



Mataikona Road: Emerging Preferred Option

Karakia timatanga

Kia tau ngā manaakitanga a te mea ngaro

ki runga ki tēnā, ki tēnā o tātou

Kia mahea te hua mākihikihi

kia toi te kupu, toi te mana, toi te aroha, toi te Reo Māori

kia tūturu, ka whakamaua kia tīna! Tīna!

Hui e, Tāiki e!





Agenda

Welcome/ Introductions Background

- ILM
- Community feedback
- Assessment process
- Option descriptions

Options Assessment

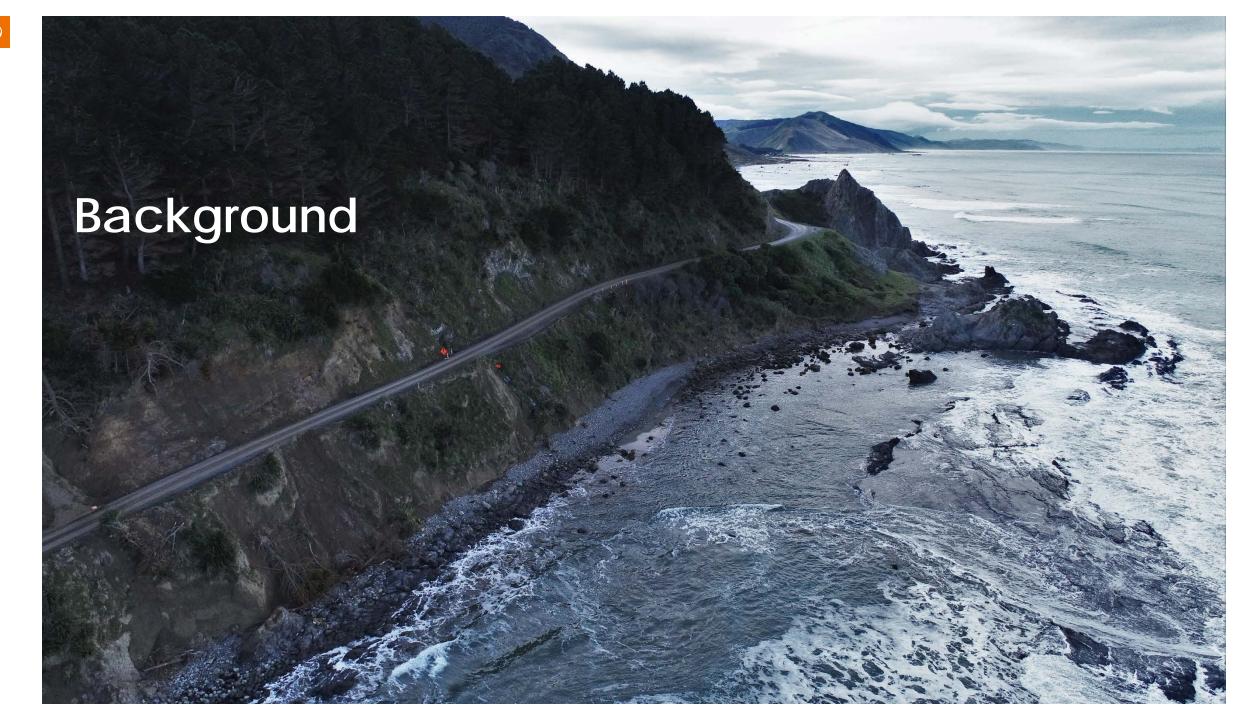
- MCA Criteria
- MCA Scoring
- Indicative economics

Your feedback

- Risks
- Preferences

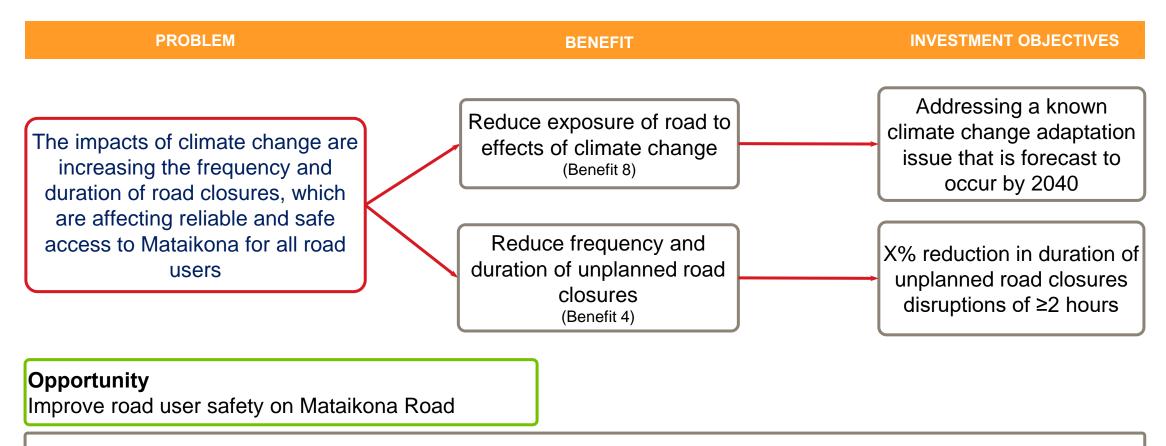
Next Steps







Investment Logic Map



Note: Benefits are aligned with Waka Kotahi's Land Transport Benefits Framework. Benefit numbers refer to the relevant benefit within the framework.



