

UNIVERSITY OF NATAL

APPROPRIATE INTERVENTION TO REVITALISE THE
DURBAN CENTRAL BUSINESS DISTRICT HARD CORE:
A PHYSICAL DESIGN PERSPECTIVE

DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE DEGREE
MASTER OF TOWN AND REGIONAL PLANNING

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APPROPRIATE INTERVENTION TO REVITALISE THE
DURBAN CENTRAL BUSINESS DISTRICT HARD CORE:
A PHYSICAL DESIGN PERSPECTIVE

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CHAPTER 1

INTRODUCTION TO RESEARCH TOPIC

1.1 Research Overview

The deterioration of the Central Business District (CBD) of cities worldwide is a problem which has been extensively documented. As upmarket shops and offices have located to more attractive shopping centres and office parks in decentralised locations, the economic turnover of central city areas has decreased. This has resulted in impaired maintenance and a subsequent deterioration of the visual quality of these areas.

Various approaches towards improving the public infrastructure, pedestrian environment, visual appeal and economic value of Central Business Districts (CBD's) have been taken in different countries. They include full pedestrianisation of CBD streets, traffic calming measures, general physical improvements to the public realm such as new street furniture and street surfacing, new public transportation systems and new municipal by-laws, to regulate the behaviour of CBD users.

The CBD's of cities in South Africa have suffered a similar fate to a greater or lesser extent. Of particular significance in the South African context, is the increasing presence of informal traders along street sidewalks in the CBD. The CBD is also used by an increasing number of pedestrians.

In the case of Durban, a combination of uncontrolled street trading and increased pedestrian movement has lead to a situation of congestion on many CBD street sidewalks. In addition, ill-disciplined taxi and bus drivers have contributed to traffic congestion. This is detrimental for registered street traders, formal retailers, pedestrians, motorists and future investors in the CBD.

The aim of this dissertation is to examine and evaluate the West Street Pilot Project in Durban, as a means of revitalising a section of its CBD, and solving the abovementioned problems. The West Street Pilot Project (WSPP) has attempted to ease pedestrian flow by widening the sidewalks and creating nibs or "nodes" for the purpose of street trading. Certain of these nodes have been formed at pedestrian crossings, shortening the crossing distance. It has attempted to improve the aesthetic appeal of the street, by introducing new planting and street furniture and making this part of the CBD hard core more "user-friendly".

1.2 Research Aims

The main aims of this study are:

- 1) To ascertain what is needed to improve the public realm of the CBD in the South African context, and in Durban in particular.

- 2) To evaluate the WSPP as a physical intervention to improve conditions in the public realm of a CBD hard core.
- 3) To generate new ideas which will:
 - a) improve the existing pilot project
 - b) contribute to future CBD revitalisation efforts.

1.3 Formulation of the Hypothesis

1.3.1 Research Problems

In recent years, there has been a marked increase in informal trading and pedestrian movement in the hard core of the Durban CBD. This has resulted in a state of congestion and uncontrolled street trading on certain streets and sidewalks as well as crime, filth and general deterioration of the public realm.

1.3.2 Research Question

What is the appropriate intervention to physically revitalise the Durban CBD hard core, to solve problems of street trader organisation, and pedestrian and traffic congestion?

1.3.3 Subsidiary Research Questions

- 1.3.3.1 What street conditions lead to an improved public realm?
- 1.3.3.2 What interventions are available to address pedestrian congestion and traffic dominance?
- 1.3.3.3 What suggestions concerning CBD revitalisation have been made in the past: in Durban, and in similar situations in other South African towns and cities?
- 1.3.3.4 What is the nature/role of the core of a CBD?
- 1.3.3.5 What is the nature/role of the core of the Durban CBD?
- 1.3.3.6 What are the current problems in the Durban CBD?
- 1.3.3.7 What is the role of West Street within the Central Business District, and what should it be:
 - 1) As a vehicular movement route?
 - 2) As a pedestrian movement route?
 - 3) As an informal trade district?
 - 4) As a formal retail district?
- 1.3.3.7 What are the objectives of the WSPP?
- 1.3.3.8 What are the potential impacts, both positive and negative, of the current WSPP?
- 1.3.3.9 What form of management is necessary to ensure that the improvements to the public realm are maintained?
- 1.3.3.10 What lessons can be learnt from the existing pilot, to improve future interventions?

1.3.4 Research Hypothesis

The application of certain types of pedestrianisation and physical improvement measures in a main CBD retail corridor, which address problems of pedestrian movement and street trader organisation, will create a noticeable improvement, if the appropriate management strategy is installed.

1.4 Chapter Outline:

CHAPTER 1: Introduction commences with a broad overview of the ideas involved in the research topic. It is followed by *CHAPTER 2: Research Methodology* which outlines the way in which the research questions will be answered, and the hypothesis proved or disproved.

CHAPTER 3: Conceptual Framework introduces, analyses and explains the concepts which inform the case study. These concepts comprise two types: concepts of CBD revitalisation from literature, and concepts of urban design and central area revitalisation from case studies.

CHAPTER 4: Case Study Introduction examines the broader context in which the West Street Pilot Project is located: Durban, its CBD, the hard core of the CBD and proposals and ideas which have been suggested for its development in the past. It introduces the site of the West Street Pilot Project, its aims as conceived by the designers, the events leading to its implementation, and the physical measures implemented on the street. The role of the Durban CBD hard core, and the role of West Street within it, are established.

The Research Methodology, Conceptual Framework and Case Study Introduction all lead to *CHAPTER 5: Case Study Evaluation*, in which the West Street Pilot Project is evaluated in two ways: in terms of its immediate physical impacts; and its potential success in the longer term.

From the evaluation, *CHAPTER 6: Findings* draws together the main strengths and weaknesses of the Case Study Pilot Scheme. These findings are used in *CHAPTER 7* to address the shortcomings and provide alternatives to better revitalise this stretch of the CBD hard core.

The dissertation is concluded in *CHAPTER 8: Conclusion*. In this chapter, the study is assessed as to whether or not the research questions have been answered and the hypothesis proven. A critique is made of the alternative proposals for West Street as conceived by the author. Strengths and weaknesses of the study are highlighted, and recommendation is made for further study.

CHAPTER 2

RESEARCH METHODOLOGY

2.1 Introduction

The research methodology has been organised to address seven main goals. The achievement of these goals represents a process of understanding the research aims, research questions and research problems. The process culminates in findings, further recommendations, and a conclusion.

Each of the goals is divided into smaller objectives. Accompanying the various objectives are the necessary individual tasks that together form a detailed research methodology. In this way, a logical link between the overall aims of the research, and the composite tasks, is created.

2.2 Methodology Outline

GOAL 1: UNDERSTAND THE RESEARCH PROBLEM

Objectives:

- Formulation of a conceptual framework.
- Understanding of the lessons presented by precedent examples of city centre revitalisation.

Tasks:

- Examine recent proposals of city centre revitalisation done elsewhere, of relevance to the context of the Durban CBD.
- Examine and analyse the relevant theories, concepts and precedents, with respect to:
 - CBD urban improvement
 - Urban Design Frameworks
 - the CBD hard core
 - traffic calming
 - pedestrianisation
 - street trading.

GOAL 2: SYNTHESIS OF FINDINGS IN A USABLE FORM

Objectives:

- Identification of the major themes and concepts, as they emerge from the conceptual studies.

Tasks:

- Analyse and synthesise the findings from the conceptual framework and precedent studies, in a form which can be used to gain a greater understanding of the case study.

GOAL 3: ANALYSE THE CASE STUDY IN DETAIL

Objectives:

- Understanding of the physical problems of pedestrian and vehicular movement and street trader organisation in West Street.
- Understanding of the impact of the physical problems in West Street on various stakeholders in the CBD hardcore.
- Understanding of the management plan which is in place to maintain the improved physical environment of the WSPP.
- Understanding of the objectives of the WSPP as a means of revitalising a part of the CBD hardcore.
- Familiarity with the type/extent of physical improvements implemented in the CBD.

Tasks:

- Examine the physical context in which the WSPP has been implemented.
- Examine recent studies on the Durban CBD defining problems and exploring solutions.
- Observe the physical measures implemented within the WSPP.
- Interview various stakeholders in the concerned portion of the CBD hard core.
- Interview professionals in the fields of urban planning, urban design and architecture.
- Interview the programme leader of the Inner Thekwini Renewal and Urban Management Programme (iTRUMP).
- Examine the Inner Thekwini Renewal and Urban Management Programme (iTRUMP) and studies on the new Public Transport Circulation System for the Inner City.

GOAL 4: EVALUATE THE PILOT PROJECT

Objectives:

- Understanding of the degree to which the WSPP has achieved a physically-improved, better-managed street.
- Understanding of the degree to which the WSPP is perceived to improve the conditions on West Street in the future.

Tasks:

- Compile criteria for the evaluation, based on an understanding of city centre revitalisation concepts and precedents.
- Detailed site observation of pedestrian and vehicle movement patterns and street trader conditions on the street before and after the completion of the physical improvements.
- Interviews with the various stakeholders in this part of the CBD.
- Interviews with professionals in the fields of urban planning, urban design and architecture.

GOAL 5: DEVELOP FINDINGS FROM THE PROJECT EVALUATION

Objectives:

- Understanding of the successes and failures of the West Street Pilot Project.
- Understanding of what is needed to improve such urban improvement initiatives in Durban in the future.

Tasks:

- Compile a list of strengths and weaknesses of the physical design measures, the management framework and policies in place to maintain the new street improvements.

GOAL 6: DEVELOP ALTERNATIVE PLANS FOR WEST STREET

Objectives:

- Original alternative proposals for the physical improvement of the WSPP.
- Proposals for improvement of the management of the WSPP.

Tasks:

- List the problems of West Street which have not been solved by the WSPP.
- Develop designs in response to the most urgent unsolved problems.

GOAL 7: CONCLUDE THE STUDY

Objectives:

- Establishing the strengths and weaknesses of the dissertation.
- Establishing to what extent the dissertation has answered the research questions, and proved or disproved the hypothesis.
- Evaluation of the author's alternative proposals.
- Establishing what further studies are required to provide a more complete analysis of the researched problem.

Tasks:

- Analyse the completed study in terms of the research questions originally posed, and the hypothesis set out.
- Critique the study methodology, findings, and alternative proposals.

CHAPTER 3

CONCEPTUAL FRAMEWORK

3.1 Introduction

This chapter will explore the concepts which underpin a clear understanding of what is required to analyse and evaluate the case study in question. These concepts pertain to the case study setting, the design approaches and methods employed in the West Street Pilot Project (WSPP) and problems which it is attempting to solve.

Initially, the concepts of the CBD, and its hard core, are introduced. The theories and characteristics of these demarcated areas are explored. The concept of CBD revitalisation and features of successful revitalisation efforts are examined. The revitalisation methods of traffic calming and pedestrianisation, as employed to a limited extent in the WSPP, are then explored so as to understand their role in the design of the implemented street improvements.

3.1.1 Concepts of CBD Revitalisation

- CBD revitalisation
- Traffic Calming
- Pedestrianisation
- Urban Design and Management Frameworks
- The Central Business District and the Hard Core
- Street Trading

3.1.2 Concepts Identified in South African Examples of City Centre Revitalisation

- Pietermaritzburg
- Pinetown
- Cape Town

3.2 Concepts of CBD Revitalisation

3.2.1 CBD Revitalisation

CBD revitalisation in the context of South Africa has been studied extensively by Reg Pheiffer. From examining 10 central business districts in South Africa in the 1980's, it was concluded that there are 6 essential ingredients for the revitalisation of the South African CBD. (Pheiffer 1987: 8)

The 'vital ingredients' include:

- 1) Traffic related improvements:

- (i) The separation of different forms of traffic – one of the most popular ways of separating traffic is through traffic-free pedestrian areas such as pedestrian malls.
 - (ii) The provision of adequate and well-located parking.
 - (iii) The improvement of the capacity of the central business district road network.
- 2) The creation of new facilities in the central business district. Such facilities could include hotels, restaurants, entertainment facilities, as well as new pedestrian areas of different types.
 - 3) Environmental improvements – a popular way of introducing environmental improvements is through the construction of a pedestrian plaza or mall.
 - 4) Promotion of the central business district – promotional venues may, too, be located in urban malls, parks or squares.
 - 5) Implementation of the proposals.
 - 6) Protection of the revitalisation effort.
- (Pheiffer 1987: 9)

Pheiffer has concluded that pedestrian malls are useful tools in the revitalisation of the central business district.

However:

- (1) Pedestrian malls must not be regarded as the solution to all central business problems.
- (2) Pedestrian malls must not be built in isolation, without the support of other ingredients (such as improved road capacity and a suitable management plan)
- (3) Pedestrian malls must be properly designed to deal with all the local problems of off-loading, refuse collection and emergency vehicles
- (4) An organisation must be established to take responsibility for the on-going promotion, maintenance and security of the mall after its construction.

(Pheiffer 1987: 9)

More specific guidelines for successful city revitalisation are presented in Brodeur's article "Ten Tips for Designing a Consumer-friendly Downtown". (APA April 2003: 24-27). Pointers from this article include:

1. Promoting cross-street movement by the pedestrian.
2. Prioritising street lighting.
3. Keeping sidewalks basic, smooth and clean.
4. Establishing a "way finding programme" with kiosks which link to existing street furniture patterns.

It is important to encourage pedestrian cross-street movement, and not to "split the street in two" as it often is through the use of median islands or fences. (Brodeur in APA April 2003: 24). Furthermore, it is beneficial for retailers if mid-block pedestrian jay-walking is not hampered. Approaches taken by some cities, is to channel pedestrians, using a mid-block crossing, to extend curbs out into the street. On busy roadways, such crossings would have a traffic signal. The aim of such measures is for jay-

walkers to be attracted to these crossing points, increasing sales from businesses next to them. A better solution would be to slow traffic down to the point where it is no longer a hazard. (Brodeur in APA April 2003: 25)

Good detailed sidewalk design is also vital for city centre revitalisation. Brodeur divides the city centre sidewalk into three functional zones. The first zone is the utility zone, adjacent to the kerb. It is complex to design as it contains the highest concentration of street furniture and other obstacles: street lights, trees, benches, raised planters, parking meters and parking signs. This zone is not used as a thoroughfare, but it must be used by pedestrians to get from car to shop. (Brodeur in APA April 2003: 26)

The next zone is the through-way zone, devoted to steady pedestrian movement. The width of this zone is critical, as it can cause, or prevent pedestrian congestion. The third zone is the browsing zone, about a one-metre width along the storefronts. This area should have the greatest level of amenity. (Brodeur in APA April 2003: 25)

In fact, there is an effective browsing zone on both sides of the through way zone. It is important to acknowledge that improving pedestrian space does not imply elaborate, expensive paving designs. For the area to succeed, the focus of the pedestrian's attention should be on window displays and business activities. (Brodeur in APA April 2003: 25)

In the case of West Street, zone one, and to an extent zone three, have been used for street trading

3.2.2 Traffic Calming

The urban improvement measures implemented in West Street can be termed a minor form of traffic calming. It was the aim of the project architects to create conditions on the street which were more pedestrian friendly, to create the feeling for pedestrians and motorists that this was a pedestrian space as well as a traffic thoroughfare. In this way, the WSPP was a traffic calming exercise.

The practice of traffic calming involves a large range of planning, transport and environmental objectives. Pharaoh and Russel (1991) have defined the main goals of traffic calming as follows:

1. To improve road safety;
2. To reclaim space from the carriageway for pedestrians, cyclists and non-traffic activities;
3. To improve pedestrian mobility and safety;
4. To channel, control and reduce the speed of traffic;
5. To promote greater feelings of safety, especially for residents, pedestrians, cyclists and those engaged in shopping and play;
6. To create environmental improvements, sometimes in order to promote local economic activity.

(Pharaoh et al 1991: 80)

Within the conventional aims of traffic planning, such as reducing traffic speed and volume, the aim of improving and enhancing the character of the street is also mentioned as a priority for traffic calming. Traffic calming schemes are designed to integrate the traffic and parking functions with the living functions of the street. Ultimately, they should also enhance townscape and environmental qualities. (Pharaoh et al 1991: 82)

A distinguishing feature of traffic calming, which differentiates it from other forms of traffic management, is the priority which it places on improving the character of the road or street. Pharaoh and Russel (1991:82) state: "The design of traffic calming schemes is derived from the need to integrate traffic and parking with what the Dutch have called the living functions of the street, and to give greater priority to the vulnerable road users."

In traffic calming schemes, various physical measures are used to reduce vehicle speed. They include discomfort or perceived risk by the motorist, which is achieved by a change in horizontal alignment, tight bends, carriageway narrowing, reduction of the optical width of the street, and a change in the surface materials of the street. In narrowing the carriageway, or changing the horizontal alignment of moving vehicles, more area is available in the road space for safe pedestrian movement, parking, planting, seating and other street furniture.

To change the visual appearance of the road, and make it more accommodating of pedestrians, measures previously used have included raising the level of pedestrian crossings, visually emphasising various features and decreasing the visual width of the street with planting.

In many existing examples of traffic calming in central city areas, the extent of physical measures implemented is modest. There is great competition for street space in these areas, and it is more difficult to reduce vehicle speeds on CBD main roads, than it is in residential areas. Up until the 1980s, there was an emphasis in city centre traffic calming, on redistributing street space to provide for wider pedestrian areas and cycle lanes, bus lanes and parking and service bays. (Pharaoh et al 1991: 89)

3.2.3 Pedestrianisation

Pedestrianisation involves claiming a street or part thereof for the exclusive use of the pedestrian. Such schemes are often implemented in conjunction with major improvements to the urban quality of the area, and new public transportation systems.

According to Landscape Architect Alan James, "pedestrianisation and traffic calming are widely seen as policies which redress the balance between traffic and pedestrians." (James 1995: 5) They are about:

- Returning the streets to the people
- Eliminating or reducing the adverse affects of traffic
- Using the space to meet more vital and human needs.

- Providing trees, seats, fountains, art, information and meeting places.

The materials used in the design of the pedestrian space are important and need to respond closely to the character of the town or city in which they are being implemented.

To create successful pedestrianisation schemes, according to James, an approach is required in which "townscape and urban design objectives are given equal status to traffic management objectives". In addition, traffic management policy needs to progress, to allow more radical measures, which will not only have a greater traffic calming impact, but also show a more "unified and less compromised townscape treatment". (James 1995: 8)

This indeed is part of what has been termed partial pedestrianisation. There are several forms of partial pedestrianisation, such as the following:

- 1) Where only a small part of the hardcore is pedestrianised and the remainder is not.
- 2) Where a pedestrian area permits some traffic, in the following possible ways:
 - i. Only buses
 - ii. Buses and taxis
 - iii. Entry of vehicles only during times of delivery.

Pedestrianisation of parts of towns and cities has been practiced extensively in Germany since the 1940s. In (the former) West Germany pedestrian malls could be divided into "First Generation" and "Second Generation " pedestrian malls, according to their aims and physical designs. (Hadju 1988: 328)

"First Generation" malls aimed to manage city centre traffic and to preserve or stimulate retail trade in the CBD's. This took place in Essen, Cologne, Kiel and Kassel. By the early 70s, pedestrian shopping malls, and the attraction they gave to the city centre, was seen as an effective counter-measure to the threat of suburban shopping centres. By the 1970s, the creation of pedestrian malls was seen to encourage the clustering of speciality shops, restaurants and entertainment facilities, giving new life to city centres. They provided an attraction in the city centre, and resulted clearly in increased pedestrian flows and high retail turnover in the streets converted to pedestrian malls. (Hadju 1988: 328)

The aim of "Second Generation" malls was to enhance the environmental appeal of the city centre, to preserve historical monuments by integrating them into traffic-free zones, and to encourage the city centre as a social meeting place. There was a desire in the late 1970s to integrate a great diversity of buildings and streetscapes and to include more of the city's shops. These traffic-free areas became successful as centres for social, recreational and cultural activities. (Hadju 1988: 330)

Peter Hall and Carmen Hass-Klau, traffic policy consultant and researcher, quote the research of Monheim in their book, "The Impacts of Rail Rapid Transport and Pedestrianisation on the City". Monheim researched the pedestrianisation programmes of Germany in the post World War 2 period, and highlighted the benefits that it was seen to have, for various stakeholders and professionals.

- 1) The different stakeholders and role players in pedestrianisation had different motives for separating pedestrians and motor vehicles.
- 2) Most of the transport planners saw the principal aim of pedestrianisation as the improvement of traffic conditions.
- 3) The retailing sector saw it as a way of attracting retail trade from the surrounding area.
- 4) Urban planners saw the aims of pedestrianisation within a much wider spectrum, which included creating an attractive image, creating value for the city centre as a whole, and more life in the evening. Traffic condition improvement was mentioned by only one tenth of planners surveyed.

The research showed that pedestrianisation can solve problems between different economic sectors and interest groups. It solves the spatial conflict between pedestrians and vehicles; as well as the negative effect that cars have on retail (pedestrians who cannot shop in a relaxed atmosphere will not be inclined to visit the stores and seldom do any "impulse shopping"). In most cases, traders who initially protested the scheme vehemently, encouraged further pedestrianisation once they saw the positive economic benefits. (Hall & Hass-Klau 1985: 88)

According to Monheim's survey (in Hall and Hass-Klau 1985: 111), nearly all firms in pedestrianised streets reported an increase in turnover after the completion of a pedestrian mall. Figures collected from Germany include a 30-40% increase in economic output from the pedestrianised area of Köln, and a 15-35% increase in Essen.

The research of Hall and Hass-Klau also showed that it is important to provide a balanced mix of land-uses along a newly pedestrianised street. Many pedestrianised streets in Europe have resulted in the financially stronger retail outlets and businesses being able to bid successfully for sites within the pedestrian area, to the exclusion of the smaller ones. It is therefore important for regulations to be installed to promote all types of business and retailing activities, such that a more balanced urban environment is created along these streets. (Hall & Hass-Klau 1985: 119).

3.2.4 Urban Design and Management Frameworks

Through studying the methods of city centre revitalisation, it is apparent that for a physical upgrade project to be fully effective, and to maximise its benefit for the concerned urban area, a framework is necessary to guide its design and management. The urban design framework is explained by (the former) Markewicz English Urban Designers, Architects and Planners

as “a mechanism to address various critical problems, with regard to urban development”. (Markewicz English 1996: 13) It needs to fulfil the role of a flexible planning and development guidance mechanism.

This mechanism should be able to identify the important assets of an area, and prevent them from being destroyed or eroded as growth and change occur. It should also be able to identify those components of development which cannot be firmly controlled and directed. The Framework Plan needs to “place” a project area within its urban context to ensure its integration with urban land use, movement and service systems. It should provide guidelines for the design of different urban elements within the area, such as landscaping, planting, buildings and street furniture. (Markewicz English 1996: 13)

The Pietermaritzburg Urban design framework echoes what was stated by Markewicz English. A flexible development plan is required for any urban intervention for the following reasons:

- Too little agreement exists on what such a plan might look like.
- Solutions postulated at one point in time may not be relevant in following years, due to changing needs and circumstances.
- The budgets associated with such proposals are beyond the means of local authorities in a one-off situation.
- What is required, is a framework flexible enough to cope with changing needs and circumstances, yet robust enough to direct development of the CBD.
- It must provide a framework that is capable of implementation in separate parts as finance becomes available.

(PMB City Engineers Department 1988: iv)

3.2.5 The Central Business District and The Hard Core

The examined WSPP is situated in the traditional “hard core” of the “Central Business District (CBD) of Durban.

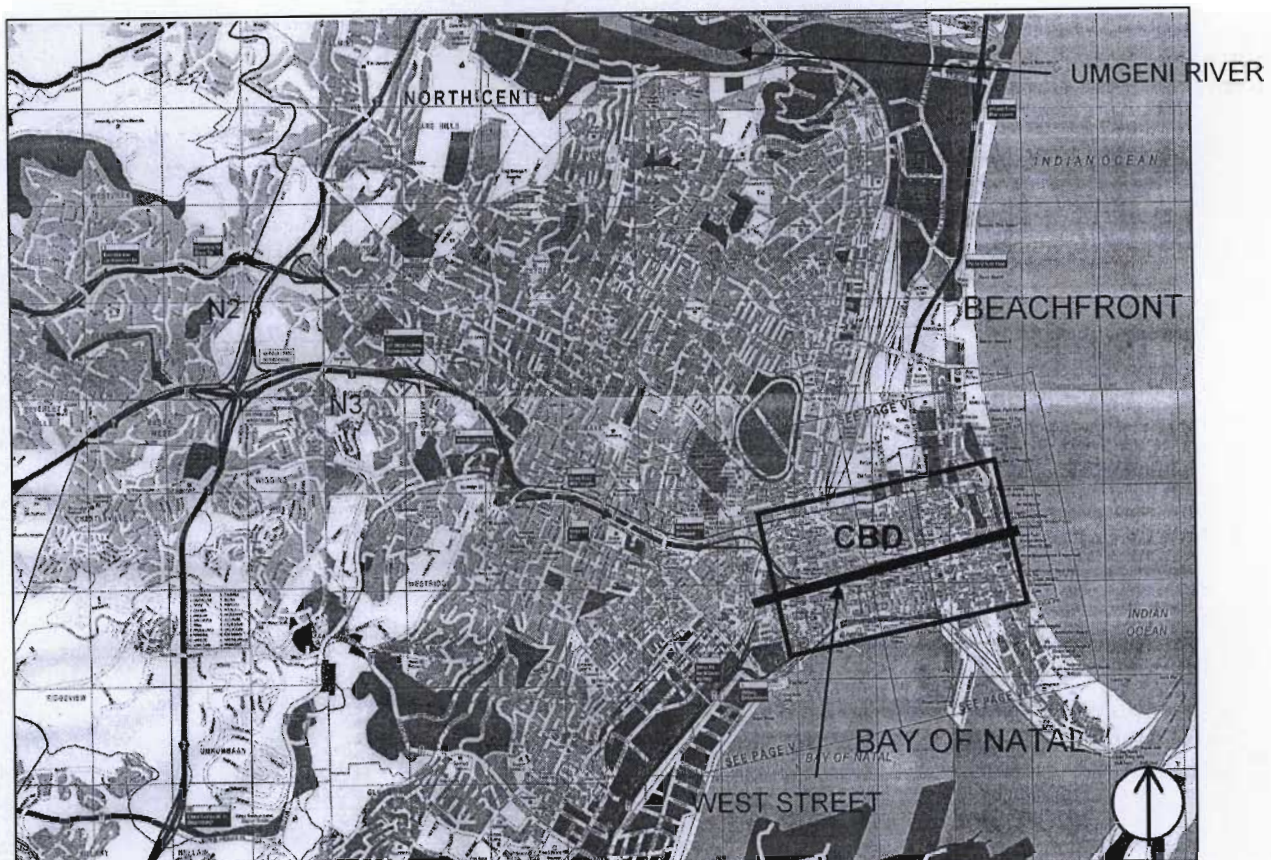
The CBD is an indefinitely defined area of a city which is geographically central and highly accessible. (See Map 3.1: The CBD in the Context of Durban) As a result, there is a tremendous competition for space, resulting in peak land values and a greater concentration of tall buildings than in other parts of the city. There is a greater concentration of both vehicles and pedestrians than in other parts of the city, a predominance of retail and offices with especially large department stores, smart shops, banks, theatres and government buildings. There is thus a great intensity of land use. (Wilkinson 1994: 26)

Horwood and Boyce (1959) were the first theorists to conceptualise the internal structure of the CBD. They divided it into two component parts, the ‘central core’ and the ‘frame’. (Horwood and Boyce 1959 in Wilkinson 1994: 26). Mallows and Beinart developed a third concept for the overall definition of the CBD, developing the triple concept of the ‘hard core’, ‘periphery’ and ‘frame’. (Mallows and Beinart 1966 in Wilkinson 1994: 26).

The hard core was seen as the area of most intensive land use, land values and traffic, dominated by the best office blocks and department stores. The periphery was defined as the expansion and transition area adjacent to the hard core which contains land uses which require larger floor areas and demand lower rents. It comprises furniture and household goods stores, hotels, entertainment and public buildings. The frame incorporates the area usually defined by major topography or major transportation facilities. (Mallows and Beinart 1966 in Wilkinson 1994: 26)

Murphy provides a more detailed description of the CBD hard core. The hard core is referred to as the area with the greatest concentration of social and economic activities. This would be reflected in high-rise buildings, high retail productivity per unit ground area, and land use characterised by offices, retail sales, consumer services, hotels, theatres and banks. The CBD hard core averages the highest buildings within the metropolitan area. It tends to grow vertically, rather than horizontally. (Murphy 1971: 113). It is also the area with the greatest concentration of daytime population, with a general absence of a permanent residential population. This is where the major mass transit interchange for the city is located. It is a centre of specialised professional and business services; the site of headquarter offices for business, government and industry. (Murphy 1971: 114). Traditionally, the size of the CBD hard core is known not to extend more than a 10 minute walking distance in any one direction. Horwood and Boyce (1959) acknowledge the CBD core as the area with the "highest concentration of foot traffic" and "geared to the walking scale." (Horwood and Boyce 1959: 16)

Of importance to the analysis of Durban, is the acknowledgement made by Horwood and Boyce (in Murphy 1971:115) that the definition of the CBD hard core "does not preclude the existence of internal functional sub-cores". Thus a CBD core may have an internal government, theatre, financial or retail core". Such a pattern is shown clearly in many American cities. In Detroit, the CBD is divided into definite retail and financial sectors. New York's financial district is completely distinct from its retail, office and amusement areas. Philadelphia, however, has two separate retail sub-cores, with government and financial sub-centres in between. (Horwood and Boyce 1959: 15) This is certainly the case of the Durban CBD: the retail core is centred on West Street, extending into Grey Street; the office core is centred in Smith Street and Victoria Embankment.



Map 3.1: The CBD in the Context of Durban

It is important to realise that these conceptual areas which define the make-up of the CBD, are not static in nature. In addition, each city has its own specific characteristics. (Wilkinson 1994:27)

3.2.6 Street Trading

The problem of uncontrolled street traders in the Durban CBD was the main cause of the need for the WSPP. The WSPP attempts to resolve the problem of overcrowding of the sidewalks by street traders. It has created special landscaped nodes for the traders, with trading tables to which they are registered. In addition to these physical sidewalk changes, a management plan to ensure that traders stay in their trading areas is in the process of being prepared. To better understand the potential success of this solution, an understanding of the street trader phenomenon in South Africa is required.

Street traders have been defined by Lund et al, in their book "Street Trading", as those "who belong to the informal economy and who trade on the streets". (Lund et al 2000: 10). Street traders in the South African context range from relatively wealthy people who trade in luxury goods at flea markets, to poorer people, who are often termed "survivalist traders".

(Lund et al 2000: 10) Those who the WSPP tries to address, form part of the latter group.

In South Africa in 2000, there were 2-4 million people throughout the country who were involved in the informal economy, 60% of whom were African women, and most between the ages of 25 and 49. Street trading forms only a small part of the informal economy, although it is the most visible. (Lund et al 2000: 11-12).

Until recently, popular perceptions of street trading have mostly been negative. They have arisen due to the impacts which traders have had on formal trading conditions, and the amenity of central urban areas. Recently, however, much attention has been given to the role that it can play in combating unemployment. This has generated a more positive attitude and perception among the general public, and public agencies with regard to the efforts of the unemployed in finding for themselves. (Markewicz English 1996: 2)

Informal trading is one of the many manifestations of larger economic problems within the South African economy. It is related directly to the inability of the formal economy to generate jobs for an expanding population. Any attempt therefore to improve the conditions of informal traders and integrate their activities into the physical fabric of the city, requires a holistic approach to the phenomenon. (Markewicz English 1996: 2) Urban management systems and infrastructure are required to co-ordinate and control activities and provide the necessary services required by marginalised communities, in an efficient and viable manner, such as transportation node and urban market management strategies.

