

# Transport Resilience Research

Date: 17 October 2019

Venue: Tūranga Central Library, Christchurch

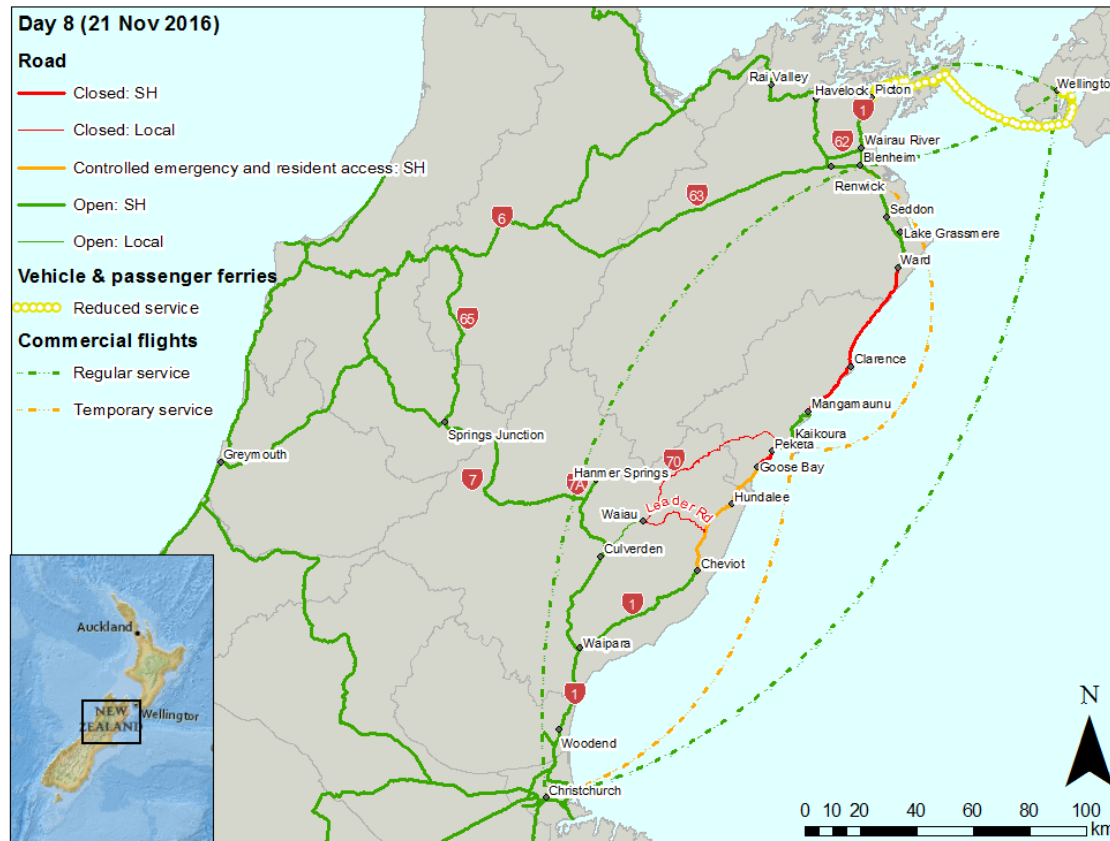
Associate Professor Seosamh Costello



