

Emerging Technology Open Working Group

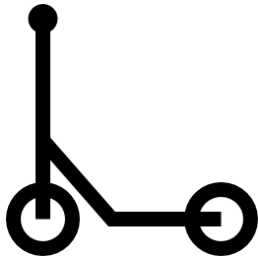
City & County of San Francisco

Learning from Our Friends

How other cities are tackling emerging technology

Looking to cities around the country (and the world) not only allows San Francisco to explore new, emerging technologies but also helps the City learn about effective implementation models, strategies for promoting equity and engaging our community, and methods for mitigating unintended consequences.

Below is a sampling of what we have learned from Santa Monica, Boston, Chicago, and Los Angeles.

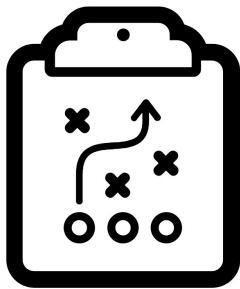


Santa Monica - Electric Scooters

Electric Scooters made their debut in late 2017. After many complaints, Santa Monica's City Council adopted an emergency ordinance establishing an impound fee for scooters parked in the right of way. This is in place until September 2018, when a 16-month pilot will begin with up to 3 vendors.

Highlights:

- The company Bird initially worked with the City, including distributing free helmets to residents. However, Santa Monica eventually sued Bird for unpaid fines. Bird settled and paid \$300,000.
- In the permit application, minimum requirements include safety measures like a maximum speed of 15 mph, monthly data reporting, and educational information posted on each device. Recommended elements go much further, including GPS, hosting community events, payment options for low-income residents, and sharing real time data.
- Santa Monica is considering other requirements such as charging a public property fee (similar to parklet fees) and requiring devices to be equipped with a mechanism for locking the devices to a bike rack.



Boston - A Smart City Playbook

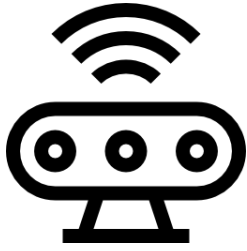
Boston released its Smart City Playbook in 2017. The Playbook provides advice to tech companies and highlights the City's goal of implementing "people-centered, problem-driven, and responsible" technology.

Core advice:

- Stop sending sales people
- Solve real problems for for real people (i.e. residents, not government)
- Don't worship efficiency
- Help make better decisions, not (just) better data
- Platforms make them go ٩(ツ)ノ
- Help move towards a "public" privacy policy

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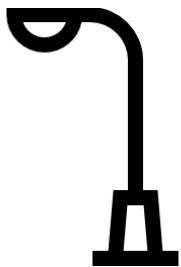


Chicago - Environmental Sensors

In 2016, Chicago announced a partnership with the University of Chicago and Argonne National Laboratory to install environmental sensor nodes around the city. Together, the nodes create a network of sensors (mounted on light posts) that collects a host of real-time data on Chicago's environmental surrounding and urban activity. The project is known as Array of Things and is thought of as a "fitness tracker" for the city.

Highlights:

- The nodes can hold up to 15 sensors and also include a computer, two cameras, a microphone, and a cooling fan. In addition, the software, hardware, specifications etc., are open source.
- Chicago launched a public engagement campaign to educate the public about the project, address any concerns, and get advice on what sensors to include and where to install them.
- Ensuring privacy was a priority for Chicago. They first engaged subject matter experts to write a policy and then released it for public comments. An oversight council, with advice from a technical privacy and security working group, then approved the revised policy.



Los Angeles - Smart Poles

Los Angeles is in the early phases of testing out sensors installed on street lights. The City is currently testing Philips' Smart Poles and one ENE-HUB pole, and is in discussion with vendors to have a larger scale pilot. The City's goal is to have full deployment of smart poles by the 2028 Summer Olympics.

Highlights:

- The capabilities Los Angeles is discussing for their smart poles includes WiFi, gunshot detecting, lighting controls, electric vehicle charging, traffic control, cameras, and USB charging stations.
 - The City will make revenue off of the poles by allowing companies to provide 4G LTE and charging them for this right. The City is also testing solar panels on the tops of street poles to generate electricity.
 - The potential of smart street lights to impact several departments across the city led to new levels of interdepartmental coordination and collaboration. Departments first met for a workshop to discuss priorities and system requirements and later formed a Smart City Coordinating Group that meets regularly.
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