It is the belief of Markewicz English that the public space of a city (such as road reserves and public open spaces) is a resource not only for people to use, but for them to sustain. Municipal councils thus have a very important role to play in actively promoting local economic development. In urban areas, this could manifest itself as the promotion of urban development policy which seeks to transform existing urban areas into responsive, dynamic, functional living environments. In this way, city spaces will fulfil not only the function of a public stage for social and economic transformation to be played out, but also a "space which can sustain itself". (Markewicz English 1996: 2)

The main problems experienced by street traders, are the high transportation costs getting to and from trading sites; the lack of basic facilities at trading sites; lack of convenient accommodation and overnight storage of goods; lack of appropriate child care and lack of security for traders and customers. (Lund et al 2000: 31-38) Unhygienic conditions and overtrading have been included as other obstacles to effective street trading activity. (Lund et al 2000: 39)

According to the same authors, there are various factors considered "good" for street traders. They include: good sites where there are many

“passing feet”; improved consultation with authorities; support from local and national government; improved skills in a particular type of trade; and skills in the production process of stock. (Lund et al 2000: 40)

The management of street trading must therefore include strategies, programmes and measures to provide hygienic, well-managed trading sites along main pedestrian movement routes. Storage, accommodation and other necessary facilities need to be provided through support from local and national government.

According to Lund, the local councils have the responsibility of sustaining the livelihood of street traders. Their work must include: respecting the need for (and providing) secure space for traders; developing and promoting street traders as entrepreneurs; managing the interests of the formal and informal economy, as well as pedestrians and motorists; managing town planning issues such as provision of water, toilets, shelters and storage; and enforcing municipal by-laws. (Lund et al 2000: 64)

Many new approaches towards managing street trading have been proposed in Lund’s work “Street Trading”. They are derived from successful models studied in various South African cities.

Listed are three possible approaches towards street trading management, with explanations and assessments of the advantages and disadvantages for street traders:

1. Street Traders Take over the Management of Street Trading

This approach is based on a model used in Cape Town, whereby street trader organisations take over the management of street trading. This is then leased out by the organisation to individual street traders. All organisations are compelled, as part of their lease agreements, to set out a plan to assist and empower traders who were disadvantaged by the apartheid system. However, with this system, site rents are often very high and it is open to abuse of money and power. (Lund et al 2000: 70)

2. Property Owners take over the Management of Street Trading

This model has been introduced in Johannesburg, whereby property owners can form a company which is responsible for the management of street trading in that area. Such companies are concerned with managing not only street trading, but crime, litter and waste. The city council collaborates with them, by raising rates in the area, and giving the company the extra money raised in this way. Areas managed in this way have appeared to be more orderly, with lower crime levels and stricter by-law enforcement. However, many street traders are opposed to this method of management, as it gives these companies the right to set high prices for trading sites. (Lund et al 2000: 71)

3. Street Trading is Located in Dedicated Markets

Such markets have been planned in central Johannesburg. In such a market, a private company is hired to manage it. In this system the better-off traders, who sell goods for which people are prepared to go out of their way, will certainly benefit. Often, there are more facilities in dedicated markets, such as toilets, water and storage, than at street trading sites. Nevertheless, a dedicated market will not benefit the majority of street traders, who are reliant on sites with "passing feet". Once dedicated markets have been established, the streets will have to be strictly policed, to ensure that new traders do not take up the vacant sites. (Lund et al 2000: 73)

It is apparent that simply designing new spaces for street traders to do their business, is not sufficient for their management. A holistic approach, involving management plans, skills training, and involvement and collaboration from both the public and private sectors is necessary.

3.3 City Centre Revitalisation Precedent

This section will examine specific case studies of previous city or town centre revitalisation projects which have been implemented in South Africa.

The development strategies and urban design frameworks of 3 city/town centre revitalisation projects are examined to determine the common concepts and elements which constitute a good design and development strategy. They are Hill Street West Upgrading in Pinetown, Maritzburg Mall and Central City Upgrading in Pietermaritzburg, and St. George's Mall in Cape Town.

3.3.1 Pinetown: Hill Street West Upgrading Project 1996

This plan was intended to offer proposals for the layout of a part of the Pinetown CBD. It was to include suggestions for the location of bus and taxi ranks, the location and size of motor vehicle parking areas, the location and size of the informal sector market area, and the recommended road pattern and traffic flow. Additionally, the document was to include pedestrian flow patterns; the relationship between taxis, buses and pedestrians; provision and location of street furniture facilities and ablutions, the relationship between formal and informal land uses and activities, demarcation of formal and informal sector trading areas and buildings, (see Map 3.2: Hill Street West Upgrading Project 1996) as well as soft and hard landscaping of the area, and project priority and implementation actions.

(Markewicz English 1996: 1-2)

There are various components to this plan, all of which added to its success:

- Detailed Site Analysis

Detailed analyses were made of the project area, including stakeholder needs, site analysis, study of movement patterns, and study of problems of public infrastructure, public space, urban landscape, layout and location of land uses.



Map 3.2: Hill Street West Upgrading Project 1996
(Source: Markewicz English 1996)

From these analyses, it was acknowledged that informal trading is integral to the urban economy in Pinetown and other parts of South Africa, and is not going to disappear. The important assets of the area were identified, to prevent them from being destroyed or eroded as growth and change occurred.

- Direct Response to the Need of the Public Realm

Detailed physical improvements were proposed as a direct response to physical, social and economic problems.

In the physical street design, an effort was made to respond to the function of the street. The landscaping plan responded to various features and existing buildings, which enabled it to create a "sense of place" and to celebrate specific environmental qualities. Physical interventions were proposed, which did not merely improve the public realm, but attempted to improve the function and quality of individual spaces within the street.

- Integration of Component Projects:

There was alignment of the various component projects; the planning of new trading facilities was co-ordinated with other projects, such as the widening of streets and the redesign of taxi ranks. Different trading facilities, such as platforms, shelters, kiosks, demarcated areas, trader and pedestrian waiting areas, were proposed within a complete design for the area.

Finally, The Urban Design Framework was integrated with other management directives, such as storage and refuse removal, and the creation of service nodes. (Markewicz English 1996: 18-19)

From the Hill Street West Upgrading Project, the following lessons of good city centre revitalisation can be learnt:

- 1) A detailed site analysis is needed to determine the needs of the area to be revitalised, as well as the relationship between different movement patterns and land uses.
- 2) A direct response to the public realm is needed, so that particular problems or opportunities, such as special buildings or landmarks, are treated appropriately.
- 3) In the design, and planning of the implementation, it is important that the component parts of the design are co-ordinated. In addition, it is important that the physical public realm improvements are aligned with other current urban management directives.

3.3.2 Pietermaritzburg: Central Area Master Plan 1988

In the 1980s, the Pietermaritzburg City Engineers Department outlined a large group of urban improvement and revitalisation projects which together were known as 'Pietermaritzburg 2000'. The Pietermaritzburg 2000 Project involved a detailed Policy Framework, a Conceptual Framework, as well as an Urban Design Framework as part of a Central Area Master Plan for Pietermaritzburg.

The following were the broad goals for achieving revitalisation of the central area:

- Providing as much space as possible for pedestrian movement and social interaction.
- Making the inner core accessible to public transportation.
- Providing off-street parking as close as possible to transport corridors, which would encourage people to park their cars and move around the inner core on foot.
- Promotion of the important movement corridors and city centre attributes.
- Investment in attractive landscaping at focal points in the city.

The Central Area Master Plan highlighted certain priorities seen as crucial for the successful revitalisation of the Central Area of Pietermaritzburg. (See Map 3.3: Pietermaritzburg Central Area Master Plan Urban Design Concept)

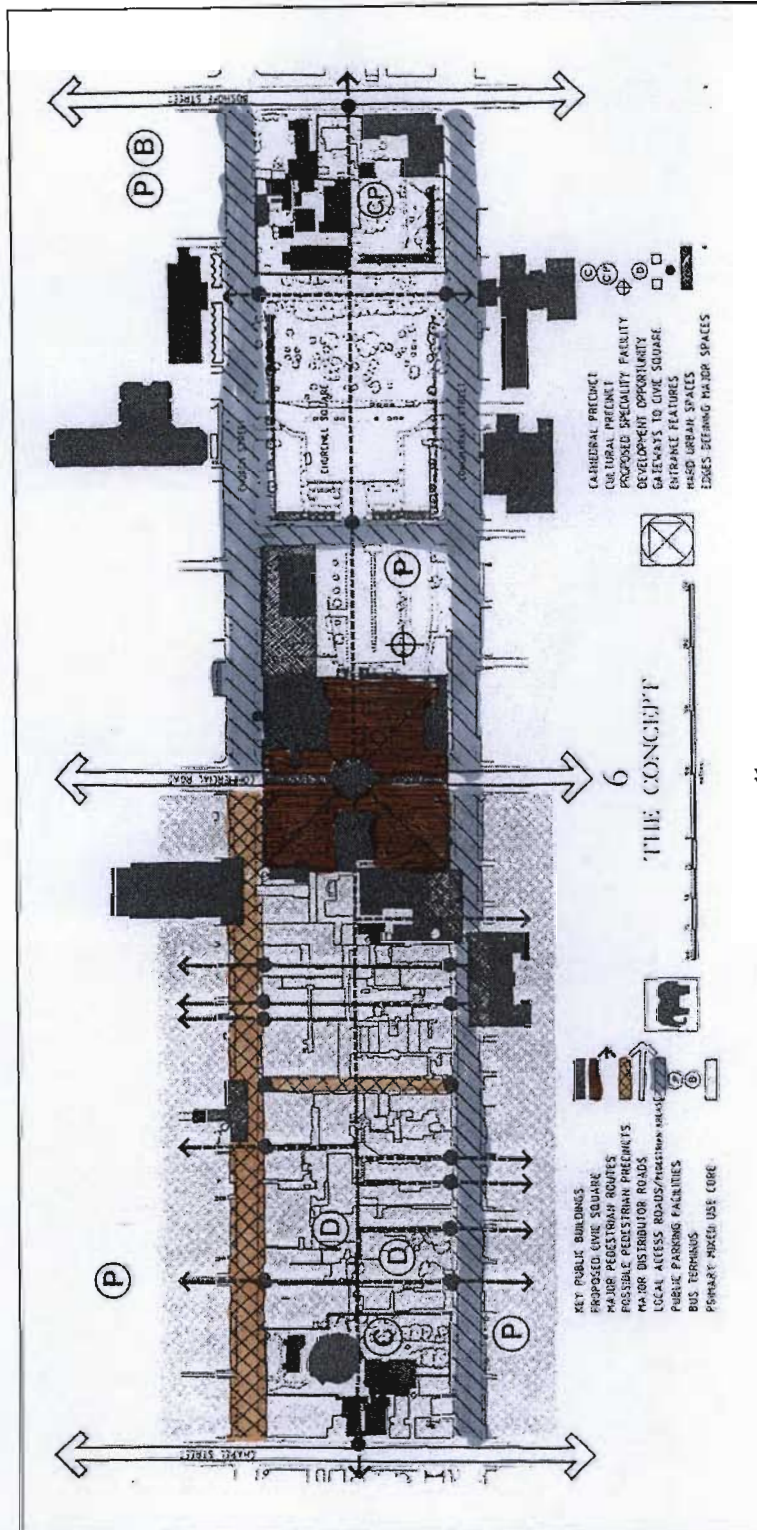
- 1) Creating a legible/imageable environment in the central area.
 - 2) Introducing new activities and facilities into the central area.
 - 3) Improving mobility for users of all modes of transport within the central area.
 - 4) Encouraging a transportation system which makes all parts of the central area accessible.
 - 5) Maintaining, and where necessary upgrading, the central area service network to accommodate existing and future development, by:
 - a) Minimising vehicular/pedestrian conflict
 - b) Providing well-located parking
 - c) Co-ordinating traffic movements
 - d) Improving pedestrian capacity in pedestrian areas, at intersections, and on sidewalks.
- (PMB City Engineer's Department 1986: 1-15)

The Central Area Master Plan: Urban Design Phase highlighted more detailed aims and principles for creating a successful city centre urban environment.

- It is important to identify special opportunities for intervention, by building on the unique character of the city. Such opportunities may be architectural or historically significant buildings, existing spaces within the public environment, prominent landmarks, specific entrances and edges, focal points and vistas. These features "create unique responses to the character of each place rather than a standard solution throughout the whole area". (PMB City Engineer's Department 1988: 7)
- Prominent landmarks in the study area are strong symbols, and can be used to structure both functional and visual continuity.
- Arcade entrances should be emphasised through detailed design, promoting the arcades as important places in the urban fabric. (PMB City Engineer's Department 1988: 9)

The important principles of city centre revitalisation, which are promoted in this revitalisation plan, are:

1. Revitalisation plans must provide space for pedestrian movement and social interaction.
2. New facilities must be introduced into the area.
3. The entire revitalised area must be accessible to public transportation vehicles, as well as all other modes of transport.
4. The new design must respond to opportunities for special types of intervention.
5. The new urban design must highlight prominent landmarks and arcade entrances.



Map 3.3: Pietermaritzburg Central Area Master Plan Urban Design Concept.
(Source: PMB City Engineer's Department 1988: 11)

3.3.3 Cape Town: St. George's Mall - 1985

The St. George's Mall plan was outlined in the document "A Pedestrian Network for Central Cape Town" in 1985, prepared by Cape Town City Engineer's Department Urban Design Section. The document provided, through its physical and policy proposals, an overall organisation for the improvement of the physical environment of the city centre.

An integrated pedestrian network was proposed for this purpose. In this proposal, a continuous mall system was used to link the old city more firmly to the foreshore, to connect the city squares and places of interest to the areas of greatest employment and density; and to give a "tangible expression to the concept of a pedestrian realm, where the citizen can stroll at leisure in the heart of the city". (Cape Town City Engineer's Department 1985: iii)

Such a pedestrian network would comprise the following elements:

1. Streets ranked according to their importance to pedestrian traffic and landscaped accordingly.
 2. Basement walkways and overhead bridges.
 3. Suburban bus routings, stops and termini related to the pedestrian network.
 4. Increased short and medium-term parking, close to the retail core, together with major parking garages.
 5. Historic precincts, squares, open spaces and parks, re-landscaped to increase their usability.
 6. Major tree-planting and landscaping of streets and squares.
- (Cape Town City Engineer's Department 1985: iii)

Central to the pedestrian network was St. George's Mall, (See Map 3.4: St. George's Mall) extending from Whale Street to Thibault Square with linked east-west malls in parts of Church, Castle and Waterkant Streets. (Cape Town City Engineer's Department 1985: iii)

The approach of the fully pedestrianised mall was chosen for the following reasons:

- The perception of the Cape Town CBD could only be influenced through the creation of a sizeable pedestrian realm in the heart of the city.
 - The key to this was a pedestrian street, which would act as a structuring device and link into a larger pedestrian movement network.
 - The mall would be successful, because it linked well to other pedestrian movement links, such as the narrow Church, Castle and Waterkant Streets, and to parking and public transportation termini.
- (Cape Town City Engineer's Department 1985: 25-26)

St. George's Mall provided a visually clear connection between important parts of the city, such as the old retail area, office core and foreshore. It was conveniently located to provide easy access to the squares and open spaces of the Central City, as well as to the main concentrations of shopping and employment, commuter and visitor parking and rail and bus terminals. (Cape Town City Engineer's Department 1985: iii)

"A Pedestrian Network for Central Cape Town" highlighted that physical measures alone could not create a sustainable improvement in the city centre. Other measures, such as promotion and marketing, traffic engineering and management, and a plan for the conservation of important buildings in the city centre, were needed to complement

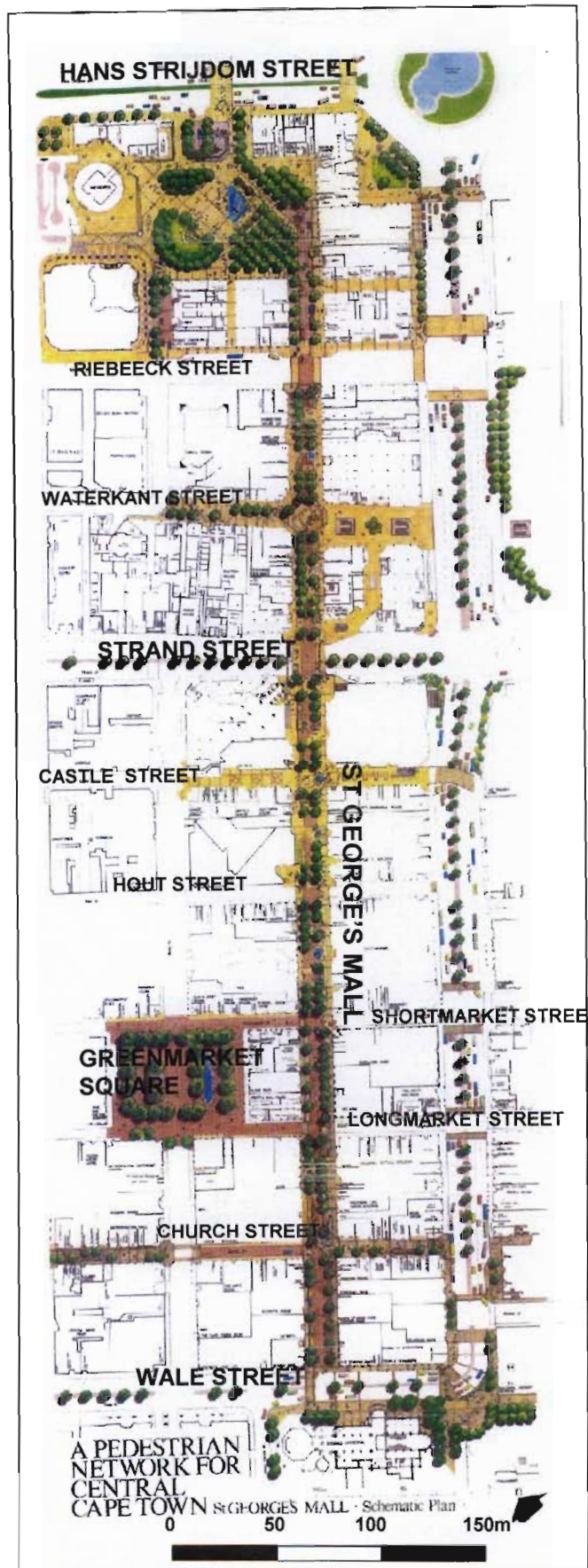
pedestrianisation measures. (Cape Town City Engineer's Department 1985: ii; iv) Important principles for generating successful city centre revitalisation plans can be learnt from the St. George's Mall experience:

- An improvement to the public realm of a CBD must involve the creation of sizeable pedestrian spaces. This new pedestrian space must link, and respond, to existing pedestrian movement routes.
- It is highly important to reduce conflict between pedestrians and vehicles.
- It is important to combine improvements for the pedestrian with those for other CBD users, such as parking for motorists.
- Accessibility by all modes of transport, including the pedestrian, is a key determinant of business district vitality. Planning is required to create a balance between pedestrian and vehicular movement.
- It is important that the creation of a city centre pedestrian mall or traffic calming scheme is implemented in conjunction with parallel sectoral plans in order for the improvement to be effective. Such plans may include an urban conservation programme, a promotion plan, and a plan of parallel improvements to other public spaces, such as city squares and parks. (Cape Town City Engineer's Department 1985: iv)

3.4 Summary of Conceptual Informants

The main themes and ideas established in the conceptual framework, which are necessary to carry out this study, are concerned mainly with city centre revitalisation. City centre revitalisation consists of a broad range of measures, such as pedestrian malls and their associated physical and environmental improvements. When dealing with city centre revitalisation areas, the following issues must be responded to:

- Traffic related issues must be addressed simultaneously to pedestrian issues. The revitalised area must be accessible to public transportation.
- Environmental improvements and the introduction of new facilities are effective ways of revitalising city centre areas.
- Urban Design and Management Frameworks are needed to manage urban revitalisation efforts, to ensure alignment and co-ordination between different physical improvements, and between other urban management directives, and to ensure the protection and maintenance of the revitalisation effort.
- Physical design must respond as closely as possible to the function of the street and provide as much space as possible for pedestrian movement; it must address the most important social and economic needs.
- Measures should be taken, through pedestrianisation and traffic calming methods, to minimise pedestrian/vehicle conflict, and improve pedestrian capacity in pedestrian areas and on sidewalks.
- In the South African context, the issue of street traders, the specific needs of this economic group, and the strategies needed to organise them effectively are important in managing and revitalising city centre areas.
- The CBD, and its hard core in particular, must be understood as the area in the city with the highest concentration of pedestrian movement, and high concentrations of land use.
- Pedestrianisation and traffic calming schemes in city centre must be designed so as to improve its urban qualities, as well as managing and facilitating traffic, and pedestrian movement.



Map 3.4: St. George's Mall Schematic Plan, showing proposals for new street paving and landscaping.
 (Source: Cape Town City Engineer's Department 1985)

CHAPTER 4

CASE STUDY: INTRODUCTION

4.1 Introduction

The Case Study Comprises 4 Parts:

4.1.1 An examination of the Case Study Area

The Case Study Area is examined by exploring:

- The background of Durban
- The extent and characteristics of the CBD of Durban
- Recent proposals for the development of the CBD of Durban

4.1.2 An examination of the West Street Pilot Project within the Case Study Area

The West Street Pilot Project is examined by outlining the physical design measures which are present in the completed project, highlighting its aims and discussing the problems leading up to its planning and implementation.

4.1.3 An Evaluation of the West Street Pilot Project

The Evaluation of the West Street Pilot Project is made in three steps:

1. A "Before and After" Study of physical conditions on the street, in the block of West Street in which the Project has been carried out.
2. A report of public and private stakeholder views on the project, obtained through open-ended interviews.
3. An assessment of the management plan which accompanies the physical measures of the pilot project.

4.1.4 A set of original proposals to improve the West Street Pilot Project and the Case Study Area as a whole.

The findings of the Pilot Project Evaluation will be used to arrive at three original proposals to further improve the existing pilot scheme.

Part 1 and 2 of the Case Study: Examination of the Case Study Area, and Examination of the West Street Pilot Project, are covered in Chapter 4. Chapter 5 will deal with the Pilot Project Evaluation, Chapter 6 with the Findings from the Evaluation, and Chapter 7 with the recommendations and proposals that follow.

4.2 Examination of the Case Study Area

4.2.1 Background of Durban

In the early 19th century, British and European settlers arrived at the Bay of Natal, with the purpose of trading with the Zulus. The trading post settlement began as a group of scattered encampments along the northern and western shores. The Boer Trekkers arrived in 1838, after which Durban began to develop as a traditional seaport town. The town grew economically, based on the wholesale, finance, retailing and small-scale manufacturing sectors. (Wilkinson 1994: 62-3 in Davies 1963: 20).

The central grid of the city was laid out in 1845. The grid plan followed the form of a narrow rectangle, with three main east-west streets, and shorter cross streets perpendicular to the bay shoreline. The areas west of the market square provided the cheapest land for commercial development, and this is where the CBD was established. The Point and Umgeni railway lines followed the southern and western edges of the square. (Wilkinson 1994: 63)

From the city centre, expansion of residential areas took place mainly along transportation routes. Several small nuclei developed along these routes, forming a multi-nucleated growth pattern which expanded concentrically from the central grid.

By 1900, the CBD had expanded west of the market square, along West Street, with the market area becoming the seat of civic government. By 1906, an irregular zone of merchants, wholesalers and storage facilities had developed on the outskirts of the CBD. (Wilkinson 1994: 66). The CBD later expanded, incorporating the wholesale, storage and residential land. These activities were forced outwards to the periphery of the grid, enclosed by the railway lines. Further pressure for development on central land resulted due to both physical and man-made barriers, and the desire of businesses to be based as close as possible to the city centre. The period after 1930 was therefore characterised by vertical expansion, with an image typical of current American cities. (Wilkinson 1994: 67).

Within the metropolitan whole, the urban area grew as a single, dominant central city with smaller sub-centres, at varying distances from the city.

From 1950, Durban (as all other urban areas in South Africa) developed a particular form of racial segregation. (Wilkinson 1994: 68) The Group Areas Act and similar legislation displaced Black, Indian and Coloured communities to peripheral locations on the outskirts of the city. These areas had few resources, and little

infrastructure or economic opportunities. As resources had been invested solely in "White" areas in the centre of the city, the Black working class were forced to travel to these central areas to fulfil their needs. As a result, people from the townships came to rely heavily on taxi, bus and rail modes of transport, operating along the main routes to the CBD. (Wilkinson 1994: 72)

This pattern of reliance of peripheral Blacks on the central areas to fulfil their needs of shopping, recreation and employment has continued to the present.

4.2.2 The Extent and Characteristics of the CBD of Durban, and its hard core

The central CBD of Durban extends approximately from Old Fort Road in the north to Victoria Embankment in the South, and from Berea Road Station in the West to the beachfront in the east.

Within the CBD, a certain clustering of commercial types has developed in defined areas. Smith Street has become a nodal growth area for commercial offices, while West Street has developed as a retail strip. (See Map 4.1 The Durban CBD) Industry is focussed in the Point and dock areas, as well as along Umgeni Road. (Wilkinson 1994: 67)

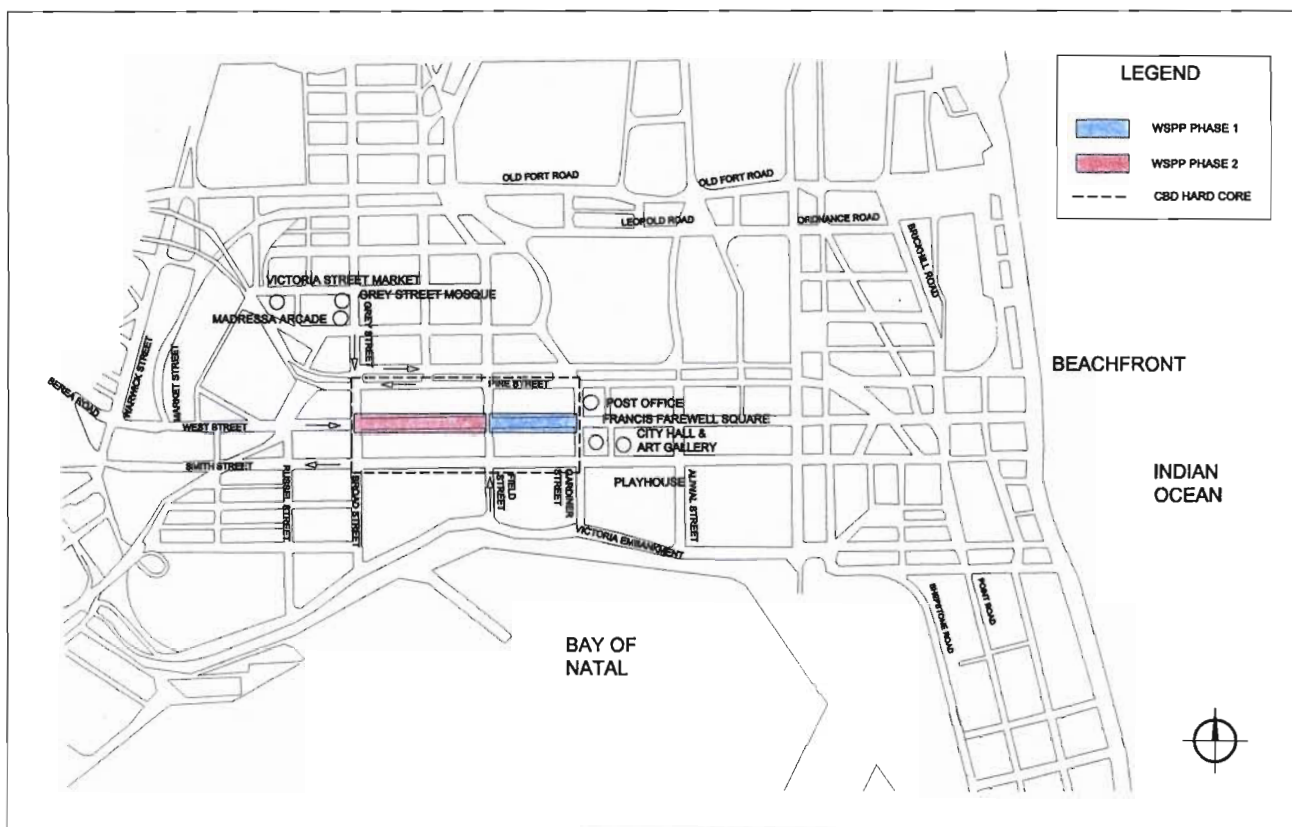
The role of the hard core of the Durban CBD is similar to that of many other cities. The activities in Smith, West and Pine Streets consist of various retailing, financial institutions and offices. Durban's CBD hard core was previously a popular location for prime office space, but now supports a lower income market.

According to the 1984 Beach and City Report, "The hard core of the CBD is divided and bounded by 4 major roads running in an east-west direction, namely the Esplanade, Smith Street, West Street and Pine Street, and 4 running north-south - Gardiner Street, Field Street, Broad Street and Russell Street." (Beach and City Report 1984: 55).

The true hard core of the Durban CBD in fact extends only from Pine Street to Smith Street and from Gardiner Street to Broad Street. It is these four blocks in which most of the banking and retail is carried out, and most of the offices are located.

Durban was described by Murphy, in the 1970s, as having "two CBD's", a "White CBD" and an "Indian CBD" (Murphy 1976: 89). In Durban, these two distinct trading communities have developed separately since the late 19th Century. (Murphy 1976: 90). The two groups occupied distinct areas. White ownership and occupation of land was concentrated in the blocks south of Pine Street. The Indian CBD was located north of Pine Street and west of Albert

Street. Although the Durban CBD is now more integrated, the presence of the Indian trading area is still evident.



Map 4.1 the Durban CBD

4.2.3 Previous Plans for Environmental Upgrade in the Durban CBD

Many ideas for the development of the city centre of Durban have been published since the 1980s. They are examined here to establish common problems and potential solutions which have been recognised by urban planners and architects, and to later

assess whether or not these problems have been addressed in the solution provided by the WSPP.

Recent publications suggesting directions for investment in future physical upgrade in the CBD include:

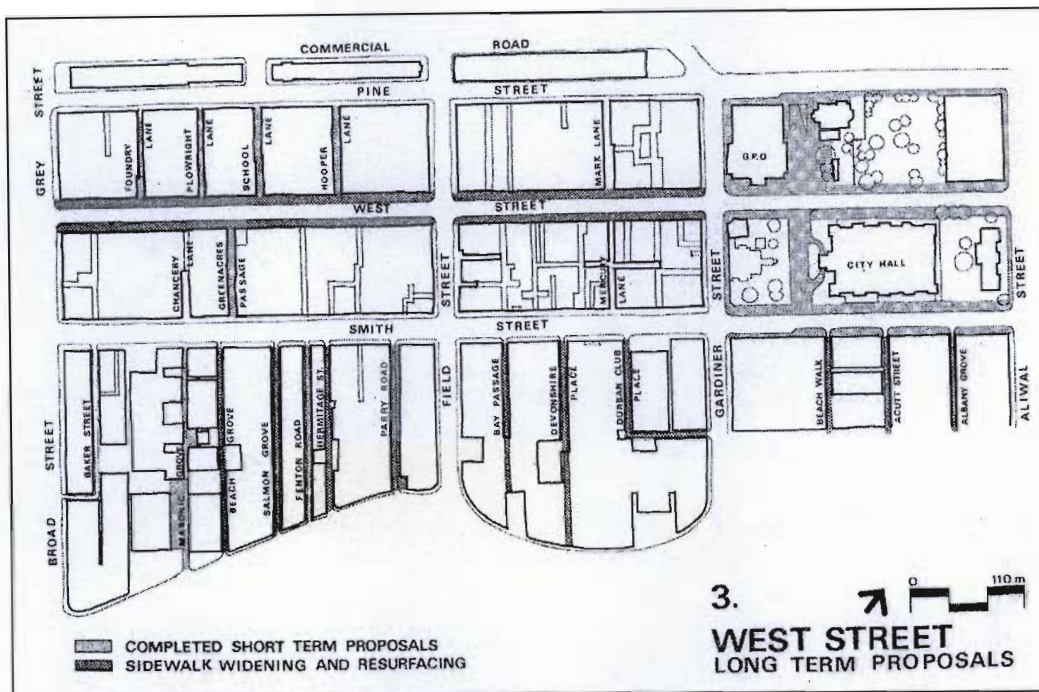
- Beach and City Report (1984), produced by the City Engineer's Department, outlining the priorities for different sections of the CBD of Durban, indicating possible future movement routes through the city, and possible new initiatives to revitalise the city.
- The Centrum Site (1997), published by the D'Urban Changes Forum.
- 'Towards an Inner City Framework Plan' (1998), produced by the Urban Design Branch of the City Engineer's Unit, in which directions for physical, as well as management improvements were outlined.
- "A Future office Vision for the Central Business District (2001) by Iyer Rothaug Collaborative, in which physical upgrade of the public realm was given a high priority.