**ENGINEERING**



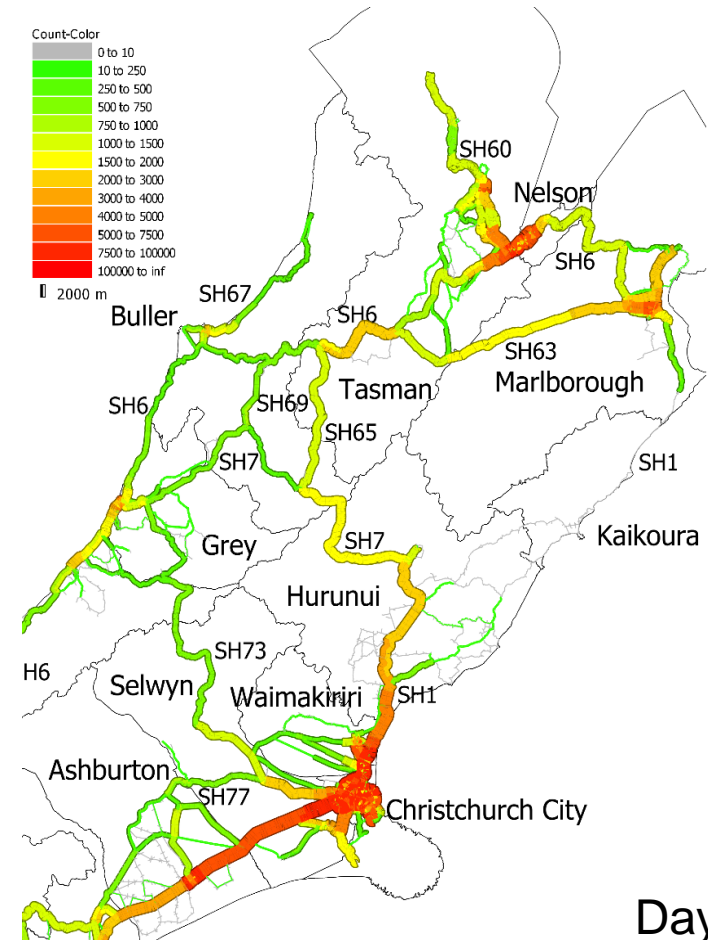
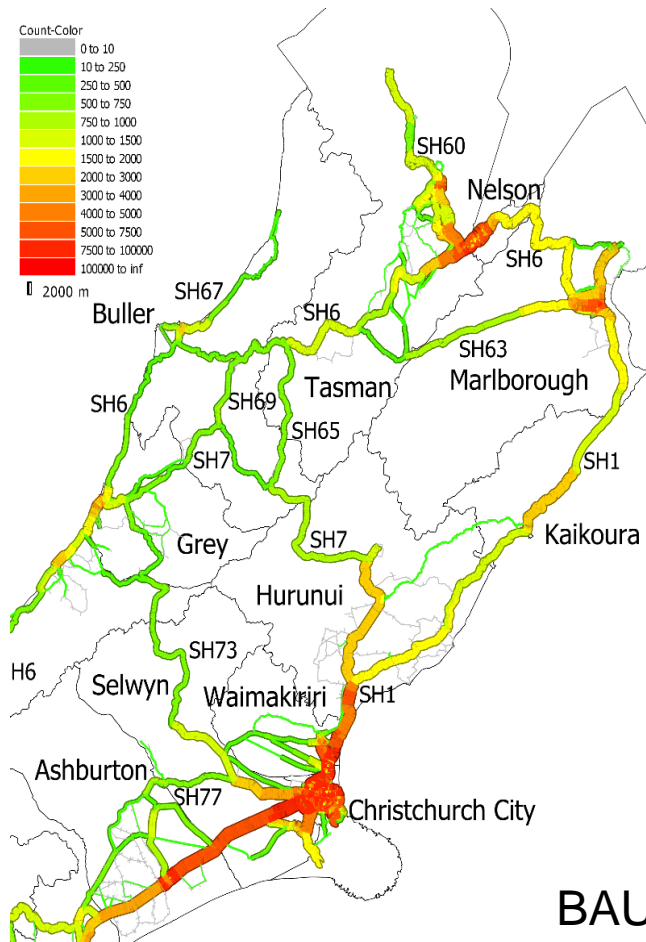
PhD Student: Mohammad Aghababaei  
Supervisors: Costello and Ranjitkar



Source: (Davies et al., 2017)

