

# Addressing city-wide disaster risk through modeling

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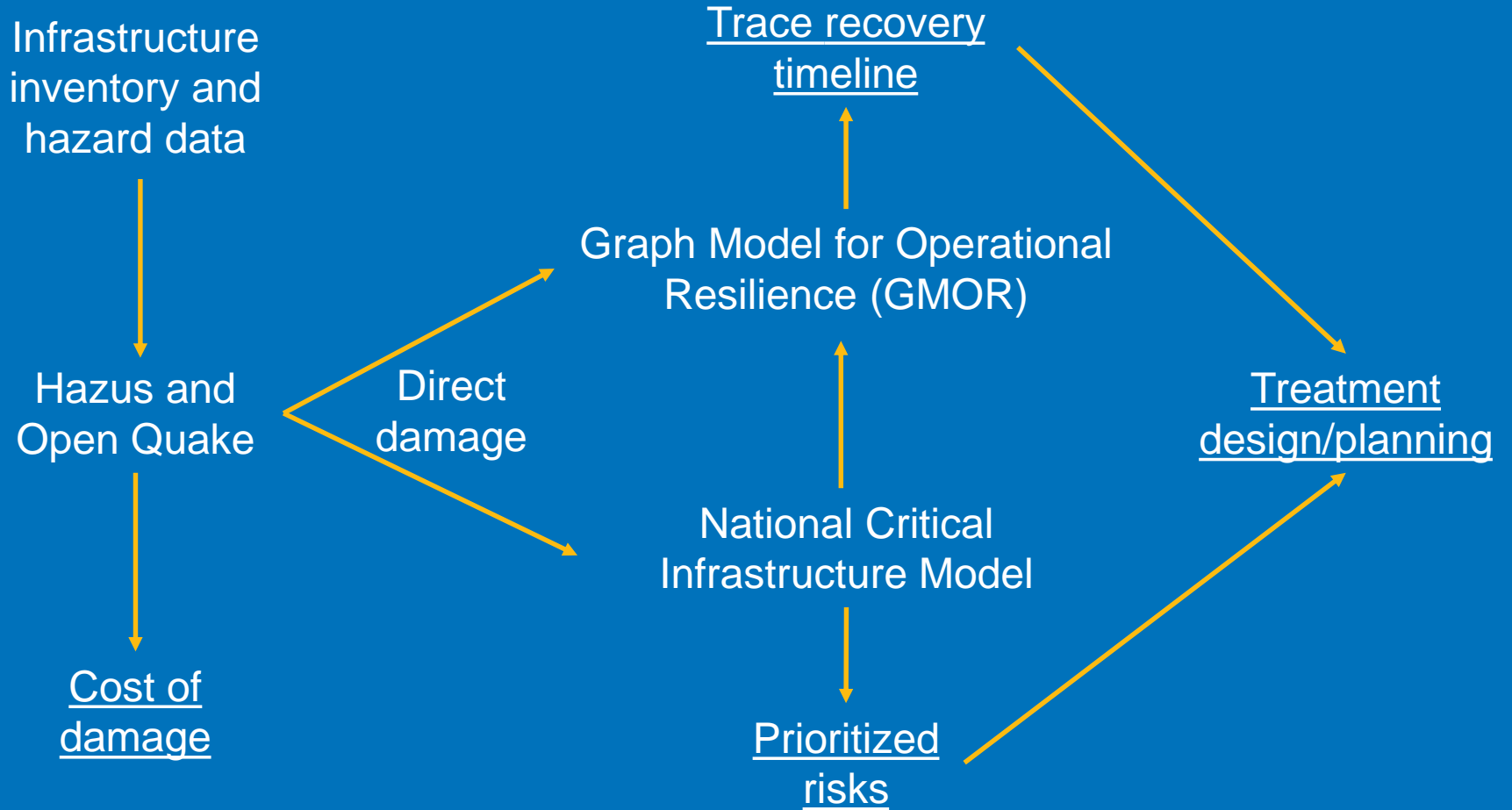


Mike Andrews, NSEM  
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Fiona Dercole, NSEM (DNV)  
Alison Goshulak, UVic  
Nicky Hastings, NRCAN  
Doug Hales, DRDC  
Murray Journey, NRCAN  
Carol Wagner, NRCAN

# District of North Vancouver

M.7.3 earthquake in  
the Strait of Georgia





Risk Prioritization – how the dominos fall

Recovery – how they get set back up

Image: <https://i.ytimg.com/vi/vM5GTWCQ-L0/maxresdefault.jpg>

# *RiskOutLook* – Hospital Operations

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# RISK PRIORITIZATION



# Preliminary Results – Risk Rank

## Relative Risk Ranking

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# Opportunities for Improvement