These are the main ideas, according to the documents, which need to be considered in the revitalisation of the Durban CBD:

4.2.3.1 Maintaining the qualities of the Historic Civic Core and extending them to the surrounding areas.

It has been considered important by urban professionals in Durban that the Central Civic area of the CBD be maintained and enhanced. Not only does the precinct contain the aesthetically important City Hall, St. Paul's Cathedral and Francis Farewell Gardens, but it connects the Centrum Site to West Street.

It was seen by the Beach and City Report (1984) to be a logical place to start a process of environmental improvement in the CBD. The implemented plan of the report included sidewalk widening along both West and Smith Streets, adjacent to the City Hall, as well as along West Street, west of Francis Farewell Gardens, and on the lanes between Smith Street and Victoria Embankment. It also included a number of resurfacing and upgrading measures. Church Street was pedestrianised and a pedestrian square created adjacent to St. Paul's Cathedral. West Street, the Centrum site and the connection between them has been seen as critical for the revitalisation of the CBD. The link was achieved with the pedestrian underpass and amphitheatre, and refurbishment of the old warehouses to create the Workshop shopping centre.



Map 4.2: Beach and City Report Proposals for West Street
(Source: Beach and City Report 1984: 50)

4.2.3.2 Investment in Corridors and Links within the CBD

“Centrum: Heart of the City – Report on Inner City Linkages” reported on potential development options for the vacant Centrum Site north of the CBD hard core. Furthermore, the document reported on ways in which the upgrading of this area could be linked and extended into other parts of the inner city through a “North Link”, “South Link”, “East Link” and “West Link”. (D’Urban Changes Forum circa 1993)

The West Street Pilot Project falls within the vicinity of the South link area. The various objectives of the South Link were: strengthen the existing civic character of Locomotive Square and Farewell Square (adjacent to the City Hall); refurbish the Church street underpass and associated market; enhance and restore existing environmental and architectural elements, and enhance the character of Gardiner Street, Aliwal Street and the minor lanes. Furthermore, the link was required to “extend the quality of the historic Civic Centre”. (D’Urban Changes Forum circa 1993)

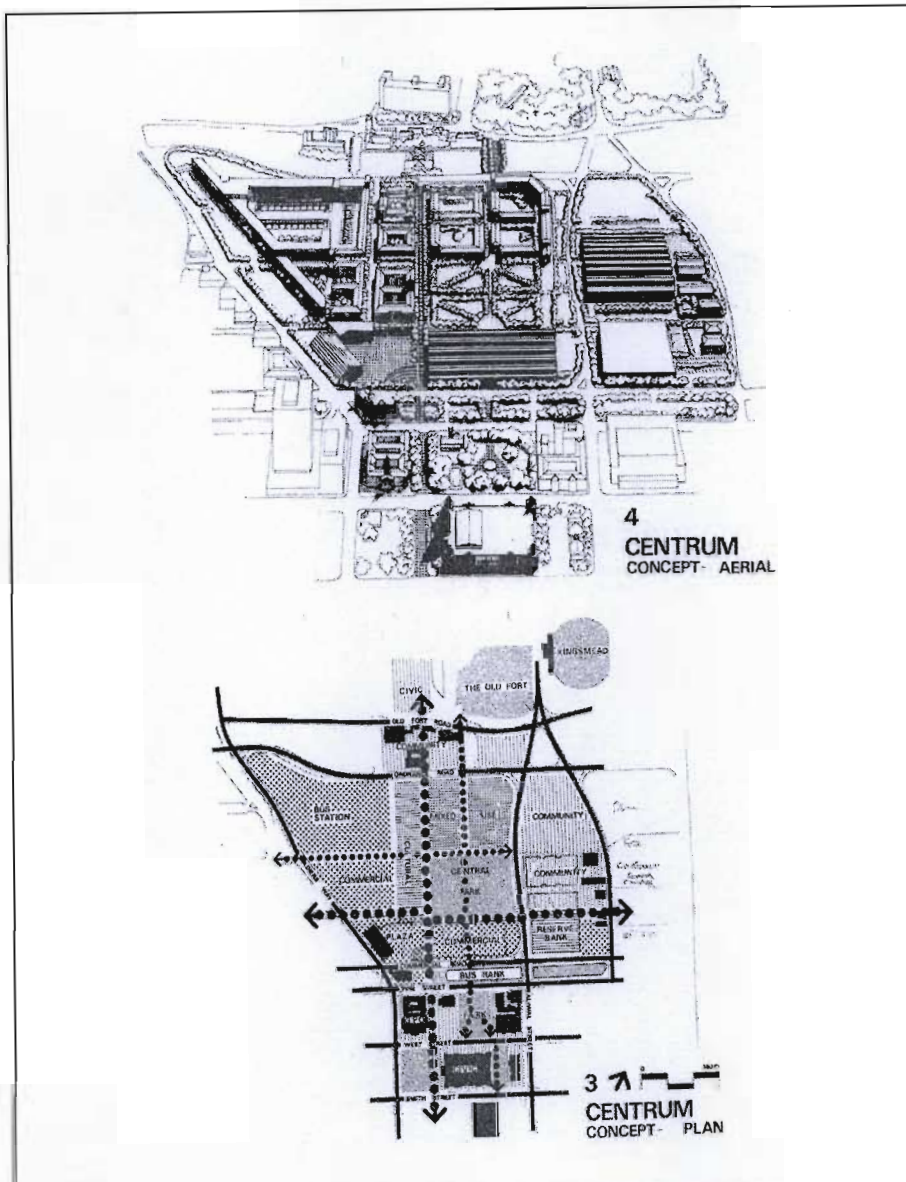
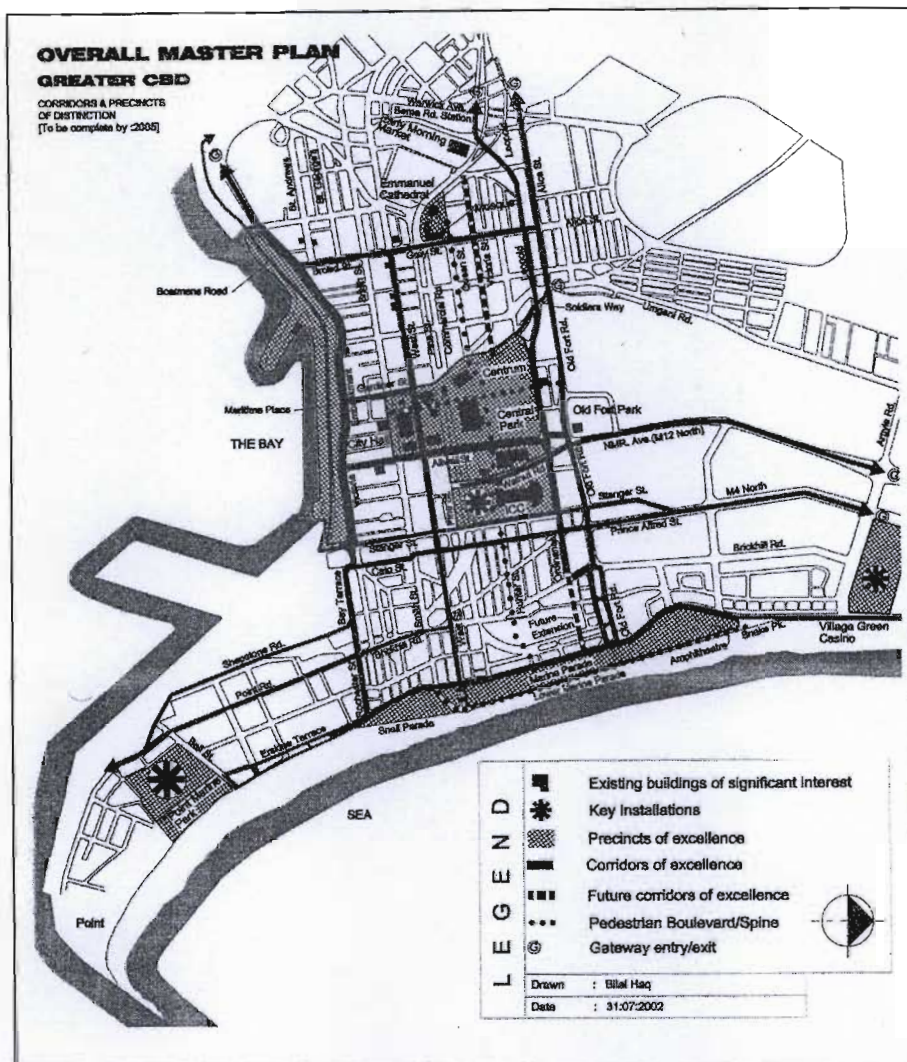


Figure 4.1: The Centrum Site

Perspective and Diagrammatic Representations of the 1984 Beach and City Report Proposals for the Centrum Site

(Source: Beach and City Report 1984: 37, 38)

Furthermore, the council has proposed a “Corridors and precincts of Excellence” programme which identifies the important areas and routes in the inner city. It is in these areas that Council will invest its resources for the maximum benefit of city users. The corridors of excellence identified in the CBD at present include most of the main movement routes in the CBD: West Street, Victoria Embankment, Grey Street, the one-way pairings of Old Fort and Leopold Road, and Stanger and Prince Alfred Road, as well as Point Road, Shepstone Road and Marine Parade. (See Map 4.6: Corridors and Precincts of Excellence).



Map 4.3: Corridors and Precincts of Excellence
(Source: Ethekwini Municipality City Engineer's Unit)

4.2.3.3 Public Realm Physical Upgrade

"Towards an Inner City Framework Plan" highlighted the business requirements of corporate offices in the CBD. It stressed that the CBD needed to change in order to avert the flight of business to decentralised locations. The requirements, according to the document, included good access, parking, high security and orderly, clean, landscaped surroundings.

(City Engineer's Unit 1998 in Iyer Rothaug 2001: 34)

In response, the document suggested the following physical adjustments and improvements, to make the CBD more attractive for business.

- The refurbishment of pavement spaces and street furniture according to an integrated, fresh design language.
- The installation of functional yet attractive street kiosks.

- The adjusting of pedestrian and vehicular surfaces to address issues of congestion, safety and the space requirements of various street activities.
- The place making of a civic heart including robust, open, public spaces.
- The strengthening of linkages with places of interest and entertainment around the CBD, including its heritage resources and multiple waterfronts
- The upgrading, beautification and celebration of gateways in and out of the CBD.

(City Engineer's Unit 1998 in Iyer Rothaug 2001: 39)

In directing these ideas to certain areas within the CBD, the document suggested "the creation of a major east-west boulevard and spine of pedestrian and public transport-orientated, civic and commercial activity".

In "Durban Central Business District Office Concept Plan", Iyer Rothaug highlighted various positive aspects of the CBD, which needed to be built upon.

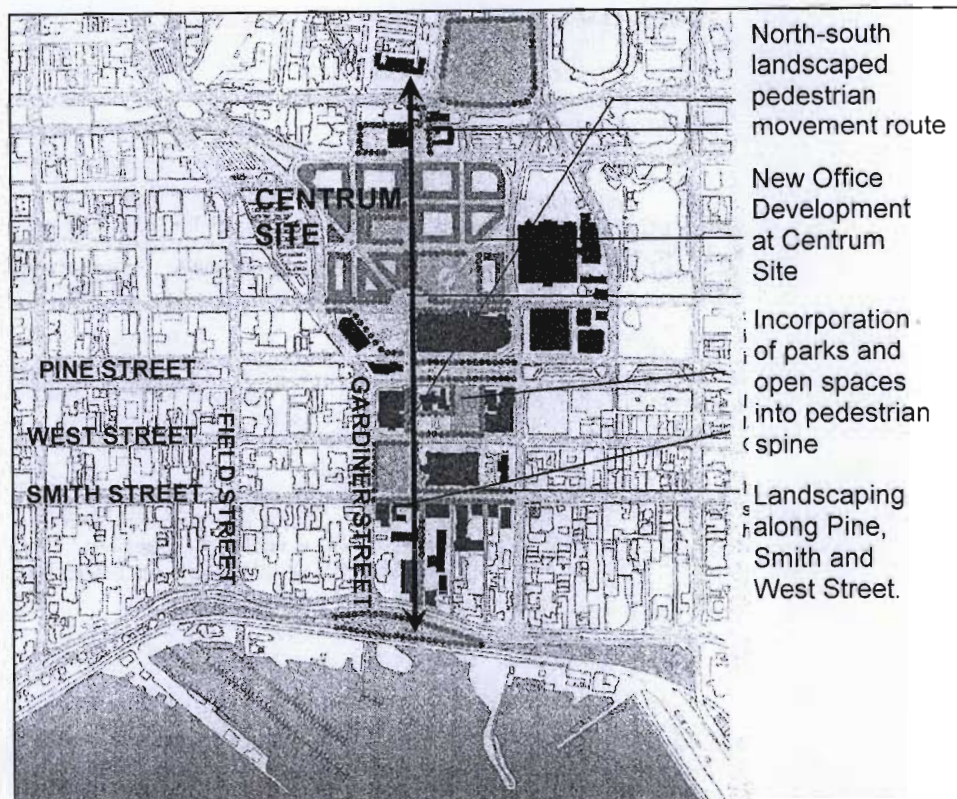
Organisation of street trading within the CBD core commercial zone had resulted in streetscape improvements in the past, and was thus likely to reveal positive results in the future. Furthermore, the establishment of business improvement districts within portions of the Durban CBD had resulted in an example of public-private sector involvement in renewal and management, and delivered a mode which could be replicated within the broader CBD environment.

(Iyer Rothaug 2001: 10)

The key to inner city revitalisation, argued Iyer Rothaug, was to invest in new and well-maintained public infrastructure, so as to encourage private investment:

- Ensure an upgraded public realm through investment in tree-planting, new paving and new pedestrianisation schemes where appropriate.
- Ensure a high level of street and pavement maintenance including street signage.
- Organise street trading in dedicated, well-designed and maintained markets.
- Direct public realm improvements in areas under stress and as a means to promote private investment.

(Iyer Rothaug 2001: 36)



Map 4.4: Iyer Rothaug: Office Concept for the CBD.
(Source Iyer Rothaug 2001: 66)

4.2.3.4 Twin Improvements of Physical Qualities and Management of the CBD

The West Street Renewal Project document outlined the main problems of the CBD, and the solutions which the WSPP was initially intended to provide.

It summarised the main problems and opportunities, emphasising that they arise mainly from problems of urban management.

- The public realm in the Durban CBD (pavement areas, malls, parks and public squares) has been negatively impacted in recent years by a range of poorly-controlled and managed initiatives.
- As a consequence, investment in the CBD is depressed and is exacerbating the deterioration of the city's physical fabric.
- There is dissatisfaction amongst the corporate business and professional service sector in particular.

This was the first publication which highlighted the need for pilot projects in the CBD, intended to address the "myriad of problems encountered along the city streets, including the sidewalk public realm". (City Engineer's Unit 1998: 2) Objectives of the future pilot projects included both physical improvements, such as landscaping, lighting, signage, security surveillance equipment, infra-structural services, street furniture and facilities for street traders; and a new city and street

management system, comprising maintenance, cleansing and policing with a zero tolerance enforcement of the law, by-laws and permit controlled activities such as street trading.

The purpose of the pilot projects was to re-establish an “acceptable level of governance and orderliness in the public realm”. It was implied that if successful, these pilot projects could be used as motivation and benchmarks for further streetscape upgrading along key public routes. (City Engineer’s Unit 1998: 2)

The document comprised various broad aims for the revival of the CBD: changing the perception and reality of the deteriorating CBD; creation of a sustainable and positive environment for investment and work opportunities; revival of the CBD into an attractive, safe, secure, well-managed, clean, secure environment; and the creation of a “living environment.” (City Engineer’s Unit 1998: 3) More specific objectives were listed as: Improved management of informal and formal trading conditions; improved security; improved visual environment; improved movement flows for pedestrians and vehicles; upgraded image; reduced crime; and improved physical maintenance.

4.2.3.5 Improvement to the Transport System

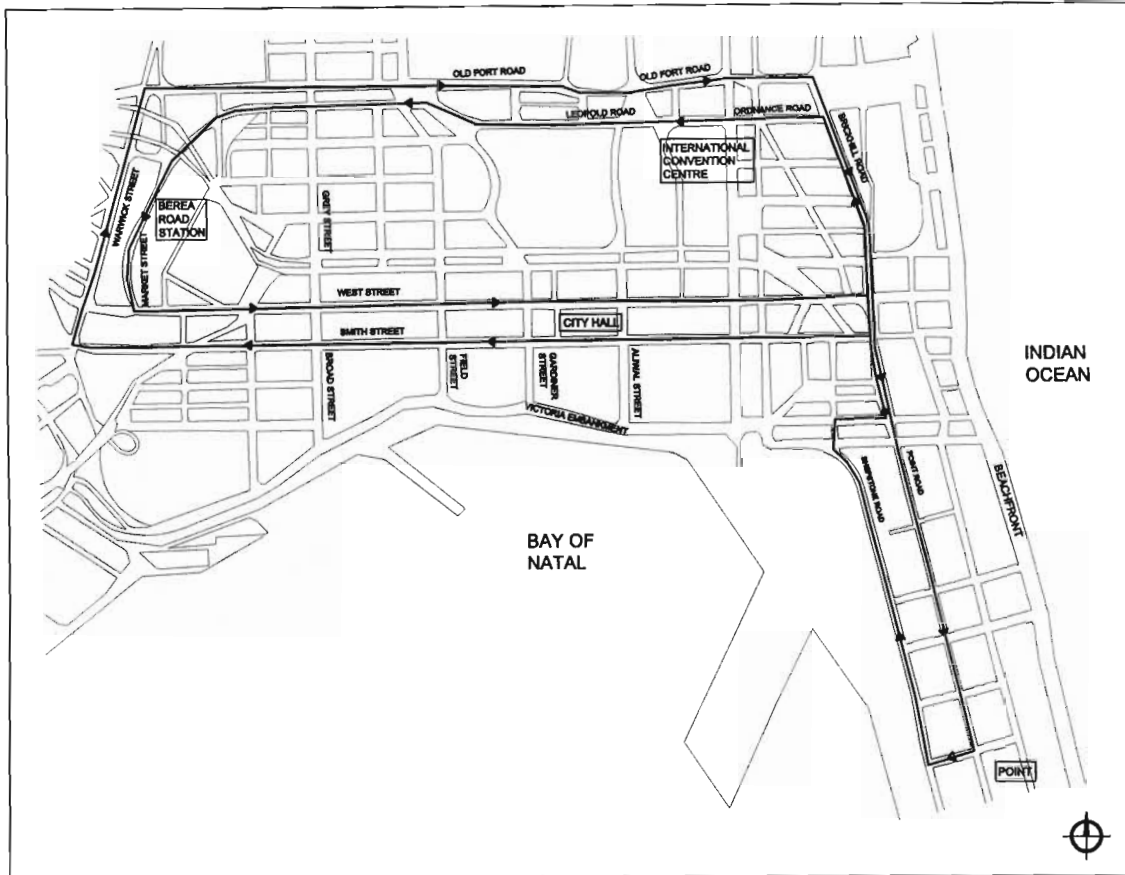
In addition to plans for the physical improvement of the CBD, plans have also been published outlining necessary improvements in the transportation system.

In January 1999, the Inner City Interim Transport Plan for Durban was released by the Durban Metropolitan Transport Advisory Board. It assessed the Durban Inner City transport situation, which included the CBD.

In this document, the opportunities as well as threats, associated with bus public transport are mentioned. It is acknowledged that there is a need to provide measures to prevent congestion of buses on city centre roads.

West Street is proposed for inclusion in a possible bus network in the CBD, linking Berea Road Station, Grey Street precinct, Centrum Site, and the ICC through to the beachfront with supporting routes along Smith Street, West Street and Victoria Embankment. (DBN Metropolitan Transport Advisory Board 1999: 25)

Among the measures of exclusive public transport routes, traffic signal priority measures, re-routing to uncongested streets, localised congestion by-pass measures, is the mention of “bus lanes on city streets”.



Map 4.5: Proposed New Public Transportation Circulatory System for the CBD

“An Investigation into a Public Transport Circulatory System on Smith and West Streets” was prepared by VKE Engineers in 1999. This document included the proposal for the installation of a dedicated public transportation lane on the extreme left-hand side of certain CBD streets. Ideally, parking and loading were to be banned in public transportation lanes throughout the day. A compromise would be to allow parking and loading during certain times of the day. Another possibility investigated included banning loading during the daytime in favour of night-time loading.

It was concluded that an introduction of a public transport circulatory system on Smith and West Streets would be a major benefit for public transport users. (VKE Engineers 1999: 33) Such a system, which would include more stringent enforcement of public transportation by-laws, would certainly be beneficial for the WSPP.

In assessing the WSPP, it is important to note that the proposed dedicated public transportation lane, included in the initial street plan, forms part of a new public transportation system for the CBD, which includes Smith and West Streets. These proposals were included in the initial street plans of the West Street Pilot Project.

4.2.4 The Role of West Street:

According to the various stakeholders in West Street and professionals who were interviewed, the street is of critical importance in the CBD. It is the main retail street of Durban, and connects the entire CBD, from the beachfront to Warwick Junction. It is a major market place of Durban, and has a very important role in terms of public transport vehicle movement.

West Street serves many functions, across its length. Especially from Broad to Gardiner Street, it serves as a retail area, of which informal trade is a definite part. It has always been one of the key shopping streets in the city, and has different segments of shopping along it. Originally, it was a formalised, privileged white shopping street. In recent years the market for these shops has changed to lower income shoppers, but its important role as a shopping street has not changed.

It is a popular shopping destination for people from outlying townships as there are no such shops in those areas. Indeed, West Street is the route along which minibus taxis enter the CBD. It caters for people who use public transport, and any new infrastructure that is provided, needs to focus on public transportation and pedestrian orientation.

Recently, there has also been a distinct increase in the levels of pedestrian usage of West Street. In the CBD, there is a strong pedestrian movement system, which has many patterns to it. It is not only linear, but has a complex arcade system, a system which is unique to Durban. The arcades extend through the blocks from West Street to both Pine Street and Smith Street. It must be noted, however, that West Street is not a through route, for pedestrian movement. Most of the pedestrian activity in West Street is generated by commuters who have entered the area by public transportation, and will exit similarly.

West Street accommodates all of the major retailers and businesses of the CBD. Smith Street and Pine Street are also important, but they have more financial businesses than retail. The two blocks being addressed, from Broad to Field are, according to Nathan Iyer, of Iyer Rothaug Collaborative, "real market place opportunities", as they cater for many people from outlying areas of the city.

The retail types in West Street are extremely varied. (See Map 46: West Street Land Uses, Pg. 42). They include major clothing stores, fast food outlets, supermarkets, furniture stores, department stores, banks and book stores. Of importance to this study is to note that certain retail types generate more pedestrian activity, which causes increased congestion at these points. These stores include Shoprite, as well as most of the major clothing stores. Major arcade entrances cause similar congestion (see Fig. 20 "Before" Study Observations and Fig. 22 "After" Study Observations).

As regards the state of property in the area, West Street is no longer the prime office destination in the city. However there is still prime office space in West Street which, according to Peggy Daly, of the South African Property Owners Association "needs to be maintained because it energises the city".

4.3 Examination of the West Street Pilot Project

4.3.1 Background to the WSPP

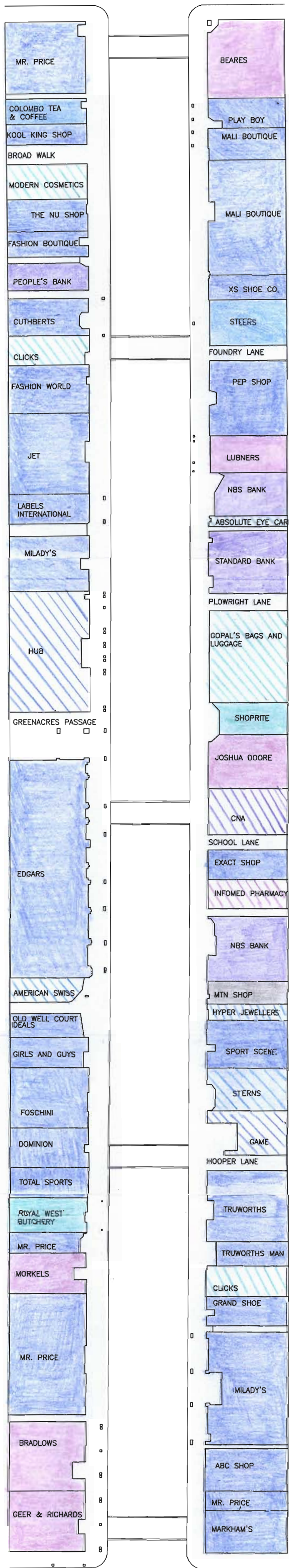
4.3.1.1 Problems in the CBD

In approximately 1995, various departments within the (then) Durban Metro Council realised that the physical fabric of the city was not suitable for its current use. The presence of street trading and informal public transportation systems (mainly minibus-taxis), was acknowledged. The function, and suitability of the public realm, was reassessed, focussing mainly on the sidewalks and road reserves.

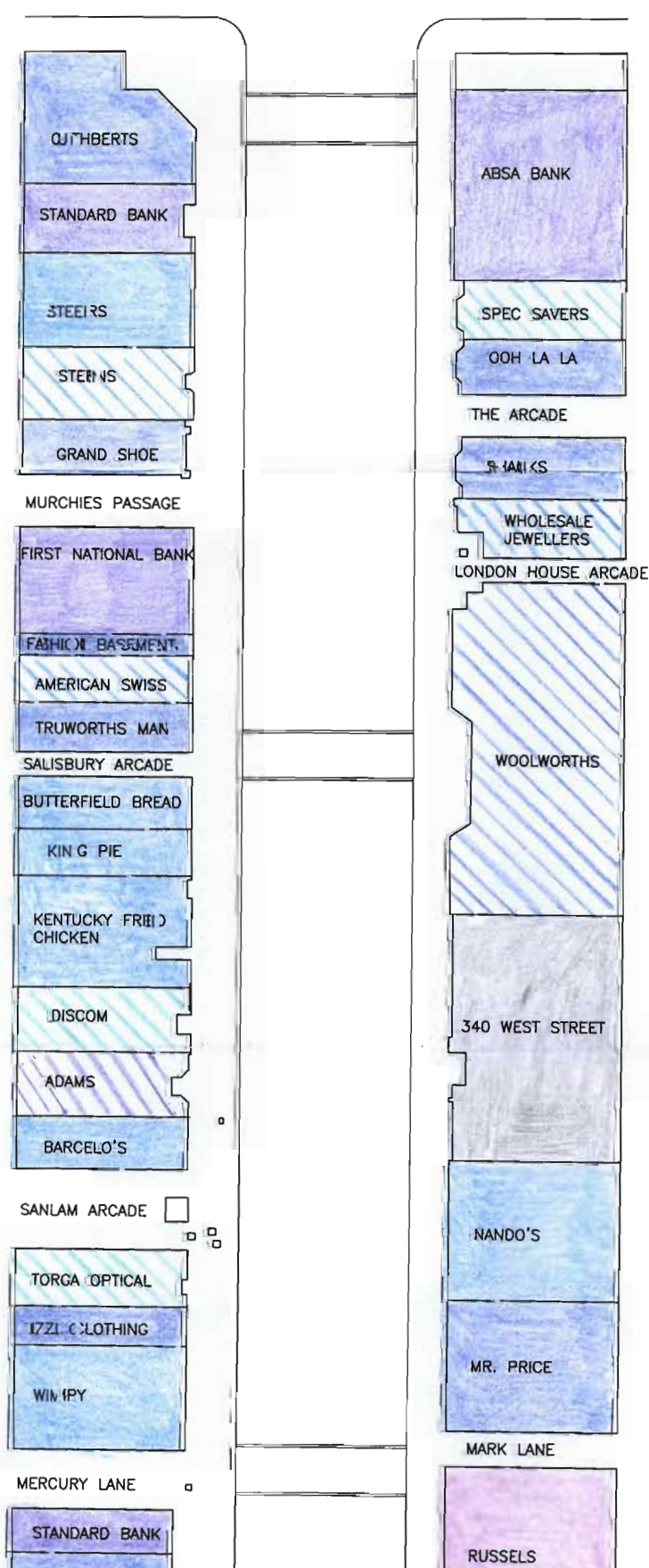
The new activities for which street spaces were being used resulted in several problems: disorganised street trading; double and triple parking as well as random stopping of minibus taxis; and dirty streets, caused by new formal retailers and street traders. In addition, there was a general lack of co-ordination between street furniture elements, which had been introduced incrementally over 4 to 5 years. Generally, there was a lack of visual coherence on many CBD streets.

The problems of physical appearance and order resulted in a poorly-functioning CBD, as recognised in the council-published document "West Street Renewal Project". The document established that the desirability and attractiveness of the CBD as a place to visit and spend time in was directly affected by the condition and quality of the public realm. Furthermore, the deterioration of the CBD public realm was directly responsible for the dissatisfaction of the corporate and professional service sector with the CBD as a place in which to do business.

(City Engineer's Unit 1998: 1)



FIELD STREET



4.3.1.2 Solutions

A study was undertaken by the municipal Department of Informal Trade and the Urban Design Branch in the City Engineer's Department, which investigated ways of better accommodating street traders in the city centre. Subsequently, trading stalls were installed uniformly, in a linear manner along many CBD streets, including the popular West Street. This was the start of a system, which the Metro Council Department of Informal Trade had the responsibility to manage fully. Thereafter it was agreed that any future improvements to CBD streets should take the needs of street traders into consideration.

The trading stalls were designed and arranged in accordance with the following criteria:

1. A clear width of 2m had to be maintained at all points.
 2. Pedestrian crossings were to be kept clear.
 3. Major intersections were to be kept clear
 4. Bus stops and queuing areas were to be kept clear.
 5. Reasonable access to parking meters, loading areas, fire hydrants and telephone booths was to be maintained.
 6. Each site area was to be marked and numbered.
- (Do Rego 1996: 27)

When disorganised street trading and pedestrian congestion on the sidewalks continued, it was decided that a more comprehensive street plan was required. Initially, two pilot areas were decided upon, to implement and evaluate certain street improvement measures: West Street, from Gardiner Street to Field Street; and Grey Street, from Ordinance Street to West Street.

The elements of the proposed plan were:

1. Grouping the physical elements in appropriate locations for activities.
2. Creating a consistent urban environment
3. Arranging traders in such a way that they did not obstruct pedestrian flows, but capitalised on passing traffic.
4. Creating trading nodes, by encroaching slightly on the roadway, to create space for pedestrians.
5. New lighting, planting and colour.

The design approach of the project was intended to identify the needs of all street users and give all street activities a space. It was intended that the plan be used as a management tool, for the daily upkeep and law enforcement in the area. With a physical plan such as this, there would be no debate as to where street traders were or were not allowed to be.

