM de Kock Associates & DPTPS, 2013: 32). The plan states that there should be incentives for owners of historical buildings, to encourage owners to preserve the historical buildings, increasing the economic and the social and environmental standard of the CBD and the surrounding areas of Mossel Bay (WM de Kock Associates & DPTPS, 2013: 50).

Development along the harbour front will be under lease agreements according to the MBCPPP, since it is one of the Transnet's terms of the agreement. Transnet states that the land could be used under a lease contract for 30 years (WM de Kock Associates & DPTPS, 2013: 48). This causes the first problem, because for the lease agreement to be economically efficient for large business, it should be at least 99 years (WM de Kock Associates & DPTPS, 2013: 48).

- **Control expansion of development**

A further economic proposal is to control the expansion of business to other areas of the city. Consequently, preventing sprawl of business zones into areas allocated for residential uses. Thus, promote densification, especially where there are still many under-utilised sites within the CBD and waterfront, which will ultimately lead to regeneration of the CBD and harbour front.

6.8.2 Proposed environmental improvements

Mossel Bay has one of the most diverse environments and attracts visitors from all over the world, providing the city with a significant opportunity to capitalise on the natural environment and indirectly attracting visitors to the business within the area.

The environment also consists of the above-mentioned pedestrian walkways. The pedestrian walkways should lead the pedestrian to open spaces, such as to Posboom Park from Giddey

Park and the other way around (WM de Kock Associates & DPTPS, 2013: 20-48). Pedestrian walkways, as explained within the phases of development, will help to improve the overall environment of the area (see Annexures A to F). Besides, improving the environmental aspect of the area it will also improve the economic and social aspect. The environmental components also benefit from the social improvements that are proposed for the area, ensuingly discussed (WM de Kock Associates & DPTPS, 2013:47).

6.8.3 Proposed social improvements

The MBCPPP states that vehicle and pedestrian walkways are linked to unlocking the potential of the area (see Annexure A to F). They assist with the social conditions of the area, such as the long lost water's edge which is declined by the physical barriers and palisade on and along the harbour (WM de Kock Associates & DPTPS, 2013: 36). For instance (linking it with Section 5.4.2), the Toronto Harbour Front was cut off from the water's edge through the road development in the area. The physical barriers along the harbour front and the beach that divides the city centre from the water will be removed, linking the residents and visitors with the water's edge.

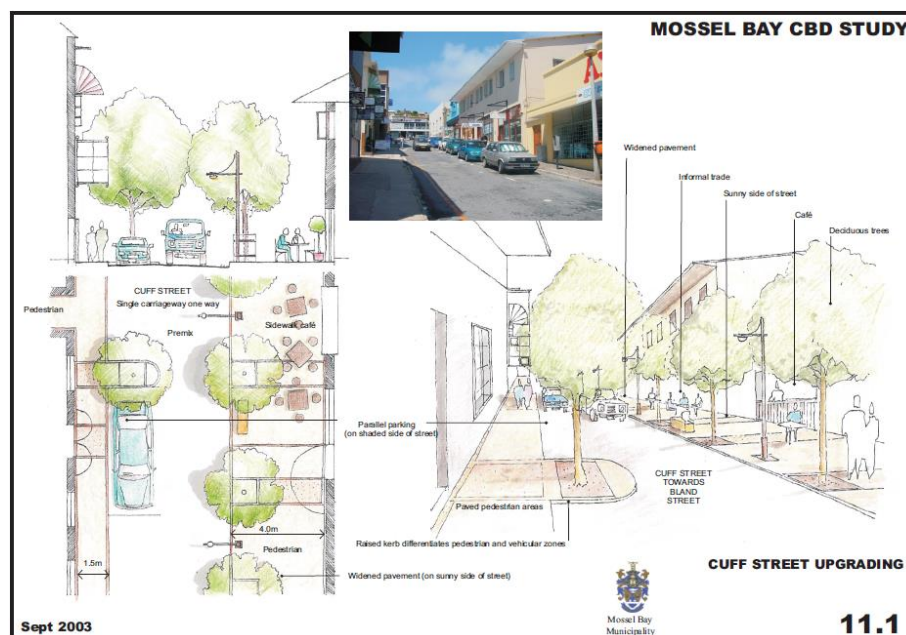


Figure 6. 6: Proposed pedestrian walkways (Source: WM de Kock Associates & DPTPS, 2013)

The plan also focuses on increasing the access to the Diaz museum, since the lack of access to the museum had a negative effect on visitors and local resident's experience, leading to the increase of total social neglect of the Mossel Bay area. Visitors and residents feel socially

burdened to buy a ticket to enjoy the areas (WM de Kock Associates & DPTPS, 2013: 12 & 39). The plan shows that safety of visitors is a primary concern, leading to the overall social improvement of the area. This will be addressed using security services and proper lighting after sunset (WM de Kock Associates & DPTPS, 2013: 39).

The MBCPP recommends that the park next to the Diaz museum should be seen as a major focus point of the town. The area has the potential to become a major public square where festivals, small markets and the like could be staged. Thus, the area has the potential to play a key role in the urban regeneration of the town (WM de Kock Associates & DPTPS, 2013: 40).



Figure 6. 7: Park located next to Diaz Museum (Source: Adopted and constructed from Google Maps, 2015g).

An example where an area with the same significance as Mossel Bay has changed the role of the city is Baltimore. The Baltimore Harbour Place Amphitheatre had a significant impact on its social role in its urban environment and role within the city.

The last aspect of improving social standards of the area is branding, since urban branding programmes are dependent on the improving of a 'sense of place'. This will be achieved through increasing investment loyalty, creating a brand for the city, which will created stronger

presence in global, national and regional standards (WM de Kock Associates & DPTPS, 2013: 44).

6.9 Mossel Bay case study exploration

The MBCPPP provided insight regarding the role of waterfront development in urban regeneration of cities and CBD's. The economic, environmental and social role of waterfront of the MBCPPP are explored below:

- **Economic role**

Mossel Bay started as a port for transported goods from Europe to India. Travellers used this port in order to replenish their supplies, before continuing on their journey. Consequently, the harbour was used as an area to provide for trade of goods. The role of the waterfront was strictly economic. As time passed and the economic role started to deteriorate. The role of the waterfront was addressed through the new MBCPPP, to provide a new economic role within the area.

The MBCPPP proposed to address the problems using an incentive scheme, which is a strong method to attract investors to the area. The plan proposes to create the area as a tourist destination, which is one method of attracting economic growth within the area.

- **Environmental role**

The environmental role was absent during the growth of the city and port area. This role has been addressed by the new MBCPPP, which links the water's edge and the different parks and open spaces. The plan integrates the environmental and the economic role of the area through the use of the walkways, thus connecting the tourist with the environment and businesses of the area, and therefore bringing the environmental and economic role in balance.

- **Social role**

The social role of the area was absent for almost the entire growth period of Mossel Bay, because it had mostly an economic focus. The importance of the social role was realised, and addressed through the MBCPPP. The plan used the historical background of the area in order to attract tourist to the area, which is a method to address the social role. On the other hand, the social role needs something else or unique that tourists enjoy. As seen through the other case studies the waterfront all had something unique to attract the tourist to the area, such as the music garden.

It is clear that the new proposed MBCPPP is in balance with all three roles, since the economic, environment and the social roles are addressed by the plan. Not one of the roles is dominated by the others, because everyone works in relation with each other. It can be said that the role is multi-faceted as indicated below (Figure 6.8.)

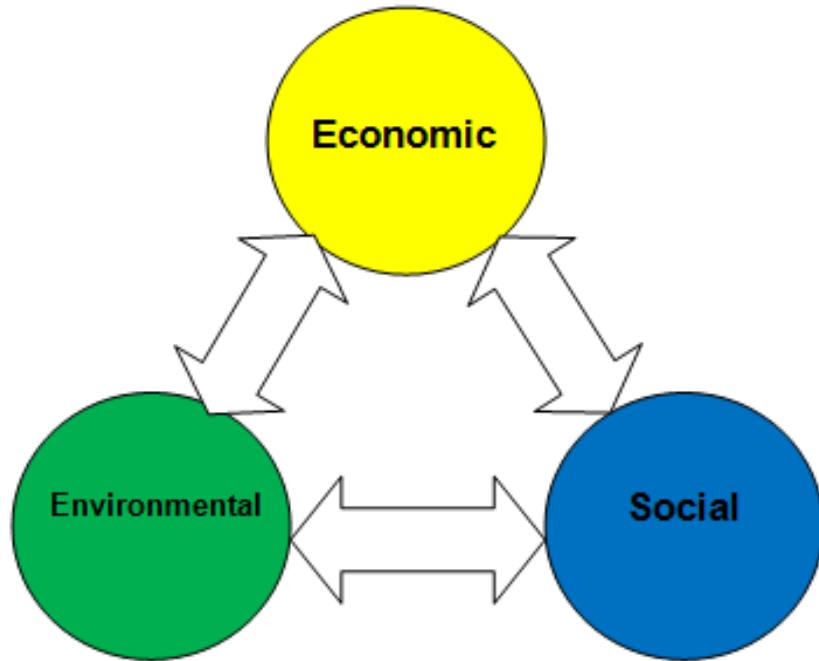


Figure 6. 8: The different roles in balance (Source: Own construction)

With the above in mind the following is a summary of the main “tools” for integrating the economic, environment and social role in the urban regeneration of cities and CBDs.

Table 6. 5 Mossel Bay CBD and port precinct plan integration tools

Tools for urban regeneration of cities through waterfront development			
Tools	Economic	Environmental	Social
History	√		√
Access		√	√
Natural resources		√	√
Tourist destination	√		

Same level / Role players	√	√	√
Monitoring	√	√	√
Owners of surrounding buildings		√	√
Design	√	√	√

Source: Own construction

History: History can have a positive effect on the role that the city plays, especially the waterfront's history. For instance, the Mossel Bay waterfront has a strong history, which attracts visitors to the area. If the history of the waterfront is used to regenerate the waterfront, it will contribute to the role it plays in the city.

Access: Access is a high priority, because without access to parks and the water's edge, visitors and residents would feel cut off from the rest of the city.

Natural resources: The Mossel Bay area is unique in natural resources, parks, historical buildings, environment, and beaches. These natural resources contribute to the beauty of the Mossel Bay area that invites visitors and local residents to the area. The plan focuses on utilising these resources when regenerating the area.