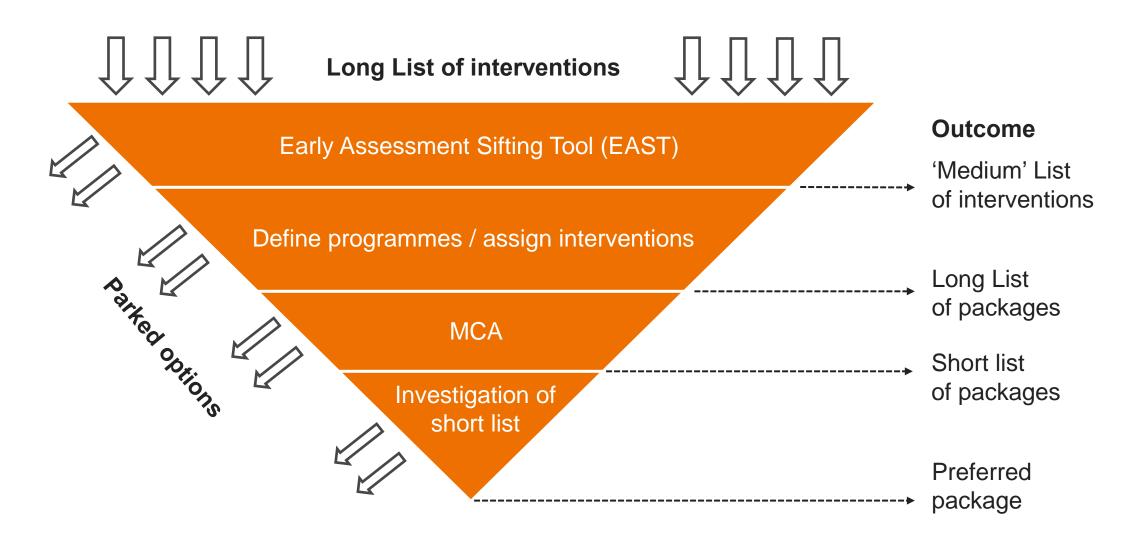
Community feedback

31 feedback forms received 65 survey responses received Topics of concern included:

- Seal level rise
- Coastal erosion
- Weather events
- Slips and dropouts
- Road closures
- Waio Hill
- Pack Spur Road
- Emergency response access
- Maintenance costs
- Safety



Assessment Process





Road Sections

- 1. Front Hill
- 2. Sandy Bay settlement
- 3. Second Hill
- 4. Second Hill to Suicide Rock
- 5. Suicide Rock
- 6. Middle settlement
- 7. South Mataikona
- 8. Mataikona
- 9. Mataikona River



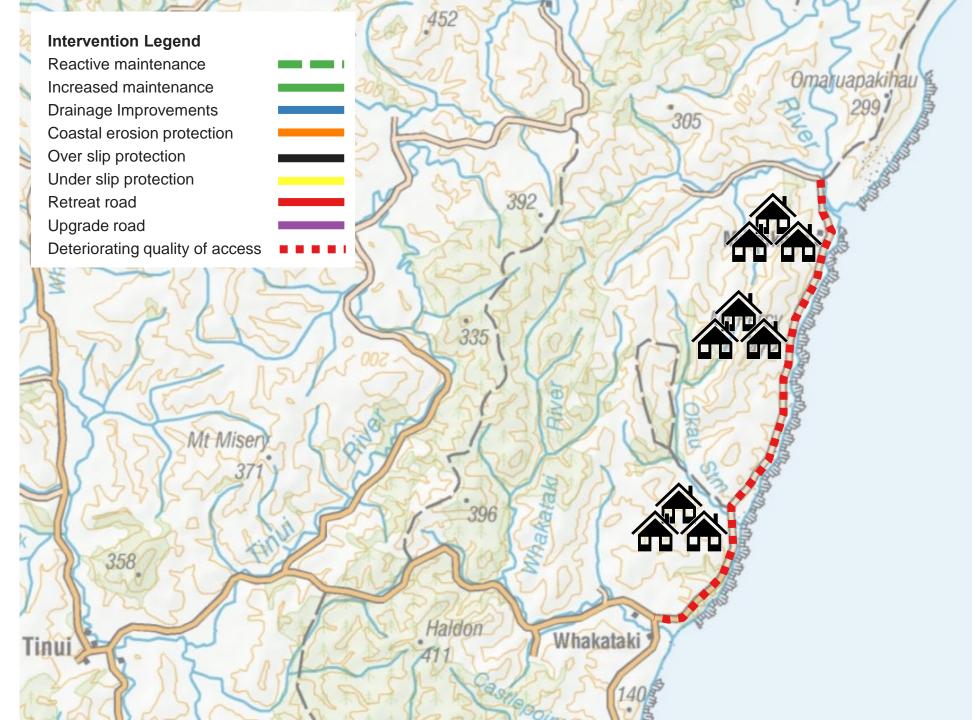


Option Descriptions

| Package | Description |
|------------------------------|---|
| 1. Do Nothing | Continue with reactive maintenance, but not necessarily restoring road to pre-damaged standard. |
| 2. Do Minimum | Continue with reactive maintenance, but not necessarily restoring road to pre-damaged standard after 2032. |
| 3. Minor Improvements | Preventative maintenance, and proactively rock armor a small number of key sites. |
| 4. Retreat | Retreat the road inland where there is space to do so. Maintain the remainder of the road with reactive maintenance. |
| 5. Strengthen | Address all problem areas along Mataikona Road with long term solutions |
| 6. Optimised (low cost) | A tailored programme of low-cost interventions that best address the problems in each section of Mataikona Road in the medium term. |
| 7. Optimised (high cost) | A tailored programme of high-cost interventions that best address the problems in each section of Mataikona Road in the long term. |
| 8. Alternate Route One | Upgrade Pack Spur Road and strengthen the Mataikona River section. Mataikona Road between Sandy Bay and the middle settlement will continue with reactive maintenance, but not necessarily restoring road to pre-damaged standard. |
| 9. Alternate Route Two | Upgrade Pack Spur Road and strengthen the Mataikona River section. Mataikona Road between Sandy Bay and Mataikona will continue with reactive maintenance, but not necessarily restoring road to pre-damaged standard. |
| 10. Alternate Route Three | Upgrade Pack Spur Road and strengthen the Mataikona River section. Mataikona Road south of Mataikona will continue with reactive maintenance, but not necessarily restoring road to pre-damaged standard. |

