

Vancouver Harbour



Vancouver Harbour

Earthquake Risk

Van Harbour
MetroVan



130,694/
460,000

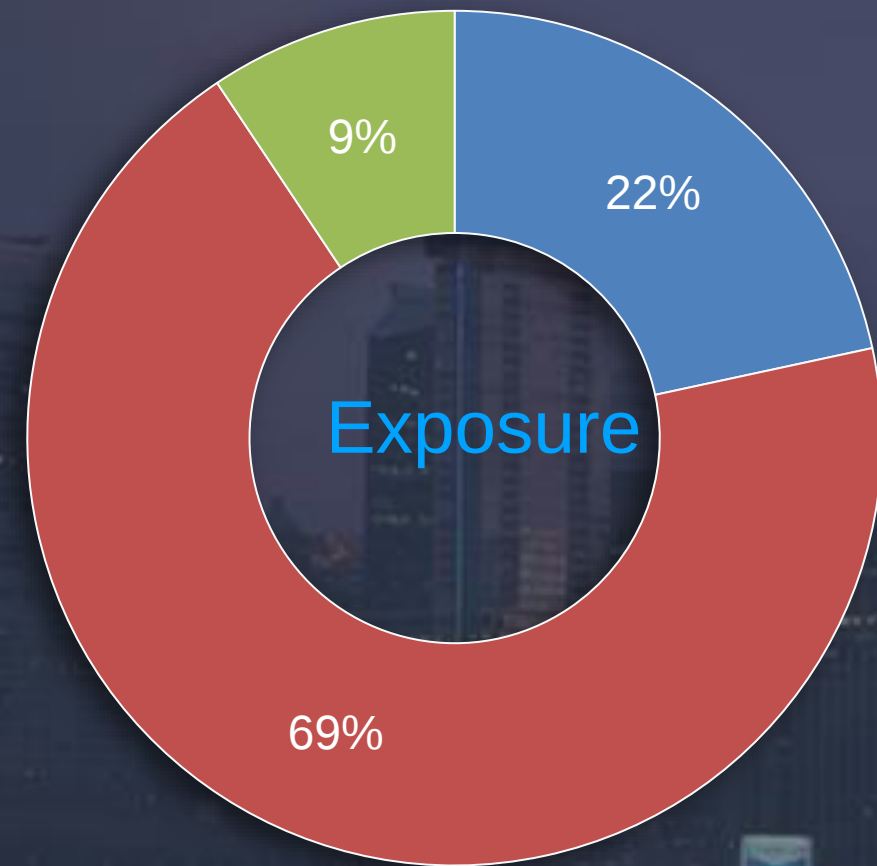


0.85M/
2.69M

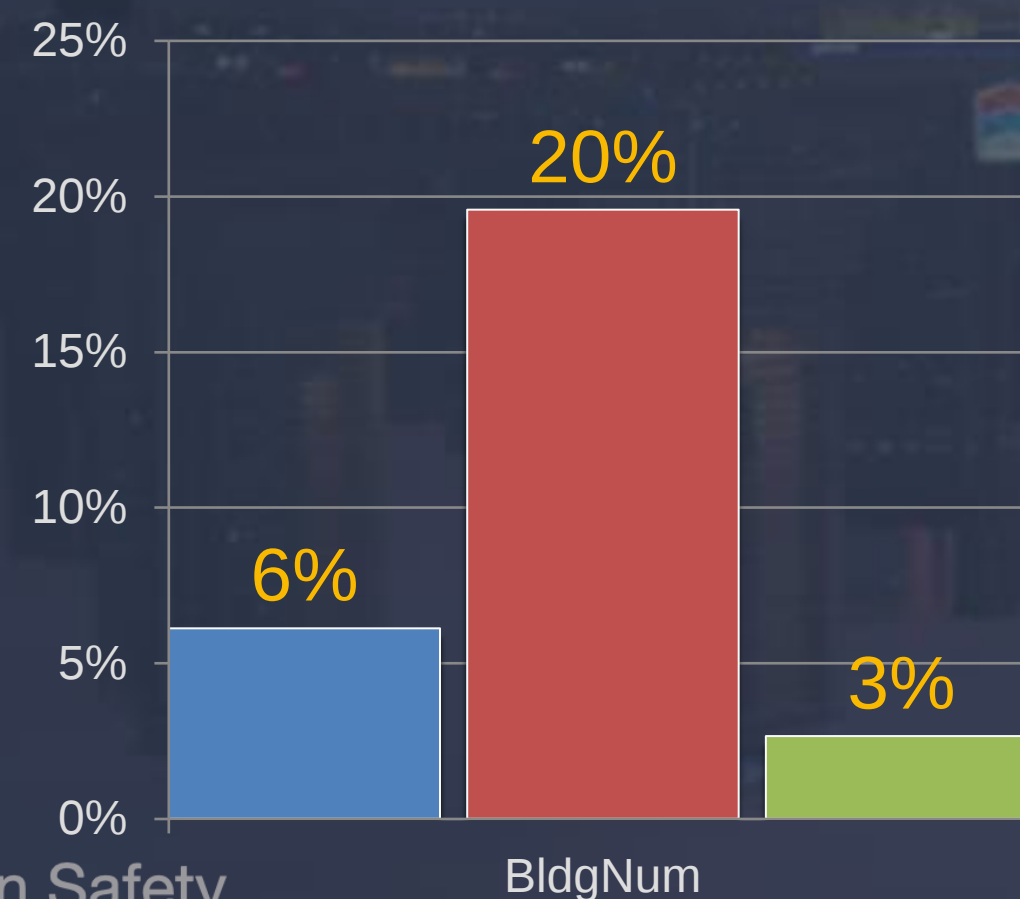


241B/
736B

■ North Vancouver ■ Vancouver
■ West Vancouver



■ North Vancouver ■ Vancouver ■ West Vancouver



3,560



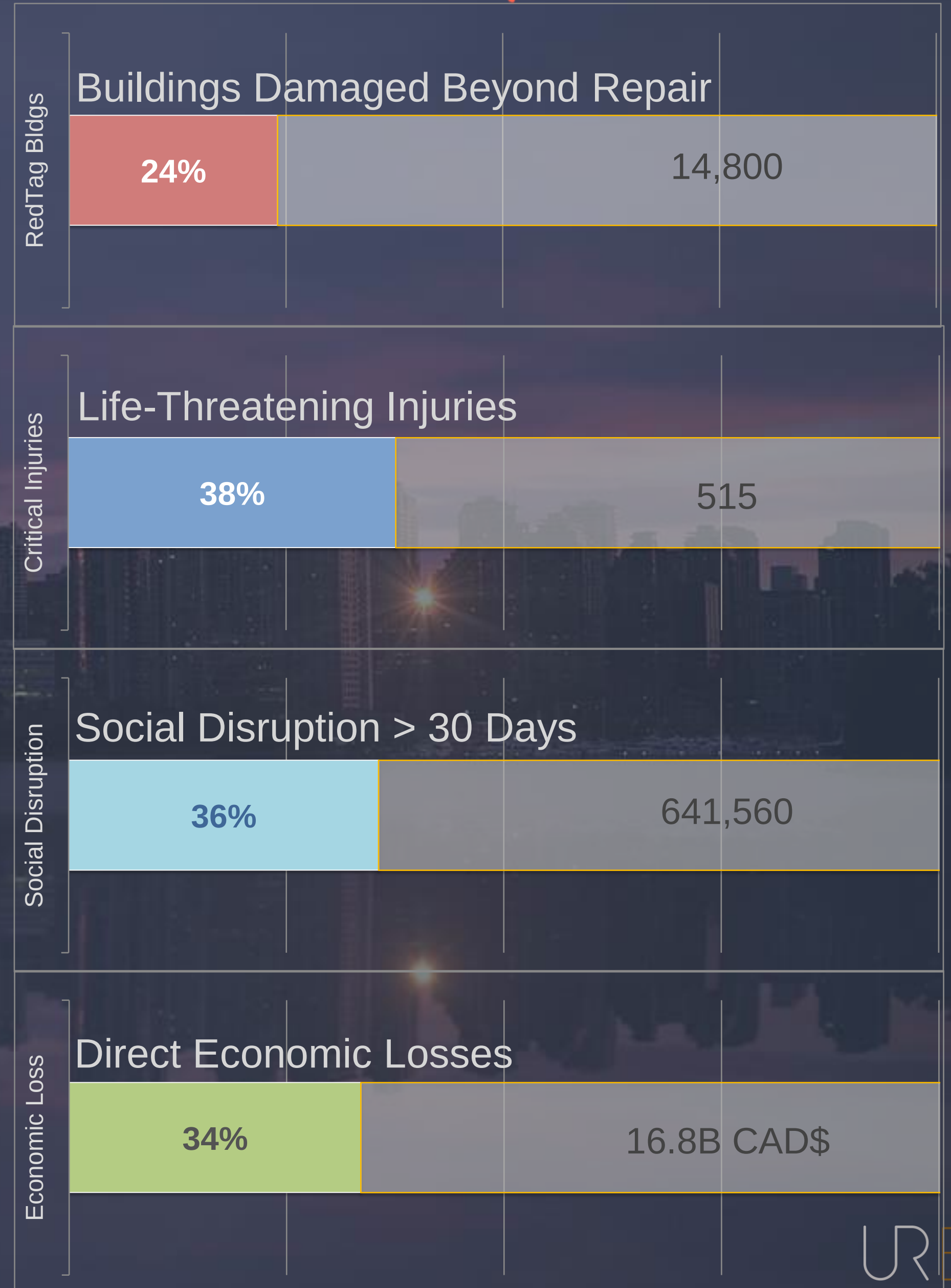
195



228.5k



5.6B CAD\$



Go to www.menti.com and use the code 90 85 64 4

Hotspots of Concern - Vancouver Harbour



Physical/Social Impacts

- 1 Building Impacts
- 2 Critical Injuries
- 3 Social Disruption
- 4 Economic Loss

Please go to [menti.com](https://www.menti.com) and then enter the code:
90 85 64 4

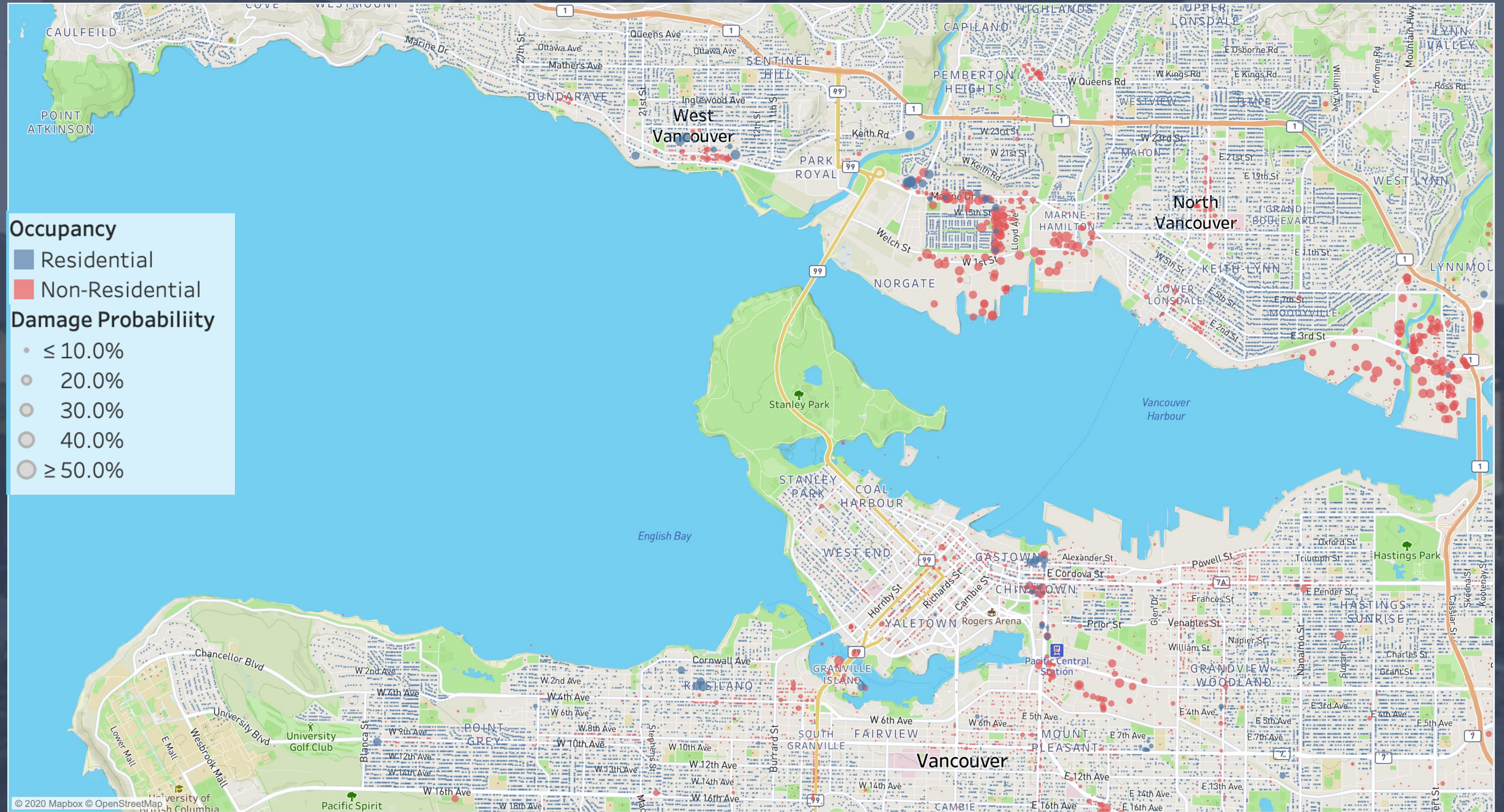
For each of the risk metrics, use your judgement to rank:

1. level of concern for physical impacts and strain on neighbourhood social fabric
2. potential to reduce risk through proactive investments in mitigation/adaptation



