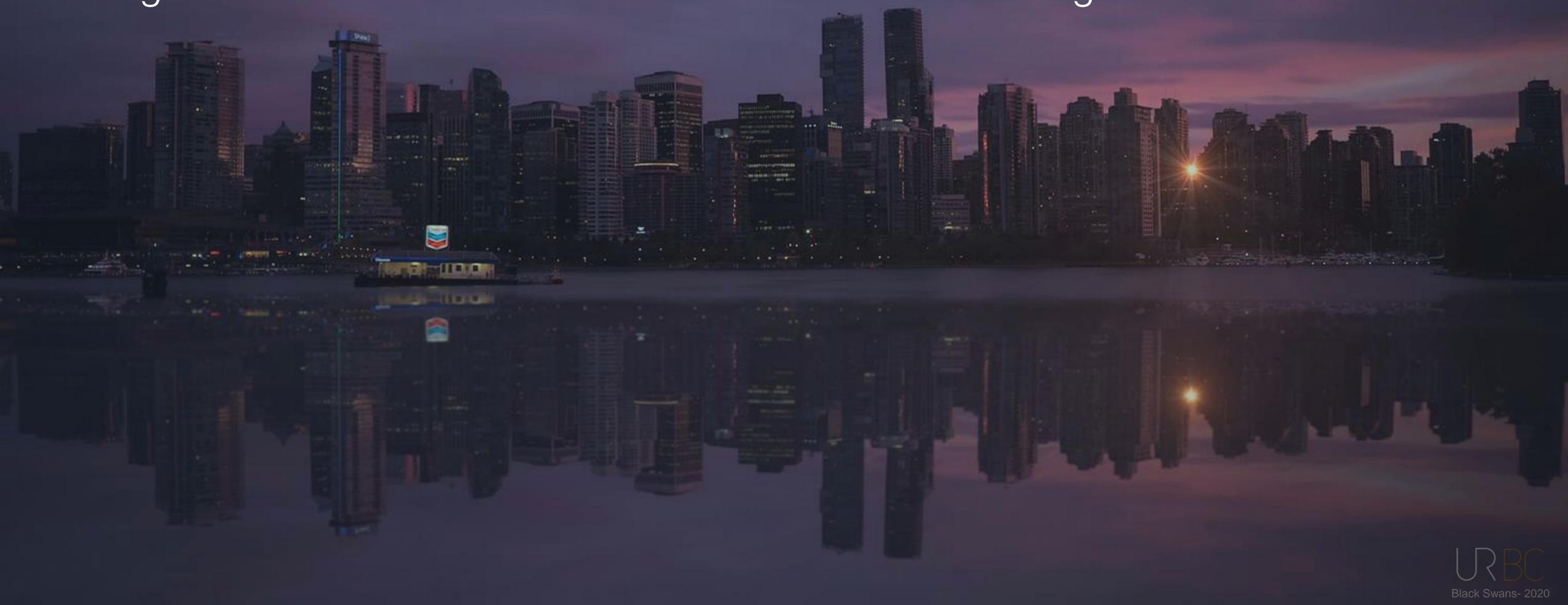


## Black Swans over Vancouver

Using Risk Models to Inform Disaster Resilience Planning

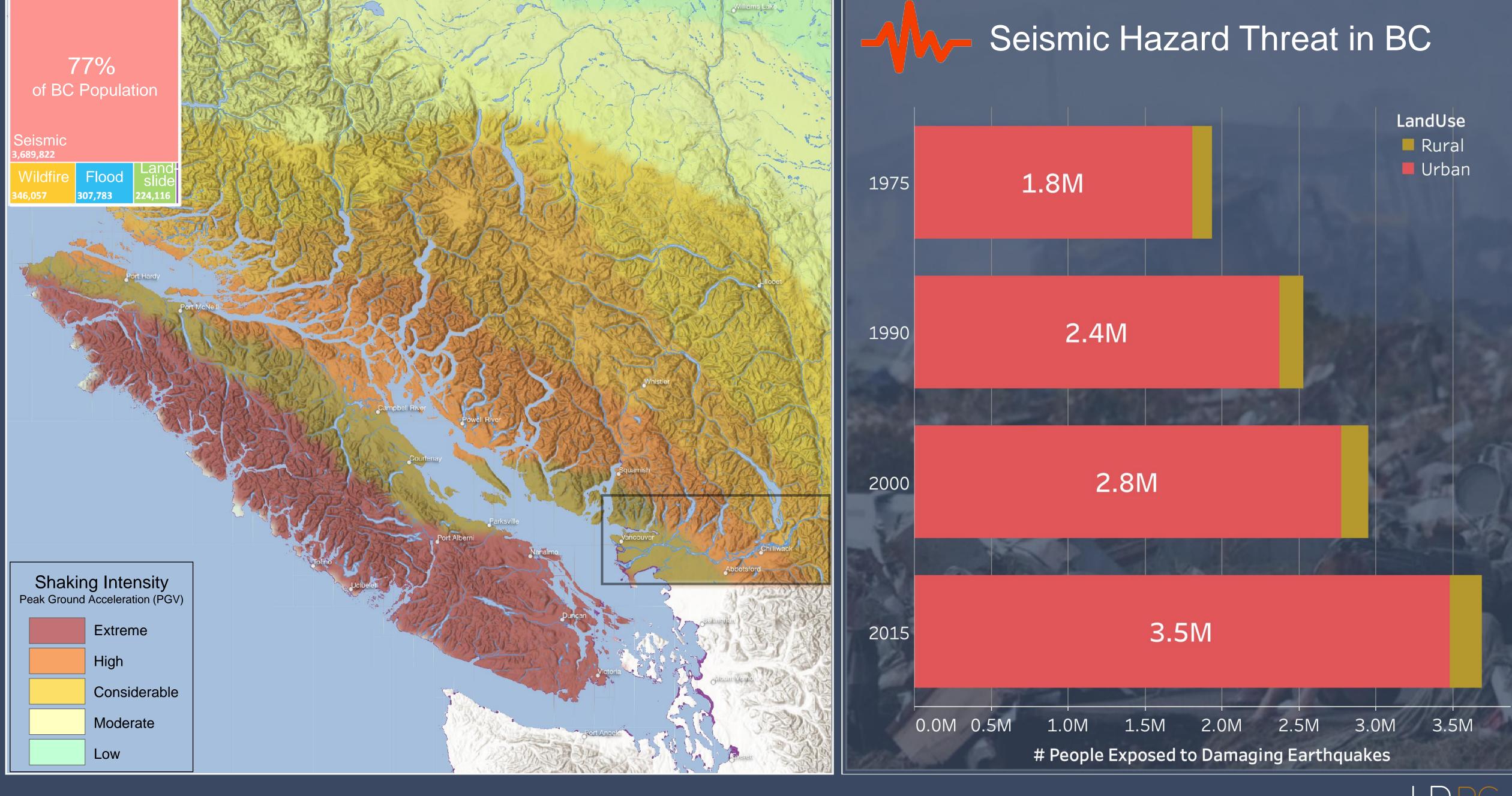


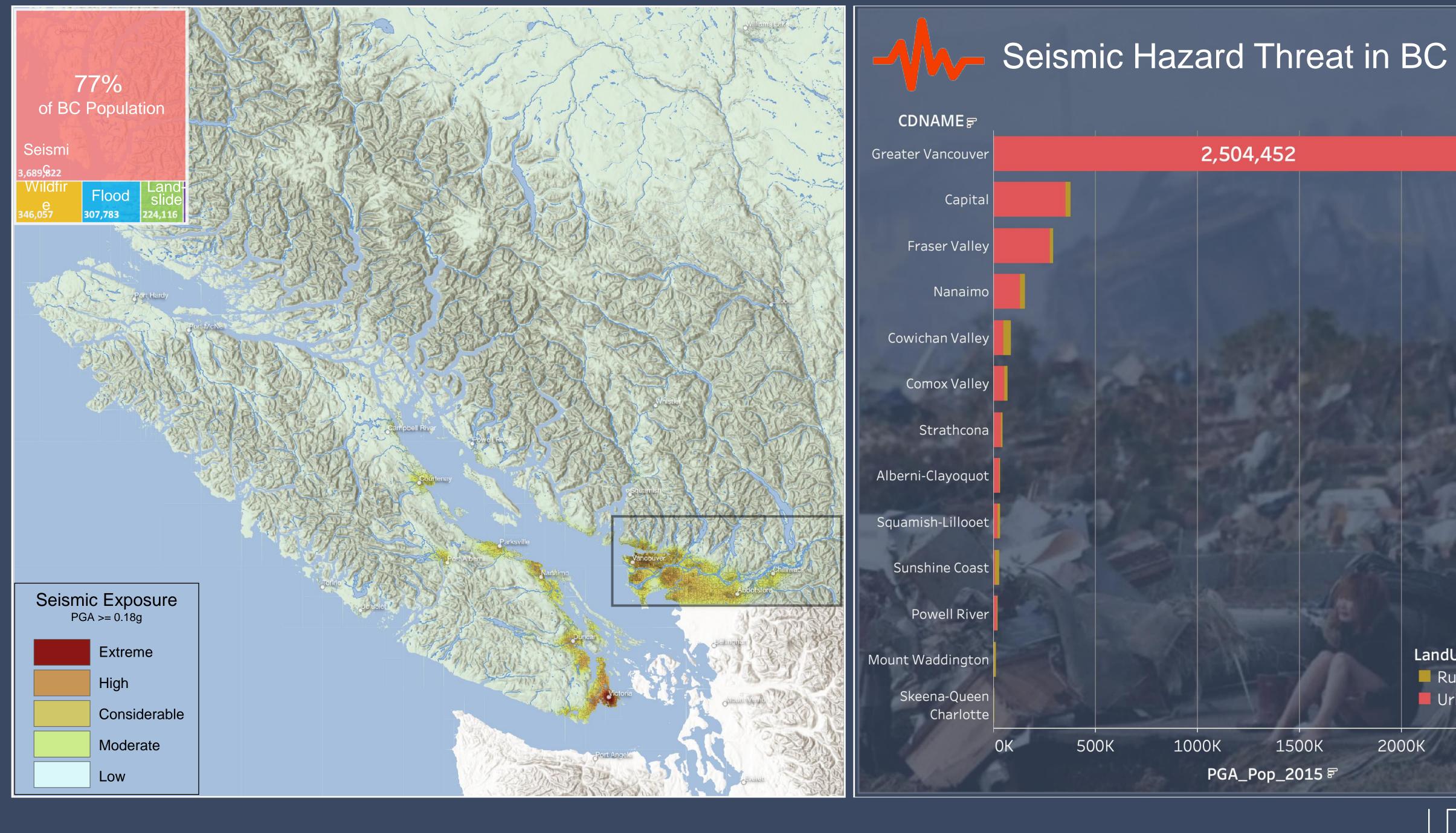
# Understanding Risk Collaboration and Innovation for a Resilient Future 2020 Online Symposium + Event Series Consequence

### What are Black Swans?

- extremely rare events with severe socioeconomic consequences.
- not easily predicted, but widely considered obvious in hindsight.
- immediate physical impacts are amplified by cascading system failures and downstream consequences
- Disaster hotspots reveal underlying socioeconomic inequities —the most vulnerable bear the greatest burden of risk







