5  Conclusions and recommendations

5.1 Introduction

Hypothesis:
The hypothesis of the study is that there is a measure of vertical and horizontal integration of the transportation plans, spatial planning/development instruments and environmental management within the three municipalities.

The empirical study has confirmed, however, that there is very little to no vertical and horizontal integration of transportation plans, spatial planning/development instruments and environmental management within the three municipalities.

In this section, an attempt will be made to indicate the extent to which that integration has been accomplished and what would be necessary in this regard to achieve more sustainable integration of transportation, sustainable development and environmental management. In order to contextualise the conclusions in view of the results and discussions of the empirical study, this overview will briefly explore the results and discussions with a view to recommend the types of changes needed in terms of the ITPs and SDFs of each municipality toward better integration.

5.2 Discussion of study results

As seen in Chapter 2, various benefits are associated with the proper integration of transportation planning and spatial development planning. These benefits include sustainability, equity, accessibility, environmental preservation and integrated decision-making in the sphere of development and transportation.

These benefits are applicable to each type of municipality addressed in this study. Through the implementation of sustainability (including sustainability, equity, accessibility, environmental preservation and integrated decision-making), each municipality can take a significant step toward the integration of transportation and development instruments.

The results section in the legislation frameworks and policies in Chapter 3 provided a brief overview of the relevant legislation and policies relating to the current study. These were divided into three categories:

1. Transportation planning;
2. Spatial development; and
3. Nodal and corridor development.

These three categories all have a influence on, and a part to play in the conservation of the natural environment. In light of the three categories within which the relevant policies were discussed, broad policy guidelines or requirements at the end of Chapter 3 have been developed and these should be used when working towards the integration of transportation plans and spatial planning/development instruments. In retrospect, however, it could be argued that policy and legislation through implementation, funding and the required integration challenges may indeed be the reason why the hypothesis cannot be proven.

The results and discussion of the empirical study presented in Chapter 4 provided a more comprehensive overview of the ITPs and SDFs of each of the municipalities as well as a number of positive planning goals that had been set with a view to improve the South African situation. By means of the empirical study and the matrix set out in Table 29, the hypothesis will now be tested against each municipality.
The local municipality of Hermanus

There is a lack of integration between the ITPs and SDFs as well as insufficient integration and integrated decision-making between the relevant departments of transportation and spatial development.

Cape Town metropolitan municipality

There is a measure of integration between the ITPs and SDFs, but very little integration and integrated decision-making takes place in the relevant departments of transportation and spatial development.

Eden district municipality

There is a measure of integration between the ITPs and SDFs, but very little integration and integrated decision-making have been found between the relevant departments.

From the literature review, policies and legislation as well as the empirical study, a number of changes are recommended with a view to achieve sound integration of transportation plans and spatial planning/development instruments

5.3. Integration planning recommendations and proposals

In the current study, it was found that the integration of development and transportation is paramount in view of hopes for successful, sustainable development in the future. Only through the successful integration can the conservation of the environment, better economic development and better decision-making and sustainable living be achieved.

Disparities between the planning instruments can be minimised and collusion points avoided by integrating these frameworks, and by planning through teamwork (between the different departments involved).

From all the findings and the empirical research, the following planning recommendations can be made (shown in Table 33). These recommendations can all be used in the municipalities under investigation in order to facilitate better integration.

Table 32: Planning Recommendations

<table>
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<tr>
<th>Planning recommendations</th>
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<tbody>
<tr>
<td>Transportation</td>
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<tr>
<td>• Implementation and promotion of better public transportation</td>
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<td>A decrease in private transportation can be accomplished by promoting and sustainably implementing public transportation. This will also improve the address economical and environmental concerns. The implementation of better public transportation will diminish the need for private car ownership which will, in turn, lead to a decrease in air and noise pollution.</td>
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<tr>
<td>Better public transportation services that are safer and more reliable and which cater for to a wider variety of</td>
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clients should be researched and implemented over a set time period. This would save a great deal on travel costs and, in the end put, more money back into the pocket of the consumer to use elsewhere.

Promotion of sustainable transportation

Through the improvement of integrated decision-making and the integration of departments, the sustainability of transportation will increase as many of the disparity issues will be resolved

<table>
<thead>
<tr>
<th>Spatial development</th>
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<tbody>
<tr>
<td>• Integration between the environmental and development relationship</td>
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<tr>
<td>The integration of EIA and SEA with planning instruments is needed. Successful implementation of environmental legislation into development should coincide with the integration of spatial development instruments and transportation plans, and all the key role-players should work together to achieve a better standard of life for all.</td>
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<tr>
<td>• The increased use of a nodal and corridor approach in development</td>
</tr>
<tr>
<td>Municipalities should implement this type of approach into the integration of their transportation plans and development instruments. This approach serves integrated development and transportation well and will give rise to investment in these development corridor areas. Such investments, in turn, can help with better municipal funding.</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Transportation and spatial development</th>
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</thead>
<tbody>
<tr>
<td>• Better integration between the departments involved</td>
</tr>
<tr>
<td>Teamwork between all the key role-players regarding the integration of transportation plans and development instruments should be paramount.</td>
</tr>
<tr>
<td>Through the use of regular scheduled contact sessions these role-players can work together (in brainstorming and solution-finding sessions) towards better integration.</td>
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<tr>
<td>• Improve the integration between spheres of Government</td>
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</table>
The current ‘top-down’ and ‘bottom-up’ approaches of municipalities within South Africa should also rather change to a horizontal approach towards integration. These spheres all currently follow a vertical approach; in the case of the national level the ‘top-down’ approach does not take the circumstances of each of the lower levels into account. This causes problems with legislation and policies that are forced down and also cause problems on the provincial, district and mostly the local levels.