Tourist destination: As is clear from this case study, the MBCPPP focuses on creating a tourist destination that will uplift the CBD of Mossel Bay. Therefore, it is important to use tourist facilities as a tool for regenerating the waterfront and CBD area.

Same level: It is important for all plans that all role players that are part of the project are on the same level and have the same vision. The Municipality and the Ports Authority should have the same goal that they wish to achieve with the plan. If one of these role players is not on the same level the project could be a failure, thus effecting the economic, environment and social role.

Monitoring: Monitoring is essential, and the MBCPPP plans to implement a Monitoring Task Team. The task team will ensure that the proposed plan is implemented correctly and if changes are needed they can respond on them in the correct manner.

Owners of surrounding buildings: As seen in the previous Chapters investors are important to include when waterfront and urban regeneration is planned for an area. As seen throughout this case study it is also important to include the local owners of the surrounding buildings to upgrade their homes in order to improve the “image” of the area.

Design: The MBCPPP mainly focuses on reconnecting the CBD and the port of Mossel Bay with each other through urban walkways. Walkways are a pertinent method as it will provide access and more freedom for the visitors and residents to explore the upgraded area.

6.10 Conclusion

Mossel Bay has undergone several phases of waterfront development since the first port area was developed. The port was economically driven, until the CBD and the rest of the city were isolated from the waterfront and water’s edge. Secondary centres formed in the Mossel Bay area. This led the MBCPPP to change the role of the waterfront within the city and to provide the CBD with a new use, since its function has largely been replaced by secondary business nodes in the surrounding areas (see Figure 7.2.) Waterfront regeneration can in this manner play a significant role in cities where the CBD has lost its function in a similar way. In addition, the role of waterfront development includes creating a tourist destination, attracting investors, providing parks and open spaces, linking the environment with the social components such as walkways and providing an identity for the urban centre.

As seen in Chapter 4, the advantages and disadvantages of a waterfront are important have a role to play in the success of a regeneration project and it is clear that Mossel Bay’s advantages and opportunities outweigh the disadvantages. Consequently, the Mossel Bay area has the opportunity to be a waterfront success story.

The Mossel Bay area has a good structure in place. As the phases of development are divided into short, medium and long-term development, a time period is linked to the development. The plan is also flexible enough to change when a change is needed. These are all positive factors.

The three (economic, social and environmental) components are also positively addressed within the MBCPPP. It shows that the focus is on providing a social area and economic attraction for tourists. A new role for the city and waterfront is created as a tourist attraction, through the new integrated zoning scheme that is aligned with legislative requirements.

The final arguments that will be explained in the remaining chapter include tools for urban regeneration. These points were used as instruments for evaluating the role of the waterfront in the city, to clarify how each point contributed in changing the role of the waterfront.

Chapter 7: Synthesis and planning recommendations

7.1 Introduction

The focus of the study was to understand the role of waterfront development in urban regeneration. It was clear that the Mossel Bay Harbour has the potential of providing a fundamental role in the urban regeneration of the Mossel Bay CBD. The first step of this chapter is to explain the roles that waterfront development has played in the urban regeneration of the selected case studies.

The second step is to provide planning recommendations with regard to these roles, such as to interlink the different zones located within an urban regeneration area and to display the different functions that should be present in a waterfront development, in order to achieve urban regeneration.

7.2 Synthesis

The research illustrated that a waterfront development has three core roles in urban regeneration, and these components have regularly emerged throughout the study. The economic, environmental and social roles of waterfront development in urban regeneration are discussed.

7.2.1 The economic role of waterfront development in urban regeneration

The economic role of waterfront development started when the first port area was developed as seen throughout the case studies, and as illustrated in Chapter Four. The primary role of the waterfront within the beginning stages of the waterfront development was economically driven. The waterfront was seen as the economic area of transportation or trade, such as in Mossel Bay where travellers used the waterfront as an area of trade in order to replenish their supplies. The following points encompass the role of waterfronts in urban regeneration in terms of its economic role:

- (a) Trade:** Port areas development from the trading of goods. Even though waterfronts are currently more focused on tourism than shipping, the harbour area is still active. For example, in the Mossel Bay and V& A Waterfront area the harbour is used for transporting goods.
- (b) Tourist destination:** This can be seen as one of the primary roles of waterfronts in urban regeneration, because the waterfronts attract tourist/visitors to the area. These

tourist/visitors spend capital within the area and thus increase the economic standards thereof.

- (c) **Increase economic standards:** Waterfronts increase the financial standards of the urban area, since new activities are created. These activities attract the visitors to the area that spend capital, increasing the income of the city or CBD.
- (d) **Increase the income taxes:** If capital is spent within the waterfront or CBD, some of this income relates to property tax, which benefits the municipality. The municipality can then use income tax for upgrading the environmental and social facilities of the area.
- (e) **Attract investors:** Waterfronts have the role of attracting investors to a new regenerated area, because the waterfront provides the capital incentives for business to invest in the area. For instance, tourists spend capital within the area that could attract business.
- (f) **Stimulate growth:** A waterfront can provide the stimulus for new growth. For example, in Baltimore, the harbour front activities increased and expanded to keep up with the economic improvements in the area. The role of the waterfront was seen as an instrument, that lead to growth or expansion within a city or CBD.

The role of waterfront development in urban regeneration is economically focused. It provides a new use for an urban area that experienced a decline in its economic purpose.

7.2.2 The environmental role of waterfront development in urban regeneration

Waterfronts also have an environmental role in urban regeneration. When port areas were first developed the focus was not environmentally driven, it was economically driven. However, as time passed the economic role started to decrease, and the area declined (see Section 4.3.2 and the case studies). A new role for the waterfront was needed in order to create an area that is an environmental attraction to visitors. Thus, the waterfront gained an environmental role. The following aspects focus on the role that a waterfront can play in terms of the environment of a city.

- (a) **Physical environment:** A waterfront can improve the role of the physical environment of the harbour front. For instance, in the Baltimore Inner Harbour the area was neglected and became a waste dump. However, during the waterfront development, the area was cleaned.
- (b) **Rehabilitation of environment:** The process of waterfront regeneration can aid in the rehabilitation of the environment. The rehabilitation of the ecosystem of the area that may

have been damaged by economic activity, like the aquatic vegetation, has become part of the role of a waterfront.

- (c) **Environmental sensitivity:** Waterfront developments should be environmentally sensitive, since such sensitivity would increase the environmental quality of the area.
- (d) **Parks and open spaces:** Open spaces and parks can be created to attract visitors. In Toronto Harbour Front the environmental role was implemented through the Music Garden, as an area that attracts visitors to the parks. In the Baltimore Harbour Front, the waterfront played a role in re-establishing the wetlands and reefs in the area.
- (e) **Provide a balance between environment and city:** A waterfront has the ability to create a balance between the economic function of the city and the city's environment.

Form the above information it was determined that the environmental component played a role in the urban regeneration of cities.

7.2.3 The social role of waterfront development in urban regeneration

As mentioned above, the waterfront also has a social role within urban regeneration and the social aspect was introduced in the same phase as the environmental aspect. As a result, the social role was introduced after the waterfront declined. A new role for the waterfront was needed that included the following:

- (a) **Providing identity:** A waterfront should provide an identity for a new urban regenerated city. For example, the Baltimore Inner Harbour is seen as one of the best tourist destinations and the V& A Waterfront is one of South Africa main tourist attractions.
- (b) **Creating access:** Assess to the water's edge through the waterfront increases the social quality of the area. The social role of the waterfront and the city increases. As in Mossel Bay, the water's edge was cut off from the city, which restricted pedestrian movement through the area and created the feeling of neglect. Through pedestrian walkways, the areas surrounding the waterfront are improved. Walkways increase the social movement between places as well as the feeling of the area.
- (c) **Community participation:** Community involvement increases the sense of being part of the city or town, which increases the social role of the waterfront with the residents of the city.

- (d) **Job creation:** The waterfront has the ability to create work for the residents of the area. The social standards of the residents are increased and they spend capital within the area, further improving the economy of the area.
- (e) **Historical sensitivity:** A waterfront development also plays a role in the preservation of the history of the area, because the waterfront attracts visitors that visit the historical buildings in the area. The historical significance of the area is preserved and restored which increase the social quality of the area.
- (f) **Interlink the environment with the social:** A waterfront has the ability of linking open spaces with social factors of the area. For instance, the waterfront of Mossel Bay has the ability to increase the uses of the parks and integrate the parks with the walkways.

It is indicated that the role of the waterfront has changed from being strictly economically, to being environmental and social. Previous chapters showed that waterfront development is used for urban regeneration of the city. The first zones are the waterfront area, CBD and the area of linkage. The new area is where the waterfront and the CBD are linked to each other (see Figure 7.1). For instance, the area in yellow is seen as an area of transition, for the following reasons:

- It provides the area with an access from the CBD to the waterfront or water edge.
- The area is seen as a link between the three areas, which is the CBD, area of linkage and the waterfront area.
- It is an area allocated for pedestrian movement, consequently attracting visitors to the area.
- Also, providing pedestrians with the walkways leading to the waterfront, while passing the businesses that will economically strengthen the CBD.
- It is an area that regenerates the waterfront and the CBD.