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# Opportunities for Improvement

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# RECOVERY TIMELINE AND PLANNING



Complete

Future: Linkages to Other Sectors

Natural Gas  
Communications  
Marine  
Power  
Rail  
Road and Fuel  
Wastewater  
Water

Residences  
Food  
Healthcare  
Businesses  
Industries  
Response

Re-usable city-wide and sectoral template models



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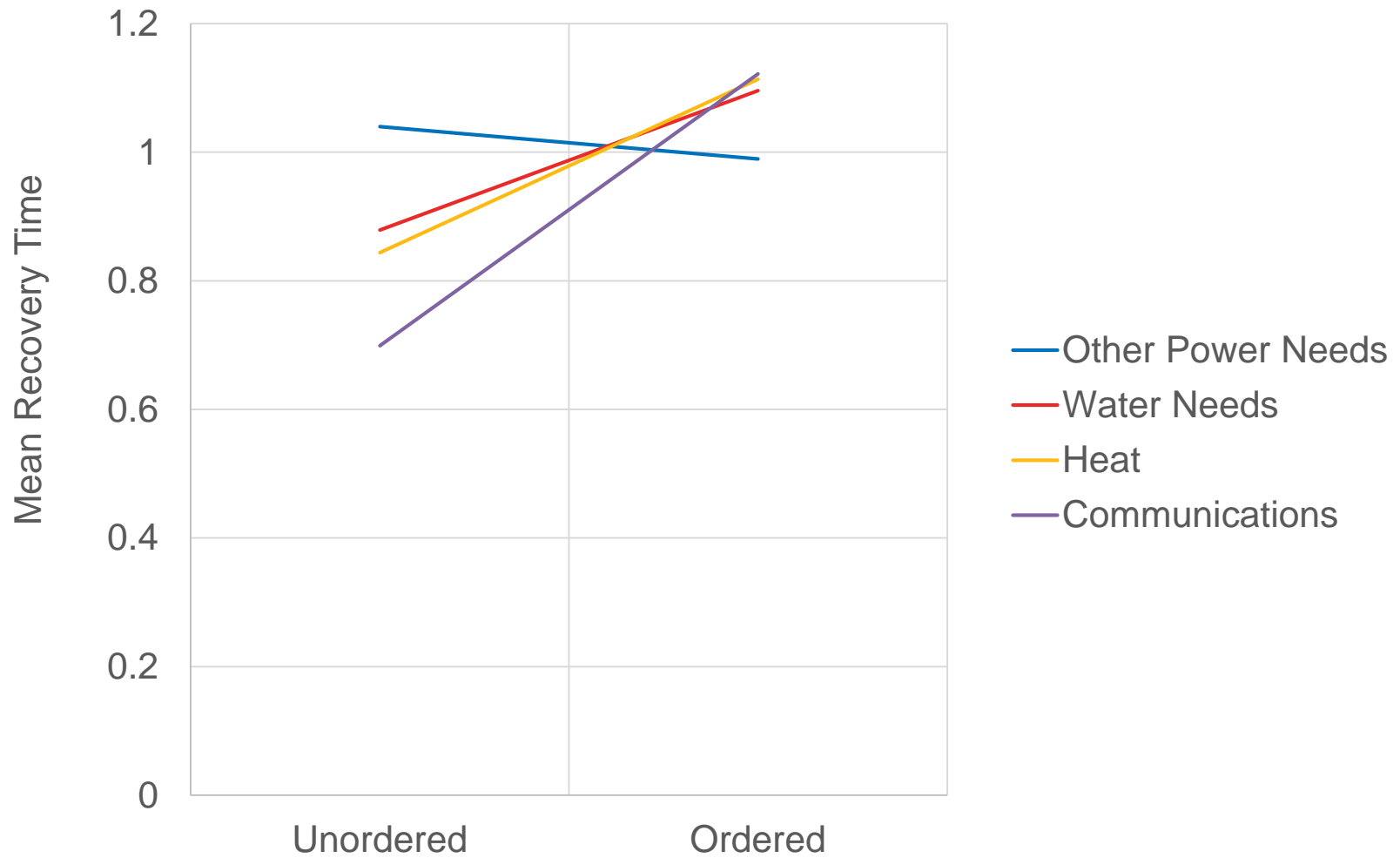
Water service returns

All lifelines return

## (Tentative) Water supply network recovery priority by neighbourhood

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# Residential Tower Recovery Times for Alternative Infrastructure Recovery Sequencing







# Thank-you

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