Dr. Anna L. Johnson
Opus International Consultants
Opus House, 197 Rattray Street, Private Bag 1913, Dunedin, New Zealand
Phone: 64 3 471 5518, Fax: 64 3 474 8995
Anna.Johnson@opus.co.nz

NEW ZEALAND APPROACHES TO GROWTH MANAGEMENT

Abstract

In the last 5 years, New Zealand has experienced a renaissance in strategic urban planning, with growth management strategies having been produced for most of New Zealand's fastest growing regions and districts. This paper summarises the results of research on recent approaches to growth management planning in New Zealand, in light of international trends. The research sets out a framework for the evaluation of growth management strategies and critically examines several of the strategies produced to date in New Zealand. The evaluation framework examines governance arrangements, and the structure and scope of growth management planning, including the key growth management policies and implementation tools. The paper traces the influence of international growth management trends in New Zealand practice and highlights the similarities and differences in approaches. It includes a discussion on the strengths and weaknesses of different strategies, and provides recommendations for future practice.

Overall, the results clearly demonstrate the influence of international urban planning trends (both theoretical and practice) on growth management planning in New Zealand. However, the ability of some of these strategies to be successfully implemented in New Zealand given the effects-based approach of the Resource Management Act (RMA) and lack of clear national guidance and supporting legislation (outside of Auckland) is questioned. There is also evidence of how some of the best practice criteria for growth management planning are not being met in several regions. For example, in some cases there is lack of clear integration and/or coordination between land use planning, transportation and other infrastructure planning, management and funding.

Introduction

Growth Management or Urban Development Strategies are not required under New Zealand legislation with the exception of the Auckland Regional Growth Strategy, which is required by the Local Government Act (LGA) Amendment Act 1998 to define preferred locations for future growth and to provide "information about future growth to assist regional providers of infrastructure to plan to meet future requirements". Nonetheless, over the last ten years an increasing number of territorial authorities and regional partnerships have completed, or are in the process of completing, growth or urban development strategies. These strategies are becoming increasingly important in the management of growth in large metropolitan areas or areas experiencing rapid growth. Partnership regional growth strategies have now been completed for Greater Christchurch and Western Bay of Plenty. In addition to the districts within the Auckland region, at least nine small or medium sized districts have also completed growth strategies, with a further two smaller districts plus the Wellington City Council having completed partial strategies - focused on parts of districts/cities.

A short introduction to strategic growth management planning

Growth management began as a responsive management tool used to address a number of issues that arose progressively from the 1950s, particularly in the US, as a result of the prevalent patterns of urban development in a time of rapid population growth. These issues included demand for infrastructure and services that outstripped local government budgets and resulted in crowded schools, congested roadways and overstretched city infrastructure. This gave rise to a concern with

provision of infrastructure, services and facilities with urban development (Deakin, 1989). This objective is still a central tenet of much of growth management practice globally.

However, in the 1970s, the growth of the environmental movement and increasing evidence of 'urban sprawl' gave rise to a broader range of concerns associated with urban growth including:

- Environmental degradation

- Loss of urban amenity/ poor design quality

- Air pollution

- Loss of productive agricultural lands surrounding cities (Deakin, 1989).

The tools of growth management included, firstly, requirements for developers to provide the infrastructure (streets, sewers, parks) required to service growth and/or regulations to control development until adequate infrastructure was in place. Secondly, growth management started to focus on controlling the pattern of growth through the use of urban growth boundaries, greenbelts, and protection of rural lands. Some communities in the US even went as far as to cap the rate of growth or try to stop it all together through controls on the issuing of building permits or establishment of population caps.

From the 1970s onwards, there was also recognition of the need to better integrate transportation planning with land use planning, although this has appeared to be an elusive goal in many places.

> *A new "growth management" framework is being built at the local level that is decisively affecting both of these planning functions* [transportation and land use] *and their relationship to each other…It is only through the effective wedding of these two disciplines that the objectives of growth management can be achieved* (Hammer, 1974, p. 85, 89)

The move to greater growth management planning in the US from the 1970s onwards was characterised by state governments enacting laws requiring or encouraging local governments to prepare "comprehensive" growth management plans consistent with specific state criteria and giving states powers of approval and/or review. In some states regional bodies were created to facilitate growth management across metropolitan areas. Several states also put in place financial incentives and disincentives for key planning practices or outcomes. During the 1970s, comprehensive planning was also common in many Western European countries (Albrechts, 2006).

