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Urban Policy and Research

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/cupr20>

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Available online: 07 Mar 2012

To cite this article: James E. Rowe (2012): Auckland's Urban Containment Dilemma: The Case for Green Belts, *Urban Policy and Research*, 30:1, 77-91

To link to this article: <http://dx.doi.org/10.1080/08111146.2012.654757>

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PRACTICE REVIEW

Auckland's Urban Containment Dilemma: The Case for Green Belts

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Introduction

In November 2010, the new Auckland Council was established as a unitary authority.² Before the amalgamation, the Auckland region consisted of seven Territorial Local Authorities (TLAs) and the Auckland Regional Council (ARC). Because of the rapid urban growth during the 1990s, the then local governments and the ARC had collectively decided to control urban sprawl by delineating a Metropolitan Urban Limits (MUL)³ boundary. New subdivisions, commercial and industrial development were controlled beyond the MUL in varying degrees through district plans and zoning regulations. Before the amalgamation, extensions of the MUL were a contentious and often highly litigated process that required approval from the ARC. Now, however, as a unified authority, the MUL boundary extensions are approved by the new Council without oversight from a regional council. This new governance arrangement has the potential to politicise an already contentious process.

This article examines the tensions created by growth pressures on the urban fringe of the new Auckland Council and investigates various planning tools that may strengthen the Council's ability to control urban growth. Containing urban growth has the potential to become a problem because the majority of the newly elected councillors represent urban areas and have a limited understanding of rural issues. Consequently, the voice of the rural areas in policymaking, budget setting and other areas has been diminished. To date, it appears that the Council has continued to embrace the 'compact city' model (Auckland Council, 2011, p. 11). It is also investigating alternative planning policy options that may be used to augment its efforts to contain urban sprawl. The Council's dilemma is how to enable the expansion of the urban area, provide new business zoned land and lifestyle residential opportunities without diminishing the rural ambience, recreational opportunities and most importantly, the rural economy. This research argues that a green belt⁴ policy should be

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adopted by the Auckland Council in order to augment the available tools used for containing urban growth in the Auckland region.⁵

This article begins with a short background section on the diminishing rural pastoral economy, the pressures caused by a dwindling supply of industrial land and the need to intensify development within the existing MUL. The next section of the article discusses the main urban containment planning tools. The article continues by examining the international experience with green belts and their effectiveness. Finally, the article concludes with a section on the policy implications of green belts in Auckland.

Background

The agriculture sector is an important economic enabler in the rural portions⁶ of the new Auckland Council, but it is in decline with respect to both space and employment (see Figure 1). As expected, Auckland’s rural economy is considerably smaller than the urban

