

Report No:	RESC11-10-10
File No:	R650
Date:	14 October 2011
Information Only – no decision required	

REPORT SUMMARY

Report to: Engineering Services
Meeting Date: 27 October 2011
Report Author: Gary Clark, Transportation Manager
Subject: **Golden Hills Road / Moutere Highway Intersection**

EXECUTIVE SUMMARY

At the last Engineering Services meeting a petition was presented expressing resident's concerns with the intersection of Golden Hills Road and Moutere Highway. These concerns relate to a recent fatal crash and a number of other crashes at the intersection over the last several years.

RECOMMENDATION/S

That the report be received.

DRAFT RESOLUTION

THAT the Engineering Services Committee receives the report RESC11-10-10.

Report No:	RESC11-10-10
File No:	R650
Report Date:	15 September 2011
<i>Information Only – no decision required</i>	

Report to: Engineering Services
Meeting Date: 27 October 2011
Report Author: Gary Clark Transportation Manager
Subject: **Golden Hills Road / Moutere Highway Intersection**

1. Background

- 1.1 On 25th May 2011, there was a fatal crash at the intersection of Golden Hills Road and the Moutere Highway (also known as Russ's Corner) involving a truck and a vehicle.
- 1.2 As a result of concerns by nearby residents and others a petition and oral presentation was given to the committee at the September meeting.
- 1.3 All the signs and road markings at the intersection are well maintained and appropriately located. They provide sufficient guidance to approaching motorists to enable them to travel through the intersection safely.

2. Crash Study

- 2.1 In reviewing the Traffic Crash Report (TCR) the truck was heading south on the Moutere Highway and proceeding towards Golden Hills Road. A car heading east along the Moutere Highway was heading straight ahead (which involves a right turn to travel towards Brightwater).
- 2.2 The car turning right is required to give way and signage and road markings provide a clear guidance to drivers. Channelisation has also been installed at the intersection to reinforce the priority at the intersection again provide guidance to all motorists using the of driver requirements.
- 2.3 In reviewing the Police report on the fatal crash, a number of factors can be attributed to the reason for the crash. These include speed, failure to give way and not driving a vehicle in accordance with road markings.
- 2.4 The Police report states the following:

“Examining the vehicle positioning at impact, relative to the actual impact position on the roadway, it is apparent that the Mercedes was not being driven in accordance with the actual lane markings.”

“There could be a number of reasons for the Mercedes failure to follow the correct alignment. However the most likely reason is a desire on the part of the driver to want to travel through the intersection faster than the 35km/hr restriction imposed by following the correct alignment.”

- 2.5 In reviewing the Traffic Crash Report staff also agree with this assessment. The location of the vehicle relative to the right turn bay has put the occupants of this vehicle in a position where both the visibility was compromised and the ability for the driver to take appropriate action became very difficult.
- 2.6 As part of reviewing the crash records staff have also conducted a search of the New Zealand Transport Agency (NZTA) crash database for the last five years to determine whether there are any trends or common cause factors in other report crashes.
- 2.7 This review has shown that with the latest crash this intersection now features as a black spot crash location instead of its previous grey spot. This crash along with the history of the intersection will push this junction higher up the Matrix to enable funding for a solution to be provided earlier.
- 2.8 The records show there have been five reported crashes in the five-year period from 2006 to 2010 with the recent fatal being the only recorded crash to date in 2011. All of the reported crashes involved injuries.
- 2.9 The review of the Traffic Crash Reports shows some common factors relating to the crashes. These include motorists turning right to head to Brightwater from the Moutere Highway misjudging the direction of vehicles heading down Golden Hills Road. The main issue with this type of crash is that the vehicle heading down Golden Hills Road is usually doing so at speed as it does not need to slow significantly to make this manoeuvre. Motorists waiting to turn right towards Brightwater are misjudging speed and incorrectly anticipating the actual vehicle of the oncoming vehicle.
- 2.10 The Traffic Crash Reports show that the majority of crashes were the result of driver factors with fatigue, inexperience and stupidity quoted. A number of crashes included drivers trying to beat the oncoming and misjudging the actual gap available. None of the crash factors related to the layout or signage of the intersection.

3. Assessment

- 3.1 The crash information clearly shows there is an accident history at this location. Council has over time carried out improvements to address the cross-road intersection. Cross-road intersections often have issues with regard to crashes because of the multiple conflict points and sometimes high speed depending on vehicle priorities.
- 3.2 This particular cross-road intersection is complicated by the fact that the priority route is left-right turn movement but there is still sufficient traffic travelling straight through to create confusion for some motorists. Signage has been installed in appropriate locations to clearly indicate priority direction and guide motorists.
- 3.3 The crash data shows that all of the crashes that have occurred at this intersection have been the result of the driver making poor decisions rather than any geometric or delineation deficiency.
- 3.4 The intersection already features on the Matrix and is currently at number 14 on this list. This was based on the previous crash records before the recent fatal incident. Current funding available for improvement and safety work will only allow the top nine of the projects on this Matrix List to be completed in the 2012/2013 financial year. The amount of work done will depend on the scheme chosen to address the different concerns at the different locations.
- 3.5 As the Councillors are aware the Matrix is an active work programme which changes to accommodate the change in circumstances with regard to our roading improvement programme. As noted above, as a result of the recent fatal the economic justification to undertake work at this intersection is stronger. Also the ranking in the Matrix will put this possible project into the top of the list for completion in the 2012/2013 for Minor Improvements Programme.
- 3.6 It should also be noted that the Minor Improvements Programme has a funding limit of \$250,000 for each individual project. If the project exceeds this amount then a special case must be presented to NZTA for funding. Currently with our experience with NZTA, funding for such works is extremely difficult to secure. Accordingly if the project to address the issue is more than \$250,000 and NZTA does not approve funding then it would need to be a non subsidised project.
- 3.7 Various options have been considered for this intersection to provide a safe environment so that when motorists do get it wrong the consequences are less severe. The different options range in costs from several thousand dollars to

over one million. The best option for this intersection will need to be appropriately evaluated, the funding source identified and presented to Council for their approval.

4. Conclusion

- 4.1 Crashes reported at the intersection of Golden Hills Road and the Moutere Highway have been the result of poor driver behaviour rather than the geometry or delineation of the intersection.
- 4.2 There are physical works that can address this issue and reduce the severity of any crashes.
- 4.3 The recent crash at the intersection will increase the ranking of this project on the Matrix. However subsidised funding for this project may be difficult to obtain from NZTA if the preferred option is over \$250,000.
- 4.4 Investigation work will be carried out in the 2012/2013 financial year to determine the preferred project and funding approval sought from NZTA. The project will be presented to Council for their consideration and approval.

5. RECOMMENDATION

- 5.1 That the report is received.

6. DRAFT RESOLUTION

- 6.1 THAT the Engineering Services Committee receives the report RESC11-10-10.**