

Example Sensor Types

Sensor	Use	Data
Ruler stuck in snow (yes, really - sometimes lowtech is best)	<p>Measures: snow depth</p> <p>Cost: very low</p> <p>Usability: very high</p> <p>Community: WNYC</p>	<p>Frequency per station: 1 per day</p> <p>Number of stations: 100s per deployment</p> <p>Data store: website (e.g. WNYC's snowfall map)</p>
Wifi-enabled weather station	<p>Measures:</p> <p>Cost: high</p> <p>Usability: high</p> <p>Community: Weather Underground PWN</p>	<p>Frequency per station: 1 per 14 seconds</p> <p>Number of stations: 1s per deployment</p> <p>Data store:</p>
Temp/humidity alerting system	<p>Measures: temperature, humidity</p> <p>Cost: Medium</p> <p>Usability: high</p> <p>Community: wine nerds!</p>	<p>Frequency per station:</p> <p>Number of stations: 1s per deployment</p> <p>Data store:</p>
Air Quality Egg	<p>Measures: air quality (NO2, CO)</p> <p>Cost:</p> <p>Usability:</p> <p>Community: Sensemakers meetups</p>	<p>Frequency per station:</p> <p>Number of stations:</p> <p>Data store:</p>
Node	<p>Measures: 9 degree-of-freedom motion sensor (accelerometer, gyroscope, magnetometer), LED-based colour sensor, weather sensor (humidity, light level, temperature, barometric pressure), infrared thermometer, gas sensors (CO, NO, NO2, Cl2, SO2 or H2S).</p> <p>Cost: medium (\$150)</p> <p>Usability: high (bluetooth to phone)</p> <p>Community:</p> <p>Notes: 1" by 2.75", has interchangeable sensors</p>	<p>Frequency per station:</p> <p>Number of stations: 1s per deployment</p> <p>Data store:</p>
Citizen Sensor	<p>Measures:</p> <p>Cost:</p> <p>Usability: high (mobilephone and static versions available)</p> <p>Community:</p>	<p>Frequency per station:</p> <p>Number of stations:</p> <p>Data store:</p>

Asthmapolis	<p>Measures: air quality, inhaler use</p> <p>Cost:</p> <p>Usability: high (built into asthma inhaler)</p> <p>Community:</p>	<p>Frequency per station:</p> <p>Number of stations:</p> <p>Data store:</p>
Copenhagen Wheel	<p>Measures: GPS, CO, NOx, noise, relative humidity, temperature.</p> <p>Cost: high (\$100s)</p> <p>Usability: high (part of bike wheel)</p> <p>Community:</p>	<p>Frequency per station:</p> <p>Number of stations:</p> <p>Data store:</p>
Grove Dust Sensor	<p>Measures: dust particles (pm2.5)</p> <p>Cost:</p> <p>Usability: low (is a component, but kit is available on publiclab.com)</p> <p>Community: Internews journalists (trial)</p>	<p>Frequency per station:</p> <p>Number of stations:</p> <p>Data store:</p>
Grove gas sensor	<p>Measures: combustible gas, smoke, alcohol vapor, LPG, natural gas, town gas, carbon monoxide, coal gas, liquified gas</p> <p>Cost:</p> <p>Usability: low (is a component)</p> <p>Community:</p>	<p>Frequency per station:</p> <p>Number of stations:</p> <p>Data store:</p>
Grove HCHO gas sensor	<p>Measures: formaldehyde, benzene, toluene</p> <p>Cost:</p> <p>Usability: low (is a component)</p> <p>Community:</p>	<p>Frequency per station:</p> <p>Number of stations:</p> <p>Data store:</p>
Geiger counter(s)	<p>Measures: radiation</p> <p>Cost: medium</p> <p>Usability: very high</p> <p>Community: RadiationNetwork</p>	<p>Frequency per station:</p> <p>Number of stations: 100s</p> <p>Data store:</p>
Water PH sensors	<p>Measures: PH levels in Water</p> <p>Cost: Medium</p> <p>Usability: moderate</p> <p>Community: Water Quality</p>	<p>Frequency per station: 1/Day or Hour</p> <p>Number of stations: Possibly Several to detect and locate chem spills, algae blooms, etc</p> <p>Data store: Data Loggers</p>
Dissolved O2 Sensors	<p>Measures: O2 levels in Water</p> <p>Cost: Medium</p> <p>Usability: moderate</p> <p>Community: Water Quality</p>	<p>Frequency per station: 1/Day/Hour</p> <p>Number of stations: few</p> <p>Data store:</p>

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