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Steven Bailey,
Inquiry Director: Better Urban Planning
NZ Productivity Commission
WELLINGTON

13 February 2016

Dear Mr Bailey

I aim to make a two-part submission to the Better Urban Planning enquiry.

At this stage I place in your hands, as Inquiry Director, the reasoning sent to Murray Sherwin on the 19th November 2015 where I broadly equate cost reductions with productivity gains 'Suburbia and Ex-urbia Costed', along with my thinking on 'Urban Retrofitting Compaction and Clustering'.

To whatever extent you find aspects of this submission relevant to your analysis this can be accessed and printed out from several websites **Riddell Sustainable Urban Planning** and my own site **Riddell Resilience**.

I will work on the second part of my submission over the next fortnight.

As noted previously to Murray Sherwin —
I wish you satisfaction + success.

Robert Riddell

Encl:

Sustainable Urban Planning

Robert Riddell

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[Free-to-view and free-to-print from website **Riddell Resilience**]

Suburbia and Ex-urbia Costed

Most North Americans and Australasians live in suburbs; they will, most of them, die in suburbs; and the next generation will also mostly live and die in suburbs, although beyond that there cannot be certainty as oil shortages bite, new technologies evolve and populations possibly decrease. Cities are lived in and are of course livable, the oxymoron 'livable cities movement' being something of an admission of guilt about the monsters created, ostensibly for an exuberant and energetic family life – in reality security fortresses inducing much unfairness and isolation. The density component alone was specifically isolated in a Real Estate Research Corporation study (United States 1974) as 'costly' in energy, land resource and fiscal terms. Yet while it is a national and personal *economic* loss as well as an extravagance to bind into the suburban lifestyle, there are also significant *social* costs involved.

'(C)ommand over money, command over space, and command over time form independent but interlocking sources of social power.'
David Harvey, 1985.

This situation will be taken to prognosis later. For now, mindful of the pattern of urban mistakes already reviewed, the cost reasoning is represented as a categorization of the adverse causal relationships which spring from the suburban way of life, and an understanding is sought as to how 'grey zone' suburbs learn, why some improve into 'green zone' suburbs with age, and why others decline and decay.

In contrasting perversion to the long-term 'high costs' of suburban living it was the short-term 'low capitalization cost' of suburban home provisioning which led to its proliferation in Anglo settler societies. What follows is a précis of Kenneth Jackson's seven-point 'cheapness' summation (*Crabgrass Frontier*, 1985).

- High per-capita wealth.
- The low cost of money.
- Low raw land costs.
- Low fuel costs.
- Inexpensive wooden frame construction.
- Deductible tax allowances (US mainly).
- Enterprise incentives to developers.

- Consider first the *fiscal-costs* into which the plot-house-car lifestyle shepherds suburban families and individuals. First comes plot provisioning, plus the costs of home construction, then the purchase costs of vehicles. The picture starts to clarify. This trap, which it proves to be in fact, is difficult to avoid. Yet on the fringe of the larger towns and cities, cross-commuting suburbia is still being put in place on rural lands lost to food and fibre production forever!
- Consider the *time-costs*, again particularly for the larger towns and cities, where some 80 per cent of the Anglo settler society urban populations live. Obviously the breadwinner's hour or so in the car each day is a waste of personal time. To this must be added the time-cost of child and other non-driver chauffeuring, shopping-trip time, and recreational-trip time. We all have an understanding of the time lost in getting to and from work; but this is only an individual component part of the personal time spent on the ten or more car trips generated out of the standard suburban household each day.

- Now consider the *stress-costs* arising from the way the preceding fiscal-costs and time-costs work. To live well in standard single-purpose suburbs, every driving-age person requires the use of an automobile; but when a second or third car cannot be afforded, or when a person is part of that one-third of society which is 'too young', 'too poor', 'too elderly', or 'too handicapped' to drive, then suburban life becomes suburban detention. Worse, an inability to budget for mothers to have discretionary use of a car induces a suburban neurosis that is the bane of family practitioners. Quite obviously, that inability to be in a position to drive away from the palpable boredom of the suburban home restricts social contacts and reduces social horizons to the solace of the television square as a surrogate for interpersonal socialization.
- Consider *institutional costs* in addition to the previously noted stress-costs, those expenses which come through as social care, involving the treatment of alcohol and drug abuse and the institutionalizing of those psychologically unable to get by in suburbia. Here too must be considered the costs of hospitalizing and rehabilitating the families of those who suffer or die from car accidents, particularly those accidents which result from otherwise avoidable car usage. There are also the policing and custodial costs connected with crime.

For the United Kingdom (1970s): more than 80 per cent of seven and eight-year-olds got to school without adult supervision.
By the 1990s: less than 10 per cent of seven and eight-year-olds travelled to school without adult supervision.

- Consider also the *separation-of-function costs* induced by a division of land users into specified-purpose cells (housing, commerce, industry, schooling); and the 'costs' which result from herding the lowest incomed and some racially distinctive groups of people into other specifically underclass ghettos.
- Consider *energy-costs* in terms of the profligate use of fuel sources, particularly non-renewable oil and gas reserves which nature allows human society access to once only during the course of recorded human history. Certainly these energy resources are there to be utilized by humankind; but apart from the pointlessness of wasteful use, their headlong uptake prejudices both future mobility and creates unsustainable places of residence for future generations. Simply expressed: lower urban densities generate proportionally higher levels of energy consumption. The most chilling prospect for cross-town commuting suburbanites is no automobile gas at the pumps, and to a lesser extent gasoline costing more than (say) five dollars a litre.[14]

Ironically *Neighbours*, a television parody of Australian cul-de-sac sociability, and the latter 'suburban' productions of *I Love Lucy* in the United States, portray low-density suburbs as socially exciting in a manner which grips its also suburban watchers during the window of time they might be socializing themselves, as in the programmes!

- Consider the habitat or *environmental costs;* the loss of indigenous floral cover and the urban transformation of usable agricultural land – productive assets forever lost whenever the urban commodification of farming land takes place. Then there is the extravagance of wastefully large (under-utilized) residential sections; the extravagance of one- and two-person households in three- and four-bedroom housing; and the high cost of long-run utilities and water-borne sewerage and storm water disposal services.
- Consider finally the *physiological costs* arising in low-density areas from the effects of toxins used in construction (such as formaldehyde and polyurethane), in housework (cleaning and pesticide chemicals), and in the garden (insecticides herbicides and fungicides). To these must be added the repair costs related to automobile usage – noise pollution, fume pollution, and other environmental impacts.

