Innovative & Smart Investments in Mobility & Transportation

* The VW Green City Proposal & EV carshare*
“We have the most cars of any metropolitan area in the state, but Los Angeles is leading California in adoption of plug-in electric vehicles and supporting infrastructure for those vehicles.”

– JR DeShazo, Director, UCLA Luskin Center for Innovation
LA IS A GLOBAL SUSTAINABILITY LEADER

“Our sustainability plan pushes L.A. to speed adoption of greener practices and technologies, which also save money and resources.”

– Mayor Eric Garcetti
LA AIR QUALITY IMPROVEMENT IS NEEDED

"Los Angeles is committed to vehicle electrification as a way to reduce emissions in the nation’s worst ozone pollution region. We’ve made some important strides at improving air quality, and further investments can help accelerate these efforts while simultaneously helping meet their own goals for BEV deployment in the state’s top market for EVs.

– Matt Petersen, Chief Sustainability Officer, City of Los Angeles
Los Angeles Air Quality Improvement is Needed

HELP LA REDUCE OZONE POLLUTION

- Mayor Garcetti has set ambitious goals to clean up pollution in the worst Ozone pollution area in the nation.

HELP LA’S DISADVANTAGED COMMUNITIES

- The LA City pLAn and Mayor Garcetti have set goals to improve conditions by 25% in the City’s disadvantaged communities.
- Los Angeles County is home to 51% of the state’s disadvantaged communities and 1/3 of the state’s population.

HELP STATE MEET ITS GOALS

- Achieving ambitious statewide air quality improvement requires Los Angeles improvements to be made. As the Los Angeles region improves its air quality profile, the state as a whole can benefit.

Image to the left is a screenshot of the Los Angeles area from CalEnviro-Screen 3.0. Red shows areas that are most heavily pollution burdened.
“The Port is proud to be a vital economic engine both regionally and nationally. Global trade and goods movement are Southern California’s strongest industries in terms of jobs and economic activity. The Port of Los Angeles powers these industries, handling almost a quarter of the cargo that enters the United States each year.” – Gene Seroka, Executive Director, Port of Los Angeles
Los Angeles has invested billions in smart mobility solutions. This investment can help leverage the investment made by the VW Green City initiative to maximize impact in sustainable mobility.
Los Angeles is a Smart Mobility Leader

**COMMITMENT BY RESIDENTS FOR MOBILITY IMPROVEMENTS**

- Los Angeles voters have twice-approved a sales and use tax for transportation improvements. Measure M, the latest iteration, will bring **$120 billion in transportation improvements to the region over the next 40 years**.

**PIONEER IN PILOTING MOBILITY SOLUTIONS**

- The **first-ever carsharing project in a major disadvantaged community**, the City of LA with the Shared Use Mobility Center will deploy 100 EVs and 200 EVSE in disadvantaged communities in and around Central Los Angeles—reducing annual greenhouse gas emissions by approximately 2,150 metric tons of CO2.

**LEADER IN MICROTRANSIT APPLICATIONS**

- Los Angeles has been innovating in microtransit applications for decades, especially in urban areas like Downtown LA and getting people to and from Los Angeles International Airport with the FlyAway. These applications are now being electrified.
- The City also has the newly-awarded FASTLink program which is a first-of-its-kind service that will be launched in the Summer of 2017 to connect people to a multitude of mobility services in a proactive and targeted fashion.

**INNOVATIVE PARTNERSHIPS TO IMPROVE MOBILITY**

- In 2016, **GoLA was launched in partnership with the City and Xerox**—providing the first app that “captures the universe of transportation options and computes the shortest, cheapest, and most sustainable way to get to your destination.” The City has also partnered with WAZE to give more real-time data on traffic.
Los Angeles is a Smart Mobility Leader

INVESTMENTS MADE IN SMART INFRASTRUCTURE

- The City is an ideal testing ground to bring connected and automated vehicles to scale by incorporating its one-of-a-kind traffic signaling system (ATSAC) with its more than 30,000 sensors, 500 cameras, and 4,500 signals deployed across 465 square miles.

