Rethink Paradise…
for a Green Fleet

WPB℠

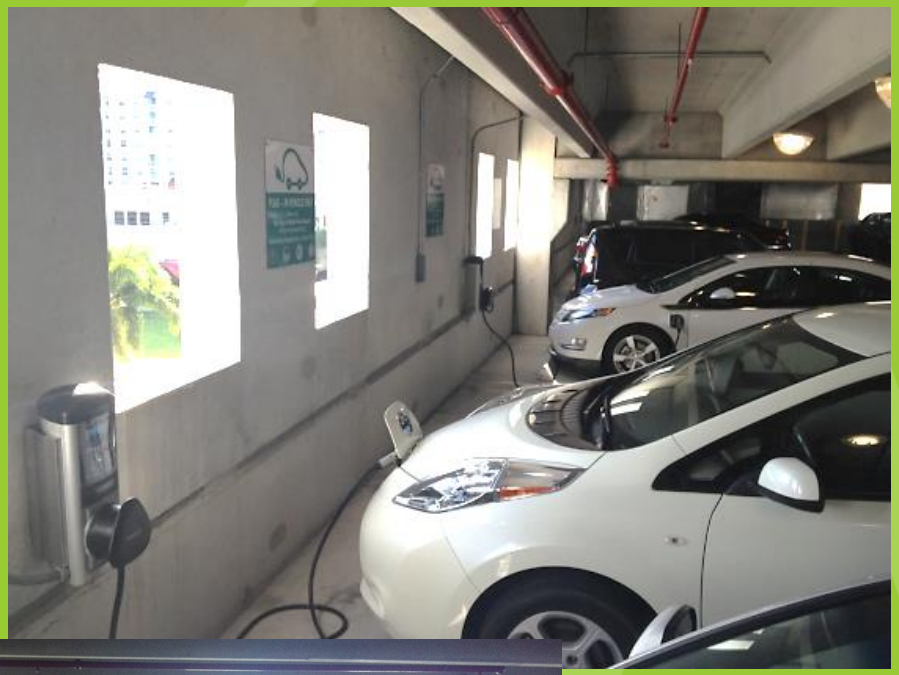
WEST PALM BEACH

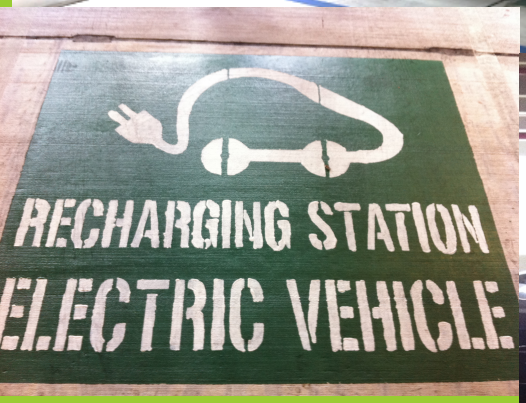
First Muni Fleet in FL with Evs 2011

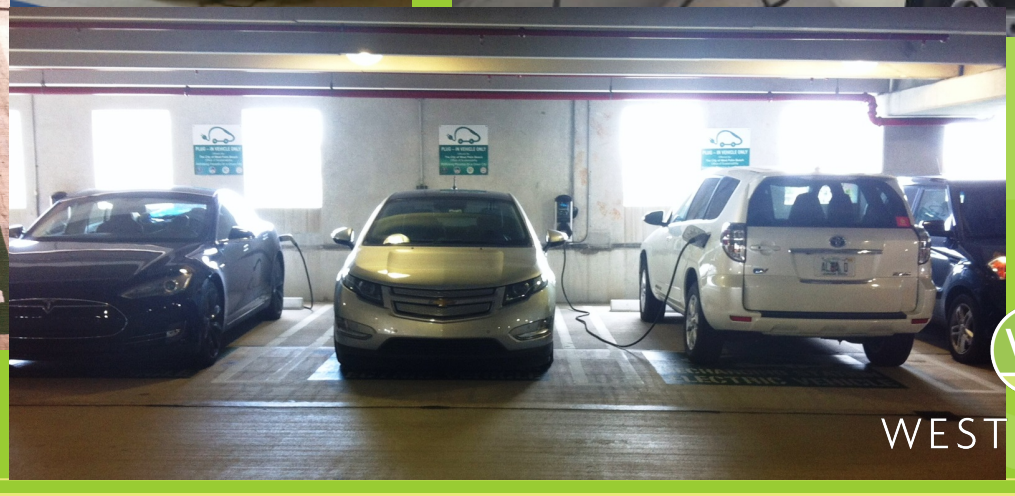
- 7 Electric Vehicle Charging Stations (Level II, 240 v) Installed.
- 5 of the stations to be utilized for Nissan Leaf fleet vehicles.
- 2 publically accessible stations on 3rd floor of the Clematis Garage.

WPB
WEST PALM BEACH

From Zero to Full







WPB
WEST PALM BEACH

Don’t Be Fuelish: Idle Reduction

Public Utilities Department

RETHINK WPB
STOP Idling.
START $aving.

WE SUPPORT SAVING FUEL

Clean Cities
U.S. Department of Energy

CITY OF WEST PALM BEACH
SUSTAINABLE INITIATIVES
wpb.org/sustainability

RETHINK WPB
STOP Idling.
START $aving.

WPB
you hold the
key
to being
Idle free

THANK YOU FOR
NOT IDLING

According to Argonne National Laboratory research:

- Idling uses more fuel than does restarting your car.
- Unless you’re driving a clunker, your vehicle will restart.
- You will not wear out the starter.
- Idling a car wastes about 0.3 gal/h and a big truck about 1 gal/h.
- Each gallon of fuel burned emits about 20 lb. of carbon dioxide.
- In some locations, idling is illegal and can result in substantial fines.
- Idling gets you nowhere!

ENERGY