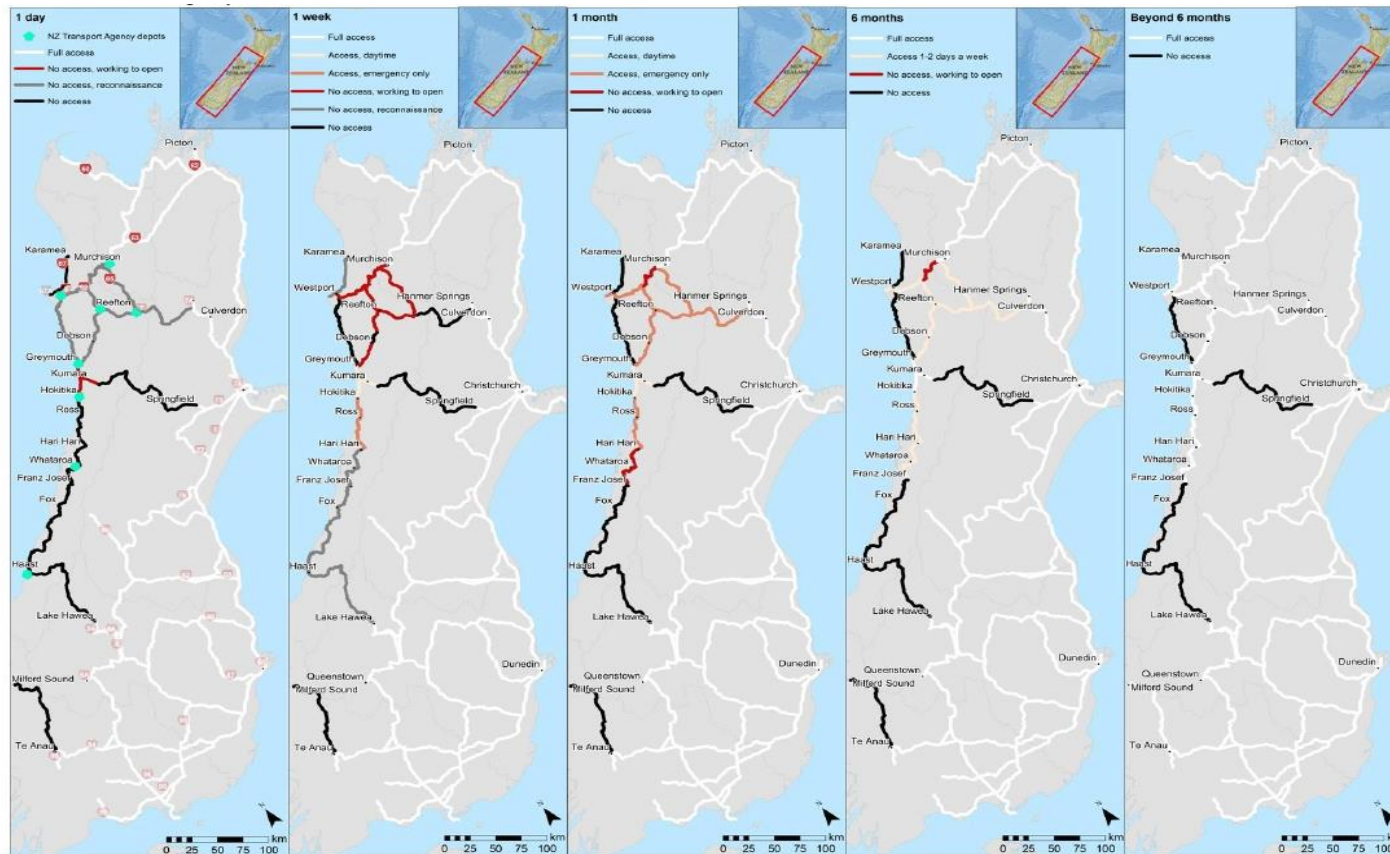
# Kaikoura EQ

PhD Student: Mohammad Aghababaei  
Supervisors: Costello and Ranjitkar



