Existing resources

- Geological resources
  - Maps, petrology, geochemistry, geochronology

- Geophysical resources
  - Seismic, geodetic, heat flow, ...

- Turbidite record, Tephra record, well-characterized (and variable) basement
Needed resources

- Nothing critical to start a GeoPRIMS project
  - Data availability of previous studies
  - Geochronology (older rocks), Isotopes, water source for magmas (serpentine)
  - Experiments (mixed volatiles, crustal response to heat input, …)
  - Numerical modeling: both subduction zone wide and more focused (magma reservoir and column)
Synergies - collaborations

- Cascadia Initiative
- Earthscope US array
- PBO
- Neptune
- IODP
- USGS/CVO
- International collaborations (Japan)
Logistics

- Help from CVO/USGS
  - Land managers easier to convince?
Needed experiment

✓ Multi-disciplinary experiment focused on a few volcanoes:
  ➢ High-resolution imaging
  ✓ Densification of geophysical monitoring, going E (E of the Cascades)
  ✓ Associated geological, petrological, experimental and modeling studies
Societal importance

- 6 Senators...
- Cascadia megacity - geohazards
- Geothermal energy, mineral resources