In New Zealand, the 1970s also witnessed greater attention to local strategic planning. A 1973 amendment to the Town and Country Planning Act 1953, later strengthened by a major review of the Act in 1977, provided for matters of national importance. These matters included avoidance of encroachment of urban development on land having a high, actual or potential value for the production of food, and the prevention of sporadic urban subdivision and development in rural areas (Perkins *et al.,* 1993). However, in New Zealand urban planning has always maintained a very narrow focus on managing land development and mitigating its effects; and on the overall spatial arrangements of buildings, open space and physical infrastructure, managed primarily through zoning (ibid). Perkins *et al.* (1993) contend that the focus of planning has been primarily on enabling private capital investment in cities, while minimising the effects of development on people, and from the 1970s onwards, the environment. There was also broad concern with providing for community health and safety; and the protection of urban amenity.

New Zealand has never had what might be considered comprehensive planning and has appeared, like many other places, to struggle with the integration of land use planning and management with transportation and other infrastructure planning and management.

In the 1980s, in many parts of the world including in New Zealand, the movement towards stronger planning was replaced by the neoliberal paradigm which had a disdain for public intervention into the market place. As a result there was a retreat from strategic planning in many locations. Instead, the main focus switched to project-based practices particularly for rundown parts of cities (urban renewal) and basic land use regulation (Albrechts, 2006).

From the late 1980s into the 90s, growth management planning became fashionable again in Australia and Europe (Albrechts, 2006), and in some cities and regions in the US and Canada. In this latest surge, growth management has evolved to be more than a 'reactive' tool to manage the effects of growth, such as the cost of infrastructure provision or effects on amenity. Instead, growth management has become part of a more proactive, *strategic*, and outcome-oriented planning process. The central focus of growth management planning has changed from how to effectively *manage* growth to how to *create* a more desirable future. This focus is often grounded in the concepts of: environmental, social, and economic "wellbeing"; "sustainable development"; "ecological sustainability"; "quality of life"; and/or "liveability".

The result, internationally, has been an array of high level strategies for urban development alternatively called:

- Growth management strategies

- Urban growth strategies

- Urban development strategies

- Sustainable growth strategies

- Smart growth strategies

- Regional plans

- Strategic plans

- Framework plans, or

- Comprehensive plans.

Collectively these will be referred to as Urban Development Strategies (UDS) in this paper.

In addition to its broadened scope, growth management has also taken on an increasingly spatial and design-oriented approach in its concern with creating a more efficient, attractive, and 'sustainable' urban form. Urban form is the physical-spatial characteristics or *morphology* of an area (building density, type and design), as well as the functional characteristics of an area (arrangement of different land uses) (van Diepen and Voogd, 2001).

The call for a more sustainable urban form has focused primarily on three main objectives: (1) halting the inefficient spread of cities (urban sprawl) and minimising the loss of open space and agricultural lands; (2) enabling more sustainable transportation patterns; and (3) creating attractive and liveable communities, which will attract skilled workers and employers in a world increasingly affected by global competition between cities. In recent years, the notion of a sustainable urban form has been generally associated with more compact development (characterised by higher average densities and people living closer to where they work, shop, and recreate, sometimes discussed in terms of the 'live, work, play' concept) supported by a transportation system that includes efficient, accessible, and reliable public transport and design features which support walking and cycling (interconnected streets, good infrastructure, and good urban design). A major current in these arguments is a call to return back to design elements that existed prior to the post-war, car-oriented development boom – referred to as "neo-traditional" design. These elements reflect the planning principles promoted by theorists and practitioners under the headings of 'Smart Growth' (US) and 'Compact City' (UK)[1]. They also draw strongly on the urban design principles promoted by the New Urbanism and Transit-oriented development movements.

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[1]"This concept uses a model for city development akin to traditional high-density European cities such as Paris and Barcelona. It offers a sustainable form of development, enabling reduced travel demand through high density mixed-used development, creating vibrant culturally rich places" (www.london.gov.uk Accessed 10.4.08).

Methodology

The methodology for this review included, in addition to reviewing the literature on strategic growth management planning, reviewing a number of growth management strategies from the US, Canada and Australia[2] in terms of:

1. Governance context of the strategy

2. Strategy development

3. Scope and purpose of the strategy

4. Implementation, monitoring, evaluation, and review.

The purpose of the review of international practice was to identify trends in growth management planning to be used as a basis of comparison for New Zealand practice.

