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Wellington Regional Strategy: Focus Areas

Background

This paper reports on the key economic and urban development interventions that the Wellington Regional Strategy should focus on in order to:

- Address as many of the identified regional issues as possible, and
- Deliver on the overarching goal of lifting the regional GDP per capita growth rate.

A key premise that this paper is based upon is that simply addressing the issues seen in a single snap shot in time (i.e. the current state of the Wellington region) will be insufficient to achieve our growth ambitions.

Our future will be the product of dynamic forces and possible discontinuities. It will be created by a wide range of actors (from individuals to institutions) and the incentives on them. Changes are occurring more rapidly and as a consequence more complex and less predictable. Today's fix may become tomorrow's problem.

To illustrate if the Wellington Regional economy grows at 4% per capita per annum for the next decade then the economy will be over 50% larger in real terms taking account of likely population growth. Many sectors will have grown much faster than this average, many will have declined and some disappeared completely.

Average real household incomes will also have grown in real terms by around 50%, with all the implications for changed demand for goods and services.

This rate of change has not occurred in recent times, and we can not predict exactly how or if it will occur.

To cope any interventions will need to help the region adapt positively to change, be robust in the face of unforeseen changes, and go well beyond just ameliorating current problems.

This all means more effective interventions are likely to be¹:

- Systemic – they will change the way the region responds with a view to reinforcing activities that are likely to create a better future state, rather than

¹ This section draws on the body of literature that deals with the distinctions between “strategic planning” and “strategic thinking”. For a brief summary of the issues see Eton Lawrence (1999) *Strategic Thinking A Discussion Paper* Public Service Commission of Canada (http://www.psc-cfp.gc.ca/research/knowledge/strathink_e.htm)

intervening to deal directly with the symptoms. Symptomatic intervention might be necessary to redress immediate problems, but should not be seen as a substitute for setting the region on a better overall path.

- Intentional – there needs to be a clear view of what is required in the Region, and this in turn means having a sound understanding of where we are, how we got there and the gap between where we are and where we want to be.
- Evaluative – will uncertainty about causality an ongoing commitment to evaluation and review is essential.
- Multidimensional and persistent over time – achieving social and economic change is difficult. Exact causes are often unclear, there are likely to be a number of factors at play that respond to different types of intervention and may involve changing behaviours that have built up over a number of generations.
- Adaptive – change will occur more quickly and interventions need to be robust in light of that change. Economic development is unpredictable and path dependant.
- Widely accepted - all the above factors place a premium on having consensus over the outcomes and the means being used to achieve them, but equally to incorporate methods whereby the outcomes and means can be reviewed and revisited over time.

The Wellington Regional Strategy is not just about developing a sense of what should be done; it is the means whereby stakeholders can agree desired outcomes and identify their appropriate contributions.

But it also needs to be seen as a live document that allows changes and learnings to be incorporated. Our ability to learn and adapt more quickly than our competitors will be the key source of advantage going forward. The last thing we need is a static regional strategy that locks us into specific plans and actions.

The issues

The issues identified so far in the work on the Strategy² are a need for:

- Greater collaborative leadership
- Improved prosperity (greater GDP per head and productivity, the impact of changes in demography and the structure of the local economy, shortage of industrial land, and the role of Iwi)
- Improved connectedness (intermodal neutrality, congestion, international connections)
- Greater entrepreneurial and innovative culture (international linkages, venture capital, science/university/industry links)
- Healthier environment (waste management, general environmental concerns, access to natural areas)

² Summarised from Proposed Regional Issues.

- Better lifestyle (use of infrastructure, demographic changes make lifestyle unaffordable)
- Better infrastructure (land use, energy, communications, water, natural hazards, finance)
- Stronger identity (image, vitality, protection of natural areas)
- Greater cohesiveness (diversity in ethnic composition, impact of growth on social integration, pockets of relative deprivation)

Comment

These issues are a mix of intermediate and final outcomes. Some reflect symptoms of failures in our regional economy and social arrangements that have become so irritating that people want them fixed now. As we have noted this is not necessarily a reason to intervene directly.

At the heart of these concerns is the desire to increase our material and social well-being as fast as other regions in New Zealand and faster than comparator countries in the OECD.

Basic models of the factors likely to contribute to these goals are well documented including in a number of the background papers for the Strategy. The *Economic Development Indicators 2005* (Treasury and Ministry of Economic Development) and *The Social Report 2004* (Ministry of Social Development) each provide a useful summary of the issues with the advantage that they cover both economic and social outcomes.

For economic development they identify labour utilisation and productivity as the two prime drivers, which are in turn influenced by investment, innovation, enterprise, international connections, skill and talent, and economic foundations (infrastructure and laws).

