

# Designing for Digital Transparency in the Public Realm:

Co-Design Workshop Material



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Infrared sensors detect heat patterns in order to control lights when entering or leaving an area.



**Fill level sensors** detect how full a garbage can is so staff know it needs to be emptied.



**Weather stations measure**  
**temperature, humidity, wind**  
**direction and speed, and rainfall.**



**Traffic video cameras** monitor  
traffic volume, vehicle speed or  
enforce rules, on streets.



Air quality sensors detect carbon  
and other chemicals to measure  
the air people breathe.



**Soil moisture sensors measure water capacity so that water is provided when the plants need it.**



Infrared sensors detect changes  
to heat patterns to count the  
number of people using a space.



Pneumatic tube counters send bursts of air to a data logger when car or bike tires pass over them, so traffic can be counted.



Surveillance cameras capture  
video footage and are monitored  
for security purposes.



License plate cameras collect  
pictures to collect tolls or enforce  
red lights at intersections.



Radar is used to monitor speed  
on city streets and highways.



**Noise sensors detect decibel levels to monitor for excessive levels of noise.**



Photo cells measure  
**light levels in order to dim or  
brighten lighting to save energy  
and reduce glare.**



**Water quality sensors measure**  
**turbidity and nutrient pollution**  
**in order to determine water is safe.**



**Bluetooth beacons transmit a unique ID which helps determine the device's location.**



**RFID readers identify  
tags in cards or key fobs in order  
to provide access to spaces or  
services.**



Computer vision collects travel paths of bikes, pedestrians, or buses to understand how streets are used.