Sustainable Urban Planning

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Urban Growth Management

chapter 5

page 238

Urban retrofit compaction and clustering

This passage heralds the most important, the least practised, and also the most woefully neglected urban growth management planning operation[56] – the retrofitting, upgrading, compaction and clustering of established suburbs. In his quirky and prescient *Edge City* the investigative journalist-author Joel Garreau (1992: 228) explains the transformation into neighbourhoods which takes place in the maturing of suburbs: 'Individual property owners continually upgrade their places. They look around at what other people are doing, decide what is good or bad, eliminate discordant elements, and bring their community closer to what is perceived to be the ideal.' What is heartening about property-owner participation

and reurbanization over time is its connection to the ever-recurring family cycle – home place, workplace, school place, shopping place, and entertainment place – as the generator of urban habitat improvement. From that perspective suburbs contain both the modern problem – a lack of variety and focus – and harbour the neomodern solution – retrofit, compaction, clustering. An issue which then arises has been noted by Randall Arendt (1994: 229) as one in which: 'Once land is checker boarded into wall-to-wall house lots, it is nearly impossible to retrofit greenways, trails, parks and neighbourhood playing fields into the established pattern. The approved plot, for better or worse, is essentially chiselled in granite.' So, a caution: when suburban arrangements are in harmony – which is the situation with many between-the-wars (1918–1939) suburbs – leave well alone. Compaction is no panacea. Indeed the corollary to compaction, higher density, can exacerbate suburban crime and disorder. The greatest challenge is induction of neighbourhood clustering into the tracts of post-World War II 'zoned for housing only' suburbs. Rescrambling the urban housing omelette and reconstituting the urban transport mix are topics shot through with complexity and difficulty. Clustering at incipient neighbourhood centres is straightforward, leaving 'fuzzy' the bipolar situation which arises where neighbourhoods join and people are attracted either way to different centres.

Extant suburbs are places well-nigh impossible to undo and repackage. Planners may retrospectively rue inadequate provisioning at the historical rural-to-urban crossover stage; but the legacy now left for them to address is how to retrofit an often dysfunctional suburban inheritance. Hawken, Lovins and Lovins (1999) finger three urban crises: 'deterioration of the natural environment', 'dissolution into lawlessness despair and apathy' and a 'lack of public will to address suffering and welfare', which in its essentials mirrors Benton and Short's (1999) identification of three broad needs for the 'greening, detoxification and reforming' of the city. Combined, these six major urban challenges confront politicians, planners and local government administrators, particularly in relation to suburban retrofit.

Richard Rogers, Chair for the Urban Task Force in England set down (2000) these criteria for evaluating an Urban Regeneration Project:

- Does it combine live, work and leisure activities?
- Is it on recycled (urban) land?
- Is it socially mixed and inclusive?
- Is it served by a public transport system?
- Is it as compact as traditional villages?
- Is its construction and energy technology relevant to the housing problems of today?

Fortress enclaves are an execration, suburbs-within-suburbs shielding people and protecting property values behind walls, shunning the city beyond. Most planners with an ounce of social responsibility regard it as important, emphatically to resolve against closed-off, single-use, same socio-economic group, physically gated housing precincts. These exhibit as walled ghettos focused into private open space without two-way access to the public realm. Suburban layout should never be predicated on an exclusionary basis. This need for privacy and security has to be met firstly in the home, and if preferred, at high densities in condominia, and at lower densities in 'broad-acre' ex-urbia. Conventional separate plot layouts should legally and allowably accommodate culturally *mixed* households forms, for *mixed*-income households, and to include a *mixed* combination of home occupiers. Walled and gated suburbs are socially regressive:

'ghettos' because they accept racial division, ethnic exclusivity, pecking-order prissiness, and inculcate smugness.

Resisting exclusionary zoning as a part of density-increase reurbanization ushers in the reverse, a consideration of 'radical inclusionary development' styles which variegate, diversify and promote a differential character to suburbs, allowing a 'deemed to comply' accommodation of worthy alternatives to the orthodox. This proactive reasoning was first, to my knowledge, profiled in the 1961 writing of Jane Jacobs on the subject of urban diversity, her *Death and Life of Great American Cities.* In lieu of land uses compartmented into single-purpose 'everything according to code' zones, the need is for proximity predicated upon two main criteria – compatibility and neighbourliness. Those keywords embrace an operational conjoining – conservation with development *and* good design. This further indicates that inclusionary zoning is not some multi-purpose free-for-all of the commercial strip kind, where a jumble of land uses is allowed to pile up, obeying only utility and fire-safety regulations. Much more than this, 'inclusionary urban zoning' is set within a neighbourhood framework each containing a school and some pre-schools, benign work-at-home places, a clustering of local corner stores, places of worship, and other places for entertainment, cultural activities and leisure. The overall objective and predication is to:

- Achieve a medium to high density mix of house types and, by implication a mixture of households;
- To identify, endorse and build up neighbourhood 'centrings' – newsagents, corner shops, community buildings, pre-schools and a public transit pick-up point;
- To attain user-paying public transport servicing in line with density increases;
- To accommodate a mixture and variety of residentially compatible land uses;
- To move toward higher net density neighbourhood pockets, well served by user-paying public transport services; *and*
- To ensure that at least 10 per cent of the overall land area is acquired as amenity space in the public realm.

Density increase policies ('densification' and 'compaction' in North America, portrayed in Australasia as 'infilling') are the key to cutting back on a range of costs in post-World War II suburbs, characterized early on in that era by small houses (around 120 m^2 'footprint') built on largish lots 600 m^2 plus. There can be savings with land provisioning costs, and utilities installation costs. This is not the sole intent, which is also to *improve* upon district nucleating, which engenders a sense of belonging, and reduces reliance on the use of individually owned automobiles to accomplish the daily living round. This is the economic and resourcing case *against* low-density suburban sprawl and the need, in response, for urban densification, community service clustering, traffic calming, landscape greening, and a transit-service. From Robert Cevero (1991: 127):

> The idea [being] that if the true social cost of building at low density were passed on to dwellers and developers, the market place itself would give rise to a built form

that respects the limits of natural environments and provides high levels of mobility. Indeed . . . to remove some of the in-built subsidies that encourage [people] to live at low densities and drive their cars to all places at all times.