For social development they identify health, knowledge and skills, paid work, economic standard of living, civil and political rights, cultural identity, leisure and recreation, physical environment, safety and social connectedness.

Clearly these various factors are interlinked, with significant overlap between the two areas.

Reviewing the various regional issues in light of the above it appears that the underlying issues facing Wellington lie in:

- Problems with the way infrastructural investments are made in the region (*leadership, connectedness, infrastructure*)
- Protection of the *environment, lifestyle, and identity* from risks that may emerge (rather more than the need to deal with specific problems today)
- Specific concerns about the way economic growth is occurring (particularly *social cohesiveness* and the distribution of growth in the Region)
- More general concerns about opportunities being missed in the regional economy (*prosperity, culture, international connectedness and infrastructure*)

Each of these issues is material in its own right:

- While the link between investment in infrastructure and growth is weak³, the impact of the failure to invest is significant⁴;
- Failure to maintain our environment, social fabric and social cohesion will quickly lead to significant economic losses as well as undermine any consensus around the Strategy; and
- The economic opportunities being missed out in the Region are significant as we shall see.

We therefore believe that the key focus areas for the Strategy should be built around these underlying issues.

In addition the Strategy needs to take account of the wider system the Region sits within. All of the above issues are significantly influenced by central government. Dealing with these issues will require active engagement with central government, and wider initiatives from the centre will have significant impact on the Region. Any Strategy needs to deal with this interface.

The key outcomes

This suggests five key desirable outcomes for the Wellington Region:

1. Better infrastructural investment
2. Mechanisms for achieving social and environmental outcomes that can adapt rapidly to changing circumstances
3. Ensure that people don't fall behind (and redress any current inequalities)
4. Unlock our untapped economic potential
5. Greater central government support for these outcomes, and regional support for central government initiatives

In what follows we will look more closely at each of these areas. In so doing we will particularly focus on systemic interventions rather than short-term symptomatic interventions.

Infrastructural investment and achieving social and environmental outcomes

Our analysis suggests that the first two outcomes are related and have a common cause, and therefore should come within a single focus area.

Both infrastructural investment (and operation) and achieving social and environmental outcomes involve a mix of central and local government interventions and market mechanisms.

³ See Dr Carolyn O'Fallon, Pinnacle Research 2003 *Linkages between Infrastructure and Economic Growth*, prepared for the Ministry of Economic Development.

⁴ See for example the Allen Consulting Group 2004 *Benefits of Investing in New Zealand's Road Infrastructure*, Sydney, prepared for the Automobile Association.

The advantages and disadvantages of direct intervention versus market mechanism for dealing with these issues are widely documented⁵. In this context the big advantage of using market mechanisms (where possible) is that they are generally better at delivering economic efficiency in a dynamic and changing environment.

There are of course areas where market mechanisms breakdown. They won't deal with perceptions of distributive justice, won't guarantee access, will be less effective in some areas where monopoly or network effects apply, may not provide the best allocation of risk in lumpy investments and won't give a guaranteed outcome for an intervention.

However, using market interventions (where practical) is likely to be superior to relying upon direct interventions. For example the geographical distribution of economic activity (a significant concern of the Strategy) is largely the result of diminishing returns from agglomeration effects (both on the production and consumption side of the economy) and increasing costs from dispersing forces (cost of living and production, social and environmental costs)⁶.

The exact balance between agglomeration and dispersing forces is a function of specific industries and location. The number of actors is large as are the issues each will take into account when determining their behaviour.

Administrative interventions are incapable of dealing with these complexities.

We are therefore better off trying to improve the way in which costs and benefits are taken into account in individual decision making⁷. Such an approach not only improves our regional economy's ability to adapt to change, it also makes clearer where administrative intervention is really needed.

Reinforcing this approach is ongoing improvements in our ability to apply market mechanisms to the provision of infrastructure⁸ and to price externalities. As information technology and our knowledge of environmental and social science improve we are becoming better able to put in place economic instruments.

It is inevitable that these developments will increasingly change administrative practice⁹, even if practice is currently lagging behind capability¹⁰.

⁵ See The Treasury 2004 *New Zealand Economic Growth: An Analysis of Performance and Policy* for a discussion of a number of these aspects.

⁶ See Sarah Box 2000 *Economic Geography – Key Concepts* The Treasury and Suzi Kerr and Jason Timmins 2000 *Economic Geography and Spatial Statistics: Theory and Empirics of New Zealand Regions* The Treasury for a survey of the key issues.

⁷ Failure to do this ends up with local authorities quite routinely arguing in district plans (and land transport planning) that land use development should be constrained to optimise the value of infrastructure, rather than that the provision of both being designed to optimise the welfare of the users (whether for production or final consumption).

