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Attention: Matthew Ah Mu

Dear Matthew

Beach Road Economics - High Level Review

As requested by Auckland Transport, Beca Limited (Beca) has undertaken a high level review of the Beach Road Cycle Highway economic evaluation. This economic evaluation was undertaken by Auckland Transport in September 2014 as part of the construction funding application. This high level review has been carried with specific focus on whether the economic efficiency profile would change using the latest cost estimates.

Based on the actual cost expended on Stage 1 (assumed to be \$2.8 million) and an expected estimate of \$2.32 million for Stage 2, the revised benefit to cost ratio (BCR) for the project is 2.2. Should the Stage 2 costs rise by a further 10% and 20%, the BCR for the project would decrease to 2.1 and 2.0 respectively.

It should be noted that this was evaluated for the project as a whole (rather than just for Stage 2). Typically in a BCR analysis, previous costs expended (and benefits realised) are considered to be a 'sunk' costs and excluded from analysis. In this case, the BCR presented above is for the entire project, with costs for Stage 1 updated using the actual costs and benefits assessed previously used. Should the actual number of cyclists in Stage 1 be higher than previously estimated; this would have a further positive impact on the BCRs presented above. To calculate the number of new cyclists in the previous assessment, the number of existing cyclists is a required input and the previous evaluation had based this on the cycle counts on Stanley Street. Based on this assessment, a cycling demand of 326 new cyclists was estimated for the Beach Road Cycle Highway project. This estimation was deemed to be conservative given the completion of the adjacent Grafton Gully cycleway which could mean higher number of cyclists. If any Stage 2 cost increases are kept within 20% of the expected estimate, the project BCR would remain above 2.0 as a Medium economic efficiency profile project. For this project to move to a High economic efficiency project, the number of cyclists would need to almost double.

Yours sincerely

Jerry Khoo
Senior Engineer - Transportation

on behalf of

Beca Ltd

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