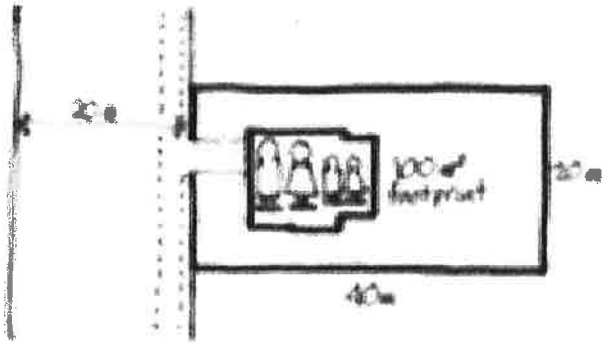


Figure 5.10 Density and coverage ratios.
Nett plot area [40 × 20 site] plus [20 × 10 half street] = 1,000 m^2.
Thus a net site density of 10 plots per ha.
Net residential density at 4 persons/plot = 40 persons/ha [net[a]].

$$\text{Site Coverage} = \frac{800\ \text{m}^2\text{(site)}}{100\ \text{m}^2\ \text{(house footprint)}}\ \text{thus } 12.5\%$$

$$\text{Site-to-Floor ratio} = \frac{800\ \text{m}^2\text{(site)}}{200\ \text{m}^2\ \text{(2 floors)}}\ \text{thus } 25\%$$

[a] Gross residential density embraces public open space, collector road space, community lots and local shops.

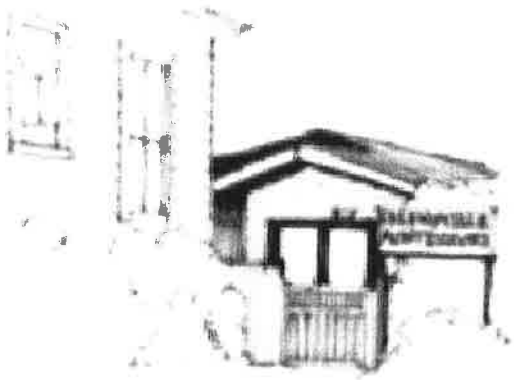
A technical problem with consolidation strategies is understanding some awkward notions, shown in figure 5.10, **Density and coverage ratios** as density (persons per acre or hectare: gross and net), plot coverage (the percentage of a site covered by buildings), and floor-to-area ratio (FAR – the amount of permitted floor space on a site expressed as a proportion of the total plot area). Suburban plot coverage below 'one-third' produces spaced-out arrangements which are culturally dysfunctional (characterized by householders frequently not knowing their neighbours); and such lower urban density lifestyles cannot support an economically viable public transport service. Although unable to identify the precise threshold of preferred intensity of land occupancy, my finding is that any net density below 35 persons per hectare (about 14 people per acre) lacks the population density to support public transport. From this premiss a further claim can be staked out, namely, that net densities of more than 60 persons per hectare (around 25 persons per acre) can and will positively generate neighbourly interaction, and provide the basis for a viable public transportation service pretty well regardless of the socio-economic group being served. Densities between 35 and 60 persons net per hectare (correlating roughly with 15 and 27 persons per acre) delimit a density trap – that band of densities where residents are denied privacy as well as the benefits of close-living urbanity. Unfortunately,

it so happens that most established standard suburbs within settler societies fall within the category of being neither low enough in density to provide an Arcadian private ambience, nor high enough in density to benefit socially and economically from compact urbanity and public transport provisioning.

This mixed housing project in Buckinghamshire, England, comprises modest bed-sit and starter housing (terraced), through to four-bedroom double-garaged bungalows. Looks good, works well.

Because density of persons per hectare (or acre) is not readily understood, the reurbanization and densification goal is, as already noted, more usefully expressed as at least 30 households per hectare (12hh/ac: 'net' of plots and the adjacent half of adjoining access roads). Consolidation also involves the acceptance of socially compatible land uses (mixture) and household variety (diversity), with the equivalent of 30 standard-family households per hectare (net as above) adhered to as the clearly understood minimum density. Proceeding toward a higher density can vary: from inducement (the carrot approach) where a local authority coerces landowners to design and work through and get special 'departure' approvals for higher-density and land-use mixes, to a penalty (stick) approach such as the application of arterial road tolls to pay for collector roads, and the application of higher land taxes for larger plots.

Mixed-housing policies, tied in with densification procedures and a 'working from home' acceptance, pull together the compaction and refurbishment case. Compatible mixed-use and 'working from home' practices are incorporated, not simply because this is a lively idea, but to provide a reason for a substantial proportion of the population *not* to have to use automobiles to get to work. If the dormitory and workplace parts of an urban framework are separately designated, people will cross-commute by private car, vindicating mixed land uses and mixed building-use design infusions. With a mixed-use pattern many car trips become unnecessary or get internalized (by pedestrian and cycle use). The main benefits from urban mixed-use higher-density development strategies within dominantly residential localities derive from enhanced lifestyle variety, improved opportunities for local employment, and the housing of older couples, solo aged, and solo parented. Then there is the huge benefit from providing starter families with an actual start, and the practical advantages which accrue from a mixture of family types able to



Helensville Montessori, located behind the family residence on a quarter suburban acre.

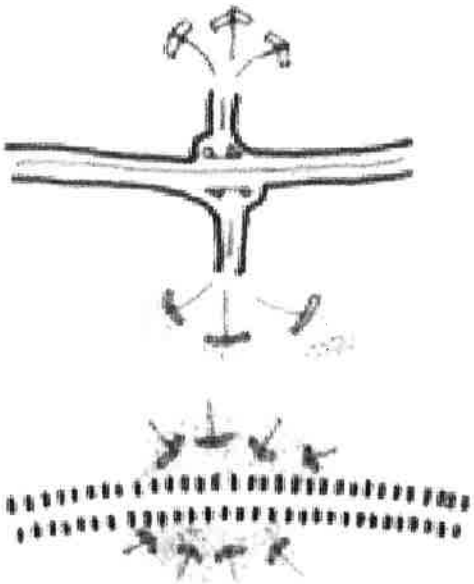
provide services to each other. Densification also achieves a more efficient use of the existing utility infrastructure, saves good-quality farmland from urban unproductiveness, and secures energy reductions. There is also the conservation benefit where densification leads to the reuse, rehabilitation and the conversion of derelict and under-used land which might otherwise decline into blight.