Next a number of New Zealand UDS were reviewed, the strategies discussed in this paper are:

- Nelson Urban Growth Strategy, December 2006, produced by the Nelson City Council - (Nelson)

- A Growth Management Strategy for the Queenstown Lakes District, April 2007 – produced by the Queenstown Lakes District Council (Queenstown)

- Whangarei Urban Growth Strategy, October 2003 – produced by the Whangarei District Council (Whangarei)

- Greater Christchurch Urban Development Strategy, 2007 – produced by a partnership of all the local authorities in the Greater Christchurch region and Transit New Zealand (the highways manager[3]) (Christchurch).

Notably, the research gave limited attention to the Auckland Regional Growth Strategy because it has a separate statutory framework and because it had already been the subject of significant research (for example, Arbury, n.d.; Tucker and Waghorn, 2006).

Results

Given the scope of this research and the limitations on what can be presented in a conference paper, this section provides only a brief summary of some of the results from the research. The full results will be made available on the programme website[4] when completed.

Governance context of the strategy

Internationally, the institutional basis and governance context of growth management/urban development planning ranges enormously. It varies according to:

- Whether growth management planning is legally mandated or a voluntary initiative

- Whether it is a federal/national, state/region, local authority, or community-driven initiative

- The legal or statutory basis of the strategy or plan

- How decision-making is shared between different authorities

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[2] Strategies reviewed included: in the U.S. - Seattle, Washington; Portland, Oregon; Minneapolis St. Paul; Envision Utah, as well as looking at governance arrangements in states of Florida, Maryland, Wisconsin; in Canada - Vancouver; and in Australia - Melbourne, Victoria; Perth, Western Australia; Adelaide, South Australia; and South East Queensland.

[3] Transit New Zealand has since been restructured to become an agency with a much broader remit called the New Zealand Transport Agency.

- How the governance context provides for integration between the implementation of different policy areas, particularly land use with transportation and (environmental and community) infrastructure planning; and policy development with finance/spending.

Howell-Moroney (2007, p.2167) discuss this range in relation to 'strong' vs. 'weak' growth management programmes in the United States. They argue that to be a 'strong' growth management state, "they must have mandatory comprehensive planning and an auxiliary policy aimed at growth control". They identify that in the US auxiliary policies include Urban Growth Boundaries and/or concurrency requirements and that Oregon, Florida and Washington are examples of strong growth management states.

Key Questions

- Whose plan is it and who is responsible for implementing the plan?

- What is its statutory status and how will it be implemented?

- How does it link with other plans/ policies/ funding/ initiatives (by the same authority and by other authorities in the region)?

Critical success factors

Based on a review of the literature and practice, the following critical success factors were identified for governance.

- Strong growth management requires a mandate for local authorities to prepare growth strategies and a requirement for these strategies to be reviewed by a higher level of government (metropolitan, region or state/national) against higher order goals. This is important as effective growth management requires regional coordination in order to be effective. Voluntary efforts have proven to be slow or unworkable in many areas.

- A wide range of actors should be involved in the policy process with strong alliances, partnerships, and community engagement processes.

- The legislative framework must allow for a wide range of implementation mechanisms to be used to manage urban development, including education, financial, and regulatory tools. The ability to set urban growth boundaries and link development to infrastructure availability are two particularly important tools.

Evaluation of New Zealand practice

New Zealand does not have a legislative framework that supports strong strategic urban development planning. There is no legislative framework, outside of Auckland, to undertake these higher level strategies, therefore, there is also a lack of national policies and objectives and higher level review or approval functions to direct their scope and improve their quality. Furthermore, because UDS have no legislative mandate, tying the policies in these strategies to a strong implementation plan is difficult. The best approach seems to be to include the policies in a Regional Policy Statement (RPS) which, in theory, can be a powerful tool for coordinating the urban planning policies of different local authorities in a region. However, local authorities and developers often challenge the role that regional authorities should have in land use planning. The RPS also provides scope to influence central government funding for regional transportation priorities, and with strong partnerships and internal commitment, it should be possible to integrate with local authority asset management planning and funding priorities. However, it is less clear how to integrate with the policies and actions of the range of other government agencies (Transport,

Education, Health[5], Housing, Social Services), many of whom have their own (not always consistent) drivers, or with the private sector.

In terms of collaboration and partnership, there has been a range of practice from what appears to be relatively strong efforts at collaboration (Christchurch), to what appears to be weak or no collaboration (Nelson, Whangarei, Queenstown).

In theory, the Resource Management Act (RMA) encourages local and regional authorities to consider a wide range of implementation mechanisms and requires justification for the final choice of method (Section 32). However, some common methods for the planning and management of urban development are either not currently available under New Zealand legislation or have yet to be tested (e.g. development corporations, form-based codes). Even the 'structure plan'[6], which is one of the most popular methods for implementing growth strategies in New Zealand, is not recognised by the legislation and must be first converted into a plan change under the RMA. Overall, the 'effects-based' nature of planning under the RMA makes proactive planning difficult.

