

Silicon Valley's Collaborative Renewable Energy Project

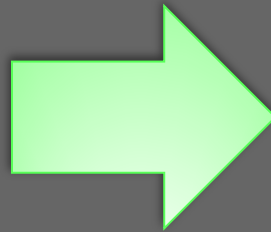
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Transportation Authority
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Solar Power Financing Options

Financing Structures

- Direct Purchase
- Power Purchase Agreement
- Equipment Leasing
- Bond Financing
- Enhanced Use Lease
- Utility Financing
- Energy Service Contract



Major Impact on:

- Performance Risk
- Up-Front Costs
- Long-Term Returns
- Procurement Process
- System Design
- Project Benefits
- Operations & Maintenance

Power Purchase Agreements (PPA)

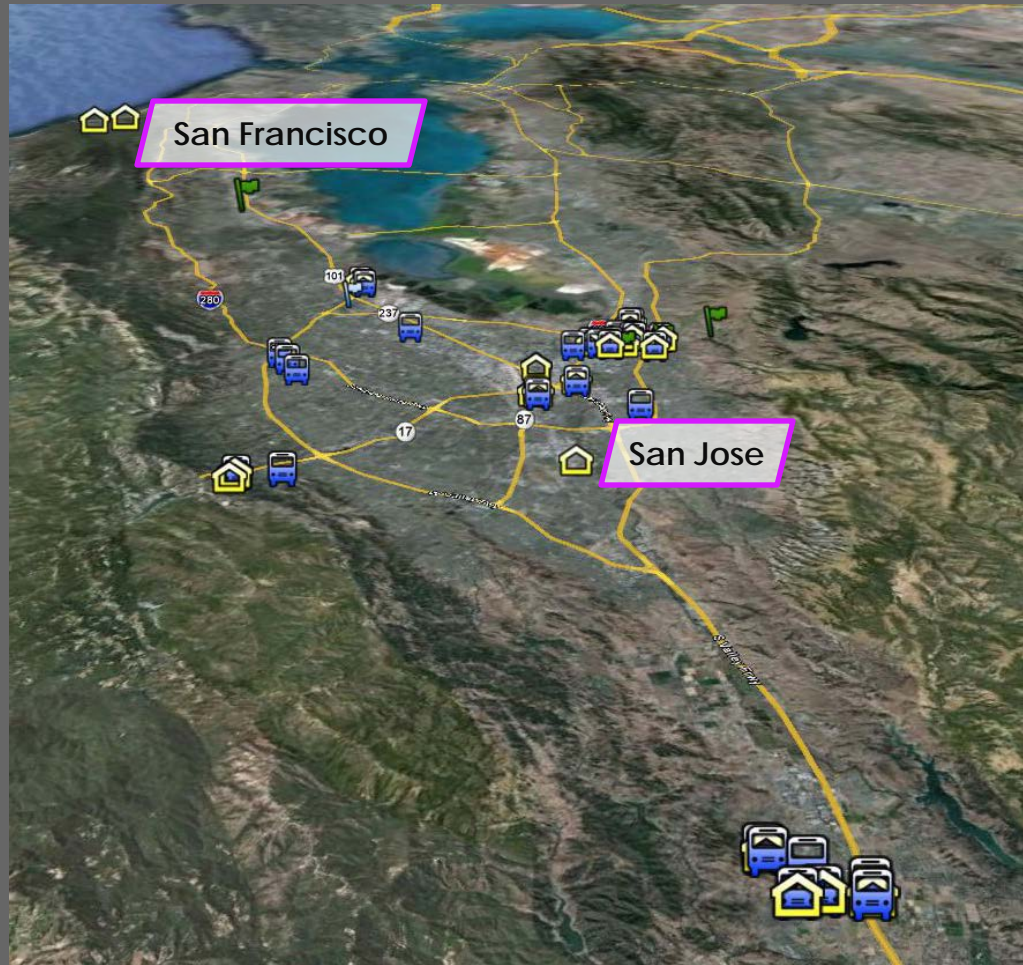


- Enables agencies to go solar without having to buy the PV system upfront
- Ideal for schools, gov't buildings, etc.
- 3rd party purchases, owns, operates and maintains system
 - Their investors take tax incentives
 - They bill clients just as a utility does

Santa Clara County's Regional Renewable PPA RFP

- Facilitated by Joint Venture: Silicon Valley
 - Non-profit public-private network in Silicon Valley
- Joint Venture SV created a Public Sector Climate Task Force to develop solutions for GHG reduction
 - www.jointventure.org/renewableenergyprocurement
- Task Force consists of members from the county, cities, and special districts

Largest Public Agency Collaborative Multi-site Renewable Energy Project in US



Includes 70 sites:

- 1 County/6 Cities
- 2 Special Districts
- Collaboration across 9 jurisdictions

14.4MW of combined PV

Multiple Site Types:

