

BEFORE THE HEARINGS PANEL

IN THE MATTER of the Private Plan
Change 84: Kapiti Coast
Airport

AND Submissions by **Alpha
Corporation Limited and
Mr Richard Mansell**

**BRIEF OF EVIDENCE OF JOHN PHILIP SMALL
(ECONOMICS)
ON BEHALF OF ALPHA CORPORATION LIMITED AND MR RICHARD MANSELL**

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**BRIEF OF EVIDENCE OF JOHN SMALL
ON BEHALF OF ALPHA CORPORATION LIMITED AND MR RICHARD MANSELL**

1. INTRODUCTION

Qualifications

- 1.1. My full name is John Philip Small. I have a PhD in economics from the University of Canterbury (1993) and was employed as an academic economist for eleven years, mostly at the University of Auckland where I served as Head of Economics for two years, and including visiting positions at Monash University, the Universities of Florida and Victoria (Canada) and the London Business School. I have published research in top international economics journals on topics in theoretical and applied econometrics and industrial organisation.
- 1.2. As a consultant, I have provided economic analysis of legal and policy issues to government and private clients for twenty-five years in New Zealand, Australia and the wider Asia-Pacific region. I mostly work on competition and regulatory issues in network industries such as telecommunications, electricity, aviation, and payments. In 2016, I was appointed to a third five-year term as a lay-member of the High Court.

Experience

- 1.3. I have undertaken numerous economics projects relating to local and regional government matters under the Resource Management Act, including work on the amenity effects of retail development, the protection of built heritage, natural hazards and the regulation of genetically modified organisms.

Background

- 1.4. During 2016, I investigated the retail markets in the Kapiti Coast District and prepared and presented economic evidence to independent commissioners considering the Proposed District Plan.

2. CODE OF CONDUCT

- 2.1. Although not necessary in respect of council hearings, I confirm I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2014. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving oral evidence before the hearing committee. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

3. EXECUTIVE SUMMARY

- 3.1. This is an economic analysis of proposed plan change 84 (PPC84) submitted to the Kapiti Coast District Council (KCDC). I have empirically modelled the likely effects of PPC84 on the Paraparaumu Town Centre (PTC), focusing initially on the diversion of retail trade and then drawing inference from that diversion as to the likely effect on public benefits including amenity benefits at the PTC over the next few years.
- 3.2. I began by modelling household demand for core retail products. This analysis was conducted for seventeen census area units (CAUs) in the District. Next, the share of demand arising from each CAU that is spent at the PTC was calibrated to information on the total retail turnover at PTC. This approach allows me to be transparent about the source of PTC spending, and provides a geographic basis for estimating trade diversion from the PTC if PPC84 were approved.
- 3.3. My trade diversion estimates range from 40% for CAUs located close to the airport down to 5% for Paekakariki. These figures represent the share of current spending at PTC from each CAU that is likely to divert to the airport under PPC84. I consider the estimates reasonable, and my approach makes them very transparent which allows others to assess them directly.

- 3.4. Using this method, I estimate that PTC will lose 21% of its retail turnover if PPC84 is approved. I check this result against the retail revenue that will be required to sustain the proposed airport development and find it to be reasonable: my prediction of diverted revenue is in line with the amounts that would be required to sustain retail developments planned for the airport under PPC84.
- 3.5. I discuss the effect of this trade diversion on the public benefits and amenities produced by the PTC. I find that a loss of 21% of patronage will significantly reduce these public benefits and amenities, and these losses will not be made up for at the airport.
- 3.6. I also discuss two aspects of the evidence of Mr Fraser Colegrave. In my view, Mr Colegrave has used two very different sets of assumptions about retail leakage: they cannot both be correct. Secondly, Mr Colegrave's analysis suggests that \$28.9m of extra retail spending will emerge if PPC84 is approved: no explanation is offered for the source of this extra spending.
- 3.7. My conclusion is that PPC84 should be rejected.

4. **SCOPE AND STRUCTURE OF EVIDENCE**

- 4.1. My evidence begins with a brief review of the background to the Council's views and desires for the Paraparaumu area. I then describe my economic analysis of the PPC84 and report its findings. Then I comment on Mr Heath's analysis for the Council and the evidence of Mr Fraser Colegrave. In each case I highlight the areas of differences of opinion for the decisions that need to be made over PPC84.