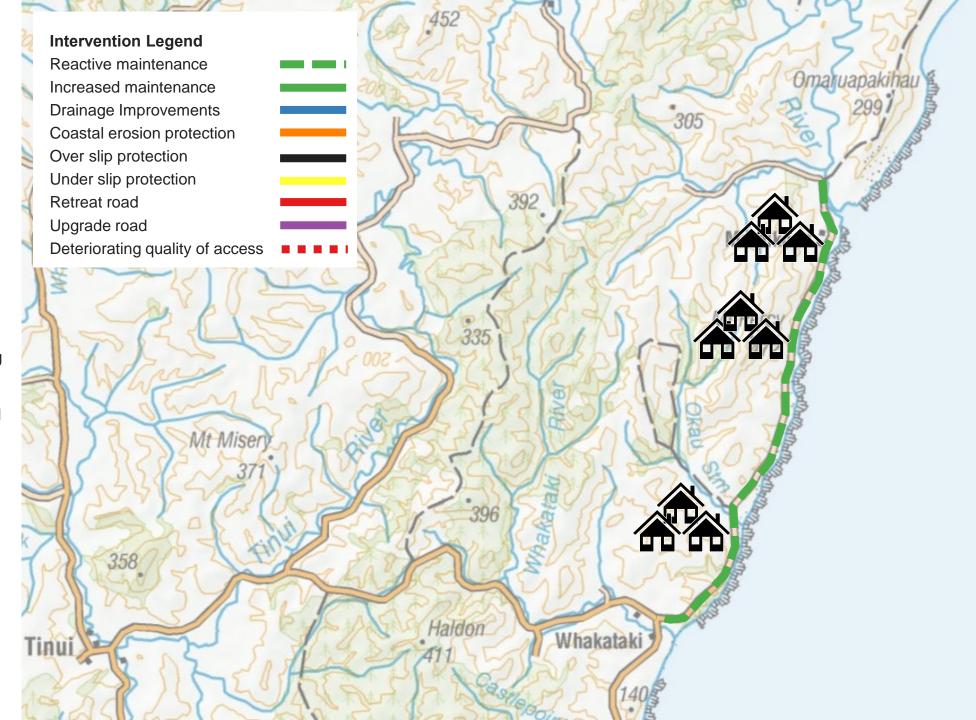
Do Nothing

Acceptance that key sections of the corridor cannot be protected against natural hazards, and access can no longer be guaranteed. Continue with reactive maintenance, but not necessarily restoring road to pre-damaged standard.



Do Minimum

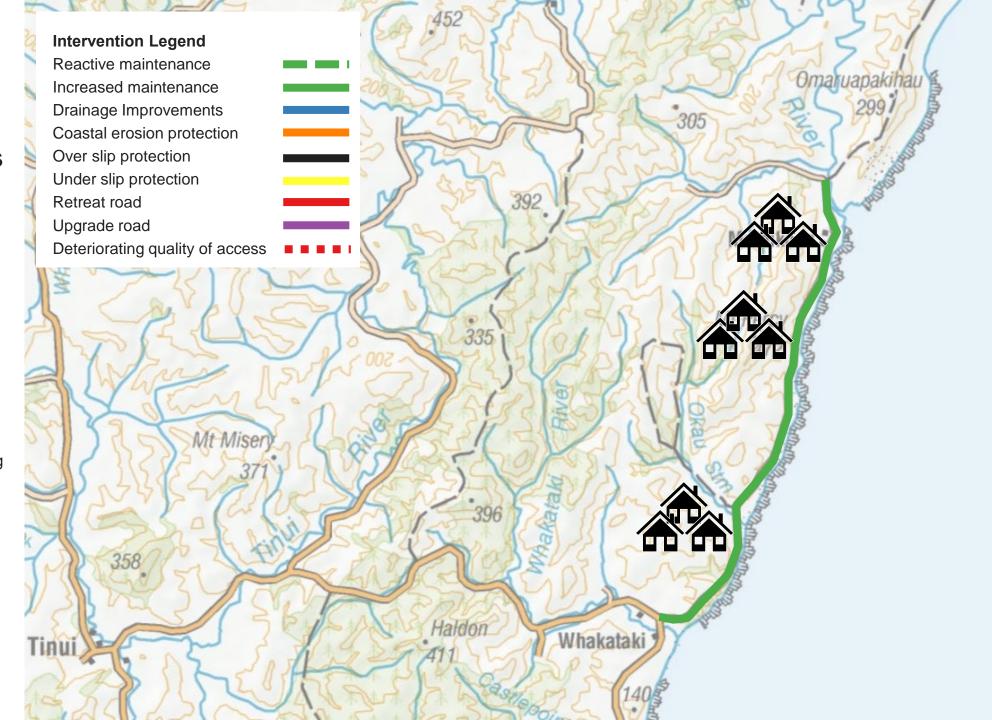
Plan for periodic disruption and trigger reactive response to natural hazards through emergency spend funding to maintain access along the corridor, but not necessarily restoring road to pre-damaged standard after 2032.



Minor Improvements

Increase preventative maintenance along Mataikona Road (drainage improvements, clean out culverts prior to storm events, etc).