⁸ For example technology to enable time of day, location and axle weight specific pricing for road user charges should be widespread in our commercial fleet in 5 to 10 years.

⁹ For examples of studies that are pointing the way see Ministry of Transport 2005 *Surface Transport Costs and Charges Study*; and ACIL Tasman 2004 *Water Markets in Australia*, a report prepared for Meridian Energy Ltd.

But the argument for focusing on the use of economic instruments is not just about staying ahead of the game.

It is very difficult to see our regional economy and real household incomes grow by over 50% (say) in real terms over the next decade while relying on our current arrangements for investing in infrastructure and using existing regulatory regimes (including our current regional and district plans).

As an example should this growth happen households will naturally demand more living space. This will in turn put pressure on our arbitrary administrative distinctions between rural and urban land¹¹. The outcome under the current regime will be a region unattractive to the people we want to attract to create economic growth because our regional plans arbitrarily limit the supply of a particular lifestyle.

Similarly high growth will outstrip our ability to supply efficient land transport under our current arrangements. Over the last few years vehicle trip kilometres have been directly coupled to real GDP¹² so if real GDP grows by 50% we should expect similar growth in demand for road transport.

This implies an increase in demand in the next decade similar to that that has taken the last two decades to generate. As Greater Wellington has noted in commenting on lower forecasts of demand *“Ultimately, tolls, congestion pricing and parking fees will be needed to give travellers direct financial incentives to change their behaviour and ensure the network can efficiently accommodate transportation demand.”*¹³

This discussion is not all just about achieving higher growth; it is about achieving that growth while maintaining acceptable social and environmental outcomes.

However economic mechanisms (where possible) are also likely to produce better social and environmental outcomes more cheaply than administrative techniques¹⁴.

Nor is this about throwing out the RMA or moving away from direct interventions by local authorities. It is about using those instruments in a way that maximises the ability of markets to deliver outcomes.

Currently legislation entrenches local government involvement and political decision making processes in all the areas under discussion, so it will only be through local political leadership that market mechanisms can be introduced.

Developing a market orientation will not be an easy task. The issues involved are complex and touch upon a wide range of issues from environmental science, to

¹⁰ See for example NZ Chambers of Commerce and Industry 2004 *Achieving Faster Growth for New Zealand Local Government's role* for a discussion of how the administration of the RMA could make better use of economic instruments.

¹¹ Note that agglomeration effects arise from employment density, not living density.

¹² John Ballingall, Doug Steel and Phil Briggs 2003 *Decoupling economic activity and transport growth: the state of play in New Zealand* NZIER

¹³ Wellington Regional Council 2003 *2003/2004 Annual Report on the Regional Land Transport Strategy*

¹⁴ See for example Basil Sharp 2002 *Institutions and Decision Making for Sustainable Development* The Treasury.

economics and economic geography, to law and public policy. To achieve the level of expertise will require scale which in turn suggests a regional approach¹⁵.

Wellington has some potential advantages in leading other regions in this area. It is close to central government and the resources of the public service, it has access to Victoria University's Institute for the Study of Competition and Regulation, NIWA and to a lesser extent Landcare Research, and a number of economic consultancies that focus on public policy.

Any move in this direction would require the Regional TLAs to set up a single agency to build this expertise and to put it in a position where it can actively influence the regulatory and investment activities of the individual TLAs.

Creating such an agency should be an early outcome of the Strategy.

Ensuring people don't fall behind (and redressing any current inequalities)¹⁶

Reducing disadvantage in our society is important to most New Zealanders. Not only for altruistic reasons but also because it improves their own sense of safety and well being. At the level of practical economics it also makes sense because unemployment and low skills increase dependency and reduce labour productivity, which both hold back economic growth. Greater inclusion increases social capital and this may also have an impact on economic performance.

However adjustment is essential for economic growth. Growth inevitably means winners and losers as resources are moved from low to high value activities. Those with limited skills will adjust to these changes more slowly than those with higher skills. They become vulnerable to being left out of the labour market.

Add to this the fact that households tend to cluster on similar levels of education and income and the risk arises that communities become locked into cycles of disadvantage.

There are two issues that have been raised during the Strategy's development.

The first is the concern that there are areas of disadvantage in the Region that deserve attention, and second the concern that Wellington City being the wealthiest in the Region (reflecting agglomeration effects) will continue to grow while others stagnate.

In what follows we will look at what could be done to ameliorate these problems, and who is best placed to do it.

¹⁵ *Institutions and Decision Making for Sustainable Development* suggests skill level as a significant reason for local authorities falling back on "command and control" in these areas.