# Alpine Fault Mw8

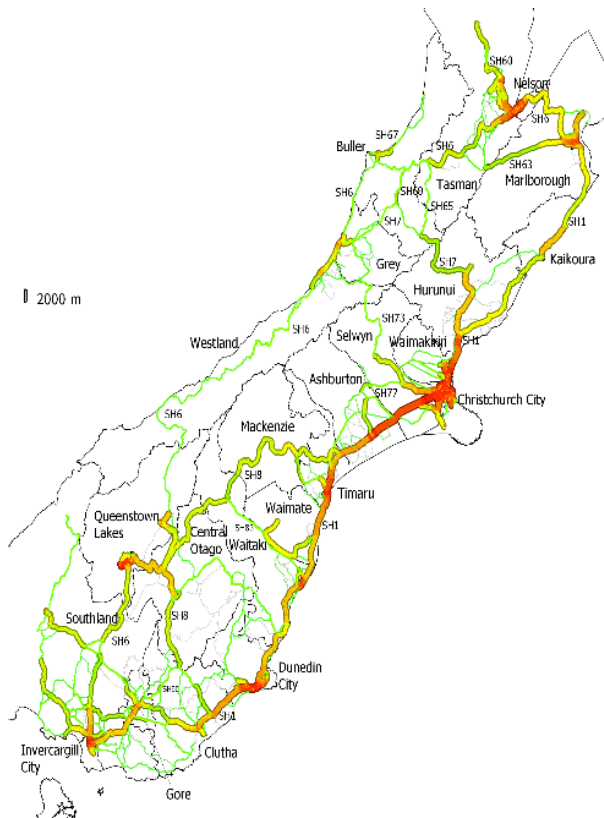
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(Source: Davies, 2019)

# Alpine Fault Mw8

PhD Student: Mohammad Aghababaei  