5. **BACKGROUND**

- 5.1. It is clear that over the course of the last two decades the KCDC has endorsed a centres-based planning philosophy under which the form and function of existing (and potentially new) retail centres is maintained and enhanced. This philosophy arose from the strategic

work undertaken by McDermott Miller for KCDC in 2003 which assessed the retailing needs of the district (including LFR, and supermarket location) examining various options for sustainable provision of retailing for growth and has been validated via work undertaken that underpins PC73, PC72A and in development of the proposed district plan (PDP) process.

6. MY ANALYSIS

- 6.1. The main economic question at issue is whether PPC84 is likely to have a significant effect on the public benefits and amenities currently provided in and by the Paraparaumu Town Centre (PTC). In this section, I explain how I have addressed this question and the results of my analysis.

Method and Results

- 6.2. **Step 1: Spatial Estimation of Retail Demand.** I began by modelling the demand for core retail products arising from each Census Area Unit (CAU) in the Kapiti Coast District. There are 17 such CAUs with public information on several characteristics on which they vary, including the number of households, the average household size, total population and median income.¹
- 6.3. I estimated a consumption function and used it to predict core retail spending arising from each CAU. My consumption function is a linear relationship between household income and core retail spending. I estimated it using the most recently available regional and national data on household income and spending by category; these data came from the Household Expenditure Survey and the Household Economic Survey (Income), both conducted by Statistics New Zealand. The estimated function explains 75% of the variation in the data.

¹ Kapiti Island is a distinct CAU but is excluded from my model because income data are not available. There were only 6 households on Kapiti Island at the 2013 census. No material error is introduced by excluding this CAU.

- 6.4. I used this consumption function to estimate the annual spending on core retail products, on average, in each CAU. Then I multiplied average household spending by the number of households in the CAU to generate an estimate of total retail demand by CAU, and for the Kapiti Coast District in total.

Table 1: Estimated 2016 Retail Spend by CAU

| Census Area Unit | Retail Spend (\$m) |
|-------------------------|---------------------------|
| Waikanae Beach | 31.5 |
| Waikanae East | 20.2 |
| Peka Peka | 5.2 |
| Waikanae Park | 17.5 |
| Waikanae West | 26.4 |
| Kaitawa | 7.6 |
| Otaki Forks | 14.4 |
| Te Horo | 8.9 |
| Otaki | 34.2 |
| Paraparaumu Beach North | 31.2 |
| Otaihanga | 14.0 |
| Paraparaumu Beach South | 44.1 |
| Paraparaumu Central | 65.0 |
| Raumati Beach | 45.9 |
| Raumati South | 38.2 |
| Paekakariki | 17.6 |
| Kapiti Island | 0.0 |
| Maungakotukutuku | 15.0 |
| Total | 436.6 |

- 6.5. My base data on households and incomes in the Kapiti Coast District are from the 2013 census. Using the cumulative average growth rate between the 2006 and 2013 census dates, I constructed 2016 estimates of household numbers and median household income by CAU. Applying my consumption function to these 2016 data, I estimated the 2016 retail spending by CAU as shown in Table 1.
- 6.6. In my opinion, spatially disaggregated estimates of retail demand are a critical starting point for this analysis because consumers' locations influence their decisions over where to shop.

- 6.7. There are important differences between the data in **Table 1** above, which are estimates of spending by consumers located in different CAUs, and Mr Colegrave's Table 1, which shows estimates of revenues received by retailers in particular shopping centres. There is also a time difference: Mr Colegrave's estimates are for 2015; mine are for 2016. Finally, while Mr Colegrave appears to present data on receipts by retailers in Kapiti Coast shopping centres, he includes \$81.8m of out of centre turnover: this appears to represent spending by Kapiti Coast District residents that is undertaken outside the district. Excluding this out of centre spending, Mr Colegrave estimates retail turnover of \$458m in 2015.
- 6.8. While the initial scale of spending is not irrelevant to the matter at hand, it is distinctly secondary to the spatial distribution of spending. To assist decision makers, I have therefore adjusted my CAU level spending figures so that after allowing for 14% net leakage they align with Mr Colegrave's total of \$458m. This helps focus the analysis on the most important issues.
- 6.9. **Step 2: Reconcile Demand with PTC Revenue.** Since I am primarily interested in the impact of PPC84 on the public benefits and amenities derived from the PTC, my next step was to estimate the share of retail spending from each CAU that is currently received by the PTC.
- 6.10. To achieve this I assigned to the PTC percentage shares of retail demand from each CAU based on their generalised distance from the PTC, while reconciling total spending to an estimate of PTC retail turnover. This process took into account the spatial distance between each CAU and the PTC, and the predominate commuting pattern which is towards Wellington. To reduce the scope of disagreement I have adopted shares of CAU spending that arrive at the PTC such that the total PTC spending in 2015-2016 is just over \$270m, which is broadly similar to Mr Colegrave's estimate.

