5.11 Built environment and transportation

5.11.1 Introduction

Most of us live in urbanised areas – from smaller settlements like Martinborough to cities like Wellington. Each place may be thought of as a separate community with its own identity, but our towns and cities are very much linked by physical, social, economic and cultural inter-relationships. Infrastructure and transportation networks bring many parts of the region together. They provide access for travel and carry essential supplies from mountains and rivers to homes and businesses and take away our waste.

We need food and water. We need building materials and the means of travelling around. To support our lifestyles, we seem to need an ever-growing supply of energy (especially for transport) and other products and services. We need to dispose of sewage and waste. Our consumption and waste put pressure on the local environment – to accommodate our pollution and unwanted material – and on the global environment, which we expect to supply much of our food, fuel, cars and household goods and appliances.

We can think of our impact as a "footprint" – a rough measurement of the amount of land needed to provide the resources we consume and absorb the waste we produce. The Wellington region has the fourth largest footprint in New Zealand and a Massey University study calculated we would need an area almost 50 per cent bigger than the size of our region to sustain our current level of consumption and waste production. In other words, we are not living within our region's means.

Urban areas are large consumers of resources and producers of waste, but they are also centres of entertainment, employment, commerce and retailing. They also provide essential health and community services. Wellington is the capital of New Zealand, with government, a major port and an international airport. It's easy to forget that urban areas are assets as well as environmental liabilities!

Sustainable management of our urban environment is about maintaining the positive aspects and minimising the negatives. The *Regional Policy Statement for the*



Wellington Region 1995 takes a similar view of the built environment and the region's infrastructure, and seeks to ensure that the region's "footprint" does not press too heavily on the underlying environmental systems that support us. It attempts to do this with provisions in the built environment and transportation chapter and throughout the document in chapters dealing with related activities (waste management, energy) and environmental systems (fresh water, the coast, air and soil).

5.11.2 How successful has the Regional Policy Statement been?

Generally speaking, the Regional Policy Statement provides a comprehensive description of the complex nature of the strategic issues associated with the built environment and transportation. The relationships between urban activities and environmental effects are well defined. There are policies on urban form, on managing transportation systems and infrastructure and their effects, and on maintaining and enhancing environmental quality in urban areas.

There has been mixed success. For example, the quality of our urban environments has improved

in locations such as Wellington's central business district, Greytown and Jackson Street, Petone. We have also kept the region's relatively compact "corridor" form, which extends from Wellington's central area and then branches out into a "Y" shape. One arm stretches through northern Wellington, Porirua, Pukerua Bay and up the Kapiti Coast while the other runs through the Hutt Valley and over into the Wairarapa.

This compact corridor form supports public transport networks and consequently reduces some of the energy and other costs associated with private transport. It also makes access to services and centres that much easier. Ad hoc development outside the main corridor, and poorly designed or poorly managed development within it, can create a range of adverse effects. These include inefficient use of land and resources, increased traffic congestion, increased storm water run-off into sensitive environments, and unexpected (and therefore unplanned) demands for new or extended infrastructure.

The role of the Regional Policy Statement in maintaining or enhancing the quality of our urban environments, managing the region's form, and addressing the effects of urban activities and transportation has been minimal. The built environment and transportation chapter has sound policy direction but it has not provided clear "on the ground" direction.

5.11.3 What's changed and what are the built environment and transportation issues now and for the future?

Since 1995, there has been a flood of legislation, strategies and programmes relevant to sustainable management of the built environment. Interestingly, much of the content has reflected the intent of the Regional Policy Statement – encouraging good urban design, promoting alternative modes of transport such as cycling and walking, encouraging efficiency in energy use and the increased production of renewable energy, and promoting a strategic approach to waste management.

During the mid to late 1990s, the Parliamentary Commissioner for the Environment undertook a major review of how we managed urban environments in New Zealand. A variety of other initiatives have emerged in the last five years, including:

- National Energy Efficiency and Conservation Strategy 2001
- Various Energy Efficiency and Conservation Authority (EECA) programmes for travel planning and vehicle fleet management
- *New Zealand Transport Strategy 2002* (which recognised broader social and environmental objectives in transport planning)
- Transport Sector Review in 2004 (recommending a more integrated approach across sectors and responsibilities)
- National Environmental Standards for Air Quality 2004
- Vehicle Fleet Emission Control Strategy 2004
- Getting There on Foot, by Cycle 2005
- New Zealand Waste Strategy 2002
- *New Zealand Urban Design Protocol* 2005 and associated guides.

Greater Wellington has also commenced a review of the *Wellington Regional Land Transport Strategy* 1999 -2004. This has resulted in a number of new initiatives including strategies for cycling, pedestrian movement and travel demand management. The next Regional Land Transport Strategy in 2007 will identify an updated set of priorities for land transport (road, and public transport) for the region.

Since 2004, Greater Wellington and the eight city and district councils in the region have been working together on a "sustainable growth framework" – the Wellington Regional Strategy. The aim of the Wellington Regional Strategy is to build an internationally competitive region and, at the same time, enhance our quality of life.

