**Manawatū Gorge Case Study**

**Executive Summary:**

State Highway three via the Manawatu Gorge (the Gorge) is a crucial connection among the west and east of the North Island. As nicely as imparting connection among the Manawatu Whanganui and Hawke’s Bay areas it connects the groups of Woodville and Dannevirke with Ashurst and Palmerston North. The direction is classed as a National Road and consists of freight site visitors at a degree qualifying it as an vital countrywide freight link. The avenue turned into closed indefinitely on 24 April 2017 following a huge slip and a record of landslides in the Gorge inflicting avenue closures and a excessive chance this will be an ongoing occurrence

So, there are opportunity routes to be had inside near proximity to the Gorge direction, the Saddle Road and Pahiatua Track. Since the closure, site visitors’ flows have persevered at preceding levels, indicating its significance to the region’s groups. Even with development works on Saddle Road, each route is steep, slim and winding ensuing in terrible protection, resilience and performance outcomes. These routes aren't taken into consideration to offer the perfect degree of carrier for the State Highway three link. So, the NZTA has come into an alternative direction for connection NH3 which has taken into consideration all of the feasible routes almost 18 directions are feasible however DBC has come into 4 essential directions through thinking about all elements like economic, social and protection consideration

**Introduction:**

Project management is application of knowledge, skills, tools and techniques that ultimately will meet or exceed a stakeholder’s needs and/or expectations on any given project.

**Doing project management** there are several advantages namely

1. Delivering the project on time
2. Overall cost of the project will be minimised by applying several cost control techniques
3. Healthy relationship between stakeholders and their management
4. Improve growth within the team to deliver the project with best quality
5. Better flexibility and opportunities to expand the services

Aim of the report

Develop and analyse options for an alternative connection between the western and eastern sides of the Ruahine and Tararua ranges on State Highway 3. The business case point of entry for this project is this DBC, which recommends an option to be progressed through to the pre-implementation phase.

provide a summary of the technical analysis of current problems as a result of the closure of State Highway 3 at Manawatu Gorge.

describe the process of identifying and assessing a range of options that achieve a defined set of objectives

**Overview of Case Study:**

The closure of the section of State Highway 3 that runs through the Manawatu Gorge was the result of major slips in April 2017 and ongoing instability. This was not an isolated event and follows a history of unplanned closures of State Highway 3 through the Manawatu Gorge due to slips blocking the road. Since 1980, seven road closures have been recorded, ranging in duration from two days to 14 months. Following the most recent slip events, the continued repair and use of the Manawatu Gorge route has been deemed unsafe due to ongoing movement and instability risk and as a result, the road has been closed indefinitely

The section of State Highway 3 through Manawatu Gorge is used not only by local road users, to connect the nearby urban and rural areas, but also by business operators and inter-regional travellers. The social and economic effects of these closures is not isolated to the Gorge itself but also impacts on nearby residents, adjoining alternative routes and the wider region. The significant and wide-reaching social and economic impacts of the indefinite closure has resulted in the urgency of determining and delivering an appropriate solution

The NZ Transport Agency has therefore commissioned this DBC to identify a suitable alternative route and demonstrate the case for investment in this important state highway connection.

**Stakeholder Management:**

Stakeholder management plays a vital role in the on-time completion of the project and within the budgeted cost

So managing the stakeholders running the project within the applied constraints like budget and time is very important

**Selection of project:**

**NZTA** has come four alternative routes but they come into one best route

1. Delivering the desired transport outcomes for a cost that is relatively less expensive compared other options
2. Providing a more direct connection and has the lowest average gradient of all the options
3. Being able to be constructed almost entirely offline and is expected to be at least one year quicker to construct than other Options Having the lowest risk option in terms of impacts on social and environmental factors
4. With some further consideration of options for improving connectivity to Ashhurst Road, providing similar network benefits as Option 4

**Sustainable Project Management:**

Sustainability of this project is depended on the economic, social and environmental many more are responsible

It is important to be considered cost effectiveness and safety is primary concern to be taken utmost care while selection of the best alternative route to proposed

By looking at stakeholders benefits it is necessary to do some actions against management of stakeholders

Financial analysis is to be taken care for smooth work flow without any delays and could not be overrun of the project

**Conclusion:**

The recommendations given by NZTA to construct an alternative line is feasible and have many benefits as compared to other options by doing this project there are more advantages likely economical and social