Different zones in waterfront development

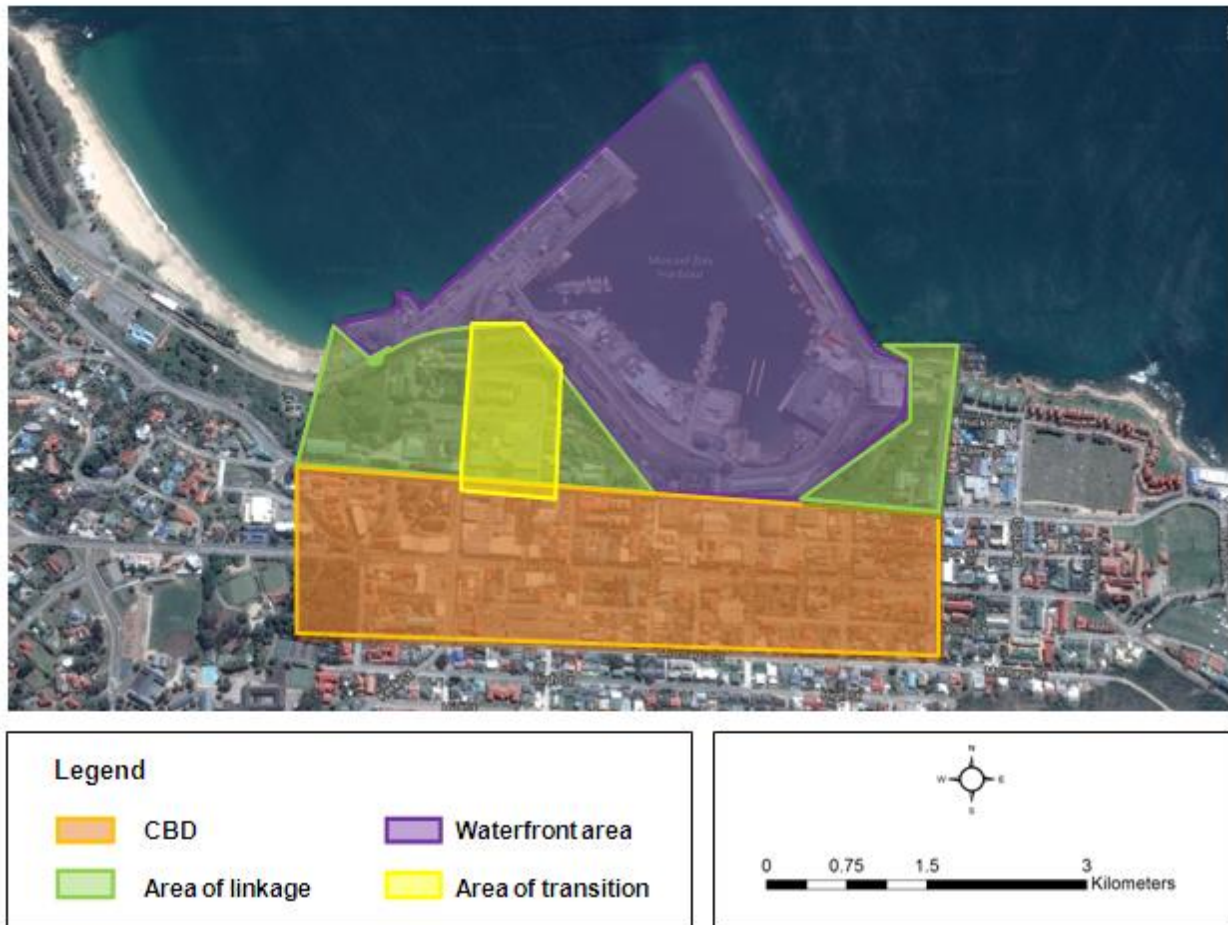


Figure 7. 1: Different zones in waterfront development (Source: Adopted and constructed from Google Maps, 2015h).

The role of waterfronts changed from strictly being economic, to playing a role in the environment and social urban regeneration of cities. The role of waterfronts are multi-faceted and these roles (economic, social and environmental) should be maximised and addressed in planning and design recommendations.

7.3 Planning recommendations

The following recommendations are provided to ensure that waterfront development regenerate cities and the CBD. Before a waterfront development can have a positive role in the regeneration of the urban form of cities there has to be an area of transition allocated within the city, in order to link the CBD and the waterfront. As these areas are divided by residential zones, warehouses, and business zones, there has to be an area that connects these three areas for them to have a positive effect on each other, namely the area of transition.

The area of transition as indicated in Figure 7. 1, connects the different zones together, in order for the waterfront to have a role in the urban regeneration of the city. For instance, in the MBCPP the areas can be linked through the use of walkways as walkways include the three roles of waterfronts. Walkways provide access to the water's edge, they take consumers to the businesses located along the waterfront and environmental awareness is increased as they provide access to parks and open spaces (see Figure 7. 1).

7.3.1 Proposals for ensuring optimisation of the multi-faceted role of waterfront in urban regeneration

There are several ‘tools’ that should be present in waterfront development to have a positive contribution within the city. The following checklist is proposed as a ‘tool’ to guide the process of developing a waterfront, including the role players’ mission and focus and the planning design. This tool includes process-orientated proposals with regard to the role players and planning/proposals.

Table 7. 1: Factors that should be present in waterfront development in urban regeneration

Factors to consider with regard to the process			
Tool 1: Structured Process	Points to consider	Explanations	X
	Location	The location of a waterfront development is critical, if the waterfront is not located close to the CBD it cannot regenerate the CBD.	
	Vision	Vision focuses on the ability to see what the end results will be, knowing that there are risks involved that can lead to an economic disaster. Vision includes the ability to see that alternative options are available and to bring people from different backgrounds together.	
	Research	Research should be done on previous waterfronts to determine what ensures a successful waterfront area.	

	Phases	The development should take place in stages/phases. All the case study developments took place within particular time frames and phases.	
	Tourist destination	The waterfront area should be seen as a tourist destination to contribute to the economy. Tourist facilities should be part of the plan, to increase attraction and promote the area to visitors.	
	Balance	Balance focuses on the capacity to understand that there must be a balance between the needs and demands of services provided and design of the area.	
	Ability to change	The plan should be able to change as the circumstances within the area changes.	
	Monitoring	The plan should regularly be monitored to ensure that the role of the waterfront is still making a positive contribution to the area.	
	Future vision	The future vision is more than the sum of the current plans for the project. For example, the MBCPPP focuses on regenerating the CBD and waterfront. However, their future vision may be to develop the city as an international tourist destination.	
Factors to consider with regarded to the role-players			
Tool 2: Integrating Role Players	Points to consider	Explanations	X
	Investors	Investors are a critical aspect of an urban regeneration project. A project can have vision, but any project needs financial support from the investors.	
	Communication	Communication is needed between the different role players in the urban regeneration project.	

		Notably, if decisions are made without the consent of the other role players trust will be lost and the investors and community will not invest or support the project.	
	Community participation	Community participation are essential, because it ensures that the needs of the community are met.	
	Same level of role players	Role players should all be at the same level. For instance, the role players should support the same goals, vision and timeframe for the project.	
	Ability to intervene	Ability to intervene when the plan moves in the wrong direction.	
	Owners of surrounding buildings	The owners of the surrounding buildings within the area should be included and motivated to upgrade their homes and therefore increase the image of the area.	
Factors to consider with regarded to the planning and design principles			
Tool 3: Establish Planning and Design Principles	Points to consider	Explanations	X
	Access	Access is a high priority, because without access to parks and the water's edge the visitors and residents would feel isolated.	
	Integration	A waterfront should not dominate the role of the city and the areas surrounding it. It is should rather be seen as an integration area between the water's edge and the CBD.	
	Identity	The identity of the area is essential because every area has a "sense of place".	
	Originality	Creativity is needed to give the waterfront something unique that other waterfronts do not have and that will support the waterfront,	

		attracting tourists and residents to the area.	
	Natural resources	The utilisation of the natural resources that the area provides will ensure that visitors are attracted to the natural beauty of the area.	
	History	History can have a positive effect on the role that the city plays, especially the waterfront's history. The history of the waterfront or area provides an attraction for visitors.	
	Environmental and cultural sensitivity	The area should be sensitive to culture and the environment and it should not confiscate old buildings.	
	Design	Design is important, such as walkways that provide access and more freedom for the visitors and residents to explore the waterfront and the CBD. It will provide a linkage to the waterfront area.	

Source: Own Construction

From the theoretical and empirical sections in this study, it is clear that these “tools” can positively contribute to the development of the waterfront and its successes in playing a decisive role in the urban regeneration of the city.

- **Tool 1: Structured Process:** The structure of the process assists with the planning and construction of the plans and process of waterfront development. The “tools” assure that the process stays true to the plan.
- **Tool 2: Integrating Role players:** The integration of role players is important to ensure that all waterfront developments apply to this tool.
- **Tool 3: Establish planning and design principles:** Ensure that waterfront development includes these tools, in order to succeed in all three roles.

These tools address all three roles that waterfronts can play in urban regeneration of cities. In addition these points should be used when waterfront development is considered. The following points can be used when the waterfront has already been regenerated in the city, especially when one of the primary roles of the waterfront development is missing.

7.3.2 Recommendations when one or the other roles of the waterfront are absent

The following points can improve implementation where one of the roles are absent. Waterfronts are needed in areas where its role in the city has been limited.

Table 7. 2: Factors to consider when one role is absent

Factors to consider when one role is absent		
	Points to consider	Explanations
In case of an absent: economic role	Marketing	Waterfronts are tourist destinations and through the use of marketing the tourists or visitors will be informed of the waterfront.
	Research	Research should be done on the area to identify the area's unique element that will attract the tourist to the area.
	Attraction activities	Attraction activities focus on the aspect that makes the area unique from the rest of the waterfront, such as an aquarium.
	Incentives for Investors	The area should provide incentives to investors, to convince them to invest in the area
	Walkways	Walkways should run along business streets to attract visitors.
	Festivals	Festivals should be held in the area, in order to attract more visitors to the area and also extend the awareness of the area.
	Role players	The role players should have the same focus and goals.
In case of an absent: environment role	Connection to parks and open spaces	Create walkways in such a manner that it connects the different parks and open spaces as it will create the illusion of an everlasting open area.
	Rundown areas	Rundown areas should be cleaned and recreated as open spaces or be integrated into the environment.
	Rehabilitation	Rehabilitation of the environment, such as the rehabilitation of

		wetlands or reefs.
	Balance	Ensure balance between the economy and the environment. Implement economic restrictions to prevent monopolies and over-emphasis on the economic role of the waterfront.
In case of an absent: Social role	Walkways	Walkways increase the social connection between the different areas and sense of place in the area
	Water's edge	Ensure that the water's edge is accessible, because without the presence of the water or sea, the area will feel isolated from the rest of the city. Thus, the social role will not be present.
	Community participation	It is important to include the community, since they provide the social life.
	Job creation	If work opportunities are provided, the social standards of residents will increase, and so will social standards of the area.
	Historical heritage of the area.	History provides for the cultural improvement of the area, which increases the social significance.

Source: Own Construction

The above factors could undoubtedly assist with the implementation of the role that is lacking in the urban regeneration of cities.

7.4 Implementation

The economic, environment and social qualities attract residents, visitors and investors to the urban regenerated city. In a spatial form, these three roles are present in the different zones as displayed in the following figures.