Urban/Rural Profile Categories: Auckland Region

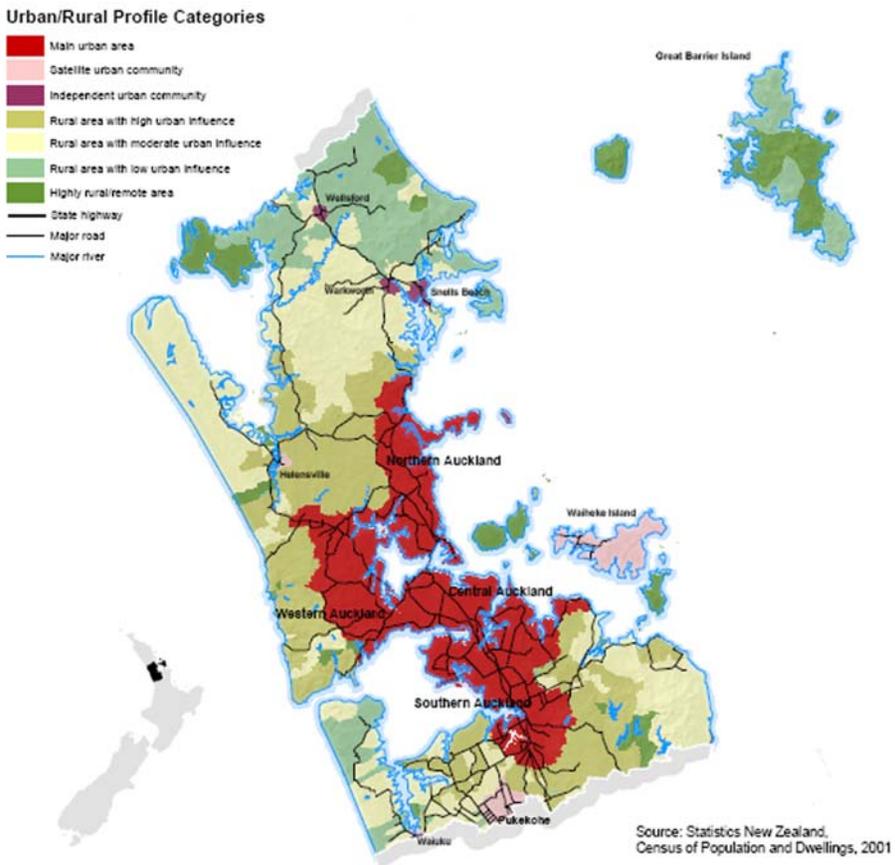


Figure 1. Urban rural profile of the Auckland region

economy; and significantly, the agriculture sector GDP for the Auckland region has been reducing by 0.4 per cent per annum. In contrast, other primary GDP for the Auckland region has been growing at 1.3 per cent per annum.⁷ Notably, pastoral activities are experiencing a steady decline. This article seeks to understand the reasons for this decline, land-use pressures that can arise on the periphery of large urban centres and the available options for containing urban growth.

The pastoral economy in the rural areas of Auckland Council is diminishing as land is transferred to alternative uses. This is being confirmed by the decreasing number of farms and the increased number of lifestyle properties in the Auckland region (see Figure 2). In 2007, there were 1381 fewer farms than in 2002.⁸ Subsequently, two recent studies have both concluded that the number of lifestyle block subdivisions is increasing and that partly as a result, the traditional pastoral rural economy is not viable in most of the countryside adjacent to the urban fringe (Waite *et al.*, 2008; Saunders *et al.*, 2009). The pastoral rural economy on the urban fringe is not viable because intensive farm-related activities tend to move to less expensive areas because of increased land prices. This results in fragmented land holdings and higher land costs.

The above referenced decline in agricultural activities has been accentuated by urban growth pressures and current land-use policies. These policies have been implemented through the Regional Policy Statement⁹ and district plans that regulate land-use activity in the Auckland region. Essentially, these planning instruments delineate the zoning, development controls and infrastructure development plans for the region. Previous TLAs in the region had agreed to a 'compact city' model that sought to concentrate urban development in specified areas for the purpose of intensifying development around transport and employment nodes. In order to achieve this objective, the rural and urban portions of the Council have been separated by the MUL. Consequently, in theory, land prices decrease sharply away from the city centre towards the edge of the MUL.¹⁰ In practice because of frequent extensions, the price gradient in many areas continues unabated beyond the MUL boundary because of land speculation and demand for lifestyle developments¹¹ (Grimes & Liang, 2007, p. 105).

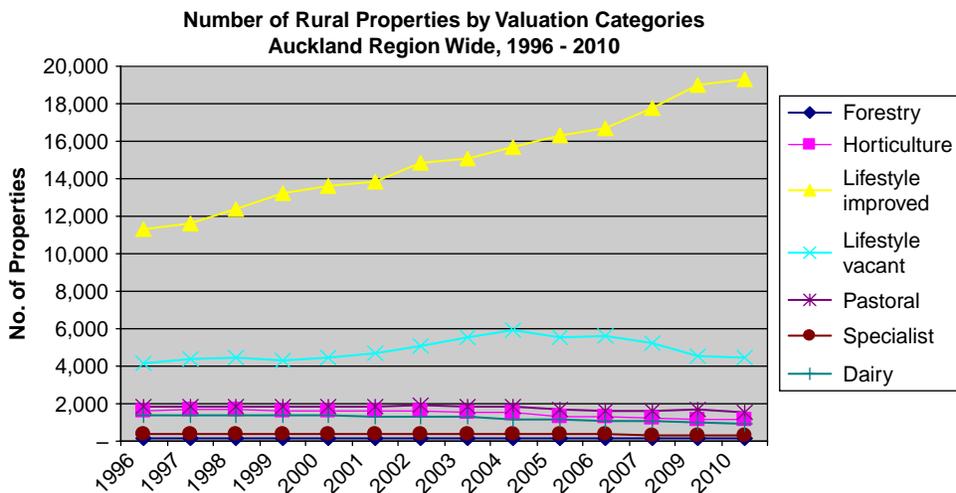


Figure 2. Number of rural properties by land use in the Auckland region, 1996–2010. *Source:* Property IQ (2010).

