
Joint Witness Statement

Economics

Ashbourne [FTAA-2507-1087]

11 December 2025

Unfacilitated Teams Meeting between the economic experts

Recorded by: All attendees jointly

Attendance

The list of participants for this expert conferencing is included in the schedule at the end of this Statement.

Basis of Attendance and Environment Court Practice Note 2023

All participants agree that:

- (a) The Environment Court Practice Note 2023 provides relevant guidance and protocols for the expert conferencing session; and
- (b) They will comply with the relevant provisions of the Environment Court Practice Note 2023.

Matters Considered at Conferencing – Agenda and Outcomes

Q1: How to determine ‘regional significance’.

Fraser Colegrave:

1. Fraser Colegrave (FC) notes that the FTAA does not define significance, so there is no agreed way to measure it. In addition, the threshold for regional significance will likely vary by region and type of project, with lower thresholds likely applying in smaller regions, and vice versa (all other things being equal).
2. Absent any statutory definition of significance, FC has assessed it for Ashbourne using the following objective indicators, which he has consistently applied to more than 100 large-scale housing developments across New Zealand (under various consenting pathways) over the past 20 years:
 - 2.1. *Housing market outcomes* – net addition to capacity, market contestability and improved affordability, including whether supply at scale brings forward

delivery and supports a well-functioning urban environment (NPS-UD).

- 2.2. *Retirement living outcomes* – the degree to which the RV component meets catchment needs and supports ageing-in-place, while freeing up existing dwellings (often) better suited to households still at earlier life stages.
 - 2.3. *Scale and durability of economic activity* – one-time construction and ongoing operational employment, GDP, and wage effects, which were calculated using input–output multipliers derived from official National Accounts data (as produced by Stats NZ).
 - 2.4. *Wider system benefits* – renewable energy generation (agrivoltaics), town-centre support, transport, and wider network efficiencies from a master-planned layout.
 - 2.5. *Opportunity-cost test for HPL* – whether the Total Economic Value (TEV) of the proposal exceeds the long-term value of continued pastoral production (including dual-use under solar arrays), to ensure that the relevant costs and benefits of foregone rural production are explicitly considered.
 - 2.6. *Retail Distribution effects* - whether the proposed commercial elements will adversely affect the role, function, health, and vitality of the township, which is an important consideration under the RMA and the NPS-UD.
 - 2.7. *Funding and risk* – whether growth-related infrastructure is credibly funded by the developer/beneficiaries such that Council financial risk is low.
 - 2.8. *Timing and certainty* – acceleration and certainty benefits that are intrinsic to the FTAA pathway (i.e., avoiding protracted delay and under-utilised land).
 - 2.9. *Overall costs and benefits* - the overall balance between economic costs and benefits for the proposal versus the most likely use(s) of the land absent it.
3. Dr Tim Denne (TD), conversely, has assessed Ashbourne’s regional significance via four other criteria that he has independently derived, and concluded that the proposal shows no evidence of significant regional or national benefits.
 4. FC considers TD’s methodology for assessing Ashbourne’s significance, and the conclusions he derives therefrom, flawed and unreliable for many reasons.
 5. First, under TD’s method, highly profitable projects can be deemed regionally or nationally significant regardless of whether the applicant companies are owned locally, and thus where those profits flow to. Consequently, under that approach, proposals that (for example) plundered New Zealand’s natural resources for the pure financial gain of foreign entities would be classified as significant, but large-scale projects like Ashbourne – which are helping to address prolonged, historic nationwide housing shortages – would not.

6. Second, TD's method deems projects significant if they use infrastructure or other resources that aren't at capacity. FC considers that this may be relevant only in extreme cases where (say, for example) a proposal utilises an otherwise-stranded asset with ample spare capacity that would otherwise be squandered. While that could be relevant for some infrastructure or energy projects assessed under the FTAA, it is not a particularly relevant or helpful consideration for urban housing developments like Ashbourne.
7. Third, TD's method deems Ashbourne insignificant because – in his view – there is no evidence of spillover effects. FC disagrees. Ashbourne is a large and multi-faceted development by an experienced and motivated applicant that will increase the supply of homes and RV units, along with supporting commercial activities and new solar generation. Each of those key elements will have spillover benefits, both within and beyond the development's physical boundaries.
8. Fourth, TD's methodology deems Ashbourne insignificant because it is not "transformational" in the way that a major transport, irrigation, or new industry project might be. FC considers this an unrealistic and highly subjective benchmark that defies the enabling ethos of the FTAA, and the context in which it was enacted (i.e. to help unlock large-scale infrastructure and housing projects that had previously been hampered by unduly restrictive rules and mindsets).
9. Indeed, if large-scale, master-planned developments like Ashbourne are not regionally significant as TD suggests, why has it (and many others like it) passed the referral stage, or even been enshrined as listed projects from the outset? Each of those referred or scheduled projects was screened to filter out those unlikely to reach the relevant statutory tests and thresholds, including the likely existence of significant regional or national benefits.
10. In FC's view, a project like Ashbourne is not only highly (regionally) significant for the purposes of the FTAA, but also for the purposes of section 3.8 of the NPS-UD. Consequently, FC considers TD's approach to assessing significance unreliable and of little (if any) use to the panel.