Energy Efficiency & Renewable Energy

Clean Cities
U.S. Department of Energy

wpb.org/sustainability

WPB
WEST PALM BEACH

Eight Major Cities Unite to form Energy Secure Cities Coalition—Fleets Embracing Alternative Fuels to Improve America's National and Economic Security

ENERGY SECURE CITIES
COALITION

Electrification Coalition

FOR IMMEDIATE RELEASE

THURSDAY, MARCH 3, 2016

Coalition's goal is to retire 50,000 petroleum-powered vehicles, saving tens of millions in taxpayer dollars and improving U.S. national and economic security.

WPB
WEST PALM BEACH

Showcasing National Leadership, West Palm Beach Mayor Jeri Muoio Joins Seven Others to Launch Energy Secure Cities Coalition, Transition Municipal Fleets to Alternative Fuel Vehicles

FOR IMMEDIATE RELEASE:

TUESDAY, MARCH 8, 2016

ENERGY SECURE CITIES COALITION

Mayor Muoio joins coalition seeking to retire 50,000 petroleum-powered vehicles, saving tens of millions in taxpayer dollars and improving U.S. national and economic security.

West Palm Beach – Mayor Muoio joined seven other mayors last Thursday in launching the Energy Secure Cities Coalition (ESCC), a group of cities dedicated to transitioning their municipal fleets from petroleum-fueled vehicles to those powered by alternative fuels, like electricity and natural gas.