(a) Waterfront area

In waterfronts three zones should be in balance, since waterfronts mostly focus on tourism. The role of the waterfront should not dominate the port activities. Tourist areas and residential properties should be integrated to prevent domination of the main focus on the harbour front. Figure 8.2 portrays the different zones of the MBCPPP and the linked areas.



Figure 7. 2: Waterfront area zones (Source: Adopted and construction from Google Maps, 2015i)

(b) Area of linkage

The area of linkage connects the waterfront and the CBD. The area should interlink the different uses of the area. The main business activities should be followed by mixed usage, such as business/ residential and thereafter the tourist activities. Linking the different zones of the city with each other is illustrated in Figure 8. 3.

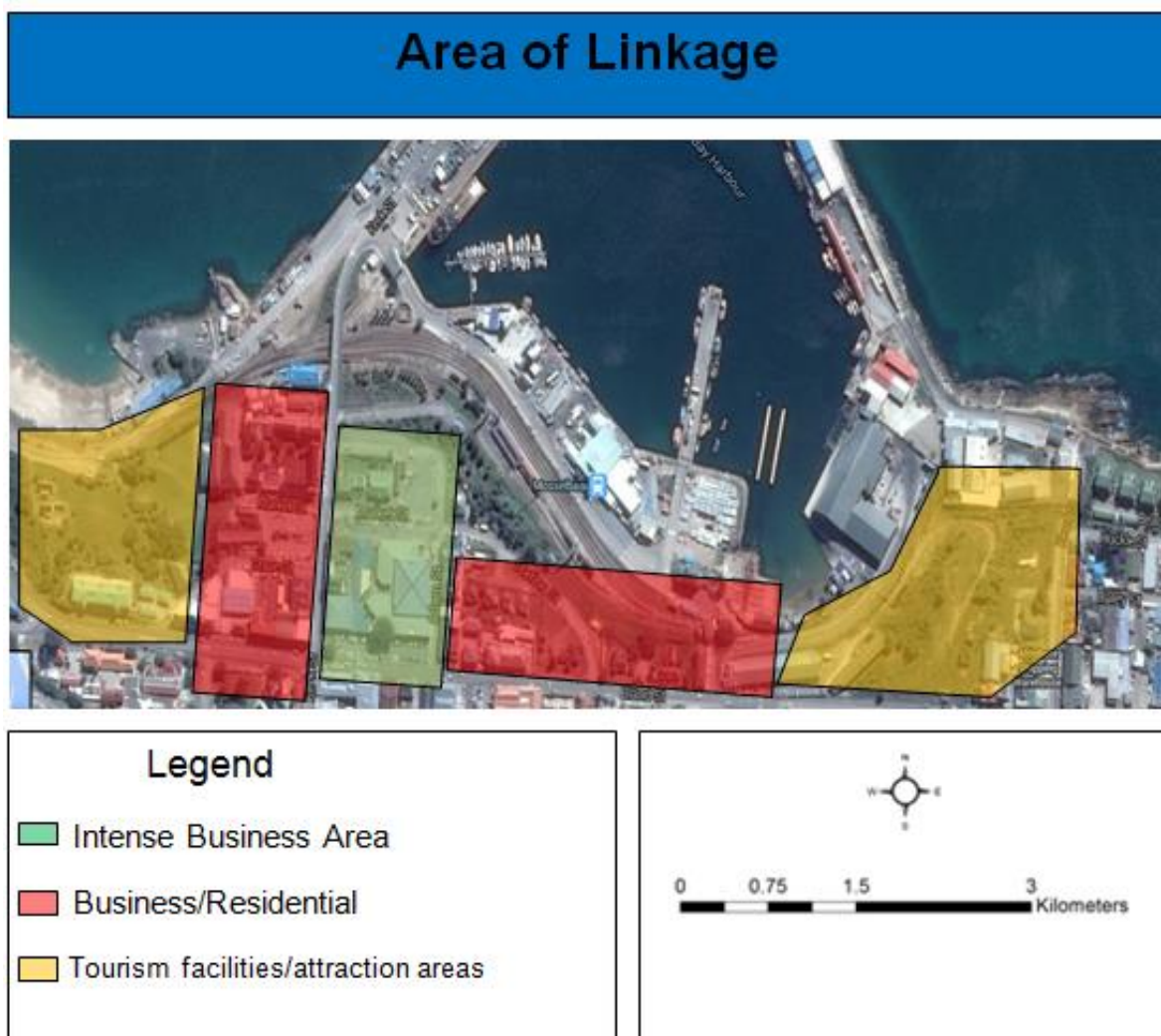


Figure 7. 3: Different uses of within the area of linkage (Source: Adopted and construction from Google Maps, 2015j)

(c) Area of transition

The area of transition is one of the main zones within waterfront development, because it provides a link between the CBD and the water's edge. The area should always be present within waterfront development in order to regenerate the CBD or city. It can be achieved through pedestrian walkways and businesses that guide tourist from the waterfront to the CBD and vice versa.

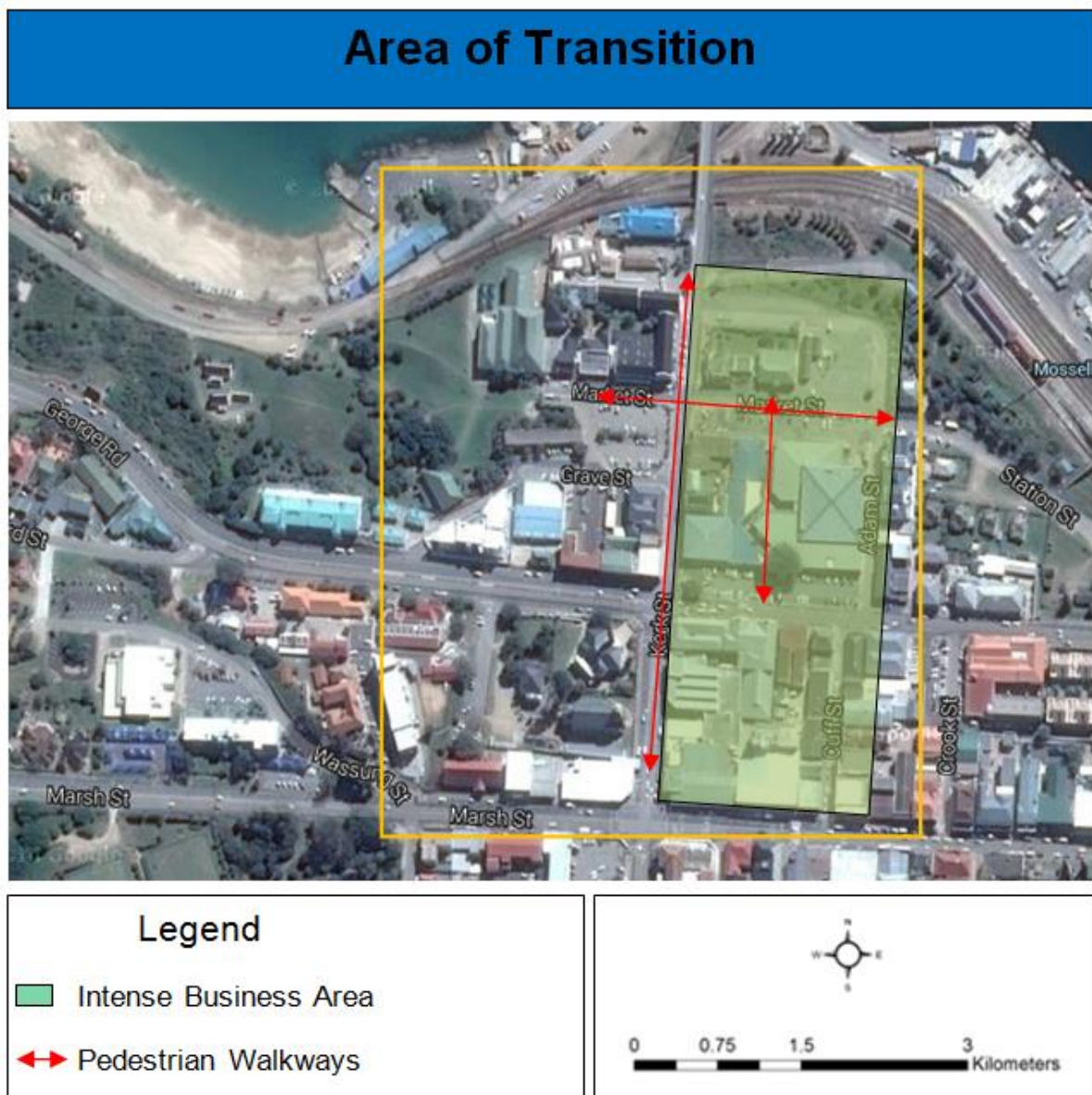


Figure 7. 4: Area of transition (Source: Adopted and construction from Google Maps, 2015k)

(d) CBD area

The CBD should be rezoned, i.e. be provided with more appropriate land uses, to attract tourists to the area. The area should remain true to the overall atmosphere of the area, namely that of a tourist destination. Linking the waterfront with the business area and residential areas can greatly contribute to this goal (see Figure 7.5.)