An interesting disclosure on this aesthetic matter comes from a Melbourne study (Swinburne Centre for Urban and Social Research 1990) which established that 'While there is no single answer to what makes medium density [housing only] development successful, landscaping around the individual units was the factor most mentioned . . . [and] from the resident's viewpoint, other factors in a successful development were a low level of noise and a layout which provided safety from traffic'. Thus against the all-Australian and general settler society preference for detached houses, the study concluded strongly (Swinburne 1990: chapter 8) in favour of medium-density housing which was well designed, mostly contiguous, well landscaped, and with some private yardspace for each residence.

A starting point for coming to terms with density-increase performance criteria involves the encouragement of urban government professionals to view their responsibility as one of promoting an efficient, enjoyable and rewarding compaction out of the received suburban inheritance. Local administrators and politicians should weigh up the prospects of increased revenues, as well as the lower unit servicing costs which higher-density urban infill generates.[57] Despite the complexity of the policy controls involved, the longer-term revenue prospects for local government are good; and when coupled to the avoidance of social damage and social gains the overall accumulation is impressive.

It clearly 'costs' greatly – environmentally, socially and in monetary terms – for the majority of settler society urban populations to live in low-density standard suburbs. It also vastly 'costs' nations in terms of land lost from agricultural production forever, as well as 'costing' heavily to patch up the lives broken through social dysfunction and isolation. The total excess works through as a national debit, which is something conceptually clear, although difficult to place a figure on with certainty. Yet it is possible to calculate the price of personal and family trauma resulting from each 'avoidable' automobile accident; the cost to victims of the larceny rampant in low density suburbs; and the total price of unemployability as a consequence of suburban isolation. In terms of household debit arising from low-density suburban life it is necessary to reckon in the price of *not* being able to organize work at home, *not* being able to get by on less than two cars per household, *not* being able to put down social roots, and on *not* being able to get into starter-housing. Box 5.4 detailed as **Compaction: an urban retrofit code** expresses the 'plussages' to seek out and apply.

Structuring the densification ideal comes down, strategically, to the identification and predetermination of potentials for extant suburbia, a realization and movement toward the installation of Co-housing, TODs and MUDs. The 'whole of suburbia' cannot be restructured, yet locations with 'nucleation' potential can



Above: 'dispersal' at an urban freeway turnout, which tips people onto streets. *Below*: 'nucleation' at a railway station, which tips people onto sidewalks.

always be identified and enhanced and the density for them can be increased, often by as much as 30 per cent without wholesale disruption. Out of this thinking has emerged the notion (somewhat fanciful because it fails fully to get around the overarching freehold-tenure fixity) which involves converting existing suburbs into suburban villages by reassembling them in better form. In the British context there was a compulsion to pursue a comprehensive approach consequent to World War II blitz damage. In settler societies, with no such compulsion, it is salutary to realize how unyielding suburbs can be. Daunting though the prospects for the creation of worthy neighbourhoods are, 'sustainable intent' and 'tolerable harmony' remain the driving-force factors for working the compaction and urban retrofit criteria (box 5.4) through one or a combination of Mixed Use Development, Co-housing, and Transport-Oriented Development schema.[58]

The urban retrofit and consolidation strategy, broadly considered, inclines toward overall sustainability, particularly when viewed in a regional context. It is important also to put into the equation the fact that within-urban ecosystems are, and ever will be, ecologically unbalanced in that they 'consume' inputs of raw materials, energy and food, and 'produce' gaseous discharges, putrescent liquids and generally useless solid wastes, incessantly. Sustainability is a desirable 'ideal' to be honed up, improved upon and striven for in differing neighbourhood contexts, and urban retrofit and consolidation contributes to that ideal through a promotion of resource conservation, community sociability and fiscal economy.

The retrofit progression moves from the inner city toward the brown-land band – then out to standard suburbia. It is in the inner-city enclaves where occupational, ethnic and religious diversity – and sexual diversity – is most apparent. In the 'brown-land' inner residential band (beyond the city core) 'diversity' is apparent to a lesser degree. Further out, in the standard 'grey zone' suburbs, families are moated away by their isolating yards 'front, back, side' – in badly ordered spaces which often prove unpleasing and seldom provide privacy.[59] Paradoxically the post-World War II plots in suburbia are often larger than what families want, yet too small to accommodate infilling. Working out from the inner city toward the edge, the Urban retrofit and compaction strategies are explored in three policy contexts: Inner-city rebuilding and retrofitting; retrofitting the inner 'brown-land' suburbs; retrofitting standard 'grey zone' suburbia.

Box 5.4 Compaction: an urban retrofit code

The recommendations offered in this box run with the set of Urban Social Arrangement and Style principles set out earlier in box 5.1; aligns with the design criteria set out in box 5.2 Basic residential componentry; and also connects with the Suburban design-detail provisioning components given in box 5.3.

1 A 'performance' approach

A deemed-to-comply 'performance-related' approach mollifies the inevitable injustices of 'prescriptive formulae' (for example density criteria, difficult to maintain); facilitating beneficial design innovations and on-site as well as beyond-site trade-offs including flexibility in site usage, enhanced off-street car parking, and higher-density site coverage.

2 Land-use mixture and clustering

It is important to avoid a housing monoculture; to accept a clustering of socially compatible mixed-site uses for professional practitioners, handicrafting, boutique food preparation, small hotels, and cultural, religious and entertainment venues with cooperatively shared parking provisions.

3 Walkability: pedestrians and cyclists: automobiles least considered

The top-down preference is to cater primarily for pedestrians, then cyclists, then motor vehicles. Public transportation is also a high priority. Provision for the private automobile is lesser ranked, and vehicle operators may suffer inconvenience.

4 Sociability

Conserving family privacy is easy to achieve at 70 persons (30 households) net per hectare, although it is necessary to provide increased design input in proportion to this density. Families living in proximity to other families fulfil lives of personal satisfaction, community utility, and personal economy, and generate sufficient customer-density to attract profit-making public transport provisioning.