Table 2 Origin of PTC Retail Spending, 2015-6

| CAU | PTC Spend (\$m) | PTC share (%) |
|-------------------------|-----------------|---------------|
| Waikanae Beach | 5.8 | 15 |
| Waikanae East | 3.7 | 15 |
| Peka Peka | 0.9 | 15 |
| Waikanae Park | 3.2 | 15 |
| Waikanae West | 4.8 | 15 |
| Kaitawa | 1.4 | 15 |
| Otaki Forks | 2.6 | 15 |
| Te Horo | 1.6 | 15 |
| Otaki | 4.2 | 10 |
| Paraparaumu Beach North | 32.7 | 86 |
| Otaihanga | 14.7 | 86 |
| Paraparaumu Beach South | 46.2 | 86 |
| Paraparaumu Central | 68.2 | 86 |
| Raumati Beach | 42.0 | 75 |
| Raumati South | 23.3 | 50 |
| Paekakariki | 5.4 | 25 |
| Kapiti Island | 0.0 | 20 |
| Maungakotukutuku | 11.0 | 60 |
| Total | 271.6 | |

- 6.11. To be clear, the PTC share column in Table 2 is my estimate of the share of retail spending originating in each CAU and arriving at PTC. The centre column (PTC Spend) is the product of the total retail demand in each CAU and the PTC share.
- 6.12. **Step 3: Estimate Diversion from PTC under PPC84.** The next step is crucial. It is independent of the previous two steps, requiring only that we form a view on the percentage of current PTC spending arising from each CAU that will divert away from the PTC if PPC84 is approved. In my opinion transparency is required for this step, so I will show my diversion assumptions below.
- 6.13. This step also requires us to be clear about what is expected under the two scenarios: approval and rejection of PPC84. Mr Colegrave assumes that under the rejection scenario 20,000m² of retail space will be developed at the airport, and that the same amount of space will be developed under the approval scenario, so that the only difference is over the composition of that space.

6.14. I disagree with that assumption for several reasons:

6.14.1. It is widely understood that retail centres need anchor tenants, and that the nature of the anchor tenants affects the market positioning of the centre. As Mr Colegrave notes, Mitre 10 Mega is already in position at the Airport. The current arrangements (i.e. without PPC84) are therefore orienting the KCAHL land towards a focus on LFR/Automotive/Hardware retailing. It is far from obvious that (without PPC84) KCAHL will be able to rapidly fill its consented space in these retail categories, and recent history suggests that they will not;

6.14.2. The clear intent of PPC84 is to allow KCAHL to add extra anchors, in the form of a supermarket and a department store, which would expand the demand for KCAHL's retail space. This would significantly advance the timing of retail development at the airport while also changing the retail mix. The presence of supermarket and department store anchor tenants would make the airport a more attractive location for other finer grain clothing, shoes and smaller food type retail outlets which may currently be put off by the LFR/Automotive/ Hardware retailing nature of the existing development; and

6.14.3. PPC84 would also open up options for further expansion of retail space better aligned with the new (supermarket and department store) anchors.

6.15. All of these factors affect reasonable judgements about the extent of diversion from PTC under PPC84. As does the physical location of the households whose demand is at issue. My own view is that under PPC84 the airport would become a full-scale competitor to the PTC except in respect of Council activities. It would have retail anchors for three major categories: hardware, supermarkets and department

stores. With these in place it would attract a wider variety of smaller, fine-grained retail tenants.

- 6.16. With the above considerations in mind, I have developed assumptions about the share (%) of existing PTC spending that will be diverted to the airport under PPC84 as shown in **Table 3**. In that table, the diversion (%) column indicates, for each CAU, the proportion of existing retail spending at PTC that would be diverted to the airport; the PTC Spend (\$m) column shows how much each CAU's residents will spend at PTC if PPC84 is approved (i.e. after deducting the diversion (%) from that CAU's existing PTC spend which is shown in **Table 2**).