Supervisors: Costello and Ranjitkar



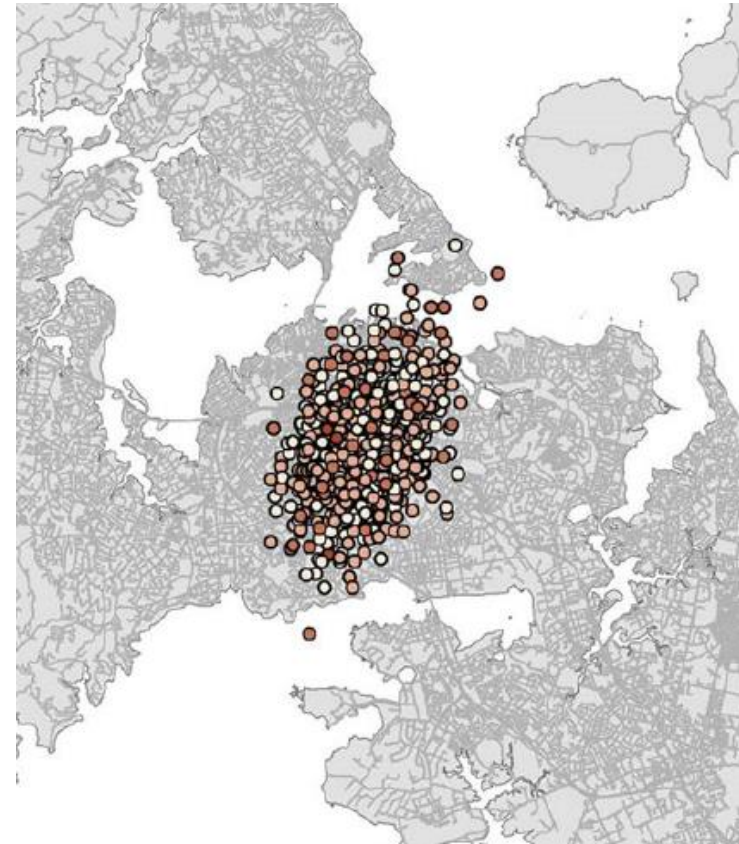
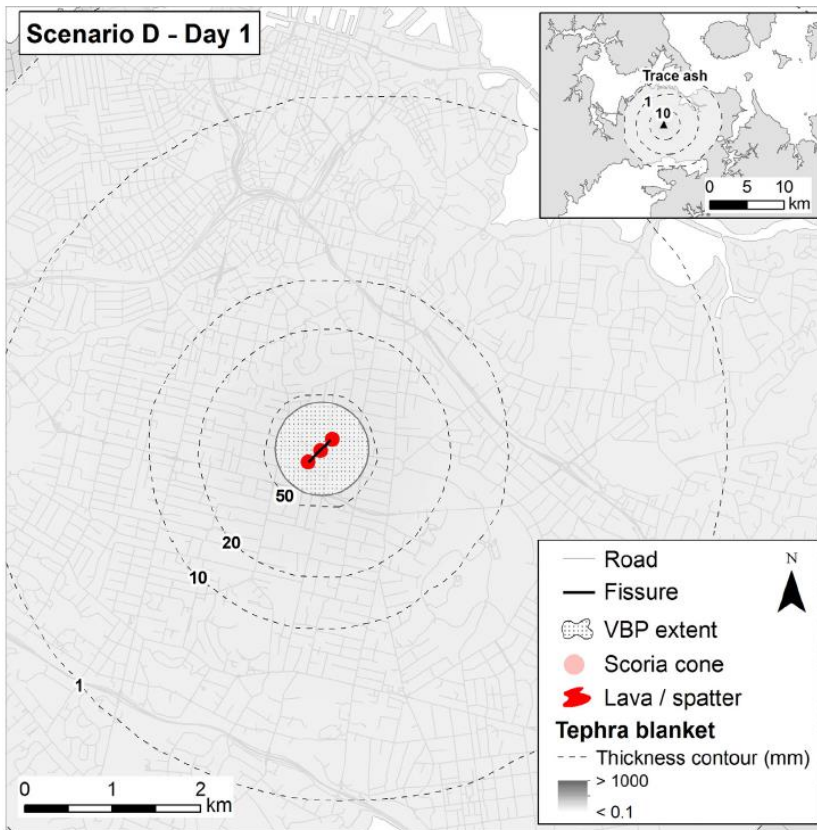
BAU



