	Project	Team	Completion	Hazard EQ-earthquake, F-flood, V-volcanic, T-Tsunami, GS-ground shaking, LQ-liquefaction, LD-landslide							Networks EP-electricity, PW-potable water, SW-storm water, WW-waste water, TC-telecoms, TP-transportation, F - fuel								Scope			Vunerability	Functional Impact	Recovery	Socio-economic consequences	Notes	Funding
				EQ																								
				GS	LQ	LD	F	V	T	Other	EP	PW	WW	SW	TC	TP	F	Other	Component	Network	System of Systems							
1	Resilience of Transportation Infrastructure	Aghababaei, Costello, Ranjitkar	2019 (PhD)	X	X	X	X		X							X				X			X	X		South Island Focus	RNC/QuakeCoRE
2	Interdependent national infrastructure	Zorn, Shamseldin	2017 (PhD)								X	X	X		X	X	X	Solid Waste		X	X		X			Outputs	RNC/QuakeCoRE
3	System level recovery	Zorn, Shamseldin	2017 (PhD)							X	X	X	X		X					X				X		Outputs	UoA
4	Tsunami loading on NZ bridges	Farvizi, Melville	2018 (PhD)						X							X			X								NHRP
5	Tsunami loading and performance of NZ wharves	Popovich, Wotherspoon	2017 (PhD)						X							X			X			X	X				UoA, NHRP
6	Seismic response of NZ wharves	Ragued, Wotherspoon	2017 (PhD)	X												X			X				X				UoA
7	Potable water networks	Bellagamba, Bradley, Hughes, Wotherspoon	2019 (PhD)	X	X							X							X	X		X		X	X	Christchurch	RNC/QuakeCoRE
8	Electricity Distribution Network Assessment to Extreme Natural Hazards	Liu, Nair	2019 (PostDoc)	X	X	X	X			X	X								X	X			X	X	X		RNC/QuakeCoRE
9	Water supply system resilience measurement	Balaei, Wilkinson	2017 (PhD)	X	X	X				X		X								X	X	X		X	X		UoA
10	Resilience of Stormwater Management systems	Valizadeh, Shamseldin	2018(PhD)				X							X						X			X	X			RNC/QuakeCoRE
11	Assessment of multi-hazard impacts on regional infrastructure and consequent implications for isolated settlements and their communities	Davies, Wilson, Davies, Gaillard, Wotherspoon, Hughes	2018 (PhD)	X	X	X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	West-Coast Focus	RNC Rural
12	Developing tsunami vulnerability functions and functionality/repair time models for critical infrastructure	Williams, Wilson, Horspool, Hughes, Lane, Davies	2018 (PhD)						X		X	X	X	X	X	X	X	X	X	X			X	X	X		UoC, GNS Core
13	Volcanic ash impacts on surface transportation (road, rail, airport, maritime)	Blake, Wilson, Deligne, Lindsay, Cole	2016 (PhD)					X								X			X	X		X	X	X		Internationally applicable with a focus on Auckland and roads	UoC
14	Clean-up and restoration of urban environments after volcanic eruptions	Hayes, Wilson, Leonard, Deligne, Brown, Cole	2018 (PhD)					X								X		Waste		X			X	X		Internationally applicable with a focus on Auckland urba environment	UoC
15	Performance of the Telecommunication Network during the Canterbury Earthquake Sequence	Giovinazzi, Nayyerloo, Esposito,	2017 (RfP)	X	X										X				X				X				RNC/QuakeCoRE
16	Literature review of flood vulnerability models for infrastructure assets.	Crowley, Paulik	2017 (NIWA Cr)				X				X	X	X	X	X	X	X		X			X	X			Review limited to published flood vulnerability models for infrastructure assets.	NIWA Core
17	Resilience of Urban Transportation Infrastructure	Afzal, Ranjitkar, Costello, Wotherspoon	2019 (PhD)	X	X	X	X	X	X							X				X			X	X		Auckland Focus	RNC/QuakeCoRE
18	Modelling the Hazard Footprint and Consequences of Lava Flows in an Urban Environment	Tsang, Lindsay, Coco, Wilson, Kennedy, & Delinge	2019 (PhD)					X			X	X	X	X	X	X			X				X			Internationally applicable with a focus on Auckland and the built environment	UoA
19	Development of a tool to assess the resilience of Canterbury lifelines	Ball, Megan	2017 (ME)	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X			X		High level, regional focus	Canterbury Lifelines
20	Electricity Network Assessment during Alpine Fault Event	Shirzadi, Nair, Liu, Austin	2020 (PhD)	X	X	X					X								X	X			X	X	X	West Coast Focus	UoA International Doctoral Scholarship
21	Effective Restoration Practices and Improvement of electricity/communication nexus infrastructure following extreme natural hazard	Maina, Nair, Liu	2020 (PhD)	X	X	X					X								X	X			X	X	X	Kaikoura Focus	TBD
22	Characterising long-term ground deformation impacts on Christchurch City's buried high voltage electricity network since the start of the Canterbury Earthquake Sequence	Hughes, Wotherspoon, van Ballegooy	2018 (ME)	X	X						X								X				X			Christchurch Focus	RNC/QuakeCoRE
23	Tsunami loading characteristics on power poles	Whittaker	2018 (ME)						X		X								X				X				RNC/QuakeCoRE
24	Characterisation and screening of New Zealand stopbank networks	Crawford-Flett, Shamseldin, Wotherspoon	2018 (ME)	X	X	X	X											X	X	X							RNC/QuakeCoRE
25	End-to-End' integrated impact assessment of infrastructure networks	Syed, Uma, Prasanna	2018 (PhD)	X	X	X	X	X	X		X	X	X	X	X	X	X	X			X	X	X	X	X	Framework Development	RNC/QuakeCoRE
26	Seismic fragility models for New Zealand bridges	Lew, Wotherspoon, Al-Ani	2020 (PhD)	X	X	X										X			X			X					Callaghan