4.3.1.3 West Street Revitalisation as an Extension of the International Convention Centre Refurbishments

At a broader scale, there were other reasons to refurbish West Street. As a result of excess resources from the International Convention Centre (ICC) street refurbishments, there were proposals within the Council for refurbishment in other areas within the CBD. It was the intention of Council that the CBD be revitalised by the ICC, and its accompanying street refurbishments. To extend this revitalisation process further, it was proposed to implement changes to West Street and Grey Street. This proposal was made in 1997.

4.3.1.4 Developments and Obstacles

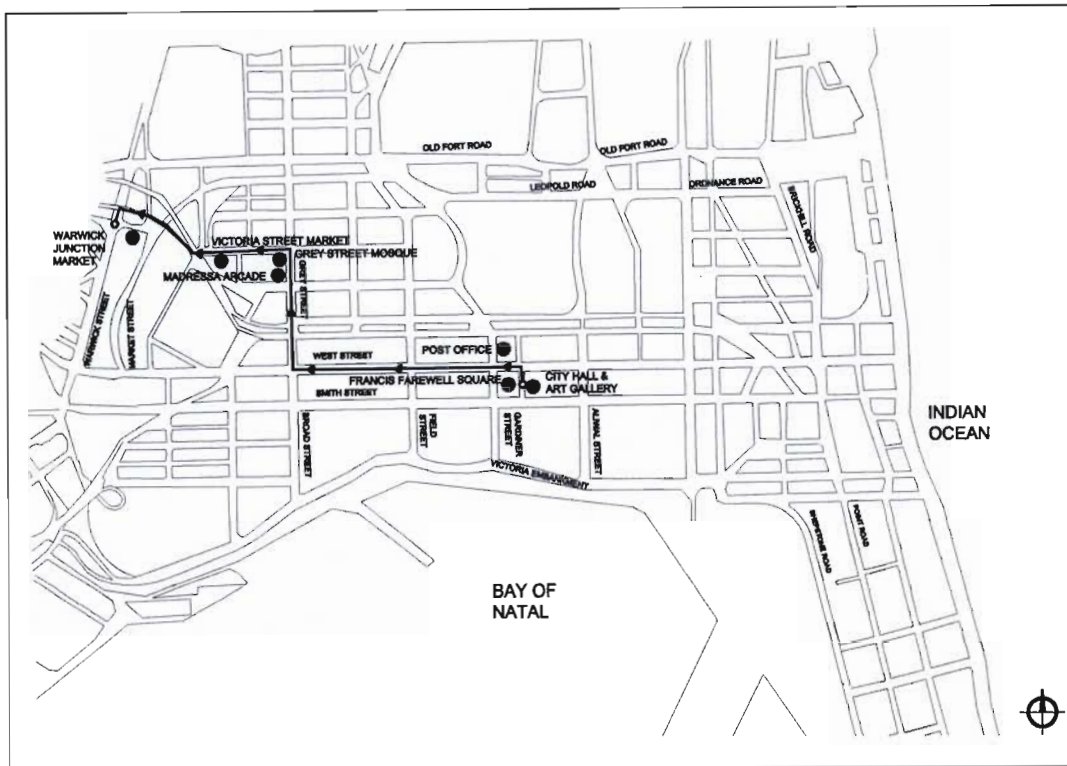
The main objective of the street improvements was to address street trading within the central city area. The new plan for West Street was implemented as the West Street Pilot Project, which would be implemented on a stretch of West Street, evaluated and possibly replicated in other congested areas of the city centre.

The Urban Design Branch of the City Engineer's unit examined various solutions to revive the central city area, looking firstly at the potential of complete pedestrianisation of a certain section of West Street, from Gardiner through to Broad Street. What was finally concluded, was that as opposed to a stretch from Gardiner Street to Broad Street, a shorter section, from Gardiner to Field Street, would be treated as a pilot project. This section was less congested and had fewer colonnaded buildings.

The eventual aim of the project was to extend the street improvements to Grey Street, from West Street to Victoria Street. In this way, the movement of potential tourists could be integrated into a journey from the central civic area, through the central CBD main street (West Street) through to Madressa Arcade, and ultimately to Warwick Junction. (See Map 4.7: Potential Tourist Route).

The project was co-ordinated, and financed, by the Department of Informal Trade. One of the conditions of this department, as the client body, was that the informal traders remain in West Street. The vision of the department was that there would be market places in certain areas of the city, complemented by street traders in high-usage areas.

The first presentation to project stakeholders was made by the City Engineer's Urban Design Branch in conjunction with the architectural Consultants, Interarc, in June 1998.



Map 4.7: Potential Tourist Route

4.3.1.5 Acknowledging the Need for a Street Management System:

One of the major concerns from the Urban Design Branch was that any physical design solution had to be complemented with “zero tolerance enforcement” of municipal by-laws at all levels. This was to occur not only with informal traders, but more holistically with all aspects of the public realm. Without that in place as a goal for the CBD, physical interventions were seen to be futile.

The Development and Planning Services Unit acknowledged the need for by-law enforcement, and stated that they did not want to proceed with any physical solution until such a system was in place. According to the Development and Planning Services Unit, that management system was in place through the iTRUMP programme. However, according to Mr. Derek White of the Urban Design Branch, this programme had limited powers and had not been effectual in developing a comprehensive management system within the central city area.

Once the project finally proceeded, many of the more expensive components had been removed, in order to achieve a budget of approximately R3 million.

4.3.1.6 Design Constraints:

Positioning of elements in the plan itself, were partially determined by the following practical considerations:

- 1) The services underground
- 2) The position of existing street lamps
- 3) Historic locations, where certain street traders had established themselves over many years
- 4) Numbers of street traders
- 5) Existing positions of formal sector shops.

4.3.1.7 Towards Project Stage Two

There have been developments towards the construction of stage two of the WSPP. The main obstacle in the process has been the Municipal Department of Traffic and Transportation Engineering. It was agreed to let a section of phase two proceed, but the construction of nodes was to be restricted to pedestrian crossings.

Currently, there was no intention to develop any further individual trader nodes. The reason for this was that the pilot study was always intended to monitor the necessary management systems. It was intended that before the physical programme started, the management programme would be in place.

4.3.2 The Aims of the West Street Pilot Project

The West Street Pilot Project was originally conceived to develop physical solutions to problems experienced in the public realm, which would facilitate efficient and effective urban management systems, creating a major thrust to energise the revitalisation of the CBD urban environment.

4.3.2.1 Long Term Aims

The aims of the WSPP have been discussed in the Council documents: "West Street Renewal Project" and "A Vision and Strategy for West Street".

The overall aims of the pilot project are to:

- "Change the perception and reality of the deteriorating CBD;
- Create a positive and sustainable environment for investment and work opportunities in the centre of the city.
- Revive the CBD into an attractive, safe, secure, well-managed, accessible, clean and healthy environment.
- Revitalise the city centre by improving investment confidence and instilling pride.
- Create a good living environment

- Achieve a rich, versatile and dynamic balance between the traditional formal activities of the past and the present informal activities.”

(City Engineer's Unit 2002: 1)

The objectives of the WSPP consisted of physical improvements, management plans and promotional strategies.

The physical improvement aspects included establishing and installing facilities for street traders, street furniture and landscaping. The improvements were intended to upgrade the physical environment and image, while simultaneously facilitating healthy conditions.

(City Engineer's Unit 2002: 2)

4.3.2.2 Promotion of Street Management:

A key aspect of the project was the promotion of various street management measures. It was intended that once the physical quality of the public realm had been improved, council and various stakeholders would be more inclined to manage the street in the following ways:

- Improved management of formal and informal trading conditions
- Improved security through observation, controls and reduced clutter
- Improved movement flows for pedestrians and vehicles
- Improved safe links to parking and transport
- Improved physical maintenance
- Implementable and sustainable street cleansing
- Enforcement of council by-laws.

(City Engineer's Unit 2002: 2)

4.3.2.3 Detailed Street Management Program:

The main areas to be affected by the new street management system were informal trade, metro police, pavement and street cleansing, street furniture maintenance, street lighting, landscaping, environmental health, traffic management, security camera surveillance systems and empowerment programmes.

▪ *Informal Trader Management*

Once trading nodes had been installed for the traders, and their physical environment had been improved, this state was to be maintained by the enforcement of trading by-laws and control of itinerant traders. Cleanliness was also of importance in maintaining the new trading environment.

- *Metro Police*

Metro Police were vital for ensuring that street traders did not remain in the same disorganised manner as they were currently. A proper, well-staffed police system in the area could ensure a high level of all by-law enforcement.

- *Pavement/Street Cleansing*

Cleaning of the improved area of West Street was vital to maintaining its new image, as well as to discourage people from littering again.

- *Street Furniture Maintenance*

Investment in the maintenance of street furniture needed to be focussed in areas under the Corridors and Precincts of Excellence Program. The upkeep of street furniture required a greater level of frequency. The WSPP was an important component of this project.

- *Traffic Management*

An improved pedestrian public realm needed to be accompanied by a well-managed traffic system. This could be achieved through: a program to upgrade the signal control system, to be first implemented in the West Street program; an improved level of traffic by-law enforcement in West Street which would reduce congestion in the lanes; and re-laning of West Street.

- *Better Buildings Program*

A strategy and programme was currently being developed to address, together with building owners, the refurbishment of buildings that had been allowed to deteriorate physically.

- *Closed Circuit TV – Security Camera Surveillance System*

To be fully effective, this would need to include surveillance down many of the lanes between West/Pine, and West/Smith Streets. The system would be integrated with the metro police CCTV Programme.

- *Imagery*

The use of coloured mosaic work integrated into the new paving was intended to create a unique image. The ethnic mosaic imagery would establish, in the public realm, a truly East Coast African identity.

- *Empowerment Programs*

It was intended that the introduction of mosaic artwork would be expanded into an empowerment programme, to uplift and develop the

design, technical, contractual and managerial skills of young emerging mosaic artists across the city.

- *Promotion and Maximisation of the Pilot Area*

Once the physical improvements had been made to West Street, it would be appropriate to promote it for use on special occasions and for new functions. Such efforts would further increase the turnover from the area.

On festive occasions, the facilities used for Christmas Decorations in December should be used to display other festive and religious occasions during the year. Shopping hours could be extended to create additional retail opportunities and enhanced vibrancy in the area. There was further potential to close the project area to traffic, and create a Sunday Flea Market in the street, which could be an enlargement of the Centrum Flea Market.

(City Engineer's Unit 2002: 6)

4.3.3 Detailed Aims as Expressed by the City Engineer's Unit Urban Design Branch

An interview was conducted with Mr. Derek White of the Ethekwini Municipality City Engineer's Unit Urban Design Branch, who was the project manager of the WSPP. More detailed aims of the design, not highlighted in the documentation, were explained in this interview.

The overall aim of the WSPP was to try to create a new pedestrian environment, an atmosphere of a pedestrian place, rather than a main traffic thoroughfare. In doing so, an attempt was made to achieve more public movement space on the sidewalks, and visually acknowledge the pedestrian crossing areas. A further attempt was made to try to "break up the road visually" into a system of components, rather than simply a single road along a linear city block.

With regard to street trading nodes, the aim was to create a simple design that was robust. There were certain detailed proposals made to improve the quality, appearance and aesthetics of the area. The Urban Design Branch examined the possibility of installing a new lighting system, which would enable the extension of shopping hours. At times on the weekends, the street could be closed off, and from the lighting structures, a street covering could be attached. West Street could thus be transformed into an open flea market. With new materials as had been introduced, the street would appear more as an open public pedestrian realm than a vehicular traffic thoroughfare.

Part of an earlier alternative scheme for West Street was a widening of the entire sidewalk area of the narrow, congested northern sidewalk, while reducing the width of the southern side. This plan would improve trading conditions notably for the many traders who used this street, as

well as for the numerous pedestrians. The pedestrian movement on the northern side was generated by the off-loading of buses and taxis, as well as the arcade links from the northern sidewalk to Pine Street and Commercial Road, which are the major feeder roads for pedestrians. In comparison, the wider southern sidewalk was under-utilised by both street traders and pedestrians. However, this proposal was rejected for budgetary reasons.

Consequently, as part of the implemented scheme, some of the traders needed to be relocated from the northern sidewalk to the less congested southern one.

4.3.4 Detailed Description of the West Street Pilot Project

The West Street Pilot Project comprised a number of physical measures to improve the public realm of the block of West Street: Broad to Gardiner Street. The envisioned Phase Two of the project proposed similar measures. (See Map 4.8: West Street Pilot Project Phase 1 & 2 Street Plan)

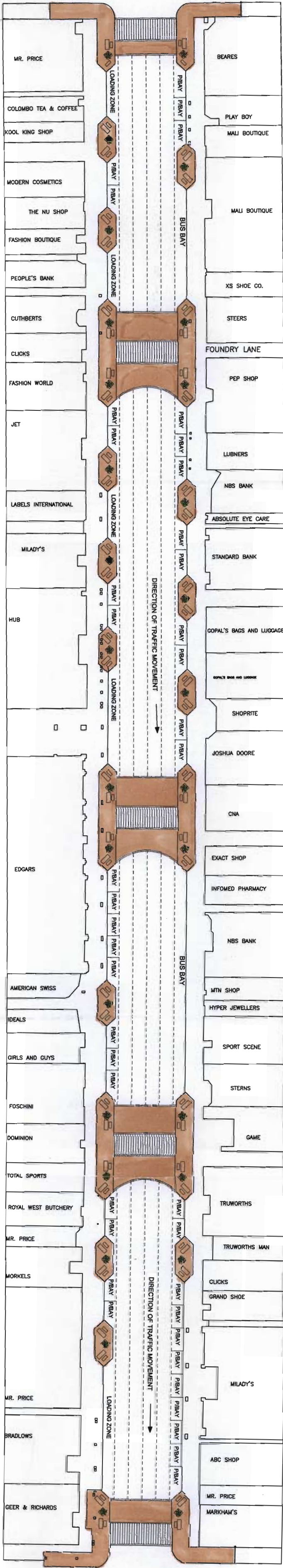
The main physical measures were:

1. Trading Nodes

Both the northern and southern sidewalk was widened at certain points, to form nibs which protruded into the roadway. (See Map 4.8: West Street Pilot Project Phase 1 & 2 Street Plan, and Figure 4.2: Plan of a Typical Node) These nibs were designed as "trading nodes" to be used by registered street traders. In this way, the street traders occupied a new space outside of the pedestrian thoroughfare.

BROAD STREET

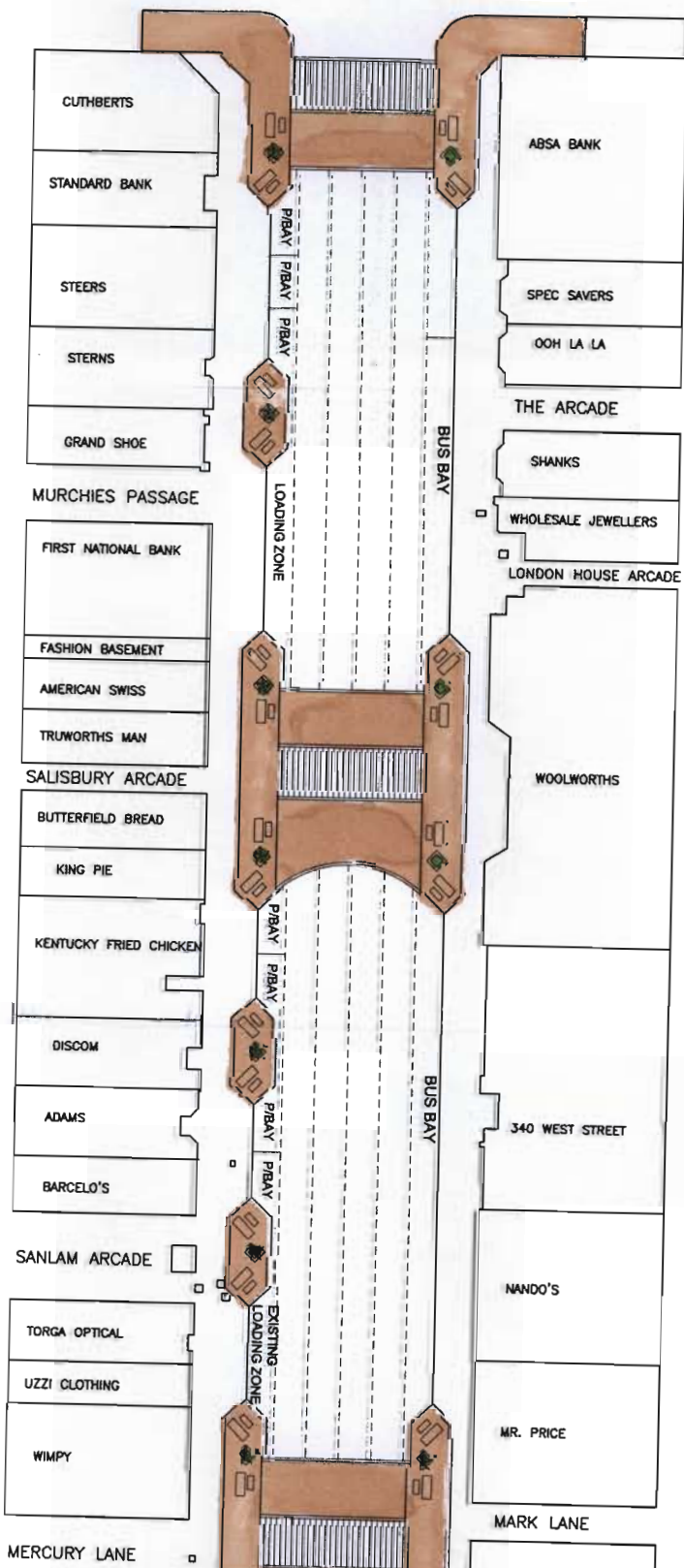
DIRECTION OF TRAFFIC MOVEMENT



PROPOSED WEST STREET PILOT PROJECT PHASE 2

FIELD STREET

DIRECTION OF TRAFFIC MOVEMENT



WEST STREET PILOT PROJECT PHASE 1
(IMPLEMENTED MAY - DECEMBER 2002)

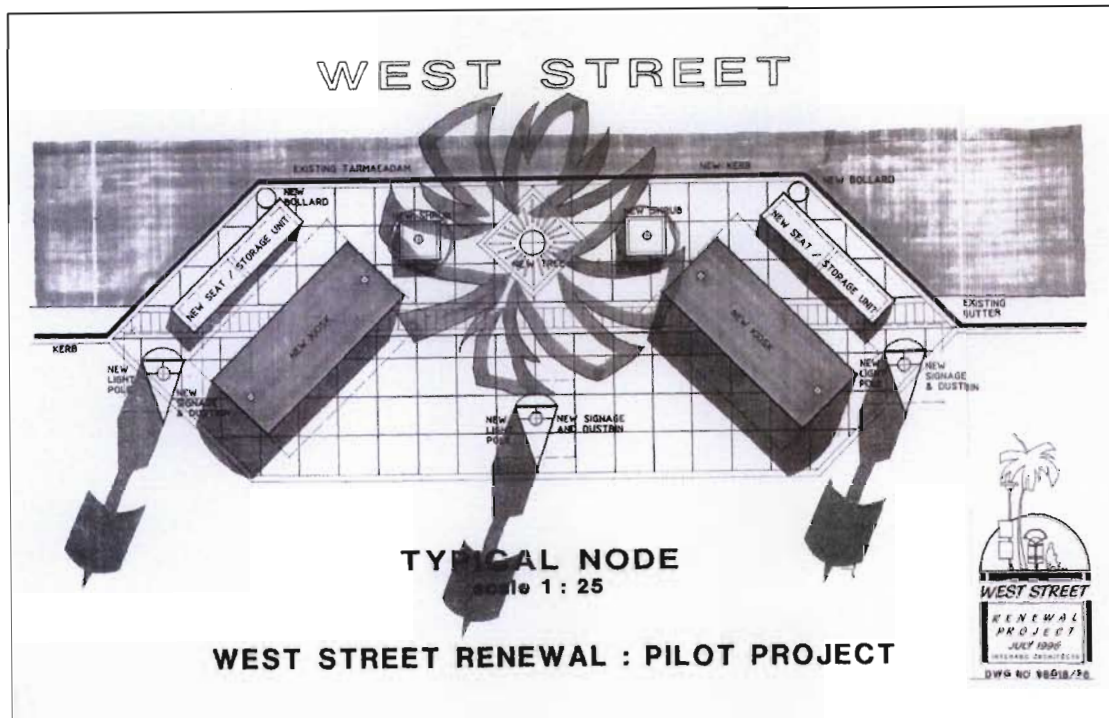


Figure 4.2: Plan of a Typical Node, as designed by Interarc architects.

As part of the detailed design of each trader node, the following elements were added:

1.1 Trading tables

Large, new concrete trading tables were provided with seats. The tables were arranged at an angle to the line of pedestrian movement, so as to create a space for people to stop and examine goods without causing obstruction. (See Figure 4.2 and Plate 4.1)



Plate 4.1: Trading Nodes

Occupied outside Russells, Field-Gardiner Block, northern sidewalk (left); and unoccupied outside First National Bank, Field-Gardiner Block, southern sidewalk (Right).

1.2 Planting

New palms were provided at each trading node, to further improve the aesthetic appeal of the street.

1.3 Mosaics

Colourful mosaics were inlaid around the edges of all paved trading nodes, on all trading benches, bollards and planting boxes. This improved the aesthetic quality of the street. (See Plate 4.2)



Plate 4.2: Mosaics

In paving, on planters and on bollards (northern and southern sidewalks).

2. Redesign of Pedestrian Crossings

All four pedestrian crossings were repaved and resurfaced. The waiting area on the sidewalk for pedestrians entering the pedestrian crossing were repaved and enclosed with bollards. The road surface on either side of the pedestrian crossing was resurfaced. An especially large area had been resurfaced on the side opposite to that of oncoming traffic. This had been done to accommodate pedestrians who jay-walk.

3. Bus and Mini-Bus Loading Bays

The entire road space between trading nodes along the northern sidewalk was allocated to bus and mini-bus taxi loading bays. All

parking spaces were removed. Along the southern sidewalk, the existing combination of parking bays and loading zones was retained.

4. Public Transportation Lane

The initial proposal for West Street included re-laning the street to provide for one additional lane on the extreme left, adjacent to the loading bays. This lane was to be known as a “dedicated public transportation lane” and be used exclusively for buses and mini-bus taxis. Such a system would better organise vehicular movement, as public transportation vehicles would be able to enter and exit the loading bays unobstructed by other vehicles. Additionally, there would be no conflict between private vehicles entering and exiting parking places, and public transportation vehicles.

Such a system was not initially implemented, as its success depended on traffic by-law enforcement, which was currently absent.

Chapter 5

CASE STUDY EVALUATION

5.1 Introduction

One of the aims of this study, entitled “Appropriate Intervention to Revitalise the Durban CBD hard core: A Physical Design Perspective”, is to evaluate the West Street Pilot Project in terms of its ability to improve the physical conditions of the identified area for its users.

The main thrust of the study is to evaluate the physical design measures implemented in the block of West Street, from Gardiner to Field Street, as described in Chapter 4. This is achieved by assessing the immediate impacts as well as the perceived future affects of the scheme.

The immediate impacts of the project are evaluated by means of an observation of West Street carried out personally by the author.

The future affects of the scheme are evaluated by exploring the views of two groups: stakeholders involved in the WSPP; and professionals who were involved in the project implementation or who have studied or observed the project at an academic/conceptual level.

A smaller part of the evaluation of future affects of the WSPP, involves an examination of the management plan for the Durban city centre. This will determine the ability of the WSPP to create a sustainable improvement. Additionally, the long term impacts of the street design will be evaluated by identifying the presence or absence of attributes of successful city revitalisation schemes explored in Chapter 3. Furthermore, the WSPP will be evaluated in terms of its level of response to the specific needs of the Durban CBD, as explored in Chapter 4.

The evaluation is thus divided into two parts: “Immediate Physical Impacts of the WSPP”, and “Perceived Future Impacts of the WSPP”.

The evaluation is structured in the following way:

5.2 Criteria for Evaluation

5.3 Evaluation Methodology

5.4 Part A: Evaluation of the Immediate Physical Impacts of the WSPP

5.5 Part B: Evaluation of the Perceived Future Impacts of the WSPP

5.2 Criteria for Evaluation

The following is a list of criteria used to carry out Part A and Part B of the WSPP evaluation.

Part A: Immediate Physical Impacts of the WSPP

1. Pedestrian and Vehicular Movement
 - The ability of the WSPP to solve spatial problems of pedestrian and vehicular movement, and street trader organisation, as observed and assessed by the author.
2. Street User Behaviour
 - The ability of the WSPP to change the behaviour of street traders, pedestrians and motorists towards the public realm, as observed and assessed by the author.
3. Aesthetics
 - The degree to which the WSPP has physically improved the public realm, as observed and assessed by the author.

Part B: Perceived Future Impacts of the WSPP

4. Stakeholder Approval
 - The approval of, and support for, the WSPP by the public and private stakeholders concerned, as assessed from stakeholder interviews.
5. Professional Approval
 - The approval of, and support for, the WSPP by the architects who designed it, the Urban Design Branch (of the Department of Drainage and Coastal Engineering, of the Ethekwini Municipality City Engineers Unit) who managed its implementation, professional urban designers who observed it, and professionals experienced in dealing with street traders, as assessed from interviews.
6. Management Capacity
 - The degree to which the current management plan for the area of West Street will aid and facilitate the successful management of the street, and maintain the improvements which the WSPP has achieved, as assessed from an interview and an examination of the iTRUMP Skeleton Business Plan.
7. Attributes of Successful Revitalisation
 - The degree to which the WSPP reflects key attributes of successful city centre revitalisation, as examined in literature and precedent examples in Chapter 3.

8. The Needs of the Durban CBD

- The degree to which the WSPP has responded to the specific problems of Durban, as discussed in Chapter 4: Case Study Introduction.

5.3 Evaluation Methodology

5.3.1 Part A: IMMEDIATE PHYSICAL IMPACTS OF THE WSPP

Part A evaluates the impacts of the WSPP in terms of the criteria “Pedestrian and Vehicular Movement”, “Street User Behaviour” and “Aesthetics”. The impacts of the WSPP were assessed by comparing conditions on an adjacent block of West Street (from Field to Broad Street) with conditions at the site of the WSPP.

Observations of the unaffected block of West Street (Field to Broad Street) were made on Saturday 30 November 2002 between 11:00 and 14:30.

Observations of the WSPP block of West Street (Gardiner to Field Street) were made on Saturday the 14th between 11:00 and 13:00 and 21st of December 2002, between 11:00 and 13:00.

Before making the observations, maps of the area, including the current land-uses along the concerned stretch of West Street, were obtained from the Urban Design Branch of the Ethekwini Municipality City Engineer’s Department. Photographs were taken to help with the detailed observation of certain street conditions.

In both observations, the sites were examined for the following:

1. Points of Pedestrian conflict with one another;
2. Points of Pedestrian/informal trader conflict.
3. Points of public transportation/ private vehicle conflict
4. Points of formal retail/informal trade conflict
5. Points of pedestrian/vehicle conflict

Additionally, detailed observations were made of street traders, formal retailers, pedestrians, and different forms of traffic, to discover the effects that their activities had on the street space.

The survey of the WSPP area involved an observation of the new trading nodes, paved pedestrian crossings and the overall quality of the public realm. It was noted what affect these new physical elements had on the behaviour of various street users.

By comparing the observations of the treated and untreated block of West Street, an assessment of the immediate affect of the WSPP was made.

5.3.2 Part B: PERCEIVED FUTURE IMPACTS OF THE WSPP

Individual evaluations were made for each of the listed criteria. Information was obtained through: interviews with public stakeholders, interviews with professionals; an examination and assessment of the accompanying urban management plan; and an examination of precedent, identifying the presence or absence of recognised attributes of successful revitalisation projects within the WSPP.

Below is a list of actions taken to carry out evaluation Part B:

5.3.2.1 Stakeholder Interviews

Open-ended interviews were conducted with the following stakeholder representatives, with the aim of evaluating the WSPP in terms of the criterion "Stakeholder Satisfaction". All stakeholders had been part of discussions and meetings leading up to the WSPP implementation, and represented those who the WSPP was intended to serve. The representatives of these stakeholders had experience in dealing with street traders, business-owners and property owners respectively, and were able to judge whether or not the WSPP would improve the lot of their represented stakeholder.

The respondents, represented organisations and dates and times of interviews were:

- Mr. Patrick Mahlangu
The Informal Traders Management Board
22 November 2002 14:00 – 14:45
- The Durban Chamber of Commerce and Industry
Mr. Neels Nothnagel
18 November 2002 10:30 – 11:20
- Ms. Peggy Daly
The South African Property Owners Association (SAPOA)
21 November 2002 10:00 – 11:10
- Mr. Logan Moodley
The Ethekewini Municipality Department of Traffic and Transportation Engineering.
14 November 2002 09:00 – 09:45

5.3.2.2 "Professional" Interviews

Open-ended interviews were conducted with professionals in the fields of architecture, urban planning and design, and traffic and transportation engineering. One respondent, Mr. Dobson, had extensive experience in dealing with street traders in the context of Durban. All professionals interviewed had either been involved with

the planning, design and implementation of the project, or had observed it. They had a professional understanding of the problems of Durban, West Street, and street trading in the South African context.

Professionals interviewed who were involved in the planning, design or implementation of the WSPP, were:

- Mr. Derek White
The Ethekwini Municipality City Engineer's Unit, Department of Drainage and Coastal Engineering, Urban Design Branch
20 November 2002 07:00 – 07:45
25 November 2002 07:00 – 8:15
- Mr. John Frost
Interarc Architects (former)
19 December 2002 11:00 – 12:00
23 December 2002 11:00 – 12:00
- Mr. Ahmed Seedat
Seedat & Seedat Architects
22 November 2002 09:00 – 10:00

Professionals interviewed who were not involved in the planning, design or implementation of the WSPP, were:

- Mr. Richard Dobson
ITRUMP Steering Committee
2 December 2002 16:30 – 17:20
- Mr. Nathan Iyer, Town and Regional Planner
Iyer Rothaug Collaborative
29 November 2002 14:00 – 15:00
- Mr. Tony Markewicz, Town and Regional Planner and Urban Designer
Urban Explorations
25 November 2002 16:00 – 16:30

5.3.2.3 Management Assessment

The Management Assessment was carried out in order to evaluate the WSPP in terms of the criterion “Management Capacity”.

The study comprised 2 parts:

- Examination of the current plan for the management of the Inner Thekwini area entitled “Skeleton Business Plan – Report prepared for the iTRUMP Area”
- Interview with Mr. Richard Dobson, programme leader of the Inner Thekwini Renewal and Urban Management Programme (iTRUMP). The questions for this evaluation were posed as part of the interview listed in “Professional Interviews’ above.

5.3.2.4 Assessment of Design Attributes

The Assessment of Design Attributes was carried out in order to evaluate the WSPP in terms of the criterion “Attributes of Successful Revitalisation”.

This assessment comprised 3 parts:

- Identification of the important attributes of successful city centre revitalisation in precedent examples.
- Identification of the important attributes of successful city centre revitalisation in the literature of pedestrianisation and traffic calming.
- Assessment of whether or not the WSPP incorporated these attributes.

5.4 PART A: EVALUATION OF THE IMMEDIATE PHYSICAL IMPACTS OF THE WSPP

5.4.1 INTRODUCTION AND CONSTRAINTS

The evaluation was carried out as a “before and after” study of conditions in West Street. Both the “before” and “after” studies were made on a Saturday morning, on the last weekend of November, and in the middle of the December festive season. These times were predicted to show the highest number of street users, and would display user behaviour and points of conflict most clearly.

Due to the fact that the upgrading of the Gardiner Street - Field Street Block of West Street was underway at the time of this study, the unaffected block of Field Street – Gardiner Street was used for the “before” study. This block differs from the upgraded block in its higher level of pedestrian and vehicle congestion, greater number of unregulated informal traders, and higher concentration of major food and clothing stores. The different characteristics of this block have been taken into consideration in the findings and conclusions of the evaluation.

