

## ATTACHMENT 1 TO CAO REPORT ON MEASURE X INNOVATION FUND IMPLEMENTATION

### EXAMPLES OF INNOVATIVE PROGRAMS FROM OTHER JURISDICTIONS

1. **Safe & Engaged Communities** – Improving health, wellness, and public safety outcomes through community outreach/awareness, education, and engagement.
  - **Family-to-Family** focuses on helping people who are struggling within the U.S. The goal is to connect families who have enough to share with impoverished families who have profoundly less. Providing a monthly box of groceries for a family connects richer communities with some of the country's poorest areas.
  - **Biomechanics in the Workplace.** Employing a small, wearable device to reduce common workplace injuries. If the device detects improper biomechanics – bad posture or lifting stance – it will “buzz” to alert the worker to correct his or her stance and avert common back injuries.
  - **Prescription Drug Abuse Partnership.** A Partnership comprised of multidisciplinary members who actively work to prevent prescription drug abuse and overdose deaths. Partnership members include local physicians, pharmacists, substance abuse treatment and prevention agencies, court judges, law enforcement, the Drug Enforcement Administration, public health, academia, and grassroots organizations.
  - **Post-Disaster Resilience and Recovery Initiative.** A collaboration of government, private and civil entities to respond quickly and save lives after an emergency event. This Initiative runs over 75 projects to improve a jurisdiction's resilience before and after a catastrophic event. The program often partners with organizations not normally involved in emergency planning and response, such as major utility companies.
  - **Cell-ED** is a pilot program to provide free English-language training via mobile phones to hundreds of immigrants in New York State who may lack regular access to a classroom, a computer, or the internet. Learners will gain access to self-paced audio and text lessons through their personal cell phones.
2. **Agriculture and Food Systems** – Improving environmental health, economic profitability, and social and economic equity.
  - Planting urban landscaping with edible fruits and vegetables.
  - **Laser scarecrows** are automated robots that can be programmed to sweep lasers at random across areas ranging from 200 acres to more than 3,000 acres.
  - **Weeding robots** can accurately detect and remove weeds from the field. Thanks to the robots' deep learning algorithms and cameras, they can differentiate between weeds and crops. This means that it only sprays herbicides and pesticides where they are needed with precisely how much they need. In addition to reducing pesticide and herbicide use, this innovative agriculture product controls and prevents herbicide-resistant weeds.
  - **Bee vectoring** technology uses commercially reared bees to deliver targeted crop controls through pollination. Bees venture from out of their hive to forage and spread trace amounts of biopesticides on their travels, to help host plants by blocking out harmful pathogens.

- **Digital tools:** Mpower can send SMS messages to alert farmers on favorable conditions for rapid disease development in their fields and when they should apply a treatment to protect their crops.
3. **Economic Vitality** – Providing education, job training, decent jobs, and viable businesses to reduce the number of people at a poverty level.
- **Leadership Fayette County** provides a mechanism to encourage youth to return home after completion of their higher education. Leadership Fayette County is a year-round program and curriculum that exposes youth to opportunities, people, and agencies within the county, and provides these youth with leadership tools to enhance their college prospects, and upon completion of their higher education, access to the growing local economy and its future opportunities.
  - **Running Start for Careers** is a public-private educational pathway for high school students. Unlike traditional approaches to vocational training, Running Start is not bound by campus infrastructure or trades faculty, nor is it the domain of specialty schools or limited to specific industry types. Rather, Running Start gives students direct entry into industry-developed and taught training programs in fields with demonstrated demand, while earning college credit, and can then enter work-and-learn positions the following term. The program addresses high dropout rates and the skills gap by supporting those students who are the most likely to quit school and forfeit job opportunities.
  - **Washington Skilled Worker Awareness Program** is created to increase the state’s skilled workforce by raising awareness of, and enrollment in, accredited educational, occupational, state-approved pre-apprenticeship, apprenticeship and similar education and training programs. These programs educate and train individuals to perform skills needed in the workforce and award industry or state recognized certificate, credentials, associate degrees, professional license, or similar evidence of achievement but not including bachelor’s or higher degree.
  - **Muzology.** A learning platform that helps students learn algebra concepts with music.
4. **Clean & Sustainable (Clean and Green) Environment** – Safe food and water, proper waste disposal, clean air, pest control; preventing waste.
- Public electric transportation
  - Cheap home energy storage – thermal batteries
  - LED light fixtures
  - Solar Glass is designed to capture and store solar energy and it can do so in large quantities as it can cover large parts of a building.
5. **Reliable & Accessible Infrastructure** - Modernization, technology, or equity in digital access, cybersecurity and resilience.
- **The Thingstitute.** A first-of-a-kind living laboratory for internet of things (IoT) technology, providing an unparalleled testbed for start-ups, established companies, and research institutions. The Thingstitute designs and operates test beds to enhance the quality of life for local residents. In 2014, the County launched its first IoT Project, Smart Community Alert Network (SCALE), in NIST’s GCTC. SCALE was envisioned as a testbed to pilot IoT Technology that would help seniors aging in place live independently longer and have easier access to services.

- **City Net.** Santa Monica's 10 Gigabit Fiber optic network is attracting technology companies by providing affordable and advanced broadband to businesses, and the opportunity to integrate and efficiently manage data exchanges between business partnerships.
- **Robotics.** Using flexible sensor robots that can be air-deployed into hazardous areas to furnish persistent, ground-level, real-time data.