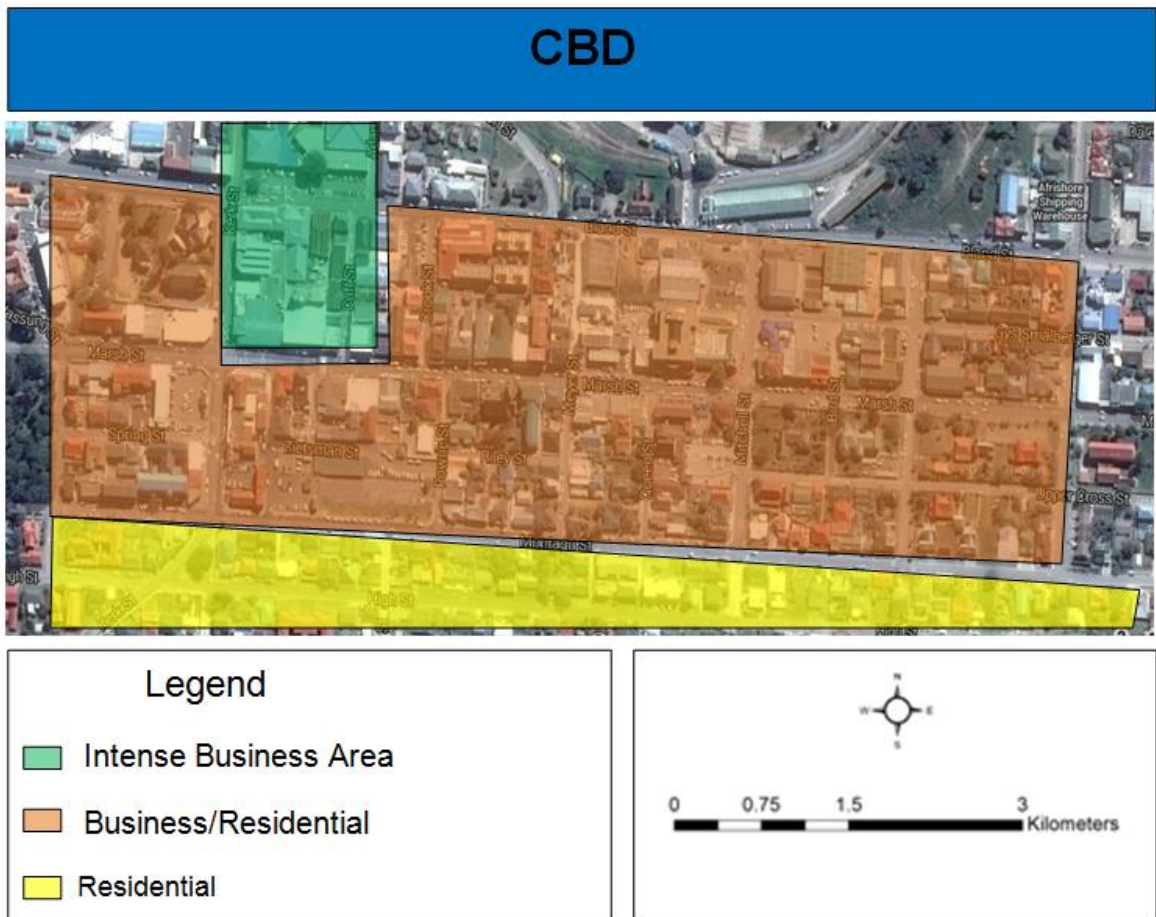


Figure 7. 5: Different areas within the CBD (Source: Adopted and construction from Google Maps, 2015I)

These zones of a waterfront development should be in place to ensure regeneration of the CBD or city adjacent to the water's edge. It should be in line with current legislative requirements to ensure that the plan will not be in conflict with the rest of the plans for the area. The MBCPPP is in line with the different policies and legislations as seen in Section 6.3.

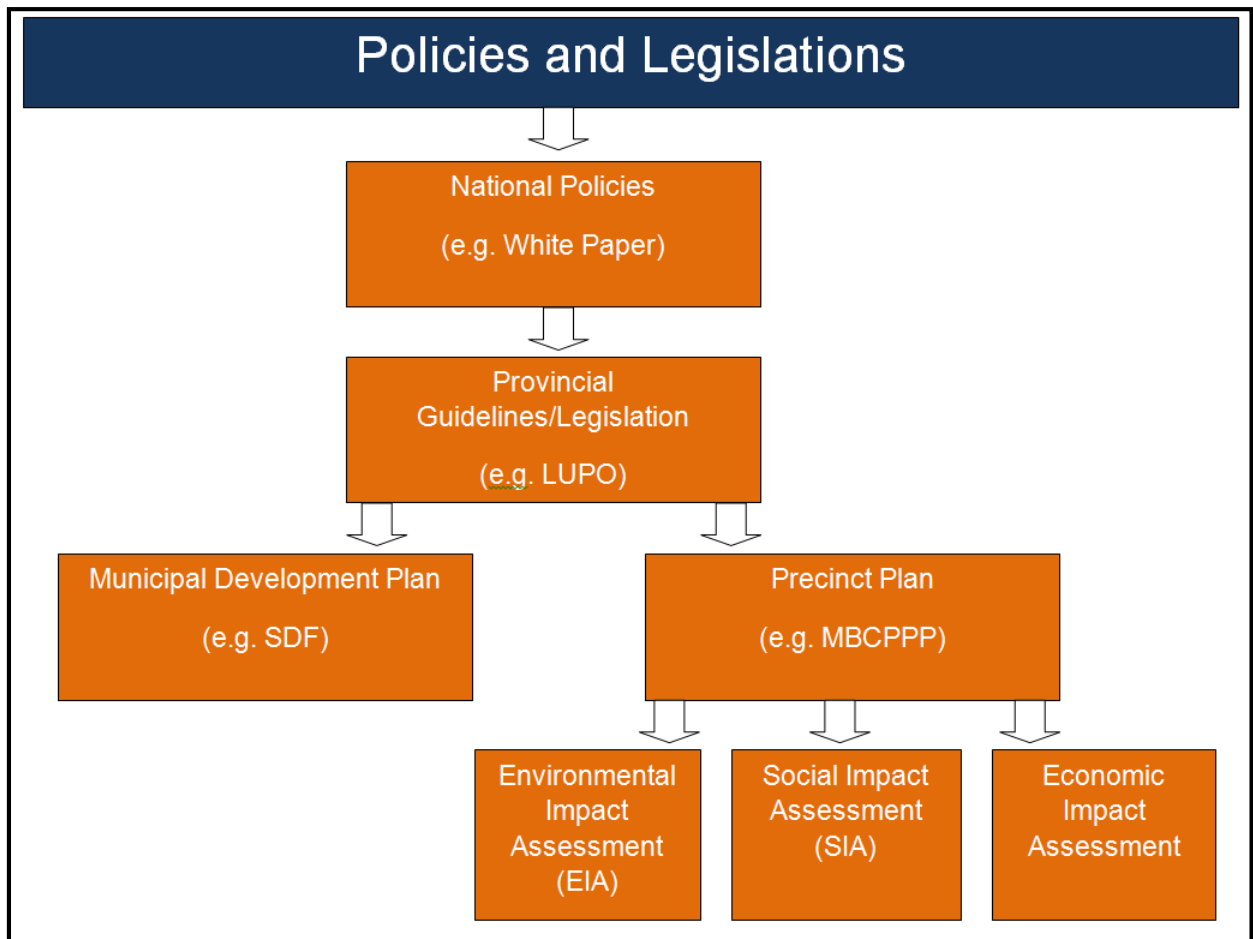


Figure 7. 6: Different policies and legislation working in unity (Source: Own construction)

Waterfront development has three primary roles in urban regeneration that evolved over time, from the first port that was established to the first waterfront that was developed. The first factor is economic considerations, which focus on providing a new economic life for cities that have lost their economic purpose. Waterfront development provides cities with an economic attraction and a new economic stimulus. The second factor is environmental. Here waterfront development provides cities with a new attraction in the area due to environmental improvements. It eradicates the low environmental standards of the area, since waterfront development improves the physical environment. The last factor is social and focuses on increasing the social role of the residents in the area, through work-related opportunities and also increases the social quality of the residents.

In conclusion, the waterfront development can be used as an urban regeneration tool when all the policies/legislation and different zones which included the economic, social and environmental components are in unity.

Bibliography

Abrahams, G. 1985. The archaeological potential of central Cape Town. (Munger Africana Library Notes, 77/78). http://authors.library.caltech.edu/25720/1/MALN_77-78.pdf Date of access: 23 August 2014.

Aguilera, A. 2003. Service relationship, market area and the intrametropolitan location of business services. *The Service Industries Journal*, 23(1): 43-58.

Alonso, W. 1964. *Location and land use: toward a general theory of land rent*. Cambridge: Harvard university press.

Anon. 2014. Harbour Place amphitheatre. <http://www.baltimore.to/Amphitheater/> Date of access: 29 July 2014.

Backhouse, R. E. 1991. British economic performance: the statistical record. <http://www.socscistaff.bham.ac.uk/backhouse/homepage/aukm/Chapter1pdf>. Date of access: 10 October 2014.

Baxter, P. & Jack, S. 2008. Qualitative case study methodology: study design and implementation form novice researchers. *The qualitative report*, 13(4): 544-559.

Beavon, K. S. O. 1975. Christaller's central place theory: reviewed, revealed, revised. Johannesburg: Department of Geography and Environmental Studies, University of the Witwatersrand.

Beavon, K. S. O. 1977. *Central place theory: a reinterpretation*. New York: Longman.

Bernstein, W. J. 2008. A splendid Exchange: how trade shaped the world from prehistory to today. *Atlantic Monthly*. 104(13): 26-30.

Berry, B. J. L. & Garrison, W. L. 1958. A note on central place theory and the range of a good. *Economic geography*, 34(4): 304-311.

Blain, W. R. 1992. *Marina technology. Computational mechanics*. United Kingdom: Bell and Bain.

Blaxter, L. , Hughes, C. & Tight, M. 2010. *How to research*. 4thed. England: Open University Press.

- Bollens, J. C. & Schmandt, H. J. 1965. The metropolis: Its people, politics, and economic life. New York: Harper & Row.
- Burgess, E. W. 1925. The growth of the city: an introduction to a research project. (In Park, R. E. , Burgess, E. W. & McKenzie, R. D. The city. Chicago: University of Chicago Press. p. 47-64).
- Burgess, E. W. 1930. The new community and its future. *Annals of the American Academy of Political and Social Science*, 149: 157-164.
- Cambridge City Council. 2009. Private Sector housing condition survey. Final report. <https://www.cambridge.gov.uk/sites/www.cambridge.gov.uk/files/documents/private-sector-house-condition-survey-2009.pdf>. Date of access: 14 December 2014.
- Carroll, A. B. 1991. The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business horizons*. 34(4): 39-48.
- Carta, M. 2006 Palermo's Waterfront: a manifesto-project for the new creative city. http://retedigital.com/wp-content/themes/rete/pdfs/portus/Portus_12/Waterfront_di_Palermo.pdf. Date of access: 7 January 2015.
- Cavicchia, G. 2004. The use of information technologies in the urban redevelopment process in the city of Baltimore, USA. http://www.corp.at/archive/CORP2004_CAVICCHIA.pdf Date of access: 12 December 2014.
- Centre of Military History United States Army, Washington, D. C. 1992. A Brief history of the U. S. Army in World War II. http://www.history.army.mil/html/books/072/72-2/CMH_Pub_72-2.pdf Date of access: 12 August 2014.
- Chapin, F. S. 1965. Urban land use planning. 2nd ed. Urbana, IL: University of Illinois Press.
- Christaller, W. 1966. Central places in Southern Germany. Englewood Cliffs, NJ: Prentice-Hall
- City of Bradford MDC. 2012. Holme Wood & Tong: neighbourhood development plan. <http://www.bradford.gov.uk/NR/rdonlyres/B7CE2401-5717-4A3E-8BE9-7B1EE04C3A66/0/HolmeWoodandTongNeighbourhoodDevelopmentPlanFinalReport.pdf> Date of access: 8 October 2014.
- Coetzee, A. Explore the historical V& A Waterfront in Cape Town. <http://www.places.co.za/blog/explore-the-historical-va-waterfront-in-cape-town/>. Date of access: 8 January 2015.