24% of
Total

Building Performance: 3,560 buildings damaged beyond repair

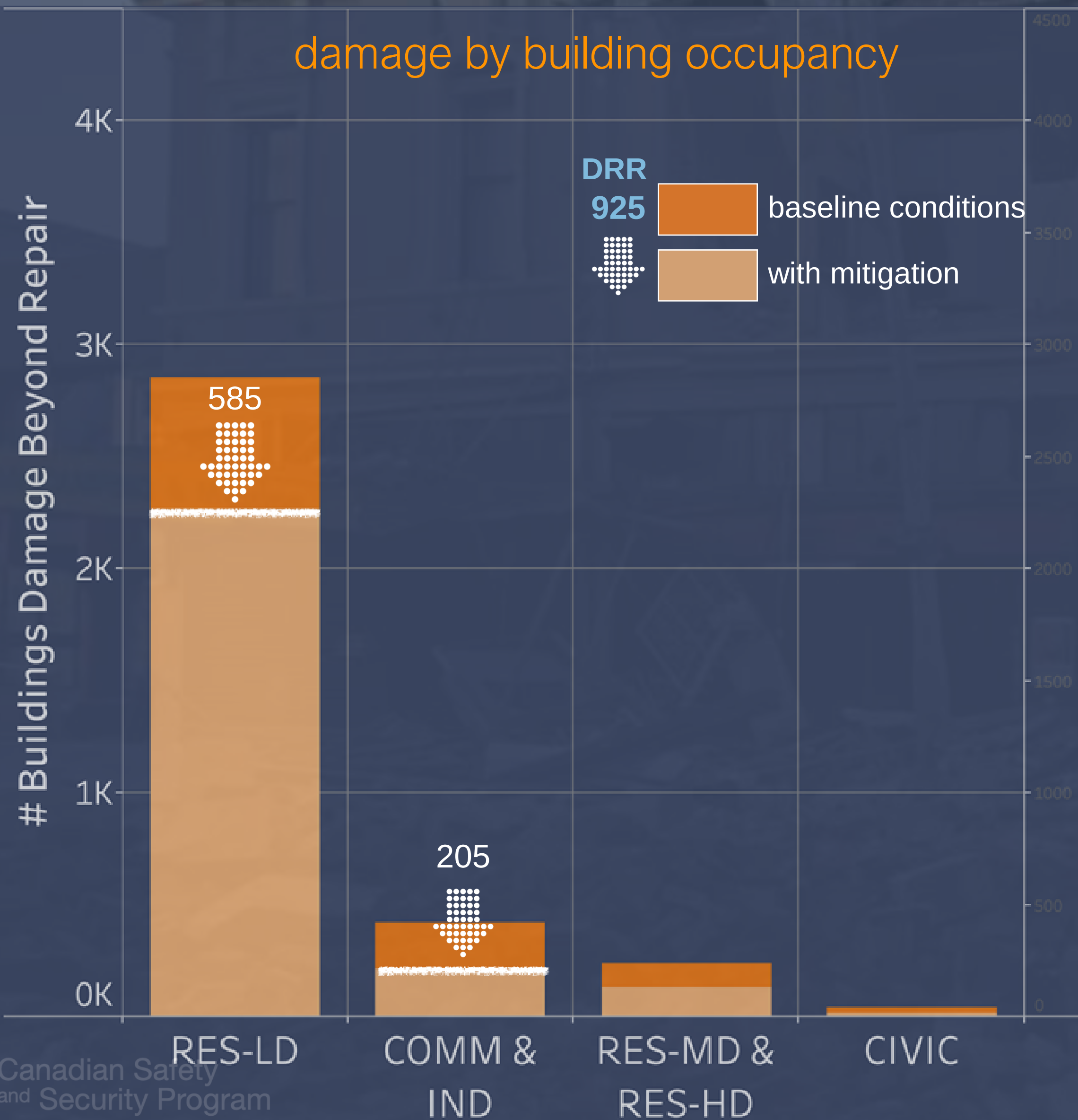




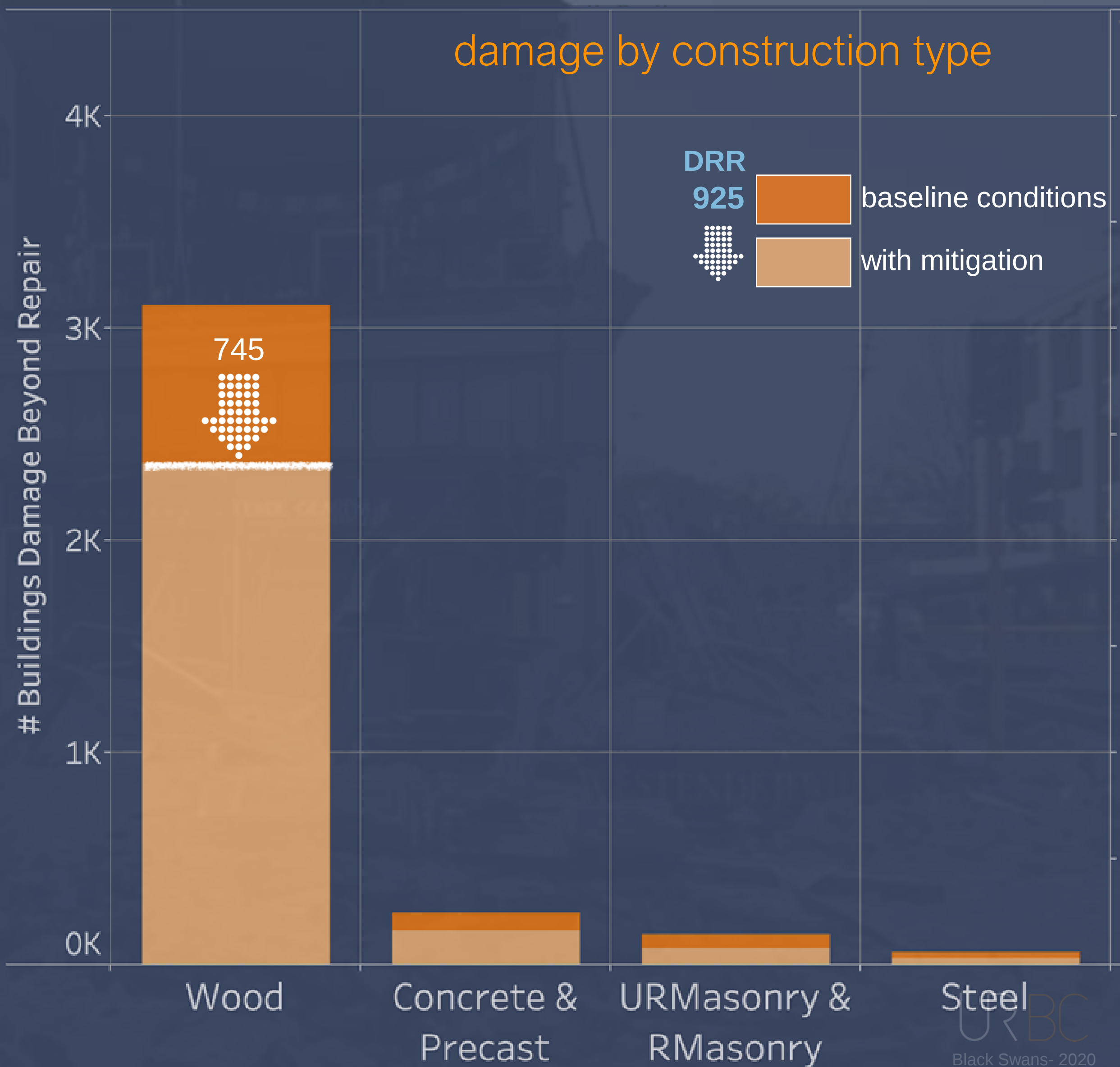
Building Performance: 3,560 buildings damaged beyond repair

