

Before a Board of Inquiry
MacKays to Peka Peka Expressway Proposal

under: the Resource Management Act 1991

in the matter of: Notice of requirement for designation and resource consent applications by the NZ Transport Agency for the MacKays to Peka Peka Expressway Proposal

applicant: **NZ Transport Agency**
Requiring Authority

Statement of rebuttal evidence of **Michael Copeland** (Economics) for the NZ Transport Agency

Dated: 24 October 2012

REFERENCE: John Hassan (john.hassan@chapmantripp.com)
Suzanne Janissen (suzanne.janissen@chapmantripp.com)

Chapman Tripp
T: +64 4 499 5999
F: +64 4 472 7111

10 Customhouse Quay
PO Box 993, Wellington 6140
New Zealand

www.chapmantripp.com
Auckland, Wellington,
Christchurch



TABLE OF CONTENTS

EXECUTIVE SUMMARY 2

EVIDENCE OF SUBMITTERS 2

C and M Dearden 2

L Pomare..... 3

J Lunday (urban design) for Save Kāpiti Incorporated 5

M Pickford (economics) for Save Kāpiti Incorporated 6

K Duston 11

F Colegrave for Kāpiti Coast Airport Holdings Limited 12

STATEMENT OF REBUTTAL EVIDENCE OF MICHAEL COPELAND FOR THE NZ TRANSPORT AGENCY

- 1 My full name is Michael Campbell Copeland.
- 2 I have the qualifications and experience set out at paragraphs 2 to 4 of my statement of evidence-in-chief, dated 4 September 2012 (*EIC*).
- 3 I repeat the confirmation given in my *EIC* that I have read, and agree to comply with, the Code of Conduct for Expert Witnesses (Consolidated Practice Note 2011).
- 4 In this statement of rebuttal evidence, I respond to the evidence of:
 - 4.1 C and M Dearden (Submitter 0261);
 - 4.2 L Pomare (Submitter 0309);
 - 4.3 J Lunday on behalf of Save Kāpiti Incorporated (Submitter 0505);
 - 4.4 M Pickford on behalf of Save Kāpiti Incorporated (Submitter 0505);
 - 4.5 K Duston on behalf of the Rational Transport Society (Submitter 0611); and
 - 4.6 F Colegrave on behalf of Kāpiti Coast Airport Ltd (Submitter 0525).
- 5 Consistent with my *EIC*, I have referred to the MacKays to Peka Peka Expressway Project as "the Project" in this rebuttal evidence.

EXECUTIVE SUMMARY

- 6 I have read the evidence of a number of submitters who have raised matters relevant to economic effects. I re-confirm my conclusion from my *EIC* that the Project is consistent with enabling "*people and communities to provide for their ... economic ... well being*", and having regard to "*the efficient use and development of natural and physical resources*".

EVIDENCE OF SUBMITTERS

C and M Dearden *Benefit cost ratios*

- 7 In response to paragraph 2.3 of the evidence of C and M Dearden, the benefit cost ratio (BCR) of 1.2 referred to in paragraph 48.1 of my *EIC* is not for a collection of Roads of National Significance (RoNS) projects throughout New Zealand. The BCR of 1.2 is for the Wellington Northern Corridor RoNS only.

