BRENT WHEELER

BRENT WHEELER LIMITED
economics - corporate finance - investment banking

Common Ground Studio

KAPITI ROAD UPGRADE OPTIONS: ECONOMIC IMPACTS

Brent Wheeler B.A., Ph.D

EXECUTIVE SUMMARY

This report discusses the economic impacts of implementing the proposed upgrading of the Wellington Northern Corridor – now designated a Road of National Significance (RoNS) – a roading development which is part of a series of targeted transport investments designed to assist New Zealand's economic growth and improve productivity.

The immediate objective of the New Zealand Transport Agency (NZTA) in implementing this policy is the relief of traffic volumes on the state highway system, in particular state highway 1 in the Kapiti Coast area through implementation of one of two options for upgrade..

The report focuses on the economic benefits of adopting an integrated corridor approach to implementation (one option proposed by NZTA) and their nature and extent by comparison with a town avoidance option (the alternative proposed) which has a narrower traffic focussed implementation.

KEY CONCLUSION:

The difference between construction costs for the town avoidance option and the integrated corridor option are currently estimated to be in the order of $200m - $250m with the latter involving more cost.

GDP and employment growth associated with an integrated corridor option however are expected, on a conservative basis, to be worth some $300m and 4,000 jobs respectively and thus exceed the construction cost differences between the two options by a significant margin.

On this basis, the integrated corridor option with simultaneous and parallel development of the local economy network supported by appropriate urban design is to be preferred over the town avoidance option.

The two key options for implementation – town avoidance and integrated corridor may be distinguished as follows:

TOWN AVOIDANCE OPTION:

- Expressway built in sections to be opened as completed;
- SH1 Expressway would avoid both Waikanae and Paraparaumu;
- Current SH1 would become a local arterial serving the major towns;
- Interchanges to provide access on and off the Expressway; and,

- Service roads to access properties adjacent to the new Expressway.

There would then, be a significant separation of the Expressway as a corridor and the local towns and the roading network connecting them.

INTEGRATED CORRIDOR OPTION:

- Expressway and supporting roads to be built simultaneously;
- Local connections in the South (Poplar Avenue) and north (Otaihanga to Te Moana Roads);
- Current SH1 used as a local road from Paraparaumu to Waikanae;
- Expressway to follow rail through the district; and,
- Service roads to access properties adjacent to the new Expressway.

Thus many of the concepts driving the thinking behind the Western Link integrated land use option previously canvassed by KCDC and others are incorporated in the integrated corridor option.

The construction cost difference between the two options is estimated to be some $200m - $250m with the integrated option the more costly. The conclusion of this report is that once economic benefits of the integrated corridor option are considered (at some $300m and 4,000 in employment count over a comparable period as development), its value exceeds that of the town avoidance option significantly.

Key to this conclusion is the impact of "simultaneous and parallel" development of the local network under the integrated option versus the more traffic focused approach of town avoidance and its reliance on more ad hoc local network development around (what will be) the former SH1.

The overall, unobjectionable objective of the RoNS initiative is to seek outcomes which:

a. Reduce congestion,
b. Improve safety, and,
c. Support economic growth.

There is a primary focus on "a series of targeted transport investments" (NZTA). This reflects the Minister's expressed desire for "roading investment to assist N.Z. achieve economic growth and productivity" (response to Ministerial question May 2009).

The Kapiti area has developed from a series of rural service centres to a more commercial, recreational and commuter dominated urban concentration. One result of this history – and one which is noted by NZTA - is that the development of an expressway which meets the criteria of strategic fit , effectiveness and efficiency (see below) is hampered by the absence of a supporting local roading network. The choice of optimal option needs to reflect a practical means to overcome this problem.

Two key sources of benefit from an integrated approach are seen. First are those associated with reducing volumes on the state highway system which arise from the upgrade itself but also from the development of a greater degree of local self sufficiency in the Kapiti area. Second are the benefits arising from a greater level of economic development within the Kapiti district itself.

Currently the Kapiti Coast economy (some 47,000 at last Census) represents some 10% of the Wellington region population but shares only 5% of the employment count for the region. Most sectors of the economy have a smaller representation than might be expected given their population. The key reason for this is leakage of demand and thus sales into the wider Wellington region and most notable Wellington city.