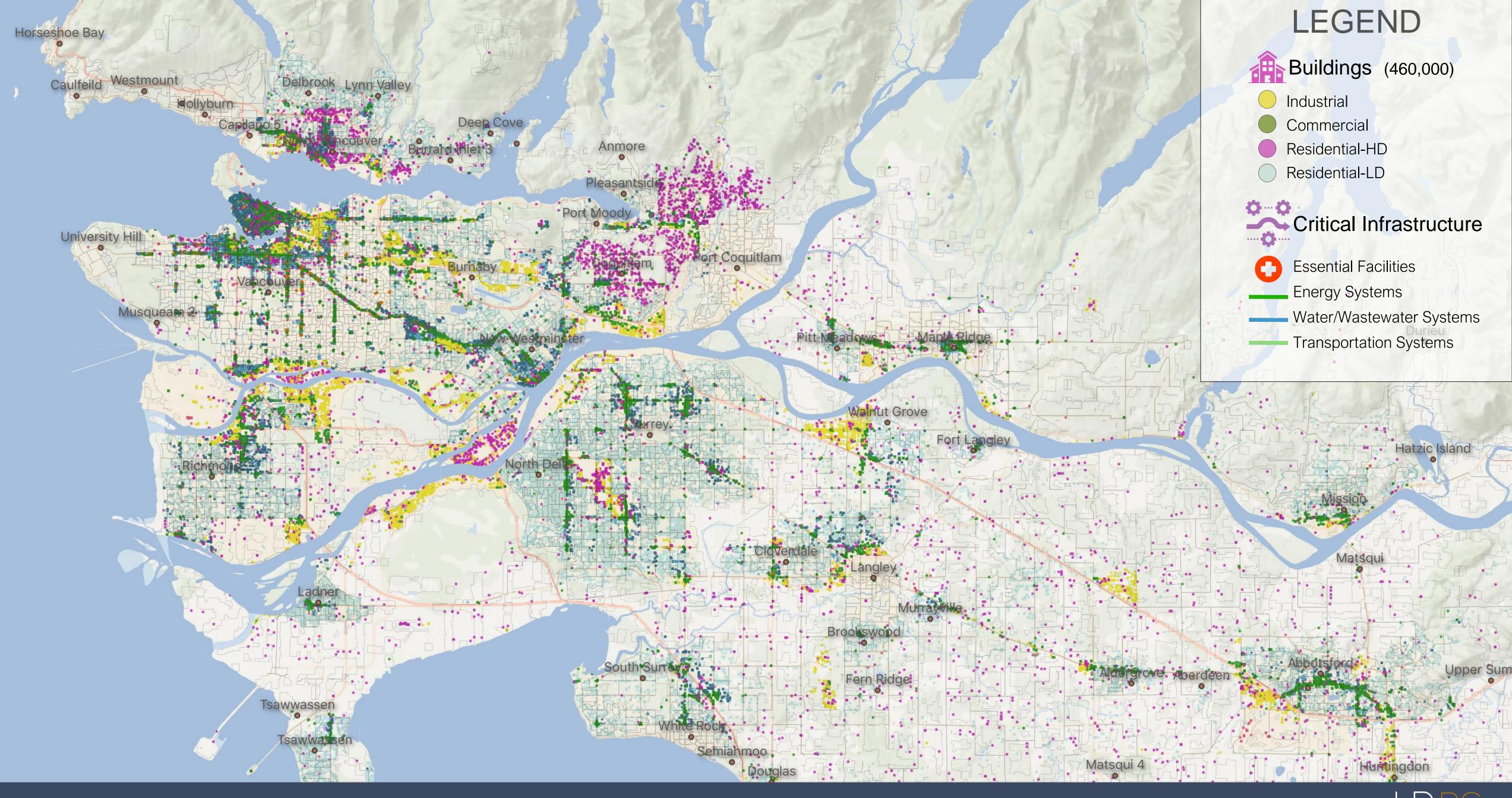


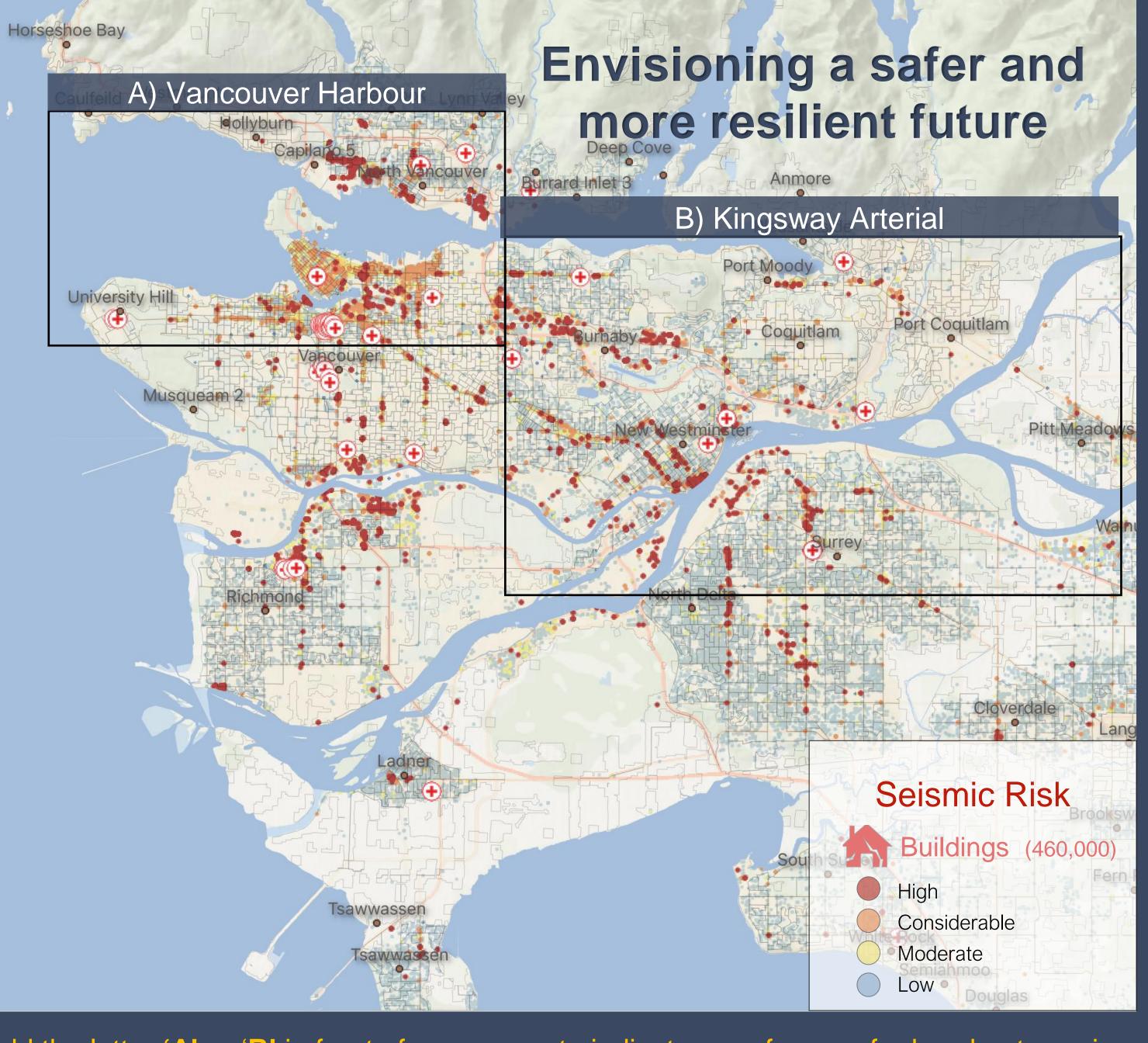
2500K

LandUse

Rural

Urban





#### The Plan for Today

Explore Risk Hotspots & Driving Forces



2. Evaluate Consequences & Opportunities for DRR



3. Identify Actions/Policies to Accelerate Functional Recovery



- Increase physical resistance of built environment
- Increase capacities to minimize downtime during immediate response and recovery
- Minimize burden of risk on vulnerable neighbourhoods



## Areas of Interest/Contributions to DRR

**Mentimeter** 

- 0% Risk Assessment & Modelling
- 2% Emergency Response Planning
  - Mitigation and Adaptation Planning
- Risk Communication
- Risk Governance & Policy Development









## Earthquake Impacts of Greatest Concern

**Mentimeter** 

Within current capacity

Injuries and Fatalities

**Economic Loss** 

Disruption of Lifeline Services

Business Interruption

Household Displacement

Social Inequity

Exceeds current capacity