Small fund for targeted rock armoring (or other appropriate strengthening works)



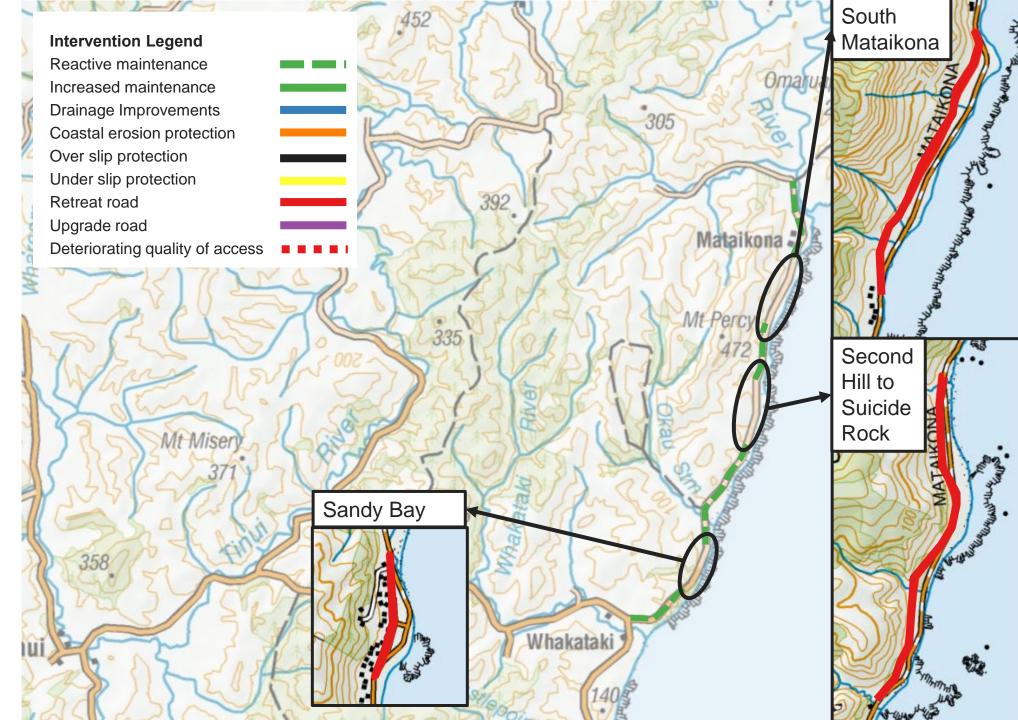
Retreat

Retreat the road inland where there is space to do so but maintain the alignment in front of the three settlements.

Maintain the remainder of the road as per the Do Minimum.

Retreat Road at:

- · Sandy Bay,
- Second Hill to Suicide Rock and
- South Mataikona



Strengthen

Complete longer-term repairs for over slips, under slips and coastal erosion in all areas of concern along the length of Mataikona Road.

1. Front Hill

- Drainage improvements
- Over slip protection
- Under slip protection

2. Sandy Bay

- Coastal erosion protection
- Drainage improvements

3. Second Hill

- Drainage improvements
- Over slip protection
- Under slip protection

4. Second Hill to Suicide Rock

- · Coastal erosion protection
- Drainage improvements

5. Suicide Rock

- Drainage improvements
- Over slip protection
- Under slip protection
- · Coastal erosion protection

6. Middle Settlement

- · Coastal erosion protection
- Drainage improvements

7. South Mataikona

Coastal erosion protection

8. Mataikona

Coastal erosion protection

Haldon

9. Mataikona River • Over slip protection • River erosion protection **Intervention Legend** Reactive maintenance Increased maintenance **Drainage Improvements** Coastal erosion protection Over slip protection Under slip protection Retreat road Upgrade road Deteriorating quality of access

Whakataki

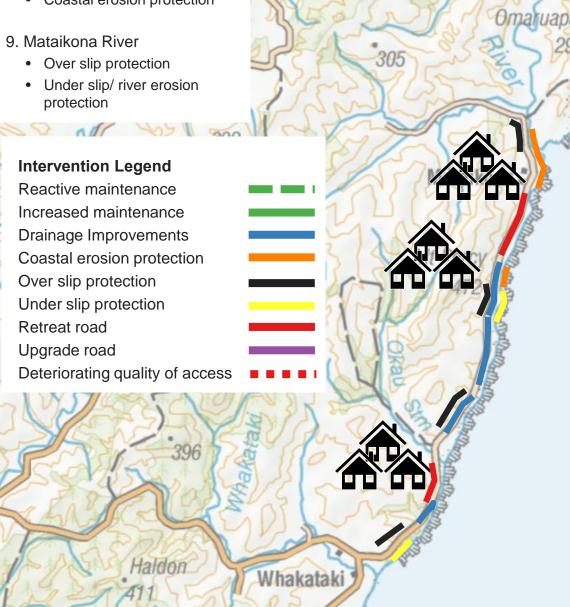
305

Optimised (low cost)

A tailored programme of low-cost interventions that best address the problems in each section of Mataikona Road in the medium term

- 1. Front Hill
 - Drainage improvements
 - Over slip protection
 - Under slip protection
- 2. Sandy Bay
 - Retreat road
 - Drainage improvements
- 3. Second Hill
 - Drainage improvements
 - Over slip protection
- 4. Second Hill to Suicide Rock
 - Drainage improvements
- 5. Suicide Rock
 - Drainage improvements
 - Over slip protection
 - Under slip protection/ Coastal erosion protection
- 6. Middle Settlement
 - · Coastal erosion protection
 - Drainage improvements
- 7. South Mataikona
 - Retreat road

- 8. Mataikona
 - Coastal erosion protection



Optimised (high cost)

A tailored programme of high-cost interventions that best address the problems in each section of Mataikona Road in the long term.