In effect, the land immediately outside the MUL has become a transition zone. This results in agricultural activities being replaced by large lot residential, commercial or industrial uses in the fringe areas.

The new Auckland Council is addressing the problem of urban encroachment by delineating a new Rural Urban Boundary (RUB) (Auckland Council, 2011, p. 31). This new form of an MUL will demarcate the urban limits by enlarging the existing urban area and promising not to move the boundaries again for another 30 years in order to provide certainty to the property market. Council planners have anticipated that an additional 5000–6000 hectares of new greenfield land will be needed to provide enough development land for new residential, commercial and business purposes until 2040. The draft Auckland Plan also delineates a suite of tools to enforce its ‘compact city’ policies (Auckland Council, 2011, p. 33). The tools are designed to promote the intensification of land within the proposed RUB and thus relieving pressure to expand the urban/rural boundaries. The tools are as follows:

- amending zoning to allow greater densities to be achieved;
- using Council-owned property as a catalyst for change;
- working with the private sector in joint ventures;
- investigating targeted reductions in development contributions and other financial incentives to stimulate development in the urban areas; and
- establishing cross-council teams to manage consents and a dedicated account manager ensuring cross-council commitment to priorities including the alignment of investment opportunities.

I argue that green belts should be included as one of the available tools.

The draft Auckland Plan recognises and “expects that the Treaty of Waitangi and customary rights [of Maori people] will be honoured” (Auckland Council, 2011, p. 55). Two priorities of the plan are to establish ‘papakainga’ and to enable the Tangata Whenua¹² to participate in the co-management of natural resources. Papakainga can be defined as a Maori model for community development on ancestral land. Consequently, the new Council is in the process of developing a co-governance and management framework in collaboration with Mana Whenua. It is unclear, at this stage, if this will include resource consents and zoning decisions and if it will affect green belts or other rural land preservation initiatives.

MULs have proven to be an effective tool for focusing urban development, population, employment and infrastructure in nodal centres. Containing urban growth by encouraging intensification while at the same time, opening new greenfield land for development becomes a balancing act that fuels considerable controversy. This is because the MUL is only one tool that is insufficient on its own to address urban and rural growth management issues or to determine appropriate social, cultural, economic and environmental outcomes. Other growth management tools such as charging impact fees (similar to development fees), differential rating systems for agricultural land, more stringent zoning regulations, establishing green belts, requiring infrastructure such as roads, water and sewers to be fully funded before issuing consent approvals and strict enforcement of restrictions on development on environmentally sensitive areas need to be added to the mix of planning instruments.

Auckland’s urban containment dilemma is a clear example of the tension created by combining the functions of a regional council with an environmental mandate with those of a traditional local government. Consequently, the amalgamation of the existing TLAs and the ARC into the new Council has dismantled the institutional arrangements that produced a strong adversarial relationship when addressing and managing urban growth.

The adversarial relationship resulted in numerous clashes and expensive litigation between the often pro-development-minded TLAs and the regional council. Paradoxically, an unexpected consequence of the amalgamation has resulted in the elimination of the system of checks and balances.

The Scarcity of Business Land

The Auckland region has a finite amount of business zoned land available. At historical take-up rates, the region is rapidly depleting its inventory of vacant business land. This scarcity will result in more rural land being developed for industrial uses. Recent research has projected that all available greenfield industrial sites will be exhausted by 2014 (Boffa Miskell, 2005; Auckland Regional Council, 2007; CityScope Consultants, 2008). The ARC Business Land Survey (2007) has indicated that the take-up rate of vacant business land had been accelerating over time at the date of publication. More recent data indicate that the trend has continued until the recent recession. This means that the region is likely to face shortages of vacant business land within a few years.