Tim Heath:

11. In my view, I do not consider there to be specific set of criteria or metrics that can be used to determine Regional Significance. It would appear from the projects that have been accepted so far that significance is often project and context specific and is up to the determination by the panel.
12. In my view, referral to the FTAA is an indication that the ministry considers the project to be regionally significant in principle and appropriate for assessment under the FTAA. This, however, does not replace the panel's own decision making as to the relative significance of the identified benefits and adverse effects that are assessed more comprehensively within the substantive application.
13. In this regard, the criteria identified by Tim Denne (i.e. underutilized resources,

spillover effects, transformational impacts) are relevant, but not exhaustive, considerations in determining significance. In other words, failure to achieve these outcomes identified by Tim Denne does not diminish the significance of the project if there are other significant benefits the applicant is able to identify. It is through this lens, that I undertook my review of FC's assessment of benefits and costs of the Ashbourne project.

Tim Denne:

14. I agree that the criteria for significance under the FTAA have not been defined, and I note that this is contested space. I believe the criteria I have suggested are consistent with an objective of maximising community welfare or wellbeing from the project, and that they would be applicable to all project types, not only housing developments. However, these are my own suggestion and they have not been subject to wider debate or 'market testing.'
15. I do not suggest the criteria are all to be met, and meeting the first (and primary) criterion – large net present value (NPV) – would be expected to follow from achievement of any of the other three.
16. FC suggests above that, "*proposals that (for example) plundered New Zealand's natural resources for the pure financial gain of foreign entities would be classified as significant.*" This fails to account for the CBA methodology which will always define the region of interest for its analysis, be that national or local. Within that analysis: all impacts on human wellbeing should be counted, including environmental impacts; all resources that are consumed should be priced at their full opportunity cost; and producer surpluses for entities that are not resident within the region or nation do not count towards the total economic surplus for the community of interest.
17. FC suggests these criteria would deem Ashbourne insignificant because (in my view) there is no evidence of spillover effects. That was not my argument at all. I merely suggested that evidence was not provided for the size of those spillover effects. FC could well be correct that these are significant, but they have not been quantified.
18. FC argues that the project is highly regionally significant. I am suggesting that there is insufficient evidence to make this claim. The methodology employed presents the impacts of a housing project using multipliers that reflect the average economic effects of housing, retirement villages, solar farms etc, such that all that could be claimed from the evidence presented is that the development will yield average levels of profit. My suggested criteria would require that a project yielded benefits that were greater than average. Ashbourne may indeed produce significant benefits, but the analysis has not provided that information.

Q2: The relevance of existing and proposed housing capacity to the determination of 'regional significance'.

Fraser Colegrave:

19. FC maintains that Matamata is highly unlikely to have sufficient serviced, feasible, and likely realisable housing capacity to meet future demand, particularly given the recent increases to the district's population projections by Stats NZ and the recent *Future Proof* directive for 90% of growth to be met in the townships. As a result, regardless of whether existing or proposed housing capacity is relevant to the determination of regional significance, FC considers Ashbourne essential to ensuring a steady and reliable supply pipeline to meet future demand.
20. That aside, FC notes that a proposed development can have regionally significant benefits absent any perceived acute shortfalls in housing capacity. This is because, all other things being equal, an increase in the supply of new homes still confers important economic benefits. For example, it will help to reduce prices (relative to the status quo), thereby improving affordability, while also increasing choice and fostering competition in the underlying land market. These are precisely the sorts of outcomes that central government has long been targeting through various policy interventions, like the NPS-UD.
21. In addition, the threat of a large new master-planned community like Ashbourne entering the market will put other developers "on notice", reducing incentives to landbank (by reducing the rate at which land prices grow over time). This will further improve choice and affordability relative to the status quo.
22. At the same time, developments like Ashbourne can help Councils to recover the costs of (often expensive) growth-related infrastructure investments more quickly than they would have otherwise. This, in turn, boosts Council's balance sheet, absolves ratepayers of the responsibility for any funding shortfalls, and reduces the risk of potential debt covenant breaches etc.
23. Moreover, as noted by TD in his peer review, the provision of a new master-planned community like Ashbourne can induce greater demand for local housing by reducing the equilibrium price and allowing more households to settle there at a price they can afford. I agree with this and made a similar point in recent memos responding to Tim Heath's (TH) peer review.
24. Even in cases where a shortfall is likely, but the timing is unclear, enabling large master-planned developments like Ashbourne sooner than later strengthens the supply pipeline, improves contestability, and supports affordability. All are directly relevant – in FC's view – to the FTAA's significance tests.
25. Accordingly, FC does not consider the extent of any existing and proposed housing capacity to be determinative of regional significance under the FTAA. Basic supply-demand dynamics dictate that significant regional benefits can still flow even if there is perceived to be sufficient capacity to meet future demand.