1. Front Hill

- Drainage improvements
- Over slip protection
- Under slip protection

2. Sandy Bay

Coastal erosion protection

3. Second Hill

- Drainage improvements
- Over slip protection
- Under slip protection

4. Second Hill to Suicide Rock

Drainage improvements

5. Suicide Rock

- Drainage improvements
- · Over slip protection
- Under slip protection/ Coastal erosion protection

6. Middle Settlement

- · Coastal erosion protection
- Drainage improvements

7. South Mataikona

Coastal erosion protection

8. Mataikona

Coastal erosion protection

9. Mataikona River Over slip protection • Under slip/ river erosion protection

Intervention Legend

Reactive maintenance Increased maintenance **Drainage Improvements**

Coastal erosion protection

Over slip protection

Under slip protection

Retreat road

Upgrade road

Deteriorating quality of access

Haldon



Whakataki









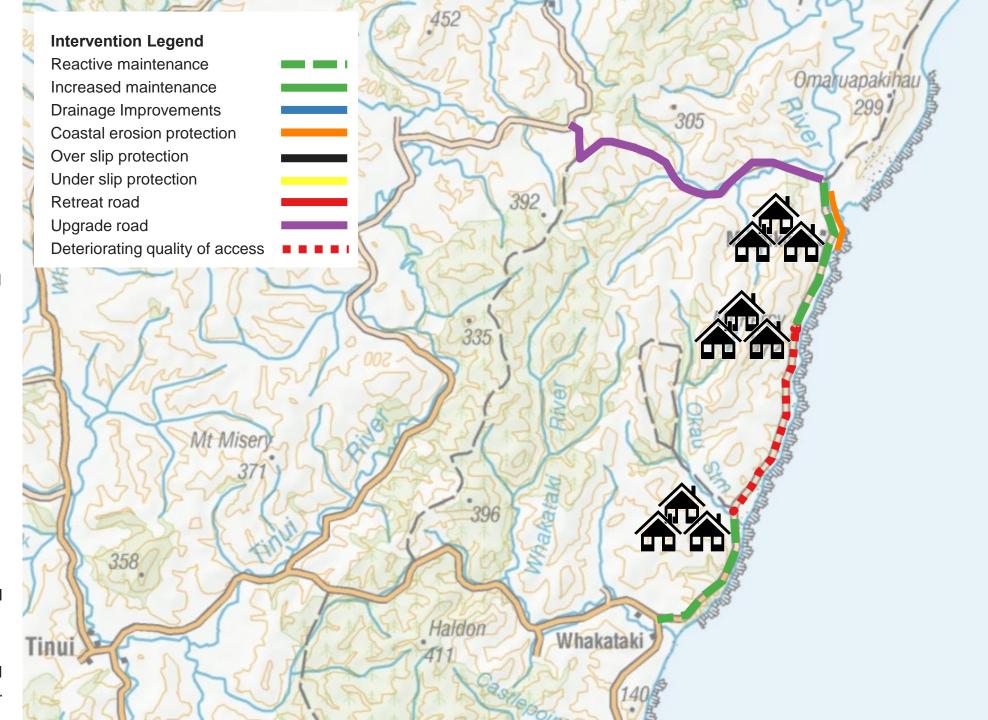
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Alternative Route 1

Upgrade Pack Spur Road so it is accessible for light vehicles in most weather conditions. Protect the Mataikona River section from erosion.

Mataikona Road between Whakataki and Sandy Bay, and Mataokona and the middle settlement will receive reactive maintenance, but not necessarily restoring the road to the pre-damaged standard after 2023.

Mataikona Road between Sandy Bay and the middle settlement will continue with reactive maintenance, but not necessarily restoring road to pre-damaged standard.

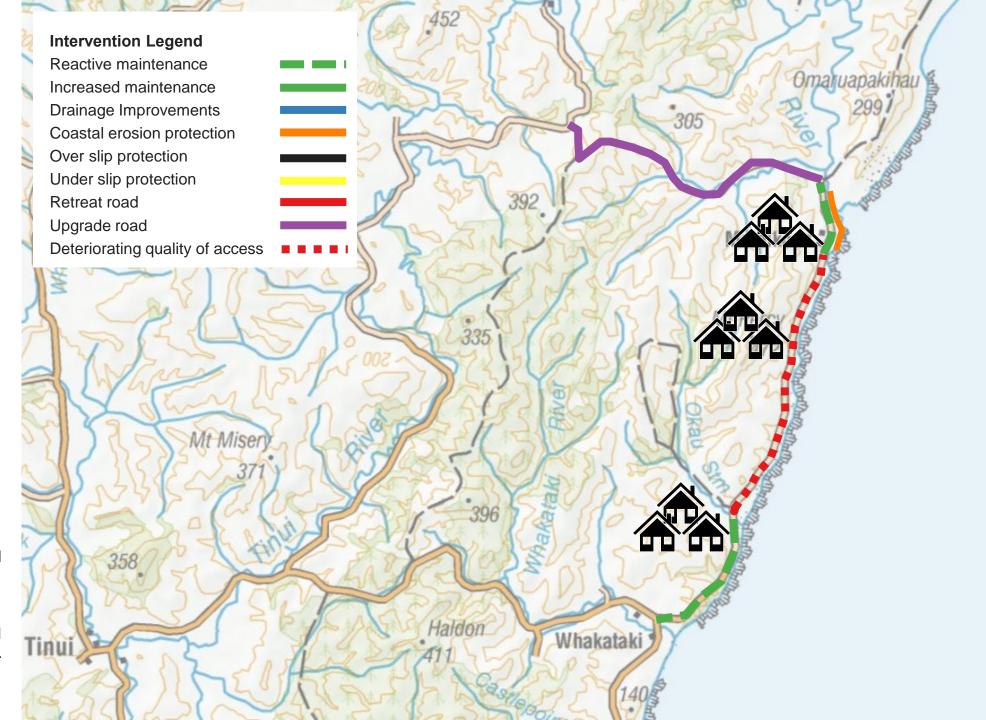


Alternative Route 2

Upgrade Pack Spur Road so it is accessible for light vehicles in most weather conditions. Protect the Mataikona River section from erosion.

Mataikona Road between Whakataki and Sandy Bay will receive reactive maintenance, but not necessarily restoring the road to the pre-damaged standard after 2023.