The Boffa Miskell (2005) study projected that Group 1 industrial land will be exhausted by 2012 at the existing take-up rates. This has resulted in land prices accelerating to a point where business zoned land in the Auckland region is now among the highest in Australasia. According to Arthur Grimes and Yun Liang (2007, pp. 28–32) these high land prices are a direct consequence of the 'compact city' intensification model that limits development within the MUL (dissenting views would point out that similar urban growth containment devices are used in almost all comparable cities in Australasia). The Council will have to be more disciplined in the type of businesses it allows in the various business zones because commercial activities are encroaching on the industrial land supply.¹³ Most researchers have indicated that unless more business zoned land is made available, the high prices will force new businesses to relocate southward toward Hamilton (CityScope Consultants, 2008). Businesses moving to rural areas will have a direct impact upon the rural environment.

This is a key issue because the existing inventory of business zoned land will be exhausted within a few years and as a consequence, new industry zones will need to be established that will as a result encroach upon rural areas, which further drives up rural land prices.

Accommodating Development with the MUL

The rural area is under increasing pressure to accommodate more population and non-agricultural uses. In order to offset this pressure, space for new industrial facilities needs to be accommodated within the present MUL in order to lessen the demand for new industrial precincts. The challenge is to use land resources more efficiently and maximise other more valuable resources such as human skills and knowledge. This has spatial implications.

There are a number of options for intensification of existing businesses or development of new businesses within the MUL to be considered, including:

- (1) accommodating the expansion of existing businesses within their existing sites (this may require relaxing or changes to car parking space ratios, storage or buffer zone areas) and their capacity for business intensification;
- (2) in brownfield sites, demolish existing development and redevelop more intensively (this would probably require new controls in the District Plan to ensure this is coordinated and meets sustainability criteria);

- (3) redevelop mixed use activity centres and rezone selective existing non-industrial land (either residential, commercial or public open space) to industrial land use for future development.

This is an important factor because in the near future the Council will be pressured to extend the existing MUL into rural areas adjacent to the urban fringe. In order to offset this pressure and to postpone the need to extend the MUL, the Council needs to encourage intensification of existing business land.

Available Planning Tools

Various measures have been proposed to control urban sprawl in many cities throughout the world with varying degrees of success (Bengston & Youn, 2006, p. 2; Lloyd & Peel, 2007). According to Pendall *et al.* (2002, pp. 4–5), there are three major types of urban containment policies: (1) urban growth boundaries; (2) urban service boundaries; and (3) green belts. The urban growth boundary, in Auckland, is defined by an MUL. It is a dividing line drawn around an urban area that is designed to stop urban uses from spreading into the adjacent rural areas. Urban growth boundaries are enforced by zoning and other regulatory tools (Knaap & Hopkins, 2001). Urban service boundaries differ by specifying the area beyond which public facilities and services, such as water and sewer, will not be provided. Bengston and Youn (2006, p. 2) argue that green belts are the most restrictive form of urban containment policy instruments because they are inflexible and intended to be permanent whereas urban growth boundaries are flexible and often moved over time.

Green belts have been an important planning policy instrument since the mid-1950s. When implemented, green belts seem to have been effective in limiting urban sprawl (Couch & Karecha, 2006, p. 355). This is because “greenbelts constrain the geographical expansion of urban areas largely through public ownership of undeveloped land or purchase of easements on agricultural land” (Pendall *et al.*, 2002, p. 20). Pendall *et al.*'s work illustrates the difficulties of applying conclusions about green belts and urban growth boundaries between countries where different governance structures and other key factors might apply. One of the central tenets of post-war UK planning has been the strict separation of countryside and urban areas, achieved largely through the implementation of green belts. A related concept is the greenway, a swatch of land that goes through a city, rather than around it. In New Zealand, Hamer in 1995 (as cited in Miller & Amati, 2008, p. 88) observed that “given the propensity of New Zealand towns to ... sprawl ... green belts might be an answer”.

As early as 1937, researchers in New Zealand were concerned with the “effects of speculative development of fringe urban land” (Putt, 1937, p. 6). Jones (1949, p. 78) suggested the “use of an urban fence or rural zoning to prevent sprawl and the positive encouragement to redevelopment and urban rehabilitation”. Green belts as a planning tool were introduced in Christchurch, Wellington and Dunedin from their inception. However, the concept was never fully embraced or implemented in Auckland and most other New Zealand cities. Nevertheless, despite no formal green belt policy or designated areas, many residents and action groups mistakenly believe that the open agricultural land in Auckland are green belts and as such should be protected (see Figure 3). The photo was taken along State Highway 1 near Drury.