Medium growth projections for the area see a population of some 57,200 by 2026 and household numbers at 25,400. If the same ratios of employment count to population persist the employment count can be expected to be some 12,698 – a minimal increase from its current level of some 11,100. A relatively modest improvement in that ratio would have significant impacts on employment however. A 5% improvement would add some 1,115 to numbers employed.

Use of an integrated corridor implementation could be expected to improve the level of employment through the promotion of local economic development, and, at the same time reduce (at least in relative terms) the amount of commuting and thus pressure on a new expressway. Mode shift to rail could also be expected to contribute to the latter.

An estimate of potential future demand under a town avoidance and an integrated corridor approach were developed for a series of plausible scenarios. These consisted of an upper bound set as the national employment count to population ratio and a lower bound set as the current ratio with the bare minimum implementation set as delivering a 10% improvement.

An estimate of the likely future under an integrated corridor implementation was estimated to be the level achieved by other urban areas which have significant dependence on major conurbations (in the way the Kapiti Coast does) but which do not exhibit the low ratio Kapiti currently has.

Estimates of aggregate employment count and regional GDP change and growth were produced for the two decades ending in 2026 so as to compare the two options. These show that the integrated corridor approach is likely to produce some $301m more than the bare minimum annually and to involve some 4,000 more in employment count numbers.

The position in 2026 is estimated as set out in the following table:

Scenario	2026
Employment town avoidance	13,728
Employment integrated corridor	17,732
GAIN	4,004
Regional GDP estimate town avoidance	$ 1,031
Regional GDP estimate Integrated corridor	$ 1,332
GAIN	$ 301

Consideration was given at the micro level to what developments might engender the type of economic development suggested by the aggregate estimates and how the integrated corridor approach might be pivotal in leading to such development.

The two major development opportunities revolve around the redevelopment of the Coastlands (and adjacent land) area and the Paraparaumu airport development project. These opportunities are additional to development in residential and other markets found in other parts of the district such as Waikanae.

Evidence presented to hearings associated with the Paraparaumu airport indicate that there is demand for up to 40,000 square metres of retail space over the coming decade in the Coastlands areas. This, coupled with the age of the mall suggest that there is strong potential to redevelop the mall and adjacent land – much of which (some 60 ha) would be unlocked through an integrated implementation.

The Paraparaumu airport development itself involves capital investment of some $35m and the development of some 63 ha of land in non aeronautical uses over a period of time. Economic activity in this area is expected include retail and commercial including large format retail which is likely to add to self sufficiency in the local economy.

In other areas of the district, estimates obtained from a registered valuer suggest that a 10% - 12% increase in residential property value may result from a carefully developed network such as that made possible through the integrated corridor option. Again the unlocking of land is an important factor.

One of the most important advantages which an integrated corridor option brings to the implementation is the move away from the bare corridor approach implied by and currently implemented through SH1. Corridors which are not integrated tend to generate significant congestion, pollution, access difficulties and, because of growth, significant uncertainty surrounding regulatory management. The result in the Kapiti case has tended to be an unwillingness to invest and commit capital on a significant level.

An integrated corridor option supported by urban design by contrast stresses sequenced development guided by integrated regulatory change which is mutually reinforcing. Extensive use could be made of public space to drive up pedestrian counts, capture local trade, untangle destination journeys from through journeys, provide dedicated simple access and generate densities capable of supporting better levels of commercial development.

It is expected that to the extent that there is economic development that may lead to demand from new output goods and services using the expressway and some increases through use of the expressway for the supply of intermediate goods and services from outside of the district. Because such flows would represent only a proportion of any total increase in economic activity and because demand for such flows would be split across modes it is not expected that these costs would be significant.

Additional costs internal to the region – increased demand for infrastructure for example – is generally undertaken under rules which effectively "internalise" such costs to developers and their consumers. Consequently commercial considerations ensure that costs are not imposed on wider communities.

The report concludes that care is needed not to attribute too great a level of precision to estimates, that the sequence and timing for the economic development discussed is not clear in any absolute sense and that caution should be exercised so as not to exaggerate the benefits of the integrated corridor option.

At the same time and even given these caveats there is a substantial difference in the level of benefits which the integrated corridor has to offer over and above those offered by the town avoidance option.