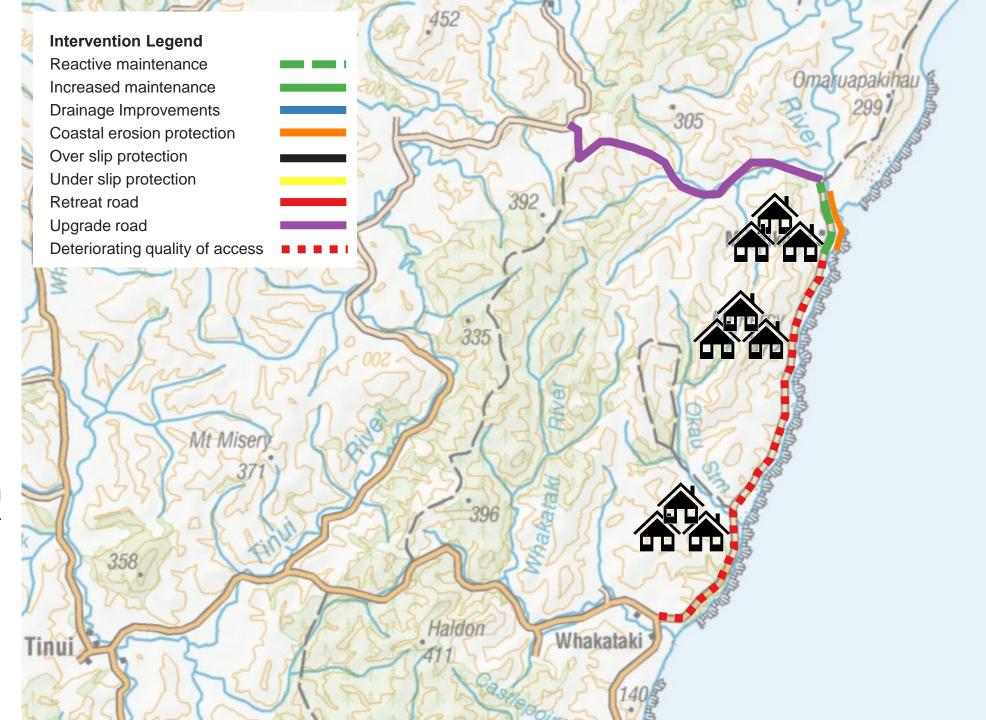
Mataikona Road between Sandy Bay and Mataikona will continue with reactive maintenance, but not necessarily restoring road to pre-damaged standard.



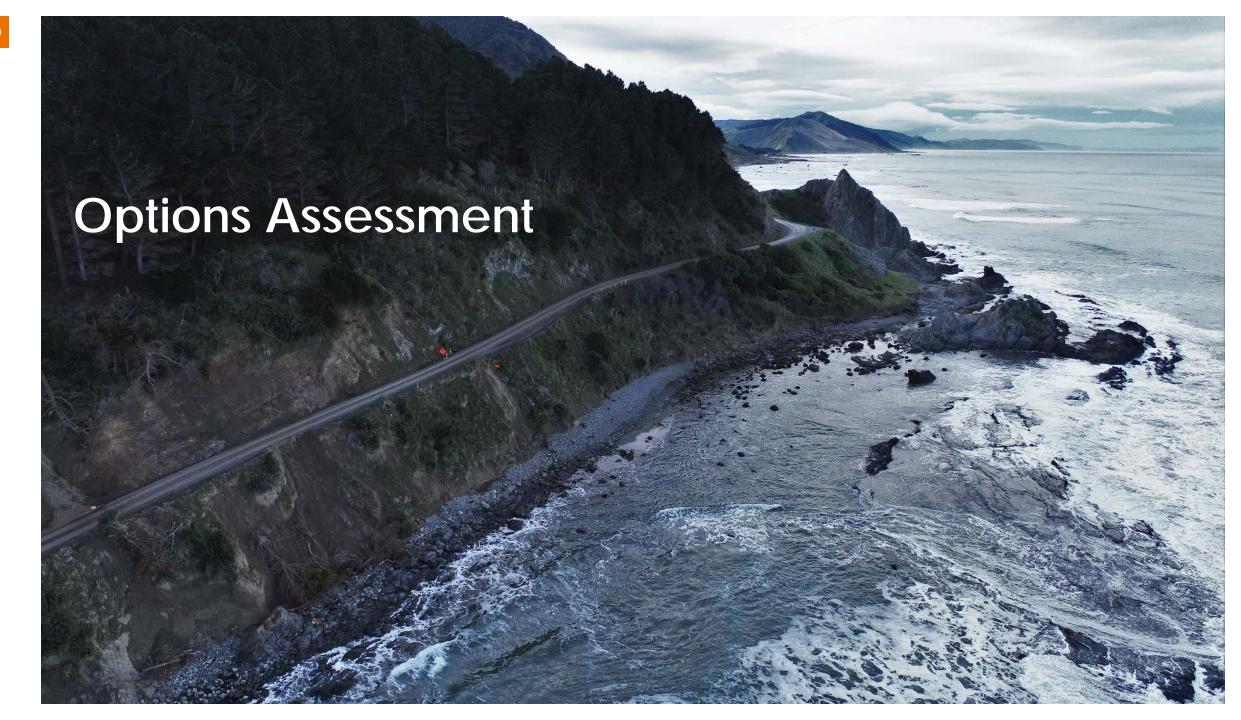
Alternative Route 3

Upgrade Pack Spur Road so it is accessible for light vehicles in most weather conditions. Protect the Mataikona River section from erosion.

Mataikona Road between Whakataki and Mataikona will continue with reactive maintenance, but not necessarily restoring road to pre-damaged standard.