With the enactment of the Resource Management Act (RMA) and the establishment of Regional Councils, urban containment became a local TLA issue. Miller and Amati (2008,



Figure 3. Action group promoting the protection of green space

pp. 100–101) concluded that green belts were not effective or widely adopted in New Zealand because protecting the natural environment and preserving rural open space were not the responsibility of local governments especially after the RMA became law. They went on to state that:

At the point at which New Zealand cities were beginning to recognise that urban growth and urban containment were planning issues that needed to be addressed there was a range of planning tools, including the green belt, that they could have elected to use. However, the green belt approach was one that was in the New Zealand context best suited to a regional level of governance, something which existed only in the most ad hoc manner until 1991. (Miller & Amati, 2008, p. 102)

International Experience

Green belt is one of the best-known British planning concepts originated by Ebenezer Howard during the late 19th century. According to Osborn (1969, p. 182), the term 'green belt' was originally coined by Raymond Unwin as "a further synonym for Country Belt" to describe "a stretch of countryside around and between towns, separating each from the others, and predominantly permanent farmland and parkland, whether or not such land is in the ownership of a town authority". He defined it as "a narrow strip of parkland more or less encircling part of a built-up metropolitan or large urban area". More recently, Amati and Yokohari (2006, p. 125) has defined green belts as "a zone of land around the city where building development is severely restricted". These various definitions reflect the flexibility of the concept (Tang *et al.*, 2005, p. 231).

In the USA, several methods of protecting rural land on the fringes of cities have been tried. Urban growth boundaries were introduced in Portland, Oregon in 1979 and in Lancaster County, Pennsylvania, in 1993 (Daniels, 2002 as referenced by Buxton & Goodman, 2003,

p. 208). In both localities, the boundaries encompassed enough land to accommodate growth needs for 20 years. Both these local governments agreed not to extend sewer and water services beyond the growth boundary. Another approach involved the purchase of land development rights from rural landowners on the fringes of cities (Anderson & Weinhold, 2008). Lancaster County chose to employ a growth boundary in addition to purchasing development rights in order to provide a permanent solution to urban sprawl (Buxton & Goodman, 2003, p. 208). In the UK, the first green belt purchases were made as part of the founding of Letchworth Garden City in 1909, where 500 hectares of agricultural land were purchased as a buffer between Hitchin and Baldock (Elson, 1986, pp. 8–9). Howard’s green belt was intended to have an agricultural function to supply produce for urban areas (Amati & Yokohari, 2006, p. 128).

In China, a second green belt is currently under construction in Beijing City in an attempt to control urban sprawl.¹⁴ This green belt will consist of tree plantations, parks and open spaces, reserved agricultural lands and residential areas. Research indicates that the first green belt failed to contain the expansion of the city (Zhao, 2011). The green belt failed because the authorities underestimated urban growth pressures and did not include many key stakeholders in the planning process. It is still unclear whether the second green belt will be more effective than the first one at this stage. Yang & Jinxiang (2007) concluded that urban sprawl in China is hard to contain with an arbitrary boundary such as a green belt.

Other countries around the world have responded to the problems associated with rapid urban growth and increasingly land-consumptive development patterns by creating a wide range of policy instruments designed to manage urban growth. Of the array of growth management techniques, urban containment policies are being increasingly adopted. Many others are revisiting existing policies, for example, after standing virtually unchanged for almost three decades, Korea’s green belt policy is currently being revised and weakened, largely due to pressure from developers and landowners who own property in the green belts. Bengston and Youn (2006, p. 8) question if Seoul would be a more or less ‘sustainable city’ today without the green belt. They argue that without the green belt, “Seoul would have lost much of its rich natural heritage and essential ecosystem services”. In Hong Kong, the actual planning intention of the green belt has been ambivalent and flexible and it has become a transition zone rather than a zone for conservation (Tang *et al.*, 2007).

Green belts also protect important resources such as sand and stone for future extraction. They provide space for important community infrastructure, recreational facilities, and for the preservation of remnant indigenous vegetation, sensitive environmental areas and wildlife corridors. Buxton and Goodman (2003, p. 206) stated that:

Perhaps most importantly they prevent *ad hoc* poorly resourced suburban sprawl and provide a break to a spreading metropolis, a definitive statement that a city should not spread in an uncontrolled manner, but be connected to its rural hinterland and surrounding environment.