24% of Total

damage by building occupancy



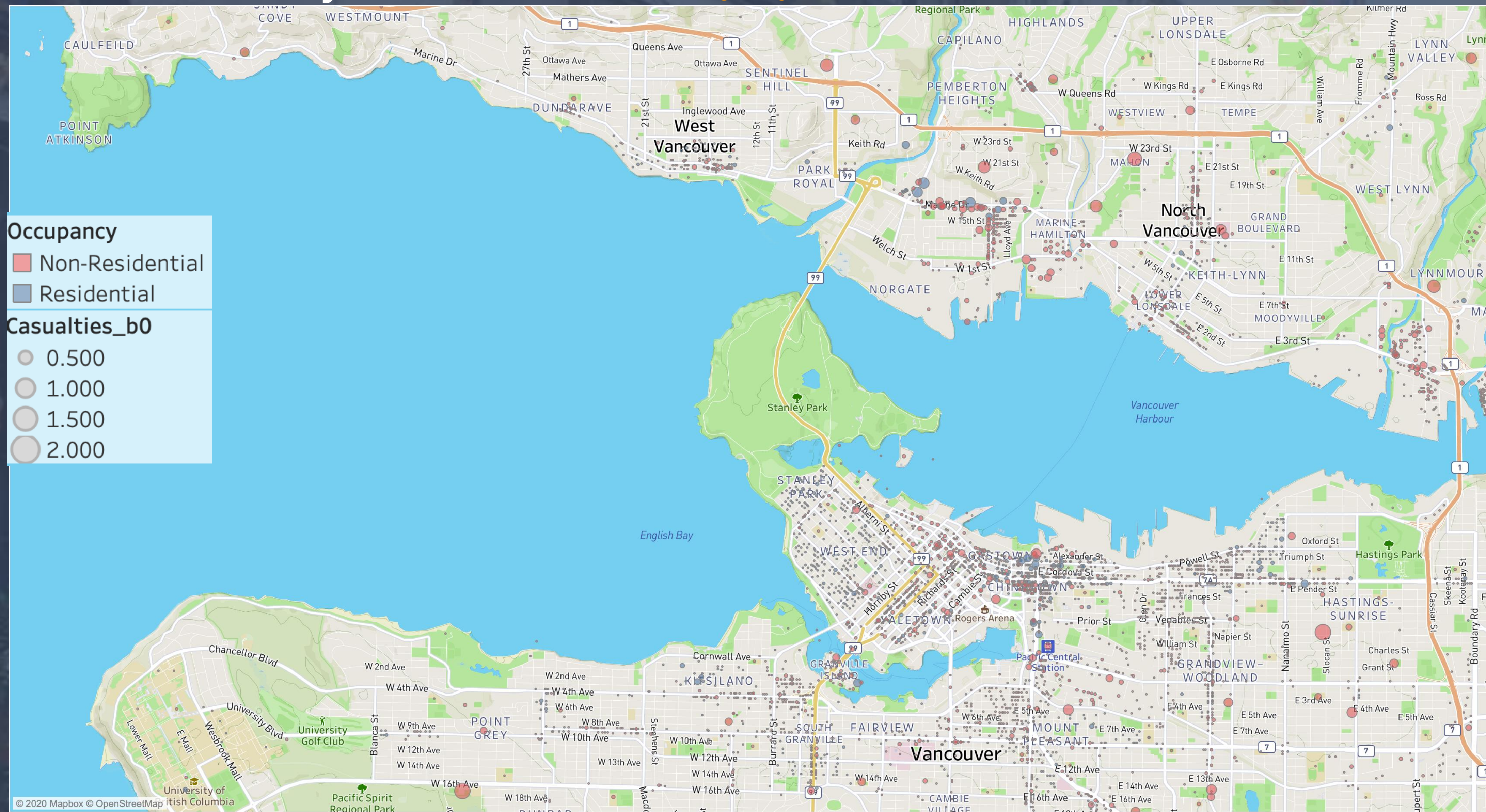
damage by construction type





38% of
Total

Public Safety: 195 life-threatening injuries



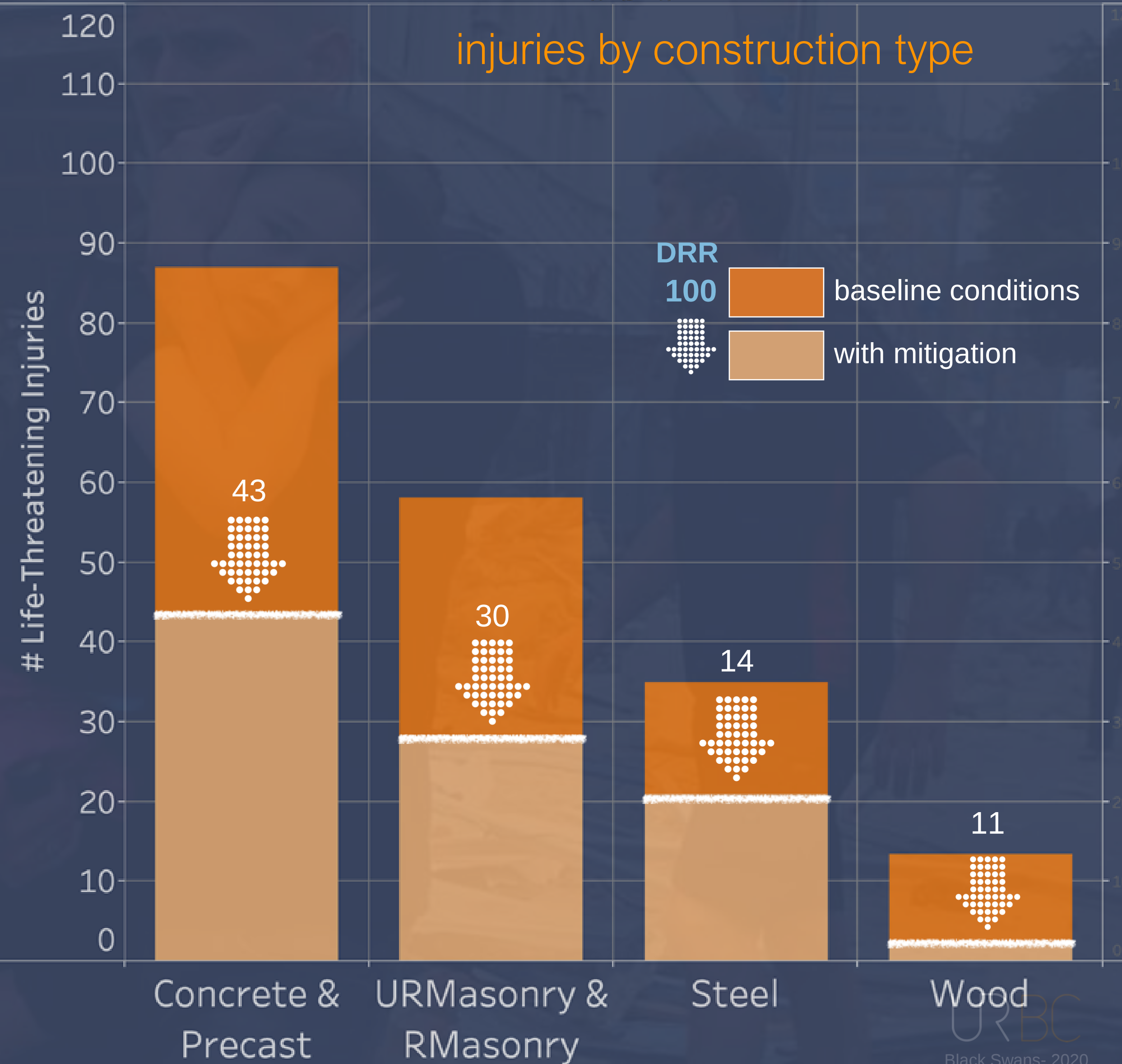
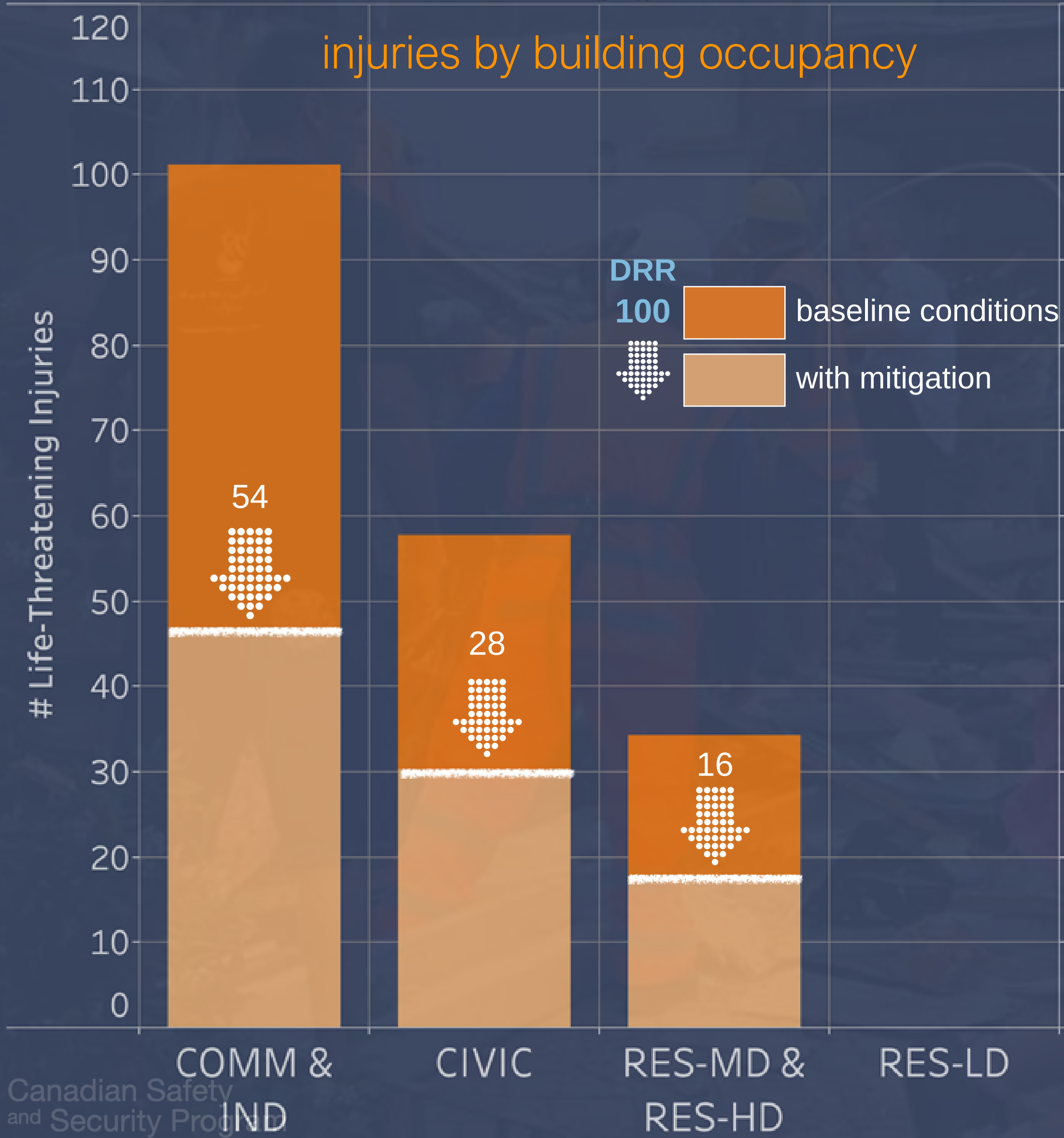


Public Safety: 195 life-threatening injuries

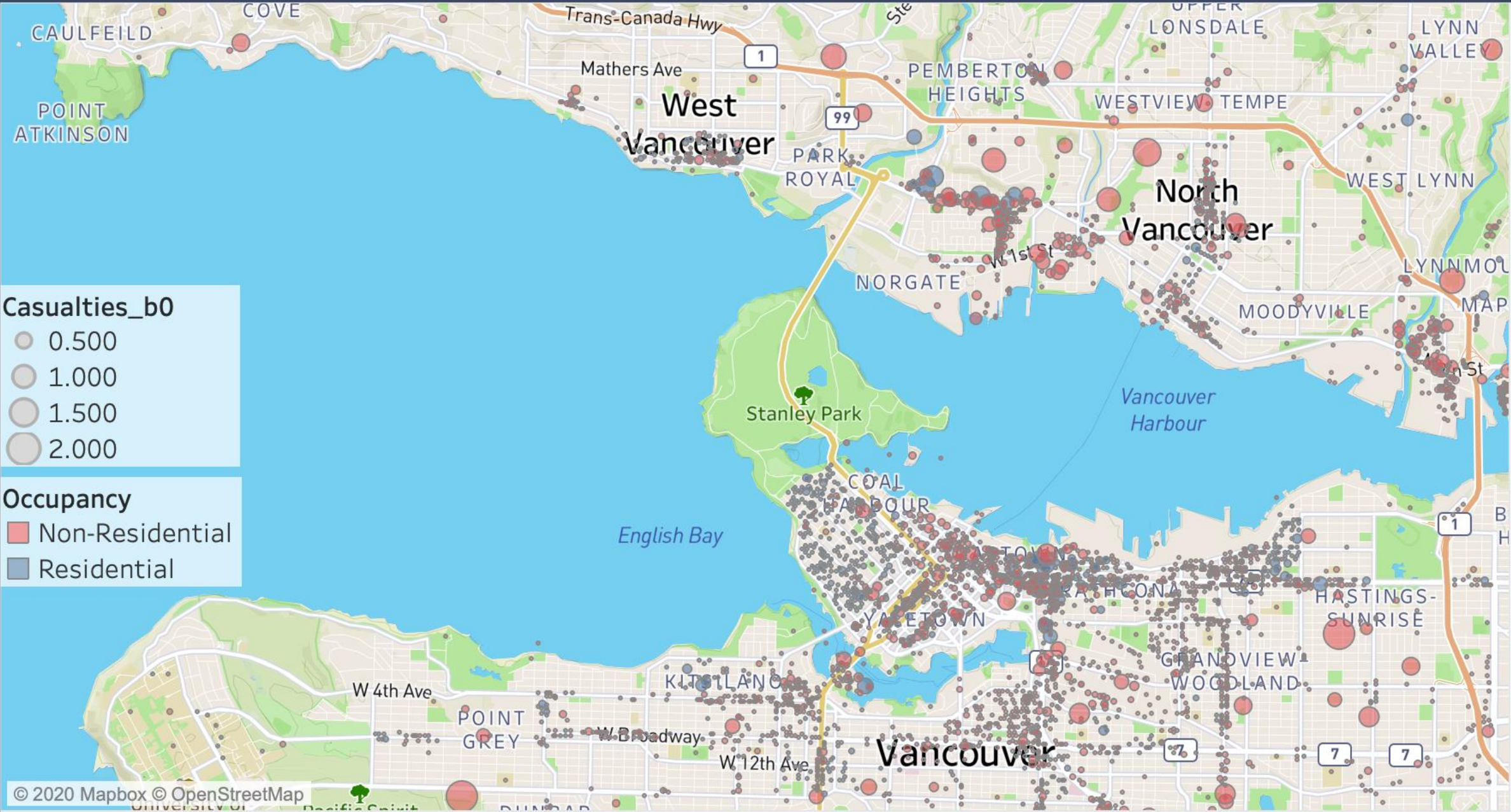
38% of Total

group (group)

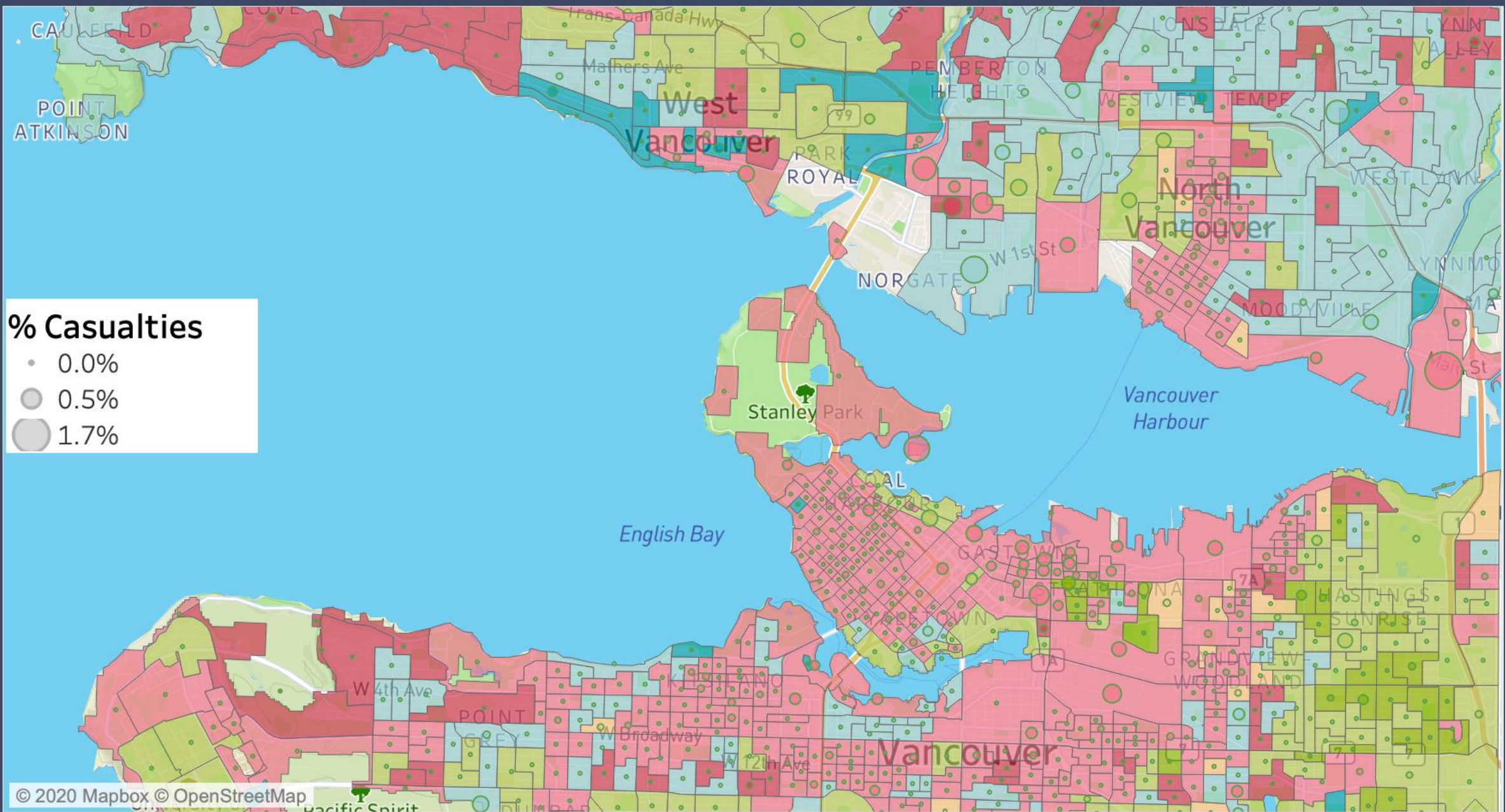
group (group)



EARTHQUAKE IMPACTS - Critical Injuries (baseline conditions)