1 week

# Auckland Evacuation

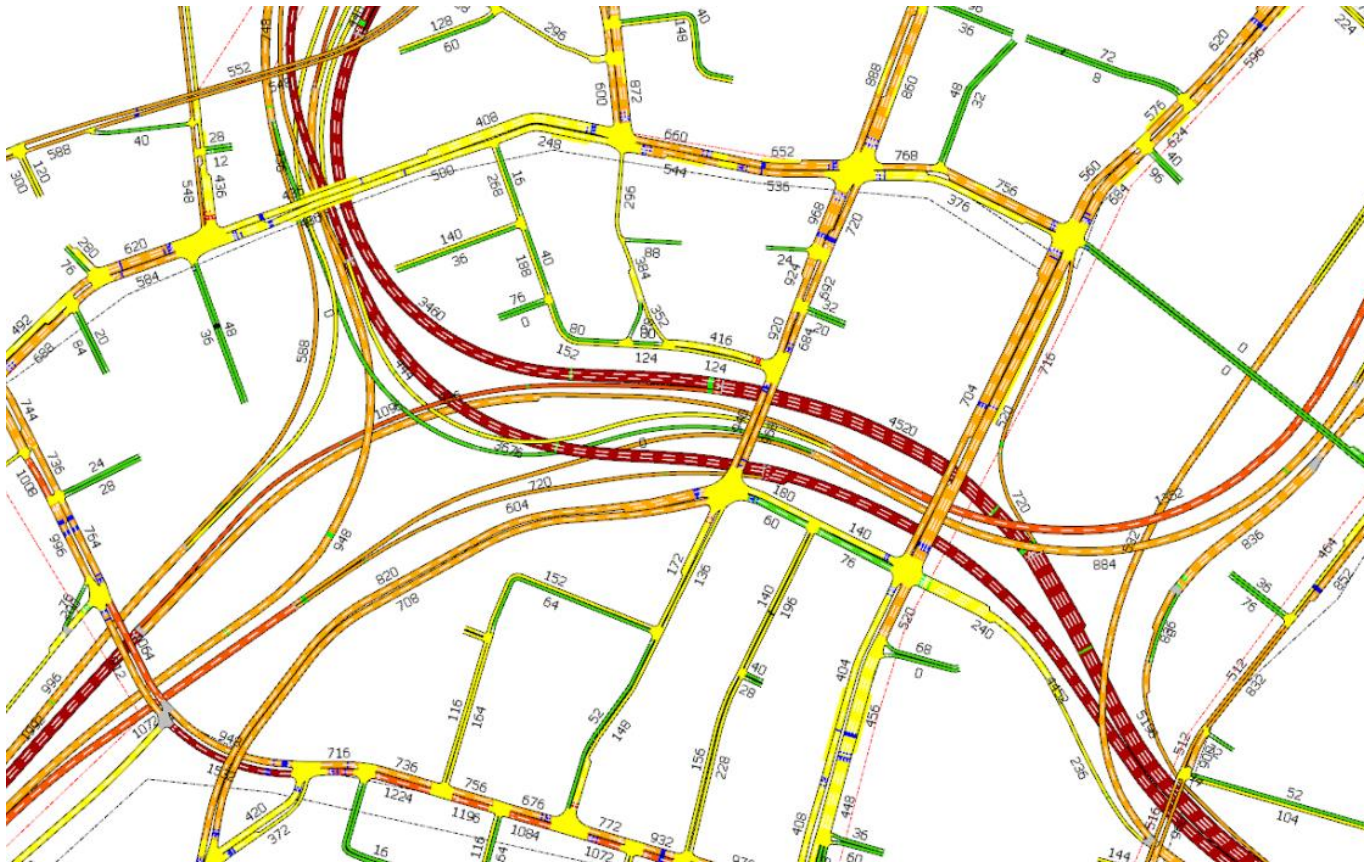
PhD Student: Mujaddad Afzal  
Supervisors: Ranjitkar and Costello