Purchasing land for green belts shows a commitment to maintaining urban boundaries. The essential characteristic of green belts is their permanence and that once the general extent of a green belt has been approved it should be altered only in exceptional circumstances.

This is applicable to Auckland because the previous TLAs have never demonstrated any long-term commitment to preserving the rural environment. The Council could begin by purchasing land for green belts. However, this does not guarantee permanence because

portions of green belts are sometimes developed at a later date due to “differing interpretations and applications of policies over time and sometimes because of inconsistencies between policies and planning decisions” (Whitehand & Morton, 2004, p. 281). Consequently, the “fundamental principle that should underpin a successful green belt is its immutability” (Buxton & Goodman, 2003, p. 207).

There are a number of benefits to a green belt. Many communities establish green belts to maintain their semi-rural character and to create recreational space. The creation of a green belt can dramatically change the look and feel of a city, as dedicated open space can make a city seem less suffocating. Green belts can also help to regulate the temperature, conserve water by minimising storm runoff and preventing water loss through evaporation. Green belts also provide habitat for wildlife that allows animals to move freely.

Effectiveness of Green Belts

The effectiveness of green belts differs depending on location and country (Amati & Taylor, 2010). In London, an often-cited example of a successful green belt policy, the preservation of a wide band of open space surrounding the urban area partially explains why the city has stopped geographically expanding since the Second World War (Longley *et al.*, 1992). Some critics argue that green belts actually defeat their own stated objective of preserving the rural environment by preventing existing towns and cities from expanding, thus creating the demand for more land-intensive housing developments further out beyond the green belts. These new communities often have lower building densities and promote a greater dependence on cars and commuting.

This is because a green belt does not extend indefinitely outside a city, as a result, they often spur the growth in satellite communities that are located a distance from the main urban area, thereby actually ‘increasing’ urban sprawl. In these situations, development ‘jumps’ over the green belt area. Some researchers, such as Baum-Snow (2007) and Coleman (2010), have concluded that new highways enable such development and may actually induce urban sprawl. Examples commonly cited are the Ottawa suburbs of Kanata and Orleans, both of which are outside the city’s green belt, and are currently undergoing explosive growth. This can lead to other problems, as residents of these areas have further to commute to work (if they seek employment within the city) and little access to public transport. It also increases traffic through the green belt, an area not designed to cope with high levels of transportation.

Many researchers, such as Dawkins & Nelson (2002), Nelson *et al.* (2004), Nelson & Sanchez (2005), Landis (2006), Millward (2006), Wassmer (2006), Amati (2008) and Catalan *et al.* (2008), strongly support urban containment policies and green belts. There are also a number of organisations such as the Campaign to Protect Rural England¹⁵ that run organised programmes encouraging the protection of rural lands and green belts. Nelson and Sanchez (2005, p. 46) conclude that “urban containment policies, especially ones that are rigorous in managing development outside development boundaries, are most effective in restraining exurban sprawl”. On a more cautionary note, Jenks (2000, pp. 242–250) suggests that intensification can be acceptable but only in specific situations.

Couch and Karecha (2006, p. 357) investigated the effectiveness of green belts and the compact city model by questioning “the apparent acceptance of a *prima facie* relationship between more compact cities and sustainable development”. Breheny (1997) in particular has raised doubts about the feasibility and acceptability of urban compaction. He suggests

that “people aspire to the very opposite of the compact city . . . there is a clear clash between the high-density aspirations of the compactionists and the desires of local communities to protect their quality of life” (Breheny, 1997, p. 216). In support of Breheny’s thesis, a number of critics (O’Conner, 2003; Searle, 2004; Buxton & Tieman, 2005; Cox, 2005) have also questioned the idea of forcing higher densities upon people who don’t want to live in such environments. This writer has heard similar sentiments voiced at numerous local board meetings during the Auckland Plan public consultation process.

There are many examples whereby the actual effect of green belts is to act as a land reserve for future roads. Whether they were originally planned as such, or the result of a newer administration taking advantage of land that was left available by its predecessors is debatable. In Britain, green belt barriers to urban expansion have also been strongly criticised as one of several major protectionist economic barriers to the price, supply and quality of new homes. Furthermore, green belts obviously have a positive effect on the values of adjacent properties (Correll *et al.*, 1978). Moreover, despite these criticisms, many people place a high value on greenspace in a city because they consider it to be an important part of sustainable design.