Tim Heath:

26. The existing housing supply and capacity is a critical element of our housing market evaluation as it informs my assessment of the relative significance of Ashbourne within its market context. For the reasons outlined in my evidence I disagree with FC that Ashbourne is likely to stimulate significant additional demand. I also similarly disagree with TD suggestion that the Fast Track application itself demonstrates any level of demand over and above the projected baseline, as the commercial and competitive decision is based on demand for the area, not creating additional demand. In my view, there is no guarantee that Ashbourne will sell homes at the assumed rate, and investment (the “skin in the game”) will occur in stages that are responsive to the sale rate in the market.
27. Ultimately, the effect of additional supply is relative to other capacity. In other words, if there is a sufficient level of capacity and competition in the market as exhibited in Matamata, additional capacity will have less of an impact on price, and by extension the quantity demand.
28. It is within this context that I assessed Ashbourne’s potential impacts and formed the view that any influence on price, and therefore on the quantity of demand realized, is unlikely to be significant, i.e. Ashbourne is not developing a new product that cannot be produced utilising existing zoned and planned residential capacity. In my assessment, a range of broader factors drive housing demand, including household demographic trends, access to employment and amenity, and migration inertia. These factors provide a degree of predictability in expected household growth and are already reflected in the housing demand projections.
29. In conclusion, I consider the housing capacity assessment prescribed by the NPS-UD to be an important resource that informs the assessment of regional significance under the FTAA, but not necessarily a determinative one. As acknowledged above, there may be other unique aspects of the project that make the development significant that goes beyond simple supply and demand.

Tim Denne:

30. I agree with FC on this point and disagree with TH. I do not believe that the project analysis should be constrained by current council plans for the size and location of incremental housing growth. Rather, the project analysis should assess whether the proposed development is viable and will contribute significant benefits, on its own attributes. In economic terms, local or regional supply and demand of housing is relevant to the extent that this affects prices, with the associated contribution to producer and consumer surpluses.
31. Similarly with infrastructure planning, the relevant consideration is not whether the project location and size is consistent with the council’s current infrastructure plans, but whether the project could pay for its infrastructure and still be viable and provide significant benefits.

32. Without taking this approach, it is likely that FTAA approvals will exclude projects which are disruptive and have the potential for significant benefit.

Q3: The appropriate basis of assessment (i.e., CBA v EIA).

Fraser Colegrave:

33. FC considers this to be a false dichotomy. The FTAA does not prescribe an analytical method, and it is not simply a choice just between cost-benefit assessment (CBA) on one hand, or economic impact assessment (EIA) on the other.
34. For example, FC's assessment of Ashbourne was not just an EIA. Instead, the results of the EIA were fed into a comprehensive assessment of the costs and benefits of the proposal vs foregone rural production using the Total Economic Value (TEV) framework.
35. Specifically, FC used an EIA to establish the scale, timing, and distribution of market activity (which help determine "significance") but then used TEV to address opportunity costs and non-market effects for the site's highly productive land. The result is a comprehensive picture of the proposals economic costs and benefits compared to the most likely use of the land absent it, which FC considers the most relevant consideration.
36. FC further notes that EIA is routinely used to estimate the impacts of proposed developments on employment, wages, and GDP across every consenting pathway that he has worked under. This not only reflects the fact that EIAs are relatively intuitive and easy to explain, but that they also produce metrics like jobs and GDP that have always been of keen interest to Local and Central Government.
37. While FC acknowledges that employment and wages represent a cost to businesses, they also represent the utilisation of human resources. They signify the financial means by which households can cater for their own social and economic well-being, which is of particular interest under the RMA.
38. Indeed, Section 32 of the RMA requires an assessment of effects on employment and economic growth, with the latter often measured by changes in GDP. Similarly, the previous (Covid-related) Fast Track Act¹ required an assessment of effects on employment, which the EIA readily provides. It is therefore no surprise that EIA is commonly used to assess the scale and significance of economic stimulus associated with proposed developments.
39. FC agrees that, like all analytical tools, EIA can yield unintuitive results if applied to unrealistic or artificial scenarios.² This reflects the standard "garbage in, garbage out" principle common to all models, rather than a limitation unique to EIA. TD's framing of this issue as a model-specific limitation is therefore