¹⁶ This section draws upon a number Treasury Working Papers published in 2000 and 2001 dealing with economic geography and disadvantage including the two papers referenced earlier along with David C Maré, Peter Mawson and Jason Timmins 2001 *Deprivation in New Zealand: Regional Patterns and Changes* Treasury, and the Treasury 2001 *Geography and the Inclusive Economy: A Regional Perspective*.

But first we need to make some general observations about what is known about relative disadvantage and what can be done about.

The first observation is that some low income communities may be a problem that will solve itself. We have already noted that periods of disadvantage may be the consequence of the economy adjusting. This adjustment might take time, but trying to stop the process might well be worse. We may want to smooth the process of adjustment, but not prevent it.

This is just a particular example of the way income can change through a person's life reflecting growing skills and experience, the accumulation of assets, and the occurrence of adverse or advantageous events¹⁷.

Some apparently disadvantaged communities may be no more than the staging posts for families living in low cost accommodation early in their working life while they gain the resources necessary to move on. Interventions run the risk of simply eliminating the availability of that particular housing and hence driving people to less desired locations.

Finally in this vein, some people want lifestyles that involve low income/low cost. Interventions to prevent this are probably doomed to failure.

Therefore in any analysis care needs to be taken to ensure that these effects need to be taken into account.

Accordingly the problem that needs to be addressed is not low income or relative disadvantage communities per se, it is the emergence of communities where disadvantage is persistent over time and individual households are trapped in these communities by what are called "spillover" or "neighbourhood" effects.

The second observation is that even where persistently disadvantaged communities develop it may not be the location or even the "spillover" effects that are the causative factors¹⁸.

As a consequence Treasury notes in *Geography and the Inclusive Economy: A Regional Perspective* ".....policy for the disadvantaged should focus at least partly on deprived neighbourhoods. Even better, it would be desirable to implement policies which benefit deprived people regardless of whether 'neighbourhood effects' are operating or not."

Third, it is not immediately clear who is best positioned to address these issues. For example as *Economic Geography and Spatial Statistics: Theory and Empirics of New Zealand Regions* notes "the homogeneity of income within TLAs¹⁹ relative to

¹⁷ See for example George Barker 1996 *Income Distribution in New Zealand* and John Creedy 1997 *Statics and Dynamics of Income Distribution in New Zealand* both Institute of Policy Studies, Wellington

¹⁸ In fact the evidence one way or the other for "spillover" effects in this case is not clear cut, hence the reason to be circumspect about intervening on this basis.

¹⁹ Porirua City is something of an anomaly in this regard with an almost bimodal distribution of income within its boundaries.

between them make them poor at carrying out redistributive functions or funding infrastructure that should be relatively evenly provided across localities”.

With this background in mind we will return to the two issues of concern.

The first is the level of disadvantage in the Region.

In fact the Region does not have a particularly problem in this regard relative to the rest of New Zealand. *Deprivation in New Zealand: Regional Patterns and Changes* reports regional council results for 1986, 1991 and 1996 using a measure of deprivation based on income, education status and employment status within mesh blocks.

Wellington Region is below average for New Zealand in each of the bottom five deciles on the score. Wellington has the lowest proportion of any North Island regional council in the bottom decile and has the highest proportion in the country in both the top and second deciles.

These results hardly point to the Region having a significant problem with disadvantage relative to New Zealand²⁰. Porirua East and Wainuiomata appear to be the main areas where disadvantage is in the bottom decile. Of specific concern Wellington has a relatively high level of persistence in the bottom decile over the period (indicating that there are location effects at play), and the Maori and Pacific Island populations have a larger negative influence on the bottom decile²¹ than much of the rest of New Zealand.

However the generally positive results for the Region should not be taken to imply that ensuring people don't fall behind shouldn't be an area of focus. We have specific problems in the Region and faster growth with the adjustment this entails increases the risk that they will become more widespread.

In *Geography and the Inclusive Economy: A Regional Perspective* Treasury provides a checklist of potentially useful spatially targeted interventions (as opposed to interventions more generally focused on disadvantaged households). Treasury suggests:

- *Education is the key.* “The quality of schooling is probably the best way to address neighbourhood effects. ... Other potentially important policy areas include skill-training, job-search assistance, and making the teaching and research of tertiary institutions located in the regions more responsive to the needs of their local economies.”
- *Connectedness matters.* Infrastructure, including transport to attract industry and internet access, is suggested but comes with the caveat that these investments require careful analysis.

²⁰ Income inequality is a separate issue since the gap may be large even though the bottom is not particularly low.

²¹ With these populations excluded Wellington has only 2.8% of its population in the bottom decile a figure that is only bettered by Tasman, Nelson and Marlborough.

