

# Submission from the AQA on the Draft Wellington Regional Land Transport Plan 2021

March 2021

## Introduction

The Aggregate and Quarry Association (AQA) is the industry body representing construction material companies which produce 45 million tonnes of aggregate and quarried materials consumed in New Zealand each year.

Funded by its members, the AQA has a mandate to increase understanding of the need for aggregates to New Zealanders, improve our industry and users' technical knowledge of aggregates and assist in developing a highly skilled workforce within a safe and sustainable work environment.

Aggregate (including sand and gravel) is an essential resource for the building of roading projects and other transport infrastructure and due to the unprecedented levels of construction and infrastructure development activity generally, aggregate is increasingly in short supply in many parts of New Zealand including the Wellington region.

We are writing this submission to the Greater Wellington Regional Council on the [draft Regional Land Transport Plan](#) (the Draft Plan) to ensure that availability and supply of aggregate is top of mind as the councils' planning processes progresses.

## Aggregate and the Transport System

Road construction and maintenance uses aggregate in large quantities. Different grades of aggregate and sand are used for the road's base layer, the pavement and the seal on top. To build 1km of a two-lane motorway, you need around 14,000 tonnes of construction aggregates (400 truckloads).

Aggregate is also used for general construction - in concrete, asphalt, mortar and other building products. (For example, the building of an average house, requires about 250 tonnes of aggregate.)

Aggregate is also used to increase resilience of the transport network to natural hazards and climate change. Aggregates, for example, are needed for flood protection and to adapt to sea level rise and coastal erosion through strengthening of sea walls etc. They will be needed to repair damage to coastal infrastructure such as roads and to make infrastructure more resilient generally to greater intensity storms and extreme weather events.

## Planning for Aggregate

It is important to note, aggregates and other quarry materials are a site-specific resource. They are not universally available and can only be sourced from where they are located. Without planning to provide for adequate access to resources at workable locations there is the real risk of losing access to the resource. It is critical that planning is streamlined and quarry resources are protected so they can supply vital construction materials including those which will be needed for the projects in the Regional Land Transport Plan.

A lot of land comprising suitable aggregate resource in Wellington has already been built on or has been sterilised as a result of inadequate planning in years gone by. With a proliferation of competing land uses it is important that land with suitable aggregate resource is first identified and then protected for future use.

Just as aggregate is an essential and underappreciated component in the transport infrastructure supply chain, the transportation of aggregate from quarry to destination is an issue given the heavy costs of shifting it (an additional 30 km travel cost typically doubles the cost of aggregate). This means potential aggregate resource must be able to be accessed as close to roading projects as possible to reduce the cost of construction.

There are several examples of roading projects around the country where aggregate has had to be transported large distances due to a lack of local product. Some of the delays at Transmission Gully are a good local example of this.

Failure to adequately plan for future aggregate extraction would lead to a substantial increase in cost of development and maintaining of transport infrastructure, delays as aggregate is sourced from outside the region and congestion as truckload after truckload is transported to the site.

It should also be noted that quarries have a limited lifespan and aggregate extraction is a temporary land-use. Once all the aggregate material has been extracted, quarry land is returned to the community to a former use, or an alternative use.

## Aggregate in the Greater Wellington Region

There are relatively few quarries in the Wellington region, especially outside the Wairarapa. It is therefore ironic that the region has large areas of 'high potential' hard rock deposits as illustrated in the **attached** map provided by GNS Science. Much of the aggregate used comes from outside the region.

A sustainable supply of aggregate will be essential to enable many of the projects listed in the Draft Plan to proceed. For example, several activities relating to the Wellington Road of National Significance, cycling infrastructure between Ngauranga and Petone and elsewhere and rail network investment throughout.

In addition to this, there is competing demand for quarry material in the region other than transport, as housing infrastructure is developed to meet the region's population growth.

This means it is essential that the region plans for its supply and that the consenting of quarries in the right place is enabled.

The Wellington Road of National Significance is one of New Zealand's most significant roading infrastructure projects. As mentioned above, shortages of aggregate are said to be one factor holding up the completion of Transmission Gully and other sections of the projects, and aggregate is having to be trucked large distances from outside the region. This is a well-documented example of failure to plan for aggregate supply putting pressure on delivery of a major infrastructure project.

## Conclusion

In summary, to ensure the projects identified in the Regional Land Transport Plan are able to be undertaken as cost effectively as possible, sound planning is required so that future access to aggregate resources is sufficiently recognised, protected and provided for.

It is important that there is good coordination between all parts of the planning process and that planning for land use and quarries is linked to the transport plan.

## Attachment - Wellington Region Aggregate Potential