For example, the City of Melbourne, according to Buxton and Goodman (2003, p. 206; 2008), has failed to protect green wedges and its green belt because it did not have the political will to enforce its own policies. Between 1996 and 2002, the Council’s planning system allowed new residential development to occur in the non-urban zones. At least 4000 hectares of land in green wedges were rezoned for residential development during this time (Buxton & Goodman, 2008, p. 68). The green wedges were originally designed to “provide easier access to open non-urbanised land between the growth corridors, and allow agricultural production to continue close to the city, including some of the most productive intensive agricultural and horticultural industries in south-eastern Australia” (Kellock, 2000, as cited in Buxton & Goodman, 2003, p. 205).

Green Belt Policy Implications for Auckland

I believe that the Council should consider augmenting its set of urban containment tools by developing a green belt policy because Auckland may exceed its growth projections. If that were to eventuate, the Council will have to consider extending the MUL/RUB before 2040 as urban growth pressures mount. This is because the supply of industrial land is rapidly dwindling and there is an increasing demand for new residential, commercial land and lifestyle properties. Protecting the rural environment while providing new greenfield development sites requires a coordinated forward planning effort that anticipates future land requirements. The previous poorly coordinated system resulted in a shortage of inexpensive industrial land. The shortage has encouraged a southward extension of new industrial sites as discussed above. Such expansion has led to the very public demonstrations against the proposed industrial development in and around the quarry land in Drury (see Figure 4).

This example points to the need to understand that the increased scarcity of business, commercial and residential land within the MUL will necessitate future development in adjacent rural areas such as in Drury. This is because intensification has its limits. As a consequence, such new development will further reduce the agricultural nature of the area. A strong case can be made for both the need for more development land and the need to preserve the rural environment. Politically, the Council will have to consider the validity of both viewpoints on a case-by-case basis.



Figure 4. Organised opposition to industrial development in rural areas

There are a number of possible actions, in addition to developing a green belt policy, which could be included in the forthcoming unitary plan¹⁶ that could lead towards a sustainable rural economy. As recognition of the decreasing size of landholdings, it would be prudent to develop guidelines that encourage specialist sectors such as equine, vineyards and aquaculture. The Council will also have to exercise self-restraint when approving development applications by ensuring that industrial zoned land is used only for industrial purposes and is utilised efficiently. The Council needs to develop more stringent district plan subdivision rules and fertile land¹⁷ protection tools. As discussed above, better enforcement of the zoning and consents process will help mitigate the pressures. However, maintaining minimum parcel size is essential because it discourages the proliferation of rural homes being developed on small lots. Another action point could be encouraging home-based businesses by promoting the deployment of rural broadband.

Conclusions

The evidence suggests that over time the rural areas that are nearest to the Auckland urban fringe are likely to become more subdivided for lifestyle properties and rural home sites as the demand grows for small land holdings within commuting distance of the urban centre. This has led some researchers to argue that Auckland will need to both intensify its housing and significantly speed up resource consent processing to allow more greenfield residential development beyond its urban growth boundary (Grimes *et al.*, 2007, p. 114). This is because, in the absence of regulation such as a strong green belt policy, changes in land use are typically the result of changes in market prices (Nickerson & Lynch, 2001).

The literature suggests that relatively low-value farming activities requiring large amounts of land will be relocated further away from the city (Property Economics, 2009). This encourages landowners to subdivide their land to take advantage of the rising land prices. Therefore, it is essential to examine minimum lot sizes, subdivision rules and regulations and to consider establishing green belts in order to achieve the goals and objectives of the Auckland Plan.

In order to provide certainty to the property market, the local planning authority needs to “define the boundary ... [of] urban growth, prohibit incompatible urban uses in non-urban areas and curtail land subdivision” (Buxton & Goodman, 2003, p. 205). In the absence of strong planning intervention, further rural land fragmentation in the form of more lifestyle properties and rural houses on small parcels is likely to occur (Dieleman & Wegener, 2004, pp. 316–320). At the local level, a green belt is effective at limiting development in the urban fringe. In a large geographically dispersed city the size of Auckland (or at the regional level), research has shown that development has a tendency to ‘leapfrog’ green belts into rural areas (Amati & Yokohari, 2006, p. 127). Such development has been linked to a higher car use and longer car journeys.

