

1886 - First Electric Street Lights in Yonkers



Downtown Yonkers in the 1880's

TAKEOVER FROM CON EDISON

City Replacing All Street Lights; 1,500 Of 7,200 Already Completed

THE MAIN CONCERN of the Yonkers Street Lighting Bureau right now is wrapping up the replacement program — replacing all the street-lighting fixtures in the city with its own, instead of renting them from Con Edison.

First proposed in 1951, the program is now plugging along at the rate of about 750 replacements a year. There are about 7,200 lights in the city, and of these 1,500 already have been replaced.

TO QUESTIONS about why the bureau doesn't get a move-on, James F. Delehanty, the Inspector of Street Lighting, replies that a speeded-up program would mean that more men would have to be hired and then laid off in a year or so.

He wants to use no more men now than will be needed later on to maintain the new fixtures.

And faster action now would require the use of more trucks. What would the bureau do with all those trucks later on?

Asked about the fact that the city hasn't even bought any new equipment this year for its replacement program, Mr. Delehanty says:

"We bought some last year, and we got enough to last us two years. That way, buying in greater quantity, the city got a better

equipment. I'm certainly glad the city bought the barns."

ONE THING that has been holding up the replacement program materially has been the big State Thruway project along Central Park Avenue.

The bureau has had to remove and then replace 210 poles and lighting fixtures, while other work had to wait.

Another thing also occupying the attention of the bureau is the installing of new mercury vapor lamps on South Broadway, Yonkers Avenue, Tuckahoe Road, and other places in the city where bright lights are needed.

These brilliant bulbs are rated at 400 watts, but give as much light as 1,000 watts of incandescent light.

"As a matter of fact," notes Mr. Delehanty, "lights have been getting brighter all along. When I first got this job in 1926 — we still had some gas lamps then — the electric lights had 40 candlepower. Today the smallest is 100 candlepower, and we're installing lights with 250 candlepower!"

STREET LIGHTS here used to be owned by Con Edison, or its predecessor, the Yonkers Electric Light and Power Company (YELP for short.) The city paid for rental

than half as much as Con Edison charged!

"**IT COSTS US** about \$11.50 to install a new light," says Mr. Delehanty. "The last price Con Edison charged us, in 1950, was \$24, and even then the city had to furnish the brackets!"

"And the city, with a lot of requests for new lights couldn't get Con Edison to install them at the rental rates it was getting."

All in all, the capital investment for the new street lights will be amortized in 10 years through the elimination in rental charges and the reduction in maintenance charges, according to Mr. Delehanty.

DEAR TO THE HEARTS of the bureau boys is the photo electric cell atop the new aluminum fixtures, which automatically turns on the light when the shades of evening fall and off when dawn breaks.

Besides being covered with plastic, instead of glass, to thwart rocks and similar low-velocity missiles, the cells are sufficient unto each light and require no central switching or control devices.

Under the old system of rental from Con Edison, which of course is still in use on some 5,700 lights, a complete wire circuit had to be maintained to turn the lights on





Yonkers Today

- Fourth largest city in New York State
- Population of 196,000
- Half of all housing is in buildings with five or more units
- Ten train stations in or near Yonkers
- Directly adjacent to New York City

