



Excelerated
Technology Consulting



IoT Demand

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Highlights



Key Pillars

Components

Challenge

Known Requests

Solutions

Key Pillars

ENVIRONMENT

Cities use 60-80% of the world's energy and GHG emissions

Growing cities struggle with infrastructure

Sustainability is critical with strain on existing resources

ECONOMIC

Technology: competitive advantage

Growth: Information, Technology & Services

Require: innovation, infrastructure operations w/economic strategy

QUALITY OF LIFE

Rising expectations for governments

Fiscal constraints vs. innovative solutions

Technology enabling better citizen engagement

Components – Where do you fit

Collection	Sensor
Connection	Network
Aggregation	Platform
Relaxation	Storage
Digestion	Artificial Intelligence
Interpretation	Analytics
Manipulation	AR/VR
Manifestation	Application

Challenge - SECURITY

Uncertified solution providers allowed to connect with infrastructure networks

IT working as OT

Municipal services managed by private companies

CSET – FREE analysis tool (Developed by ICS-CERT)

<https://ics-cert.us-cert.gov/Downloading-and-Installing-CSET>

KNOWN REQUESTS

Los Angeles



Tree health sensors

Roots busting sidewalks

Decrease risk

Limb falling or growing into utilities

Airport

Traffic flux management

Taxi line on demand

Dallas

Warning systems

Emergency alert hack (not connected to net)

False hurricane warning

Triggered 156 sirens @ once

15 times over ~2 hours (around midnight...)

Baltimore

Security Intelligence

Increase in homicide rate

More police on the street

More educational opportunities

More economic opportunities



SOLUTIONS

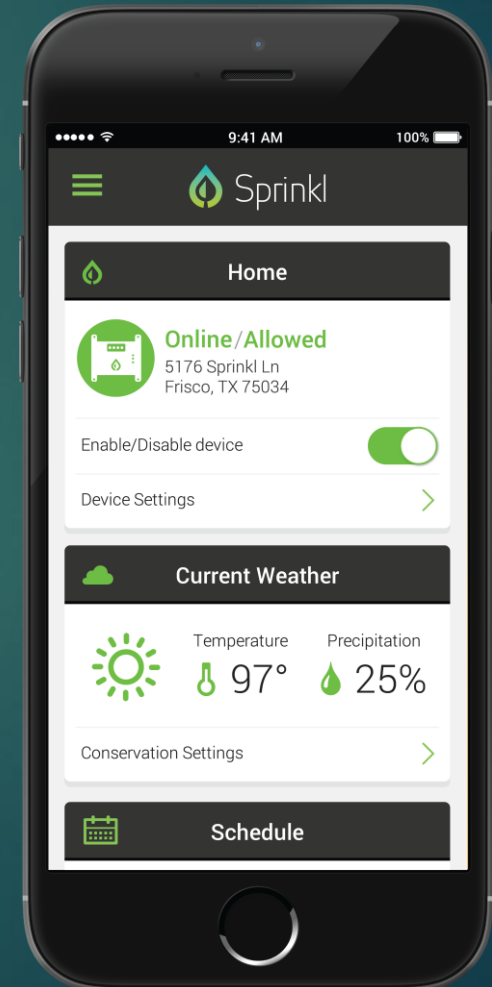
Resource Responsibility

Automatic compliance with local watering restrictions

Compatible with all existing controller models

Set rules to determine when and how much water is used

Saves water by integrating with local weather forecast to water only when necessary



Traffic Management



Queue Management - Evaluate KPIs and comply with SLA

Flow Management – Add value to existing facilities or when planning new construction

Capacity Forecasting - Accurately scale staffing resources with passenger demand



Quality of Life



Air quality

Monitoring & reporting real-time data on CO₂, urban air quality & dangerous emissions.

Hub central

Enables & lowers the cost & complexity of deploying lighting, waste management & other sensor-based, connected Smart City applications.

Parking

Parking monitor & smart parking applications enable sensor-based parking solutions & monitor / reduce parking-related traffic congestion.

Noise

Noise pollution monitoring of high-traffic zones & other heavily populated & visited areas.

Traffic

Traffic & pedestrian congestion monitoring & mapping of street & sidewalk congestion can help reduce traffic, pollution & improve productivity & quality of life.

Weather

Conditions, temperature & humidity monitoring & alerting of possible extreme weather conditions.



Lighting



Immediately detect theft and damage even when your system is not energized

Remote control and scheduling reduces energy costs and increases lamp life

Gain real insight to improve operational efficiency

Flexible for use with LED, HPS, and mixed lighting circuits



Waste



MODERNIZE A CORE CITY SERVICE
WITH SMART WASTE & RECYCLING

DEPLOYED IN THE PUBLIC RIGHT-OF-
WAY "WHERE THE PEOPLE ARE"

HIDE SMART CITY APPLICATIONS &
INFRASTRUCTURE IN PLAIN SIGHT





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