L Pomare

Employment and GDP – Wheeler reports

- 8 Ms Pomare in her evidence at paragraph 3, page 4, refers to the Western Link Road (WLR) providing an additional 4,000 jobs and additional GDP of \$301 million. Her source for this information is given as the Wheeler Report, which I assume to be a 6 page report appended to her evidence – *Kāpiti Road Upgrade Options: Economic Impacts*; Brent Wheeler; undated. This report appears to draw on sections of text and numbers from another report of 29 pages – *Western Link Road: Economic Impacts*; Brent Wheeler; 26 July 2009. This longer report is Appendix 2 of the evidence of another submitter, **Ms B Begovich** (Submitter 0669).
- 9 I note that the additional jobs and GDP in the shorter report attributed to the WLR over the proposed Expressway are identical to the additional jobs and GDP that the longer report estimated for the WLR with an "*integrated land use approach*" compared to the WLR without an "*integrated land use approach*". I find it very surprising that the analysis and much of the text contained in a report comparing the WLR (referred to in the 6 page Wheeler report as the "*integrated corridor*") and the M2PP Project (referred to in the 6 page Wheeler report as the "*town avoidance option*") are identical to the analysis and text contained in the summary of a report comparing two different WLR scenarios. It appears to me, that rather than carry out an analysis of the employment and GDP implications of the M2PP Project as compared to the WLR, the analysis and text of an earlier report prepared for a completely different purpose has been uplifted in its entirety, with the exception of minor editing substituting the words "*town avoidance option*" for "*bare arterial*" and "*integrated corridor*" for "*integrated land use*".
- 10 Subsequently, I have become aware of a third Wheeler report (Appendix 3 to the evidence of Mr Lunday on behalf of Save Kāpiti Incorporated (Submitter 0505)) with the same title as the 6 page report appended to Ms Pomare's evidence – i.e. *Kāpiti Road Upgrade Options: Economic Impacts*; Brent Wheeler; undated. This report is 32 pages long and again consists of much the same text and exactly the same analysis as the 29 page report that compared two WLR options. The summary of this third 32 page report has some differences in the text as compared to the 6 page report having the same title.
- 11 In this third report, there are some additional sections discussing a town avoidance option, an integrated corridor (Eastern option) and the introduction of a third option, being the use of the WLR alignment as an expressway (which I take to be the proposed M2PP Project). Again I am surprised that this third report appears to evaluate different options than those contained in either of the first two reports and yet contains the exact same analysis results and much of the same text as contained in the other two reports.

12 In addition, I would make the following observations about the analysis in the three Wheeler reports:

12.1 The integrated land use approach advocated by Dr Wheeler is not peculiar to the WLR or an eastern expressway option. It could equally as well be applied with the M2PP Project;

12.2 At paragraph 37 of the longer report (Appendix 2 to Ms Begovich's evidence), Dr Wheeler says:

"A feature of adopting an integrated land use approach is the need to implement various measures which are not construction matters but are necessary in order to reap full economic benefits. Such matters include:

- *The alteration of regulatory codes, notably land use zoning and regulation, such that desirable development can take place, and,*
- *Investment in and construction of ancillary roads and links required to generate the intensity of vehicular and pedestrian traffic needed to maximise economic benefit."*

To the extent that these "not construction matters" are important, they are not dependent upon either the construction of the WLR or an eastern expressway option. By definition, they are not dependent upon the road option constructed but apply equally to all options;

12.3 The additional employment and GDP estimated in all three Wheeler reports are outcomes that the 2009 report (paragraphs 99 - 121) says will occur as a consequence of:

- Paraparaumu (Coastlands) retail rejuvenation and expansion;
- Paraparaumu Airport and ancillary land development; and
- Consolidation and general development opportunities.

The first two of these bullet points are occurring now and will presumably continue even if the M2PP Project proceeds. Similarly the third bullet point is not inconsistent with the M2PP Project;

12.4 Dr Wheeler himself in his reports states that care is needed not to attribute too great a level of precision to his estimates for increases in employment and GDP.

13 Taking all these matters into account, I do not believe the reports by Dr Wheeler provide any evidence that employment and GDP in the Kāpiti Coast District will be higher if, instead of the M2PP Project, the WLR or an Eastern expressway option is built.

Impact on tourism

14 **Ms Pomare** (at paragraph 8 of her evidence) is critical of my EIC (paragraph 80) for suggesting there will be tourism economic benefits as a consequence of the M2PP Project (and other components of the Wellington Northern Corridor RoNS) making the District more accessible. Ms Pomare believes the improved accessibility will make the District's economy busier and as a consequence detract from the District's appeal to visitors. In my view, the Kāpiti District has ample capacity (for example, at beaches, reserves, golf courses, walkways, cycle trails and cafes and restaurants) to accommodate increased numbers of visitors without detracting from its attractiveness for visitors.

