

# Urban Science & Engineering

# Key themes

- Sustainability
- Efficiency
- Livability

# Major current centers

- NYU-CUSP
- Argonne/Chicago

# Our assets/differentiators

- Discussions with MacArthur Foundation
- Seattle is an integrated metro region with a (more or less) functioning metro government
- Seattle's "greenhouse gas profile" is "the future, today" – our greenhouse gas production is dominated by transportation rather than by power production
- Seattle is reputed to have significant data assets (and light use of those assets)
- The region has susceptibility to (and expertise in) earthquakes and tsunamis
- The region has a high proportion of EV users
- UW has 178 smart meters with data aggregated by McKinstry and available to PNNL (there are data quality issue)
- Operating software for homes: Microsoft Lab of Things, PNNL Voltron
- Transportation data (INRIX)
- Expertise in low-cost low-power sensors (SNUPI/Wally, Elelctrosense)

# Possible lines of attack

- Access and aggregate Seattle's/Metro's data
- Identify tools that allow that data to be put to work
- Create a public/private partnership to encourage people to contribute additional data
- Choose a small number of specific “challenge applications” that use the data, and tackle them
  - Transportation
  - Emergency management

# Immediate next steps

- Connect with Microsoft Lab of Things group
- Get access by UW to PNNL's UW smart meter data
- Sit down with Seattle and King County Metro to discuss data assets
- Sit down with UW iSchool professor Hans Scholl who has surveyed Seattle initiatives