One of the four focus areas in the Strategy is "quality regional form and systems" and a number of action areas are being investigated to help achieve this, such as reinforcing the region's compact urban form, maturing sub-regional centres and the Wellington central business district, designing major roads so that they support centres, and making sure that infrastructure (existing and new) is used efficiently. In addition, amendments made in 2005 to the *Resource Management Act 1991* (RMA) gave a new function to regional councils of "the strategic integration of infrastructure with land use" by means of objectives, policies and methods.

Things have clearly moved on for urban management since the Regional Policy Statement became operative in 1995, but have these changes resolved the issues facing us in urban areas? Greater Wellington's state of the environment report, *Measuring up 2005*, and early discussions for the review of the Regional Policy Statement indicate that the following matters are still of concern:

- Development and change has tended to proceed in a largely ad hoc fashion in different areas of the region. This raises questions about consistency of policies across council boundaries, cumulative impacts of separately considered development proposals, associated demands for infrastructure, and pressures on valued resources and places.
- While the region has a distinct and compact pattern of development there is a perception that strategic direction on "regional form" is required to reinforce this pattern. "Regional form" is here understood to have a meaning of where change should be generally located or concentrated in the region rather than giving specific direction on the structure, appearance and shape of each urban area (which might be usefully assisted by principles from the Urban Design Protocol and guides).
- There is a concern about the size and environmental effects of the "footprint" made by our urban (and rural) lifestyles and behaviour. Implications of this behaviour for energy and waste are discussed in other chapters of this document, along with the effects of transport and urban activities on streams, air quality and ecosystems.
- Pressures and problems are not evenly spread around the region, so it may be appropriate to have policy guidance that is targeted at specific issues or particular areas. Development in some areas will put additional pressures on special places (e.g. around Pauatahanui Inlet), reduce an already diminishing type of environment (e.g. subdivision along the Kapiti coastline), or

extend semi-urban activity into new areas and potentially create demand for, and inefficiencies in, the provision of infrastructure and services (e.g. in parts of the Wairarapa and Upper Hutt).

 The region's significant resources, including infrastructure, are important for the community's social and economic well-being. The location of development (and redevelopment) is strategically important as it has a major influence on the form and direction of the region's growth.
Infrastructure is important but a balance needs to be struck between its provision as a community asset and the conflicts that such provision can cause with local communities and the adverse effects it can create for the environment.

5.11.4 Comments and questions for you to consider

Urban areas are rather like ecosystems – they are constantly changing and evolving. Their management is as much about the processes that drive them as looking after their component parts. In urban areas, this translates to enjoying the spaces, places, services and inter-actions they offer us for our social, economic and cultural well-being. At the same time, we need to keep the viability of the basic processes that underpin and enable this quality of life – things like

- reliable infrastructure to supply water, power and to carry away sewage and stormwater
- transport networks that give access to places people want or need to be
- a healthy environment for enjoyment and for the life-supporting services it provides.

Our activities are complex so our management of change has to be sophisticated too. Integrated management across agencies and activities is often proposed as the way to do this, and indeed, amendments to the RMA identify the strategic integration of infrastructure with land use as a new function for regional councils. But what this actually means and how it might be achieved are harder questions. Different agencies and authorities have explicit statutory responsibilities and, understandably, with their limited resources and many demands on them, they focus on the things they have to do. The Wellington Regional Strategy (see **3.4 Wellington Regional Strategy** and **5.11.3** above) is a significant attempt to take an integrated, collaborative approach to managing change in our region. We hope that the Strategy will be sufficiently advanced to identify how the next Regional Policy Statement can fit with and help implement the Wellington Regional Strategy's agreed outcomes. If it is not, we also need to think how the Regional Policy Statement might, of itself, advance integrated management of change in the region's built environment.

Question 1:

Do you think we have given an accurate interpretation and identified the right issues for the built environment and infrastructure? Are there other issues that we should recognise for the region?

Question 2:

How important do you feel it is to provide some sort of strategic management of regional form and urban systems? Is it appropriate to reinforce our current form, and, for example, encourage intensification of development largely within existing areas and particularly around certain key centres and passenger transport nodes and networks (e.g. rail stations and transport corridors)?

Question 3:

Do you think that regionally significant infrastructure and natural areas with high values should be identified in the Regional Policy Statement? Should such identification then be reflected in directions for how these places should be managed in, for example, district plans and/or through other statutory and non-statutory documents that help shape decisions that affect the built environment?

Question 4:

How do you see the relationship between the Wellington Regional Land Transport Strategy, the Wellington Regional Strategy and the Regional Policy Statement? What role do you see for the Regional Policy Statement in managing the region's built environment in the future? Should there be any sort of focus in the Regional Policy Statement on some priority areas or should there be general policy direction for all areas? Or a mix of both?

Question 5:

Would it be helpful if the Regional Policy Statement dealt with the management of urban areas, infrastructure, energy and waste in a more integrated way by considering it in one package of "urban activities"? How would this approach best link to those parts of the Regional Policy Statement that deal with the "receiving environments" for urban activities, such as fresh water, soil, air, the coast and their associated ecosystems?