



NYC Parks

Electrifying the NYC Parks Fleet

Paris Apollon, Chief of Operations - Fleet Services

Parks

An aerial photograph of a densely populated city, likely Athens, Greece, with a prominent mountain in the background. The city is characterized by numerous buildings with red-tiled roofs. The sky is clear and blue. The text is overlaid on the left side of the image.

Air Pollution

- Environmental problems
- Health concerns
- Quality of life issues
- Vehicles: Major contributor



Parks' Vision & Mission

Our vision is to create and sustain thriving parks and public spaces for New Yorkers.
Our mission is to plan resilient and sustainable parks, public spaces, and recreational amenities, build a park system for present and future generations, and care for parks and public spaces



NYC – PARKS

- 2,000,000 trees in parks
- 600,000 street trees
- 30,000 acres of land
- 5,000 properties
- 1,800 basketball courts
- 1,200 monuments
- 1,000 playgrounds
- 800 athletic fields
- 550 tennis courts
- 65 public pools
- 51 recreational facilities
- 23 historic houses
- 15 nature centers
- 14 golf courses
- 14 miles of beaches

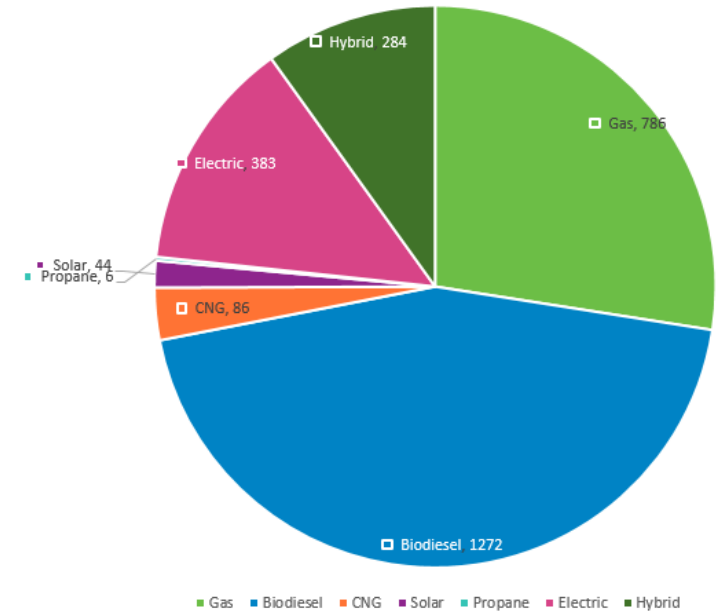


Fleet's mission is to maintain one of the most efficient Fleets in the country with a focus on safety & vehicle sustainability, & to advance our programs through innovative Fleet management strategies & new technologies.

NYC Parks Fleet

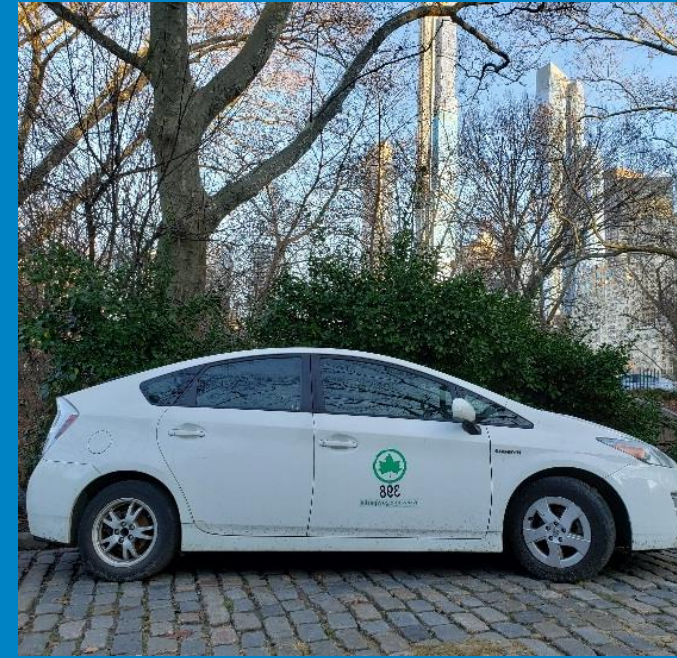
- 3,000 Vehicles
- 4,000 Drivers
- 5,000 Pieces of small equipment
- 70% Alternative fueled fleet