¹ COVID-19 Recovery (Fast-track Consenting) Act 2020

² Such as digging a hole and then refilling it.

misplaced.

40. In order to keep an EIA conservative, however, FC excludes so-called “induced effects.” These reflect the additional effects of increased spending by people employed directly or indirectly due to the project. However, such spending would likely occur anyway, so FC only includes direct and indirect effects. The latter are critical to assessing the economic impacts of construction-related projects because such a large proportion of each job is sub-contracted, and inter-industry building supply chain effects can only be estimated via an EIA. A CBA cannot do this.

41. FC also queries TD’s understanding of GDP calculations, especially in this context. In short, there are three ways to measure GDP, one of which is to simply sum the payments made to the various factors of production, which are:

41.1. Wages and salaries paid to workers;

41.2. Payments made for capital inputs (like land and machinery); and

41.3. Pre-tax profits paid to entrepreneurs.

42. In practice, this is commonly measured as EBITDA + wages and salaries paid.

43. TD, conversely, states that value added (i.e. GDP) equals a firm’s profits *if it had no labour cost*, plus wages and salaries paid. This is patently incorrect, and it raises issues (in FC’s mind) about TD’s understanding of the analytical task at hand.

44. More generally, FC queries how TD’s proposed approach could be applied in the context of deeply interrelated property sub-markets, where a change in one naturally flows through to all the others. For example, an increase in the supply of zoned land will (eventually) flow through to the building construction market, and then again into the markets for buying and/or renting new buildings. See the stylized figure below.

Figure 1: Sub-Markets that Comprise the Wider Property Market



45. In FC's view, TD's proposed methodology errantly seeks to (somehow) distil these interconnected markets into just the one for developable land. In doing so, TD's method fails to capture the wider system effects that flow from a change in that market, and for which a multi-market modelling system would be required.
46. In fact, whether TD realises it or not, FC considers that TD is effectively advocating not just for the use of CBA, but also for the use of a general equilibrium (GE) model to capture system-wide effects just noted.
47. I agree that such a model would be nice to have if the necessary data were available, but these models are extremely complicated, they operate as a pure black box, and the information required to populate them does not exist at the spatial granularity of individual districts, let alone townships. Indeed, FC is not aware of any economist in New Zealand that routinely runs a GE model to assess the likely impacts of proposed housing developments. They may sometimes be needed to assess very large and first-of-their-kind operations with high environmental risks (such as seabed mining), and where the necessary information is more readily available. But not for housing.
48. In FC's view, TD has mistaken the economist's role in this context with a policy analyst working for (say) Central Government. In the latter, an economist may be required to synthesise and weigh up all the costs and benefits of a policy or proposal, regardless of whether they are economic in nature or not, to form an overall view. This is because their analysis is often the primary (or sole) assessment relied on.
49. However, that is not the analytical task here. In this context, the economist's role is to assess the likely *economic* pros and cons of the proposal relative to an agreed, plausible counterfactual. The results of that assessment are then synthesised by the planner with the outputs from all other technical assessments to inform their overall planning assessment/environmental effects (or AEE). Consequently, there is no need for the economist to attempt to address non-economic effects – as TD seems to propose – because it would cause double counting of non-economic effects. Moreover, given that many of those non-economic issues will also feature in legal submissions, TD's approach would risk some effects being triple counted, and undermine good decision-making.
50. All that aside, FC considers TD's proposed CBA methodology unworkable because it fundamentally relies on a range of information that is simply unavailable, particularly within the time and resources available for such assessments.
- 50.1. *Unclear counterfactual* – TD appears to disagree with the counterfactual used in our analysis – which was the continuation of rural production on the subject site – but he does not describe the counterfactual that would be used in his assessment of Ashbourne's significance. In FC's view, the results of TD's proposed approach would be extremely sensitive to this counterfactual, and if it used the same one as in FC's substantive assessment, very similar conclusions would be reached.