5 Local workplace practices

Pretty well all local commercial enterprises, many local service industries, and a wide range of light manufacturing and outwork enterprises are, or can be, clean, quiet and compatible with residential life. The benefit is proximity of workplace to home place, and reducing the servicing and travelling costs associated with making an urban living.

6 Homestyle mixtures and household adaptations

Racially excluding and class-defined ghettos, whether in public housing or gated enclaves, are usually explained away and tacitly justified as economic segregation. Communities must, instead, encourage the accommodation of a mix of all kinds of residential household, including some 'starter' housing, extended family housing, and solo parent and other household types at various levels of affordability. As the needs of occupiers change consequential to the 'empty nesting', 'combo family', 'solo parenting', 'work from home' and 'boomerang granny' needs (*Planning the New Suburbia* Friedman et al., 2002) houses and households need to modify and adapt.

7 Reduced and constrained vehicle ownership and usage

Savings in household stress, and direct savings of time arise from getting by with only one car per household, along with the savings to society which arise from a use of public transport, and the further benefits which accrue from the provision of safe pedestrian and cycle ways. Traffic calming and urban greening are also practical contributions to the reduction of traffic stress.

8 Utilities management

Impressive savings in cash and kind can be attained by arranging the water supply and the sewage disposal systems conjointly: inducing savings in water resource uptake through a progressively increased and charged-price mechanism, which knocks on to induce savings in the reduced amounts of water-borne sewage put out for treatment.

9 Greening

Planting, particularly tree planting, softens the space between buildings, enhancing neighbourhood aesthetics, cooling out the habitat in the summer, increased community pride, and increased property values. Michael Hough (*City Form and Natural Process*, 1984) has observed that 'Two [forms of urban] landscape exist side by side in cities. The first is the nurtured 'pedigree' landscape of

Box 5.4 *Continued*

lawns, flowerbeds, trees, fountains and planned places everywhere that have traditionally been the focus of civic design. . . . The second is the fortuitous landscape of naturalised urban plants and flooded places left after rain, that may be found everywhere in the forgotten places.'

10 Design for densification

The disadvantages of higher-density living (noise, glare, overlooking, vibration) can be mitigated through improved layout design, site design, and unit design – provided this is also combined with the likes of traffic-calming and urban-greening.

. . . and, more generally

11 Remove obstacles

Review pricing for utilities connections to ensure the connector pays. Assist re-zoning to accommodate 'residential'. Assist recycling of warehouse, industrial and office buildings into residential use. Promote higher-density fringe residential projects. Remove penalty costs of non-conventional residential projects. Allow innovative reduction in standards (building-to-boundary and the like). Allow dual dwelling occupancy of larger lots.

12 Provide opportunities

Encourage residential construction within commercial and light industrial projects. Identify spot opportunities for higher-density residential projects. Provide higher rewards for affordable housing and higher-density residential projects. Reduce (or waiver) 'developer' fees to encourage selected initiatives for residential projects.

13 Assist the market

Undertake higher density demonstration projects. Promote public awareness programmes. Disseminate information on housing needs. Market residential innovations. Institute a public awareness programme which clarifies higher-density housing policy. Promote technical innovation and design diversity.

Inner-city rebuilding and retrofitting is consonant with a city lifestyle preference, to live close by entertainment and information facilities and the commercial bustle and business hustle available in the city core 24 hours a day, seven days a week; and there is the convenience of being walkably adjacent to places of employment and entertainment. The inner city is a part of the urban scene where, in the phrasing of Joel Garreau (1992: 223), 'Development is very much a participatory sport'. It is a context where developers often say 'Forget zoning. There is no zoning, only deals.' Inner-city living is not so much 'planned' as 'negotiated'. It can include an accommodation of family life, although it is more usually attuned to the motivations of the upwardly mobile young professionals, and those involved with city-based entertainment and business. The clearest advantage accruing from inner-city living is that of being able to get on with whatever it is that is vocationally important without the hindrance of owning, registering, insuring, maintaining and garaging an automobile. While the sense of interrelational community is largely absent, there is a subtle sense of being part of a 'system' which provides surveillance for its co-inhabitants. The sustainability ideal is several removes from the conscience of inner-city lifestylers, yet the 'triple harmony' maxim is partly upheld because these individuals use less transportation energy per capita.[60] The European inner-city family lifestyle prototype is indicated for Britain by Baldock's (1994) 'hierarchy of residents needs: Accessible shopping and service facilities – Safety and security – Social, cultural, leisure and entertainment opportunities – Environmental quality and delight'. These criteria, with a raised profile for the environmental component, ring true for the inner-city parts of settler-society inner cities.

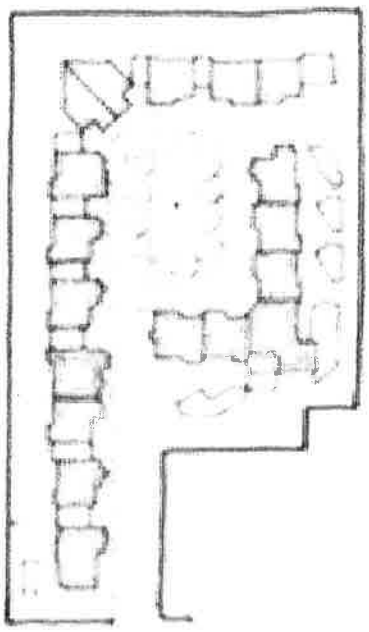
Infill on formerly built-on central city sites is one possibility. Also likely is the conversion of some floors in commercial office complexes into inner-city apartments.[61] Even more likely is that speculative office buildings for which office occupants cannot be found are converted to condominia and flats. Another popular variant involves the conversion of other non-residential buildings into loft apartments; for example warehouses of another age are overhauled and refurbished for inner-city living. Certainly a mixture of residential activities and land-use mixtures can exist alongside, and be layered into, the inner-city scene.

Early on in the residential retrofitting of inner-city localities there will arise shortfalls in the availability of corner shops, schools, clinics, and home supply stores, rectified gradually as the residential presence builds up. What cannot be easily established for the occupants of inner-city apartments is access to open space in the public realm. Nevertheless, in most settler-society cities, the civic parks provided in the nineteenth century are to hand, and usually there is access, or the potential to open up access to an urban water's edge.

At their highest level of reordering, brown-land enclaves would have car-free zones, with peripherally sited carparking.