- *Facilitate adjustment.* “.. [F]acilitating mobility in deprived regions is important – policy should focus on initiatives such as job-search assistance, and relocation assistance for those who would like to move but face barriers to doing so.” But Treasury also warns of the danger that those left behind may be worse off.
- *Intervention in local economies needs to be selective.* “Better co-ordination, facilitation and provision of information are sensible, low cost ways of helping regions to identify their potential areas of economic development and do something positive to develop them. Strategic partnerships and joint ventures can help to develop networks for transmitting important tacit knowledge. Place-based policies need to be selective and focus on areas where there are large and significant spillovers.”

The Treasury also stresses the need for good evaluation of these interventions.

It also draws attention to the potential costs involved in “taxing” one part of the regional economy to deal with these issues, and the potential for these costs to outweigh any gains. This risk is heightened if the taxes are hidden (e.g. administrative constraints on economic activity) rather than explicit. For this reason proposals that artificially move economic activity (whether market or non-market²²) from one area to another or cap activity in the hope that it will migrate elsewhere should be avoided.

Reverting back to our opening comments in this paper, helping disadvantaged households is an area where a coordinated approach over time is called for. Multiple actors need to be involved in any policy response.

Achieving this is an important role for the Strategy. Again a regional approach is indicated.

Unlocking our untapped economic potential

The SWOT analysis undertaken for the Strategy²³ is a useful basis for looking at regional economic growth. From this we will synthesised some key (non-infrastructure²⁴) issues. This area has a number of facets that warrant separate foci.

But first it is worth making a number of observations about what is known about how regional centres achieve economic growth.

The first point is that centres the size of Wellington tend to develop a number of specialised export industries in order to achieve international competitive advantage rather than being able to create broadly based economies^{25 & 26}. A consequent risk for communities the size of Wellington is that they are more vulnerable to shocks.

²² The idea that government (for example) can adopt less than efficient behaviour without having a wider impact on the economy is obviously flawed.

²³ Infometrics 2004 *Economic Futures: Working Paper 6*

²⁴ We consider that it is more important to get a better mechanism for assessing infrastructure in place before developing significant new investments aimed at economic development.

²⁵ 1999/2000 World Development Report, reported in *Economic Geography – Key Concepts*

²⁶ We share this characteristic with Christchurch and Dunedin, but Auckland probably has the scale to develop an integrated economy.

The second is that significant internationally competitive industries can arise from a cluster of activities that develops positive feedback loops that support growth²⁷, but the task is not straightforward. However when scale does arise the location can become one of the best places to do that class of business around the world. This entrenches the activity locally.

A consequence is that the focus for development activities should be on areas of the economy that have the potential to catalyse the development of internationally competitive industries.

Third, analysis of how internationally competitive businesses emerge (and what is stopping them) requires a careful analysis of the value chain. Globalisation means international businesses need to source inputs from the most efficient producers around the world, and not all sources of competitive advantage are going to be local. Equally, however, careful analysis may show unrealised opportunities to capture more of the value chain locally and hence increase the scale and scope of local sectors²⁸.

Finally, as a corollary to the third, it is a mistake to analyse a local economy in terms of broad horizontal sectors (“services”, “manufacturing”) because this conceals the detail that needs to be uncovered at the level of the firm and individual markets. Working with broader sectors leads the analysis to inevitably focus only on the generic characteristics that the sector shares, rather than on the specifics along the value chain that might make a difference to the regional economy.

We partly honour this principle in the breach in what follows for simplicity of exposition.

With these points in mind let us return to the discussion of the key issues facing our economy.

“Exporting”²⁹ services

First, Wellington is a services based economy and much of this activity is related to government.

The problem with driving economic growth out of services is that they are so often locationally based. This means they are constrained to the size of the local economy. Add to this the fact that government activity is similar constrained and the Region has a fundamental problem generating growth.

²⁷ See for example Michael Porter 2000 *Location, competition and economic development: Local Clusters in global economy* Economic Development Quarterly 14 (1) and Colin Campbell-Hunt, Sylvie Chetty and Sheelagh Mattear 2005 *Clustering at the edge: Growing businesses of global reach from thin soil* Otago Competitiveness Research Network Working Papers

²⁸ This approach is being used by NZTE and the High Temperature Superconductor Consortium to develop opportunities to move up the value chain in New Zealand.

²⁹ We have used the term exporting in quotes to convey the idea that we are attempting to create revenue from outside the region, but recognise that this may involve bringing customers to Wellington to consume the service as well as offering a service outside the Region. Note also that while we talk of export, we are really looking at increasing trade.