50.2. *Parameter Immeasurability* – TD’s proposed approach requires accurate estimates of the supply and demand elasticities prevailing in several future interrelated property markets to be available at very fine-grained geographic levels, like individual townships. Absent them, the entire analysis is purely assumption driven, and even TD admits that the information required to estimate those parameters isn’t available.³ Oddly, he then suggests that they could be inferred from similar developments elsewhere, but there are no comparable nearby benchmarks. And, even if there was, there would be an endless debate about the extent to which different developments can and should be used as benchmarks for that purpose. To make matters worse, the analysis is highly sensitive to the assumed elasticity values, with even small changes causing explosive changes to the end results.

50.3. *Overlapping Producer and Consumer Surpluses* – one significant challenge with TD's proposed approach is that the consumer surplus in one market becomes the producer surplus in another. It is unclear how that double counting would be resolved or even measured in practice. Again, TD has not provided a clear roadmap on how his academic approach would be implemented in the real world.

50.4. *Discount Rate Sensitivity* – for private projects, discount rates are both firm- and project-specific because they depend on the unique capital structure and financing conditions applying in that space and time. However, there is no reliable way to infer project-specific discount rates for an organisation without first assessing its weighted average cost of capital, which itself can be onerous.⁴ Not only that, but the results of the CBA can flip from positive to negative, depending on the discount rate applied. TD’s preferred (CBA) method is therefore not only highly sensitive, but also potentially inconclusive and thus – in FC’s view – ultimately unreliable in this context.

51. Given all the above, a CBA would be a fragile and assumption-laden approach that risks imparting a spurious degree of precision while inadvertently obscuring the issues that really matter for the FTAA, which are clarity on the scale and significance of its likely benefits versus its opportunity costs.

52. For the record, FC notes that TD has never applied a CBA to a housing development under the FTAA, nor (as far as FC understands) under any other consenting pathway. As a result, in FC’s opinion, there is no evidence that TD’s proposed methodology is remotely workable in practice, particularly within the limited timeframes available for completing FTAA assessments.

³ See page 12 of TD’s peer review.

⁴ That, in turn, also requires something like the Capital Asset Pricing Model (or CAPM) to also first be used to estimate the cost of equity, before the WACC can be derived. Again, this is not straightforward at all.

Tim Heath:

53. I agree with FC that a CBA is not required under the FTAA.
54. In my view, it is not solely the economists' role to quantify the significance of costs, particularly non-economic costs. Rather it is the expert panel's task to weigh up the significance of adverse impacts against the claimed regionally or nationally significant benefits in their proportionality assessment.
55. To this end, I consider an EIA to be an appropriate indicative measure of the gross scale of economic activity generated by the project under the FTAA of which any adverse impacts can be considered against.

Tim Denne:

56. On the basic choice of **EIA vs CBA**, FC suggests the differences have been overstated and that he has included components of both, particularly by including the total economic value (TEV) assessment for the opportunity cost of land. I agree that the TEV assessment was a useful addition, although I had some issues with its application which I believe could result in his over-valuing dairy farming. However, on the wider issue, I believe that there are important differences.
57. Chief amongst these differences is CBA's focus on including opportunity costs. FC has included an opportunity cost of land but has not applied this approach to other input costs including labour (see below) and capital (using a social discount rate). In addition, the Insight Economics analysis has included some partial environmental evaluation via the land costs and the impacts of solar farms (albeit not using relevant local data) but has not listed or assessed the environmental costs of the development itself.
58. Some of the argument against use of CBA, made both by FC and TH, is that it is too onerous compared with EIA. I disagree and think the value is in the framework and the way that it forces the analyst to think through the net contribution of the project. By using multipliers, the GDP analysis provided has identified what is essentially the average GDP associated with a project of that mix of housing types and other components. In a competitive housing market, the assumption would be that the profits achieved would be competed away such that the average returns were equal to the cost of capital for such a project. Thus a project with average returns would have a net present value (NPV) that was just positive but would not have an additional surplus that would represent significant benefits.
59. The Ashbourne development may have an additional surplus, but because the analysis has used multipliers to identify profit, rather than project-specific information (eg based on assumed house prices and sales), we cannot identify this additional surplus. I would suggest that a CBA approach would force the analyst to think through and identify these issues.