**J Lunday (urban design) for Save Kāpiti Incorporated
Increase in GDP**

15 At paragraph 106 of his evidence, Mr Lunday refers to the Wheeler report which is Appendix 3 to his evidence. Mr Lunday states:

"... an independent economic report commissioned by KCDC by Brent Wheeler (Kāpiti Road Upgrade Options: Economic Impact, July 2009 attached as Appendix 3) identified an uplift in Regional economy of \$1.3 billion for the integrated approach of the WLR over a base conventional fast arterial route along (the WLR) designation, giving over \$2 billion increase in economy by 2026."¹

16 In addition to my criticisms of all three Wheeler reports covered above in response to Ms Pomare's evidence, I would point out that the numbers which Mr Lunday quotes are erroneous. They arise from an error in a table by Dr Wheeler in his report at paragraph 87 in the version of his report, which is Appendix 3 to Mr Lunday's evidence.² Instead of determining the difference between estimated GDPs for each of the options,³ Dr Wheeler has incorrectly summed the GDPs for each option. This can be checked by comparing this table found in the summary of Dr Wheeler's report and in his Conclusions section at paragraph 123.

¹ I am assuming by "uplift in regional economy" and "increase in economy" Mr Lunday means increases in GDP for the Kāpiti Coast District.

² The same error occurs in the table at paragraph 97 in the version of Dr Wheeler's report, which is Appendix 2 to Ms Begovich's evidence.

³ Whichever options Dr Wheeler is evaluating. I note that the two options being analysed in each report are different even though Dr Wheeler's results in each report are the same.

- 17 As I have stated previously in my evidence, I do not believe that any of Dr Wheeler's reports can be used as a reliable basis to estimate differences in GDP (or employment) for the Kāpiti Coast District with and without the M2PP Project.

M Pickford (economics) for Save Kāpiti Incorporated

- 18 I note that Dr Pickford's evidence is almost entirely focussed on the BCR for the Project and the ability of the Project to obtain funding. Dr Pickford does not provide an economic assessment of the Project within what I consider to be the framework required by the Resource Management Act (RMA). I will now address specific issues raised by Dr Pickford.

Discount rates

- 19 At paragraphs 34-35 of his evidence, Dr Pickford states that, if different government agencies used different discount rates, funding could be diverted from one agency to another resulting in a reduction in economic efficiency from public sector spending. In my experience, budgets between government agencies (and even within government agencies) are set having regard to more "macro" or holistic considerations than the comparative rates of return from each agency's investment projects. For example, the budget for the New Zealand Transport Agency (NZTA) is determined by the level of fuel taxes and road user charges collected from motorists, not by comparing the potential returns from transport projects with the returns from investments in say health, education, defence or social welfare. For many government projects, no benefit cost analysis is undertaken and yet funds are still allocated to them.

- 20 I note in paragraph 38 of his evidence, Dr Pickford correctly states that the 8% discount rate which is used in the cost benefit analysis of NZTA (and other government agency) investment projects is a real rate of return (i.e. net of the effects of inflation). In comparison to nominal rates of return (i.e. rates inclusive of inflation) available today from alternative investments (e.g. bank deposits, corporate bonds, government bonds, etc.), 8% (excluding the effects of inflation) is a high rate. In my view, this suggests that an investment such as the Project which yields almost 8% (excluding the effects of inflation) should not be necessarily viewed as a bad investment or "*tantamount to accepting immediately a loss to the national economy*" (Dr Pickford at paragraph 76 of his evidence), but as an investment for which its estimated rate of return does not reach the target of an 8% real rate of return.

Section 7(b) RMA "efficient use and development"

- 21 In my opinion, section 7(b) of the RMA is not a requirement to seek to maximise economic efficiency with which national resources are allocated, as Dr Pickford appears to interpret it at paragraph 39 and elsewhere in his evidence.

- 22 In my view, section 7(b) requires only that economic efficiency be one of a number of potentially competing factors that must be taken into account.