STRAIN ON SOCIAL FABRIC - Susceptibility to Physical Injury

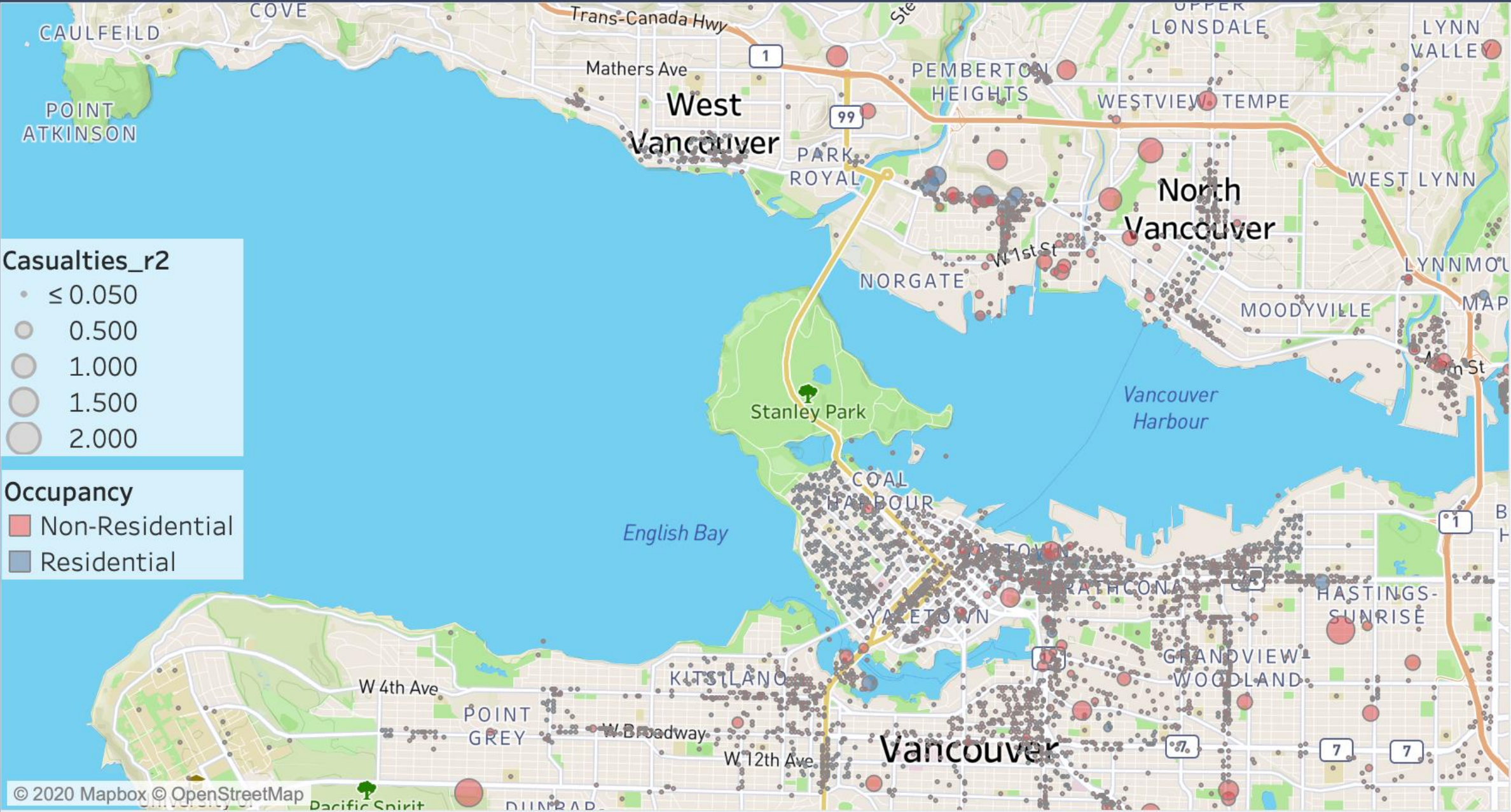


Distribution of Critical Injuries Across Neighbourhood Archetypes

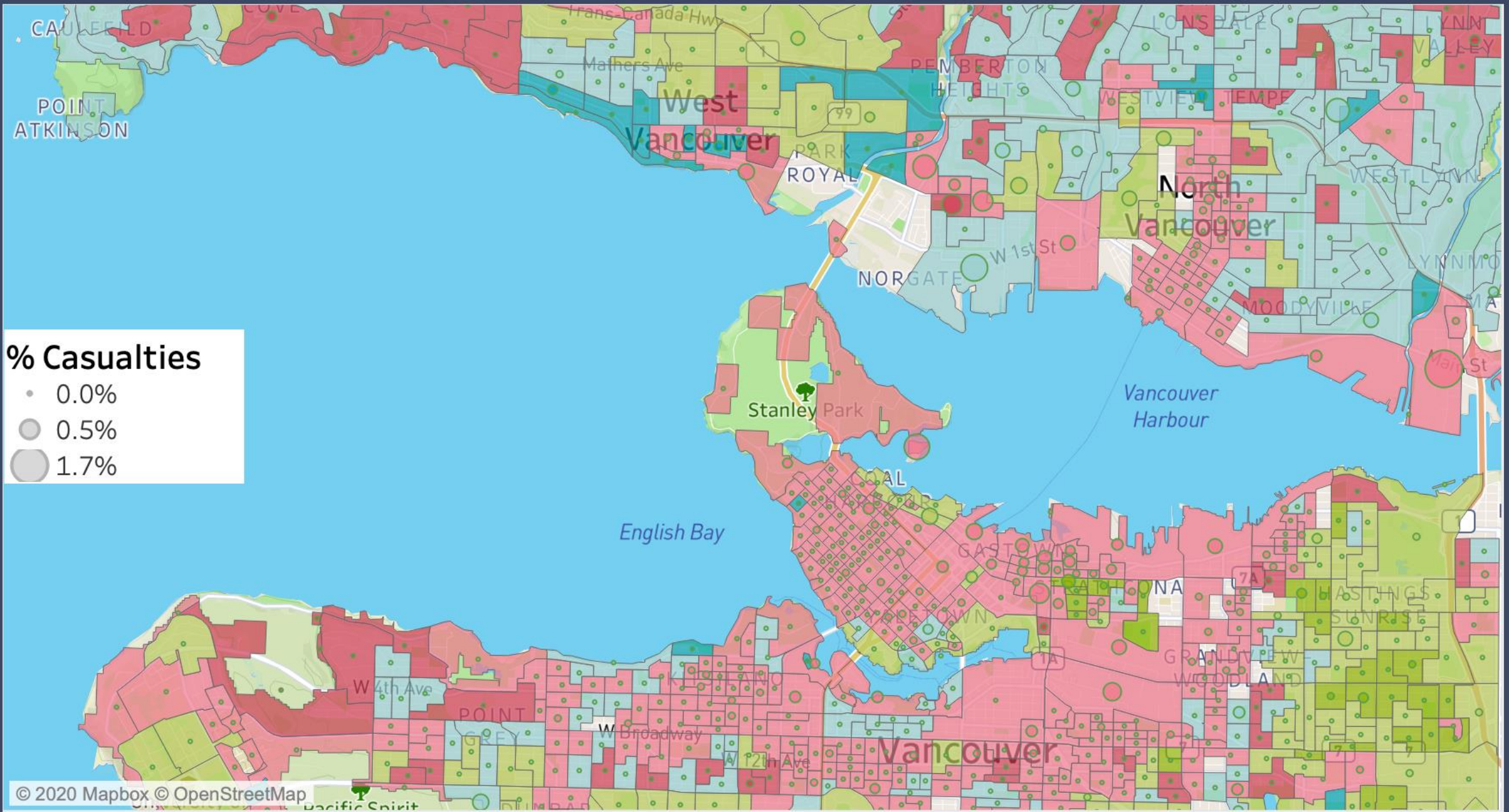
195



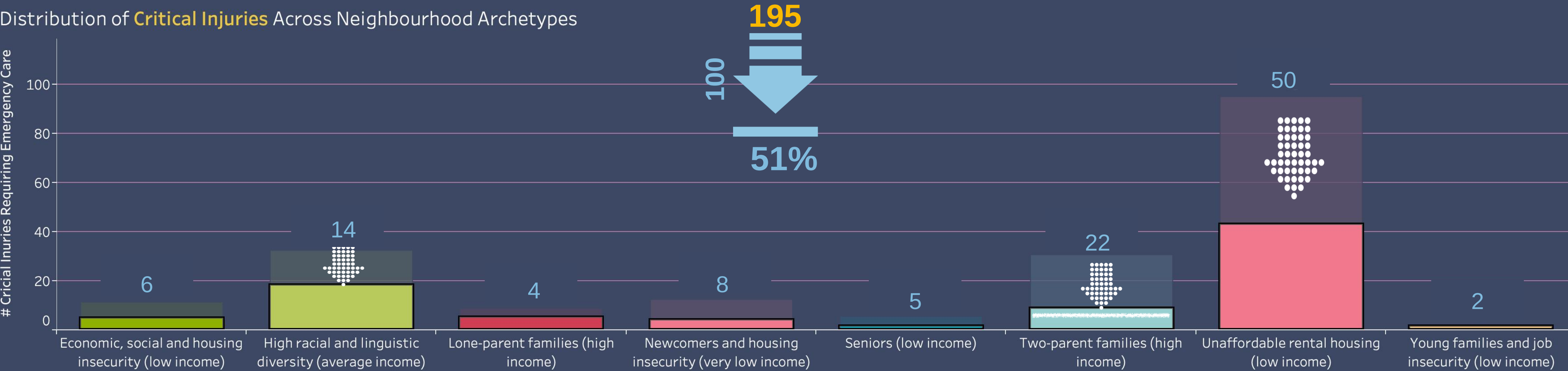
EARTHQUAKE IMPACTS - Critical Injuries (with mitigation)



STRAIN ON SOCIAL FABRIC - Susceptibility to Physical Injury



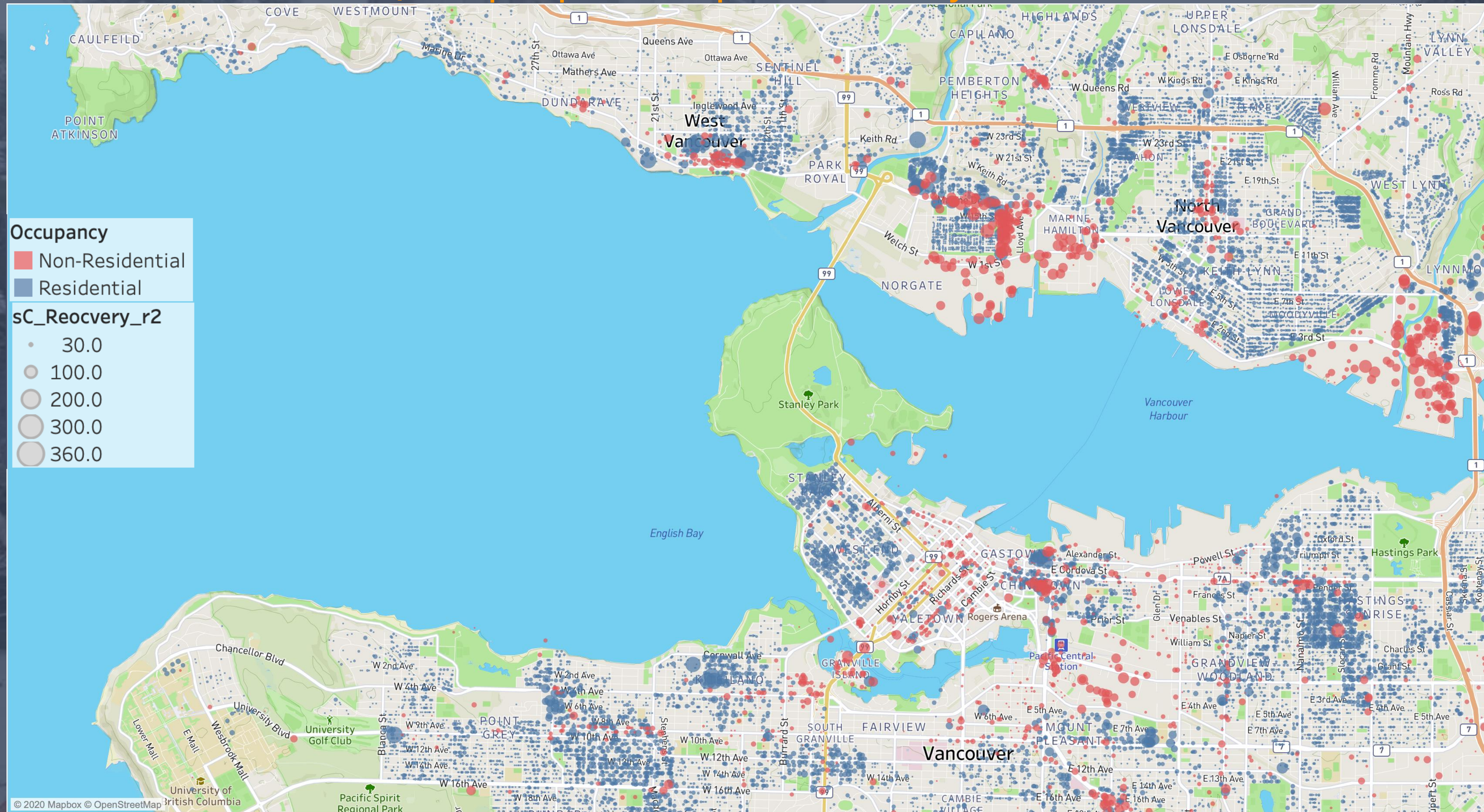
Distribution of Critical Injuries Across Neighbourhood Archetypes