Crafts, N. & Toniolo, G. 1996. Economic growth in Europe since 1945. Cambridge: Cambridge University Press.

Crafts, N. F. R. 2003. Quantifying the contribution of technological change to economic growth in different eras: A review of the evidence. Working Paper. 79(3): 1-31.

Creswell, J. W. 2007. Qualitative inquiry & research design. 2nded. Thousand Oaks, CA: Sage.

Curtin, P. D. 1984. Cross-cultural trade in world history. Cambridge: Cambridge University Press.

Day, C. 2004. Places of the Soul: Architecture and environmental design as a healing art. 2nded. Thorsons Architectural Press.

Deaton, A. 1990. Saving in developing countries: theory and review. http://www.princeton.edu/rpds/papers/Deaton_Saving_in_Developing_Countries_WBER1989.pdf Date of access: 26 August 2014.

Dennis, C. , Marsland, D. & Cockett, T. 2002. Central place practice: shopping centre attractiveness measures, hinterland boundaries and the UK retail hierarchy. Journal of Retailing and Consumer Services, 9: 185-199.

Dewar, N. 2012. 'Stemming the tide': Revitalizing the central business district of Cape Town. South African Geographical Journal, 86(2): 91-103.

Dhanraj, J. , Esakin, T. C. & Pappin, F. 2012. Sustainability case study: Harbourfront Centre. http://thomasesakin.com/personal/publications/Harbourfront%20Centre_Sustainability%20Case%20Study_DHANRAJ%20and%20ESAKIN%20and%20PAPPIN%20for%20Chang%20School%20at%20Ryerson%20University_October%202012.pdf Date of access: 7 January 2015.

Dias Museum. 2014. Bartholomeu Dias Museum Complex. <http://www.diasmuseum.co.za/> Date of access: 29 August 2014.

Dicken, P. & Lloyd, P. E. 1990. Location in space: theoretical perspectives in economic geography. 3rded. New York: Harper and Row.

Diefendorf, J. M. 1989. Urban reconstruction in Europe after World War II. Urban Studies. 26: 128-143.

Dong, L. 2004. Waterfront development: a case study of Dalian, China. Ontario, Canada: University of Waterloo. (Thesis – MA).

Durmus, A. & Turk, S. S. 2014. Factors influencing location section of warehouses at the intra-urban level: Istanbul case. *European Planning Studies*. 22(2): 268-292.

EFCL (Edmonton Federation of Community Leagues). 2003. Zones and Land Use Classifications. <http://efcl.org/Portals/0/OtherSource/CCGuide/> Date of access: 24 February 2014.

Encyclopaedia Britannica. 2014. Baltimore, Maryland. <http://eds.a.ebscohost.com.nwulib.nwu.ac.za/eds/detail/detail?sid=74aae8cc-c8c5-4d32-837c-4f137d2349bf%40sessionmgr4005&vid=1&hid=4202&bdata=JnNpdGU9ZWRzLWxpdmU%3d#db=ers&AN=93786635>. Date of access: 19 August 2014.

Ethekwini Municipality. 2010. Environmental impact assessment for municipal infrastructure projects: a guide for project managers and environmental assessment practitioners. Ethekwini.

Everett-Heath, J. 2005. Oxford concise dictionary of world place names. New York: Oxford University Press.

Falk, N. 1986. Baltimore and Lowell: Two American Approaches. *Built Environment*. 12(3): 145-152.

Ferreira, S. & Visser, G. 2007. Creating an African Riviera: Revisiting the impact of the Victoria and Alfred Waterfront development in Cape Town. *Urban forum*, 18(3): 227-246.

Flack, D. 2011. Toronto in photos from the 1850s to the 1990s. http://www.blogto.com/city/2011/02/toronto_in_photos_from_the_1850s_to_the_1990s/ Date of access: 29 July 2012. (Blog TO.)

Forward Analytics. 2011. Audience research and economic impact study of Baltimore's Ports America Chesapeake Fourth of July Celebration 2010. http://www.promotionandarts.org/~bopa/sites/default/files/ckfinder/files/july_4_ec_impact_study%281%29.pdf Date of access: 20 August 2014.

Getimis, P. & Kafkalas, G. 2007. Overcoming fragmentation in Southeast Europe: spatial development trends and integration. Aldershot, Hampshire: Ashgate.

Global Harbors. 2008. Baltimore's Charles Center-Inner Harbortimeline, 1950-2000. http://www.globalharbors.org/baltimore_inner_harbor_timeline.htm. l. Date of access: 19 August 2014.

Google Maps. 2015a. Baltimore harbour front location. <https://www.google.co.za/maps/place/Inner+Harbor,+Baltimore,+MD,+USA/@39.2826187,-76.6099638,1821m/data=!3m1!1e3!4m2!3m1!1s0x89c80363a79884b9:0x39da22abddc7412d>. Date of access: 12 July 2014.

Google Maps. 2015b. Toronto Harbour Front. <https://www.google.co.za/maps/@43.6310876,-79.3724097,4531m/data=!3m1!1e3>. Date of access: 12 July 2015.

Google Maps. 2015c. Cape Town harbour front. <https://www.google.co.za/maps/@-33.9076361,18.4304962,5801m/data=!3m1!1e3>. Date of access: 12 July 2015.

Google Maps. 2015d. Mossel Bay CBD and harbour front. <https://www.google.co.za/maps/@-34.1787724,22.1461943,1134m/data=!3m1!1e3>. Date of access: 8 August 2015.

Google Maps. 2015e. Decentralised nodes in the Mossel Bay area. <https://www.google.co.za/maps/@-34.1601919,22.1202146,11664m/data=!3m1!1e3>. Date of access: 9 August 2015.

Google Maps. 2015f. Waterfront and pedestrian walkways. <https://www.google.co.za/maps/@-34.1807546,22.1441891,16z>. Date of access: 11 August 2015.

Google Maps. 2015g. Park is located next to Diaz Museum. <https://www.google.co.za/maps/@-34.1796837,22.1405794,489m/data=!3m1!1e3>. Date of access: 15 August 2015.

Google Maps. 2015h. Different zones in waterfront development. <https://www.google.co.za/maps/@-34.1796837,22.1405794,489m/data=!3m1!1e3>. Date of access: 15 August 2015.

Google Maps. 2015i. Waterfront area zones. <https://www.google.co.za/maps/@-34.178162,22.145323,1181m/data=!3m1!1e3>. Date of access: 2 December 2015.

Google Maps. 2015j. Different uses of within the area of linkage. <https://www.google.co.za/maps/@-34.1805536,22.1450133,1176m/data=!3m1!1e3>. Date of access: 2 December 2015.

Google Maps. 2015k. Area of transition. <https://www.google.co.za/maps/@-34.1814197,22.1443839,969m/data=!3m1!1e3>. Date of access: 2 December 2015.

Google Maps. 2015l. Different areas within the CBD. <https://www.google.co.za/maps/@-34.1815812,22.1453436,969m/data=!3m1!1e3>. Date of access: 2 December 2015.

Google Maps. 2015m. Cape Town harbour front. <https://www.google.co.za/maps/@-33.9076361,18.4304962,5801m/data=!3m1!1e3>. Date of access: 12 July 2015.

Gounden, K. 2010. Waterfront development as a strategy for urban renewal: A case study of the Durban point waterfront development. Durban: University of Kwazulu Natal. (Thesis – MA).

Greater Baltimore Committee, Inner Harbour Management Task Force. 2003. Managing Baltimore's inner harbour operations: the need for direct day-to-day authority and empowerment. <http://gbc.org/reports/innerharbor/historicalperspective.html> Date of access: 23 August 2014.

Greenberg, K. 2013. Toronto: The urban waterfront as a terrain of availability. (In Malone, P. , ed. City, capital and water. Hoboken: Taylor & Francis. p. 195-218).

Hall, P. 1997. Reflections past and future on planning cities. Australian Planner, 34(2): 83-89.

Harbour front centre. 2014. Toronto Music Garden; A city of Toronto park and home to Summer Music in the Garden. <http://www.harbourfrontcentre.com/venues/torontomusicgarden/>. Date of access: 29 July 2014.

Harris, C. D. & Ullman, E. L. 1945. The Nature of Cities. Annals of the American Academy of Political and Social Science, 242: 7-17.

Hawley, Amos. 1950. Human Ecology: A Theory of Community Structure. New York, NY: The Ronald Press.

Healey, P. 1993. The communicative work of development plans. Environment and planning B: planning and design. 20(1): 83-104.

Healey, P. & Shaw, T. 1994. Changing Meanings of 'Environment' in the British Planning System. Transactions of the Institute of British Geographers, 19(4): 425-438.

Herriott, R. E. & Firestone, W. A. 1983. Multisite Qualitative Policy Research: Optimizing Description and Generalizability. Educational researcher, 12(2): 14-19.

Hirschman, A. O. 1958. The strategy of economic development. Yale University Press: London.

Holmes, P. 1988. Mossel Bay: 500 years. 1sted. Maitland, Cape Town: Clyson Printers.

Hoover, EM. 1937. Location Theory and the Shoe and Leather Industries Cambridge, MA: Harvard University Press.

Hornby, A. S. 2012. Oxford Advanced Learner's Dictionary: International Student's Edition. Oxford University Press: Eighth edition.

Hoyt, H. 1978. Recent distortions of the classical models of urban structure. Chicago: Chicago University Press.