Benefits beyond the 30 year analysis period

- 23 At paragraph 55 of his evidence, Dr Pickford reports on the results of his re-analysis of the BCR calculation for the Project involving extending the analysis period. He calculates that the BCR for the Project increases from 0.93 to 1.03. However, in paragraph 56 of his evidence, he lists three reasons as to why the additional benefits of the Project beyond the 30 year analysis period should be ignored.
- 24 The first of his stated reasons is because of future uncertainty. However, in my view, uncertainty cannot be overcome by simply ignoring the future. Where an asset such as a road has an economic life that extends beyond the end of the analysis period, it is quite appropriate to estimate a residual value for it. Since the road cannot be "sold", the most sensible residual value is calculated as the present value of net benefits from its continued operation. Mathematically, this is the same as extending the analysis period assuming (as is reasonable) that the Project will continue to perform the same functions over the extended period. It would not be unreasonable in my view to extend the analysis period more than 6 years.
- 25 The second reason Dr Pickford gives is that the M2PP Project is not exceptional in being long-lived and he also calculates additional benefits from extending the life of the alternative Western Link Road (WLR) project. The EIC and rebuttal evidence of **Mr Craig Nicholson** and **Mr Andrew Murray** explain why the WLR project cannot be taken as the counterfactual. But in any case, in my view *"having particular regard to ... the efficient use and development of natural and physical resources"* does not require the Board of Inquiry, as decision maker under the RMA, to allow only the most efficient alternative based on quantified cost benefit analysis.
- 26 The third reason Dr Pickford gives for ignoring the economic benefits of the Expressway Project beyond the end of the analysis period is because *"it is standard practice to use a uniform life span for evaluating long-term investment projects like roads, in order to rank them in terms of their returns"* and that this is a requirement of NZTA's Economic Evaluation Manual (EEM). However, the discussion in my EIC⁴ (and **Mr Nicholson's** EIC)⁵ about the Project's additional benefits beyond the end of a 30 year analysis is in the context of the efficient use of resources under the RMA. It is not to rank the Project against other roading or non-roading investment projects. In this context, I believe it is quite appropriate to have regard to the fact that the Project will continue to generate

⁴ At paragraph 48.4 (a) in my EIC.

⁵ At paragraph 45.2 in **Mr Nicholson's** EIC.

economic benefits beyond the 30 year analysis period, which was used to estimate the BCR for the Project.

National versus local benefit – redistribution

27 At paragraphs 67 to 72 (and elsewhere) in his evidence, Dr Pickford is critical of the inclusion in my EIC of discussion about the economic benefits to the local communities of the Kāpiti Coast District and the Wellington region. As I have set out in my EIC (see paragraphs 21 to 27), it is my understanding that under the RMA the national, regional and district viewpoints are all relevant. My reasons for including regional and district viewpoints are:

27.1 The use of the words "*people and communities*" in Part 2 section 5(2) of the RMA. If only a national viewpoint is relevant; then I do not believe the word "*communities*" would have been used; and

27.2 The assessment of non-economic effects is not undertaken only from a national perspective. For example, any noise effects for local Kāpiti Coast District residents from the new Expressway Project are not simply "cancelled out" because without the Project there will be similar noise effects for residents somewhere else in New Zealand from an alternative roading project.⁶

28 Usually in RMA cases, there is a range of positive and negative effects for a local community. The balancing of effects may therefore require an assessment of local economic impacts, even if from a wider national viewpoint these are distributional in nature.

Role of Treasury

29 At paragraph 78, Dr Pickford says that "the Treasury requires that public sector investment projects like the M2PP should earn a return of at least 8% per annum". The reality is the Treasury does not determine whether the Project will proceed or not. Irrespective of Treasury issuing guidelines on public sector project evaluation procedures, it does not dictate the projects chosen by NZTA.

Maximising economic efficiency

30 At paragraph 83 of his evidence, Dr Pickford states that "*the aim is to maximise the gain in economic efficiency*". In my opinion this is not the aim of the RMA and is an impossible objective for this Board of Inquiry, since the Board does not have the capability to redirect the funds earmarked for the Project to other investment projects or activities which Dr Pickford or others may judge to be more efficient uses of those funds.