If the Council wished to continue promoting a compact city urban form for Auckland, policies will have to consider the fact that many people have a clear preference for the type of living experience and neighbourhood satisfaction that is found on quarter acre lots in the suburbs and lifestyle properties rather than in more congested areas (Forster, 2006, p. 180). As demonstrated above, developing a green belt policy will not by itself resolve the problems of urban encroachment and may not provide the flexibility that many rural landowners are seeking because “the [green belt] concept is generally misunderstood, because ... its application tends to arouse contention between development and conservationist interests, and its performance often falls short of the expectations of town planners, as well as those of the community” (Tang *et al.*, 2005, p. 230).

In conclusion, Amati (2008, p. 15) argues that green belts are “still a relevant planning policy for the twenty first century, albeit as a drastically different flexible growth management tool that recognises a variety of interests”. This implies that:

cities should focus more on other functions of the green belt, such as protecting agricultural land and providing recreational resources. If a green belt is used for urban sprawl control, it must be used as a part of an integrative package that includes other planning, economic and social tools. (Yang & Jinxing, 2007, p. 295)

An integrative package of options is required because green belts or an MUL cannot stop urban sprawl if the Council lacks the political will to contain urban growth over time (Yang & Jinxing, 2007, p. 295). Flexible policy (such as frequent extensions of the MUL or Council-sanctioned encroachments into a green belt) leads inevitably to land speculation in rural areas nearest to the urban limits. This argument has been confirmed by numerous studies in leading professional journals (Nickerson & Lynch, 2001; Pendall *et al.*, 2002; Buxton & Goodman, 2003, p. 206; Amati & Yokohari, 2006; Couch & Karecha, 2006). It is important to understand that an MUL or green belts are insufficient on their own to solve all the issues associated with rapid urban growth and the demand for lifestyle properties. Nonetheless, the Council should consider developing a green belt policy to augment its package of planning tools in order to achieve its stated goals of urban intensification and rural land protection.

Notes

1. The opinions expressed by the author do not necessarily reflect Council policy.
2. In New Zealand a unitary authority is a local territorial authority (district or city) that also performs the functions of a regional council. At present, the only unitary authorities are Gisborne District, Nelson City, Tasman District, the Marlborough District and the new Auckland Council. A unitary authority has responsibility for all regulatory decision-making.
3. The MUL is a spatial planning tool for managing growth. Auckland's MUL is used to contain growth and encourage intensification in urban areas to protect aspects of the rural environment and to prevent urban sprawl (Hill, 2008, p. 1).
4. A green belt is a swath of land around a city that is protected from development and construction. A green belt is also a policy and land-use designation used in land-use planning to retain areas of largely undeveloped or agricultural land surrounding or adjacent to urban areas designed to prevent certain types of urban development from spreading further.
5. Auckland Council has a total land area of approximately 560 000 hectares with a rural area of 384 160 hectares. Rural Auckland makes up approximately 68.6 per cent of the region with the other 31.4 per cent delineated as Urban.
6. In the broadest sense, 'rural land' means non-urban land that is mainly used for agricultural related purposes.
7. See www.stats.govt.nz
8. See www.stats.govt.nz
9. The Auckland Regional Policy Statement (ARPS) is a statement about managing the use, development and protection of the natural and physical resources of the region.
10. If growth limits "are binding, land immediately on the inward side of the boundary will be valued at a higher rate (per hectare) than land immediately on the outward side of the boundary" (Grimes & Liang, 2007, p. 28).
11. In practice, land prices close to but beyond the MUL are almost as high as those within the boundaries because of anticipated MUL extensions.
12. Tangata Whenua is a Māori term for the indigenous peoples of New Zealand.
13. In recent years, many TLAs have allowed commercial uses in industrial zoned areas, thus depleting the available inventory of land (Property Economics, 2009).
14. The first green belt was initially proposed in 1958 (Yang & Jinxing, 2007, p. 289).
15. See their website for an extensive list of publications and references at <http://www.cpre.org.uk/library/results/green-belts>
16. The unitary plan will replace the existing district plans.
17. Bloomer (2011, p. 2) found that, in New Zealand, protection of productive soils was not sufficient justification to refuse new subdivision applications.

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