38% of
Total

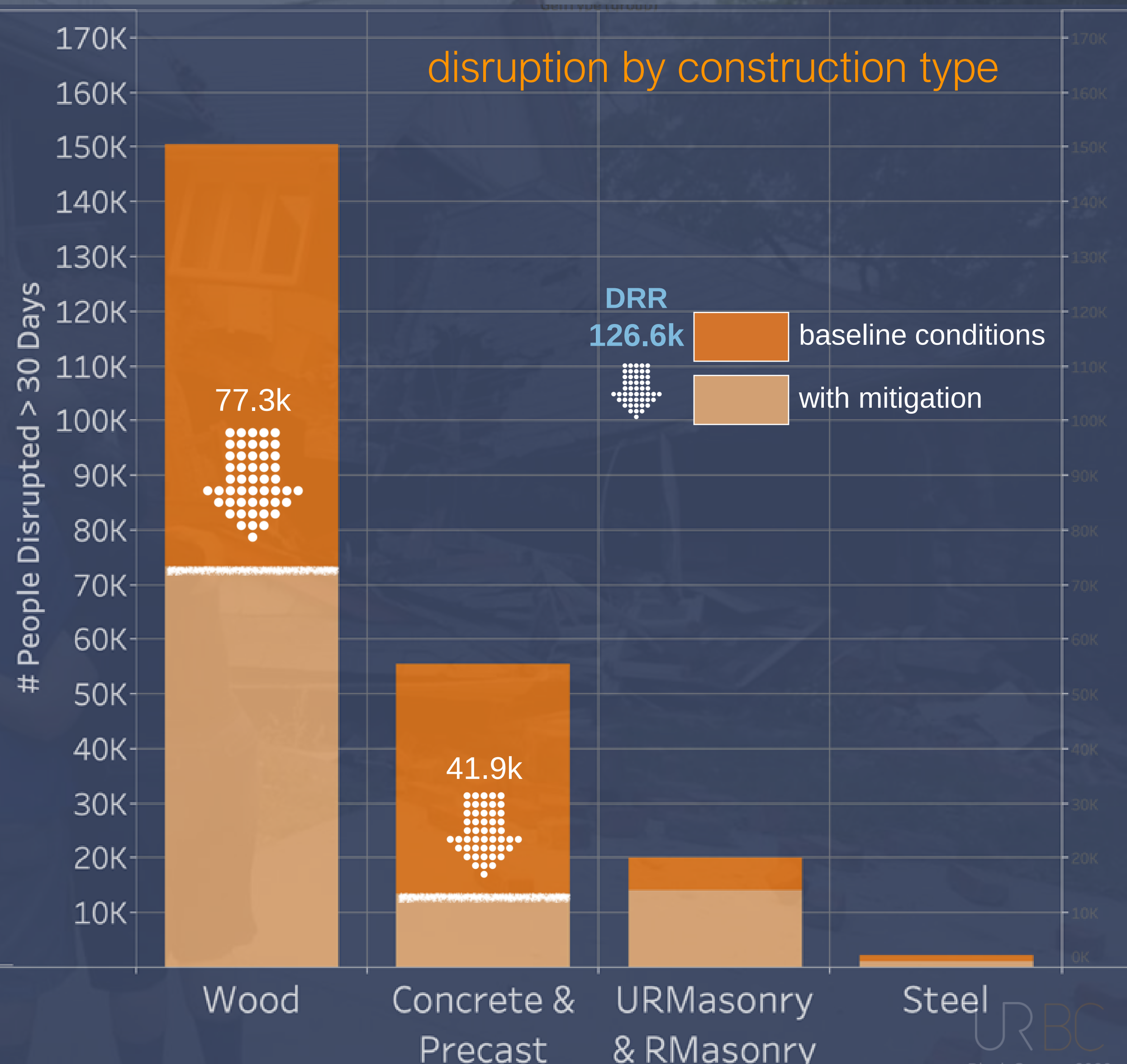
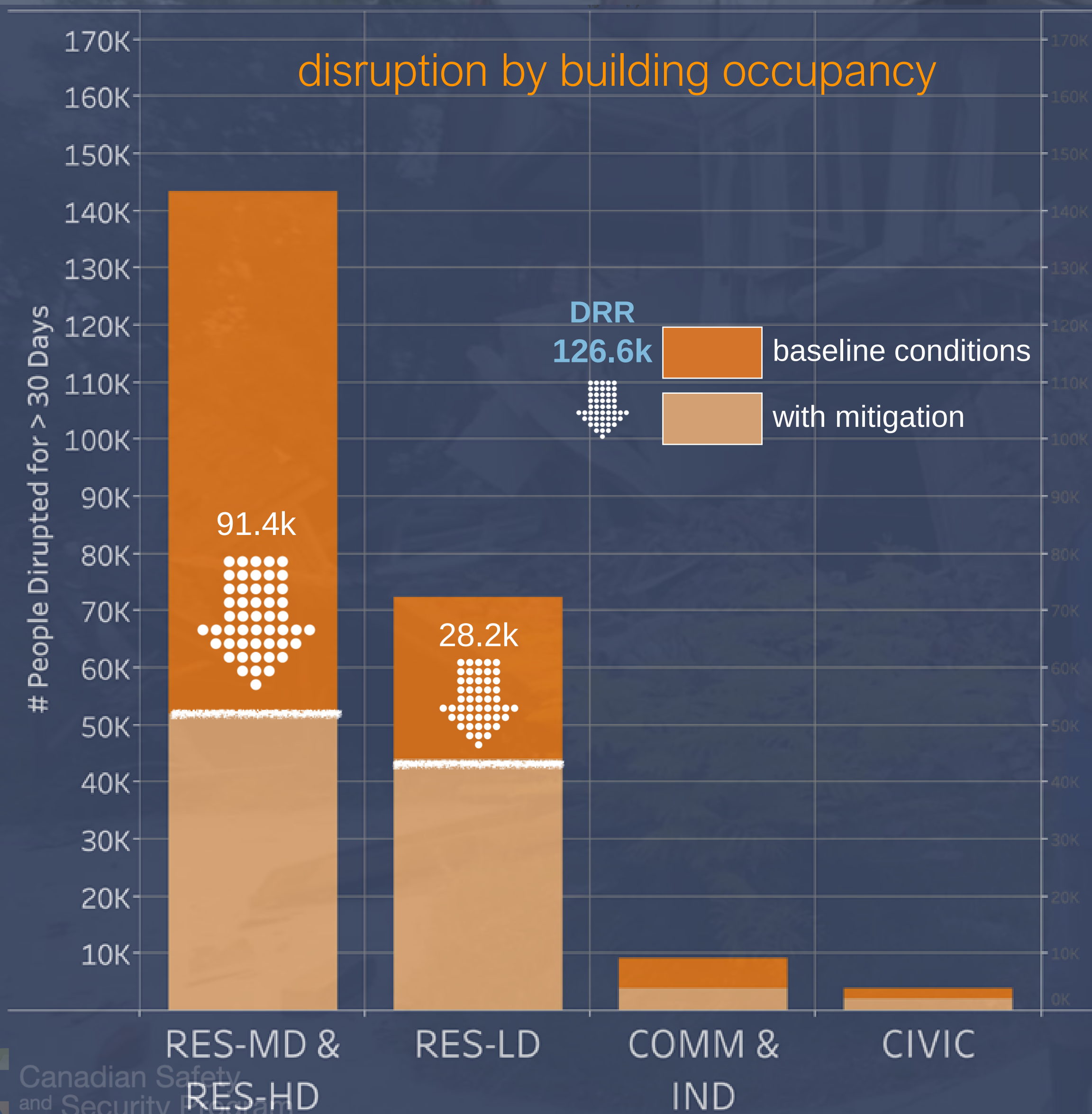
Downtime: 228,530 people disrupted > 30 days



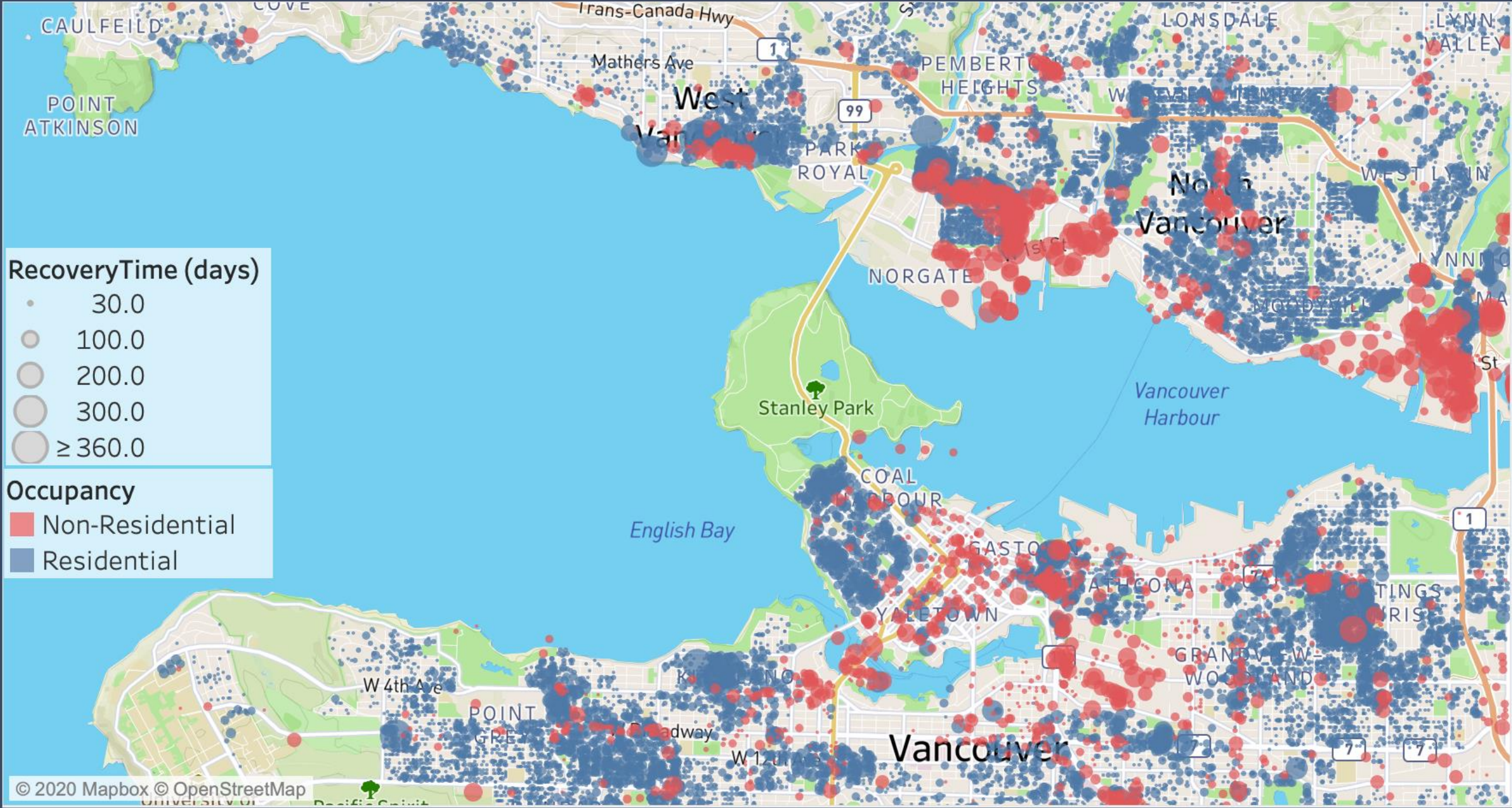


Downtime: **228,530** people disrupted > 30 days

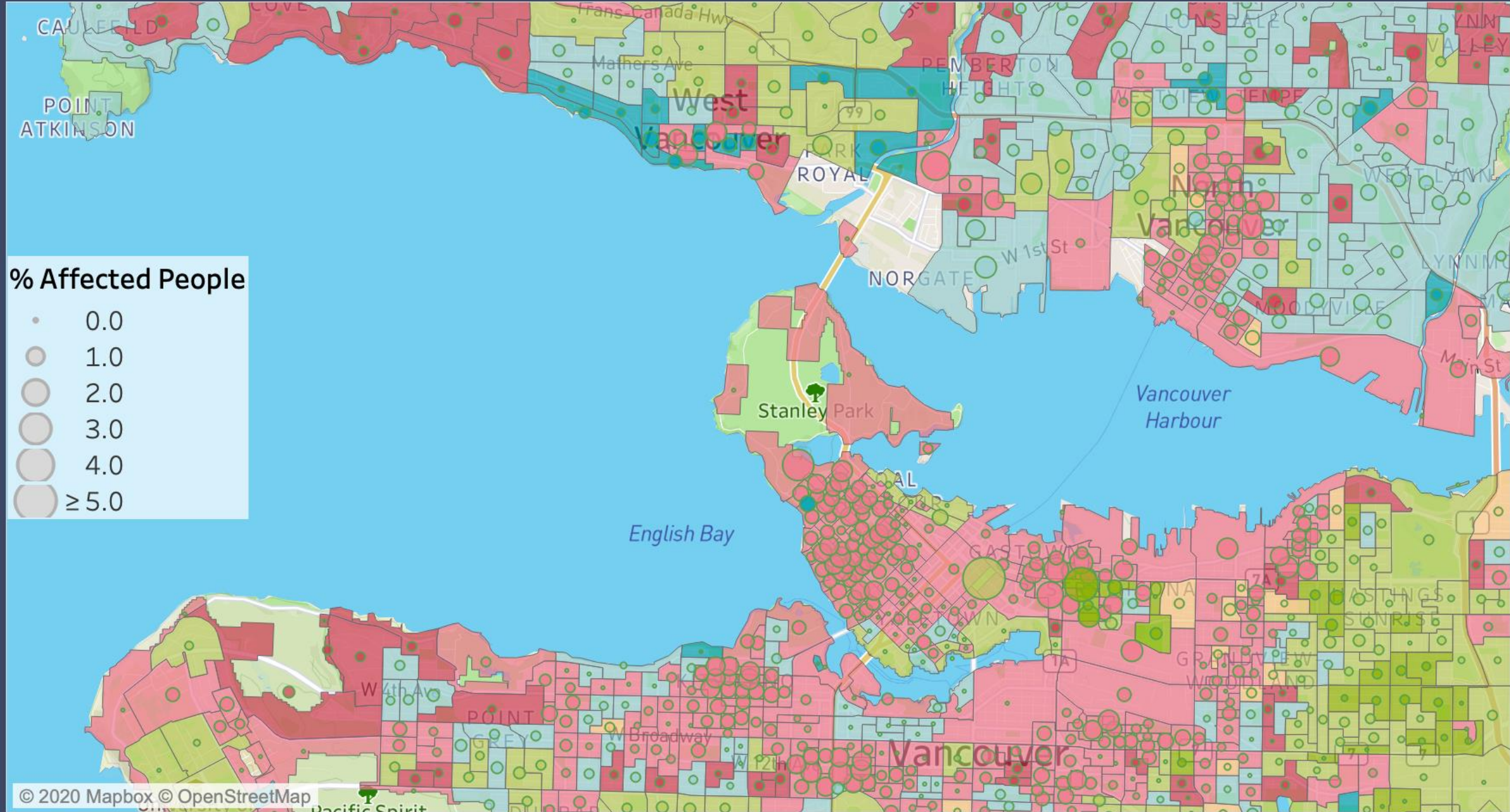
38% of Total



EARTHQUAKE IMPACTS - Recovery Time (baseline conditions)