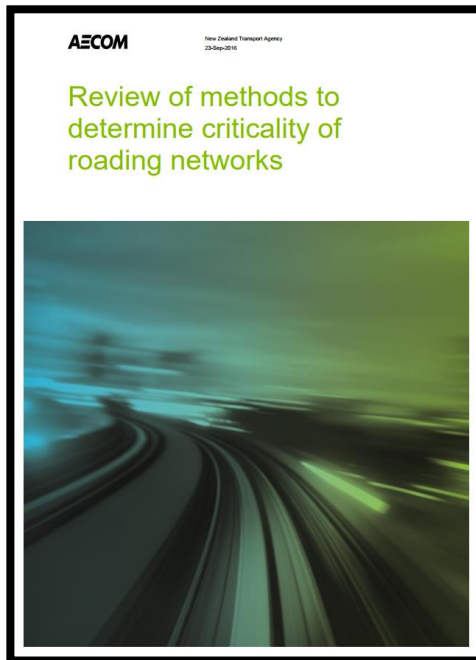
Source: Hayes et al. (2018)

# Auckland Evacuation

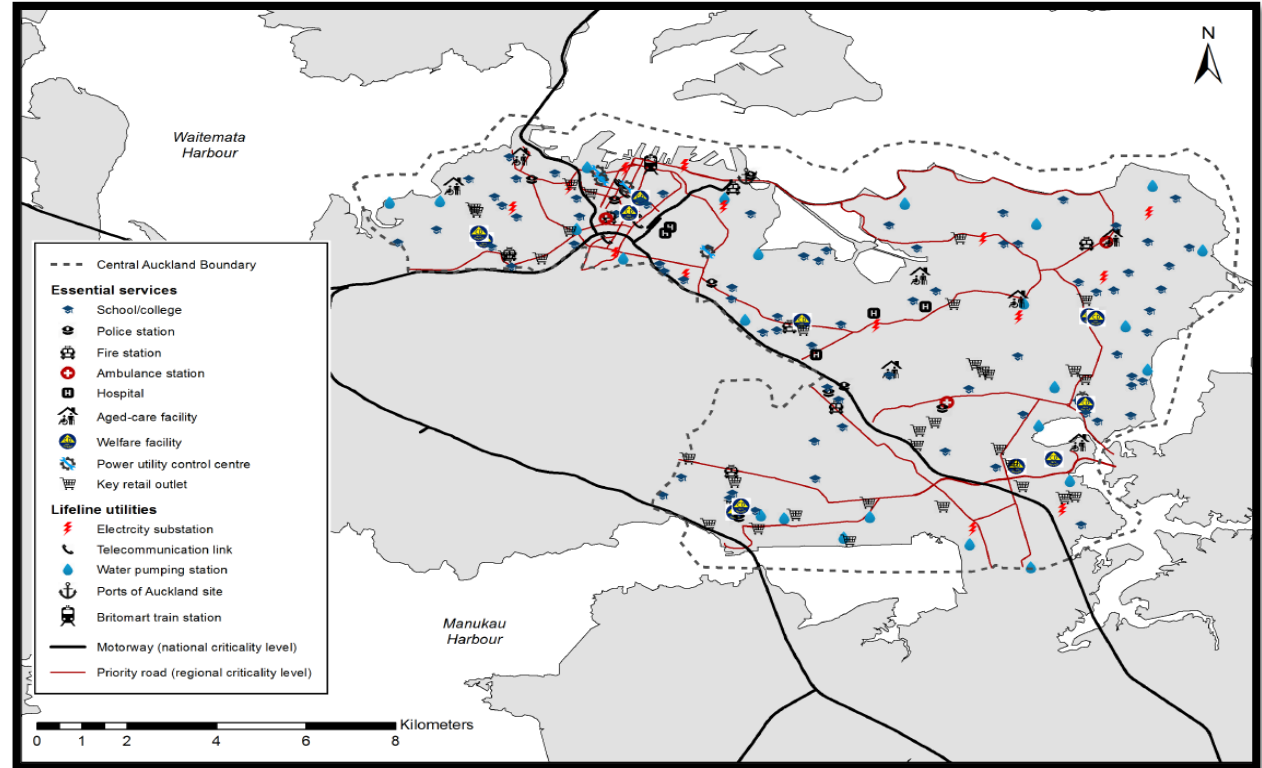
PhD Student: Mujaddad Afzal  
Supervisors: Ranjitkar and Costello