5.4.2 REPORT OF FINDINGS

The following is a summary of the key findings of both the “Before” and “After” site observations. The Site observation methodology can be found in Appendix A: Site Observation Methodology (Page 105). For a detailed report of the site observation findings, refer to Appendix B: Site Observation Details (Page 109).

5.4.2.1 “Before” Study – Summary of Main Problems

The purpose of the “Before” Study site observation was to identify problems in the public space of West Street, which needed to be addressed in order to enhance its quality. From the observations, certain problems of street user behaviour and street space appeared to be greater than others. These have been illustrated in Plate 5.1 “Before” Study: Summary of the Main Problems. The location and pattern of different observed problems, are indicated in Map 5.1: “Before” Study Observations.

The main problems, worthy of attention, were:

- 1) Conflict between pedestrians:
 - moving in different directions at shop and arcade entrances, pedestrian crossings and street corners, causing lateral collisions;
 - moving in opposite directions at random points along the sidewalk, causing head-on collisions
 - Moving in the same direction at random points along the sidewalk, causing collisions as they attempted to pass one another.
- 2) Pedestrian jay-walking: crossing the street at random points. It occurred mainly in line with major clothing stores, both before and after the marked crossing.
- 3) Problems of pedestrian movement caused by street furniture – mainly benches at bus stops.
- 4) Problems of pedestrian movement at mid-block pedestrian crossings, as well as corner crossings, caused by mini-bus taxis stopping inside the crossing areas.
- 5) Problems of congestion caused by the arrangement of particular retail types, such as major food and clothing outlets, or arcade entrances.
- 6) Problems of sidewalk congestion caused by unregulated street traders, at arcade entrances, street corners or typical sidewalk sections
- 7) Traders extending their trading space beyond the limits of their stalls, with extra tables, boxes or seats.
- 8) Traffic problems, of minibus-taxis and buses, which stopped in the left-hand lane to drop off passengers, blocking traffic in this lane.

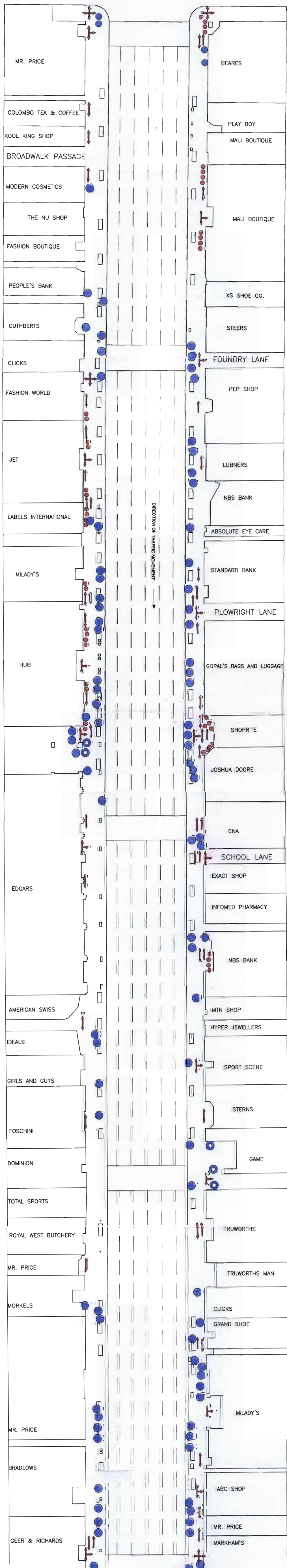
- 9) Traffic problems, of private vehicles stopped in the right-hand lane for customer run-ins. The lane was occupied continuously by stationary vehicles, rendering it useless for moving traffic.
- 10) Problems of aesthetics – street furniture was uncoordinated and in bad condition.
- 11) Cleanliness – extensive litter was caused by a range of street users – pedestrians, street traders and formal retailers.



Plate 5.1 "Before" Study: Summary of the Main Problems

A. Congestion at the entrance to Plowright Lane, B. Mini-bus taxis stopping inside pedestrian crossings, C. Pedestrian Congestion outside Jet, D. Congestion and uncontrolled street trading at the Broad Street Corner, E. Buses stopping in the left hand lane, obstructing traffic, F. Vehicles stopped in the right hand traffic lane.

BROAD STREET



5.4.2.2 "After" Study – Assessment of "Solutions" provided by the WSPP

The "solution" offered by the WSPP solved certain of the main identified problems, but did not change others. The location and pattern of different observed problems are indicated in Map 5.2: "After" Study Observations.

The findings are summarised as follows:

- 1) Conflict between pedestrians moving in different directions along the sidewalk
 - No improvement was made to the state of pedestrian congestion and collisions at shop and arcade entrances. However, congestion at pedestrian crossings, where all types of movement collision were recorded, was reduced significantly.
 - There was an improvement made to the number of conflicts of linear movement along the sidewalk. Collisions between pedestrians passing one another in the same direction, or those moving in opposite directions, were recorded, but were not as frequent as before. Although there were many pedestrians moving along the sidewalk, they moved relatively freely and steadily, without having to stop at points of severe congestion.
 - The state of congestion and lateral collisions noticed at all street corners did not improve.
- 2) Pedestrian Jay-Walking
 - Pedestrian jay-walking did not change with the newly paved pedestrian crossings. It occurred as it had before, with people crossing regularly in line with major clothing stores, regardless of whether a crossing was marked or not.
- 3) Sidewalk Congestion Caused by Unregulated Street Traders
(See Plate 5.2 "After Study": Sidewalk Congestion)
 - Along the entire northern sidewalk, illegal street traders were still positioned after the creation of the trading nodes. They contributed noticeably to a narrowing of movement space, and increased pedestrian congestion.
 - The number of street traders at arcade entrances, and the amount of congestion caused by them, was reduced in the block of the WSPP. This could be partly attributed to the larger pedestrian flow along the Broad Street-Field Street Block.
 - There were many illegal street traders stationed at all street corners, except on the southern sidewalk at the Gardiner Street intersection. They caused considerable congestion and narrowing of the pedestrian thoroughfare.

MAP 5.2
"After" Study Observations
Field Street to Gardiner Street

LEGEND

- Collisions caused by pedestrians trying to pass each other in the same direction
- Collisions caused by pedestrians trying to pass each other in opposite directions
- Collisions caused by pedestrians trying to pass each other at right angles (such as shop and arcade entrances)
- Collisions caused by pedestrians trying to pass each other at right angles in both directions (such as at street corners)
- Unregistered, illegal street traders
- Standing street traders (without a stall, holding goods or handing out flyers)
- Stationary pedestrians
- Street trader goods extended beyond the permissible display area



SCALE 1:500

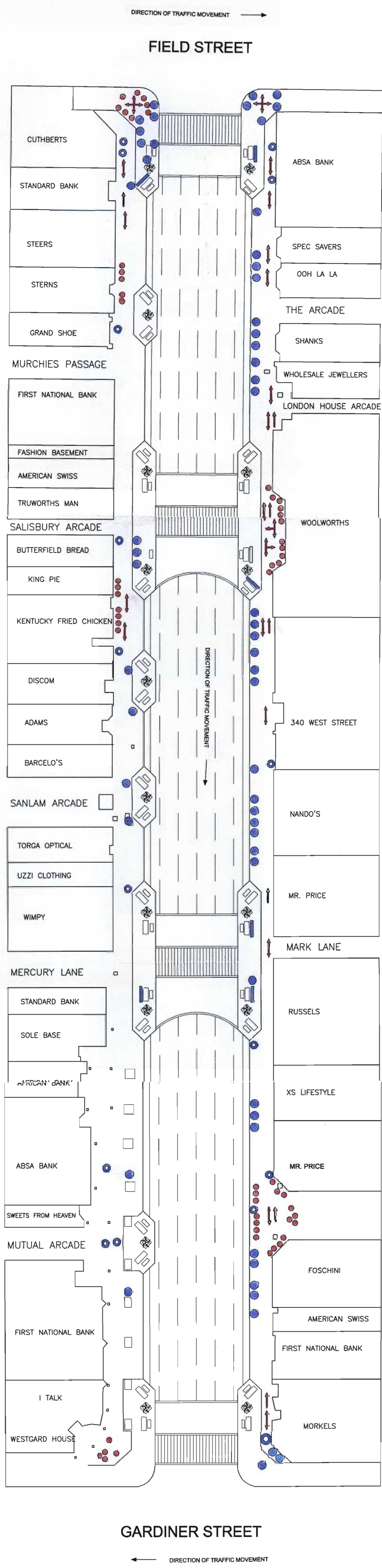




Plate 5.2 "After" Study: Sidewalk Congestion

A. Congestion outside Woolworths, B. Unregistered street traders remain on new Trading Nodes
C. Pedestrian congestion and unregistered street traders outside Chicken Licken D. Unregistered street traders remain outside 340 West Street.

4) Problems of Pedestrian Movement Caused by Street Furniture

- Large street furniture such as benches at bus stops, occupied much space on the sidewalk, and added to the state of pedestrian congestion existing on the street. This was not addressed in the WSPP, and the problem persists.

5) Problems of Pedestrian Movement at Crossings, Caused by Motor Vehicles

(See Plate 5.3 "After" Study: Motorist Behaviour at Pedestrian Crossings)

- Problems of pedestrian movement at both corner and mid-block street crossings were caused by minibus taxis and private vehicles which stopped inside the crossing area, obstructing pedestrian flow. This problem was not solved by the WSPP, and persisted.

6) Problems of Street Trader Behaviour

(See Plate 5.4 "After" Study: Street Trader Behaviour)

- Although new trading tables and benches had been provided in well-landscaped surroundings, this had not improved the behaviour of street traders. They continued to extend their

trading space with additional tables, boxes, as well as displays on the ground. In addition, unregistered illegal traders had set up informal stalls in the nodes, between the registered trading tables.



Plate 5.3 "After" Study: Motorist Behaviour at Pedestrian Crossings
Both private and public transportation vehicles continued to stop inside pedestrian crossings, obstructing pedestrian movement.



Plate 5.4 "After" Study: Street Trader Behaviour
Street traders continued to extend their trading space beyond their permissible stalls

- 7) Problems of Congestion Caused by Particular Retail Activities
(See Plate 5.5 "After" Study: Congestion caused by certain retail types)
 - In both blocks of West Street studied, certain retail activities caused conditions of particular congestion. In the WSPP section, the pedestrian activity was intensified further, where the store entrance was located opposite, or adjacent to an arcade entrance or pedestrian crossing. These areas were not addressed at all in the design of the WSPP, and congestion at these points remains.
- 8) Problems of Traffic Movement:
(See Plate 5.6 "After" Study: Motorist Behaviour)
 - The problem of buses and mini-bus taxis occupying the left-hand lane was not resolved by the plan for the WSPP. Although loading bays were provided between the nodes along

the northern sidewalk, the left hand lane was still used by buses and minibus-taxis for off-loading passengers.

- Similarly, private vehicles continued to use the right-hand lane for customer run-ins. The problem of loading was not resolved by the WSPP street plan.



Plate 5.5 "After" Study: Congestion caused by certain retail types

Despite moving street traders to trading nodes, congestion remained outside Woolworths

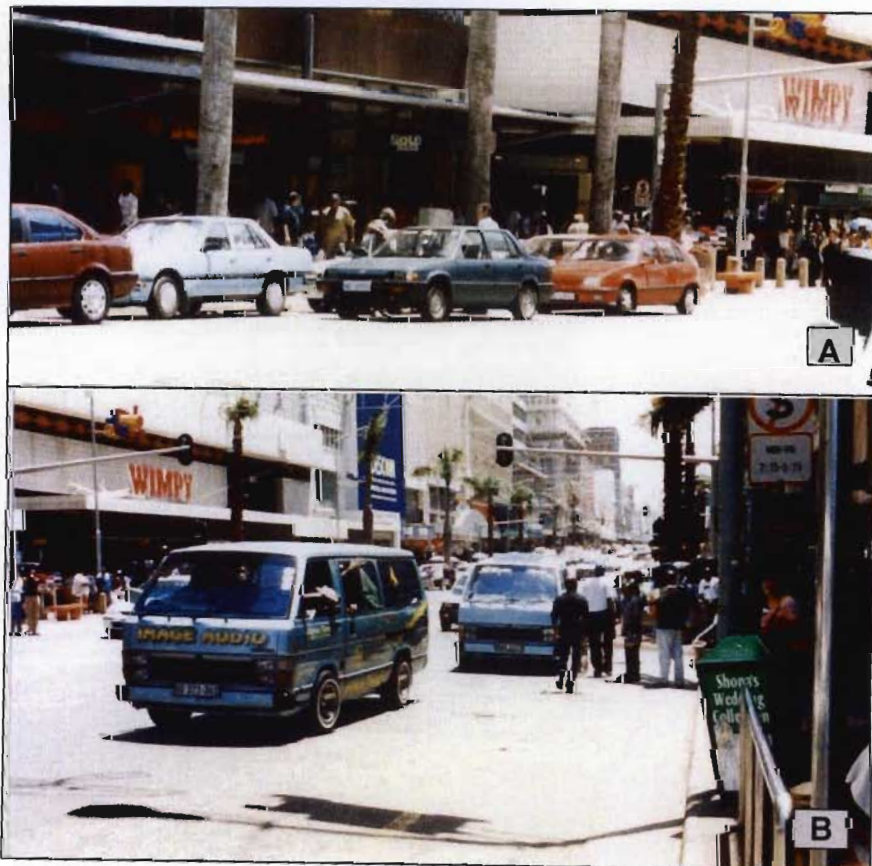


Plate 5.6 "After" Study: Motorist Behaviour

A. Vehicles continued to stop in the right-hand travelling lane, B. Mini-bus taxis continued to stop inside the left-hand travelling lane.

9) Problems of Aesthetics

(See Plate 5.7 "After" Study: Street Aesthetics)

- The problem of refuse disposal had not improved – there was as much litter on the street as before the project implementation.
- The overall image of the street had certainly improved. Old steel trading tables had been replaced with newer concrete tables; mosaics had been inlaid on all planters, trading nodes and bollards. New trees had been planted, and the overall image of the street had improved.



Plate 5.7 "After" Study: Street Aesthetics

Measures to improve street aesthetics included new planters, new palms, and mosaics on planters, bollards, and in trading node paving.

10) Other Aspects of the Trading Nodes

(See Plate 5.8 "After" Study: Effects of the Trading Nodes)

- Although there were many people walking along the sidewalk, they moved freely, with few or no collisions or points of congestion.
- The newly paved trading nodes had not influenced street trader behaviour. In fact, more unregistered traders had taken up positions in the nodes, between trading tables. Additionally, certain trading nodes had not been used because of their poor location, such as near the southern corner of Gardiner and West Street.
- The newly-paved pedestrian crossings had not influenced the way that pedestrians crossed the street. They continued to wait inside the traffic lanes.



Plate 5.8 "After" Study: Effects of the Trading Nodes

A, B. Despite an improved sidewalk, with a demarcated waiting area, pedestrians continue to wait inside the traffic lanes when crossing the street. C, D. Unregistered street traders continue to trade along the sidewalk, and have taken up positions inside the new trading nodes. E. Newly decorated planters are used as storage by newspaper vendors. F. Pedestrian movement has eased along the busy northern sidewalk.

11) Overall Performance

- The trading nodes certainly had a positive effect on pedestrian movement along the concerned block of West Street. This was achieved by moving street traders out of the pedestrian thoroughfare, as well as angling the trading tables away from the line of pedestrian movement, so as to provide more space for customers to congregate (See Figure 4.9 Plan of a Typical Node, Pg. 50)

- The aesthetic appearance of the area had improved, with coloured mosaics, new paving, landscaping and trees.
- The WSPP had given more priority to the pedestrian, by increasing the road space allocated for their use, and narrowing the roadway at pedestrian crossings. This, as well as a visually improved urban environment, made the block of West Street a more pleasant place for the pedestrian.
- However, the WSPP had no affect on the location of unregistered, illegal street traders, on the state of litter generated by the street traders, nor on the way in which pedestrians and motorists relate to their urban environment. Pedestrians and motorists still did not obey traffic regulations; motorists stopped randomly in traffic lanes; pedestrians crossed the road at random points.

5.4.2.3 Conclusions – Response to the Criteria

With regard to the three criteria for evaluation, the WSPP performed to varying degrees of success. With regard to the criterion “Pedestrian and Vehicular Movement”, the WSPP performed well. Fewer pedestrian collisions were noticed. It did not, however, improve the state of vehicular congestion.

With regard to the criterion “Street user behaviour”, the WSPP performed poorly. Pedestrians continued to jay-walk randomly; those pedestrians who were waiting to cross the street did so in the traffic lanes; mini-bus taxis and buses used the two left lanes for stopping to drop off passengers; mini-bus taxis stopped inside the pedestrian crossings, blocking pedestrian movement; street traders extended their display space beyond their allowable stall; and illegal street traders continued to use vacant sidewalk spaces to set up informal stalls, as well as locating in the new trading nodes, between tables. In addition, there were no improvements noticed in the level of cleanliness, and management of refuse by street traders.

With regard to the criterion “Aesthetics”, the WSPP performed extremely well. A combination of new sidewalk paving, newly-paved pedestrian crossings, trading nodes, planting and coloured mosaic work, has created a significant improvement to the visual quality of this block of West Street.

5.5 PART B: EVALUATION OF THE FUTURE PERCEIVED IMPACTS OF THE WSPP

5.5.1 Introduction and Constraints

The perceived future impacts of the West Street Pilot Project were evaluated by means of examining and assessing the views of project stakeholders and professionals, both those involved in the project, and

those who had observed it. A further assessment of the management plan for the area of West Street, and the presence or absence of recognised attributes of successful city centre revitalisation efforts, was made.

The respondents were separated into “stakeholders” and “professionals” as these groups represent two different levels of analysis and understanding of the WSPP. “Stakeholders” represent those not professionally trained in urban planning (and perhaps unfamiliar with the methods and principles of city centre revitalisation), yet experienced in addressing the needs of their represented group in the context of the Durban CBD. “Professionals” represent architects, urban designers and urban planners who are familiar with the concept, process and practice of city centre revitalisation, and provide a deeper knowledge of the long-term affects of revitalisation efforts.

Similar questions were posed to both stakeholders and urban professionals. “Stakeholder” questions involved an assessment of the value of the WSPP for their represented group; whether or not investing in street traders and entrenching them in the CBD was recommended; whether or not the represented stakeholder was committed to assisting with maintaining the public realm and aiding street traders; and how the project could be improved.

Professional questions prompted an assessment of the value of the WSPP for the CBD across sectors and stakeholder groups; whether or not the WSPP was extensive enough to test a revitalisation approach as a pilot study and the appropriateness of the physical measures.

5.5.2 Stakeholder Interviews

Interviews were held with all of the main stakeholders in the WSPP. An interview schedule for these interviews can be found in Appendix B: Interview Schedules. The purpose of the questions was to establish the perceived successes and failures of the WSPP with regard to:

- a) The benefit which it would provide the individual stakeholders.
- b) The value in accommodating, and investing in, street traders in the CBD.
- c) Whether or not the physical improvements would be sustained by the stakeholders, in taking responsibility for maintaining the public realm and assisting street traders further.
- d) The physical extent of the intervention: whether or not a larger or more detailed project should have been pursued.

Finally, an enquiry was made as to what could be done, from the point of view of the individual stakeholder, to improve the existing project.

5.5.2.1 Responses and Findings:

a) The Benefit of the WSPP for Individual Stakeholders

- *Successes*

All stakeholders, including informal trade, formal retail and property owners, saw the WSPP as benefiting their sector.

The Informal Traders' Management Board saw improvements in West Street as being of particular benefit to street traders, as it was a very popular street with traders, and always overcrowded. From what they had seen from the street plan, they believed that it would have marked benefits for them.

The Durban Chamber of Commerce and Industry believed that the street improvements would speed up pedestrian flow on the sidewalks, assist traffic flow, and provide a larger, more organised street trading area. These improvements would all lead to a safer and more pleasant shopping environment, which would benefit formal retailers.

The Department of Traffic and Transportation Engineering acknowledged the WSPP as assisting in the minibus-taxi operations in West Street. With traders grouped in nodes, there would be more space along the sidewalk edge for pedestrians to congregate, and minibus-taxis would be more visible to pedestrians. The proposed dedicated public transportation lane and loading zone (with the required legal enforcement) was also of benefit to vehicular movement along West Street.

- *Failures*

It was the opinion of the South African Property Owners Association (SAPOA), that the project would not have an effect on property in terms of popularity and price increase.

b) The Value in Accommodating Street Traders In The CBD

- *Successes*

All stakeholders supported the WSPP in its attempt to accommodate, and invest in, street trading in the CBD.

The Durban Chamber of Commerce and Industry saw the encouragement and support of informal trade as having economic value for the CBD. It recognised that informal traders would attract people to West Street, who would not normally shop there.

c) Whether or not the Physical Improvements would be Sustained by the Stakeholders

- *Successes*

It appeared that the WSPP would succeed in the future, as both the Durban Chamber of Commerce and Industry and SAPOA acknowledged having a role in public realm maintenance, both currently and in the future.

The Durban Chamber of Commerce and Industry currently worked with street traders in partnership, in employing Cwebezela and Enforce Security, to supplement the existing council-provided cleaning and security services respectively. It had also assisted street traders by providing two ablution facilities, and pledged its commitment to taking responsibility for their maintenance.

The Durban Chamber of Commerce and Industry saw the future role of private business in maintaining the public realm, as involving the formation of partnerships with Council, as had already been achieved with the provision of security and cleaning services

SAPOA played a role within the Inner Thekwini Renewal and Urban Management Programme, (iTRUMP), by assisting in maintaining cleanliness on the streets and eliminating crime. They currently assisted street traders, by providing use of ablution facilities.

With regard to its future role in the CBD, SAPOA was committed to maintaining and upgrading building entrances, by providing planting and other landscaping. With regard to street trading, SAPOA had encouraged property owners to assist street traders in front of their building. Property owners were thus willing to assist street traders, and in the upkeep of the public realm, where it made financial sense to them.

d) The Physical Extent of the Intervention

- *Successes*

The Durban Chamber of Commerce and Industry stated that it was satisfied with the existing level of intervention, as a way of improving conditions for street users in West Street.

- *Failures*

SAPOA stated the need for larger, complete urban design solutions for parts of the city. Reference was made to the beachfront, as a successful revitalisation model. It was stressed

that it was a project for an entire defined area, designed and implemented in completion. This model, according to SAPOA, should be emulated in the CBD.

e) Possible Improvements to the Existing Pilot Project

SAPOA suggested pedestrianising West Street fully, stating that a larger intervention was required, rather than a patch-up one.

The Informal Traders' Management Board highlighted that other forms of informal activity needed to be physically accommodated on the street, such as cardboard collection and storage.

The Department of Traffic and Transportation Engineering stated that in future schemes, trading nodes should be limited to points of minimal traffic impact, such as mid-block positions.

5.5.3 Professional Interviews

Interviews were held with professionals in the fields of urban planning, urban design and architecture in the WSPP. An interview schedule for these questions can be found in Appendix B: Interview Schedules. The purpose of the questions was to establish the perceived successes and failures of the WSPP, with regard to:

- a) The benefit of the WSPP, for the various functions of the CBD and its hard core (such as public transport, pedestrian movement, formal retail, street trading, property market)
- b) The value in accommodating, and investing in, street traders in the CBD.
- c) The physical extent of the intervention as a pilot project: whether or not a larger or more detailed project should have been pursued.
- d) Professional support in the use of traffic calming and pedestrianisation measures in the CBD hard core.
- e) Professional support of the physical street plan.
- f) Whether the WSPP has value in benefiting the CBD as a whole.

5.5.3.1 Responses and Findings:

a) The Benefit of the WSPP for various CBD functions

- *Successes*

Mr. White, of the City Engineer's Department of Drainage and Coastal Engineering Urban Design Branch, acknowledged that West Street forms part of a strong pedestrian movement system, including main streets and arcades. The WSPP, by improving and increasing pedestrian movement space along this route, would thus certainly benefit many users of the CBD hard core.

Mr. Frost (of Interarc) acknowledged that West Street, and the Gardiner Street – Field Street block in particular, were highly important as physical spaces in the Durban CBD. West Street formed a vital connection between the beachfront and the Warwick Junction and Grey Street area. It also lay in the middle of a north-south link from the Centrum Site to the bay. From this point of view, any improvement to the physical street space of this stretch of West Street would be highly beneficial for the CBD.

Mr. Markewicz (of Urban Explorations) stated that the WSPP was indeed part of the solution to improve the functioning of West Street. The project provided attractive places for informal traders adjacent to formal traders, which generated “feet on the ground”. It made West Street attractive for shoppers who arrived by public transport, which would have positive spin-offs for the public transport industry.

- *Failures*

The WSPP would only have a real benefit for any street users, according to Mr. Markewicz, if accompanied by a management plan.

b) The Value in Accommodating Street Traders in The CBD

- *Successes*

Mr. Markewicz supported the presence of street traders in the CBD, but they needed to be managed carefully. In order to manage them successfully, Council needed to organize certain traders in a set of informal markets, provided with the necessary infrastructure. A successful informal trading economy in the CBD could be created through a balance of both street traders and market traders.

Mr. Frost (of Interarc), Mr. Iyer (of Iyer Rothaugh Collaborative) and Mr. Seedat (of Seedat & Seedat Architects) agreed that street trading in the CBD was a reality, and needed to be supported.

- *Failures*

Although supporting the accommodation of street traders in the CBD as a temporary measure, Mr. Iyer acknowledged that the physical infrastructure provided by the WSPP, was not the whole solution. A more favourable option was to give traders a support structure in which to “move up” and form their own formal businesses, rather than “entrenching them as street traders”. Such a structure would begin with business training programmes and management.

This view was supported by Mr. Dobson.

c) The Physical Extent of the Intervention

- *Successes*

Mr. Frost acknowledged the value of the WSPP as a study, within a larger study of the CBD. It was thus sufficient, and of value, as a smaller part of a larger development process.

- *Failures*

Both Mr. Iyer and Mr. Markewicz stated the need for larger, complete urban design solutions for parts of the city. The WSPP was not such a solution, nor did it form part of one.

Mr. Seedat highlighted that a more detailed physical intervention was required in order to have a lasting impact on the public realm. Referred to were details such as sidewalk paving and lower, pedestrian-orientated lighting.

d) Professional Support for the Use of Traffic Calming and Pedestrianisation Measures in the CBD Hard Core.

- *Successes*

Mr. Iyer and Mr. Markewicz both supported traffic calming and pedestrianisation in the CBD. According to Mr. Iyer, pedestrianisation gave the opportunity to consolidate larger spaces within the city, rather than making smaller, random gestures.

According to Mr. Iyer, pedestrianisation in the CBD of Durban is important, as it is very much a pedestrian city centre. Most users of the CBD are pedestrians, who arrive by public transport. The priority in Durban is thus a safe, uncontested CBD, and pedestrianisation and traffic calming measures can assist in achieving this.

e) Professional Support of the Physical Street Plan

- *Successes*

According to Mr. Dobson, the WSPP street plan provided the first of many measures needed to uplift the informal economy. It showed that informal traders were recognised as part of the CBD economy. The provision of specialised trading nodes celebrated what the informal economy could offer the city. It provided the first of many measures to uplift the informal economy. Such measures should include business training and better management.

- *Failures*

Mr. Iyer highlighted that the street plan dealt with the practical problem of street traders, but did not provide a long-lasting improvement to the visual quality of the street. What had been provided was a standard trading node, which had been provided was a standard node, which had been implemented uniformly along a block of West Street. The intention was to continue the same identical design into the next block of West Street in the next project phase.

Mr. Iyer suggested that to improve the street plan, larger pedestrian spaces were needed, which did not repeat the same design across several nodes, but responded to the spatial needs at particular points on the street.

f) Whether the WSPP has value in benefiting the CBD as a whole.

- *Successes*

Most respondents agreed that if implemented on a larger scale, this type of city centre revitalization could benefit the CBD as a whole.

Mr. Frost acknowledged the value of the WSPP as a study, within a piecemeal study of the city. The WSPP will be of benefit to the CBD, when lessons are recorded from the project evaluation and combined with lessons from other revitalisation projects in Durban, such as Warwick Junction. Future strategies can then be formulated from these lessons, for the development of the Durban CBD.

- *Failures*

Mr. White, Mr. Iyer, Mr. Frost and Mr. Markewicz and Mr. Dobson agreed that in order for the benefits of the WSPP to be realised, a clear management plan was needed. Such a plan was currently absent.

What was needed, according to Mr. White, was an ongoing development framework plan for the entire city. Such a plan was required to give direction to the social, economic and political urban sectors, as well as the relevant technical departments. Decisions on physical improvement should follow thereafter.

Mr. Markewicz acknowledged that even if substantial physical improvements are made, a further mechanism to manage and control street traders is needed.

5.5.4 Management Assessment

5.5.4.1 Introduction

The Management Assessment was carried out in order to evaluate the WSPP in terms of the criterion "Management Capacity".

The study was carried out by examining the current plan for the management of the Inner Thekwini (Central Durban) area entitled "Skeleton Business Plan – Report prepared for the iTRUMP Area". This study included an interview with Mr. Richard Dobson, programme leader of the Inner Thekwini Renewal and Urban Management Programme (iTRUMP). The questions for this evaluation were posed as part of the interview listed in "Professional Interviews" in '5.3 Methodology' above.

5.5.4.2 Management Plan

This evaluation was made by exploring and analysing the Inner Thekwini Renewal and Urban Management Programme, to establish whether or not the WSPP forms part of this plan, and benefits from it.

- iTRUMP: Definition and Explanation

iTRUMP is the main mechanism for urban management in the Durban inner city. It consists of many individual area-based initiatives, such as the Beachfront, Warwick Junction and the CBD. The programme promotes urban renewal and urban management. What has been learnt from initiatives such as the Warwick Junction Project, according to Richard Dobson, programme leader of iTRUMP, is that unless physical intervention is combined with sound management, a sustainable solution cannot be achieved. iTRUMP supports initiatives such as the WSPP, when they are accompanied by their own specific management plan.

- Priorities within iTRUMP:

Within the iTRUMP strategic plan, one of the key elements of urban renewal is to increase the economic turnover of the CBD by 10%. This involves an improvement of the A-Grade office environment, which necessitates physical improvements.

- Capacity and Resources of iTRUMP:

The iTRUMP area of Durban is one of five areas which the city council has adopted to provide services to. Each of these areas has a capital grant from the council. The iTRUMP budget for 2003 is R14 million. In the iTRUMP programme team for 2003, all posts come from a senior

level in the municipal council. The iTRUMP team therefore have credibility within the council.

- Importance of the WSPP within iTRUMP

The WSPP forms part of iTRUMP, as it falls within one of its 10 districts. Indeed, the capital that is being spent on the WSPP, is iTRUMP capital.

The introduction of security cameras, necessary for security enforcement in West Street is on the iTRUMP budget. One such security camera, according to Dobson, would be installed in West Street.

- The Benefit of a CBD Management Framework for the WSPP

Within the new iTRUMP strategic plan, there are many sections which include aspects of managing and promoting projects such as the WSPP.

Firstly, the strategic plan promotes a responsive environment for the office precinct (the CBD hard core). It states the need to address uncontrolled informal activity. In the “social needs” section, the need to provide safety and security is mentioned. Under the “economy” section, the issue of striking the right balance between the formal and informal economy, is highlighted.

However, trying to solve this issue simply through formal enforcement, was, according to Dobson, not a sustainable solution. What was lacking in the West Street area was the development of good working relationships between the city council and street traders. Firstly, full co-operation was needed from the legal traders (such as adhering to by-laws, confining their activities to the space of their trading stalls and controlling litter). Then iTRUMP could direct its limited resources towards the management of the illegal traders.