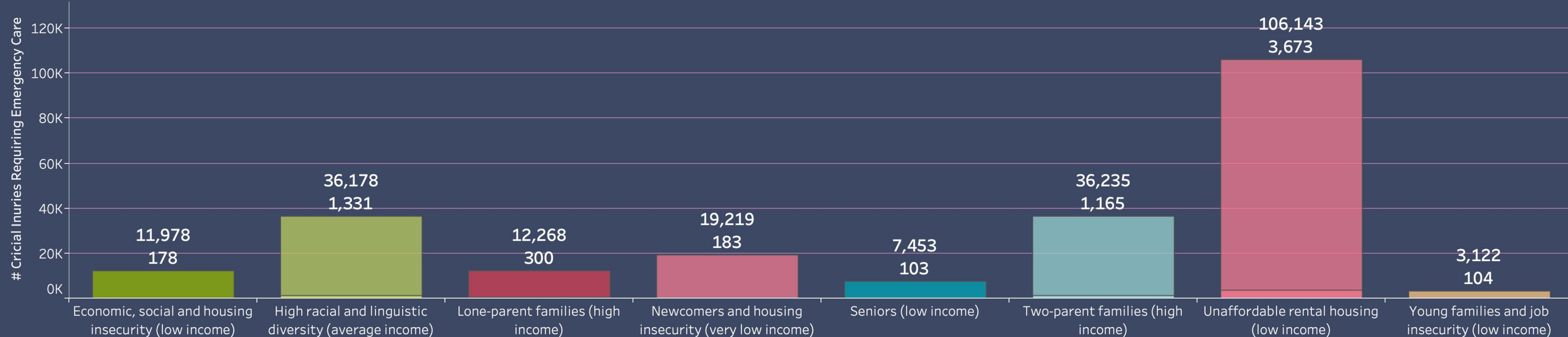


STRAIN ON SOCIAL FABRIC - Loss of Habitation for > 30 Days

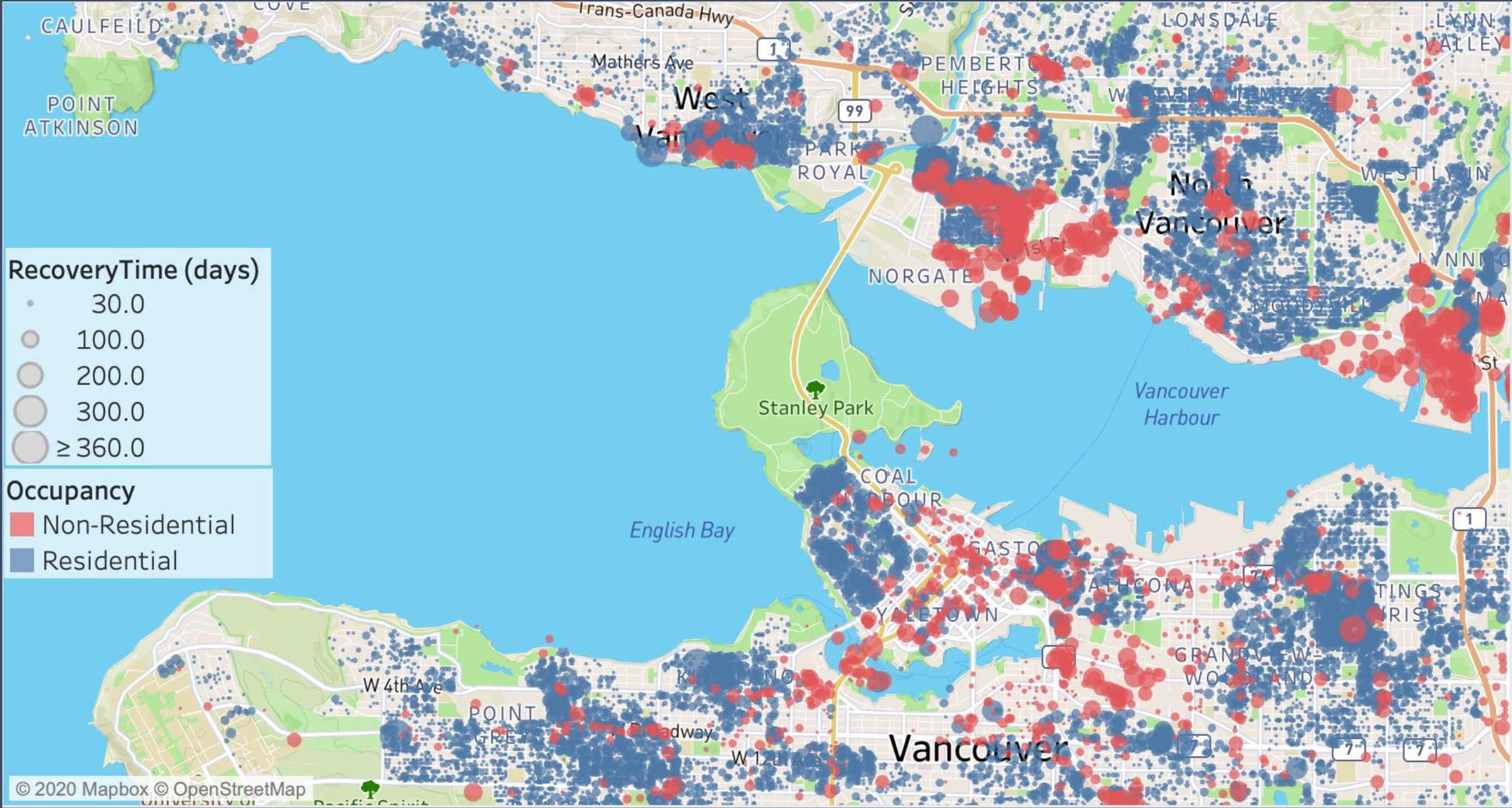


Distribution of Disrupted People Across Neighbourhood Archetypes

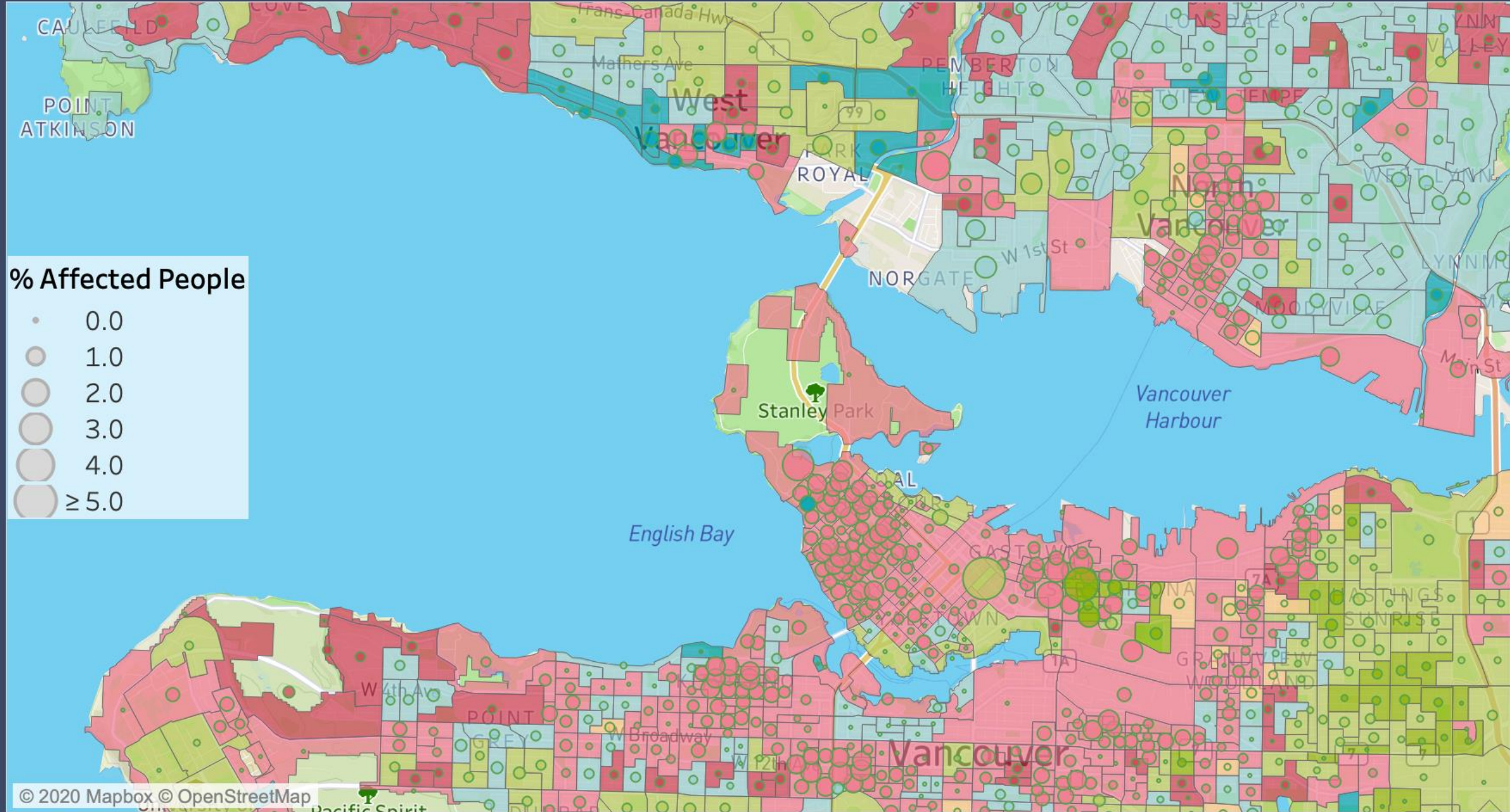
228.5k



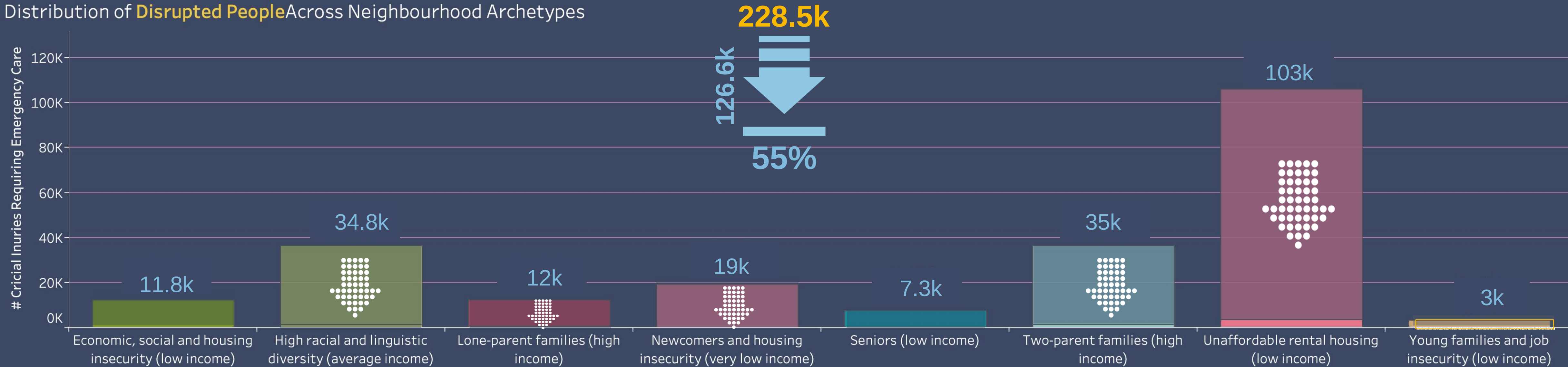
EARTHQUAKE IMPACTS - Recovery Time (baseline conditions)



STRAIN ON SOCIAL FABRIC - Loss of Habitation for > 30 Days



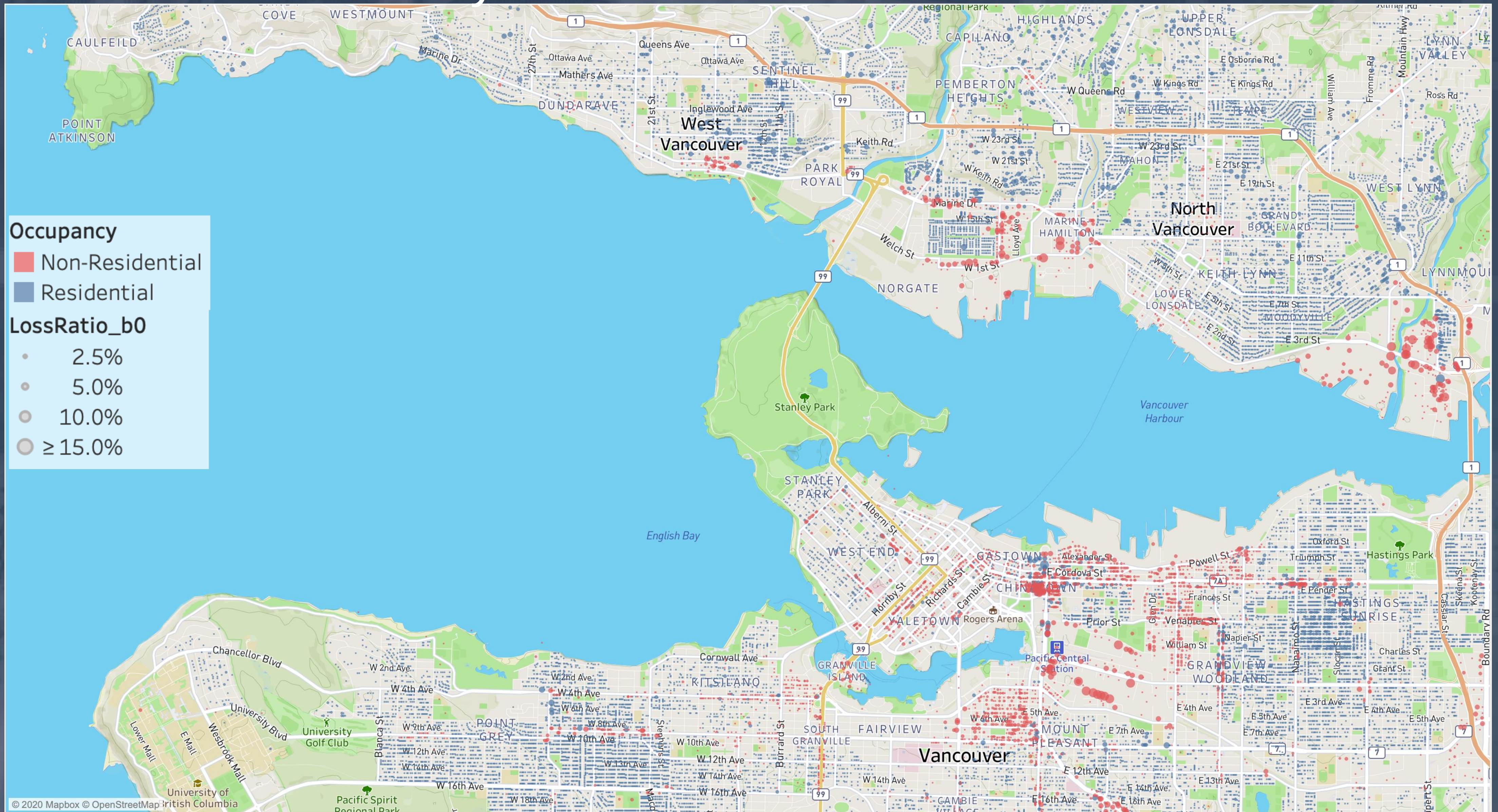
Distribution of Disrupted People Across Neighbourhood Archetypes