Parks Fleet by Fuel Type



EVs	383
Hybrid	284
Gas	786
CNG	86
Biodiesel	1272
Solar	44
Propane	6
Other	133
Grand Total	2,994

NYC Parks Sedan Fleet



EV - 61%
218 EVs

Hybrid - 31%
112 Hybrids

CNG - 8%
30 CNGs

EVs 61%

Other 39%

NYC Parks Charging Station Infrastructure



Charging ports **87%**
343 ports



Solar chargers **12%**
48 solar chargers



Level 3
chargers
>1%
1 Level 3

To EV or not to EV....

Assumptions. Compared to conventional cars*:

- EVs are better for the environment
- EVs are more efficient and more responsive
- EVs cost less (in the long run)
- EVs are good for the economy
- EVs work

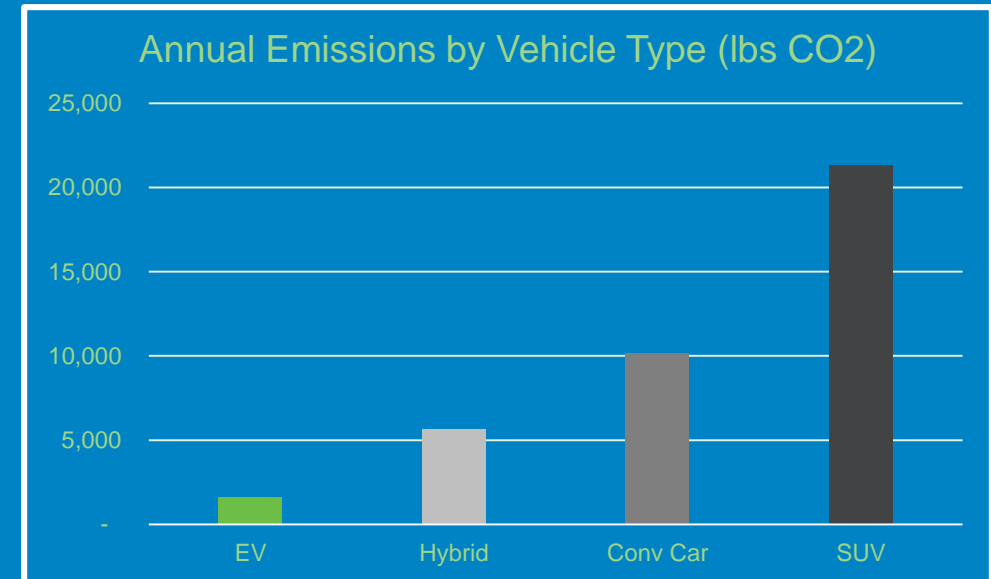


Facts...