MCA Criteria

| Theme | Criteria | Description | | | | |
|-----------------------------------|---|--|--|--|--|--|
| Investment Objectives (40%) | Addresses a known climate change adaptation issue (60%) | Does the option reduce exposure to climate change risk or other natural hazards over time? | | | | |
| | Reduction in duration of unplanned road closures (40%) | Does the option reduce the occurrence of unplanned road closures, or reduce the duration of unplanned road closures? | | | | |
| Wellbeings (20%) | Natural environment (40%) | How well does the option avoid or minimize adverse effects on the natural environment? | | | | |
| | Social and community (40%) | To what extent does the scheme effect social and community values, such as feelings of community and access to emergency services? | | | | |
| | Economic development and growth (20%) | How well will the option support the population and economic growth? | | | | |
| Critical Success Factors (40%) | Property impacts (50%) | What is the scale of property impacts? Can the necessary property rights be obtained? Does the option impact access? | | | | |
| | Technical difficulty (50%) | How difficult will the option be to design and construct? Are there any material supply constraints that will impact this? | | | | |



Scoring

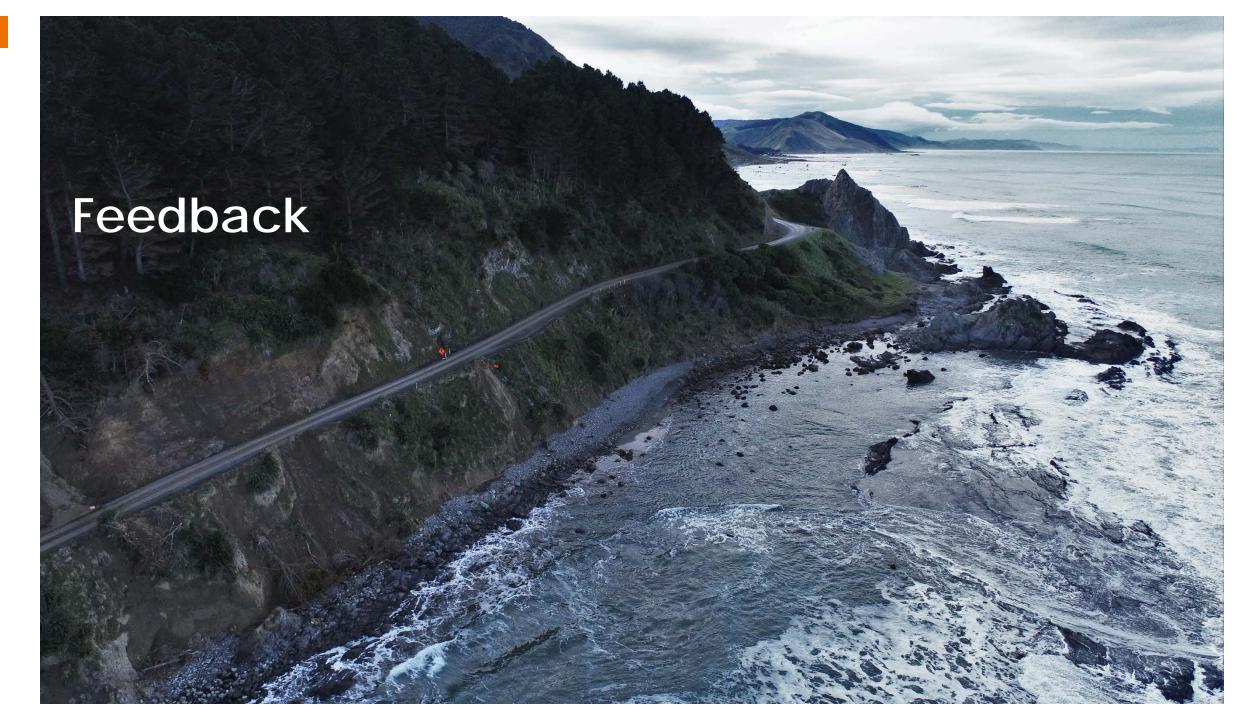
| Option | Climate Change | Road Closures | Environment | Community | Economic | Property impacts | Technical difficulty | Rank |
|-----------------------|-------------------|------------------|-------------|-----------|----------|---------------------|-------------------------|------|
| Do nothing | | | | | | | | 10 |
| Do minimum | | | | | | | | 9 |
| Minor improvements | | | | | | | | 8 |
| Retreat | | | | | | | | 4 |
| Strengthen | | | | | | | | 2 |
| Optimised (low cost) | | | | | | | | 2 |
| Optimised (high cost) | | | | | | | | 1 |
| Alternate Route 1 | | | | | | | | 6 |
| Alternate Route 2 | | | | | | | | 5 |
| Alternate Route 3 | | | | | | | | 7 |