34% of
Total

Economic Security: 5.6B CAD\$ in direct economic loss

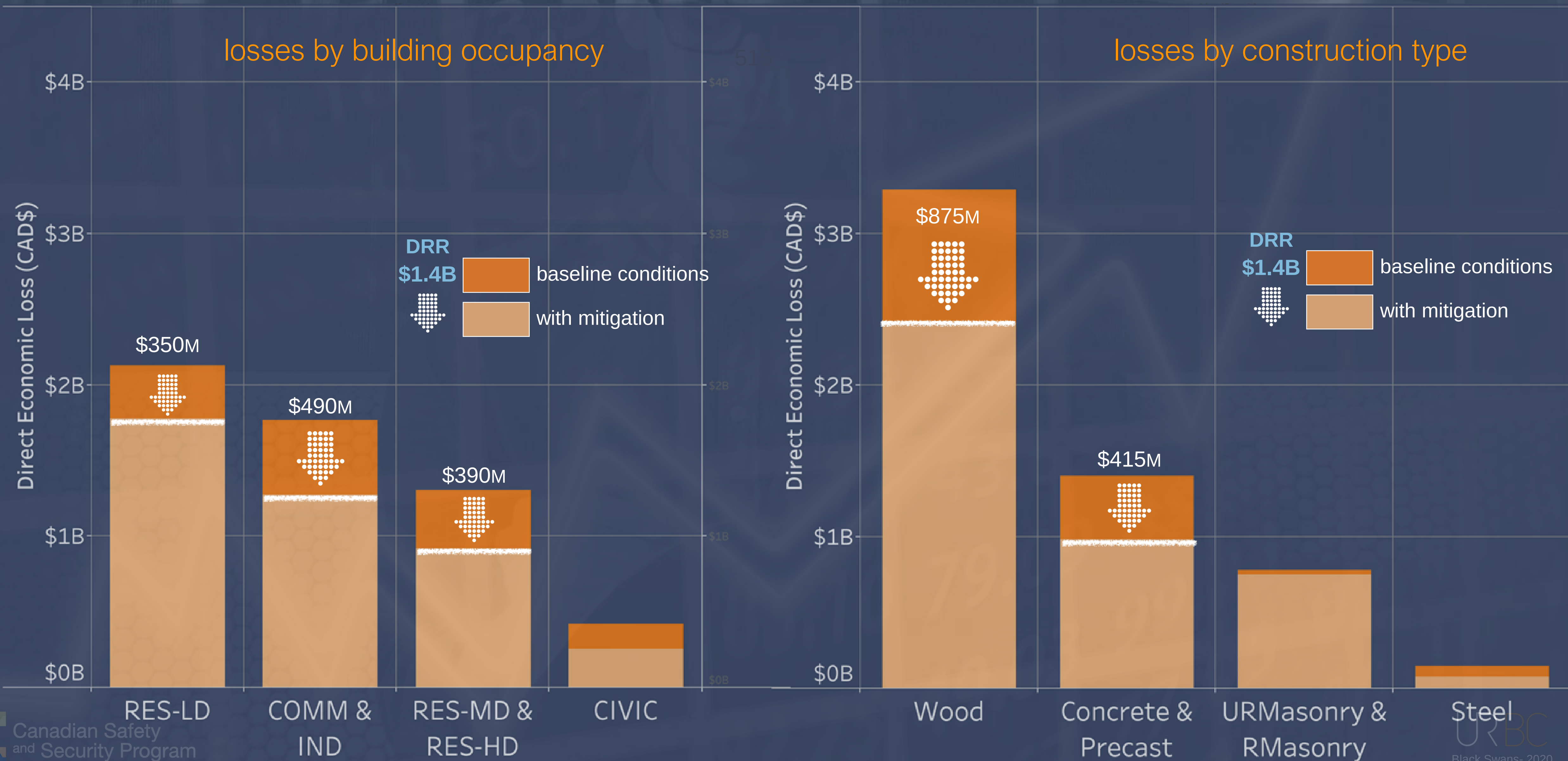


© 2020 Mapbox © OpenStreetMap British Columbia

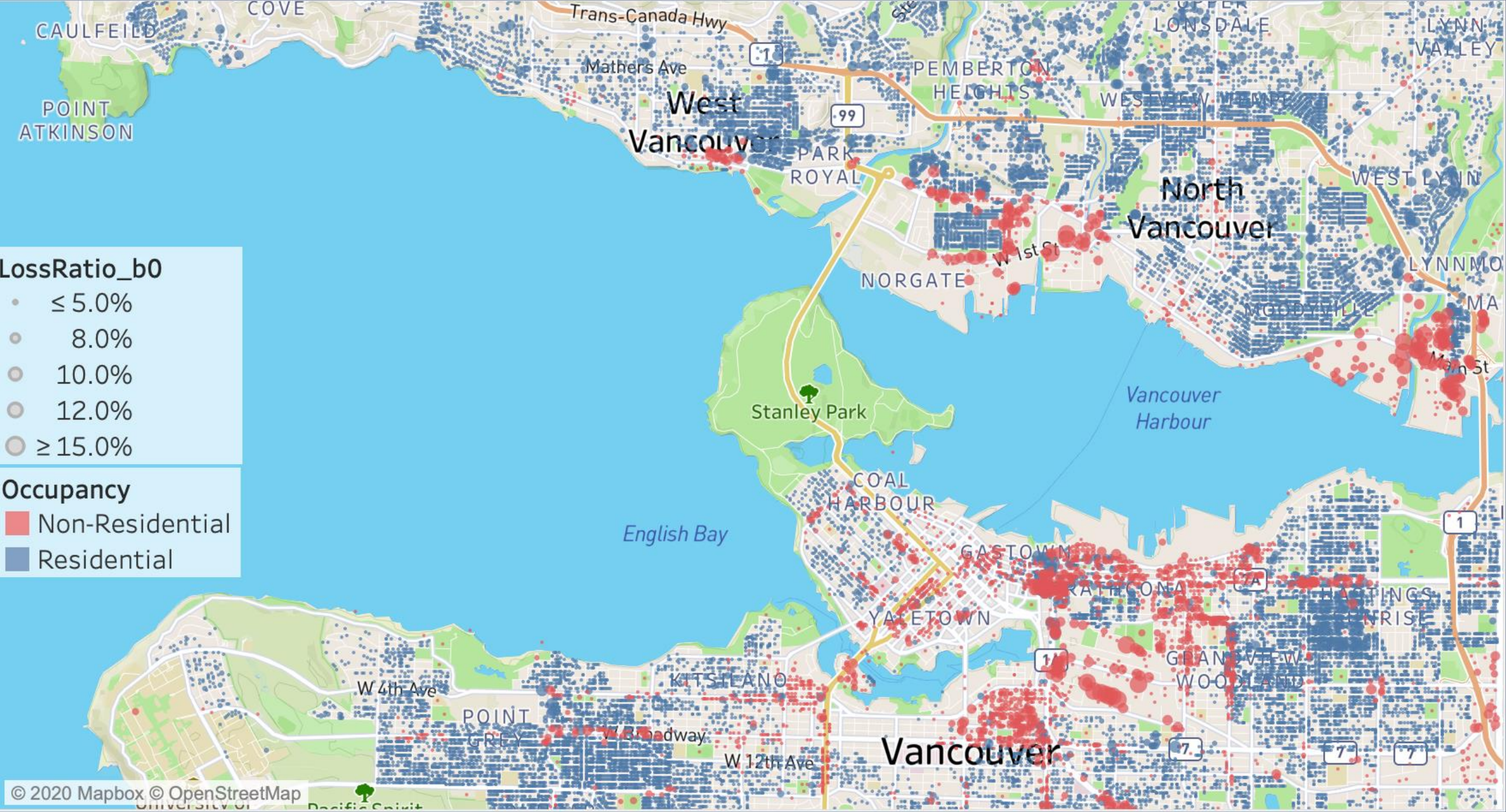


Economic Security: **5.6B** CAD\$ in direct economic loss

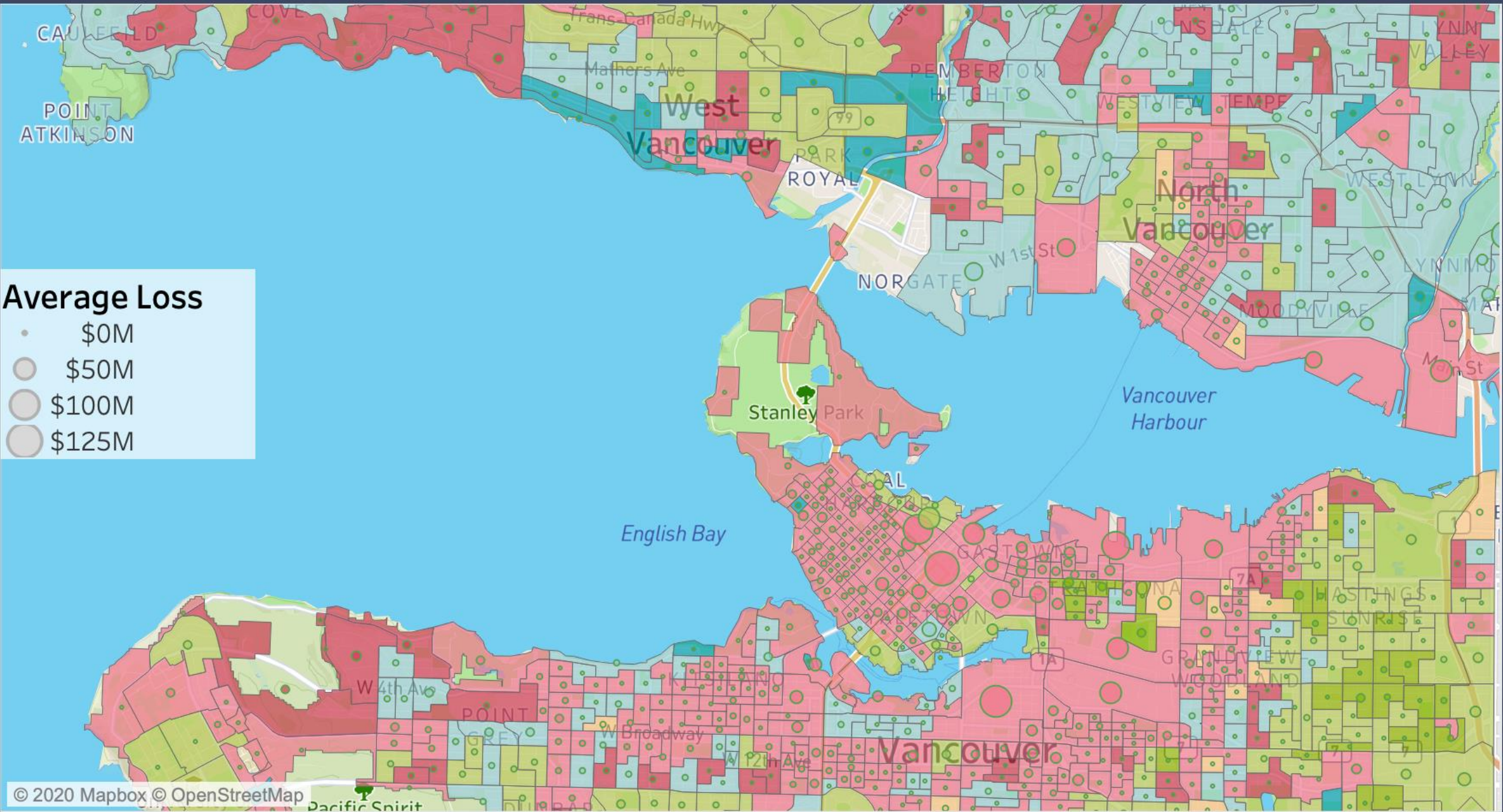
34% of Total



EARTHQUAKE IMPACTS - Direct Economic Loss (baseline conditions)