INVESTMENTS MADE IN DATA & MAPPING

- City’s investments in geospatially mapping is a key asset for AV and connected vehicle integration.
- The City has over 1,000 datasets on terrain, elevation, and more

FORWARD THINKING TRANSPORTATION PLANNING

- In 2016, Los Angeles produced a transportation technology strategy titled “Urban Mobility in a Digital Age” to guide the city’s investment and focus in smarter mobility solutions.
- The City has also adopted Mobility 2035, which stressed different modes of transportation and multi-modal options to move people, goods and services.

LEADERSHIP RECOGNITION ON AVS

- Mayor Garcetti was recently appointed as Co-Chair for a new federal committee to advance vehicle automation.
- Los Angeles is the state’s only city in the Bloomberg Aspen Initiative on Cities and Autonomous Vehicles, which is a new program for leading global mayors who will work together to prepare their cities for the emergence of autonomous vehicles.
Shared mobility is DISRUPTING transportation.

While all the impacts of shared mobility are not fully understood, traditional models such as taxis have suffered. The taxi industry has fought the introduction of rideshare which seeks a different regulatory standard, particularly on issues such as fingerprinting and background checks.

“Los Angeles is known worldwide as a hub for automotive design, aerospace, advanced manufacturing, and logistics with a deep reservoir of skilled talent (graduating more engineers than anywhere else in the nation), supplier companies, trade infrastructure, and our advanced capacity to create, design, build, and export.” – David Flaks, President/COO, LAEDC
LA OWNS & OPERATES AIRPORT, PORT & UTILITY

The City owns and operates several proprietary departments that are among the nation’s largest and have a direct role in the future of vehicle electrification: airport, port, and utility are all city departments wholly under the City’s authority. Having City ownership of the airport, port and utility enables the city and its proprietary departments to move more nimbly as there is no need to go through the Public Utilities Commission for approval.
LA HAS EXTENSIVE PUBLIC ENGAGEMENT PLATFORM

The City of Los Angeles has invested heavily in community engagement to ensure communities have a say and stake in what happens within their city. Through neighborhood councils and community groups, the City has a well networked and strong infrastructure for communicating to a diverse group of stakeholders—allowing easy to access and leveraging-capable platform for EV awareness and outreach.
CITY OF LA - SUMMARY OF PILOT REGIONS FOR INVESTMENTS

1. Downtown LA
2. South LA
3. Boyle Heights
4. Wilmington
5. Pacoima
6. LAX
Los Angeles is the first major city to have an EV carsharing pilot servicing disadvantaged communities. It is a unique program and opportunity to increase ZEV access and engagement in communities that traditionally have been locked out of vehicle electrification.
**Project Deliverables:**

1. Quickly scale a 100-vehicle pilot carshare fleet to serve disadvantaged communities in Central L.A.

2. Install at least 200 Level 2 charging units at on-and-off street public parking locations.

3. Recruit 7,250 users from the base of residents in these disadvantaged communities to these EV carshare programs in partnership with a Steering Committee comprised of community based organizations (CBOs) and the operator(s).
EV CARSHARE

Los Angeles’ 100% Electric Car Sharing Service

Available 24/7

Join Us For a Community Forum to Learn About:
Electric Vehicle Car Sharing Project Coming Soon to LA!

Car sharing is a service that lets you rent a car for short distance rides, and is highly affordable and convenient!

This is an exciting and innovative service that will benefit your community!
Come see the next phase of transportation. We will have an electric vehicle on display.

› Special guest:
Councilmember Gil Cedillo

› Free Parking
Parking is located immediately next to the CCNP building on 5th Street.

› Food and drinks will be provided
For more information:
Contact Betty at 213.480.1052 or email bbarberena@salef.org

When: April 27th
Thursday
6 PM - 8 PM

Where: CCNP
(Central City Neighborhood Partners)
501 S Bixel St.
Los Angeles, CA
90017
Enter on 5th St.

EV CARSHARE

• Policy Guidance: Mayor’s Office
• Project Implementer: LADOT
• Technical Adviser: Shared Use Mobility Center
• Tiger Team: LADWP, Bureau of Engineering, Bureau of Contract Administration, Bureau of Street Services
• Steering Committee: SALEF, KIWA, Trust South L.A. 