Strategy development

There are two key aspects of strategy development: stakeholder and public participation and research and analysis. Approaches to public participation in UDS tend to range from the more 'traditional' to the more 'innovative'. Traditional approaches tend to include publication and consultation of discussion/options documents and draft strategies supported by public meetings. Another common but more innovative method is 'visioning', a technique which gained popularity in the 1990s in the US, which has been lauded by some and heavily criticised by others[7]. Visioning involves active participation by the public in creating a 'vision for the future' of the community that is used as a reference point for the development of specific policies and objectives. However, Albrechts (2006) argues that "to avoid naïve utopian thinking and to avoid visions being just exercises in 'banalization', 'wooly thought', and pseudolegitimation for a number of measure and projects connected only on paper… visions must be rooted in an understanding of the basic processes that shape places"….Whose vision is created remains a basic question to be asked" (p. 1160). Other innovative techniques that have been promoted for public participation in UDS are design charrettes and Enquiry by Design[8].

The second key element of strategy development is research and analysis, in particular trend and scenario analysis. Trend analysis is fairly straight forward and is based on detailed monitoring and analysis of key variables affecting urban systems. On the hand, scenario analysis is used to evaluate alternative potential futures. For growth management these futures typically are concerned with different development patterns and their respective impacts on other key factors such as transportation patterns or other key social, environmental or economic variables (e.g. price of housing, open space lost, congestion, infrastructure costs, water quality/availability and air quality). Scenario analysis ranges from those that rely on crude 'theoretical' models to those that use more robust empirical models (Lee *et al.,* 1999). The purpose of the exercise is to evaluate the desirability of these various futures in order to choose an appropriate future to work towards. This exercise also has an important educational component by demonstrating the need for certain policy decisions to be made to reach a more desirable future and avoid the path to a less desirable one. It can also be used as a public participation tool to achieve public consensus around a desirable future and the necessary steps needed to get there. The use of scenario analysis in Portland[9] and Vancouver[10] has

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[5] Health care is largely administered by District Health Boards (DHBs) who are responsible for providing, or funding the provision of, health and disability services in their district. One problem for alignment with health services is that the administrative boundaries of DHBs and local authorities are misaligned.

[6] downscaled version of the Master Plan

[7] See for example Helling, 1998; McCann 2001; Shipley, 2002.

[8] http://www.princes-foundation.org

received considerable attention. Furthermore, these examples illustrate quite different approaches to scenario analysis from the more technical modelling used in Portland to the less robust but more engaging tool used in Vancouver.

Key questions

- How were key stakeholders and the broader community involved in the strategy development?

- What type of research and analysis was undertaken to inform the strategy?

Critical success factors

Based on a review of the literature and practice, the following critical success factors were identified for strategy development.

- Research needs to be undertaken to understand drivers of growth, how long they may continue, and what quantums/forms of growth they are likely to produce (Tremaine, 2005).

- There needs to be public consensus for growth management and a respected leader to champion the process (Nelson et al. 1995).

- Strategies should be based around a long range vision/scenario of a desirable future and 'back-cast' from that future. Visions/scenarios should be detailed, spatial, and realistic (considering trade-offs) not limited to a list of generic ideals e.g. 'sustainable'.

- Goal setting and visioning should occur early in the process leading to a shared vision that most stakeholders agree on and think can be implemented including consensus on desired urban form (*ibid*).

- The public should be involved in identifying problems and opportunities and setting goals which should guide the strategy/plan development process (*ibid*).

- There should be adequate financial and technical support – most growth management planning exercises in the US have been expensive exercises. In the US an important element is statewide planning agencies providing financial and technical support (specialist staff, GIS, research and modelling) to local communities (*ibid*).

Evaluation of New Zealand practice

The public participation in the growth management strategies reviewed varied significantly. Educating communities about growth management issues and options was a major aspect of all the strategies. All the strategies also included visions, in Queenstown Lakes District, there appeared to be an active effort to use broad community input to build the 'vision' for the strategy, Whangarei also asked people, primarily in the form of written feedback, of ideas for the vision. In other areas it appeared that a draft vision was prepared internally or with a selected group of key stakeholders and then consulted on.