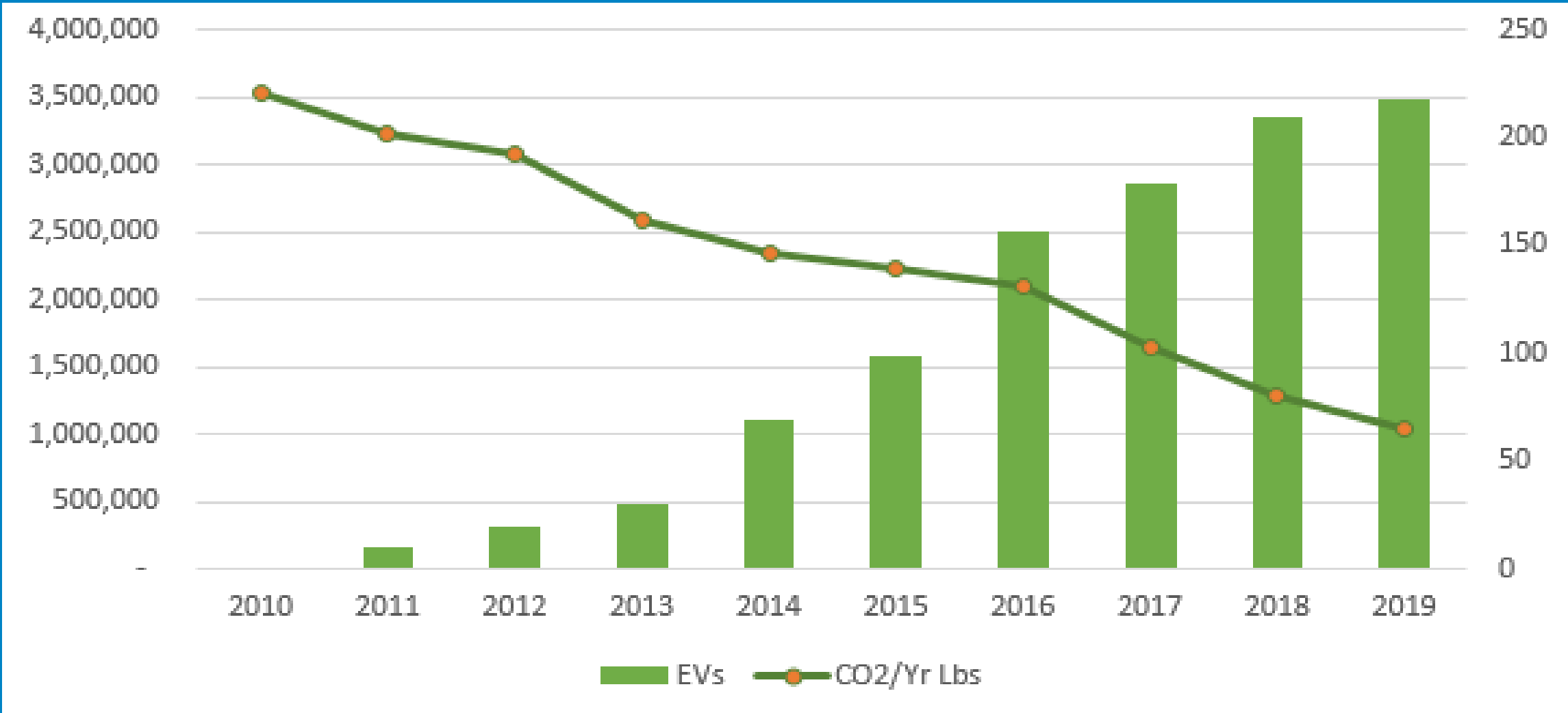
NYC Parks Fleet Annual Savings:

- **GHG reduction:** 1,130 Metric Tons (MT)/Year.
- **Gasoline saved:** 113,543 gallons/Year.
- **Dollar amount saved:** \$318,226/Year.

- **Reduction of GHG emission CO2 Equivalent to:**
- 2,503,860 miles driven by an average car.
- 1,111,841 lbs of coal burned



NYC Parks - Number of EVs vs CO2 Emission Reduction (in lbs) 2010-2019



Electrifying the NYC Parks Fleet

(Considerations – Best Practices)