Cap and Trade Dollars at Work
Pilot Program Priorities

- Barriers to adoption and memberships
- Ease of use by members
- Program structure in future years
- Robust evaluation of programs
- Benchmarking & Data

- Disadvantaged communities as the primary areas
- Customer service adapted to community needs
- Inclusion of Steering Committee CBOs in planning, outreach, and implementation
- Business Outreach & Support
Outreach and Education

• Outreach Manager
• Street Team Manager & Street Team Ambassadors
• Grassroots strategies:
  1. Local Events
  2. Outdoor Events
  3. Community Forums
  4. Drive & Ride Events

• Advertising
• Web and Social Media
• Co-Branding with LA Department of Transportation
• Integrated mobility hubs
Community Co-Benefits

Participant Behavior

• Travel behavior
• Demographics
• Surveys

Impacts

• Health
• Cost Savings
• Mode shift/Mobility
• Environmental
• Economic
The City is committed to providing increased access to electric vehicle charging and has a significant level of investment poured into the infrastructure (with 1,024 publicly accessible chargers to-date) and rebates coupled with additional city budget allocations to leverage investments.
Transit electrification is a high priority project for the City of Los Angeles, and over $170 million in investment has been dedicated to electrifying transit for LADOT and LA Metro. The City is looking to accelerate transit electrification for DASH buses and LA Metro buses in high traffic areas.
The City of Los Angeles has been innovating with Microtransit applications for decades as an efficient and convenient way to move people around the City. The City is seeking to now electrify Microtransit and shuttle applications while also improving mobility connectivity options as well.
The City is committed to leading by example with fleet electrification efforts. The City has set ambitious goals that 50% of new procurements must be battery electric within the city’s own fleet.
The City of Los Angeles is home to the #1 container terminal in the US, which is a huge economic engine for the City. It also comes with a significant number of trucks—much of which are diesel—that contribute to our air quality challenges. The City has a unique opportunity to improve emissions at the Port and electrify a sector that is dominated by diesel.
Integrating renewables into zero emission vehicle operations is essential to improve the emissions profile of battery electric vehicles. The City is committed to reducing its grid impacts while ensuring ZEVs are truly ZEVs by integrating renewables with managed charging and solar.
## SUMMARY ON PROJECT CONCEPTS

The City of Los Angeles has proposed a series of shovel-ready, investment-rich projects that help pave the path for the future of urban mobility and vehicle electrification.

<table>
<thead>
<tr>
<th>#</th>
<th>Project Concept</th>
<th>Existing Investment</th>
<th>Estimated Project Cost</th>
<th>GHG Emissions Impact</th>
<th>NOx &amp; PM Impact</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Zero Emission Vehicle Transit</td>
<td>$2.8M</td>
<td>$20.7M</td>
<td>55% GHG reduction from fossil CNG baseline</td>
<td>100% reduction in NOx and PM tailpipe emissions</td>
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<td>DASH Electrification (bus) Accelerating Electrification at LA Metro (bus)</td>
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<td>ZEV Infrastructure</td>
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<td>ZEV Carsharing in Disadvantaged Communities</td>
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<td>2,150 MT of CO2 reduced annually</td>
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<td>ZEV Microtransit &amp; Shuttle FASTLink</td>
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<td>Griffith Park</td>
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<td>Municipal Fleet Electrification</td>
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<td>BEV Dryage Pilot</td>
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<td>ZEVs with Renewables</td>
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*these projects are shovel-ready and can be done independently (either in whole or in part) or in conjunction with others. Estimated project costs are preliminary figures; more precise and exact figures can be provided upon request.*
INNOVATIVE AND SMART INVESTMENTS IN MOBILITY & TRANSPORTATION

- Key EV Market
- Sustainability Leadership
- Air Quality Need
- Goods Movement
- Mobility Leadership
- Concentration of Industry
- Strong Diversity
- City-Owned Airport, Port & Utility
- Public Engagement Platforms
- Maximum Visibility

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