A main focus of the public participation in Christchurch and Nelson was on the location of growth at a region/district level. In Whangarei it was more on broad growth issues, and issues on a neighbourhood by neighbourhood level. In Queenstown Lakes District early consultation also seemed to focus on issue identification and what overall approach or "strategies" the council should take. There is also some evidence of community involvement in spatial planning/urban design.

The techniques used to interact with the community varied with two strategies (Whangarei, Nelson) using primarily traditional methods of discussion documents/ option papers and feedback. The other two used more comprehensive and innovative methods run by out of town professional community engagement experts, in addition to the more traditional methods. For example, the Queenstown

Lakes District Council used a form of design charrette run with members of the community, and the Christchurch Urban Development Strategy included an 'Inquiry by Design' process run with strategy partners and invited stakeholders and representatives, as well as broader consultation on a set of basic growth scenarios/options.

All of the strategies used basic trend analysis in their development, particularly focused on population trends and housing needs, with some extrapolation to consequences across a range of areas. There was no evidence of scenario analysis based on advanced urban development modelling for any of the strategies.

Scope and purpose of the strategy

The spatial and temporal scale of UDS varies. Ideally strategies should take into account areas beyond jurisdictional borders to consider policy affects/integration within the wider urban or ecological (watershed) region. They should also consider national and supranational policies and directions. The temporal scale of strategies is often long term generally around 20-30 years, with consideration of short (5-10 years) and medium term (10-20 years) issues and objectives.

The specific purpose and objectives of UDS can also vary but have remarkable similarities across cities and countries. There are a number of key themes that repeat across strategies. These themes include promoting: (ecological) sustainability/sustainable development, liveability, well-being, adaptability, and economic development/competitiveness.

Likewise, there is great deal of similarity between policies included in UDS. Two of the most common overarching policies are (1) reducing urban sprawl and promoting an *Efficient/Compact Urban Form*, and (2) reducing car dependence and promoting more S*ustainable Transport*. These policies are also linked to protecting resource lands and surrounding scenic amenity; reducing the escalating cost of infrastructure and services provision; and creating attractive and liveable, and, therefore, internationally competitive communities.

The policies typically used to promote these outcomes are general policies of *Intensification* or *Urban Consolidation*, as well as more specific urban form policies including:

- Providing a clear *Urban/Rural boundary* or *Urban Edges*
- Encouraging a polycentric form based on a hierarchy of higher density mixed-use *(Activity) Centres*, sometimes discussed as promoting a collection of *Urban Villages* and/or in terms of *Transit-Oriented Design*
- Promoting *Urban Regeneration/Renewal*
- Encouraging more *Mixed-Use Development* and a *Jobs-Housing Balance*
- Encouraging most growth into centres and along public transportation *Spines/Corridors*
- Promoting *Green networks/linkages/corridors* to encourage local recreation and active transport
- Promoting *Urban Design* that has higher environmental performance and encourages pedestrian and other active modes of transport.

These policies draw directly from those policies promoted by 'Compact City', 'Smart Growth', New Urbanism, and Transit-Oriented Design (TOD) movements.

The urban form and design policies in UDS are often linked to:

- Social policies of promoting *Housing Choice/Diversity*, which is linked to improved *Housing Affordability*, as well as policies around safety, crime prevention, and access to services e.g. education, medical
- Transportation policies of creating a high quality *Multi-modal transportation system* and *discouraging car based travel*

- Infrastructure policy of *Concurrency*, which requires infrastructure and services to be in place before new urban development can take place; policies related to provision of green spaces, recreational, sport and community facilities; and policies to promote environmental management of infrastructure, facilities and services

- Environmental policies related to protection of sensitive ecosystems and areas of biodiversity, such as wetlands, lakes and rivers, and coastal areas; general environmental performance policies around water quality/supply, waste, air quality; and policies to protect scenic and productive lands.

However, in addition to these 'standard policies' many strategies also identify policies to address local concerns, many of which link to concerns about the perceived potential impacts of intensification or increased governmental influence on the market place. These can include policies related to:

- Protection of regional/ neighbourhood character (or 'look and feel' of settlement)

- Protection of heritage sites

- Addressing potential conflict between activities (rural/ residential and industrial/ residential), such as protection from reverse sensitivity and/or proving a clear buffer between incompatible activities

- Improving administrative efficiency.

Key questions

- How wide of a spatial and temporal scope does it take?

- What is the purpose and overall objectives of the strategy?

- What are the major growth management 'themes' in the strategy?

- Which policy areas are covered under the strategy?

Critical success factors

Based on a review of the literature and practice, the following critical success factors were identified for scope and purpose.