Yonkers Today

CITY GOVERNMENT

energy costs

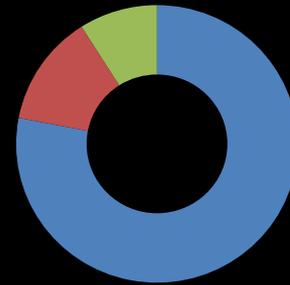
\$16,000,000

CITY-WIDE

energy costs

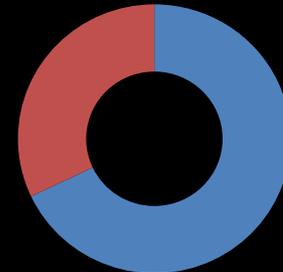
\$500,000,000

carbon footprint



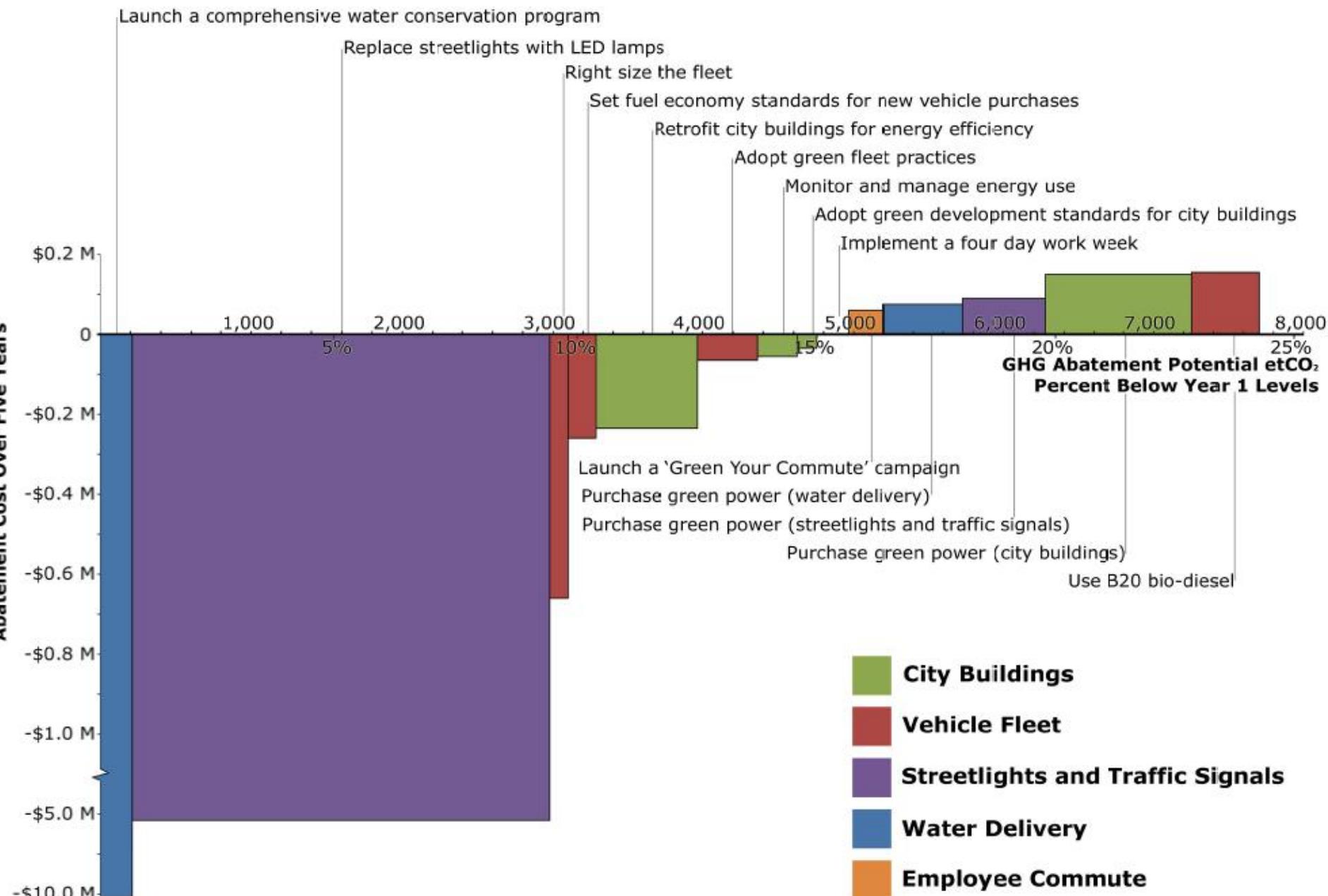
78% Buildings
13% Fleet
8% Street Lights