To ignore the resource endowments represented by the public sector and the businesses that service it means putting aside a significant part of the Region's potential. This is particularly so when we are seeking to build growth through economies of scale.

However services can break out of the locational constraint and be used to generate foreign exchange earnings³⁰ (and hence grow beyond the limitations of the local economy). We can:

- Bring outsiders here to consume the services (e.g. tourism, events and education);
- Deliver our service outside the Region either on a temporary basis (e.g. natural hazards abatement consulting) or on a more permanent basis by internationalisation (e.g. Beca) or franchising (e.g. Hell Pizza); or
- Embed the service into a product and export that (e.g. Weta, Synergy, IRL BioPharm).

But these examples are only the tip of the iceberg. Apart from the specific case of our applied R&D capability (which is sufficiently important to warrant its own foci) there are potential opportunities around areas such as:

- The arts (visual, performing and electronic)
- Law, regulation and public administration, and specialist business service to these sectors
- Maori and Pacific peoples culture

As a country we have a strong preoccupation with the export of goods. Consequently businesses active in the services tend not to get exposed to the notation that they too can “export”, and how to get the best out of this.

Therefore for at least a period of time we believe that the Region would benefit from paying special attention to raising our capability in “exporting” services.

Commercialising R&D

The Region has relative endowments in applied R&D. The Region has a number of centres of international class R&D. It is the recipient of significant public spending/investment in research (perhaps in the order of \$100m per annum). (However private spending/investment is likely to be much lower³¹.)

Very little of this translates into tangible commercial activity within the region.

³⁰ Not to mention income from the rest of New Zealand.

³¹ Not just because private spending is lower than public spending in New Zealand, but also because Wellington is under represented in the primary and foods sectors that account for a significant proportion of the private spending, while being over represented in terms of public institutions. As for many areas regional statistics are scarce but see Statistic NZ and MoRST 2003 *Research and Development in New Zealand 2002* for background on public/private spending and industry breakdowns.

The reasons for this are reasonably clear:

- Much of the spending goes on R&D service activities³² (rather than business creation) and in this case the failure to generate wider commercial activities is a particular case of failing to leverage income off services capability³³.
- The incentives on R&D providers to commercialise are relatively weak³⁴. This is the product of central government policy settings which makes them suitable for intervention. Regions can also make a difference by introducing their own incentives.
- Outside the biotech and ICT areas the region lacks many firms capable of working with R&D providers. This means that R&D providers are facing the difficult challenge of pushing technology into the market³⁵ – which creates strong incentives to adopt licensing and other approaches to commercialisation that are easier and less risky but add less value to the region.
- There is a lack of capability and/or linkages to help push R&D up the value chain locally. This includes the capability to translate technologies and technology based market opportunities into business cases, thin venture financing markets, limited number of people with experience in taking advanced technology companies to market etc.

This may seem a rather daunting list of problems. However the recent experience built up by Industrial Research Ltd (IRL)³⁶ in the Region suggests that these problems can be progressively overcome if the institutions have the focus, incentives, and support from the wider community. Similar approaches can be called upon from around the world and applied regionally³⁷.

Exploiting human capital endowments (including the public service)³⁸

Wellington has excellent human capital endowments, and we need to make the best out of these to exploit this competitive advantage.

Human capital endowments provide direct commercial opportunities (some of which could be better used as we have discussed in the previous two sections).

But they also offer opportunities that are less direct. Improvements may be possible through redeployment of human capital within the local economy, or the systematic movement of people between institutions either within the local economy or internationally (this process is an important way to build up institutional learning and

³² NIWA, GNS and ESR are predominantly R&D service CRIs.

³³ The recent sale of weather presentation software by MetService to the BBC and the success of ESR's DNA processing management software are a couple of local success stories.

³⁴ The Performance Based Research Fund that determines academic standing under rewards commercialisation; CRIs are mainly monitored for operating performance, not value creation.

³⁵ Technology push may well be appropriate where disruptive technologies are involved e.g. high temperature superconductors.

³⁶ See Industrial Research Ltd 2004 *Annual Report 2004* for a description of the process being used.

³⁷ We have separately proposed in a report for WelTec the setting up of an organisation with staffing and funding to replicate the work being done by IRL but for broader constituency.

³⁸ This section also draws upon Infometrics 2005 *Wellington Regional Strategy Human capital – issues and directions* (Draft).

technology transfer), or strengthening social capital by developing linkages and networks between people.

Because these opportunities are less direct it is more difficult to ensure we aren't missing out on some. They are often not recognised until links in the value chain are unpicked.