- Strategies should be proactive, focused on identifying the policies and actions necessary to create a desirable future rather than passive and reactive.

- There should be 'vertical' and 'horizontal' integration of policies across government, in particular land use planning must be integrated with transportation and other infrastructure/services planning.

- Strategies should be regional in focus, holistically examining urban area and surrounding peri-urban areas, notwithstanding jurisdictional boundaries.

Evaluation of New Zealand practice

The spatial scale of strategies in New Zealand varies. The scale ranges from those which focus on a mostly self-contained city/town within a single local authority area (e.g. Whangarei Urban Growth Strategy); to those that focus on a sub-part of an urbanised area separated by jurisdiction (e.g. Nelson Urban Growth Strategy[11]); to those that focus on a sub-metropolitan/regional area that crosses jurisdictional boundaries (Wellington Northern Growth Management framework); to full metropolitan/regional strategies which cross jurisdictional boundaries (Auckland, Western Bay of

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[11] Nelson presents a particularly complicated governance situation as not only does the wider settlement centred on Nelson cross a local authority boundary, as the Nelson City Council and Tasman District Council are both unitary

Plenty, Christchurch). In some cases, there is a hierarchy of strategies with both regional and local strategies (Auckland Region).

All of the strategies attempted to be relatively proactive in addressing a desired future, with some strategies being more detailed than others.

The urban form policies of three of the four of the strategies reviewed strongly followed the key policy trends outlined above (see Table 1). The only exception was Whangarei. Perhaps, in this case, the relatively slower growth of the district, combined with a unique set of issues focused more around economic development, perception of town quality, social issues, and some environmental issues, meant that these more 'growth' oriented policies were not as relevant.

In terms of spatial focus, only the Christchurch strategy made any significant attempt to look at the broader region. Whangarei as an isolated settlement probably adequately addressed its settlement area. The Nelson City Council, on the other hand, acknowledged they should plan in association with the neighbouring Tasman District Council as the greater Nelson area crosses the jurisdictional border, why this did not occur was unclear though it states "any future strategic land use planning will take a regional approach". Queenstown also did not give enough attention to the connections between the smaller outlying settlements in the district and the relatively larger settlements of Wanaka and Queenstown nor to the connection with settlements, particularly Cromwell, in the Central Otago District.

Policy	GMS Queenstown Lakes District	Whangarei UGS	Nelson UGS	Greater Christchurch UDS
Reduce sprawl/ efficient growth/Compact form	Yes	No	Yes	Yes
Clear urban/rural boundary, urban edges	Yes, indicate UGB for Wanaka and Queenstown	No	Limited, objective of "defined boundaries between urban and rural areas"	Limited, calls for a UGB but does not include one.
(Activity) Centres policy	Limited, calls for new centres in Queenstown, Frankton, and Wanaka, and also calls for community hubs, with a clustering of mixed uses but no comprehensive policy.	No centres policy in relation to targeted intensification, however, objective of accessible and convenient suburban centres.	Yes (weak), includes objective of "Local service centres of high amenity as an essential part of residential hubs" and higher density around hubs but no detailed policy to support it.	Yes, calls for activity centres with high quality public spaces, increased residential density, community facilities, public transport, cycling and walking facilities and retail activities.
Growth spines/corridors	Limited, not discussed directly but has a policy that "high density areas located to support public transport and not located in areas difficult to serve with public transport"	No policies around intensification in centres or corridors	Yes (weak) policy to have high density around corridors but no detailed policy to support it.	Yes, policy to have intensification along corridors as well as in centres.
Encourage more mixed use development	Yes, in greenfields developments and centres.	Not discussed	Not discussed	Yes, in intensification areas around activity centres.
Intensification/ Urban consolidation	Yes, includes principle to encourage higher density in greenfield development inside growth boundary; to allow infill where appropriate; and an area identified for higher rise residential mixed use development.	Limited, intensification discussed for commercial and industrial zones with some discussion of ability to have intensified residential activity in some areas.	Yes, major policy	Yes, major policy

Table 1. How common urban development policies are addressed in New Zealand UDS

Implementation, monitoring, evaluation, and review

There is a wide range of implementation tools that are used in growth/urban development management. Deakin (1989) organises these into five distinct groups[12]:

- Limitations on the level of intensity of development permitted (subdivision and regulatory planning controls – zoning/rules)

- Stringent design and performance standards for lots and buildings (subdivision and regulatory planning controls – zoning/rules)

- Shifting the costs of infrastructure provision from the public to the development project (developer or financial contributions, administrative fees for application review and processing)

- Reductions in the supply of developable land and/or restrictions on the locations where development is permitted (zoning, urban growth boundaries, reserves)

- Reductions in the amount of growth permitted, overall or per unit time (population, housing, permit caps, not available in New Zealand).