carbon footprint

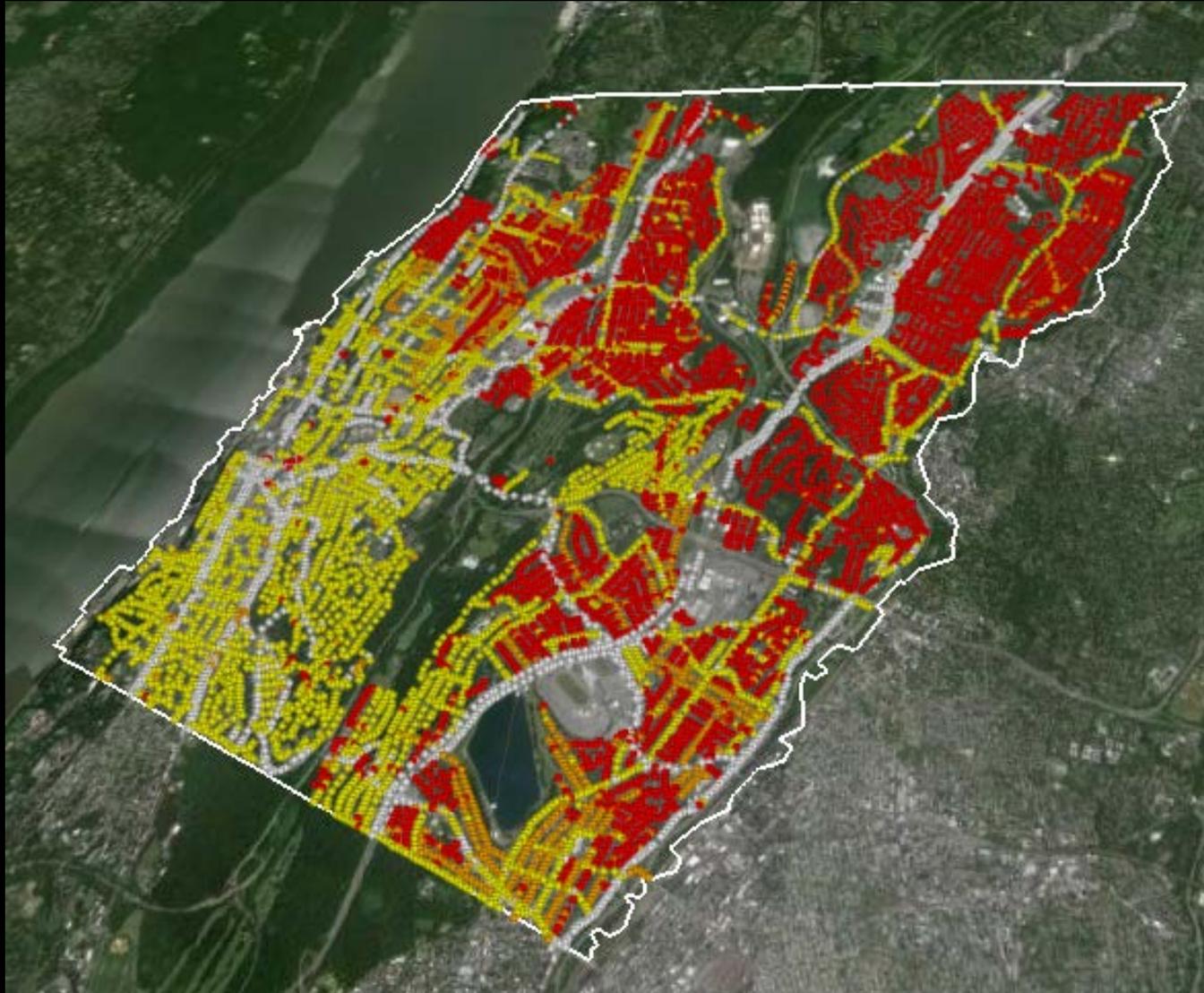


68% Buildings
32% Transportation

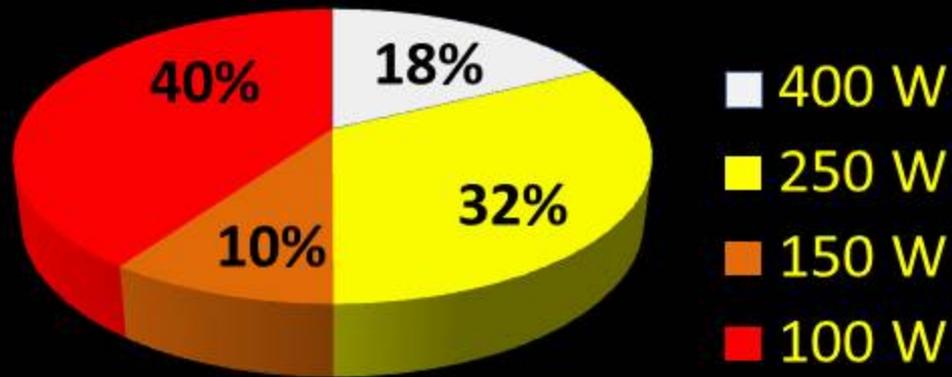
Yonkers Government Operations GHG Abatement Cost Curve