WPB

WEST PALM BEACH

Key elements driving a fleet vehicle's total cost of ownership (TCO)

Fuel	Cost to fuel the vehicle and maintain fueling infrastructure
Infrastructure	Cost of fueling infrastructure
Maintenance	Cost of maintenance, accidents, and repairs, including facility upgrades
Telematics	Cost of hardware and software to monitor vehicle performance
Financing	Direct cost of financing or indirect opportunity cost of using scarce capita
Depreciation	Difference between vehicle resale valu

Summary: Preliminary findings from assessing West Palm Beach's fleet

PRELIMINARY DRAFT

Preliminary analysis predicts ~**$580k over 8 years** as the estimated ***net added cost*** of implementing 137 new AFVs and rightsizing candidates based on current annual VMT. Excluding CNG vehicles (or offsetting CNG infrastructure costs) provides for a ***net savings*** **of between $988k and $1.3M.**

Potential Implementation Savings:

AFV Type	# of Units	Net 8-year Savings	Notes
PHEV	18	$119,900	Includes EVSE costs
BEV	28	$517,200	Includes EVSE costs
Hybrids	49	$349,600	1 sedan, 48 SUVs
CNG Vehicles	42	$344,400	Pickups and Vans
CNG (Infrastructure)		($1,911,000)	1 station; Maint. Upgrades
Total Net Savings:		**($579,900)**	
Net Savings w/o CNG infrastructure:		**$1,331,000**	
Net Savings (BEV, PHEV, Hybrid Only):		**$986,700**	

This preliminary analysis reveals a considerable opportunity but requires further analysis:

- Ability to leverage existing (or anticipated) CNG fueling infrastructure
- Right-sizing 23 existing sedans could provide an additional ~$40k in annual savings
- Right-typing candidates (SUV → PHEV Sedan) could potentially unlock exponential savings

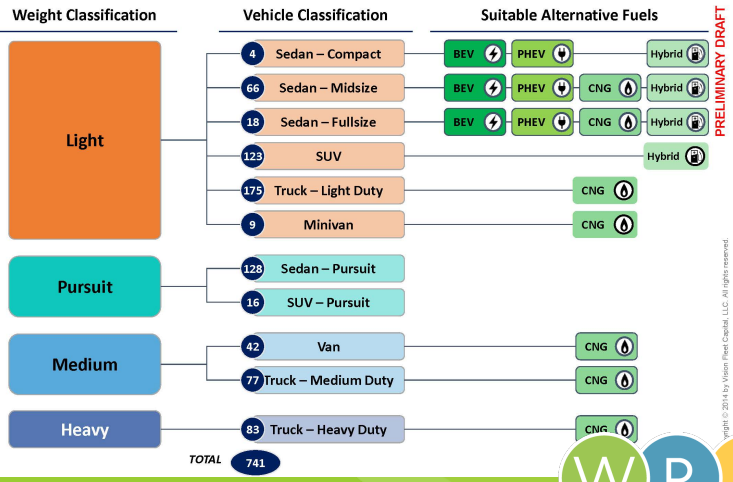
Summary of Findings by Vehicle Segment

PRELIMINARY DRAFT

Vehicle Class	Mileage-Weighted TCO/Mile	Average Age (years)	Average VMT (last 12 months)	# of Vehicles	% of Total
Sedan - Compact	$0.39	5.8	6,361	4	0.5%
Sedan - Midsize	$0.48	7.2	9,678	66	8.9%
Sedan – Full Size	$0.76	9.5	7,578	18	2.4%
Sedan - Pursuit	$0.82	5.8	12,682	128	17.3%
SUV - Pursuit	$1.16	1.3	7,365	16	2.2%
SUV	$0.84	6.4	5,347	123	16.6%
Truck - Light Duty	$1.02	7.9	4,920	175	23.6%
Truck - Medium Duty	$1.67	6.7	6,519	77	10.4%
Truck - Heavy Duty	$4.75	8.4	5,578	83	11.2%
Minivan	$0.80	12.4	4,290	9	1.2%
Van	$1.26	7.8	3,134	42	5.7%
TOTALS	$1.27	7.2	6,678	741	100%

AFV options evaluated for each vehicle classification

PRELIMINARY DRAFT



WPB

WEST PALM BEACH

WPB

WEST PALM BEACH