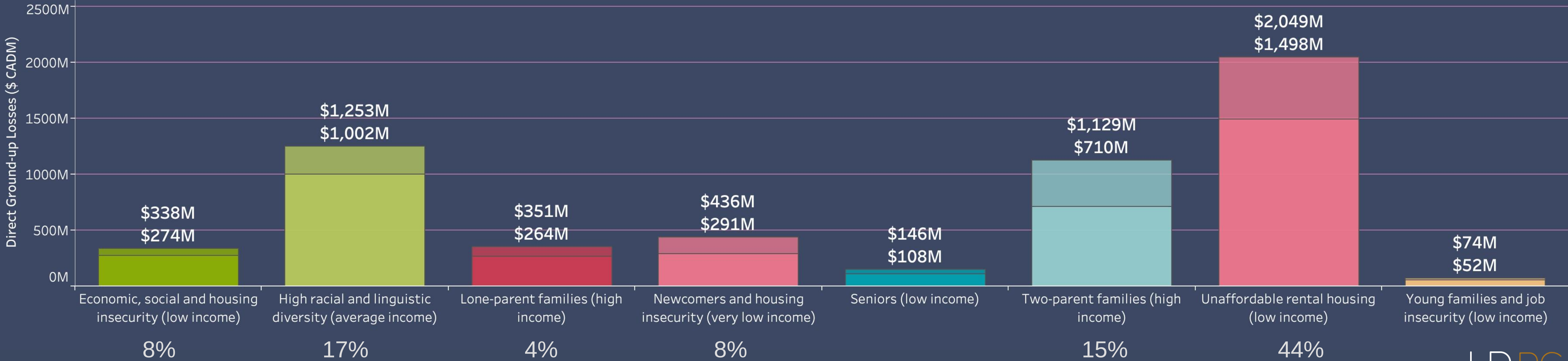


STRAIN ON SOCIAL FABRIC - Financial Hardship

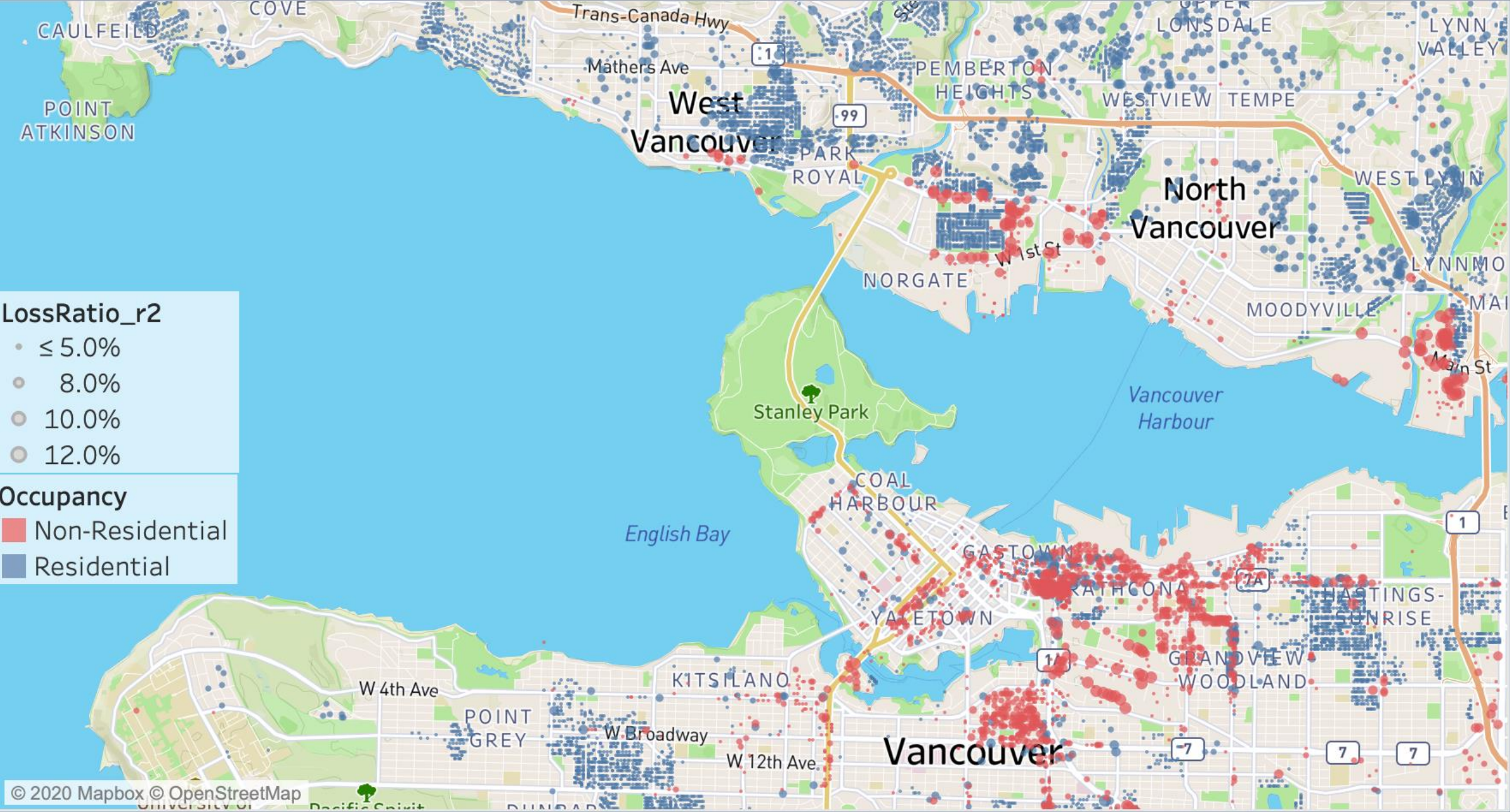


Distribution of Economic Losses Across Neighbourhood Archetypes

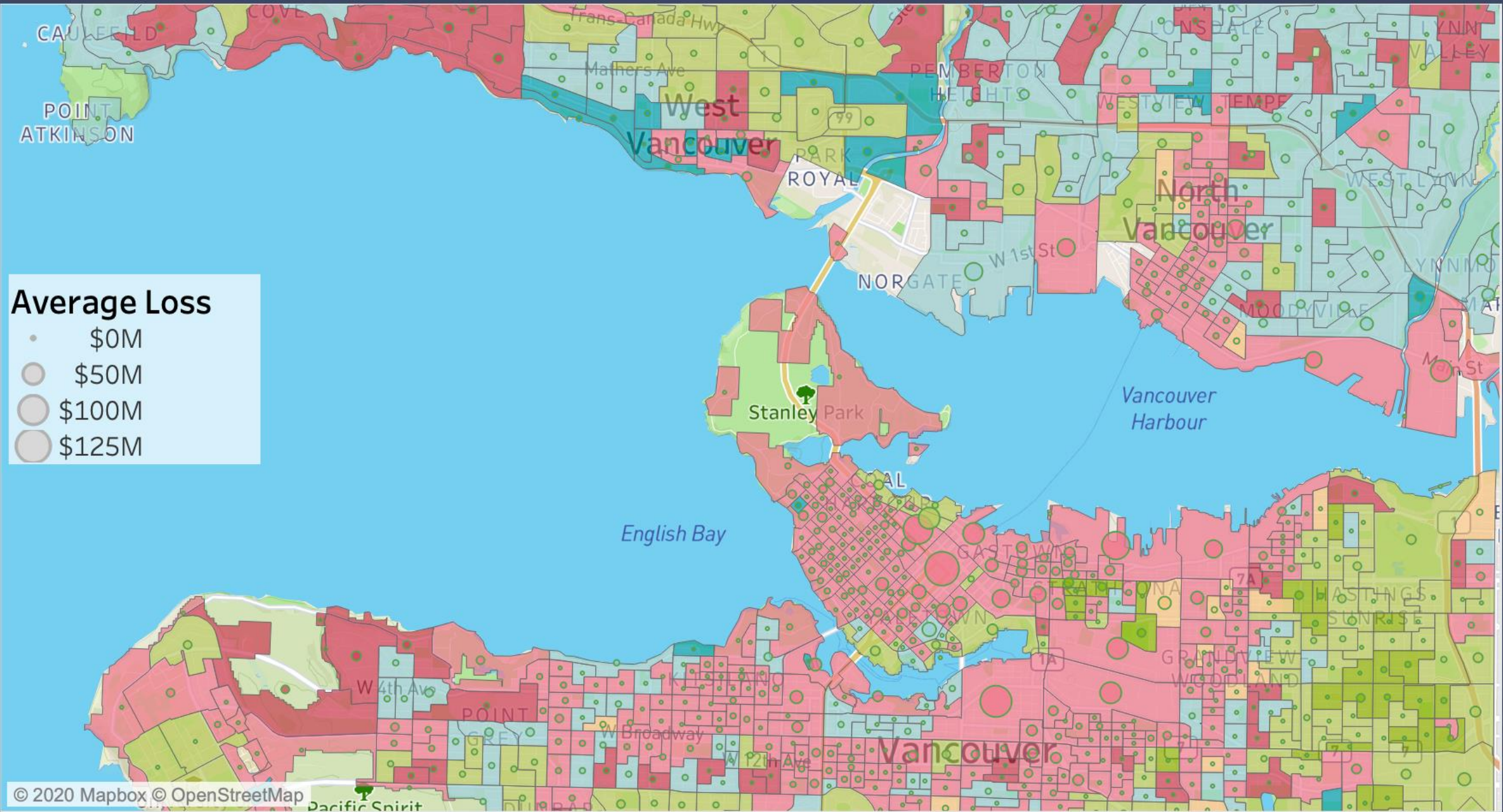
5.6B CAD\$



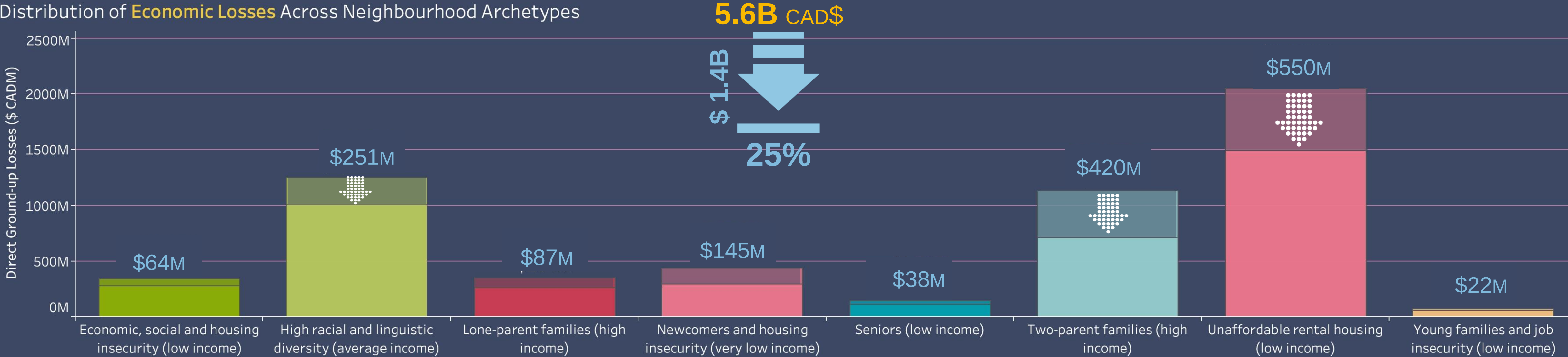
EARTHQUAKE IMPACTS - Direct Economic Loss (with mitigation)

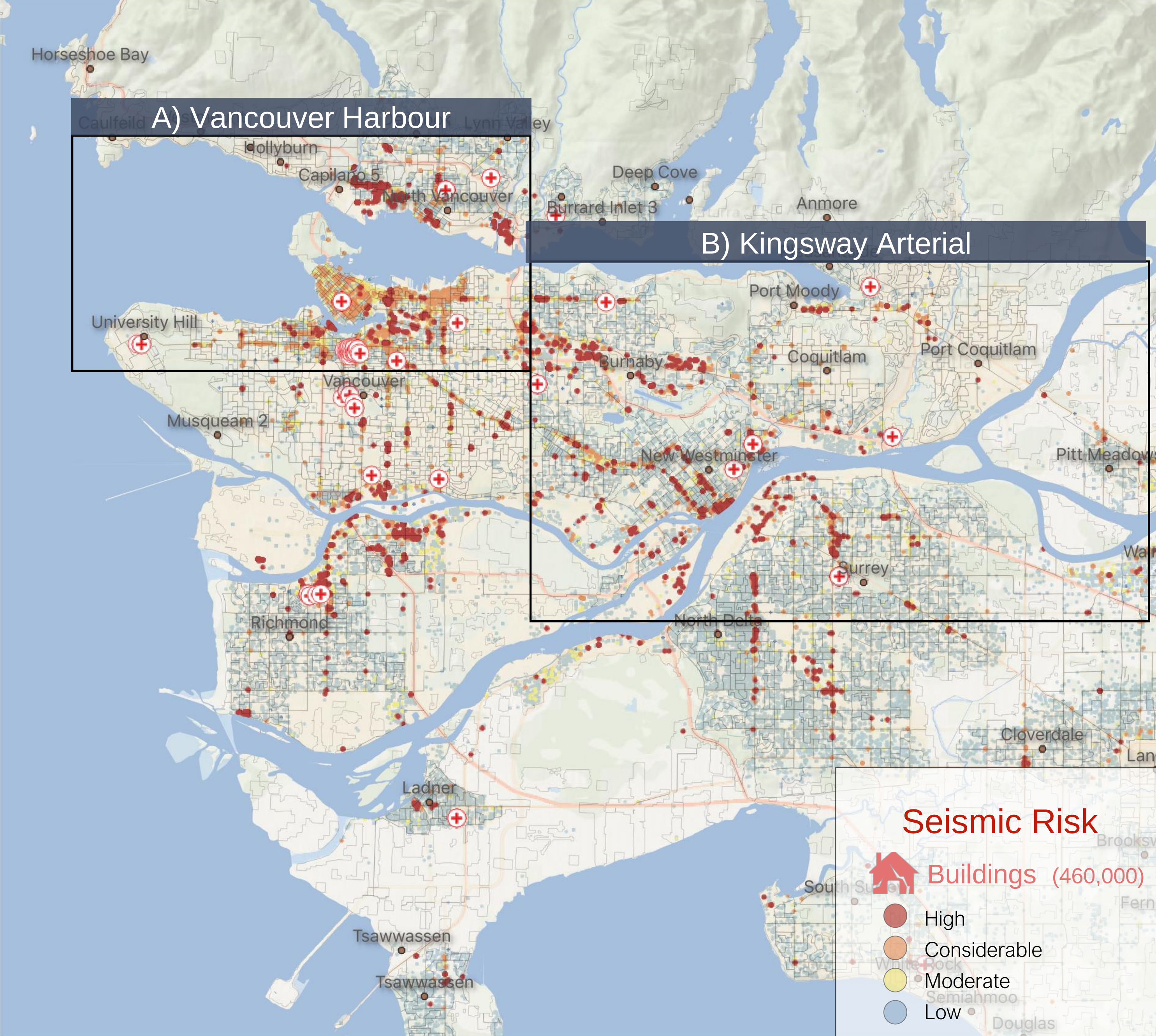


STRAIN ON SOCIAL FABRIC - Financial Hardship



Distribution of Economic Losses Across Neighbourhood Archetypes





- Are you surprised by any of the risk information shared today?
- Does the integration of physical & social impacts change your perception of risk?

Breakout Session 2

3. Identify actions/policies that will be effective in promoting functional recovery by:



- Increasing physical resistance
- Accelerating response/recovery functions
- Minimizing burden of risk on vulnerable populations