Table 3 Estimated Spending at PTC under PPC84

| CAU | Diversion (%) | PTC Spend (\$m) |
|-------------------------|----------------------|------------------------|
| Waikanae Beach | 15 | 4.9 |
| Waikanae East | 15 | 3.1 |
| Peka Peka | 15 | 0.8 |
| Waikanae Park | 15 | 2.7 |
| Waikanae West | 15 | 4.1 |
| Kaitawa | 15 | 1.2 |
| Otaki Forks | 15 | 2.2 |
| Te Horo | 15 | 1.4 |
| Otaki | 10 | 3.8 |
| Paraparaumu Beach North | 40 | 19.6 |
| Otaihanga | 15 | 12.5 |
| Paraparaumu Beach South | 40 | 27.7 |
| Paraparaumu Central | 10 | 61.4 |
| Raumati Beach | 20 | 33.6 |
| Raumati South | 10 | 21.0 |
| Paekakariki | 5 | 5.1 |
| Kapiti Island | 0 | 0.0 |
| Maungakotukutuku | 5 | 10.4 |
| Total | | \$215.5m |

- 6.17. In assessing the diversion percentages in **Table 3** it is important to refer to the CAU map, remember that the expressway is imminent, that the Transmission Gully development is underway, and consider the factors outlined in ¶6.14 above.

- 6.18. **Step 4: Sanity Check.** My estimate is that PTC retail spending will fall by 21% or \$56m per annum.² This estimate is consistent with the available evidence.
- 6.19. Mr Colegrave in his "with PC84 scenario" assumes 6000m² of department store space which would require the investors to expect around \$17m of retail revenue.³ An expanded New World or new supermarket could easily add 4000m², which would require a further \$35m⁴ of expected retail revenue to be sustainable. This accounts for \$52m of the \$56m that I estimate will be diverted from PTC. Once these anchors are in place, the acceleration/stimulation of other retail activities which would be provided for as part of a retail node accommodating these anchors could readily account for the balance. I conclude that my estimates are reasonable, and emphasise that they are based on transparent information.
- 6.20. **Step 5: Commercial Impact on PTC.** The next question is how would a 21% reduction in PTC retail revenue affect the PTC retailers? Timing and scale effects are considered.
- 6.21. The initial impact would be felt in the retail leasing market and would occur rapidly. Participants in the market for retail leasing can be expected to factor in the extra location option as soon as it becomes available. Indeed, the prospect of PPC84 being approved might already be deterring retailers from leasing space at PTC as retailers wait to see if cheaper space will be made available.
- 6.22. Over a slightly longer time horizon, as space is taken up at the airport, the trade impacts will materialise for those currently retailing at PTC, In some cases the loss of trade will induce exit, the timing of which will depend in part on the remaining duration on leases. It is likely that the effects will include the following.

² Current spending is estimated at \$271.6m (Table 2) and under PPC84 this is estimated to fall to \$215.5m (Table 3) which is a drop of \$56.1m, which is 21% of current spending.

³ This assumes revenue of \$2800 per square metre of GFA to sustain a department store.

⁴ Assuming \$8750 per square metre of GFA

- 6.23. A supermarket will close at PTC. Many people at Paraparaumu beach (north and south) will prefer the airport supermarket and expressway exits will encourage residents of other CAUs away from the PTC:
- 6.23.1. The main department stores at PTC will be seriously challenged. Whether they remain open or not will be highly correlated with the broader amenities offered at the PTC; and
 - 6.23.2. Smaller retailers at PTC will consider shifting to the airport, and if not, will choose between closing down and remaining in business. Depending on the nature of the retail shop these type of speciality shops will face more competition from an increased number of department stores and loss of foot traffic in the PTC. Responses will vary but vacancy rates will certainly increase at PTC.
- 6.24. These are very serious commercial challenges. My conclusion is that PPC84 would significantly undermine the commercial base of the PTC.
- 6.25. **Step 6: Social and Public Effects.** Patronage of retail outlets is a significant contributor to the public amenities in centres. As more patrons arrive, all existing patrons gain extra benefits. This is partly due to the prospect of interacting with others directly (e.g. chance meetings between friends), but also because extra patronage helps to under-write upgrades of physical amenities such as attractive streetscapes, plantings, and the provision of other public facilities.
- 6.26. All of these effects will work in reverse if PPC84 is approved. Patronage of the PTC will fall by around 20% as trade is diverted to the airport. On this point, I agree with Property Economics that *“by dispersing economic activity, the value of a vibrant centre is reduced”*. I consider that Property Economics estimate of a loss in social value for District residents of *“between \$1.2m - \$1.8m per*

annum" to be a conservatively low estimate for this particular proposal to disperse economic activity.