60. FC questions my **understanding of GDP** calculations, based partly on my comment that value added (i.e. GDP) equals a firm's profits *if it had no labour cost*, plus wages and salaries paid, which he states is patently incorrect. I agree that the comment is incorrect. It is based partly on my misreading of his text. In his original analysis, FC and colleagues state that value added is the difference between a business's inputs (excluding wages and salaries) and the value of its outputs. Thus, the positive contribution of wages and salaries to GDP is captured in that calculation, rather than its later addition. My original misreading was based on the then listing of wages and salaries as though (in my rapid assessment) it had been counted as an additional benefit, rather than this being simply a way of presenting the results. Despite my wording, in my calculation of the component parts of GDP in my Tables 2 and 3, I believe I have correctly calculated the separate components of FC's GDP calculation into "wages/salaries" and "other", rather than the double counting of the value of wages/salaries, as would be the outcome consistent with the statement in my text.
61. All that said, the point being made remains. This is the question of **how to treat labour costs** in the assessment of project value, i.e. is it a cost or a benefit?
- 61.1. The approach used in CBA is to treat wages paid as a transfer payment (a cost to a company and a benefit to the worker) but to calculate a social (or community) opportunity cost of labour that is equal to the value of what the worker would have been doing otherwise. This takes account of situations where there is significant unemployment by reducing the assumed opportunity cost. Thus, the estimated company profit would only be the same as the estimate of the profit component of GDP if all the workers would otherwise be unemployed.
- 61.2. In GDP analysis, the value of the wages paid is treated as a benefit (or effectively a zero cost). Account is taken of what a worker would have been doing otherwise only if there is a full counterfactual scenario analysis, in which the wages/salaries the workers would otherwise have been paid is estimated. This is routinely part of general equilibrium (GE) analysis but often not in an EIA using i-o based multipliers.
62. I suggest that to count the full value of wages and salaries as a benefit, without considering what the workers would be doing otherwise, is to over-estimate the benefits.
63. FC suggests I have not presented a clear **counterfactual**, i.e. the assumptions around what would happen otherwise (absent the project). The counterfactual is largely built into the CBA approach by identifying all costs as opportunity costs. Other effects, such as environmental impacts, can be assessed either as the change in environmental value or by doing a full counterfactual analysis in which two scenarios are compared: with and without the project.
64. As a general conclusion, I still maintain (consistent with the stated views of the Treasury and Auckland Council) that a CBA is the right analytical approach to

addressing the community benefits of a project and that EIAs consistently fail to address the issue of opportunity costs across all resource inputs.

Q4: An explanation of multipliers used by the Applicant and how they are used.

Fraser Colegrave:

65. FC acknowledges that input-output (I-O) multipliers were used to estimate the direct and indirect economic activity generated by development expenditure. These multipliers represent the relationship between a dollar of spending in a given industry and the associated effects on GDP, wages, and employment. They are used widely in New Zealand for economic impact analysis, including in regional economic modelling and infrastructure assessments.
66. FC notes that multiplier analysis describes the scale and distribution of economic activity, not the net welfare gains or losses from the proposal. For matters relating to opportunity cost and the appropriateness of alternative land uses, FC undertook a separate TEV analysis, which directly addresses the points raised in TD's review regarding wider cost-benefit considerations.
67. FC notes that Statistics New Zealand (Stats NZ) publishes national I-O tables, with the most recent being several years out of date. For Ashbourne, FC used updated multipliers derived by applying the same I-O framework to more recent industry data.
68. These updated multipliers were derived by FC using Stats NZ source data, including the Annual Enterprise Survey, Linked Employer-Employee Data, Quarterly Employment Survey, and Monthly Employment Indicators. These datasets allow estimation of employment, value-added and wage relationships across industries.
69. FC notes that while the derivation process is proprietary, the underlying structure follows the same logic as the Stats NZ I-O tables, updated to reflect more recent economic conditions.
70. In response to TD's comments regarding the source and transparency of multipliers, FC notes that while the individual coefficients were not reproduced in the substantive report, the underlying approach is consistent with standard practice in EIA. It is the same framework used by other consultancies undertaking FTAA economic assessments and supports comparability of results across projects considered by different panels.
71. Given the intended audience for the substantive assessment (planners, economists, and other experts familiar with these tools) and the length and scope of the report, it was considered reasonable to summarise the approach adopted. Had further methodological detail been requested at the time, FC would have been happy to provide this.