- Aligning, rationalising or reconciling spatial policies at the regional level with those of the national level

By means of improved integrated decision-making and the implementation of overarching co-ordination structures, policies can be better aligned.

Source: Own construction, 2011

In conclusion, it has been found that there is insufficient integration within these municipalities between the respective integrated transportation plans and the spatial planning instruments. Although the current study aimed at being comprehensive, there are still some avenues that require further investigation in order to provide more insight how one could bring about proper integration between transportation planning, spatial planning/devolvement and environmental management.

For example, a study comprising a global perspective could explore solutions to the issues found within the current study, as well as a more comprehensive exploration of the integration of integrated development plans (IDPs) and with integrated transportation plans (ITPs).
Appendix A:

Concept of the nodal cycle

Proposed
- Not yet existing or minimal activity in the area.
- The area is well located and is approved in council documents as a suitable location for a node
- Market survey required to give proof of need and desirability for new proposed nodes

Emerging
- Areas that are developing rapidly and require management intervention to give direction to the growth
- Activities are physically structured and of a nature that can be grown and developed into a node
- There is some clustering of activities, a physical structure and the beginnings of an environment that underpin the typical characteristics of a node
- There is suitable land in close proximity which allows for expansion
- Growth may be horizontal, or vertical e.g. intensification of uses through infill and densification

Mature
- Nodes are mature when they encompass many of the typical characteristics of a node as defined above and the land uses are intense and there is little or no space for new development or redevelopment
- There is usually opportunity for expansion through intensification (infill and utilisation of remaining rights), or by redevelopment within the existing nodal boundary
- At this stage of the cycle development may move to proposed or emerging nodes. This can result in flight out of mature nodes that can lead to degradation and urban decay. Management of the node is required to maintain its efficiency

Stagnant and / or declining:
- Characterised by economic stagnation and subsequent decline
- A lack of development and investment
- Increased vacancy rates, lower rentals
- Deteriorating and decaying public environment, lack of maintenance and management, crime and grime
- and declining number of visitors and users
- Potential demolition and refurbishment of buildings and infrastructure
- Potential to be revitalised

Figure 56: Relationship with road classification (as per mobility policy)
Source: RSDF, 2003:42
### Appendix B:

<table>
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<tr>
<th>Departure points</th>
<th>Interview questions</th>
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| **Integration between transportation planning and spatial development/planning** | • Would you say there is a measure of integration of the transport and development in this area?  
_Sal jy sé dat daar ‘n mate van integrasie is tussen vervoer en ontwikkeling in die area?_  
• Do the current frameworks and plans live up to their stated goals and objectives in reality? (your opinion)  
_Is jou opinie dat die huidige planne en raamwerke hul voorgestelde doelwitte in werkelikheid bereik?_  
• Would you describe the municipality’s approach to development and transportation integration as horizontal or vertical?  
_Sou jy die munisipaliteit se benadering tot die integrasie van ontwikkeling en vervoer beskryf as vertikaal of horisontaal?_ |
| **Public transportation and its orientated development** | • Describe the public transport standard of the region:  
_Beskryf die standaard van openbare vervoer in die omgewing:_)  
• What is your opinion of the new rapid bus transit (BRT) system?  
_Wat is jou opinie van die nuwe ‘bus rapid transit’ stelsel?_  
• Do you see potential for this type of system in this region?  
_Sien jy potensiaal vir dié soort stelsel in die omgewing?_  
• Does the public transport of this region offer sufficient service to the community?  
_Bied die openbare vervoer in die omgewing voldoende dienste aan die gemeenskap?_  
• Do you see potential in incorporating international type public transport in this region in the future?  
_Sien jy potensiaal daarin om openbare vervoer soos dit oorsee voorkom, in die toekoms na die omgewing te bring?_ |
| **Environmental management integration** | • Is the environmental legislation set in place within the frameworks and planning instruments as these function in reality? (and do they work?)  
_Word die omgewing wetgewing geplaas binne die raamwerke en beplanningsinstrumente soos hul in werkelikheid bestaan? (en werk hulle?)_ |
| **Nodal and corridor development** | • Would you think that a node and corridor approach would solve some problems in this study area?  
_Voel jy dat ‘n gang-en-nodusontwikkelingsbenadering sou help om van die probleme in die studiegebied op te los?_ |
| **Governmental sphere integration** | • Is there integration between the different spheres of Government in this region in terms of transport and development?  
_Is daar integrasie tussentd die verskillende regeringsfere in die omgewing in terme van vervoer an ontwikkeling?_  
• Do you think that the local plans and frameworks correlate with provincial plans and frameworks?  
_Dink jy dat die plaaslike planne en raamwerke korreleer met die provisiale planne en raamwerke?_ |
| **Other** | • What is the approximate time it would take for a transport/development project to be approved?  
_Hoe lank neem dit ongeveer vir vervoer- en ontwikkelings_ |
Would you say there is an appropriate supply of funds for projects or not?  
*Sou jy sê dat daar voldoende voorsiening van fondse bestaan vir die projekte, of nie?*

Where would the funding mostly come from for these projects?  
*Waar kom meeste van die befonings vir die projekte vandaan?*

Would you think that more involvement of the private sector in projects would be beneficial?  
*Dink jy dat meer betrokkenheid van die privaatsektor in projekte voordelig sal wees?*

What would you say are the biggest obstacles of this region in terms of development and transport?  
*Wat sou jy sê is die grootste struikelblokke in die omgewing in terme van ontwikkeling en vevoer?*