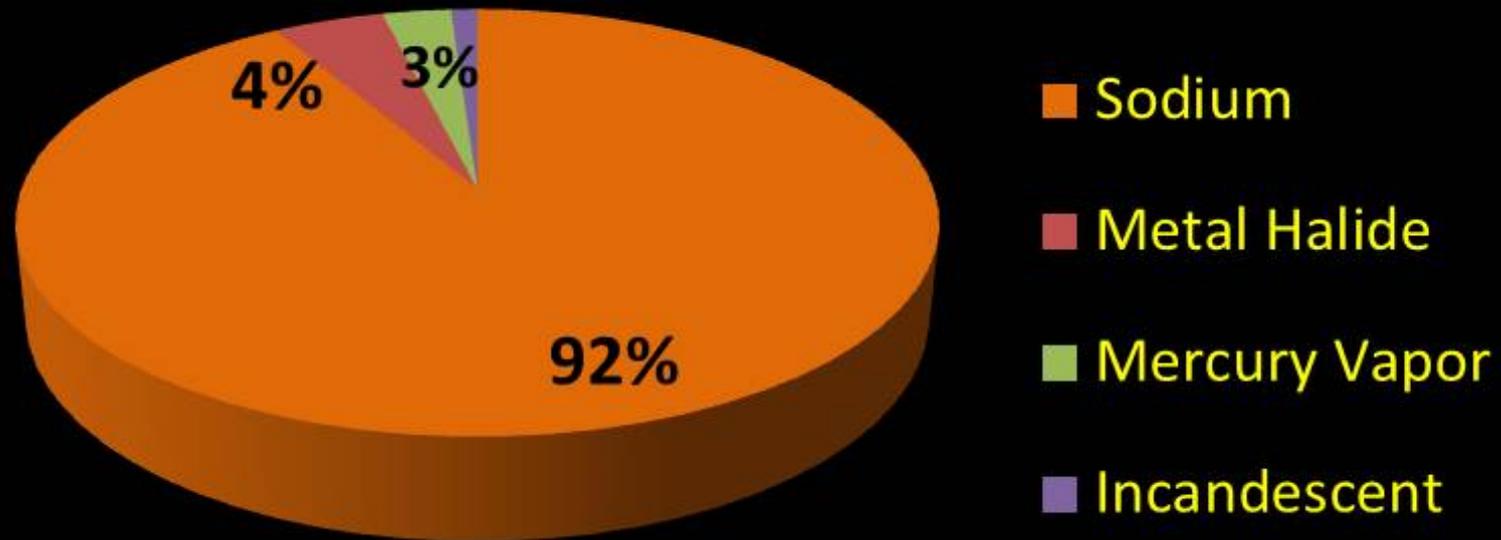
Yonkers Street Light System



Existing Street Light Wattages



Existing Street Light Technologies



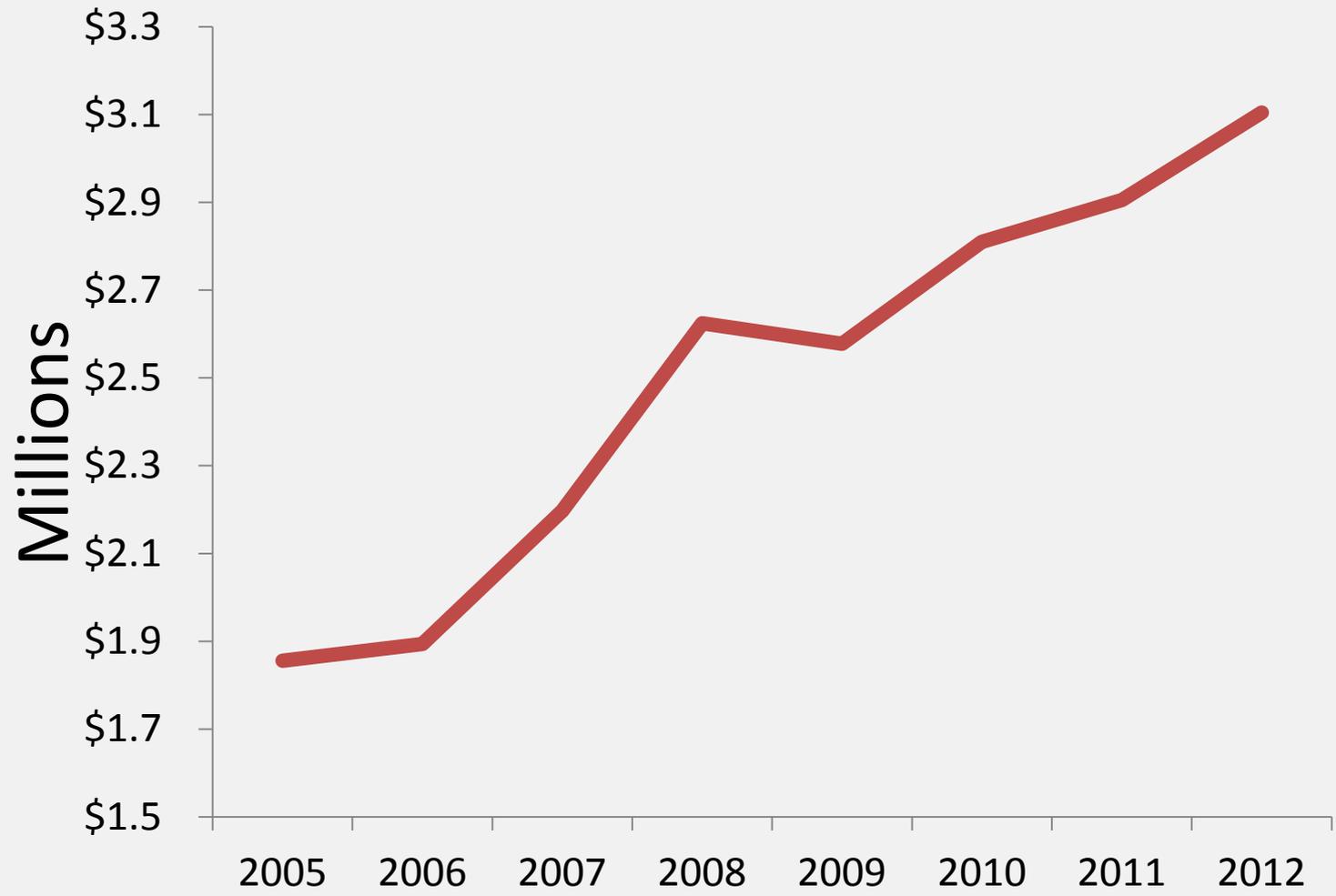


Street Light Billing

- Street lights are unmetered
- Con Edison maintains a street light database that lists the location, type, wattage and annual burn hours of every street light in Yonkers.