⁶ Perhaps a clearer example would be where expansion at one airport in New Zealand (say Queenstown) allowed more international flights to arrive. Supposing this diverted international flights from another New Zealand airport (say Christchurch). Any additional noise effects for residents nearby Queenstown airport would not be deemed acceptable simply because there would be an offsetting reduction in noise effects for residents nearby Christchurch airport.

Opportunity costs

- 31 Dr Pickford’s hypothetical analysis as to the “opportunity cost” of funds to be used in the Expressway Project at paragraphs 84 to 99 of his evidence is only conjecture. As Dr Pickford himself points out (see paragraph 119 and elsewhere in his evidence) NZTA does not allocate funds to investment projects solely on the basis of a ranking of projects according to BCRs. This is also outlined in the evidence in chief on **Mr Nicholson**. Therefore, in my view, it is completely unrealistic for Dr Pickford to rework the BCR for the Project assuming that, without the Project, the funds that would have been used for it will be redirected to projects having very high BCRs.

Project selection criteria

- 32 Paragraphs 100 to 123 of Dr Pickford’s evidence are an attack on the project selection criteria and processes used by NZTA. In my view, the NZTA’s project selection criteria are not a relevant consideration for the Board of Inquiry making a decision under the RMA. Of course, section 7(b) gives economic efficiency relevance, albeit not in the paramount way economists may prefer. In any case investment and other business decisions are frequently taken without quantified economic efficiency measures such as BCRs being the sole determinant or even one of a number of determinants. In my EIC (paragraph 47), I have suggested that the decision by NZTA to incorporate two additional criteria – “strategic fit” and effectiveness” – into their project selection processes is because of a recognition that quantified BCR analyses do not always capture all of the positive and negative effects of roading projects.

- 33 Whilst I agree with Dr Pickford that it is likely the introduction of these strategic fit and effectiveness criteria involves a certain amount of double counting, this is likely to be a feature of many alternative decision making processes.⁷ However, I think it also unrealistic for economists to assume that decision makers should have total confidence in the data and assumptions that underlie a BCR analysis result. For example, public concern about fatal and serious injury accidents on the existing SH1 may not be allayed simply by the results of a BCR analysis using NZTA’s EEM estimates for accident costs (which incorporate a cost per fatal accident in dollar terms) indicating that road improvements to reduce the number of accidents are not justified. Public concern and political pressure may override conclusions drawn only from quantitative BCR analyses.

Local economic effects

- 34 At paragraphs 144 to 159, Dr Pickford is again critical of consideration of local (district or regional) economic effects in the

⁷ For example, I am familiar with the use of “multi-criteria decision making frameworks” where options are evaluated by (i) ascribing a score for each option under various criteria; (ii) weights for each criterion are estimated; and (iii) the weighted average scores are summed. I am sure this method has elements of double counting but it is a preferred method of some, especially where different professional disciplines are involved.

AEE and in my EIC. As I have stated earlier in my rebuttal evidence (paragraph 27 above), it is my opinion that local economic (and non economic) effects are relevant to enabling “*people and communities to provide for their social, economic and cultural well being*” under the RMA. I believe it is important to point out that many of the economic benefits of the M2PP Project will accrue to local residents and businesses and not only to through traffic. Also with respect to Dr Pickford’s paragraphs 145.3 and 157, it is my understanding that, although the RMA requires trade competition effects to be ignored, this does not mean the distribution of other economic (and non economic) effects is irrelevant under the Act.