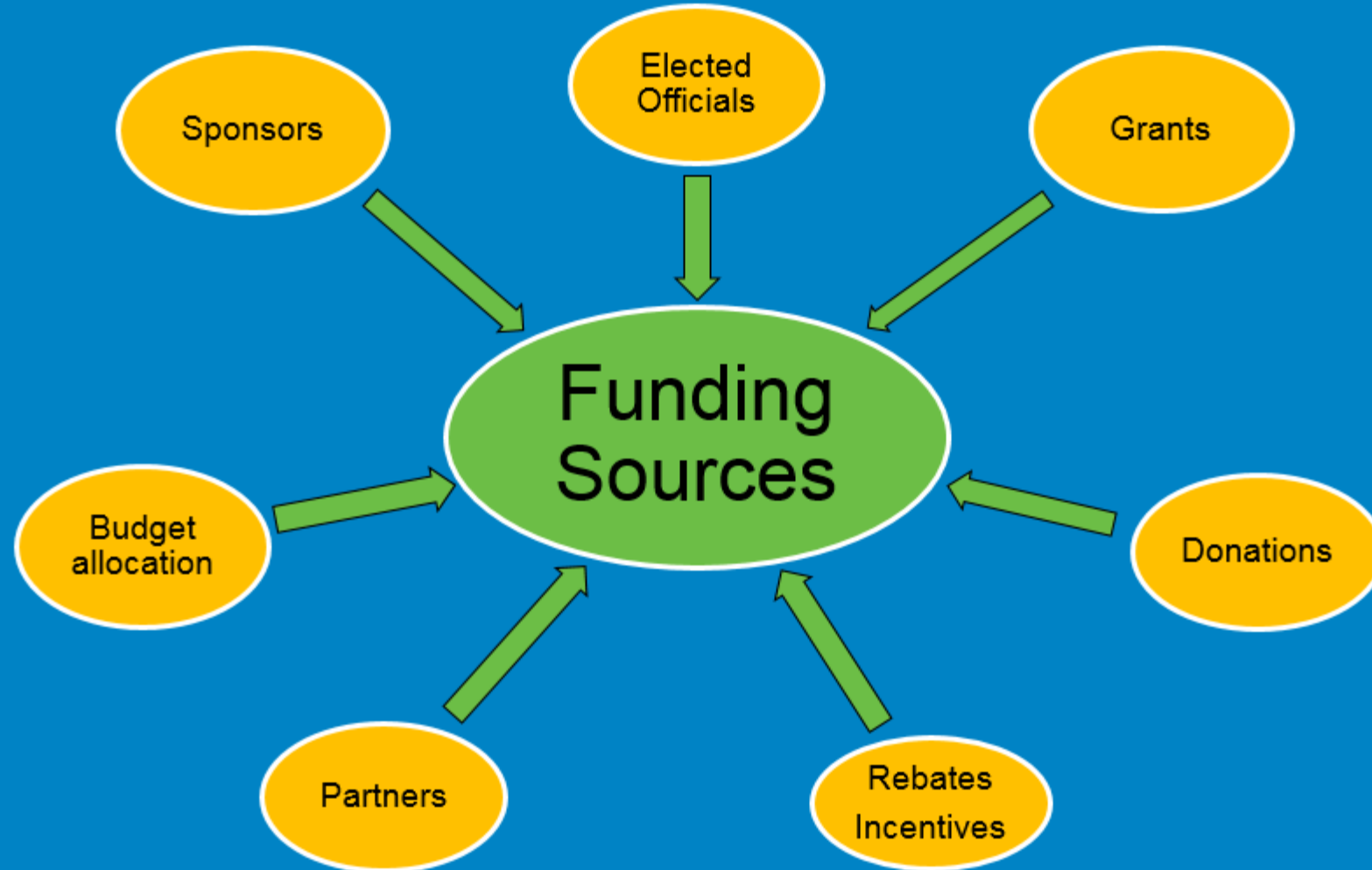
- **Budget**
- **Changing the Culture**
- **Infrastructure**
- **The Future...**

Electrifying the NYC Parks Fleet Budget

- **Competing Priorities**
- **Additional Projects**
- **Rising costs**
- **New Technologies**



Electrifying the NYC Parks Fleet Budget



Electrifying the NYC Parks Fleet Changing the Culture

- **Resistance to change:**
 - Loss of status
 - Fear of the unknown
- **An excuse:**
 - Targets
 - Deadlines
- **Limitations:**
 - Range
 - Charging station availability
- **Real issues:**
 - Range anxiety
 - The grid
 - Storm impact



Electrifying the NYC Parks Fleet

Changing the Culture

- **Outreach:**
 - Brochures
 - Newsletters
 - Videos
 - Presentations
 - Training
- **Proactive approach:**
 - Benefits
 - Personal
 - Agency
 - Community
 - Environment
 - Pros and Cons of EVs



Electrifying the NYC Parks Fleet Infrastructure

Car....