BE(Hons) Students: Kester Rebello and Karan Jaggi  
Supervisor: Costello



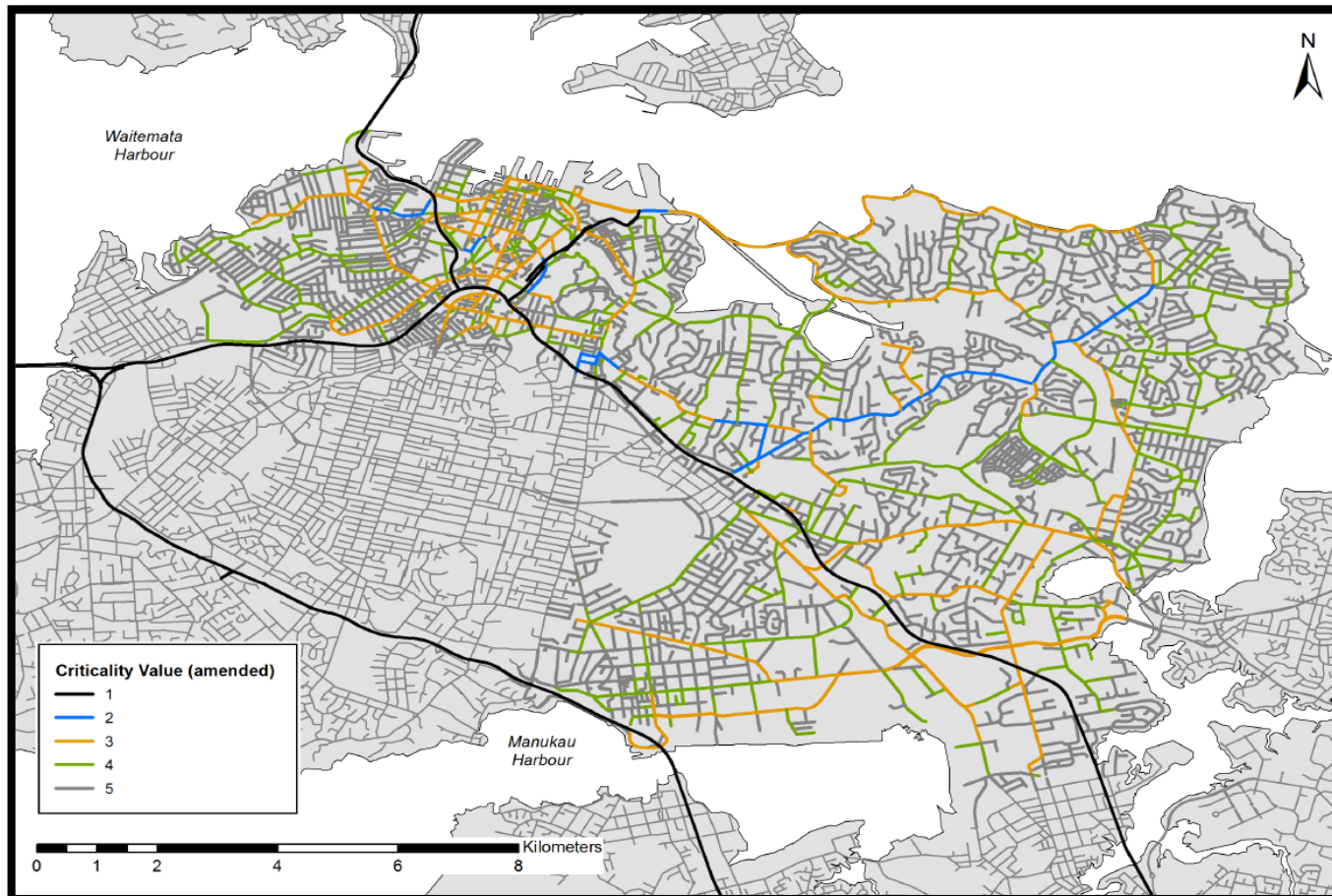
Source: Hughes, 2016



Source: Rebello et al. (2018)



BE(Hons) Students: Kester Rebello and Karan Jaggi  
Supervisor: Costello



# References



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1. DAVIES, A. 2019. Increasing the disaster resilience of remote communities through scenario co-creation. Doctor of Philosophy, University of Canterbury.
2. DAVIES, A., SADASHIVA, V., AGHABABAEI, M., BARNHILL, D., COSTELLO, S., FANSLAW, B., HUGHES, M., MACKIE, J., THOMPSON, J., WILSON, T., WOODS, S. & WOTHERSPOON, L. 2017. Transport Infrastructure Performance And Management In The South Island Of New Zealand, During The First 100 Days Following The 14 November 2016 Mw 7.8 “Kaikōura” Earthquake. Bulletin of the New Zealand Society for Earthquake Engineering, Vol. 50, No. 2,, 271-299.
3. HAYES JL, TSANG SW, FITZGERALD RH, BLAKE DM, DELIGNE NI, DOHERTY A, HOPKINS JL, HURST AW, LE CORVEC N, LEONARD GS, et al. 2018. The DEVORA scenarios: multi-hazard eruption scenarios for the Auckland Volcanic Field. Lower Hutt (NZ): GNS Science. 138 p. (GNS Science report; 2018/29). doi:10.21420/G20652.
4. HUGHES, J. (2016). Review of methods to determine criticality of roading networks.
5. REBELLO, K., JAGGI, K., COSTELLO, S.B., BLAKE, D., OO, M., HUGHES, J., EGBELAKIN, T. (2019) “Implementation of a Criticality Framework for Road Networks in Auckland City, New Zealand”. International Journal of Disaster Resilience in the Built Environment, Vol. 10 No. 1, pp. 36-51.