Lamp wattage
x Annual burn hours
kWhs
x Rate
= Basis for billing

Yonkers Street Light Electricity Costs



Request for Proposals (RFP)

- Issued by Mayor Mike Spano in May 2012
- Energy Performance Contract
 - Project cost financed through a 10-year lease
 - Use energy cost savings - guaranteed by the vendor - for repayment.
 - Provide equal or better lighting
- Seven firms responded
- Evaluation committee with broad experience

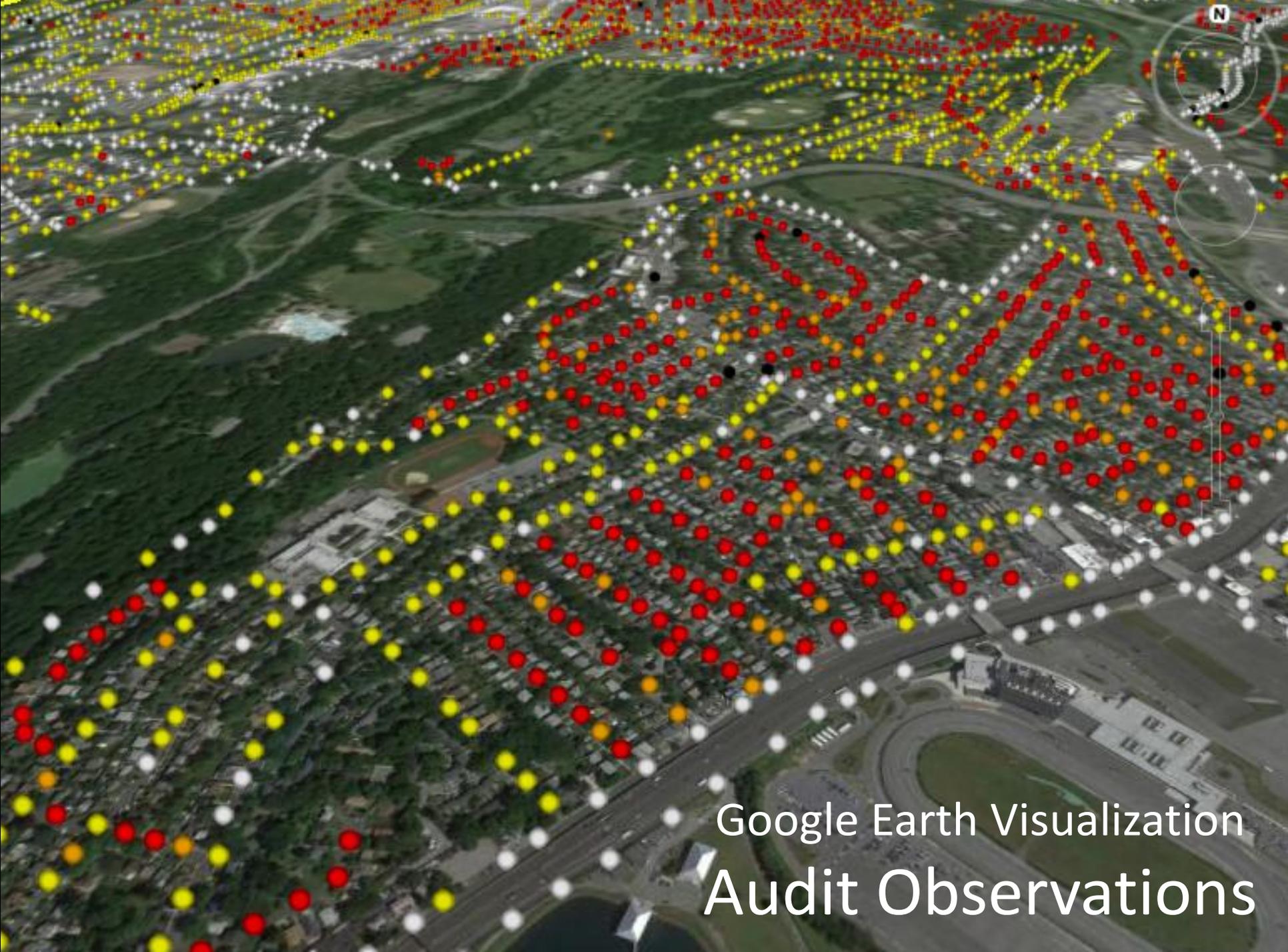
Energy Performance Contract

- Energy Audit Phase
- Installation Phase
- Lease Phase

Energy Audit Phase

- GPS coordinates
- Lamp type
- Wattage
- Condition
- Mobile mapping application
- Google Earth visualization





Google Earth Visualization
Audit Observations