Retrofitting brown-land inner suburbs arises for the localities which occur between the inner-city core and standard suburbia. Although mainly remnant first suburbs (sometimes villages) they are also infused with commercial and industrial activities. Atypical demographic forces are evident – fewer than average children per household, a large proportion of young professionals, many same-sex partnerings. There is also a recognition that the separate-uses concept which underpins single-purpose 'planned unit zoning' has given way to mixed land uses and population diversity. What often emerges is a multicultural household mix, along with a variety of household formations and intermingled commercial and light-service industrial land uses. The brown-land trending process frequently involves infill projects on land once used for a now-abandoned manufacturing or warehousing purpose. The urban design outcome for such solely residential projects is often exquisite. The results are profitable to the landowner and contractor, and meet a residential need. There are also new competitive land-use incursions: offices, light service industries and specialist commercial outlets. A high proportion of the residential inhabitants of brown lands are transitory, moving up-market, or renesting further out as children are born into their households.

Brown lands offer culturally diverse and service-diverse regeneration (often disparaged as gentrified) opportunities within cities and larger towns.[62] Their positive virtues can be enhanced in ways which set out to retain most of the existing built structures and the local ambience. An objective is for through-traffic denial worked out on a precinct basis: pedestrians as the 'top priority', cyclists with public transport as the conjoint 'second priority', and service vehicles and private automobiles as a 'third priority'. A significant technical difficulty is that the pedestrianization of a former vehicular street is always of inconvenience to someone, and has the knock-on disadvantage of shunting more wheeled traffic onto the remaining thoroughfares. An advantage of traffic calming over full pedestrianization is that it allows vehicular penetration at a slower, quieter, safer and

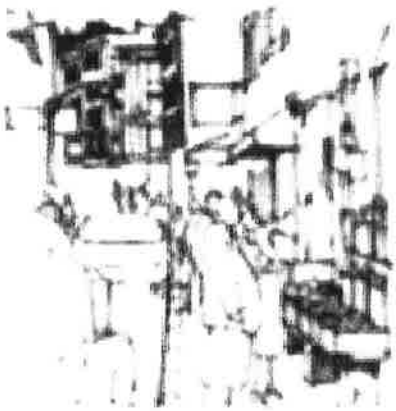


The 1853 Grace's Paddock allotment, Auckland, now the site of a townhouse cluster; probably the optimal replacement house-type in brown-land situations. The difficulty is that two hectare-plus chunks of usable land are needed for each cluster, and there are not all that many ex-breweries and former brickyards – or the like – being abandoned to provide space for cluster housing of this worthy kind.

more environmentally sensitive pace. Another objective is to enhance overall greenness both within the public realm and by means of 'corridor' and 'spot' planting on both public and private land, inducing a pedestrianization of the pace of life in brown lands.

The brown-land 'village' emphasis works best when established land-use intensities and transportation provisions come together at or around former villages, railway stations, abandoned electric tram stops, or surrounding a park or some other community facility. This can be pushed along by a local government administration in a number of ways (encouragement, advice, publicity) although the actual execution of regenerative change is mostly a function of returns to private developers and landowners of income relative to capital outlay. It is clear that hub-focused cluster projects, wholly desirable though they are, cannot infiltrate the whole of the inner suburbs; indeed the locating opportunities are limited.

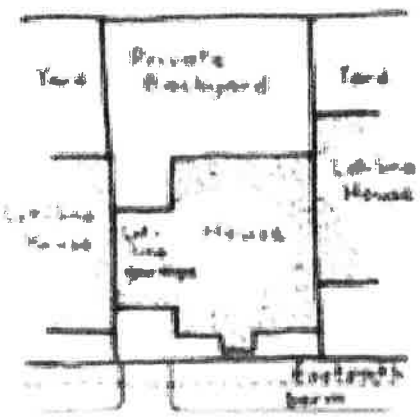
Surviving urban 'villages' within the brown-land context usually exhibit outward signs of community and street life personality and a strong sense of place. This is particularly the situation with the generation of specific activities (places of worship and the like), and functions (shopping and transit exchange), and variety (mixed household types), and local jobbing (artisans and shopkeepers) when these are within easy walking distance of one another. These characteristics reinforce the sense of security, friendliness and calm, noted to be the hallmarks of 'urban village' living. At best brown-land neighbourhoods are interactive in ambience, legible in character, and highly permeable via interconnected and safe public realm spaces, also exhibiting an acceptance of mixed activities and mixed uses of genteel kinds (bakeries, realators (estate agents), small hotels, entertainment venues, handicraft centres).



Around 1970, following a reading of Jane Jacobs's *Death and Life of Great American Cities*, I visited the 'brown-land' neighbourhoods of Boston's North End and Chicago's Back of the Yards.

Design excellence, in conjunction with the mixed-use and higher-density policies already reviewed, enable brown-land retrofits to avoid the fundamental layout mistakes which provide the context for street crime – 'opportunities', 'victims', 'offenders' (Zelinka and Brennan, *SafeScape*, 2001). In terms of physical design, the call is for the provision of well-lit public areas which ensure that there are no opportunities for entrapment, along with high visibility entrance–exit sight lines. These issues are important, but nowhere near as important as the need for root-cause social problem alleviation (most challenging, the eradication of drug dealing) centred on designing a sense of belonging, pleasure, liveliness and

community. It is clear that were the cost of root-cause social correction compared to the cost of private surveillance provision, *and* the cost of contact-avoidance manoeuvres, *and* expenditures on institutionalizing, hospitalizing and counselling for both assailants and assaulted, *then* communities would get the mixed-use higher-density layouts and designs they deserve. This would also involve the activation of community-focused training and education, the incorporation of a safety audit (Zelinka and Brennan 2001: 174) and an increased and accepted obligation to keep an eye open for each other, as well as the promotion of a greater degree of civility in the public realm.



Design facilitating home security.

The inner suburbs are places where a mixture of household arrangements are positioned to support lifestyle objectives such as variety and conviviality, and which go some way to excluding the motor car and noxious land uses and socially unacceptable activities. Inner suburb villages improve on the unattainable urban sustainability ideal and are a major step in the direction of neighbourly urban form. Inner suburb villagization fulfils neomodern ideals, predicated on the lines of ancient guild-influenced inner-city living in the Old World.