The principle issue of the management of the informal economy was one of inter-departmental co-operation within council. Currently there was a lack of clarity among various council departments, as to their roles and responsibilities.

Metro Police would be able to perform their duties, according to Dobson, if there was very clear circumstance for them to act. The West Street project was important for policing, because it showed clearly which traders were legitimate and which were not. It was apparent to all, including the police, that only those street traders who were in the nodes, at their designated tables, were legal traders. The layout of the nodes ensured that those at trading tables were visually separate from those who were not. Elsewhere, there were various circumstances which obstructed trader management.

Part of the iTRUMP programme was to promote the rewriting of the by-laws, to deal more efficiently with itinerants. The issue of dealing with various illegal traders was both a policing, and an Informal Trade departmental issue. The issue had to be solved in an inter-departmental way, as it was done at Warwick Junction.

- Importance of Physical Upgrade within the iTRUMP Programme

The resources of iTRUMP include only a capital budget, which it is obliged to spend on physical urban improvements. In addition, the iTRUMP team produces an integrated management plan, which outlines the way in which it would approach development issues. The plan states various benchmarks, referring to the required policing, cleaning staff, security personnel and other standards needed for a particular precinct in the city. Any deviation from those benchmarks was monitored, and pressure is brought on the relevant council departments to resolve it.

The iTRUMP budget focuses specifically on physical upgrade. However, the work of its members included the improvement of management which was achieved by persuasion of various council departments.

- A Current Urban Design Framework for the CBD

In the iTRUMP strategic plan, the completion of an Urban Design framework is a priority. There is a guiding framework at present, produced by the Urban Design Branch in 1998. In addition, many of the iTRUMP precincts have their own design framework; Warwick Junction, Albert Park and Victoria Embankment are included in this list. The iTRUMP team intends to complete all district plans as well as formalise the adoption of an inner city framework plan, during the coming year. The corridors and precincts of excellence idea, is one of the components. The other components still to be produced are a land use management plan and a zoning plan.

- Corridors and Precincts of Excellence

Ultimately, these are areas in which the public realm will be upgraded, spatially and aesthetically. Strategically, the plan prioritises how and where money is spent. Its aims are to make the city more legible, by upgrading important vehicular and pedestrian routes, and improving tourist routes, by improving safety and security. It is thus a strategy to eventually see a significant upgrade of the public environment. West Street, including the block of the WSPP, is included as a proposed "Corridor of Excellence".

- iTRUMP Skeleton Business Plan

The iTRUMP Skeleton Business Plan, released on the 4th December 2002, is the most recent document outlining the management objectives of iTRUMP in the immediate future:

The Business Plan lists 6 strategies to achieve its two desired outcomes: regeneration of the inner city economy; and comfort and safety of the citizens of eThekweni.

The Strategies are:

1. Increase the economic activity of the city
2. Make the inner city more viable
3. Promote sustainable and effective urban management
4. Reduce poverty and social isolation
5. Improve safety and security
6. Develop institutional capacity.

Within certain of these strategies, projects are highlighted, which have the potential to help in the management and success of the WSPP:

Strategy 1: 'Increase the economic activity of the city', includes a programme to support growth sectors and niche markets. This programme comprises projects such as capital works, including new infrastructure and public realm upgrade; establishing specialised retail districts for both the formal and informal sector; promoting district distinctiveness in support of inner city tourism; promotion of "happy lunch times" including pedestrian walkways, markets and city restaurants. (Lees 2002: 6-7)

The programme to support and stimulate Small, Medium and Micro Enterprises (SMME's) includes: a support programme for street traders, including literacy, numeracy and business skills; the implementation of informal economic policy; and a small business advice and support centre. (Lees 2002: 7)

The programme to 'increase investment in the inner city' includes a project to promote strategic investment, involving the renewal of public places and strategic pedestrianisation; the programme also includes a project to develop premier and niche office precincts. Other projects include a restructure of the public transport system and a new traffic enforcement system. (Lees 2002: 8)

'Strategy 2: Make the inner city more viable' includes the programme 'corridors of excellence' which fundamentally affects the success of the West Street Pilot Project. The programme involves projects such as public realm upgrade including lighting, landscaping, street furniture, signage and the provision of security cameras. A second project involves the implementation of urban management strategies.

Other projects which could benefit the success of the WSPP are found in the cultural renewal programme, which includes projects to support and promote cultural events, and revitalise cultural precincts. (Lees 2002: 11)

The success of the WSPP depends fundamentally on 'Strategy 3: sustainable and effective urban management'. Within this strategy, the integrated management programme provides what has been absent in the implementation process of the WSPP. It is the aim of this programme to ensure co-ordination of council departments with line functions and other independent spheres of government, and to ensure that Implementation management plans for projects are drawn up in consultation with all stakeholders. The improved infrastructure programme aims to provide the necessary basic infrastructure to allow for effective management. Projects to this aim include informal trade facilities (tables, water and storage) as well as taxi facilities. (Lees 2002: 14)

'Strategy 5: Improve safety and security' includes the programme for effective policing. This programme will clarify the roles and responsibilities of all enforcement agencies, such as the South African Police Service, Metro Police, Council peace officers, private security services. Projects are listed, such as a policing plan to ensure the strategic use of all policing powers; developing meaningful partnerships between police, private sector and communities; stimulate and support Urban Improvement Precincts, with respect to safety and security issues (such as 'Traders against Crime'. The 'Crime prevention through Environmental Design principles' programme promotes the planning of all physical environment interventions to enhance natural surveillance and minimise opportunities for criminals. The public safety programme focuses on improving environmental safety, including fire, electricity, storm water, food and traffic safety. Additionally the Community service programme ensures appropriate sentencing for by-law offenders. (Lees 2002: 19-20)

Strategy 6: Institutional Development includes the programmes 'Build iTRUMP capacity', 'Institutional Alignment' and 'Communications and Marketing'. Projects involved include building iTRUMP human resources, identifying linkages with other government departments with a view to them delivering on iTRUMP priorities and the implementation of a communications strategy.

5.5.4.3 Conclusions:

The Inner Thekwini Renewal and Urban Management Programme has many benefits for the West Street pilot Project. Many strategies and programmes indicate that it will have a great influence in sustaining the improved condition of the West Street public realm.

The positive aspects of the iTRUMP Programme can be summarised as:

- It has made a definite commitment to assisting with security in the WSPP area, by funding the installation of security cameras.
- The development of an urban design framework for the iTRUMP area is a priority within the programme.
- The integrated management programme which will ensure co-ordination of council departments with line functions and other independent spheres of government and ensuring that implementation management plans are drawn up.
- The 'corridors of excellence' programme has potential to further improve the WSPP, such as "landscaping, street furniture, signage and the provision of security cameras" which were intended in the initial WSPP proposals, and which many interview respondents felt were missing.
- Other plans within the iTRUMP skeleton business plan, such as an improved safety and security programme, as well as plans to educate and train street traders, could have a gradual benefit for the WSPP area.

The negative aspects are:

- The iTRUMP programme, and its funding strategy for 2003, has many potential benefits for the WSPP in the future, but the WSPP was not conceived as part of any plan within iTRUMP.
- As a result its connection to other initiatives in the city, its function within a possible Urban Design Framework, and the role of various council departments and stakeholders in its creation were never clear.
- iTRUMP is a broad management plan for the entire inner city area. It does not include a "West Street Pilot Project management plan" to direct its spending, or that of the council, to the specific project area.

5.5.5 Design Assessment

- In Terms of Previous Successful Revitalisation Projects and Plans

5.5.5.1 Introduction

The design assessment establishes the degree to which the WSPP reflects the positive attributes of inner city revitalisation discovered in case studies.

For this purpose, the important attributes of the three case studies examined, are compiled.

Secondly, the previous plans for Durban as introduced in Chapter 4: Case Study Introduction are summarised and common, important

ideas for the future development of Durban are listed. The WSPP is assessed as to its response to the “contextual needs” of Durban

An evaluation is thus made, whether such recognised features and components of city centre revitalisation, are present in the WSPP.

5.5.5.2 Attributes of Successful City Centre Revitalisation

From the precedent examples studied, the following general and specific issues, seen as common to successful city-centre revitalisation, are compiled. It is assessed whether or not such issues have been considered in the planning and design of the WSPP:

- *Traffic-related issues must be addressed in conjunction with landscaping and other physical solutions. Such improvements must include the capacity of the road network and the provision of adequate parking.*

Traffic-related issues had certainly been considered in the WSPP. The initial proposal incorporated a dedicated public transportation lane. New bus-only parking and loading bays had been planned along the left-hand kerb, with loading zones along the right-hand kerb. Although not increasing the parking capacity of the street, the plan did attempt to manage and co-ordinate traffic movement better.

- *New facilities of various types need to be introduced into the revitalised area, such as entertainment and restaurants.*

No such facilities had been introduced into West Street. However, facilities for street trading had been upgraded.

- *Environmental improvements are necessary, through the improvement of pedestrian spaces, such as a pedestrian plaza or mall.*

Although no full pedestrian plaza or mall was created, environmental improvements were certainly achieved. The physical quality of West Street had been upgraded through: new, attractive trading tables and benches; new paving on the trading nodes and at pedestrian crossings; new planting; and coloured mosaics on planters, bollards, benches and trading nodes.

- *Protection of the revitalisation effort: a management plan is vital to uphold and maintain the physical improvement of the revitalisation project.*

The iTRUMP plan for 2003 had the potential to manage and maintain the physical improvement of the WSPP. However, there was no management plan in place to deal specifically with the WSPP, to ensure that by-laws were upheld, and street traders remained only in their dedicated trading nodes.

- *Physical improvements should be guided by physical, social and economic problems.*

The choice of investing in the improvement of conditions for street traders showed a clear response to the social and economic problems facing the CBD. The presence of disorganised street traders, which hindered pedestrian movement, was a clear response to physical, spatial problems on the street sidewalk.

- *The implementation of various physical improvements should be aligned and co-ordinated.*

This had certainly not been the case with the WSPP. It was intended that the introduction of a dedicated public transportation lane be implemented simultaneously with the widening of the sidewalk and creation of trading nodes. Without the implementation of this lane, and its exclusive use by public transportation vehicles, it was predicted that the creation of trading nodes would aggravate traffic congestion further.

- *Physical design must respond as closely as possible to the function of the street. Landscaping must respond to architectural features and focal points, so as to celebrate specific environmental qualities.*

This had not been achieved in the WSPP. A standard solution of uniform trading nodes had been created, which did not respond to particular problems or opportunities along the street. More nodes had been created along the southern sidewalk, where there was less pedestrian movement, less congestion and less need for sidewalk widening and street trader management.

- *Revitalisation must provide as much space as possible for pedestrian movement and social interaction.*

The space for pedestrian movement had certainly increased. The angled arrangement of trading tables allowed customers and other pedestrians to congregate, browse, and interact. This could have been improved, however, by an overall increase in the width of the northern sidewalk.

- *The revitalised area must be accessible to public transportation.*

Public transportation has certainly not been denied access from the revitalised area. Rather, the sidewalk spaces are now more accessible to public transportation: spatial organisation of street traders allows better access to taxis by pedestrians moving along the sidewalks; dedicated bus loading bays will improve the way this form of public transport functions.

- *Measures should be taken to minimise pedestrian/vehicle conflict, as well as improving pedestrian capacity in pedestrian areas and on sidewalks.*

This had certainly been achieved, through increasing pedestrian movement space along sidewalks, and emphasising pedestrian crossings with new paving.

- *The revitalisation effort should be conceived as a whole. A plan for a broader central area needs to be created, into which various smaller projects can fit.*

No clear plan was created prior to implementing the WSPP.

- *It is important to provide improvements for the pedestrian with parallel plans for other sectors, such as urban conservation, promotion of the revitalised area and partnerships between council and the private sector.*

Certain parallel plans did exist. These involve Urban Improvement Precinct-generated services, such as the cleaning services of Cwebezela Trust, and the security services of Enforce and Traders Against Crime. The dedicated public transportation lane, as part of a broader plan for the CBD, was planned but not implemented in conjunction with the WSPP. Thus, although parallel plans in other sectors do exist, they were not aligned and co-ordinated with the WSPP.

Conclusions:

From the precedent examples studied, both general and specific aspects were identified as common to successful city-centre revitalisation. Certain of these aspects were illustrated in the WSPP:

- **Environmental improvements** were made through the improvement of pedestrian spaces.
- Measures were taken to **minimise pedestrian/vehicle conflict**, as well as **improve pedestrian capacity** in pedestrian areas and on sidewalks.

- There was an attempt to **manage traffic-related issues** in conjunction with landscaping and other physical solutions. An attempt was made to improve the capacity of the road network and provide adequate parking.
- The revitalisation effort had provided as much space as possible for **pedestrian movement and social interaction**.
- The revitalised area had remained **accessible to public transportation**, and had improved the capacity of the street to accommodate public transportation vehicles.
- **New facilities** (such as new trading tables and benches) had been introduced to the revitalised area.
- Physical improvements in the revitalised area had been **guided by social and economic problems**.

Other aspects identified as important to city centre revitalisation have not been incorporated:

- **Protection of the revitalisation effort:** At present, there was no management plan specifically for the WSPP, which will uphold and maintain the physical improvement of the revitalisation project.
- The implementation of various **urban improvement measures** (such as traffic and street trader by-law enforcement, installation of a public transportation lane and installation of security cameras) **had not been aligned**.
- The physical street design had **not responded adequately to the function and quality of the street**. Landscaping had not responded to focal points or architectural features; rather a standard solution had been created across an entire block of the street, with the intention of repeating it similarly in an adjacent block.
- The revitalisation project in West Street had not been conceived as part of a **greater revitalisation effort for the whole of the CBD**. A plan for a broader central area needed to be created, into which various smaller projects fit. Such a plan could include urban conservation, promotion of the revitalised area and partnerships between council and the private sector.

5.5.5.3 Contextual Needs of Durban

According to the ideas outlined in Chapter 4: Case Study Introduction, 4.2.3 Previous Plans for Environmental Upgrade in the Durban CBD, there are certain aspects which are important for the future success of the Durban CBD and its hard core.

The WSPP is thus evaluated here in terms of whether or not it has responded to those particular needs of Durban:

- *Street trading must be addressed, through the physical improvement of trading conditions. Traders need to be located either in dedicated, well-designed markets, or along busy routes, where there are many customers.*

Addressing the needs of street traders was the main aim of the WSPP. Providing for their physical needs, such as well-defined trading places and secure tables and benches, had been achieved. Managing the traders and solving the problem of un-registered traders, had not been addressed.

- *Sidewalk widening is an effective way of alleviating crowded pedestrian conditions, and needs to be encouraged. The quality of sidewalk spaces and street furniture needs to be upgraded generally, but especially along key routes, such as West Street.*

The WSPP had responded admirably to these problems. Further improvement to street furniture, such as bins and seating at bus stops, required further improvement.

- *The historic civic area is important for the CBD aesthetically, as well as for tourism in the area. It needs to be maintained, through repaving, landscaping, and enhancement of the character of the important buildings in the area. The quality of this area needs to be extended to surrounding areas, and along adjoining streets, as a way of revitalising the CBD core.*

The location of the WSPP, adjacent to the historic civic area of the CBD, provided the first step in extending the urban quality of this area to surrounding areas. The urban quality and character of trading nodes, mosaics, and paved pedestrian crossings might not be the same as the civic character of stately buildings and parks associated with the civic area. However, the WSPP extended this area, as a precinct of high urban quality, into adjacent areas and spaces.

- *Gateways in and out of the CBD especially need to be upgraded.*

West Street was one of the main gateways into the Durban CBD.

- *There is a need for a major east-west corridor between Berea Station and the beach. This corridor is intended to be promoted as a spine of pedestrian and public-transport orientated, civic and commercial activity. It has been suggested, that both West and Smith Streets need to be promoted as "high streets".*

The WSPP represented the beginning of such a route along West Street, and thereby responds to such a “need” in the CBD.

- *A new public transport circulation system is needed (and is currently planned) in the CBD. The streets included in the system, will incorporate a dedicated public transport lane.*

The initial plan for the WSPP incorporated such a transportation lane into its design. However, it was not implemented together with other improvements to the pedestrian space.

Conclusions:

The WSPP has responded admirably to the problems of the Durban context, as highlighted by urban planning professionals previously. It did not, however, succeed in co-ordinating physical improvements with the new public transportation plan for the city.

CHAPTER 6

FINDINGS

6.1 Introduction

Chapter 6 concludes the project evaluation, by highlighting its strengths, weaknesses and opportunities for improvement. It identifies what the main problems of West Street were, and whether or not the WSPP has solved them.

The WSPP attempted to improve the street conditions for pedestrians and street traders, by increasing pedestrian movement space, providing better facilities for street traders, a better management framework and generally improving the visual quality of a section of West Street. It succeeded in certain of its aims, and failed in others.

6.2 Successes

- Generally, pedestrians moved more freely along the sidewalk
- The number of illegal street traders at arcade entrances had decreased, although many were still present.
- The overall image of the street had certainly improved.
- The trading nodes had a noticeably positive effect on pedestrian movement. They accommodated both the traders as well as customers stopping to browse, creating a completely free pedestrian thoroughfare.
- Overall, a more positive urban environment had been created.
- The site of the WSPP on one of the main shopping streets in the city, was supported by all stakeholders
- All professional respondents supported the upliftment of street traders in the CBD, and valued the WSPP as a way of beginning to revitalise the CBD.
- The WSPP was supported as a pedestrianisation/traffic calming scheme, which were to be further encouraged in the CBD.
- The physical plan of the WSPP, comprising trader nodes and improved pedestrian movement space, was supported by professionals experienced in dealing with street trading.
- The WSPP area forms part of a management plan (iTRUMP) which has great potential for its maintenance and further development.

- The WSPP incorporated many aspects of successful city centre revitalisation; they included environmental improvements, improving pedestrian capacity and providing space for movement and social interaction, management of traffic-related issues in conjunction with pedestrian issues, introduction of new facilities into the area (in this case, new street trader tables and benches), and addressing key social and economic problems in the CBD.
- The WSPP also incorporates many important attributes which are seen by professionals as important within the context of the Durban CBD. It has responded to: the problem of disorganised street trading, the need for sidewalk widening as a way of alleviating crowded pedestrian conditions, the need to extend the positive urban quality of the historic civic area to adjoining street, the need to focus investment in gateways in and out of the CBD, and the need for an east-west movement route in the city centre.

6.3 Failures

- Congestion still existed at street corners, shop entrances and arcade entrances.
- Pedestrians continued to jay-walk randomly at various points, despite the new demarcation of pedestrian crossings with paving.
- Illegal street traders were still positioned at various points along the sidewalk, including trading nodes and street corners.
- Large, unsightly street furniture, which contributed to further pedestrian movement problems, was not addressed in the WSPP
- Despite the newly-paved pedestrian crossings, minibus-taxis and private vehicles continued to stop within the crossing area.
- Certain retail activities, such as large food and clothing stores caused particular levels of pedestrian congestion – this problem was not addressed, nor solved, by the WSPP.
- Although public transportation loading bays and private vehicle loading zones were allocated along the northern and southern sidewalks respectively, vehicles continued to use 2 or 3 lanes on either side for stopping and loading.
- The WSPP did not influence street user behaviour with regard to littering.
- The council aim of supporting street traders in the CBD was supported by all relevant stakeholders. All relevant stakeholders were committed, in some form, to assisting with the upkeep of the

public realm, once the WSPP physical improvements were complete.

- Not all stakeholders were satisfied that the displayed level of intervention of the WSPP was sufficient.
- The WSPP was not seen as appropriate to be used as a pilot for the whole CBD; conditions on other streets were different and required different approaches.
- Currently, there was no management plan for the WSPP area, and without it, the effects of the new improved public realm would not be realised.
- Important aspects identified in examples of successful city centre revitalisation, which were not incorporated into the WSPP included: a management plan to maintain and uphold the revitalisation effort; design measures which respond directly to the function and quality of the street; and a link to a greater plan, into which many smaller projects can fit.
- As a new street design, the WSPP represented a uniform distribution, of identical, repetitive trading nodes along two sides of West Street. It did not create “events” by responding to special circumstances at particular points along the street. Furthermore, the new design of West Street was not conceived as a whole, but merely as an assembly of identical, repeated trading nodes. For this reason, it would not create a lasting impression in the eyes of a new visitor to the CBD.

6.4 Opportunities for Improvement:

Many of the failures of the WSPP observed in the case study evaluation can be resolved by means of improved management of the revitalisation effort. Improved management can be achieved through co-ordination of council departments, involving especially Metro Police.

However, there are key physical improvements which can be made to the WSPP street design. Certain of these improvements involve a new approach to the entire street design; others refer to individual design elements.

The following improvements are recommended by the author:

- 1) Design the street “as a whole”, to integrate all elements, for the benefit of all street users. This proposal for the entire street may then be implemented incrementally, as and when funds become available.

This holistic design would include new paving along the whole street, new street furniture, as well as plans for extension into the pedestrian lanes.

- 2) Respond to individual conditions at different points along the street. Such responses would include special paving treatments at prominent buildings, such as Old Mutual Building. They would also include wider pavement designs at points of high levels of congestion. Such points include the entrance to Woolworths and London House Arcade (in the WSPP) as well as the entrance to Shoprite, the Hub, Jet, Edgars and the pedestrian lanes: Plowright Lane, School Lane and Greenacres Passage.

In essence, an improved design must respond more accurately to the spatial needs of pedestrian movement at particular points along the street.

- 3) Relocate as many as possible of the small trading nodes which are between pedestrian crossings on the southern sidewalk, to the northern sidewalk. These will include the trading nodes at Murchie's Passage, Discom, Sanlam Arcade and Mutual Arcade. Relocate the new trading nodes designed for the southern sidewalk of project Phase 2 accordingly.
- 4) Introduce street furniture elements, such as planting or seating, which will discourage unregistered street traders to remain on the sidewalk.
- 5) Design the street as a composition of varying elements, instead of a row of identical trading nodes. "Larger statements" such as longer trading nodes and small pedestrian plazas at popular trading points, varied landscaping and paving at points of particular interest, should be included. Such points of interest may include a busy arcade entrance or an impressive building.

CHAPTER 7

PROPOSALS TO BETTER REVITALISE THE DURBAN CBD HARD CORE

7.1. Introduction

Chapter 7 presents original proposals for West Street from the author which, according to the findings, assessments and conclusions, would make the current CBD hard core revitalisation more successful.

It has become apparent throughout interviews that successful urban management is critical for the WSPP to succeed. This is alluded to later in the chapter. However, the central aim of this study is to discover: what physical attributes are needed to revitalise a section of the Durban CBD hard core; what is lacking from the existing physical development; and what changes can be made to improve the WSPP further.

For this purpose the author has made the following proposals (7.2) for street plans which respond more accurately to the needs of the street users. Further proposals are also made for improvements to the management of the WSPP, in 7.3 below.

All of the new physical proposals include both blocks of West Street (from Gardiner Street to Field Street, and Field Street to Broad Street) as the Field-Broad Street block has been proposed as a second phase to the existing pilot.

7.2. Physical Proposals

All alternate proposals for West Street respond in different ways to the shortcomings of the WSPP as discovered in Chapter 5. The 3 proposals represent different levels of intervention, which would be possible with larger or smaller budgets. The shortcomings which the proposals respond to are:

- Remaining pedestrian congestion, at street corners, major shop entrances and arcade entrances.
- Remaining illegal, uncontrolled street traders positioned both inside, and between trading nodes.
- Remaining large, unsightly street furniture, which contributed to further pedestrian movement problems.
- Motorist behaviour: minibus-taxis and private vehicles continued to stop within the pedestrian crossing area, as well as within traffic lanes.
- Certain retail activities, such as large food and clothing stores caused particular levels of pedestrian congestion – this problem was not addressed, nor solved, by the WSPP.

- As a new street design, the WSPP represented a uniform distribution, of identical, repetitive trading nodes along two sides of West Street. It did not create “events” by responding to special circumstances at particular points along the street. Furthermore, the new design of West Street was not conceived as a whole, but merely as an assembly of identical, repeated trading nodes. For this reason, it would not create a lasting impression in the eyes of a new visitor to the CBD.

Other shortcomings, such as littering, pedestrian jay-walking, and the continued presence of illegal, unregistered street traders in the trading nodes, were not addressed. These problems could be addressed only through a management system and by-law enforcement.

The attached maps show the key elements of the 3 proposals, and indicate where a trading node has been added, removed, extended or reduced, in relation to the original street plan. The shaded areas indicate areas of upgraded surface treatment, in the form of the paving seen in the existing project.

7.2.1. Proposal 1: Map 7.1 - Responding to Pedestrian Movement Routes (Pg. 99)

Proposal 1 responds to the problem of remaining pedestrian congestion and uncontrolled street trading by rearranging and enlarging certain trading nodes. Trading nodes are lengthened at points of remaining congestion, such as entrances to major shops and arcades. The trading node lengthening, to accommodate some of the remaining illegal traders, occurs mainly on sidewalk strips along which pedestrians are most likely to move, such as between arcades entrances and pedestrian crossings. In doing so, the monotonous pattern of identical trading nodes is modified to provide variation.

Principles:

- Relating the street plan more closely to pedestrian movement needs and street trader spatial needs.
- Accommodation of remaining uncontrolled, illegal street trading and pedestrian congestion in areas in which they are likely to benefit from “passing feet”.
- Providing variation to the pattern of uniform, identical trading nodes.

Measures:

- 1) Lengthen the trading node at the entrance to Woolworths,
- 2) Lengthen the trading nodes along the southern sidewalk at pedestrian crossings, to respond to pedestrian movement through Sanlam Arcade and Murchie's Passage. This is proposed for the next phase of the WSPP. In the Field Street

- Broad Street Block, trading nodes at pedestrian crossings are lengthened with additional trading space provided in line with the entrances to the Hub, Edgars and Old Well Court.
- 3) Move the mid-block pedestrian crossing in line with Edgars and the CNA westwards, to link Greenacres Passage with the entrance to Shoprite. The crossing is thus equidistant and equally accessible from both School Lane and Plowright Lane, and will relieve the congestion at the entrance to School Lane
- 4) Eliminate certain of the existing small trading nodes along the northern and southern sidewalks, to provide sufficient loading zones and parking bays.
- 5) Relocate traders from the eliminated trading nodes, to the new lengthened nodes, and use the remainder of the new trading tables for allocating unregistered street traders.
- 6) Introduce the dedicated public transportation lane and dedicated public transport loading bays along the northern sidewalk.

7.2.2. Proposal 2: Map 7.2 - Focussing Activity on the Northern Sidewalk
(Pg. 100)

Proposal 2 responds to the recognition that pedestrian congestion and levels of illegal street trading are higher on the northern sidewalk. It further acknowledges that the northern sidewalk is more favourable for street trading. It therefore recommends that street improvements need to be focussed more closely on the northern sidewalk. The proposal involves a widening of the entire northern sidewalk, and a narrowing of the southern, and relocation of as many traders as possible, from nodes on the southern sidewalk, to the northern one. By lengthening trading nodes on the northern sidewalk, bus and taxi loading areas are reduced to regular stretches between the new nodes. This is likely to assist in the management of bus and taxi activity.

Principles:

- Increasing movement space along the northern sidewalk;
- Focus as much trading activity as possible on the northern sidewalk, where there is more pedestrian movement.
- Regulating bus and taxi activity.

Measures:

- 1) Increase the width of the entire northern sidewalk, by 1.5m, to provide more space for pedestrian movement.
- 2) Reduce the width of the entire southern sidewalk, by 1.5m, to maintain the existing carriageway width.

- 3) Lengthen all trading nodes at pedestrian crossings on the northern sidewalk.
- 4) Eliminate the existing small trading nodes along the southern sidewalk, to provide the original number of loading zones and parking bays.
- 5) Relocate traders from the eliminated trading nodes, to the new lengthened nodes, and use the remainder of the new trading tables for allocating unregistered street traders.
- 6) Move the mid-block pedestrian crossing in line with Edgars and the CNA westwards, to link Greenacres Passage with the entrance to Shoprite. The crossing is thus equidistant and equally accessible from both School Lane and Plowright Lane, and will relieve the congestion at the entrance to School Lane.
- 7) Introduce the dedicated public transportation lane and dedicated public transport loading bays along the northern sidewalk.
- 8) Locate bus/taxi loading zones at regular points between the new trading nodes.

7.2.3. Proposal 3: Map 7.3 – Pedestrian Plazas (Pg. 101)

Proposal 3 responds to the recognition that for a lasting improvement to be made, new facilities need to be introduced into the street space. Although new trading spaces and facilities have been introduced, larger pedestrian spaces and facilities are needed to create a strong impact as a physical revitalisation project. The proposal includes a larger 'pedestrian plaza', new food vending kiosks and pedestrian seating, and new seating for bus and minibus-taxi passengers.

Principles:

- Creating larger, complete urban design solutions for each block of West Street.
- Consolidating street traders in longer nodes or strips, to create larger, recognizable, memorable pedestrian plazas, which correspond to the points of most intensive pedestrian movement.
- Incorporating pedestrian facilities into the pedestrian plazas, such as food vending and seating. The seating could also be used (in the Field-Gardiner Street Block) as an outdoor extension, of fast food outlet seating areas.
- Incorporating commuter facilities into the pedestrian spaces such as new seating for passengers waiting for buses and minibus-taxis.
- Responding in the design to areas of special aesthetic quality, or to an important function of the sidewalk, (these may include

architecturally impressive buildings or major shop or arcade entrances).

Measures:

- 1) Widen both sidewalks of both blocks of West Street along congested strips, to create larger nodes, or small pedestrian plazas. Within the Field-Gardiner Street Block, these strips include the entire length from London House Arcade to 320 West Street, on the northern sidewalk, and from Salisbury Arcade to Mercury Lane, along the southern sidewalk. Within the Broad-Field Street Block, the length extends from Mali Boutique to Hooper Lane, along the northern sidewalk, and from Cuthberts to Dominion along the southern sidewalk.
- 2) Incorporate existing activities within these plazas, such as street trading, and queuing areas and seating for buses and taxis passengers.
- 3) In the pedestrian plazas, include other facilities, such as kiosks for selling food and seating, as well as new planting. Within the Field-Gardiner Street Block, the seating area could form an outdoor extension of fast food outlets, such as
- 4) Extend paving from the pedestrian plazas over the sidewalk at certain points, to link major shop and arcade entrances and acknowledge those important points within the pedestrian movement network.
- 5) Upgrade the sidewalk outside the impressive Old Mutual Building, with new paving and seating.
- 6) Maintain the small trading nodes at all corners, to prevent illegal traders from occupying these positions.
- 7) Introduce the dedicated public transportation lane and dedicated public transport loading bays along the northern sidewalk.
- 8) Eliminate the existing mid-block small trading nodes along both southern sidewalks, to provide the required original number of loading zones and parking bays.

7.3. Management Proposals

A detailed urban management plan for the inner city is required before any physical solution is implemented. iTRUMP is the beginning of such a plan, but its funding is limited, and its strategies are too broad.