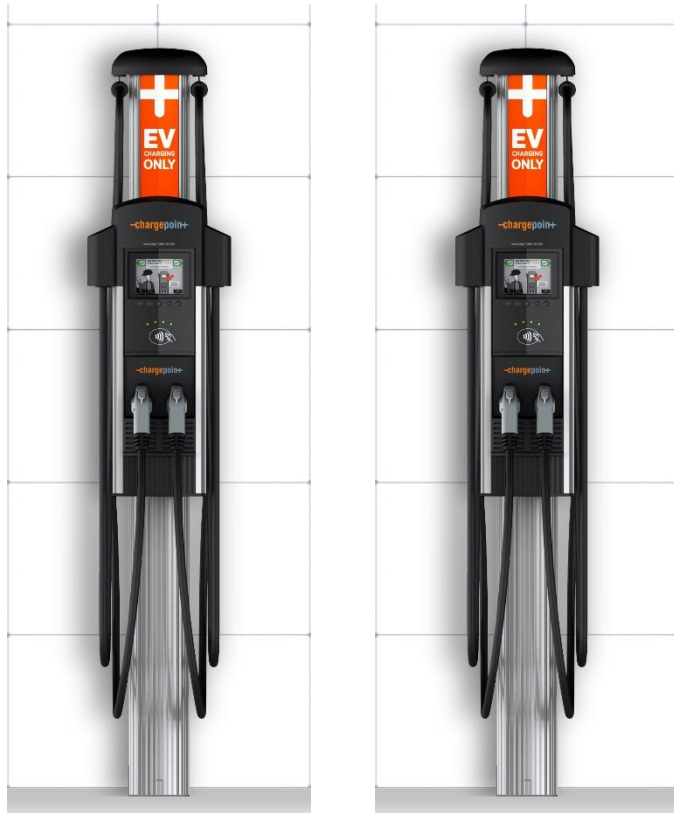


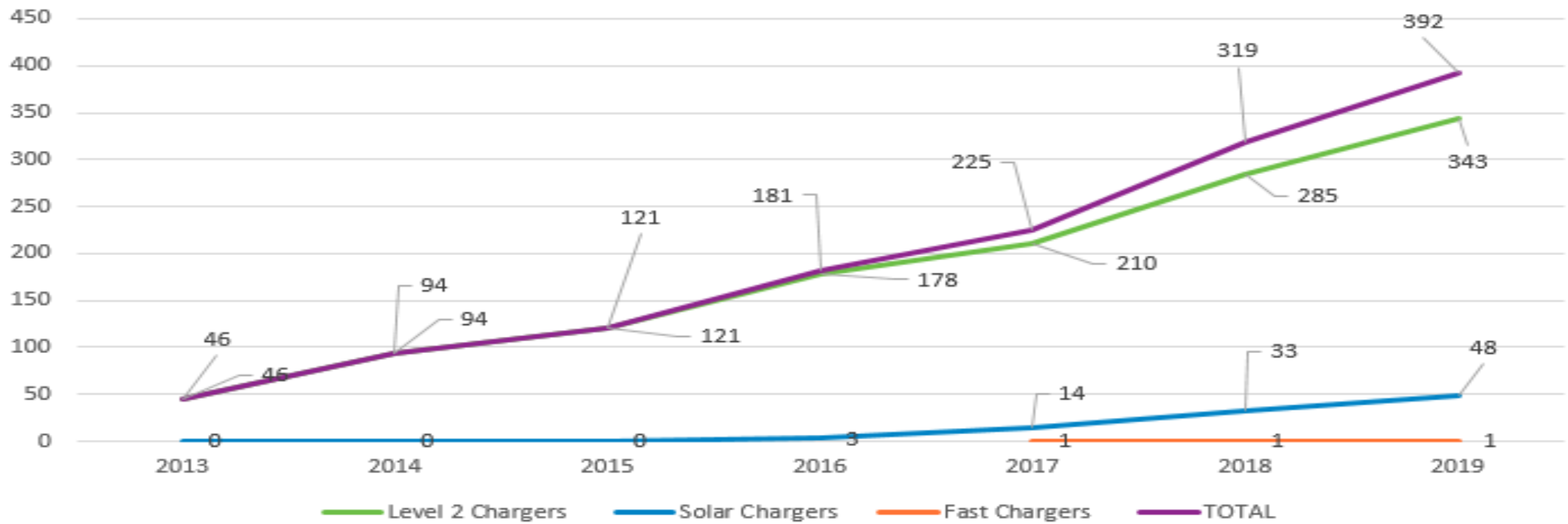
...or Charger?