Retrofitting, consolidating and revitalizing standard suburbia (Steve Belmont's 'Grey Zones', 2002) presents something of a curate's egg. Spatially considered, the partly-bad (usually post-World War II) patches which sprawl over most of lower-density suburbia, are adjacent or proximate to pockets of mostly-good urban living (usually built between the wars, 1919 to 1939). These standard suburbs can be partially remediated: rendered more affordable and economical, more safe and sociable, and more environmentally diverse and sustainable. Opportunities arise for 'citylets' through the design of within-city TOD and Co-housing projects. These work best when a public space or function lies at the heart of, or penetrates, such clusterings, although this is really only a worthy and purposeful outcome for select contexts. The 'bad news' is that the more recently built suburbs are inordinately transfixed, difficult to change physically, and do little to stir the political and administrative conscience or imagination.

With 'consolidation and densification' as a generally desirable objective, the straightforward housing infill approach runs head on into the also straightforward problem of utilities overload. Within low plot ratio layouts it is relatively easy to identify some backyard and frontyard infill building sites. Aside from issues of house-style compatibility (older bungalows juxtapositioned with new shift-ons?) a repetition of such infillings overload the pipe-and-wire supply services and the culvert-and-drain disposal services, and imposes increased residential street parking and traffic movement problems. Little wonder that local authorities which set off down the densification policy path for standard suburbs soon come to

realize that there are wider aspects of neighbourhood resistance, ambience concerns, utilities upgrade, and transportation planning to consider. The cost of utilities refurbishment is inhibited by low investment returns on outlay over the short term, which of course deters investors.

One approach is simply to leave problem suburbia to stew in its original single-purpose layout, proposing little more for them than a landscape makeover. A cynical corollary is to beef up the marriage-counselling, gambling-counselling, vice-counselling, and drug-rehabilitation services, it being left to central government to provide the prisons, refuges and hospitals where the most irredeemably wrecked lives end up. The more positive longer-haul solution involves refurbishment in accordance with general rules (boxes 5.4, 5.1, and 5.2): to start with what is given and work toward a realistic, affordable and realizable neighbourhood recentralization and revitalization.

Infilling encounters three relatively intractable obstacles. *First* is the inertia of local residents and their local government agency overwhelmed by the tangle of the challenge.[63] *Second* is the tenural inertia whereby low-density freeholding induces an indifference toward community centring, it being reasoned that, as a consequence of the expanding use of the automobile, schooling, entertainment and employment can be accessed anywhere these happen to be located cross-city. *Third*, local government agencies avoid assuming a proactive indicative attitude, mostly preferring to adopt a 'you propose, we dispose' approach.

Garage and granny flat infill.

A rewarding collaborative outcome can be pursued on a joint-venture basis by neighbours activated by their local government council within a street block, combining their overgrown and disused rear yards into an amenity garden and playground shared space as shown in figure 5.11, **Creating an open space oasis**. In many respects, retrofitting and consolidating standard suburbia appears 'too difficult'. An alternative is for local authorities to operate on a joint-venture facilitative basis.[64] A supplementary approach for the attainment of prescriptive densification is land taxing calculated on a site-size basis whereby one household occupying a two-house site has to meet a two-house land tax bill thereby hurrying on infill. Greening the suburbs, planning plus planting, is a value-adding and ambience-refurbishment factor – and a can-do owner input option.

The sites of social services (play area, library, school, health centre, corner shop, church) are other nodal points available for the retrofitting and centring of suburbia through clustering and greening. These are the services which should have been planned in at the time of rural crossover – but they were not, are not, and probably never will be worked adequately into the standard suburb. This problem of community provisioning gives rise to a major challenge and question: how to

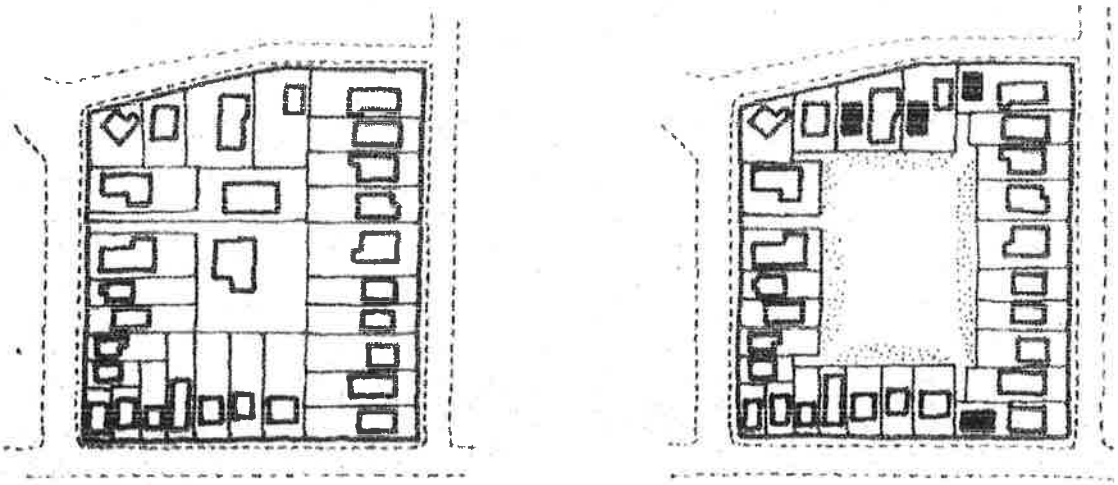


Figure 5.11 Creating an open space oasis
A conjectural depiction based on a starter effort by the Addington Bush Society in Christchurch. Two houses removed. Four new houses inserted. Large, secure private open space created.

retrofit the social and utilities facilities *and* densify and partly repopulate in order to justify the investment called for. In all of this it is important to remember that the advent of an increased density demands a proportionally increased input of utility restructuring, public transport provisioning, and landscaping.

Urban density increase strategy, broadly contemplated, inclines toward urban sustainability, viewed from both a within-city and from a wider regional perspective. Urban ecosystems are, and ever will be, unbalanced in that they 'consume' inputs of raw energy, materials and food, and 'produce' waste gases, putrescent liquids, and generally useless solid garbage. Sustainability is a conservation *with* development ideal to be maximized, even though it may never be fully attained. The neighbourhood retrofit and consolidation process reviewed in this passage contributes additionally to revitalization through the pursuit of community sociability, amenity enhancement and compatible work-at-home arrangements.

