



# ADVANCED ENERGY GROUP—NYC

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# ITRON IN SMART CITIES AT A GLANCE



**200m**

COMMUNICATION  
MODULES DEPLOYED



**8,000**

CUSTOMERS IN  
100 COUNTRIES



**3M**

STREETLIGHTS  
MANAGED GLOBALLY



**22M**

WATER COMMUNICATION  
MODULES DEPLOYED



**#1**

WORLD'S LARGEST  
SMART STREETLIGHT PROVIDER

# PROBLEM STATEMENT

## UNDERSTANDING THE IMPACT OF TRAFFIC ON NYC CARBON EMISSIONS

- » On-Road Traffic is responsible for **~30% of NYC Carbon Emissions\***
  - Up to 30% of traffic during peak hours can be due to people looking for a parking space
    - Increasing number of cars in the streets and fuel consumption
    - Reducing average speed of vehicles (looking for a space)
  - Hyper-Local parking, traffic, noise and air quality data does not exist

**14.8 Mt CO2**

EMISSIONS FROM ON-ROAD  
TRANSPORTATION\*



**80%**

OBJECTIVE FOR  
EMISSIONS REDUCTION  
BY 2050



\*Apr 2017 NYC Inventory of Greenhouse emissions

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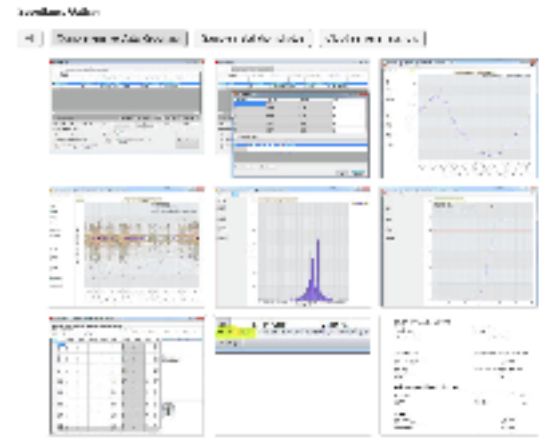
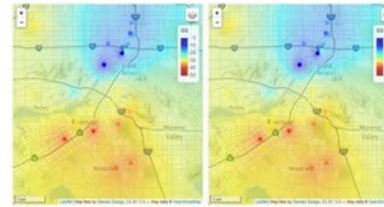
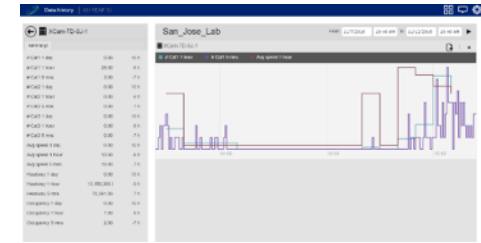
# PROBLEM STATEMENT - CONTINUED

## HYPER LOCAL DATA

Currently – There are no sensors to enable a data-driven approach to understand how smart parking and interactive displays can help reduce the carbon footprint of NYC

» How do we create **hyper-local** data and patterns on:

- **Parking** – Available spaces in real-time
- **Traffic** – For each moment:
  - Number of Vehicles
  - Category of Vehicles (Truck, Car, Motorcycle, Bike/Scooter)
  - Avg. Speed
- **Air Quality:**
  - PM2.5, PM10, O3, NO2, Temp, Humidity
- **Noise:**
  - Ambient dB level



# ITRON PROPOSAL - SUMMARY



Traffic today in NYC is responsible for 30% of unwanted Carbon Emissions.

We can act to reduce it AND generate valuable data to drive deeper insights into further action in the future:

- » Understand Impact of Smart Parking Solution and correlation with:
  - Air Quality Levels
  - Noise Pollution
  - Avg. Speed & Number of Vehicles
  - Population satisfaction
  - Local Commerce uptake
- » Understand ROI and business case for NYC to install these system at a city-wide scale



THANK YOU

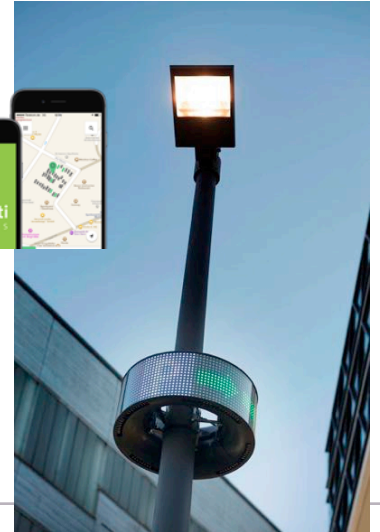


[www.itron.com](http://www.itron.com)

# ITRON PROPOSAL

Make It Local & Repeatable

- » Itron is proposing to Install a series of sensors to enable a data-driven approach to understanding how smart parking systems and interactive displays can help reduce the carbon footprint of NYC
- » Recommending to select a neighborhood with a mix of offices, local commerce and residences
  - A well defined area and educated community can help create a real impact
    - Explaining ahead of time the technology that will be deployed to avoid backlash from community



# COMMUNITY DRIVEN

Make It Local & Repeatable

## » Step 2: Activate Smart Parking Solution:

- Educate and Communicate: Provide air quality and noise data on sidewalk side and parking availability guidance on street-facing side
- Sensors will automatically detect available spots and information will be updated in displays and maps (city app)
- Community members participating in the pilot can be provided an NYC PARK smart card to place in the vehicle to identify them and make payments automatically

