
448PN – P2G Design Surgery II

Wednesday 14 August 2013

West Plaza Hotel (Dorset Suite)

Meeting Notes

Purpose of Meeting:

- Present each specialist's assessment of the options developed for this project, which includes: benefit cost ratio (transportation); landscape, ecology, resilience, and archaeology.
- Discuss and challenge specialists' assessments with the wider team.
- Present the preferred option to the wider team, which best meets the project objectives with the least overall social, community and environmental impacts.

Summary of Key Ideas:

P2G Options

1. Connection of P2G to Transmission Gully (TG) should remove some of the pressure on SH1.
2. Interchange at Horikiwi introduces challenges, such as, increasing traffic levels between Horokiwi and Petone would require increasing the number of lanes on this section of SH2 from 4 to 6.
3. P2G estimated to have AADT of 32000, approximately.
4. All options reduce traffic on SH1 and SH2.
5. Option A induces more traffic on SH1 than all other options as this option requires a longer section of SH1 to be upgraded to 6 lanes than Options B and C. Option D does not require upgrading SH1.
6. Option B induces significant traffic on local roads within Tawa and Grenada as it only comprises north facing ramps to SH1 at Tawa (with no direct connections to local roads).
7. Options C and D perform better than A and B;
8. Option D has more potential advantages than Option C such as long term capacity, resilience and reliability.
9. Preliminary estimates show that Option A is the most expensive while Option D is the cheapest.
10. Transportation benefits (VOCs and travel time) for A, C and D are similar.
11. Initial economic assessment shows Options A, C and D have a BCR of 2.4 while Option B has a BCR of 1.8.
12. Landscape assessment concluded that all options rated at significant negative because of the impact at the Petone section of the route. Option P1 has a significant negative visual

- impact on the coastal escarpment while Options P2 and P3 impact negatively on the Korokoro Valley and Belmont Regional Park. Vegetation can be used to mitigate effects.
13. Ecology assessment concluded that the majority of negative impacts occur at the Petone section of the route. Option P3 has the greatest negative impact and is rated at significant negative due to impacts on Korokoro Stream. Option P2 has a slightly less negative impact and is rated between moderate and significant negative. Option P1 has the least negative impact of the P options and is rated at moderate negative.
 14. Resilience assessment concluded that Option P1 was not only rated at significant negative but also compromised the security of SH2. On the other hand Options P2 and P3 were rated at substantial positive and did not compromise the security of SH2. Consequently any Option combined with P1 is rated at significant negative. Without P1, Option D provides the best resilience and is rated substantial positive while Options A and B provide the lowest rating at minor positive.
 15. Archaeology and landscape considerations are similar for all options.
 16. Overall Options C and D are preferred as they perform best with respect to transportation outcomes, offer the highest BCRs and are the most resilient.
 17. A preferred option at Petone is not clear at this stage and is narrowed down to P1 or P3. The preferred option will depend on the weighting given to ecology and resilience.

Other Projects

1. Upgrading SH2 from Petone to Ngauranga not a feasible option (BCR less than zero). This work assumes that Ng2A is going ahead. Requires moving out into the sea and relocating the railway.
2. Cross Valley Link alignments all have a BCR greater than 1. This work assumed a full interchange at Petone.

List of Issues and Concerns Identified:

1. Gradient of some lengths of P2G a concern: ~9% from Petone to the summit, ~2% from the summit to Grenada/Tawa/TG.
2. Concern that 80km/hr design speed is too low and how to achieve a road that looks and feels like an 80km/hr road, especially where the road is 6 lanes. There are 6 lanes to the summit however 2 would be crawler lanes for trucks. Depth of cuts influenced by design speed.
3. Full interchanges at either end of P2G are required in order for the road to function most effectively.
4. Improvements to SH1 are required where P2G connection made for Options A, B and C, specifically upgrading curves and capacity. These costs have been included in the estimates.
5. Possible that median separation should be considered for Option D from Tawa to TG.
6. Following the workshop NZTA has requested Opus to consider another Option at Petone which has better resilience than P1 and also avoids Belmont Regional Park. Opus agreed to develop this option, identified as P4 and include in the scoping phase.