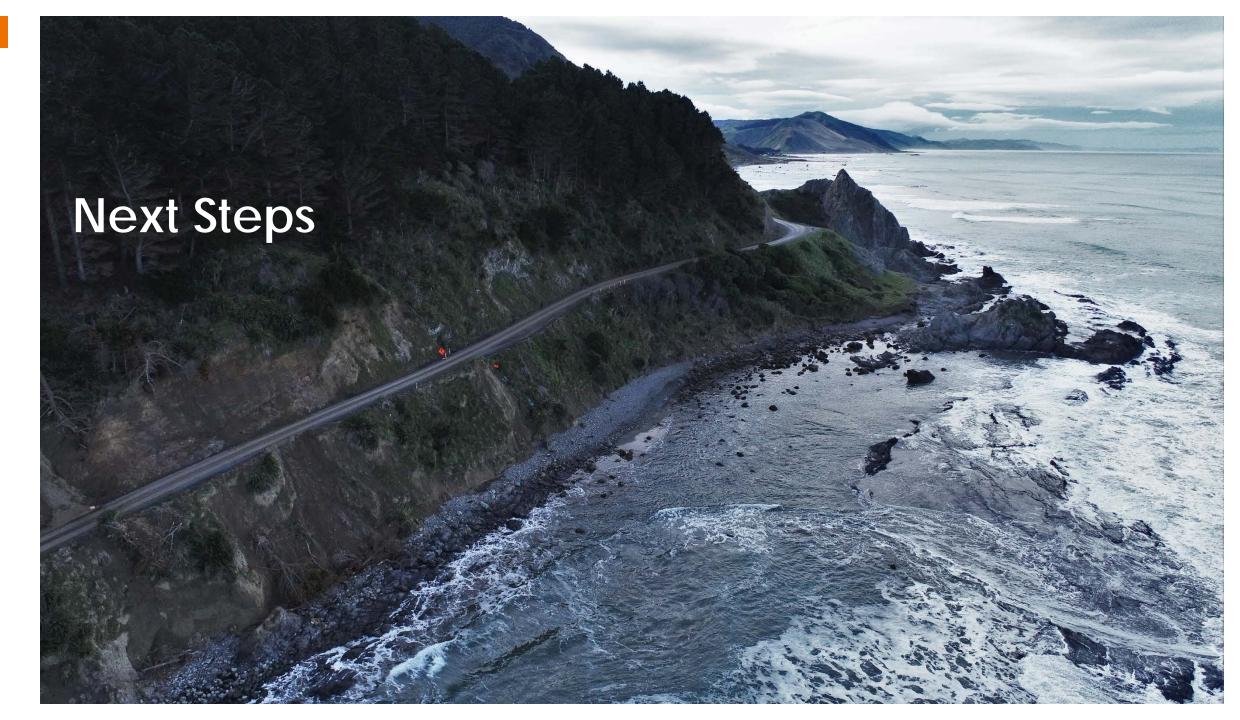
Indicative Economics

| | Scoring | | | Assumptions | | Benefit vs Cost Assessment | | | | |
|-----------------------|--------------|-----|-------|---------------|--------------------|----------------------------|--------------|---------|---------|--------|
| Package | Kahungunu ki | | MCA | Deteriorating | Disruption | Benefit | Capital Cost | | Ratio | |
| | Wairarapa | | IVICA | access | | | Low \$ | High \$ | High \$ | Low \$ |
| Do nothing | 10 | Yes | 10 | 2027 | Every year | \$12m | - | - | - | - |
| Do minimum | 8 | Yes | 9 | 2032 | Every year | \$12m | ? | \$2m | - | 6.5 |
| Minor improvements | 7 | No | 8 | 2040 | 8/10 years | \$14m | \$3m | \$30m | 0.4 | 5.3 |
| Retreat | 8 | Yes | 4 | 2050 | 6/10 years | \$28m | \$3m | \$6m | 5.1 | 7.7 |
| Strengthen | 1 | Yes | 2 | 2122 | 1/10 years | \$60m | \$70m | \$270m | 0.2 | 0.9 |
| Optimised (low cost) | 1 | No | 2 | 2080 | 3/10 years | \$60m | \$30m | \$150m | 0.4 | 1.7 |
| Optimised (high cost) | 3 | Yes | 1 | 2100 | 2/10 years | \$60m | \$70m | \$250m | 0.2 | 0.9 |
| Alternate Route 1 | 4 | No | 6 | 2080 | 4/10 years | \$60m | \$12m | \$25m | 2.5 | 4.8 |
| Alternate Route 2 | 4 | No | 5 | 2080 | 3 or 4/10 years | \$55m | \$13m | \$25m | 2.1 | 4.1 |
| Alternate Route 3 | 4 | No | 7 | 2100 | 3/10 years | \$35m | \$15m | \$30m | 1.3 | 2.4 |

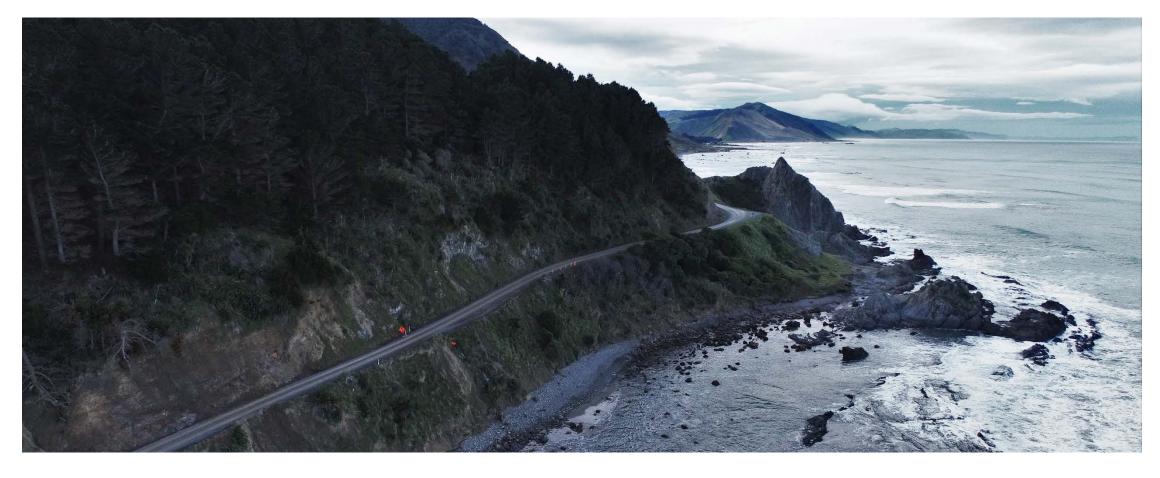












Questions?

Karakia whakamutunga

Kua mutu ā mātou mahi

For the time being

Mō tēnei wā

Protect us all

Manaakitia mai mātou katoa

Ō mātou hoa

Ō mātou whānau

Āio ki te Aorangi

Our Friends

Our Family

Peace to the universe