In the main we should allow competitive markets to seek out these opportunities and exploit them. However there are two areas where intervention might be indicated:

1. The interface between public institutions and the private sector is not necessarily subject to strong value optimising incentives.
2. Low cost activities designed to bring together parties who separately might otherwise not identify opportunities maybe cost effective.

As we have noted the human capital in the public sector is an important regional resource. Not just for the capability it offers public administration but also because of the additional human capital it brings to the region in the form of partners and families, the services it demands, and the kind of economy that it creates.

But the public service consists of large organisations with strong relationships with its staff. What could be a source of human capital to feed the Region's wider economic goals often ends up locked into public services – partly because employment relationships make it difficult for people to move, partly because people lack the specific skills required to make the transition.

A number of policy instruments could be used to create sustainable cycles whereby the public service recruits young people to Wellington and then they are retained in the Region through a mix of public and private sector employment.

Public sector employment arrangements and policies could be more supportive of such a cycle³⁹. In particular even greater use of the private sector in the delivery of public services would help reduce the boundaries. This (in conjunction with an emphasis on “exporting” services) would also have the highly desirable outcome of allowing export revenue to be generated from this capability, whereas presently it is locked up in the public sector.

Turning now to the possibility of improving social capital through network facilitation.

Value chain analysis will identify repositories of human capital that could contribute to creating value outside its current sphere of activity, or where human capital is being lost or under used.

Two immediate examples (respectively) are:

1. The application of creative advertising and media skills to international brand development and marketing, and

³⁹ The joint appointment in both the public and private sectors held by many medical specialists is an example.

2. Encouraging industrial design graduates to stay and contribute to product development⁴⁰.

These may or may not represent real commercial opportunities, but there is the potential to identify such opportunities from analysis of the local economy and to facilitate conversations that might not otherwise happen.

Encouraging specialisation and scale without discouraging new centres of excellence emerging

The work on economic geography, Porter, *Clustering at the edge: Growing businesses of global reach from thin soil* and earlier work by Competitive Advantage NZ⁴¹ point to the importance of building depth in niches to create scale and competitive advantage. Wellington will need more of these if it is to grow faster.

Those centres of excellence⁴² not linked to geographical or historical endowments start serendipitously in a region at a variety of points along the value chain, and their development from that point is state dependent.

However serendipity and the nurturing of nascent centres of excellence can be encouraged. The first by encouraging a culture of risk taking and entrepreneurship; the later by accelerating the growth of supporting activity around centres of excellence as they emerge.

Encouraging a culture of risk taking and entrepreneurship are matters that are being addressed widely throughout New Zealand using a variety of interventions (both public and private sector led). There are no doubt some local initiatives that could help advance this,⁴³ but the more important priority for local activity lies in helping emerging centres of excellence.

Clustering at the edge: Growing businesses of global reach from thin soil argues that building scale is crucial to the emergence of clusters. This is achieved by a small number of firms developing unique specialist internationally competitive products within the same industry⁴⁴. The cluster then grows by supporting these firms. In the language of the authors the tier of “rainmakers” supports a tier of much smaller “feeder” firms deriving advantage from their proximity to the rainmakers.

This is highly suggestive of interventions that recognise potential sources of competitive advantage and help them to emerge. It is in this regard that value chain analysis is important.

⁴⁰ Although there is a school of thought that says some overseas experience is important, in which case the question is how to bring them back.

⁴¹ Based at VUW.

⁴² Note that in this context we are thinking about centres of excellence as any individual or group of organisations that is world class and produces economic outcomes. In fact identifying centres of excellence that are not generating economic returns is a practical way into identifying opportunities for further analysis and possible intervention.

⁴³ Working with local schools to further develop their entrepreneurship programmes and developing business incubation activities in conjunction with tertiary institutions might be two priorities, as well as adopting our proposals for a more market approach to regulation.

⁴⁴ A common technology platform can be used to create a cluster of such businesses.

The process involved is to:

1. Identify areas of strength
2. Develop a value chain analysis that takes them through to market
3. Work through the weaknesses
4. Develop interventions that remove the key barriers to growth and transferring the capability to act in this way in the future into the sector.

Where we already have scale we should focus on building co-specialist firms (i.e. firms that are in a similar industry so there is the potential for inter company learning, but specialised in different products). An obvious example would be the development of another major film production company based in the Region.

This creates local competition both between rainmakers and between the feeder firms (and thus encourages innovation through the supply chain), spreads the risk of failure and builds scale further.

In the Region we have a number of activities that have the potential to create international competitive advantage in international markets. The task is to identify these and build a portfolio of opportunities that can be encouraged⁴⁵ (although some will not be susceptible to intervention). Using a portfolio approach helps covers the risk of failure.