72. The procedure to apply these multipliers in the EIA was as follows:
73. Each component of project expenditure (such as residential construction, civil works, solar farm installation, commercial construction, retirement village construction, planning and design, etc.) was mapped to its corresponding I-O industry classification.
74. Direct impacts were calculated by multiplying the expenditure in each industry by that industry's direct FTE, wage, and GDP multipliers.
75. Indirect impacts were calculated by applying the supply-chain multipliers linked to each industry, representing upstream purchases such as materials, manufacturing inputs, freight, etc.
76. These impacts were summed across all project components to produce the total one-time and ongoing activity reported in Table 10 and Table 12 of the substantive assessment.
77. To assist the panel, FC provides a simplified, hypothetical example of the mechanics of multiplier application. The values used below are for illustration only.
78. Using the residential building construction industry as an example, each \$1 million of expenditure is (indicatively) associated with a direct FTE multiplier of 1.5, a direct wage multiplier of \$0.10 million, and a direct GDP multiplier of \$0.15 million. These direct effects represent the labour, wages, and value added generated by firms undertaking the construction work.
79. Construction activity also generates wider supply-chain demand. The corresponding indirect multipliers indicate that each \$1 million of expenditure supports a further 3.5 FTEs, \$0.30 million in wages, and \$0.50 million in GDP across upstream suppliers.
80. Taken together, the combined effect of \$1 million of expenditure associated with residential construction is therefore 5.0 FTEs, \$0.40 million in wages, and \$0.65 million in GDP. If a project involved, for example, \$40 million of expenditure allocated to this industry, the impacts would simply scale in proportion using the same relationships.
81. This methodology is applied across project components mapped in the Ashbourne assessment, including civil works, non-residential construction, solar installation, professional services, and retirement village activities.
82. Regarding TD's comments on employment and sectoral breakdowns presented in Table 11 of the substantive assessment, FC notes that the distribution of employment across industries follows directly from the structure of the I-O tables. These tables capture how expenditure allocated to one industry produces demand for goods and services from others. The sectoral employment output

therefore reflects the pattern of upstream supplier relationships, rather than representing forecasts of changes to regional labour supply or labour market equilibrium. They are descriptive of economic activity, not predictive of long-term structural shifts.

83. FC also notes that TD's critique of "multipliers" appears at points to conflate two distinct concepts: (i) I-O multipliers used to estimate total GDP, wage, and FTE effects across the economy; and (ii) scalars or rules of thumb used within the cost build-up (such as the assumed shares of total costs allocated to planning, design, and infrastructure). The former are derived from the I-O framework described above; the latter are project-level assumptions reflecting how total capital expenditure is typically apportioned across cost categories.
84. For Ashbourne, scalars such as the 2% allowance for planning, design, and consenting, and the 20% allowance for infrastructure, were applied as pragmatic rules of thumb derived from FC's experience on more than 100 large-scale development projects across New Zealand. These parameters are consistent with the expectations of the applicant and other members of the project team and have not previously been challenged by practitioners who regularly work with development feasibility and infrastructure funding in comparable contexts.
85. In response to TD's observation that higher project costs result in higher measured economic impacts, FC agrees that this is a known property of multiplier-based EIA. Because the approach measures activity rather than net welfare gains, higher expenditure naturally produces larger gross activity estimates. FC has not used these estimates to infer project viability, profitability, or the capacity to fund infrastructure. Questions relating to opportunity costs, economic efficiency, and infrastructure funding were addressed separately through the TEV analysis and the subsequent response to the peer review.
86. Finally, in relation to TD's concerns about the treatment of infrastructure costs, FC clarifies that these costs were included because they form part of the overall construction activity associated with the project and therefore contribute to the gross economic impacts measured in the EIA framework. FC agrees that issues relating to viability and the ability of the developer to meet infrastructure funding requirements fall outside the scope of the multiplier analysis itself and require separate analytical tools.
87. FC considers that the multiplier analysis undertaken is a standard, methodologically sound approach that is consistent with how other substantive FTAA proposals have been assessed. It provides a consistent means by which to describe the scale of economic activity associated with Ashbourne's development while the TEV analysis separately addresses the opportunity-cost and net-benefit considerations highlighted in TD's review.

Tim Heath:

88. I note that in my review of FC's EIA, I was satisfied that the methodology and

approach utilised to estimate economic activity generated was appropriate. Although I did not undertake an in-depth critique of the EIA, given our fast track work elsewhere in the country utilising the EIA approach, the economic activity and employment numbers generated appeared reasonable for a project of this scale.