The spectrum in Figure 1 indicates that growth management practices can range from those which attempt to actively control growth (such as population or permit caps), to those which seek to guide the rate or location of growth (for example zoning, urban growth boundaries, and economic incentives), to efforts to mitigate the effects of growth (such as through rules in plans or design guidelines). 'Strong' growth management usually incorporates tools to guide growth, while weaker growth management relies mainly on mitigating the effects of growth.

Mitigate the effects of growth   **Guide growth**   **Control growth**

Figure 1. Spectrum of growth management/ urban development tools

The most important factor related to the implementation of UDS is the need for integration and coordination of both policies and actions, which often involves the use of a wide range of coordinated implementation mechanisms that provide both 'carrots' and 'sticks' to achieve the desired policy outcomes. In particular, the implementation of the policies associated with UDS requires the integration of land use planning with transportation, and other infrastructure and services planning.

Finally, as there is very limited information about the efficacy and efficiency of different tools, and the complexity of urban systems makes the outcomes of planning hard to predict, ongoing monitoring and evaluation of the implementation and outcomes of UDS is essential.

Key questions

- Which are the main implementation methods and tools used?

- How will the plan be monitored, evaluated and reviewed?

Critical success factors

Based on a review of the literature and practice, the following critical success factors were identified for implementation, monitoring, evaluation, and review.

- Strong growth management includes guiding growth not just mitigating its effects.

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[12] Examples in ( ) are given in the language of New Zealand planning, translated as close as possible to the original US

- There needs to be integration and coordination of implementation actions vertically and horizontally within and across local authorities, regional authorities, and central/state government.

- Different policy areas (economic, environmental, social and cultural) should be 'joined-up' into packages of investment programmes, regulatory practices, economic dis/incentives, and education programmes (mixing carrots and sticks). The systemic nature of urban areas should be considered in how policies and actions are integrated.

- Strategies need to identify a clear implementation strategy including, 'how, by whom, and by when' and costs of implementation need to be calculated and funding sources identified.

- There needs to be adequate administrative support to effectively implement growth management, and this often requires a larger and more professionally trained planning staff (Nelson *et al.* 1995).

- Monitoring and evaluation need to be included.

Evaluation of New Zealand practice

The Christchurch strategy was the only strategy reviewed that had clear evidence of vertical and horizontal integration, supported through collaboration. The strategy identified actions to be completed by all partners, and all partners signed off on the strategy. The strategy also makes links to funding for major transportation projects. In the case of Nelson, the strategy as a whole was very limited in scope to only really address the location for housing with very little integration of policy areas. On the other hand in Whangarei, given the inclusion of objectives and policies related to transport, the environment, heritage, and social issues (e.g. education and employment), this strategy should have involved a much wider range of stakeholders to achieve integrated policies. Likewise the actions in the Queenstown Strategy are almost all actions by the District Council with little evidence of integrated policies and actions (including weak integration with transport and other infrastructure planning and funding).

In terms of implementation strategies, Christchurch was the only strategy to include a complete implementation plan including cost implications, implementation tools, responsibility, and timing. Queenstown also included an action plan, but was fuzzy on responsibility and did not include detail on timing, just priority. Whangarei was even less committed listing those involved with actions but not indicating responsibility and providing no detail on timing or priority. Nelson did not include any type of implementation plan. The implementation section of the strategy indicates that further planning and implementation will be done taking a regional approach.

Finally, in terms of the range of implementation mechanisms, the most common mechanisms included the development of structure plans and changes to strategic and land use planning documents to reflect the strategy[13]. This included aligning land use zones/rules to achieve objectives and including projects in asset management and short and longer term financial planning. In terms of addition mechanisms, the Christchurch strategy discussed the widest range of implementation mechanisms (including 'outline development plans', design guidelines, revitalisation strategies, and integrated catchment management plans). It was also linked to implementation through the Regional Policy Statement, which is arguable the strongest way of giving the objectives and policies in a UDS influence in New Zealand. Queenstown identified the need to 'consider' some innovative methods to achieve desired land use outcomes (e.g. minimum densities, design guidelines, economic instruments). Whangarei almost entirely focused on the development of structure plans, with other methods (including economic instruments) mentioned but given little attention. Nelson only briefly mentions implementation in terms of private initiatives, plan alignment, and public-private partnerships.