- 6.27. There will be fewer direct interactions between shoppers at both locations than are currently occurring at PTC. The economic case for further upgrading of public spaces at the PTC will be weakened and projects will be deferred or cancelled as the private retail sector is affected. New developments like Coastlands Square or re-development of the existing Coastlands site, particularly that including fine grain retail along the main street will be seriously challenged with uncertain final results.
- 6.28. These effects are the obvious consequence of such a significant diversion of trade to what would be a new, full scale retail centre located a short drive away.

Mr Heath's evidence

- 6.29. I have read Mr Heath's evidence and agree with much of it. In particular, I agree that PPC84 needs to be evaluated in the context of the planning objectives and policies operative in the District, and that if PPC84 is approved and a department store is established at the airport then *"the policy framework within the wider business chapter of the PDP might need to be reconsidered"*.
- 6.30. My main concern with Mr Heath's evidence is the apparent disconnect between sections 3.3 and 3.4.
- 6.31. In section 3.3, Mr Heath relies on his own analysis to conclude that *"no additional retail enablement should be provided at the airport"* and that *"no proliferation of department stores or small speciality stores is considered appropriate ...[and]... Council should take a firm stance on the retail aspects of this submission which seek to expand their retail enablement."*

6.32. I agree with these views. However, they are in direct conflict with Mr Heath's support for adding supermarket and department store anchors at the airport. For the airport PPC84 will very clearly "*expand their retail enablement*". I agree with Mr Heath that the airport's retail enablement should not be expanded. This is indeed why I oppose PPC84.

Mr Colegrave's evidence

6.33. As noted above, I have accepted some of Mr Colegrave's estimates to assist decision makers in understanding the important differences between his analysis and mine.

6.34. The main differences can be readily explained:

6.34.1. Mr Colegrave assumes that there is no barrier to the construction of a further 20,000m² of retail space at the airport, whereas I consider that this is much more likely to occur under PPC84 than under the status quo. My analysis (see ¶6.12 - 6.16 above) suggests that the reason KCAHL want to add two new anchors (supermarket and department store) is to materially increase the prospect of attracting tenants for the already consented extra space. In essence the existing controls in the operative district plan are working as intended to protect the town centre;

6.34.2. I have concerns with Mr Colegrave's analysis as it addresses retail leakage. In Tables 1 and 4 of Mr Colegrave's letter of 30 October 2015, he includes "out of centre" as a category of retail turnover. I suspect that this refers to spending by District residents that occurs beyond the District, i.e. to net retail leakage. The figure is around 15% of total turnover, which is broadly consistent with my estimate of 14% (derived from Marketview data). My concern is how to reconcile these figures with Table 6 in the same letter. Table 6 purports to show that PPC84 would induce "*quite dramatic*

reductions in leakage...for certain store types", yet none of the figures in the Table are as low as 15% and several are three times that amount. Table 6 is all the more difficult to understand given the statement in Mr Colegrave's evidence that *"Kapiti Coast district's leakage rate is one of the lowest amongst its peers"*. I have not been able to resolve the inconsistency between the very high initial leakage rates in Table 6 and the Mr Colegrave's views as stated elsewhere (e.g. his evidence and Table 1) that leakage rates are low; and

6.34.3. More generally, Mr Colegrave has not explained the source of the extra retail spending evident in Table 4 of his October letter. Consider in particular the difference between the Baseline and Plan Change columns. Between these two columns an extra \$35.5m of retail turnover appears, yet "out of centre" leakage has only fallen by \$6.6m, so there is an unexplained addition of \$28.9m. I have been unable to determine how this extra spending arises.

6.35. Based on the analysis reported above, I consider that PPC84 will have significant effects and should be rejected.

John Philip Small

Date: 3 February 2017