An appropriate urban management plan must contain the following:

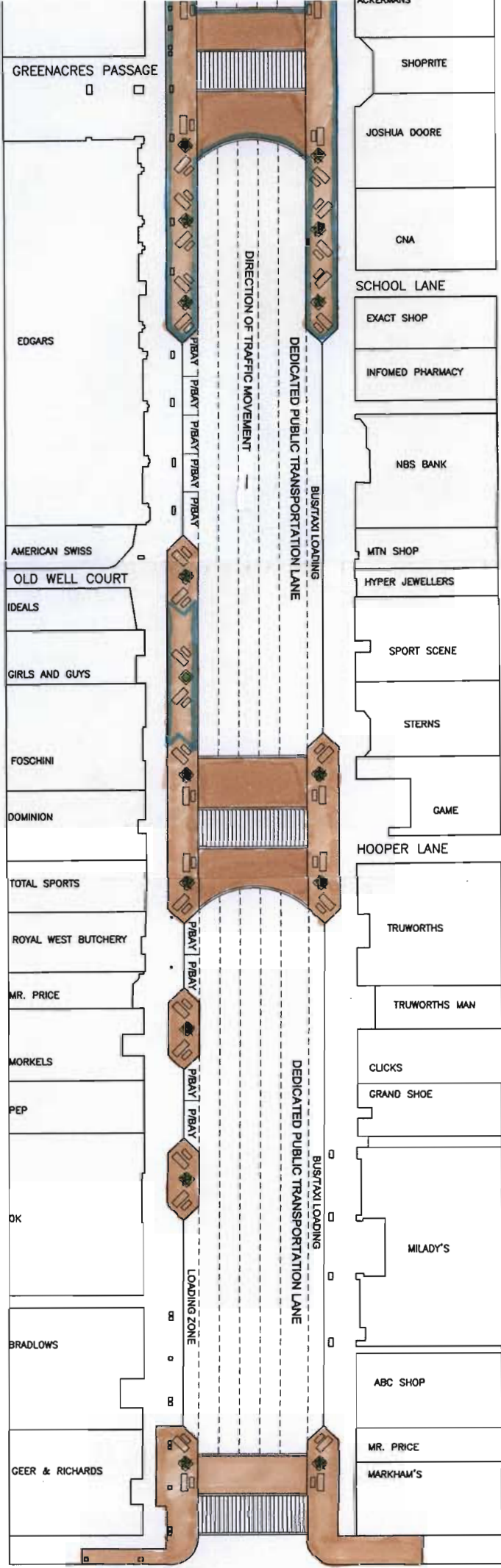
- A list of physical urban revitalisation projects which it has prioritised and allocated resources to.
- The stipulation that no physical revitalisation project may be implemented without a project-specific framework plan. Such a plan would:

1. Include directives for the integration of the physical improvement project with other urban improvement projects, such as the new Public Transport Circulation System, and a by-law enforcement programme.
 2. Guide the design of new street improvements, based on a vision of how the project relates to a larger design framework for the CBD as a whole. It would include a West Street management plan, outlining the roles of the various stakeholder and council departments in the maintenance of the street improvements.
 3. Be based on detailed site studies, including: vehicular and pedestrian movement patterns, problems and conflicts; stakeholder needs; and public infrastructure, public space and land uses.
- Clear directives for different Council Departments, as to their roles in the management of the public realm, once the project is complete.
 - Clear policies on complex social issues which physical revitalisation projects attempt to address; policies should be the culmination of detailed professional research. The main issue in the case of West Street is street trading.
 - A clear integration between different sectoral plans in the city: In the case of West Street, the project should be implemented in an integrated way with public transport plans, street trader management plans, and a policing plan. Had this been the case in West Street, and the dedicated public transportation and minibus taxi enforcement programme been in place, a more comprehensive evaluation of the feasibility of the trading nodes could be made. This would influence design decisions for subsequent phases of the project.

LEGEND

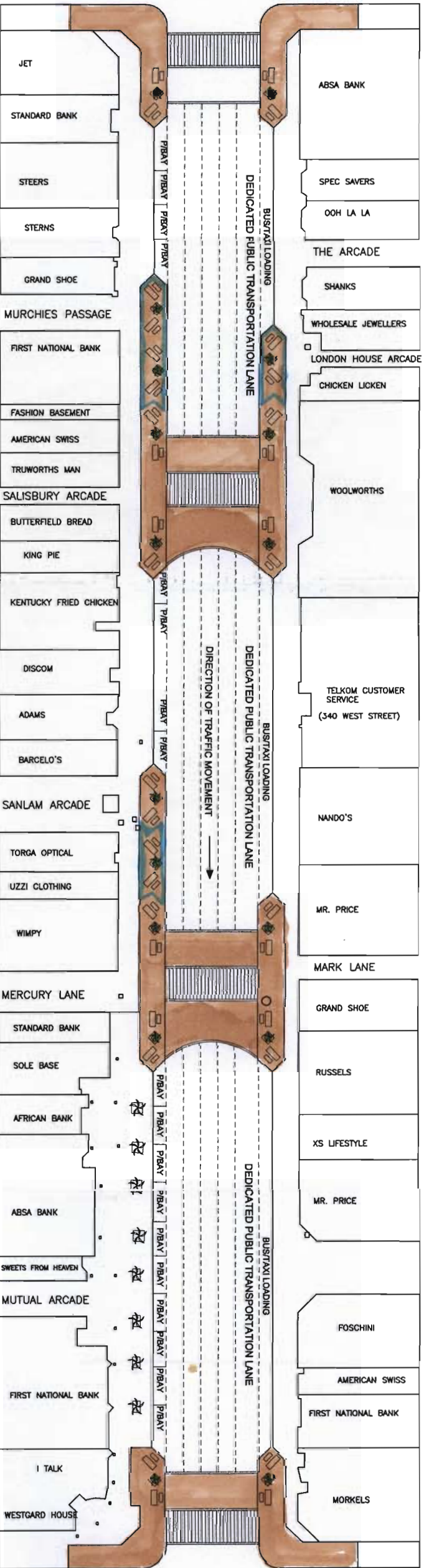
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PROPOSED STREET PLAN



FIELD STREET

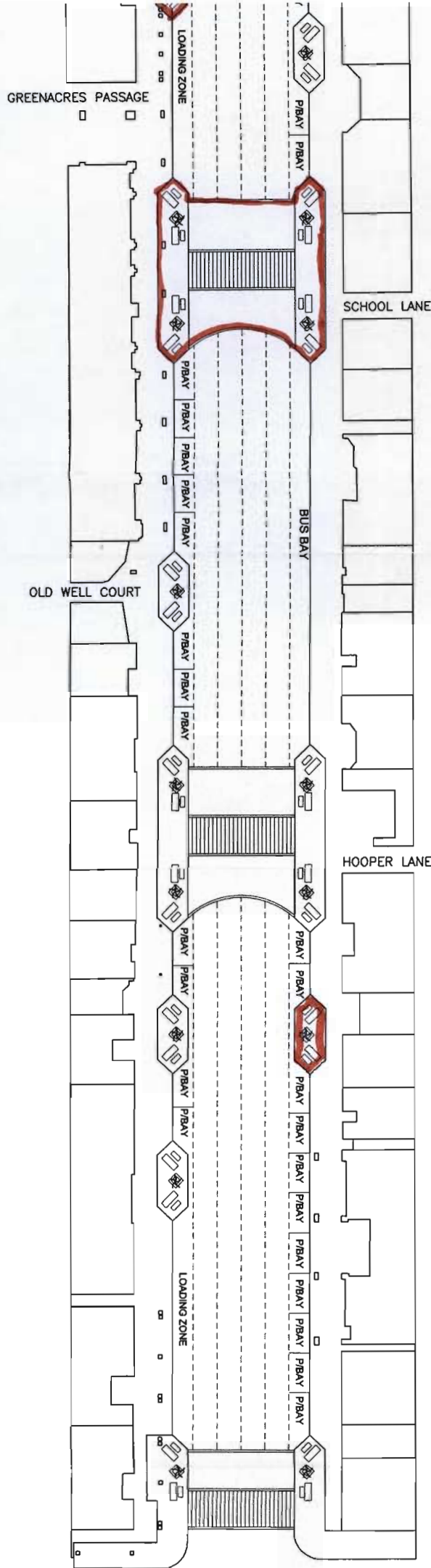
DIRECTION OF TRAFFIC MOVEMENT



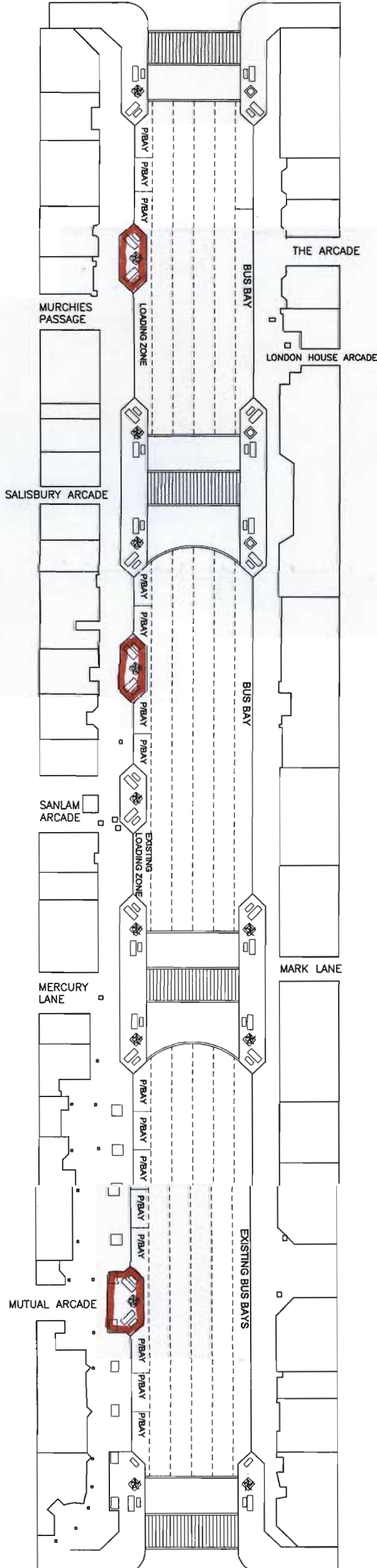
GARDINER STREET

DIRECTION OF TRAFFIC MOVEMENT

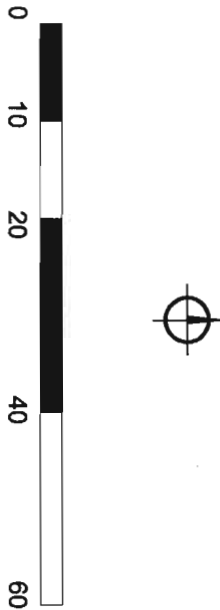
EXISTING STREET PLAN



FIELD STREET

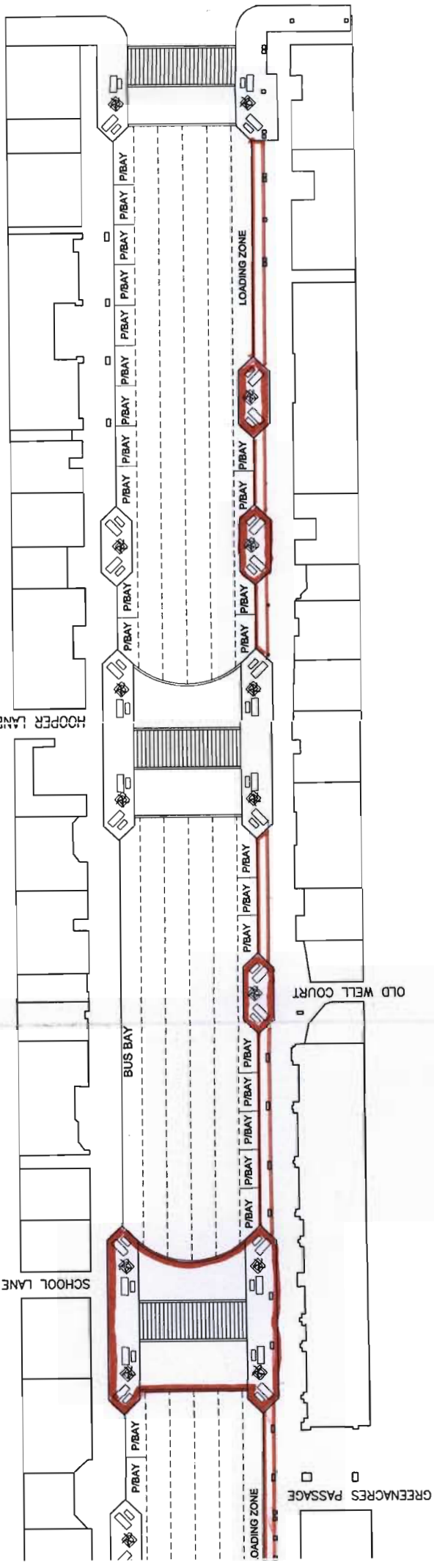
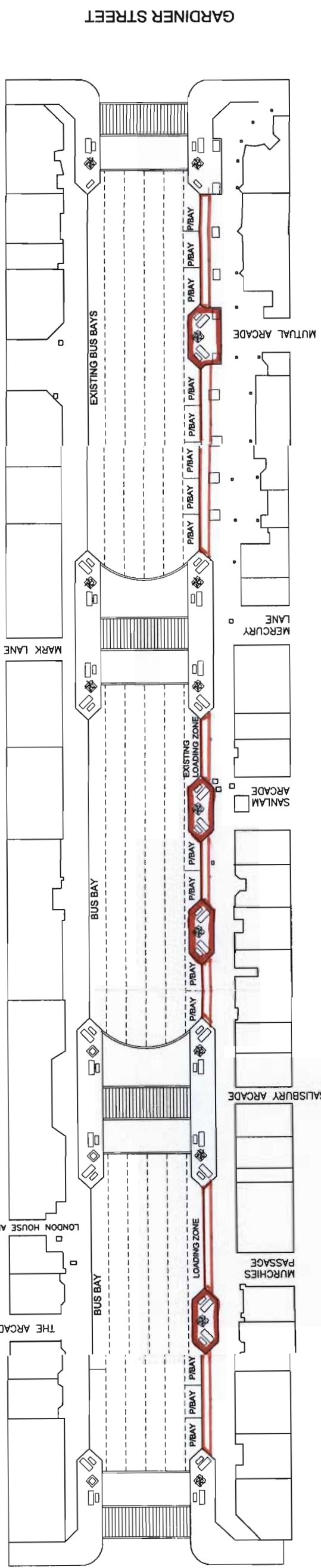
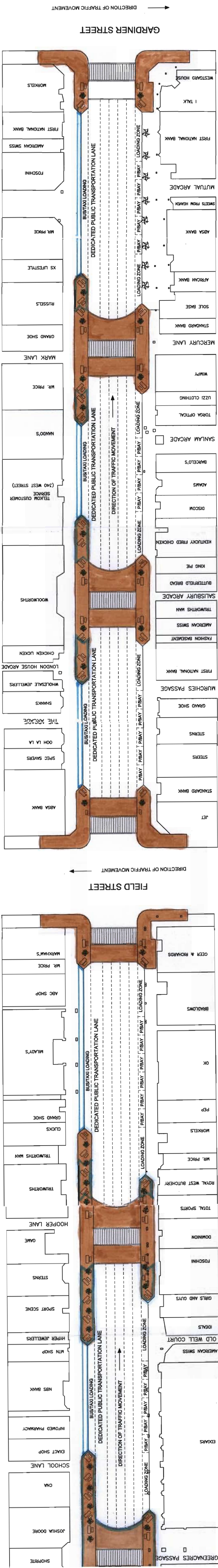


GARDINER STREET

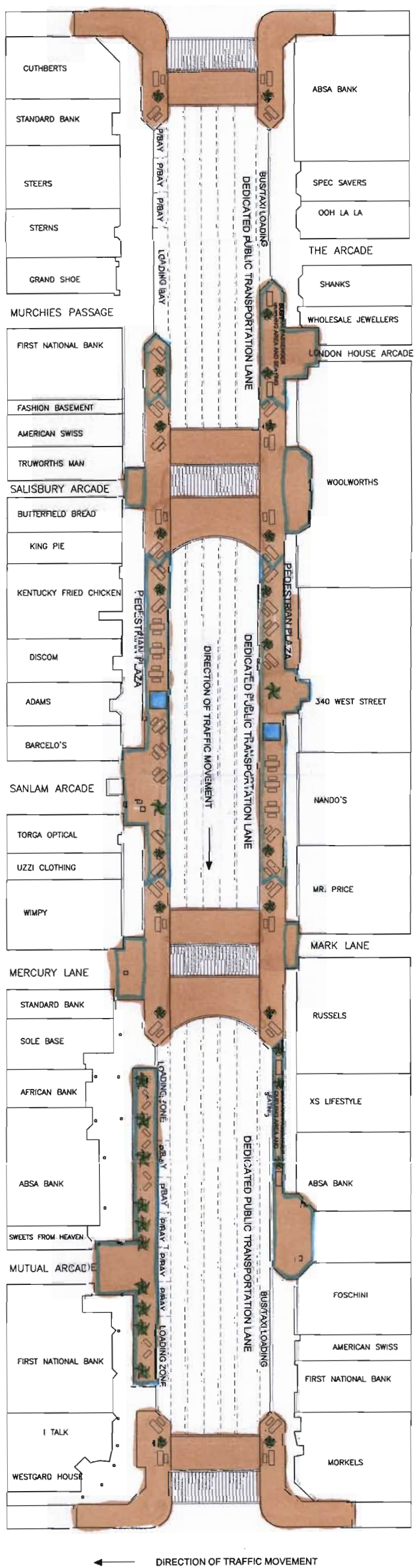
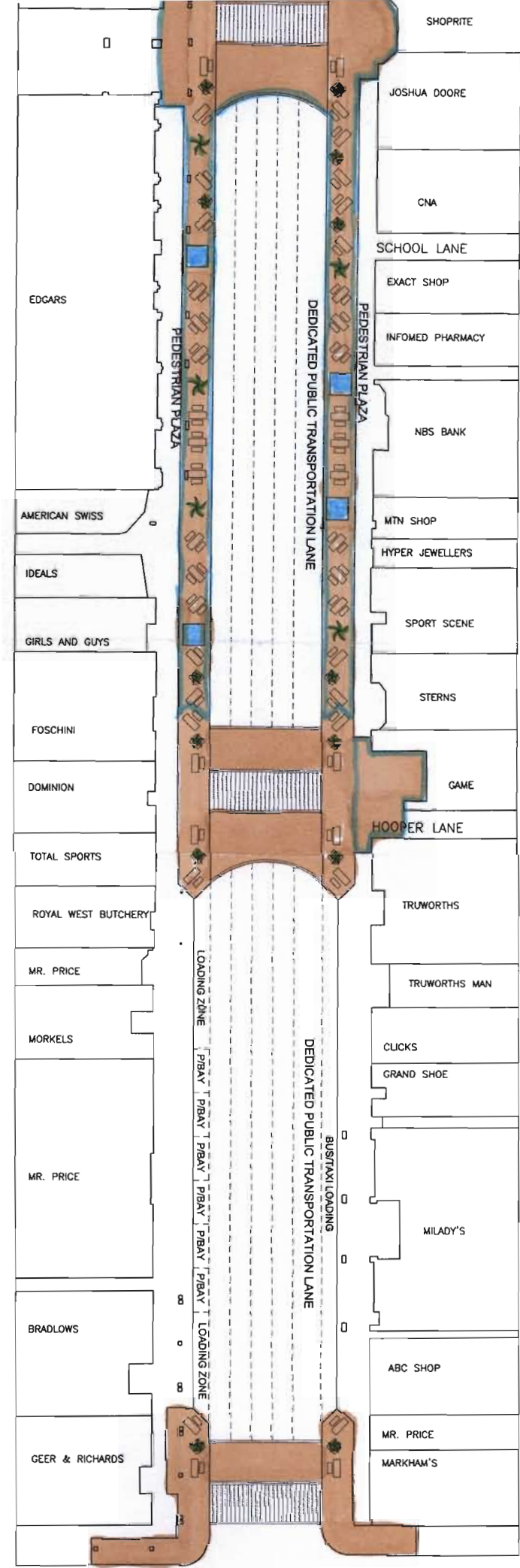


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- Portion removed from original street plan



PROPOSED STREET PLAN



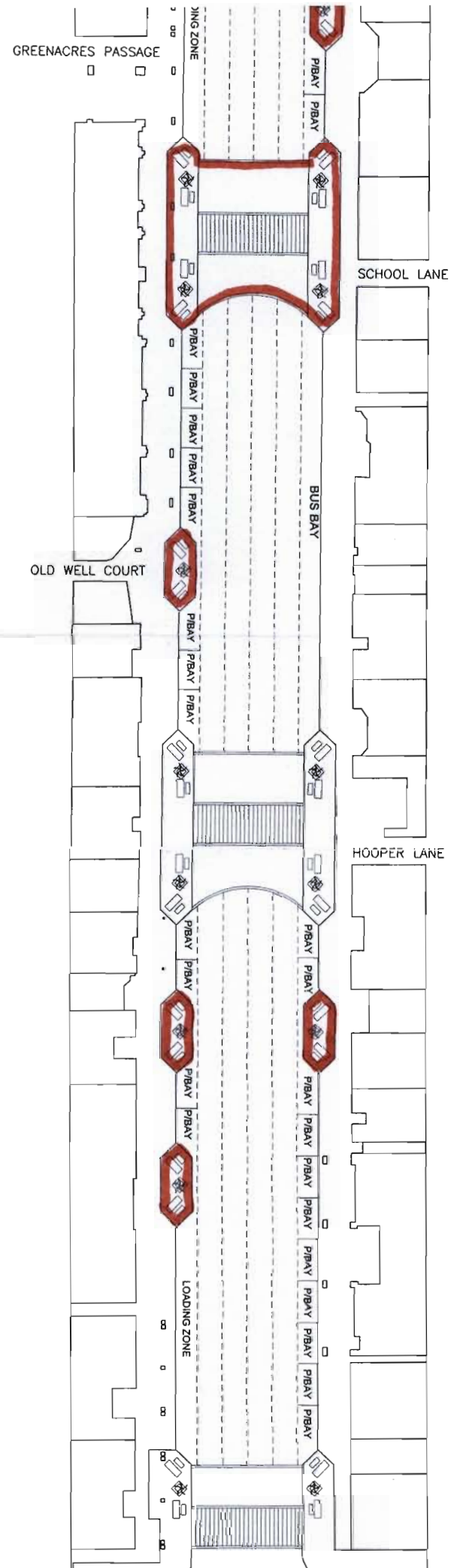
FIELD STREET

GARDINER STREET

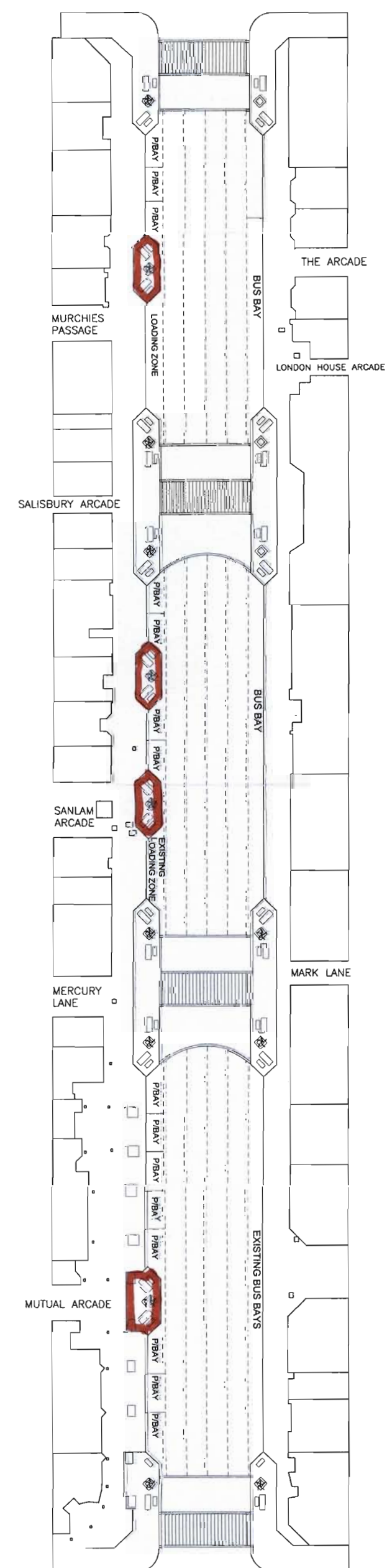
LEGEND

- Portion added to new street plan
- Portion removed from original street plan
- New kiosks for food vending
- Pedestrian seating

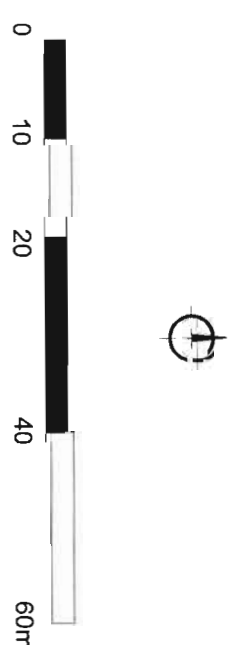
EXISTING STREET PLAN



FIELD STREET



GARDINER STREET



CHAPTER 8

CONCLUSIONS

8.1. Introduction

The purpose of this chapter is to evaluate the study, and to assess to what extent it has answered the questions and sub-questions, and proved or disproved the hypothesis.

The proposals made in Chapter 7 will be evaluated and the strengths and weaknesses of the study as a whole discussed.

Finally, further analyses and studies will be suggested, which are required in order to fulfil a 'complete' study of the problem of revitalisation of the hard core of the Durban CBD.

8.2. Research Questions and Hypothesis

The research question, "What is the appropriate intervention to physically revitalise the Durban CBD hard core, to solve problems of street trader organisation, and pedestrian and traffic congestion" was answered by exploring and examining various approaches and measures for physically revitalising this part of the city.

It was found that physical interventions alone could not bring about a lasting physical change. Non-physical interventions, such as improvements to the urban management system, were equally vital. The focus in this dissertation has been on physical change, but the research showed that when striving for urban improvement, physical and non-physical change are inseparable.

For this reason, one criterion for the evaluation of the physical improvements of the WSPP was its level of integration with an urban management plan, and the strength thereof. In the case of the evaluation of the WSPP, the main management plan was the Inner Thekwini Renewal and Urban Management Programme (iTRUMP). This management framework structured the central city into a system of smaller urban improvement precincts, one of which covered the site of the WSPP.

The findings of the study showed that the minimal intervention of creating trading nodes, freeing the sidewalk for pedestrian movement, and providing new paving and landscaping created a small degree of improvement, but was not ideal. The site observations and interview responses showed this clearly.

The subsidiary research questions attempted to gain a deeper understanding of: the case study area (including the Durban Inner City, the CBD, the CBD hard core and West Street itself); the range of urban

revitalisation measures used in South Africa and around the world; the urban revitalisation methods employed in the WSPP; and the potential impacts of the WSPP.

Many of these questions were answered in “Chapter 3: Conceptual Framework”, and others were answered as part of the case study introduction and evaluation.

The research hypothesis stated that “The application of certain types of pedestrianisation and physical improvement measures in a main CBD retail corridor, which address problems of pedestrian movement and street trader organisation, will create a noticeable improvement, if the appropriate management strategy is installed”.

The hypothesis has been proven to a limited extent. Due to the time period in which the research was carried out, it was not possible to determine precisely the affects of the WSPP. The completion of this study coincided with the completion of the WSPP implementation. A study over a much longer time period after the WSPP completion is required, in order for a fully comprehensive assessment to be made. For this reason, the views, opinions and predictions of professionals and stakeholders in the area of West Street, were included. Thereby, the best assessment of the future impact of the WSPP could be made.

However, the pedestrianisation and physical improvement measures of the WSPP have had a direct impact on the quality of the urban public realm, levels of pedestrian congestion and street user behaviour.

8.3. Research Methodology

The applied methodology involved:

Assessment of Immediate Physical Impacts:

1. Site observations of the situation on West Street, before and after the WSPP improvements.

Assessment of Perceived Future Impacts:

2. Interviews with stakeholders and professionals.
3. Assessment of the current management plan for West Street.
4. Assessment of the WSPP in terms of recognised attributes of city centre revitalisation, and response to contextual issues of the Durban CBD.

The above two-part evaluation methodology was implemented with the purpose of providing a complete evaluation of the WSPP, both of immediate, clear physical impacts, and changes which it is predicted to instigate in the future. It compensated for the fact that only the immediate

impacts of the implemented project could be assessed by means of site observation.

There were certain inherent restrictions and potential errors in the site observation methodology (which were acknowledged in the introduction to Chapter 5). By using two different blocks for each of the “before” and “after” studies, slight inaccuracies in the level of observed improvement caused by the WSPP, were undoubtedly incurred.

In addition, the original street studies made by Interarc Architects, which gave the detailed aims of the WSPP, were unavailable.

The methodology thus involved a combination of recording evident physical impacts of the WSPP, and making personal conclusions as to its ultimate impact in several years time, with the implementation of the assessed management plan.

This was satisfactorily achieved for the purpose of this study.

As stated in “Chapter 6: Findings”, the study succeeded in highlighting the following:

1. The WSPP has had a small positive impact on the quality of the public realm of West Street, without the implementation of a management plan.
2. The WSPP has potential to cause further improvements to the public realm of West Street, once the appropriate management plan is in place.
3. The impact of the WSPP on the organisation and behaviour of street traders and mini-bus taxi drivers is extremely limited, unless the relevant by-laws are enforced. Once this has occurred, however, street traders are likely to be well-managed and organised, as the local retailers and property owners have expressed their willingness to assist them.
4. The WSPP could cause significant improvement, if larger, more detailed physical interventions are implemented.

8.4. Author's Proposals

The three alternative proposals for West Street were recommended by the author for the purpose of improving the existing scheme and addressing its shortcomings. The proposals are evaluated here to test their own performances.

8.4.1. Proposal 1: Responding to Pedestrian Movement Routes

Proposal 1 aimed to improve the state of congestion remaining on the sidewalks. It responded more sensitively to areas of particular pedestrian congestion, such as those in line with major shop entrances and arcade

entrances. Certain stretches of the street were highlighted and differentiated, creating a stronger visual impression.

This proposal thus succeeded in creating more space for pedestrian movement at points of further need. It provided benefits for street traders, as it located more of them at points of high levels of pedestrian movement. It succeeded partially in eliminating the uniform pattern of identical street trading nodes, but did not have the potential to create a lasting improvement to the street and aesthetics.

8.4.2. Proposal 2: Focussing Activity on the Northern Sidewalk

Proposal 2 represented a similar level of intervention to proposal 1 – arranging and extending trading nodes to further ease pedestrian movement and organise street traders.

It proposed to shift both kerb lines southwards, to increase the width of the busy northern sidewalk and reduce the quieter southern one. The proposal included the widening of the sidewalk at particular points which remained congested after the changes implemented in the WSPP. It also aimed to focus street trading activity at points of high pedestrian volumes. By creating or extending trading nodes along the northern sidewalk at pedestrian crossings, both street traders and pedestrians would benefit further. Street traders would benefit from more 'passing feet'; pedestrians would benefit too, as illegal street traders would be unable to set up their stalls at these points, and mini-bus taxis would be discouraged from stopping at or near pedestrian crossings.

The proposal thus succeeded in further easing pedestrian movement and organising street trading. It created larger visual statements in the street, and eliminated the existing repetitive treatment of identical trading nodes.

It did not, however, create a new identity for West Street, nor did it introduce pedestrian facilities. The longer trading nodes at the pedestrian crossings, although providing larger visual elements, were similar, and created a new type of monotony.

8.4.3. Proposal 3: Pedestrian Plazas

Proposal 3 presented a level of intervention beyond what Proposal 1 and Proposal 2 had offered. It aimed to change the character of the street, by introducing pedestrian habitation of the sidewalk.

In this way pedestrian mini-plazas would be created, including pedestrian seating, kiosks for food vending and seating areas for commuters awaiting buses and minibus-taxis. In such an area, which was inhabited by pedestrians, illegal street traders were less likely to set up their stalls.

The street plan accommodated and assisted not only pedestrians and street traders, but customers, shop-owners, minibus-taxi and bus drivers, and commuters too.

Furthermore, by introducing human habitation of the public realm, and formal retail activities, the character of the street would improve. It would become a public space which people would want to inhabit, and in which they would want to invest.

With more street traders and pedestrians positioned along certain strips, bus and minibus-taxi passengers would be forced to use their demarcated waiting area.

Proposal 3 responded to specific opportunities of the site, by providing special treatment to the sidewalk outside the architecturally impressive Old Mutual Building and the main shop and arcade entrances.

This plan thus succeeded in further spatially directing the activities of different street users, to further aid street management.

