### RCN: Mobility, Health, and Resilience in SCC: Building Capacities and Expanding Impact (MOHERE)

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RCN FY2018

# WHAT COMMUNITY-IDENTIFIED PROBLEMS ARE WE ADDRESSING?

Communities are expected to steward all citizens' basic needs, economic prosperity, health, and cultural well-being despite ever-increasing challenges of population growth, aging, resource scarcity, and so forth. This RCN, called MOHERE, supports a multi-disciplinary research community of scholars and local and municipal community leaders and practitioners. Together we seek to meet the challenges faced by communities, especially those that are underserved, by collaboratively developing smart and socially responsible solutions that improve community services' efficiency, safety, and sustainability.

#### **INTELLECTUAL MERIT | ADVANCEMENTS WITHIN KEY DOMAINS**

MOHERE develops smart and socially responsible technologies in Mobility, Health & Wellbeing, Interdependent Infrastructure Resilience, and Cross-Cutting Social Themes, supported with Community Engagement and Research Capacity Building.

- Mobility: improving mobility access; energy-sustainability tradeoffs; smart mobility & delivery systems
- Health & Wellbeing: addressing insecurity; cognitive health; precision medicine; vulnerable populations
- Interdependent Infrastructure Resilience: real-world data; social factors modeling; future technology
- Cross-Cutting Themes: smart technology to benefit underserved and vulnerable populations
- Community Engagement: early engagement; prototyping & transmission of engagement tools and materials
- Research Capacity Building: project co-production; workshops & support for capacity building

#### PROJECTS & OUTCOMES TO DATE | HOW ARE THEY COMMUNITY INFORMED?

Social Justice and Equity in the Engineering of Cities, Workshop at UW, Winter 2018: convened int'l scholars, practitioners, & stakeholders on how technology and engineering practices associated with smart cities can adapt to address vulnerable pops.

#### **BROADER IMPACT (WHO BENEFITS?)**

- MOHERE is focused on co-producing sustainable, scalable, and socially responsible tools and processes for SCC issues.
- In MOBILITY, local communities benefit through improved access, tools, and networks
- In HEALTH, vulnerable populations receive improved assessment and lessened economic insecurity
- In INFRASTRUCTURE, society benefits from improved data sourcing, social factors modeling, and future tech envisioning
- In CROSS-CUTTING THEMES, underserved & vulnerable populations are prioritized

Urban@UW Spark Grant Project Funding, 2021-2022: (Project 1) Using anonymous cell phone data to count people experiencing homelessness (UW team), (Project 2) Evaluating Seattle's RV Pump Out Pilot (UW, UNC Chapel Hill, UCSF, Emory, and Seattle team)

# BROADER IMPACT (WHAT ARE THE LASTING EFFECTS?)

- Thoughtful project co-production and capacity building leads to long-term upskilling for individuals and groups w/continued downstream gains
- Community engagement practices and tools are widely shared for public use
- Robust socio-technological tools and processes are widely shared for public use

#### Urban@UW Spark Grant Project Funding, 2022-

**2023:** (Project 1) Artificial Turf in Low-Income Areas for Climate Resilience, (Project 2) Sonic Streetwear, (Project 3) Bike-based food bank home delivery program. All teams have community partners.

## NEXT STEPS (PLANNED ACTIVITIES/OUTCOMES) Urban@UW Spark Grant Project Funding, 2023-2024

 Community-engaged research projects focused on solving urban problems

## <u>Urban@UW Research to Action Collaboratory Funding,</u> 2022-2025

- Supports community-engaged scholarship across
   UW and regionally in SCC topics, AND
- Creates community impact through projects directly, AND
- Builds capacity through workshops, incubators, and symposia