Huang, W. , Chen, C. , Kao, S. & Chen, K. 2011 The concept of diverse development in port cities. *Ocean & Coastal Management*, 54: 381-390.

Hurd, R. M. 1903. Principles of city land values. Estate Record Association: New York. <https://archive.org/stream/principlesofcity00hurdrich#page/n3/mode/2up>. Date of access: 14 April 2014.

Isard, W. 1972. Location and space-economy: a general theory relating to industrial location, market areas, land use, trade and urban structure. M. I. T. : Cambridge Massachusetts.

Jones, A. 2010. Issues in waterfront regeneration: More sobering thoughts-A UK Perspective. <http://www.tandfonline.com/doi/pdf/10.1080/02697459815987>. Date of access: 18 March 2014.

Kanbur, R. 2001. Qualitative and quantitative poverty appraisal: Complementarities, tensions and the way forward. <http://www.arts.cornell.edu/poverty/kanbur/qqz.pdf>. Date of access: 28 May 2013.

Kilian, D. & Dodson, B. 1996. Between the devil and the deep blue sea: Functional conflicts in Cape Town's Victoria and Alfred Waterfront. *Department of Environmental and Geographical Science*, 27(4): 495-507.

Kotze, N. J & Donaldson, S. E. 1998. Residential desegregation in two South African cities: A comparative study of Bloemfontein and Pietersburg. *Urban Studies*, 35(3): 467-477

Kumar, R. 2014. Research Methodology: a step-by-step guide for beginners. 4thed. United States of America: SAGE.

Land and water development division. 2003. Overview of land value conditions. Land and plant nutrition management service. Food and Agriculture Organization of the United Nations. <ftp://ftp.fao.org/agl/agll/docs/misc35e.pdf>. Date of access: 1 January 2015.

Lehrer, U. & Laidley, J. 2008. Old Mega-Projects Newly Packaged Waterfront Redevelopment in Toronto. *International Journal of Urban and Regional Research*, 32(4): 786-803.

Lehrer, U. & Laidley, J. 2009. Old mega-project newly packaged? Waterfront redevelopment in Toronto. Blackwell.

Letourneur, C. C. 1993. Life at the water's edge: An analysis of human behaviour and urban design of public open space at the water's edge. The University of British Columbia. Vancouver, Canada. (Dissertation- Masters)

Loftman, P & Nevin, B. 1995. Prestige projects and urban regeneration in the 1980s and 1990s: A review of benefits and limitations. *Planning Practice and Research*, 10(314): 299-315.

Mack, N. , Woodson, C. , MacQueen, K. M. , Guest, G. & Namey, E. 2005. Qualitative research methods: a data collector's field guide. Triangle Park, NC: Family Health International.

Marshall, A. 1920. *Principles of Economics*. London: Macmillan.

Marshall, R. 2001. *Waterfront in Post-Industrial Cities*. London: Span Press.

Martin, B. 2010. Rebalancing the British economy: a strategic assessment. Centre for business research, University of Cambridge. <http://www.cbr.cam.ac.uk/pdf/RebalancingBritishEconomy.pdf>. Date of access: 13 October 2014.

McCann, P. 2010. International business and economic geography: knowledge, time and transactions costs. *Journal of Economic Geography*, 11: 309-317.

McCann, P. & Shefer, D. 2004. Location, agglomeration and infrastructure. *Papers in Regional Science*, 83: 177-196.

Michael, C. I. 2002. Port privatisation: commerce and recreation. Professor of Civil Engineering and Urban Planning: The Transportation Group. http://www.unb.ca/research/transportation-group/_resources/pdf/research-papers/port-privatization-commerce-and-recreation.pdf Date of access: 22 August 2014.

Miles, M. B. , Huberman, A. M. & Saldana, J. 2014. *Qualitative data analysis : a methods sourcebook*. Thousand Oaks/California: SAGE.

Miller, L. 2011. Sustainable waterfront revitalization: Baltimore, San Francisco, and Seattle. California: Polytechnic State University. (Thesis - Ma).

Millspaugh, M. L. 2003. The inner harbor story: A model of urban waterfront development Baltimore's inner harbor offers and adventure in downtown revitalization. http://www.globalharbors.org/pdf/The_Inner_Harbor_Story.pdf. Date of access: 14 December 2014.

- Mitchell, J. 2001. Business Improvement Districts and the “New” Revitalization of Downtown. *Economic Development Quarterly*. <http://edq.sagepub.com/content/15/2/115.full.pdf+html> Date of access: 15 August 2014.
- Mizerova, Z. 1995. Public private cooperation in urban redevelopment: A case study of Baltimore. Baltimore, U. S. A.
- Morawetz, D. 1977. Twenty-five years of economic development 1950 to 1975. The World Bank. http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2002/11/15/000178830_98101911003679/Rendered/PDF/multi0page.pdf Date of access: 14 December 2014.
- Morena, M. 2011. Morphological, technological and functional characteristics of infrastructures as a vital sector for the competitiveness of a country system: An analysis of the evolution of waterfronts. Milano: MaggioliEditore.
- Mossel Bay. 2014. Mossel Bay. <http://www.mosselbay.net/>. Date of access: 10 December 2014.
- Mumford, L. 1989. The city in history its origins, its transformation, and its prospects. HacourtInc: New York.
- Nell, L. 2003. The Garden Route and Little Karoo: between the desert and the deep blue sea. Singapore: Craft Print.
- Newman, R. 1992. New Views on Urban History: A view from Federal Hill. <http://davidharvey.org/wp-content/uploads/2014/05/a-view-from-federal-hill.pdf>. Date of access: 19 August 2014.
- Ozcevik, O. , Turk, S. , Tas, E. , Yaman, H. & Beygo, C. 2009. Flagship regeneration project as a tool for post-disaster recovery planning: the Zeytinburnu case. *Overseas Development institute*, 33(2): 180-202.
- Park, J. 2014. Land Rent Theory Revisited. *Science & Society*, 78(1): 88-109.
- Pekelaring, E. J. 2005. The phenomenon of urban edge as a planning tool for compact cities: an international and local comparison. NWU, Potchefstroom Campus. (Dissertation –M. Sc)
- Pirie, G. 2007. Reanimating a comatose goddess: Reconfiguring central Cape Town. *Urban Forum*, 18: 125-151.
- Pirie, G. H. 1993. Revitalising South African Docklands. Department of Geography and Environmental Studies, University of the Witwatersrand, Johannesburg, 9(1-2): 147-163.

Planteleev, I. 1992. Citizen Participation in Urban Renewal. Institute for Policy studies: The Johns Hopkins University.

Regional Planning Council. 1982. The Baltimore Harbour Environmental Enhancement Plan. <http://www.dnr.state.md.us/irc/docs/00000642.pdf>. Date of access: 22 August 2014.

Robert, P & Sykes, H. 2005. Urban Regeneration: A handbook. SAGE.

Rogerson, J. M. 2012. The Changing location of hotels in South Africa's coastal cities, 1990-2010. Department of Geography, Environmental Management and Energy Studies. 23: 73-91.

Rosen, M. & Sullivan, W. 2012a. From urban renewal and displacement to economic inclusion: San Francisco affordable housing policy 1978-2012. <http://www.prrac.org/pdf/SanFranAffHsing.pdf>. Date of access: 18 July 2014.

Rosen, M. & Sullivan, W. 2012b. From urban renewal and displacement to economic inclusion: San Fransisco Affordable Housing Policy 1978-2012. Poverty and Race Research Action Council. <http://www.prrac.org/pdf/SanFranAffHsing.pdf> Date of access: 14 December 2014.

Sage Policy Group. 2012. The economic contributions of the National Aquarium: 2012 assessment. <http://www.aqua.org/about/~media/Files/Economic-Contributions-FINALlr-2012.pdf>. Date of access: 20 August 2014.

Sairinen, R. & Kumpulainen, S. 2005. Assessing social impacts in urban waterfront regeneration. Environmental Impact Assessment Review, 26: 120-135. http://ac.els-cdn.com/S0195925505000764/1-s2.0-S0195925505000764-main.pdf?_tid=60aa6406-248f-11e4-85c1-00000aacb361&acdnat=1408116074_5567bad7b4a160b7cf61c34ce2073661. Date of access: 15 August 2014.

Saunders, P. 1984. Beyond housing classes: the sociological of private property rights in means of consumption. International Journal of Urban & Regional Research. 8(2): 202-227.

Schumacher, B. J. & Leitner, M. 1999. Spatial crime displacement resulting from large-scale urban renewal programs in the city of Baltimore, MD: a GIS modeling approach. Thousand Oaks, California: SAGE. http://www.geocomputation.org/1999/047/gc_047.htm. Date of access: 16 September 2014.

Seattle's Waterfront Design Collaborative. 2010. Waterfront: open space and interfaces of edge environments. http://depts.washington.edu/open2100/pdf/2_OpenSpaceTypes/Open_Space_Types/waterfront.pdf Date of access: 15 April 2014.

- Silverman, D. 2013. *Doing qualitative research*. Thousand Oaks, California: SAGE.
- Simon, D. 1989. Crisis and Change in South Africa: implications for the apartheid city. *Transactions of the Institute of British Geographers, New Series*, 14(2): 189-206.
- Sinclair, R. 1967. Von Thünen and urban sprawl. *Annals of the Association of American Geographers*, 57(1): 72-87.
- Smith, D. M. 1971. *Industrial location: An Economic geographical analysis*. John Wiley: New York.
- Smolny, W. 2000. Post-War growth, productivity convergence and reconstruction. *Oxford bulletin of economics and statistics*. 62(5): 589-606.
- South Africa. Department of Environmental Affairs and Tourism. 2004. Review in Environmental Impact Assessment, Integrated Environmental Management. Pretoria. (Information Series 13).
- South Africa. Department of housing. 1994. White Paper: a new housing policy and strategy for South Africa. http://www.dhs.gov.za/sites/default/files/legislation/Policies_Housing_White_Paper.pdf. Date of access: 14 December 2014.
- South Africa. Department of Rural Development and Land Reform. 2008. Guidelines for the development of municipal spatial development framework. Pretoria.
- South African History Online: towards a people history. 2014. Bartolomeu Dias reaches present Mossel Bay. <http://www.sahistory.org.za/dated-event/bartolomeu-dias-reaches-present-mossel-bay> Date of access: 29 August 2014.
- Spafford, G. 2001. Toronto's Harbourfront: The Harbourfront Corporation. http://www.ucalgary.ca/ev/designresearch/projects/2001/CEDRO/cedro/cip_acupp_css/pdf/harbour.pdf. Date of access: 22 August 2014.
- Stake, R. E. 1995. *The art of case study research*. Thousand Oaks, CA: SAGE.
- Stockholm Resilience Centre. 2013. What is resilience: an introduction to social ecological research. http://www.stockholmresilience.org/SRC_whatisresilience_sida.pdf Date of access:
- Stokes, C. J. 1962. A theory of Slums. *Land economics: a quarterly journal of planning, housing & public utilities*, 36(3): 187-197.