Proposal 3 provided the most benefit for all street users.

8.5. Recommendation for Further Study:

This study has examined whether or not a certain level of physical intervention in the public realm can change the visual quality of the area, can change the behaviour of street users. It has examined the need for a management plan to accompany physical measures in the context of revitalisation in the Durban CBD hard core.

Essentially, this study is only the first step towards gaining a full understanding of what is necessary, from both a physical and management perspective, to create a lasting improvement in the CBD hard core of Durban.

Further studies on the concerned topic: "Appropriate Intervention to Revitalise the Durban CBD Hard Core: A Physical Design Perspective" are thus proposed. They are intended to address important problems of CBD hard core revitalisation, which have not yet been addressed, as well as those problems which this study has failed to address sufficiently.

The proposals include:

1. A similar study to this, which would be carried out in the near future, examining the effects of the WSPP. This would provide more concrete evidence on the benefit of a CBD or street-specific management system, a dedicated public transportation lane and dedicated public transportation loading zones, and street trader- and taxi by-laws enforcements.

2. A comprehensive study of the whole of the CBD, to identify areas of specific importance, where investment and physical upgrade would benefit larger areas of the CBD.
3. A study of the dynamics of street trading in the specific context of Durban. This would establish whether or not the provision of demarcated, landscaped areas for registered traders, and the policing of un-registered, illegal traders, are sufficient to manage this phenomenon in the CBD of Durban.
4. Further studies of city centre revitalisation in other cities, to examine the effect of various types of physical intervention accompanied by various types of management.

By studying such examples, and experimenting with different levels of physical and non-physical intervention in different parts of the CBD, successful models of intervention and co-ordination between physical and management measures can be established. Such measures can then be used to encourage and motivate investment in future city centre revitalisation.

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APPENDIX A

SITE OBSERVATION METHODOLOGY

The following methodology was used for observing types of street user behaviour and conflict. Part A, "Street User Behaviour and Conflict" was used in carrying out observations of both the "Before" and "After" conditions in West Street. Part B, "Specific Effects of the New Public Realm" was used in the "After" Study in examining the specific effects of the WSPP.

Part A: Street User Behaviour and Conflict

1. Conflict cause by street user movement and behaviour

- A) Points of Pedestrian conflict with one another:
 - I. Lateral – pavement & shop/arcade entrance
 - II. Lateral – pavement & pedestrian crossing
 - III. Linear – passing on pavement in same direction
 - IV. Linear – passing in opposite directions (head-on collisions)
 - V. Linear/Lateral – corners
- B) Points of Pedestrian/informal trader conflict.
 - I. At shop entrances
 - II. At arcade entrances
 - III. At street corners
 - IV. At pedestrian crossings
 - V. At 'typical' pavement sections
 - VI. At points preventing access to street-parked private vehicles
- C) Points of public transportation/ private vehicle Conflict
 - I. Bus/ mini-bus taxi
 - II. Mini-bus taxi/ private vehicle
 - III. Double-parked vehicles for offloading of goods/other private vehicles
 - IV. Double parked vehicles for customer run-ins/other private vehicles
- D) Points of formal retail/informal trade conflict
 - I. Street traders located outside shop entrances
 - II. Street traders located in front of shop windows.
- E) Points of pedestrian/vehicle conflict
 - I. Pedestrian jay-walking
 - II. Pedestrian /private vehicle
 - III. Pedestrian/ public transportation vehicle

2. General Observations of Street User Behaviour

- A) Pedestrians
 - I. Do pedestrians cause particular congestion on the pavements at pedestrian crossings?

- B) Street traders
 - I. Sense of organisation?
 - II. Are they using designated stalls?
 - III. Are the designated stalls sufficient?
 - IV. Are they clustered at certain points in relation to pedestrian/vehicular movements, or retailing activities?
- C) Formal retailers
 - I. Do certain retail activities generate especially intense pedestrian activity?
- D) Traffic
 - I. Do mini-bus taxis have regular pick up/ drop off points, or are they completely random?
 - II. Do they cause particular pedestrian conflict problems on the pavement?
 - III. Do buses cause particular pedestrian conflict problems on the pavement?
 - IV. Is most of the traffic through traffic/ or has it come to West Street for a particular reason?

Part B: Specific Effects of the New Public Realm

- A) Trading Nodes
 - I. Have the trading nodes had any affect on sidewalk pedestrian movement?
 - II. Have the trading nodes any affect on private vehicles, mini-bus taxis or buses?
 - III. Do the trading nodes influence the behaviour of street traders, in ensuring that they do not take up more space than that allocated by their stall?
 - IV. Do the trading nodes influence the behaviour of traders, in their management of refuse?
- B) Pedestrian Crossings
 - I. Have the repaved pedestrian crossings influenced the behaviour of pedestrians, when crossing the street, and when waiting to cross?
- C) Quality of the Public Realm
 - I. Has the West Street Pilot Project improved the aesthetic quality of the public realm
 - II. Have the new physical improvements influenced any aspect of pedestrian behaviour?

APPENDIX B

INTERVIEW SCHEDULES

A. Stakeholder Interviews

The following questions were posed to all “Stakeholders”.

1. What is the value of the West Street Pilot Project:
 - a) In the formal retail network of the CBD/
 - b) In the street trade network of the CBD/
 - c) In the Public Transport Network of the CBD/
 - d) In the Property Market of the CBD?
2. What is your attitude towards accommodating street traders in the CBD?
Have resources been invested in the right area with the right aim?
3. What should the responsibility of your represented stakeholder be to the upkeep of the public realm and the assistance of street traders?
4. Do you feel that a more extensive project should have been followed?
5. What could be done, from the perspective of your represented stakeholder, to improve the existing project?

B. “Professional” Interviews

The following questions were posed to professionals in the fields of urban planning, urban design and architecture:

1. What is the value of the West Street Pilot Project:
 - a) In the pedestrian movement network of the CBD?
 - b) In the formal retail network of the CBD?
 - c) In the street trade network of the CBD?
 - d) In the Public Transport Network of the CBD?
 - e) In the Property Market of the CBD?
2. What is your attitude towards accommodating street traders in the CBD?
Have resources been invested in the right area with the right aim?
3. Is the project extensive enough as a pilot project?
4. Has the right approach been followed, in managing the CBD in an incremental way? Do you think that a more ambitious project should have been followed?
5. What is your opinion of the street plan with regard to your experience with street traders?
6. Do you think that the WSPP can benefit the CBD as a whole?

APPENDIX C

SITE OBSERVATION DETAILS

The following appendix contains a detailed of the site observations of West Street both before and after the WSPP street improvements were implemented. It follows the methodology contained in Appendix A.

1. PROBLEMS OF CONFLICT BETWEEN STREET USERS

a) POINTS OF PEDESTRIAN CONFLICT WITH ONE ANOTHER:

1. Lateral – pavement & shop/arcade entrances (See Plate 9.1)

Before Street Improvements

Particular congestion occurred at the entrances to large clothing and food stores, such as the Hub, Jet and Shoprite. At such points, there was as much linear collision as there was lateral collision. This situation was particularly aggravated where a major shop entrance was situated adjacent to an arcade entrance, such as Game on the Northern sidewalk.

The point of worst pedestrian congestion was at the entrance to School Lane where pedestrian flow reached a standstill, with a pile-up of up to 4 people. It was almost as congested at the entrance to Plowright Lane. The extreme congestion at the entrance to School Lane was due to the fact that it was in line with a pedestrian crossing, and was within a few metres of the Shoprite entrance. Shoprite caused the greatest level of congestion of any shop entrance. There were collisions of all types recorded here, which were aggravated by the presence of stationary pedestrians and street traders.



Plate 9.1: Congested Arcade Entrances: Plowright Lane (left) and School Lane (Broad-Field Street Block, northern sidewalk)

After Street Improvements:

The entrance to Woolworths was a point of major pedestrian conflict, including many lateral collisions. The intensity of pedestrian activity was increased by its location adjacent to the entrance to London House Arcade, and in line with a pedestrian crossing. Lateral movement conflict was also recorded at the entrance to London House Arcade.

II. Lateral – movement between sidewalk & pedestrian crossing

Before Street Improvements:

Crossings at street corners caused congestion on the sidewalk corners, where pedestrians queued to cross the road, and where they reached the next kerb. This was aggravated by a dense arrangement of street traders at these pavement corner points. All types of pedestrian collisions were recorded.

After Street Improvements:

No pedestrian movement conflict was observed at pedestrian crossings.

III. Linear – movement on the sidewalk in the same direction
(See Plate 9.2 and Plate 9.3))

Before Street Improvements:

This occurred at many points along the pavement, but especially outside major shop entrances.

After Street Improvements:

Linear collisions (of pedestrians moving in the same direction) were noticed outside all major shop and arcade entrances, especially London House Arcade, Woolworths, 340 West Street, Mr Price, ABSA Bank, Steers and Kentucky Fried Chicken.



Plate 9.2: Linear Collisions outside Jet Entrance ("Before" Study)

Linear collisions and congestion occurred outside major shop entrances, such as Jet (Broad-Field Street Block, southern sidewalk)

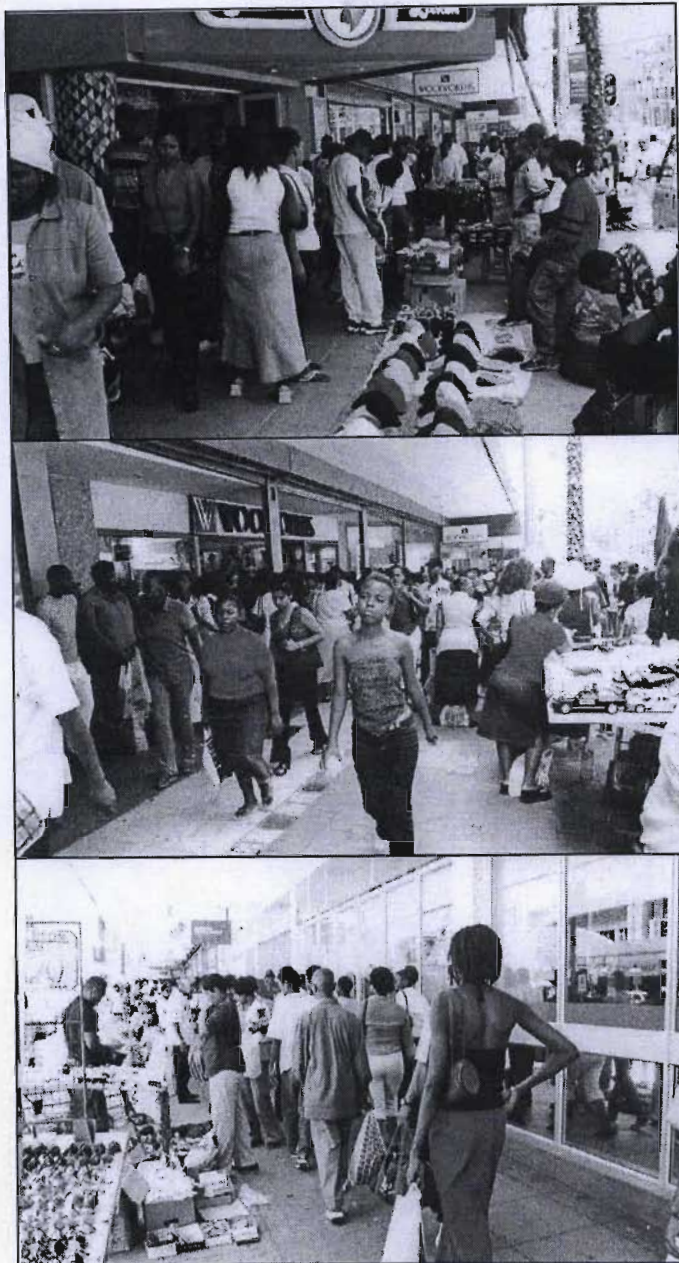


Plate 9.3: Linear Collisions ("After" Study)

Linear collisions were noticed outside all major shop entrances, such as Woolworths and Chicken Licken (Field Gardiner Street Block)

IV. Linear – movement in opposite directions

Before Street Improvements:

This occurred frequently, especially at points of intense congestion, such as shop and arcade entrances.

After Street Improvements:

This was the most common type of collision, as it was caused by any form of pavement narrowing. It occurred outside the entrances to all major banks, food and clothing stores.

V. Linear/Lateral Movement – Corners
(See Plate 9.4)

Before Street Improvements:

Major collisions of all types at all corners, especially the southern pavement corner on Field Street. These collisions were aggravated by street traders who were stationed at those exact points.



Plate 9.4: Broad Street Corner ("Before" Study)
Lateral Collisions at Broad Street corner (southern sidewalk)

After Street Improvements:

Collisions of this form were noticed at all street corners, except on the southern sidewalk at the Gardiner Street corner.

VI. Stationary Pedestrians

Before Street Improvements:

Stationary pedestrians, waiting outside shops, aggravated other pedestrian movement, by narrowing the usable pavement width, although not causing collisions directly. Stationary pedestrians were visible, especially outside major clothing and food shops, such as the Hub, Jet, Shoprite and Checkers.

After Street Improvements:

Stationary pedestrians gathered outside the main stores, especially clothing stores, but to a lesser degree to that noticed in the "before" study.

b) POINTS OF PEDESTRIAN/INFORMAL TRADER CONFLICT.

These points of conflict include all points where informal traders occupy space on the pavement not assigned to them, which caused collisions between pedestrians and each other, or between pedestrians and the informal traders themselves. Such points of conflict include areas where unregistered traders occupy a space on

the pavement, either standing, sitting, with trolleys or with makeshift stalls. It also includes registered traders at stalls, who have extended their trading space with additional tables, boxes, or seats in front of their stalls.

I. At shop entrances

Before Street Improvements:

Illegal informal traders were gathered around many shop entrances, but did not contribute noticeably to pedestrian collisions and congestion. One exception was Shoprite, where the numbers of informal traders did narrow the existing usable pavement width, and added to an existing state of congestion.

After Street Improvements:

No particular congestion was caused by street traders at shop entrances.

II. At arcade entrances
(See Plate 9.5)

Before Street Improvements:

Illegal traders did contribute to pedestrian congestion at arcade entrances, especially Plowright Lane, School Lane and Greenacres Passage. The sheer volume of pedestrians at these arcade entrances would have caused congestion without the presence of street traders, but the traders did aggravate the situation.



Plate 9.5 Congestion at Arcade Entrances ("Before" Study)

Congestion at the entrances to School Lane (left) and Plowright Lane (right) - Broad-Field Street Block, northern sidewalk.

After Street Improvements:

No particular congestion was caused by street traders at arcade entrances.

III. At street corners
(See Plate 9.6 and Plate 9.7)

Before Street Improvements:

This was the most noticeable case of unregulated informal traders obstructing the flow of pedestrian movement considerably. It occurred on both street corners at both intersections (Field Street and Broad Street), with the most severe case being on the southern pavement at the Field Street intersection. Here, many itinerant traders with trolleys, blocked a significant width of the pavement at the crucial corner position, where pedestrian movement was extremely high at signal changes.

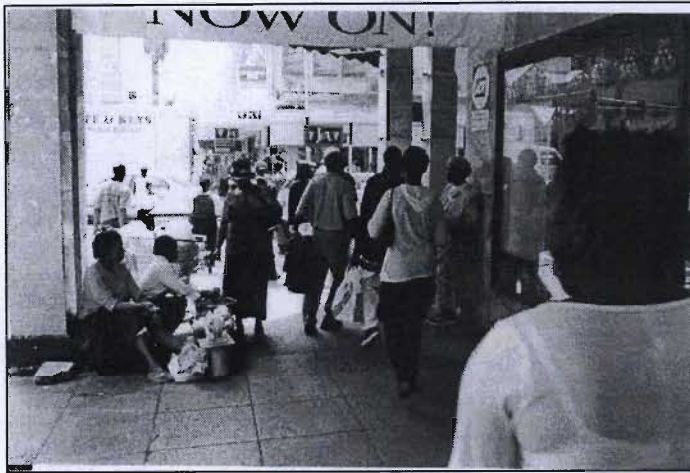


Plate 9.6: Illegal Street Traders at Street Corner ("Before" Study)
Broad-Field Street Block, southern sidewalk.

After Street Improvements:

Unregistered traders were stationed at the corners on the Northern and Southern sidewalks at the Field Street intersection, as well as the northern sidewalk at the Gardiner Street intersection. Because of the pedestrian activity generated at these points, up to six individual traders were stationed at some of the corners. These traders had a marked affect on pedestrian movement, causing additional congestion at these very busy points.



Plate 9.7: Illegal street traders ("After" Study)
Field Street Corner (northern sidewalk).

IV. At pedestrian crossings

Before Street Improvements:

Pedestrian movement was not affected severely by street trading at pedestrian crossings.

After Street Improvements:

No particular congestion was caused by traders at pedestrian crossings.

V. At 'typical' sidewalk sections

(See Plate 9.8)

Before Street Improvements:

Specific conflict was recorded where the location of an un-registered trader, or the extension of goods display space beyond the limits of a stall, caused a reduction in the usable width of pavement at that point. This occurred mainly on the street side of the pavement, but some traders were also stationed directly outside shop windows, narrowing the width from the building side.

After Street Improvements:

Unregistered informal traders contributed to increased pedestrian congestion and collisions at many points along the northern sidewalk, especially outside Nando's.



Plate 9.8: 'Typical' Sidewalk Sections

Street traders contributed to pedestrian congestion both before (left) and after (right) the WSPP street improvements.

VI. Between street trader stalls and parked vehicles
(See Plate 9.9)

Before Street Improvements:

Along the entire length of the block, on both sides of the street, the space between street trading stalls and the kerb line was used as additional movement space for pedestrians, as the existing movement width on the pavement was not sufficient. This pedestrian movement disturbed the operations of street traders.

After Street Improvements:

No conflict was noticed.



Plate 9.9: Thoroughfare Behind Trading Stalls ("Before" Study)

Due to lack of sidewalk space, pedestrians use the space along the entire southern sidewalk between trading stalls and kerb for movement. (Broad-Field Street Block)

c) POINTS OF PUBLIC TRANSPORTATION / PRIVATE VEHICLE CONFLICT

I. Bus/ minibus-taxi

Before Street Improvements:

Very little conflict was noticed between these two forms of public transport. Buses drove closer to the centre of the street, in the second or third lane from the left. Minibus taxis drove, and stopped, in the left hand travelling lane.

After Street Improvements:

Buses used the two left-hand lanes for stopping and collecting passengers and blocked private vehicular traffic.

II. Mini-bus taxi/ private vehicle
(See Plate 9.10)

Before Street Improvements:

Along the entire left-hand lane, mini-bus taxis used this space for dropping off passengers. It was unusable for any other traffic. As a

result, private parked vehicles had difficulty parking, or exiting their parking places. Certain taxis also used the right-most lane, for dropping off and picking up passengers at random points.

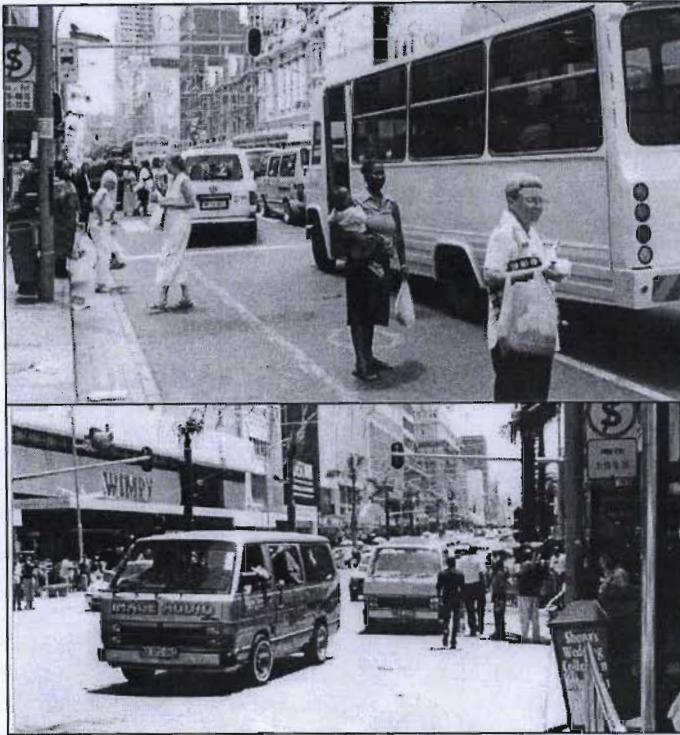


Plate 9.10: Public Transportation Vehicles ("Before" and "After" Study)

Public transportation vehicles used the entire left hand lane for passenger drop-offs, both in the Broad-Field Street Block - "Before" Study (top) and the Field-Gardiner Street Block - "After" Study (bottom)

After Street Improvements:

Mini-bus taxis used the left-hand lane for dropping off passengers, blocking its use by all other vehicles.

III. Double-parked loading vehicles/ private vehicles

Before Street Improvements:

There were few cases of loading vehicles, but this could be attributed to the fact that it was a Saturday morning. All loading vehicles occupied the right-most lane for extended periods, rendering it unusable for all other traffic.

After Street Improvements:

No incidents were observed.

IV. Double-parked vehicles for run-ins/ private vehicles.
(See Plate 9.11)

Before Street Improvements:

Other than a few off-loading vehicles and mini-bus taxis, the entire right hand lane was occupied by stationary, double-parked vehicles, which had stopped for customer run-ins. Many of them occupied their positions for extended periods of time, rendering the lane unusable for other forms of traffic.



Plate 9.11: Stationary Vehicles for Customer Run-ins

Private vehicles used the entire right hand lane for customer run-ins, in both the Broad-Field Street Block – “Before” Study (left) and the Field-Gardiner Street Block – “After” Study (right).

After Street Improvements:

Double parking along the right-hand lane still occurred, although to a lesser extent than in the Broad – Field Street block.

d) POINTS OF FORMAL RETAIL/INFORMAL TRADE CONFLICT

I. Street traders located outside shop entrances

Before Street Improvements:

There were no street traders located directly outside shop entrances. Where they were located in line with shop entrances, they did not noticeably contribute to congestion.

After:

No conflict was noticed.

II. Street traders located in front of shop windows

Before Street Improvements:

There were limited examples of street traders located in front of shop windows. Where it did occur, it conflicted with formal retail interests, by blocking window displays.

After Street Improvements:

There were many cases of people handing out leaflets outside shop windows. They conflicted with the interests of the shop, by attracting attention away from window displays, by blocking the pedestrian view of displays completely.

e) POINTS OF PEDESTRIAN/VEHICLE CONFLICT

I. Pedestrian jay-walking

Before Street Improvements:

This occurred in line with major shops, such as Jet, where there was no marked pedestrian crossing. It also occurred both before and after pedestrian crossings.

After Street Improvements:

Pedestrian jaywalking occurred exactly as it did in the block from Field Street to Broad Street. The newly paved pedestrian crossing did not change pedestrian behaviour in this instance.

II. Pedestrian /private vehicle

Before Street Improvements:

This occurred mainly at pedestrian crossings, where private vehicles had stopped inside the crossing area.

After Street Improvements:

Uncontrolled street crossing at corners, caused problems for turning vehicles, which could not move because of pedestrians crossing out of turn. Problems of vehicles stopping inside pedestrian crossings still occurred.

III. Pedestrian/ public transportation vehicle
(See Plate 9.12)

Before Street Improvements:

Such conflict occurred frequently at corner crossings where mini-bus taxis had stopped. Mini-bus taxis were a major obstacle to pedestrian movement, by blocking the pedestrians as they approached the pavement. Some minibus taxis also stopped in the middle of a mid-block pedestrian crossing.

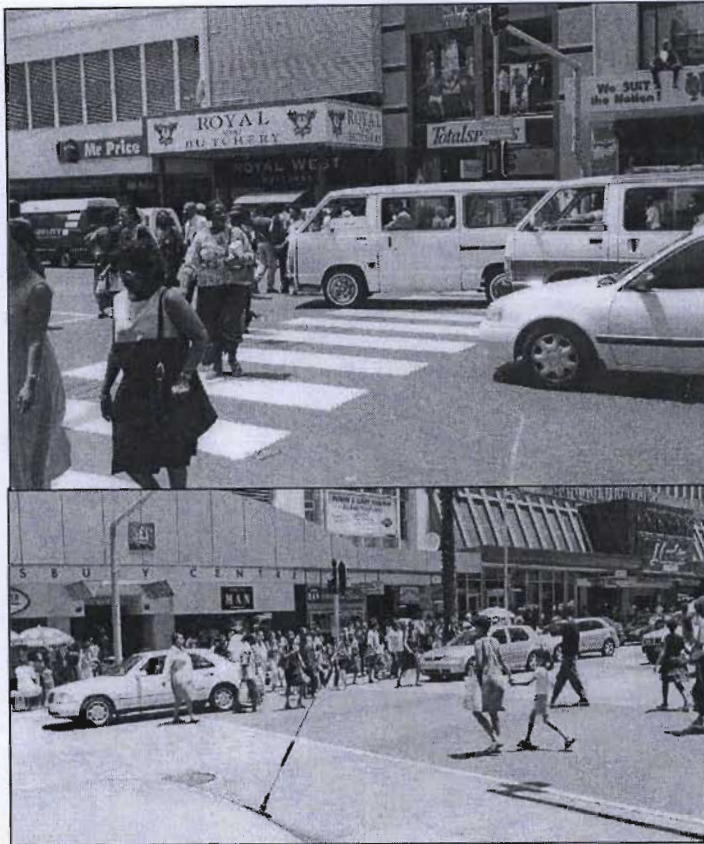


Plate 9.12: Vehicles at Pedestrian Crossings

Vehicles stopped inside the pedestrian crossing in both the Broad-Field Street Block – “Before” Study (top) and the Field-Gardiner Street Block – “After” Study (bottom).

After Street Improvements:

Minibus-taxis stopped inside the pedestrian crossings, at corner and mid-block crossings. This partially blocked pedestrian movement, causing additional congestion.

2. GENERAL CHARACTERISTICS OF STREET USERS: LOCATION, ORGANISATION AND BEHAVIOUR

a) PEDESTRIANS

1. Do pedestrians cause particular congestion on the pavements at pedestrian crossings?

Before Street Improvements:

Pedestrians did congregate on the pavement or on the street, but did not cause particular congestion.

After Street Improvements:

Neither pedestrians entering the sidewalk from the pedestrian crossing, nor those waiting to cross, caused collisions or

congestion on the sidewalk. Pedestrians waiting to cross the street did so within the demarcated area, or spread out on the street itself.

II. Are the levels of pedestrian movement and street trading activity equal on either side of the street?

Before Street Improvements:

The levels of both pedestrian movement and street trader activity are higher on the northern side.

After Street Improvements:

As in the Broad Street - Field Street block, the levels of both pedestrian movement and street trader activity are higher on the northern side.

b) FORMAL RETAILERS:

I. Do certain retail activities generate especially intense pedestrian activity?

Before Street Improvements:

As noted in the 'Pedestrian Conflicts' section, particular congestion was caused by major food and clothing stores, such as Shoprite, Hub and Jet.

After Street Improvements:

As observed in the block of West Street from Broad to Field Street, the large clothing and retail stores generated large amounts of pedestrian activity. This activity was intensified, where the store was located opposite, or adjacent to a pedestrian crossing or arcade entrance. This was the case with Woolworths.

c) STREET TRADERS

I. Sense of organisation?

Before Street Improvements:

Generally, the street traders were not well-organised. Many of them were positioned at points which hindered pedestrian movement. Even those traders who had a stall used additional tables, boxes and seats, which took up space beyond the line of their trading stall.

After Street Improvements:

Although new trading tables have been provided in the trading nodes, unregistered street traders are still present at various positions along the sidewalk. The creation of trading nodes has not solved this problem.

II. Are they using designated stalls?

Before Street Improvements:

Yes.

After Street Improvements:

Yes. All trading tables have been occupied.

III. Are the designated stalls sufficient?

Before Street Improvements:

The dedicated trading stalls are not sufficient. There was an equal number of traders trading without a stall, as those trading with one.

After Street Improvements:

The trading tables in the nodes are not sufficient to cater for all existing traders. They do, however, cater for all registered traders in this section of the street.

IV. Are they clustered at certain points in relation to pedestrian/vehicular movements, or retailing activities? Has the design of trading nodes responded to this?

Before Street Improvements:

It was very obvious that certain large stores, such as the Hub, Jet, Shoprite, NBS were a major cause of pedestrian activity. As a result, street traders were concentrated outside the entrances of these stores. The major stores were also points where stationary pedestrians gathered. This was an additional cause of congestion.

After Street Improvements:

The design of trading nodes did not respond specifically to the needs of traders outside large stores. There was no particular attempt to create nodes at these points.

d) TRAFFIC

I. Do mini-bus taxis have regular pick up/ drop off points, or are they completely random?

Before Street Improvements:

Many mini-bus taxis stopped at corners, and mid-block pedestrian crossings. Besides these points, they stopped randomly and frequently along the entire length of the street.

After Street Improvements:

Minibus-taxis stop along the left-hand kerb of the street. Their points of dropping off and picking up passengers are random.

II. Do mini-bus taxis cause particular pedestrian conflict problems on the sidewalk?

Before Street Improvements:

Mini-bus taxis did not cause any particular problems of congestion on the sidewalks.

After Street Improvements:

Mini-bus taxis did not cause any spatial conflicts on the sidewalks.

III. Do buses cause particular pedestrian conflict problems on the pavement?

Before Street Improvements:

The only congestion that the buses caused was at the bus stops, where benches were provided, which took up a significant part of the usable pavement width.

After Street Improvements:

Bus stops, and the benches provided, caused a marked narrowing of the sidewalks. The benches, with unregistered street traders alongside, caused increased pedestrian collisions.

3. EFFECT OF THE NEW PUBLIC REALM CREATED BY THE WSPP

a) TRADING NODES

I. Have the trading nodes had any affect on sidewalk pedestrian movement?

The observation made of pedestrian movement, was that although there were many people, they moved freely. There were no points of congestion where pedestrians could not move, as there were in the block of Field to Broad Street. (See Plate 9.13)



Plate 9.13: Trading Nodes outside Woolworths

Trading nodes create space for customers to browse wares without obstructing pedestrian flow. (Field-Gardiner Street Block – northern sidewalk)

II. Do the trading nodes influence the behaviour of street traders, in ensuring that they do not take up more space than that allocated by their stall?

No. Although the traders have been given a special, well-landscaped space in which to trade, they have not organised their activities accordingly. Traders within the nodes have extended their trading space with displays on additional tables and on the ground. Additional unregistered traders have set up informal stalls in the nodes, between the trading tables. (See Plate 9.14)

III. Do the trading nodes influence the behaviour of traders, in their management of refuse?

No noticeable improvements to refuse management have been observed.



Plate 9.14: Street Trader Behaviour

Traders have extended their trading space beyond their allowable table, and have allowed illegal traders to set up informal stalls within the nodes.

b) STREET DESIGN

I. Has the West Street Pilot Project improved the aesthetic quality of the public realm?

Yes. The aesthetic quality has certainly improved, with built-in concrete benches, tree-planting, colourful mosaic work and newly-paved trader nodes and pedestrian crossings. The quality of a 'pedestrian space' has been created to a certain extent

II. Have the new physical improvements influenced any aspect of pedestrian behaviour?

There has been no change in pedestrian or behaviour. Indeed, during construction, unfilled planters were used by pedestrians as rubbish bins. Pedestrians continue to wait inside traffic lanes when crossing the street, as well as crossing at random points along the street. (See Plate 9.14)



Plate 9.15: Behaviour at Pedestrian Crossings

Pedestrians continue to wait in the vehicular lanes when crossing the street.

III. Has the new street design had any affect on private vehicles, mini-bus taxis or buses?

The trading nodes themselves have not had any affect on vehicles either positive or negative. The provision of loading zones, along the entire northern sidewalk has certainly helped with the operations of buses and mini-bus taxis.