Shopping as a leisure activity

Two countervailing forces, the protectionist urge to 'save' traditional central business districts and the profiteering urge to 'capture' middle- and lower-income consumers, are at work in the cities and larger towns of Australasia and North America. The United States and Canada have reinvigorated many small-city centres along the lines described evocatively by Franaviglia in *Main Street Revisited* (1996) and Suzanne Dane in *Mainstreet Success Stories* (1997). The main shopping opportunity for cities and large towns lies with 'big box' strips and within 'large shed' malls, usually at cheap and accessible locations in the suburbs

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Steven Bailey,
Inquiry Director: Better Urban Planning
NZ Productivity Commission
WELLINGTON 7 March 2016

This is a follow-up to my previous (18 February) contribution to the Better Urban Planning inquiry. I adhere to the spirit and direction set down in the Productivity Commission media releases:

— "Start from first principles responding to future urban challenges" 12 Dec
— "Look at ways for improving our urban planning system" 10 Nov 2016

'FROM FIRST PRINCIPLES' [1]

Specific to this submission 'first principles' is about the planning, design and provisioning of residential suburbia in our cities and larger towns — the dormitories where almost 90 percent (it's really that important!) of us live. Here the desired eventual outcome is the security, freedom, and lifestyle enrichment of healthy communities and safe households — a matter of social provisioning regulated through local political agency. A point to note here is that although the academy (Schools of Planning) instill good suburban design, this gets overlooked (or observed in the breach) within local government administrations fixated on the legal complexities around resource consenting — to the neglect of worthy higher-density suburban outcomes.[2]

As noted in the 'Better Urban Planning' *Issues Paper* our distinctly home grown urban planning system is smothered in legal confusions and negative externalities impinging from three sides. The Resource Management Act (RMA), Local Government Act (LGA), and Land Transport Act (LTA) contribute to delays and compromise, and proves inefficient and costly; all of which thwarts the growth of community wellbeing within residential dormitories.

My advocacy is around the attainment of carefully crafted urban densification:— *policy* which identifies, focuses and enhances the sense and reality of community; *layout* which fosters communities which are nuisance free, cycleable-walkable, textured with variety, and creative about work-from-home mixed usage; *design* which is sufficiently fine-grained to ensure that each dwelling expresses identity and individual character; *action* whereby the end result is places and spaces where 'individuals' can meet and interact to become 'community'.

The known and proven forms of urban intensification (localization) include TODs (transport oriented development), MUDs (mixed use development), Co-housing, and also the generally suspect patch-zoning.[3] Here the bigger question asked is whether community-rich outcomes of quality can be achieved within the RMA LGA LTA framework as it stands. The answer has to be 'improbable' for, despite all the coalescing of legislation (notably under the RMA), site-specific resource management wrangling detracts from worthy urban provisioning.[4]

More to the point: there is scant recognition of the need, notably within density-increase residential neighborhoods, of community centering; with strategically planned (pedestrian and cycle accessed) schools and pocket parks where residents and their children foregather and inhere a community mantle. By extension, this is also where there is a call for sociable (livable!) design to be fashioned and embedded; urban planning, architecture, landscaping, engineering and legal professionals breathing life into secure, healthful and coherent communities.[5] This case for design excellence, especially for higher density neighborhoods, deserves an input-doubling of all the relevant skills.

'IMPROVING OUR URBAN PLANNING SYSTEM'

Traditional urban planning systems in settler societies, like ours in NZ, are systemically normative (lineal), compartmentalizing land usage into zones. Responsive (non-lineal) planning systems (to which, in part, the RMA strived) adapt to the multiplex needs of a changing world, and extend beyond property protection and rigid zoning to interactive land usage. Non-lineal residential systems accept varietal (compatibly mixed) land use activities, facilitates connectivity for people working from home, enhances community safety and security, and exhibits a walk-cycle permeability; the whole oriented internally toward the local school, pocket-park and shops.

* * *

What follows is a 'blue skies' opinion on the thorny matter of improving our legal structures and operational processes. The emphasis is on clarification, and simplification, along with a greater amount of carefully considered prescription.

First: although there was considerable reluctance to endorse the change-over to the RMA in the early 1990s, the Bill then before Parliament was passed 'on the nod' by both major parties as something of a bi-partisan leap of faith for a new approach, untried and largely not understood. Although procedurally flawed and unduly opaque **the RMA endures, is operational, and should remain as the legislated instrument of precedent.**

Second: surely this tortuous Act can be sorted-out and rendered adherent to its philosophy, culled to its essence, refined down to its working premise on resource management and **stiffened with newly specific urban planning provisions**[6] — withal in clear language, accessible to all users.

Third: urban local plans need to be clear and simplified, and the code-books decisively and consciously abbreviated and written in plain language.[7] To that end **Central Government must provide clear guidance, producing exemplar Bulletins illustrating best suburban provisioning practice**.

Fourth: planning principle and practical efficacy should become the hallmark of a **new focus and style of Planning Tribunal** (moving away from the legally engrossed Environmental Court) giving priority to technical guidance and best-practice rulings — excellence of planning outcome to eclipse legal nicety.

Dr Robert Riddell, Professor of Planning *emeritus*

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[1] The main source of these 'First Principles' is my *Sustainable Urban Planning* Blackwell-Wiley 2004 (reprinted 2007) — also available through Amazon Book's print-on-demand service.

[2] The Queenstown Lakes District has launched an effort to produce a new generation of District Plan "...with less text and bulk" which is to be "...easier for the wider community to understand". *Town Planning Quarterly* No 199, December 2015.

[3] Riddell *loc. cit.* pp 227—232.

[4] Further to 'improbable'. Two excellent low rise (walk-up) intense-density projects with generous shared outdoor space are the Freeman's Bay (Auckland) 'Courtyard Development', and the Birdsong Co-housing project in West Auckland's Ranui. Refer to Nicola Shepard's 'Lessons in Livability' *Metro* 394 (June 2015).

[5] After Bentley *et al.* Riddell *loc cit* Box 5.1 pp205—206 'Urban Social Arrangement and Style'.

[6] Again, for 'those dormitories where over 80 percent of us live'.

[7] *Loc. cit.* Footnote 2