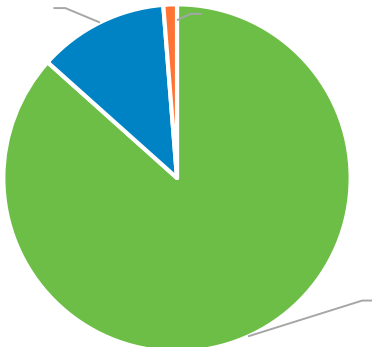


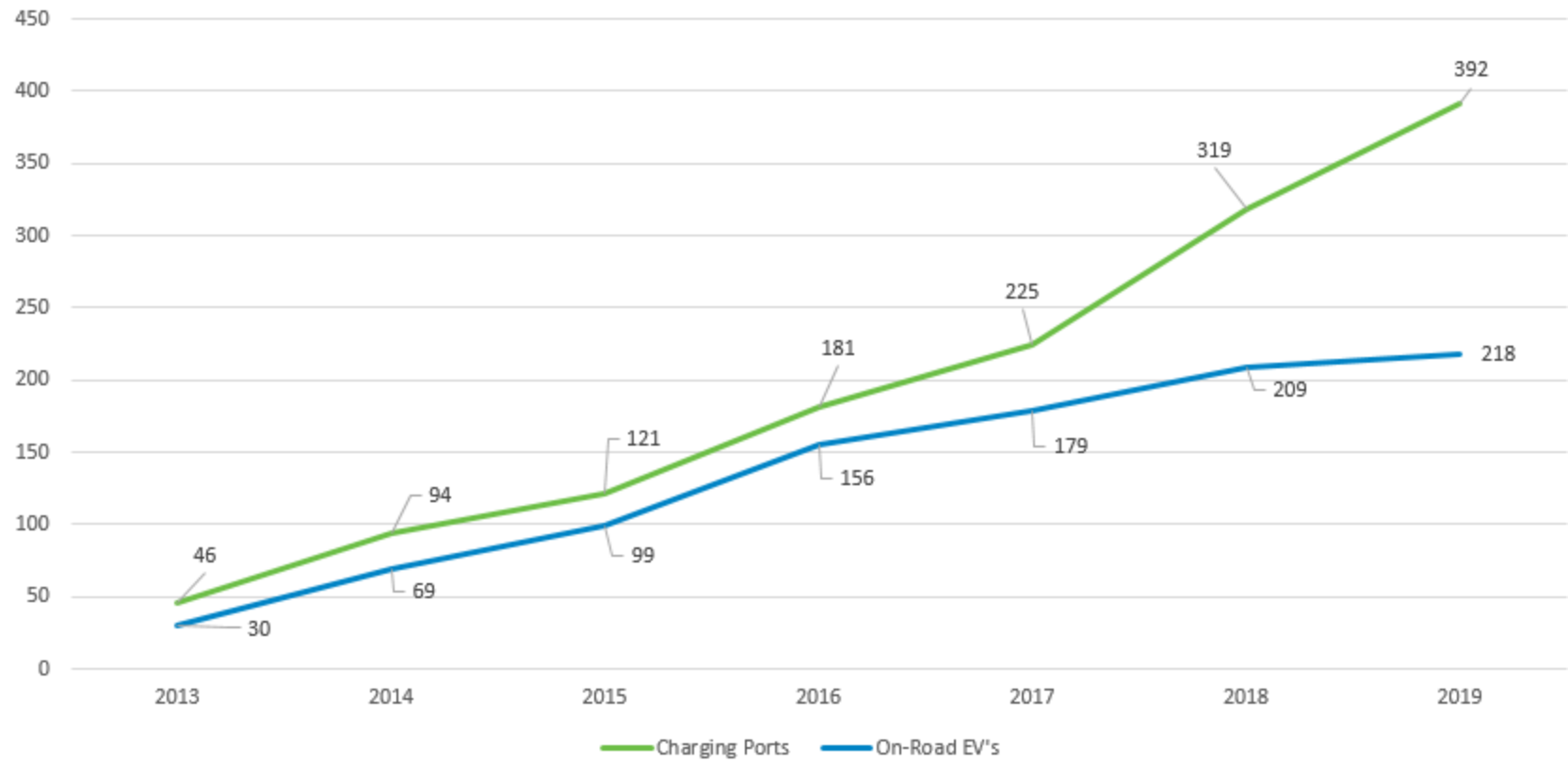
NYC Parks - Charging Station Locations

EV effectiveness is limited only by the number of Charging Stations available









Electrifying the NYC Parks Fleet The Future...



-Electrification of our Medium & Heavy duty trucks



-Green Garage



-Solar Canopies



-Go off the Grid

A group of people are swimming in a bright blue pool. In the foreground, a man is supporting a woman who is floating on her back. Other swimmers are visible in the background, some splashing and others floating. The water is clear and vibrant blue.

Thank you!

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