Sweeney, K. W. 2005. A report on the Port Angeles Harbor Resource Management Plan. <http://olympen.com/copa/Planning/Committees%20materials%202/1.%20FINAL%20APPENDICES-1.pdf>. Date of access: 6 January 2015.

Tassey, G. 2003. Planning report 03-1: Methods for assessing the economic impact of government R& D. <http://www.nist.gov/director/planning/upload/report03-1.pdf>. Date of access: 7 January 2014.

Teaford, J. C. 2000. Urban renewal and its aftermath. *Housing policy debate*. 11(2): 443-465.

Tekalign, A. 2013. The impact of unplanned urban waterfront development on Lake Hawassa. Ethiopian Institute of Architecture, Building construction and City Development. <http://etd.aau.edu.et/dspace/bitstream/123456789/4911/1/Anasimos%20Tekalign.pdf>. Date of access: 11 August 2014. (M. Sc thesis in environmental planning and landscape design)

Temelová, J. 2007. Flagship developments and the physical upgrading of the Post-Socialist Inner City: The golden Angel Project in Prague. *Geografiska Annaler*, series B, Human Geography, 89(2): 161-181.

Timur, U. P. 2013. Urban Waterfront Regeneration. <http://www.intechopen.com/books/advances-in-landscape-architecture/urban-waterfront-regenerations>. Date of access: 12 December 2014.

Tracy, S. J. 2013. *Qualitative research methods: collecting evidence, crafting analysis, communicating impact*. Chichester, West Sussex/ UK: Wiley-Blackwell.

Transnet. 2013. Doing Business with Transnet Port Terminals. <http://www.transnet-tp.net/pages/default.aspx> Date of access: 4 December 2014.

UN, Centre for Good Governance. 2006. A comprehensive guide for social impact assessment. <http://unpan1.un.org/intradoc/groups/public/documents/cgg/unpan026197.pdf>. Date of access: 8 January 2015.

United States Environmental Protection Agency. Revitalizing Local Waterfront Economies: Investing in the Great Lakes. <http://www.glc.org/rap/pdf/Legacy-FINAL-lowres.pdf> Date of access; 27 May 2013.

Urban Tick. 2011. City in Time – SACRPH Conference in Baltimore. <http://urbantick.blogspot.com/2011/11/city-in-time-sacrph-conference-in.html> Date of access: 29 July 2014.

Urban-Econ: Development Economists. 2012. Mossel Bay CBD and Port Area Precinct Plan: Market Research Study. (WM de Kock Associates & DPTPS. 2013. Mossel Bay CBD and port precinct plan: Local structure plan: final draft). [CD].

V& A Waterfront Cape Town. 2013. The V& A History. <http://www.waterfront.co.za/vanda/history>. Date of access: 29 July 2014.

Vale, B. 2003. Prefabs: The History of the UK Temporary Housing Programme. Routledge

Van Zyl, P. S. 2005. V& A Waterfront Development: An African success story in the integration of water, working harbour, heritage, urban revitalisation and tourism development. <http://capeinfo.com/component/content/article/115-waterfront-development.pdf>. Date of access: 23 August 2014.

Vickers, J & Yarrow, G. 1991. Economic Perspectives on Privatization. The Journal of Economic Perspectives, 5(2): 111-132.

Visser, G. 2002. Gentrification and South African cities: Towards a research agenda. Department of Geography. 9(6): 419-423.

Walzer, N & Jacobs, B. D. 1998. Public-Private Partnerships for Local Economic Development. United States of America: Greenwood.

Wang, C. 2002. Waterfront Regeneration. Cardiff University. <http://www.richardkenyon.co.uk/planningsummerschool.org/pdfs/2003B017AU.pdf>. Date of access: 19 March 2014. (MSc in City and Regional Planning.)

Wang, Y. 2006. Cheap labor and China's export capacity. (In Zhang, K. H. , ed. China as the world factory. Madison, NY: Routledge. p. 69-82).

Waterfront Partnership of Baltimore Inc. 2015. History of the harbor. <http://waterfrontpartnership.org/history-of-the-harbor>. Date of access: 7 January 2015.

Waterfront Partnership of Baltimore. 2013. Baltimore Inner Harbour 2. 0. <http://waterfrontpartnership.org/pdf/Inner-Harbor2-0-Master-Plan-compressed.pdf> Date of access: 19 August 2014.

Weaver, C. & Dennert, M. 1987. Economic development and the public-private partnership: Introduction to the Symposium. Journal of the American Planning Association, 53(4): 430-437.

Weber, A. 1929. Theory of the location of industries. Translated by C. J. Friedrich. London: University of Chicago Press.

Western Cape. 1985. Cape land use planning ordinance no. 15 of 1985.

Wiegman, B. W. & Louw, E. 2011. Changing port-city relations at Amsterdam: A new phase at the interface?. *Journal of Transport Geography*, 19: 575-583. http://ac.els-cdn.com/S0966692310000888/1-s2.0-S0966692310000888-main.pdf?_tid=0fbba964-2490-11e4-8ede-00000aacb35e&acdnat=1408116368_5c8033c5396c580006314ba446540470. Date of access: 14 August 2014.

Wilson, F.D. 1976. The organizational components of expanding metropolitan systems. <http://www.ssc.wisc.edu/cde/cdewp/75-20.pdf>. Date of access: 19 March 2015.

WM de Kock Associates & DPTPS. 2013. Mosselbay central precinct plan: local structure plan: final draft. WM de Kock Associates & DPTPS. 2013. Mossel Bay CBD and port precinct plan: Local structure plan: final draft). [CD].

Wrenn, D. M. 1983. Urban waterfront development. Washington: Urban land institute.










Yassin, E. C. , Eves, C. & McDonagh, J. 2009. Waterfront Development for Residential Property in Malaysia. The 15th Annual conference of the Pacific Rim Real Estate Society. http://researcharchive.lincoln.ac.nz/bitstream/10182/3390/3/Waterfront_Development.pdf Date of Access: 15 August 2014.






Yin, R. K. 2008. Case Study Research: Design and Methods. 5thed. United States of America: SAGE.







Yokohari, M. & Amati, M. 2005. Nature in the city, city in the nature: case studies of the restoration of urban nature in Tokyo, Japan and Toronto, Canada. International Consortium of Landscape and Ecological Engineering and Springer-Verlag Tokyo, 1: 53-99.





Zhang, L. 2002. An evaluation of an urban riverfront park riverfront park, Spokane, Washington: Experience s and lessons for designers. http://www.dissertations.wsu.edu/Thesis/Spring2002/L_Zhang_050602.pdf. Date of access: 12 December 2014.






Annexure J: Current and proposed land uses

CURRENT AND PROPOSED LAND USES		
CURRENT LAND USES: Mossel Bay Zoning Scheme Regulation 1984	PROPOSED LAND USES: Mossel Bay Integrated Zoning Scheme (MBIZS)	
 Business	 Business	Core business activities as permitted in terms of the Zoning Scheme Regulations: Business Zone
 Single residential	 Singlr residential	
 General Residential	 Medium residential	
 Public open space	 Public open space	
	 Business/Residential Area 2, Designated areas along Church, Bland & March St.	-Retail (shops, restaurants) -Personal services (spa, salon, confectionery, deli, etc) -Tourist trade -Offices (from ground floor and not from ground floor)

		<ul style="list-style-type: none"> -Hotel accommodation -High density residential (from ground floor and not from ground floor)
 Commercial	 Commercial Port Facilities Area 5	<ul style="list-style-type: none"> -Light industrial buildings -Warehouses -Fish market / Auction of fish related products -Business buildings
 Conservation area	 Conservation area	<ul style="list-style-type: none"> -Museum -Natural conservation areas -Open air recreation -Amphitheatre -Nature trails -Conference facilities
	 Corporate Port Facilities Area 3	<ul style="list-style-type: none"> -Offices

 Institutional	 Institutional	<ul style="list-style-type: none"> -Places of education -Places of worship
	 Medium Density Residential	<ul style="list-style-type: none"> -Town Housing -Group Housing -Medium density residential buildings
	 Medium-High Density Residential	<ul style="list-style-type: none"> -General Residential (as defined in the Zoning Scheme Regulations)
	 Mixed use Development	<p>Transitional zone to include:</p> <ul style="list-style-type: none"> -Light Industrial buildings -Retail -Restaurants -Tourist trade and craft stores -Offices -Residential buildings
	 Offices	<ul style="list-style-type: none"> -Offices

	 Office/Medium Density Residential	<ul style="list-style-type: none"> -Offices -Medium density residential buildings
 Public Parking	 Parking areas/Public Square	<ul style="list-style-type: none"> -Parking areas -Parking garages -Ablutions facilities -Open air markets -Public gatherings
	 Tourist facilities & recreation Area 1: CBD integrated area and Waterfront area. Area 4.	<ul style="list-style-type: none"> -Restaurant -Retail with individual tenancy limited to 400m² (from ground floor and not from ground floor). -Specialty Shops -Tourist trade & services -Entertainment -Marine activities (incl. yachting, boating, charter boats, etc) -Recreation

		<ul style="list-style-type: none"> -Conference facilities -Offices (above ground) -High density residential (above ground) -Art gallery -Craft centre -Indoor markets -Open air markets -Fresh produce market -Kiosks & places of refreshment
	 Special development opportunity	<ul style="list-style-type: none"> -Specialised restaurant -Fresh fish and fish product market -Auctioning of fish, shellfish, etc.
 Government	 Port activities	-Port related commercial, tourism, transport and administrative activities, including workshops and trade
 Local authority		
 Workshop		

Source: Adapted and constructed from WM de Kock Associates & DPTPS (2013)