Carnegie Mellon University











We are Metro21: Smart Cities Institute, and we have a mission:

Develop and deploy 21st century solutions to the challenges facing metropolitan regions.

The challenges we address affect every metropolitan community world-wide:

- Safe mobility
- Healthy citizens
- Net zero energy
- Clean air and water
- Equitable economic prosperity
- Smart building and infrastructure

Metro21: Smart Cities Institute at Carnegie Mellon University focuses on innovation bringing people, technology and policy together to significantly improve quality of life in metropolitan areas. This multidisciplinary effort employs a CMU research, development and deployment (R&D&D) approach with key partners to create and implement smart city solutions around the world.

METRO21 PILLARS

- Interdisciplinary people, technology and policy
- Intellectual scholarship, science and education
- Needs-driven research, development and deployment to address real-world problems

WHAT WE KNOW

Today, more than half of the world's population lives in cities. By 2050, the United Nations anticipates that this proportion will surge to 68 percent. Already, exponential population growth in global metropolitan areas has emphasized the need for a robust and human-centered infrastructure. To address the current and future critical challenges facing cities worldwide, researchers at CMU are transforming the urban experience through connected, intelligent infrastructures — or smart cities.

OUR JOB

Identify high-impact needs and innovate, deploy and evaluate the solution to ensure a better and safer life for citizens.

OUR EXPERTISE

Working with government, industry and community partners to address real-world problems by working to utilize the region as a working lab.

JOIN US

Together we can enable a smarter, sustainable and more equitable world.

METRO21'S IMPACT

- Over 50 projects deployed in the Pittsburgh and Allegheny County region
- Partner funding of more than \$10M

The Metro21: Smart Cities Institute leverages innovations that address the vital interplay of technology, people and policy to have a positive and lasting impact on metropolitan societies.

INTEGRATING SMART SYSTEMS

Every city is a "system of systems" — water, traffic, air quality, public transportation and people. Given their substantial overlaps, these systems best function as one cohesive system. Metro21's collaborative R&D&D transforms and enhances not only individual systems, but their synergistic integration.

LIVING LABORATORY

Metro21 is a "real world" laboratory. With government, community and industry partners, we develop 21st century solutions to urban challenges and then test them for viability and scalability. Metro21 embraces all major areas that enhance life in the city:

- Infrastructure
- · Transportation and mobility
- Climate change and environment
- Water and sewer
- Citizen engagement
- City operations

COLLABORATION

In collaboration with the City of Pittsburgh, Allegheny County Airport Authority and other government agencies, Metro21 has set the standard with an interoperable global model for smart city solutions.

We are also proud to collaborate with private corporations. Support from the Henry L. Hillman Foundation, the Heinz Endowments, Richard King Mellon Foundation, Buhl Foundation, IBM and Pentair has contributed significantly to our growth. We look forward to working with additional sponsors.

THOUGHT LEADERS

We are a global model for cities that promote resiliency and sustainability in urban settings. Moving forward, we're looking to expand our partnerships and we invite you to join us on this exciting journey. Only through collaboration and partnership can we address the challenges facing metropolitan communities.