- 35 At paragraph 160.4 of his evidence, Dr Pickford is critical of statements I make in my EIC (at paragraph 52.6 and elsewhere) that competing businesses between Wellington and north of Otaki will be disadvantaged similarly to those in the Paraparaumu and Waikanae town centres in that there will be no direct access from SH1 along the length of the motorway (including the Transmission Gully section) and the proposed expressways from MacKays to Peka Peka and from Peka Peka to north of Otaki. I made this point not to suggest additional benefits would accrue to Paraparaumu and Waikanae town centres but to highlight that these centres will be no worse off than competing centres for the passing motorized trade. In my view, because this would limit any redistribution of Paraparaumu and Waikanae trade to other centres along the route, this will help to retain amenity values for Paraparaumu and Waikanae town centres.
- 36 At paragraph 160.5 of his evidence, Dr Pickford states that it is inappropriate to claim that over time economic growth would provide an offset to the adverse effects felt by some businesses. Dr Pickford states that I have compared “before” and “after” effects rather than “with” and “without” effects. I agree with Dr Pickford that “with” and “without” is the appropriate approach in the estimation of BCRs, but in assessing effects on the amenity values of town centres under the RMA it is appropriate to assess effects “before” and “after” the Project.
- 37 It is my understanding that, when assessing the amenity values associated with business activity, the Environment Court compares the amenity values of the current levels of business activities with the changes to amenity that would result from a new Project in the future.⁸ I presume this focus is because, under the RMA, the Court is assessing the amenity effects of business closures, shop vacancies and reductions in pedestrian counts rather than simply lower (or forgone) levels of business activity generally.

⁸ *Eldamos Investments Ltd v Gisborne District Council* W047/2005 (22 May 2005, Environment Court, Wellington). See paragraphs 245 and 249. The base year is not specified in the Judgement, but it has been confirmed as the year of analysis (2004) and not the year preceding the opening of the development (personal communication, Mr M Tansley, the expert witness upon whose analysis and evidence the Court relied).

- 38 Dr Pickford, (at paragraphs 162 to 167) dismisses economic benefits to the Kāpiti Coast District from the construction activity generated by the Project. He quotes a Professor Compton who found no such benefits from the construction of sports stadia in the United States. Irrespective of Professor Compton's findings, it is my experience that national, regional and local governments throughout New Zealand and Australia all seek to encourage new, and retain existing businesses, projects and events in their economies. I have set out at paragraph 62 of my EIC why I believe there are improvements in economic wellbeing or economic welfare associated with increases in economic activity.
- 39 Even if, as Dr Pickford suggests (paragraph 164 of his evidence), those employed directly on the construction of the M2PP Project were recruited entirely from outside the Kāpiti Coast District, I cannot believe that a number of Kāpiti Coast businesses and residents would not benefit from having a major construction project in their District for four years.⁹ I agree with Dr Pickford that, if the M2PP Project does not proceed, the funds earmarked for it would be spent on another roading project in New Zealand. However, this is unlikely to be of benefit to businesses and residents within the Kāpiti Coast District and probably not the within the Wellington region.
- 40 Again at paragraphs 168 to 170, Dr Pickford is critical of the AEE and my EIC for identifying the economic benefits for Kāpiti Coast District businesses and residents during the operation of the M2PP Project. Once again I did this in my EIC, not to suggest additional benefits to those incorporated in the BCR analysis, but to highlight how the "*economic wellbeing*" of the Kāpiti Coast District and Wellington region "*people and communities*" would be enhanced by the Project.
- 41 At paragraphs 179 and 180 of his evidence, Dr Pickford appears to suggest that any property value changes or "*detriments to amenity values (social, noise, health, etc)*" should be included in the measure of efficiency for the Project. Leaving aside the practical difficulties in quantifying any of these in monetary terms, the point I make in my EIC (e.g. at paragraph 34) is that I expect the Board of Inquiry will be provided with considerable evidence from a number of experts relating to amenity value effects of the Project and will give due weight to this evidence as part of the overall judgment under section 5 of the RMA. Double-counting would occur if, in addition to any such costs (adverse effects), property value effects were also included in an assessment of economic effects.
- K Duston**
- 42 On page 4 of his evidence, Mr Duston says that the Transmission Gully project:

⁹ For example, food and beverage businesses.

"... represents a transfer of benefit from the national community (which is paying for the road) to the local community (as traffic on the road is predominantly commuting traffic)..."