Conclusions

The purpose of this research was to explore and evaluate the practice of growth management/urban development planning in New Zealand. In order to do this a number of key evaluation questions and critical success factors were identified from the literature and a review of international practice.

The results demonstrate the enormous influence of international 'growth management' trends, with a number of key policies evident across the international and New Zealand strategies reviewed. However, New Zealand approaches to urban development planning are much weaker than many of the international counterparts, because of two interrelated factors (1) the weak governance arrangements and limited institutional capacity; and (2) the relative weakness of the implementation mechanisms available and used in New Zealand.

Overall, the results of this study show that the practice of growth management/urban development planning in New Zealand varies considerably and is still in its infancy. While there have been some recent changes to New Zealand legislation[14] that have strengthened the ability to undertake regionally integrated planning, there are still major weaknesses in the New Zealand governance system which need to be further addressed[15]. Firstly, the link between the financial planning functions under the LGA and the resource management planning functions under the RMA need to be strengthened. Secondly, in order to be truly 'strategic' planning needs to move from the local to the regional and, given the need to incorporate the policies and action of government agencies and national level issues, probably to the national level. There is also a need to be aware of following blindly planning 'trends'. There is clear evidence of international trends dominating New Zealand strategies. All plans and strategies should be subjected to thorough policy analysis and outcomes evaluation, to better understand the appropriateness, effectiveness and efficiency of the policies and methods for different areas of New Zealand. This is not being done well enough at present and needs to be coordinated nationally to provide data consistency and allow robust analysis. Finally, there is need for the New Zealand government to put "its money where its mouth is", as any hope of achieving significant changes to the types of housing people choose to live in or how people travel, two of the main objectives of urban development planning, will require major increases in government spending on the infrastructure necessary to support these changes.

References

Albrechts, L. (2006) Shifts in strategic spatial planning? Some evidence from Europe and Australia. *Environment and Planning A* 38:1149-1170.

Arbury, J. n.d. *From Urban Sprawl to Compact city: An analysis of urban growth management in Auckland.* Available from: http://portal.jarbury.net/thesis.pdf. Accessed 1/6/08.

Deakin, E. (1989) Growth Controls and Growth Management: A Review of Empirical Research. In D. Brower, D. Godschalk, and D. Porter, eds., *Understanding Growth Management: Critical Issues and a Research Agenda.* Washington, DC: Urban Land Institute.

Hammer, P. (1974) Growth management: A new framework for land use and transportation planning. *Transportation Research Record* 508. Transportation Research Board: Washington D.C.

Helling, A. (1998) Collaborative visioning: Proceed with caution. *APA Journal* 64(3), 335-349.

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[14] For example RMA Amendment 2005

[15] However, in the time of writing this paper, two national initiatives were launched. Firstly, the Ministry for the Environment is consulting on the scope of a National Policy Statement on Urban Design; and secondly the Department of Internal Affairs is consulting on a discussion document exploring place-based approaches to sustainable urban

Howell-Moroney, M. (2007) Studying the effects of the intensity of US state growth management approaches on land development outcomes. *Urban Studies* 44(11):2163-2178.

Lee et al. (1999) *Development of a community-accessible urban sprawl impact assessment system in Northeast Ohio 15-county region for the Empact project.* Available from: ftp://gis.geog.kent.edu/EMPACT/review.pdf. Accessed 14/1/2006.

McCann, E. J. (2001) Collaborative visioning or urban planning as therapy? The politics of public-private policy making. *Professional Geographer* 53(2), 207-218.

Nelson, A.C., Duncan, J. B., Mullen, C.J., Bishop, K.R. (1995) *Growth Management Principles and Practices.* American Planning Association: Washington D.C.

Perkins, HC; Memon, PA, Swaffield, SR; and Gelfand, L (1993) The Urban Environment In Memon, PA and Perkins, PC (eds) *Environmental Planning in New Zealand.* Palmerston North: Dunmore Press.

Shipley, R. (2002) Visioning in planning: is the practice based on sound theory? *Environment and Planning A* 34(1), 7-22

Tremaine, K. (2005). *Urban Growth and Strategy – International practices: the New Zealand experience.* Paper presented to the Resource Management Law Association Conference Christchurch October 2005.

Tucker, M. and Waghorn, B. (2006) Multiple strategies in search of coherent implementation. *New Zealand Planning Quarterly* (December 2006): 8-10.

van Diepen, A. M. L. and H. Voogd (2001) Sustainability and Planning: Does urban form matter. *International Journal of Sustainable Development* 4(1): 59-74.