Tim Denne:

89. I am grateful to FC for the additional information about the source of the multipliers. I am somewhat surprised that more references were not supplied to justify all of the assumptions used, and that this is not standard practice.
90. FC notes that the approach he has used measures activity rather than net welfare gains, and that higher expenditure naturally produces larger gross activity estimates. I suggest this is a key concern of the EIA approach. As the Treasury notes with respect to EIA, "Because it measures the activity generated, it treats costs as a benefit."⁵ The CBA approach focuses on identifying the optimal level of investment rather than one in which more costs equal more benefit.

Q5: Whether the proposal is of "regional significance".

Fraser Colegrave:

91. FC strongly maintains that the proposal is regionally significant. It represents a large increase in future land supply by an experienced, motivated, and well-resourced developer, and it is required to keep pace with demand while tempering the rate of future house price inflation. It is precisely the sort of project that the FTAA was designed to help unlock, in FC's view.
92. FC refers the panel to the economic benefits extensively covered in his substantive assessment, from which regional significance can readily be gleaned.

Tim Heath:

93. Although the project is of a scale that could be regarded as regionally significant, I do not consider its consequential economic impacts on the region to be significant. As outlined in my evidence, the overall economic impact must be considered in light of existing market conditions and as such, it is my position, that a material proportion of the development's impacts are likely to represent displacement or a transfer of activity that would have occurred elsewhere in its absence.
94. Whether this displacement effect is treated as a mitigating factor that reduces the claimed benefits (i.e., realised benefits) or as a significant adverse effect to be weighed against the gross economic benefits is a matter for the panel to determine. In either case, the outcome is the same: once displacement is

⁵ p54 in NZ Treasury (2015) Guide to Social Cost Benefit Analysis.

properly accounted for, the proposal is unlikely to materially impact the level of economic activity, within the region, than would occur in its absence.

Tim Denne:

95. As noted above, it is difficult to tell the regional significance of the project from the data provided because the multiplier methodology used has reported average effects of a project of this type, rather than the project-specific impacts from which any significant benefits could be identified.

Q6: Considerations as to viability regarding part or full payment of infrastructure costs.

Fraser Colegrave:

96. FC considers this part of TD's peer review to further highlight his lack of experience and understanding about the way that developers approach the infrastructure required for this sort of project.
97. Having worked on more than 100 local infrastructure funding projects for dozens of local and central government agencies and developers, including helping MPDC with these issues since 2008, FC unequivocally rejects TD's concerns about the impacts of infrastructure costs on project viability.
98. In FC's view, TD seems to be querying the applicant's willingness, ability, and motivations to fund or provide the infrastructure required for its development. TD imparts a belief that Ashbourne would not be financially viable if it paid its own way for infrastructure, however that is not the case. FC considers it somewhat incredulous that TD thinks the applicant would not have considered those costs and factored it into its own workings before pursuing the fast-track application. This is both surprising and enlightening.
99. Indeed, there is no evidence before the panel to suggest that the applicant would shirk its infrastructure funding responsibilities, and our assessment and various follow-up memos have made that abundantly clear, in FC's view.

Tim Heath:

100. The development should be viable with full payment for its fair share of the relevant infrastructure costs, whether this is assessed through an infrastructure agreement or through mechanisms such as development contributions. This includes the proportional cost of bringing wider infrastructure forward in time. I should note however that this is a baseline condition I would expect to be reflected in a developer infrastructure agreement. The economic consideration I discussed in my evidence is the indirect flow-on effects to the efficiency of the wider infrastructure system. Council still has to fund and maintain infrastructure in areas of existing zoned capacity and a slow down of growth in these areas has the potential to increase Council's infrastructure burden through increased

marginal costs. This is a negative externality that cannot easily be transferred to the applicant.

Tim Denne:

101. FC has rather misinterpreted my comments on infrastructure costs and the ability of the developer to fund them. My critique is aimed at the assertion made by TH that the key question is over who pays and whether the financial mechanisms noted by FC will be employed in practice. My assertion is that the key issue is whether the developer could pay for the infrastructure and still have a viable project. In this regard, and contrary to what FC is suggesting, I have not suggested this developer could not pay. Rather, I have argued that FC has not presented the data to enable that conclusion to be reached. This is because, as stated several times above and in my review, the data provided rely too much on general multipliers rather than project-specific information, such as on expected house prices, sales and revenues and their timing.

Confirmed: 11/12/2025

Expert's name and expertise	Party	Expert's confirmation
Fraser Colegrave (FC)	Matamata Development Limited	
Tim Heath (TH)	Matamata-Piako District Council	
Tim Denne (TD)	EPA	