Finally while the emphasis in this section has been on the development of specific interventions for particular value chains, common problems will obviously emerge and these will need to be tackled on a wider front.

Extend the Wellington Region around the world

The growth of the Region will depend on our ability to export. This in turn depends on our ability to understand international markets, connect with them and learn from them.

At present the government subsidises collective export activities by any group of firms seeking to go into international markets. It has embassies and trade posts and has developed “beach head” activities in international markets that go beyond the normal support offered through New Zealand’s trade posts.

Private sector agencies also offer trade facilitation services.

The question is whether these are sufficient to support the Region’s growth agenda, or if additional regional activity is justified.

There are two corollaries to our earlier discussion about regional specialisation.

⁴⁵ We have identified a number of potential opportunities in this report including potential products developed from the local R&D base. In the piece of work for WelTec (referred to earlier) we identified eleven such opportunities for general manufactured product (not including biotech and chemical processing).

First we are likely to find regional specialisations arising to drive our growth, and second we are atypical as a region in as much as our offerings are less oriented to primary products and more focused on public sector, science based, creative and lifestyle products than the rest of the country.

This (along with the globalisation of the value chain within industries) suggests the Region may increasingly develop particular geographical areas of interest (not just relating to markets we have a particular interest in but also elsewhere through the value chain). Some possible examples are Hollywood for film, areas in China for education, Canberra for public sector consulting etc.

For many there is little case for specific regional involvement since private sector interests will adequately meet the need. But there are two situations where a combined approach could add value:

1. For a number of countries (and even key institutions within countries⁴⁶) there are aspects of business that are more easily transacted within the context of cordial government to government relationships.
2. As specialist sectors start to emerge there will be locations that are important to their success. Some assistance to help this build these relationships is warranted since establishing relationships for one Wellington business can have externalities associated with it for other firms (i.e. having one business with positive relationships helps following businesses get established and visa versa).

There are a number of sister city relationships in the Region but these have not been developed with such a conscious strategic intent as we are suggesting. We are suggesting building relationships that are specifically designed to achieve economic outcomes that will accelerate the process of learning within the local economy, and reduce the transaction costs of building critical relationships.

Any initiatives in this area should build on the back of existing programmes (e.g. central government initiatives) or put a specific focus on them so that the Regional initiatives don't duplicate what already exists.

Implementation

In this section we have identified issues that exist in the region right now that are holding back economic growth. We have selected some that we see as having priority for action. While we focus on these particular examples, and suggest they have sufficient appeal to be focus areas within the Strategy, we hope that they won't persist in time. However new problems will emerge.

In the spirit of thinking about the issues in a systemic way we would observe that all these are symptoms of the lack (until recently) of a capability in the Region to look at the economy and address weaknesses in its structure and performance.

We think that in WREDA we now have an agency that can undertake this role.

⁴⁶ For example US government agencies.

Regional engagement with central government on the strategy and growth

From the discussion so far it will be obvious that a productive engagement with central government will be essential to make a difference in each of the focus areas.

Central government:

- Sets the framework for local government regulation;
- Funds much of the regional infrastructure, and sets the rule by which this occurs;
- Funds and delivers many of the programmes that help disadvantaged households;
- Collectively is the main employer and industry in the region;
- Is the “owner”⁴⁷ and funder of the applied research centres in the region; and
- Funds and delivers a wide range of services designed to help business and industry development, including trade facilitation.

In addition central government through other macro and micro economic interventions is the main influence over regional economic performance.

If the Region wants better economic growth then it will need to be a strong advocate for national policies that support growth.

Thus central government is critical to achieving the Strategy.

For this reason we believe the Region (TLAs, community and business interests) needs to establish mechanisms that will allow engagement to take place with central government on the Strategy. This focus on the Strategy means the engagement that is required is different from and much more focused than that which occurs in the variety of fora that already exist.

Without ongoing support and alignment of goals with central government we doubt that the Strategy will make much traction. The relationship is therefore mission critical to the Strategy, and for this reason we believe it should be a focus area until appropriate and productive engagement is underway.

Summary

To summarise we have identified the following focus areas for the Strategy:

- To improve regional infrastructure investment and the achievement of regional social and environmental goals through the use of economic instruments
- To ensure people don't fall behind (and redress any current inequalities)
- To lock our untapped economic potential by:
 - Developing our ability to export services

⁴⁷ Who owns the Universities is a matter for great debate, but central government has significant influence over ownership issues.

- Improving how we commercialise applied research in the region
- Making better use of our human capital for economic growth, including those involved in public services
- Encouraging the development of a number of significant but specialised industries in the region
- Assisting the development of international linkages to the Region
- To ensure that central government supports the Strategy and that its wider economic management helps create growth