- 43 Whilst I agree that the Transmission Gully project and the M2PP Project represent good value for the local communities of the Kāpiti Coast District and the Wellington region, residents and businesses of these areas contribute towards the cost of these projects and others elsewhere in New Zealand via their payment of fuel taxes and road user charges. Therefore, I do not see this "transfer of benefit" as being a misallocation of resources.

**F Colegrave for Kāpiti Coast Airport Holdings Limited
Floorspace growth projections**

- 44 Mr Colegrave in his evidence is critical of the Kāpiti Coast District floorspace growth projections that were used in the AEE's modelling to determine traffic growth projections with and without the M2PP Project. In his opinion, the "composite growth scenario" which was used as the base case in the AEE is too low. Mr Colegrave instead derives his own floorspace growth projections, which are much higher and close to the "full growth scenario", which was examined in sensitivity testing in the AEE. This sensitivity testing showed that the M2PP Project and the local road network within the Kāpiti Coast District were capable of handling the higher volumes of traffic corresponding to the "full growth scenario" (see the EIC of **Mr Murray** at paragraph 190).
- 45 I was not involved in preparing the floorspace growth (or other) projections which provided the basis for the traffic growth projections in the AEE. However, I wish to make a number of comments about Mr Colegrave's evidence.
- 46 Firstly, if Mr Colegrave is correct in his assumptions and analysis, this serves to underpin the need for, and economic benefits arising from, the proposed M2PP Project. It will mean that the BCR estimated for the Project is higher and it also counters the evidence of a number of submitters¹⁰ who contend that traffic growth in the Kāpiti Coast District will be much lower than was assumed in the AEE traffic modelling.
- 47 Secondly, there will always be uncertainty associated with projections of any sort including those relating to the floorspace growth. Notwithstanding the possible "structural shift" during the last five years identified by Mr Colegrave's analysis, in my opinion, **Mr Murray** and his colleagues took a responsible approach in using the growth assumptions contained in the Wellington Regional Council's Wellington Transport Strategic Model (WTSM) as the basis for future growth projections, together with adjustments for realistic levels of development at identified growth nodes (Paraparaumu

¹⁰ See for example L Pomare (paragraphs 16-17), M Pickford (paragraphs 48-52) and K Duston (pages 13-14).

Town Centre, Kāpiti Coast Airport, Waikanae North and Otaki) within the District.¹¹ By using higher future growth projections (similar to those estimated by Mr Colegrave) in sensitivity testing, the AEE analysis ensured that the M2PP Project was capable of handling the higher traffic volumes that would eventuate with this higher future growth in floorspace.

- 48 Thirdly, the Kāpiti Coast District's low gross floor area per head of population (paragraphs 40-44 of Mr Colegrave's evidence), low "location quotients"¹² for a number of industries (paragraphs 45-50 of Mr Colegrave's evidence), and the high employment leakage out of the District (paragraphs 51-52 of Mr Colegrave's evidence) are a reflection of a number of particular circumstances pertaining to the Kāpiti Coast District. Whilst the M2PP Project and (possibly) the future development of the Kāpiti Coast Airport Business Park may help to bring about further "structural shifts" to the Kāpiti District such that it becomes more self sufficient in a number of industries, a number of circumstances will continue to restrict such change.
- 49 In particular, it is my view that the Kāpiti Coast District's proximity to already well developed retail and employment hubs in Wellington City, Porirua and the Hutt Valley will continue to constrain the development of some industries within the Kāpiti Coast District, even with improvements to transport links.
- 50 Finally, I find Mr Colegrave's assertions about the "airport city" and "aerotropolis" concepts in the context of Kāpiti Airport to be somewhat optimistic. Whilst I accept the logic in relation to larger airports found in major metropolitan centres in New Zealand (e.g. Auckland International Airport), I have reservations about airport operations at Kāpiti Airport becoming a major catalyst for floorspace development within the Kāpiti Coast District.

Michael Copeland

24 October 2012

¹¹ See paragraphs 103-108 of **Mr Murray's** EIC.

¹² i.e. the share of a district's total employment for a particular industry divided by the corresponding national share for that industry.