- Carports
- Rooftops
- Ground mounted

5 Bundle Groups:

- Large
- Medium
- Small – combined
- Small – rooftop
- Other

Collaboration Benefits for Solar Projects

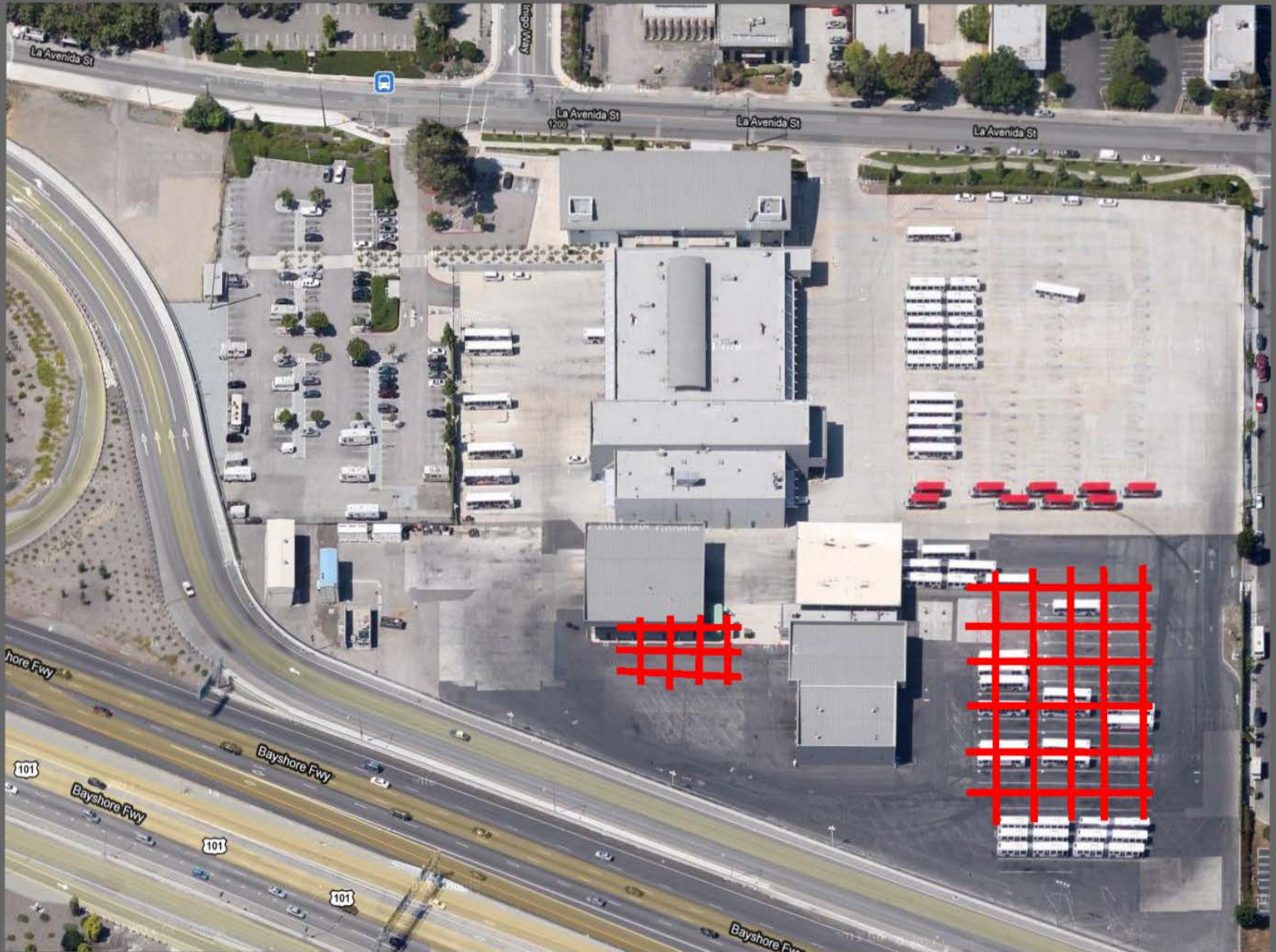
- Achieve sustainability goals faster by working together and sharing expertise
- Working together yields lower project risks with higher returns
- Dramatically reduce transactions costs and administrative effort (50% - 75% decrease)
- Aggregation yields greater market interest and better pricing thru volume discounts (10% - 15% cost reductions)

VTA Case: Solar for Transportation Agencies

- 5 Sites, 3 Selected (2.1 MW Capacity)
- Challenges: Very large electricity loads at some facilities, lack of available capital funds
- Opportunities: Consider alternative sites, optimize system sizing, vendor financing
- Results: 20-year PPA, \$2.7M Savings, 1.8 Million VMT Reduction



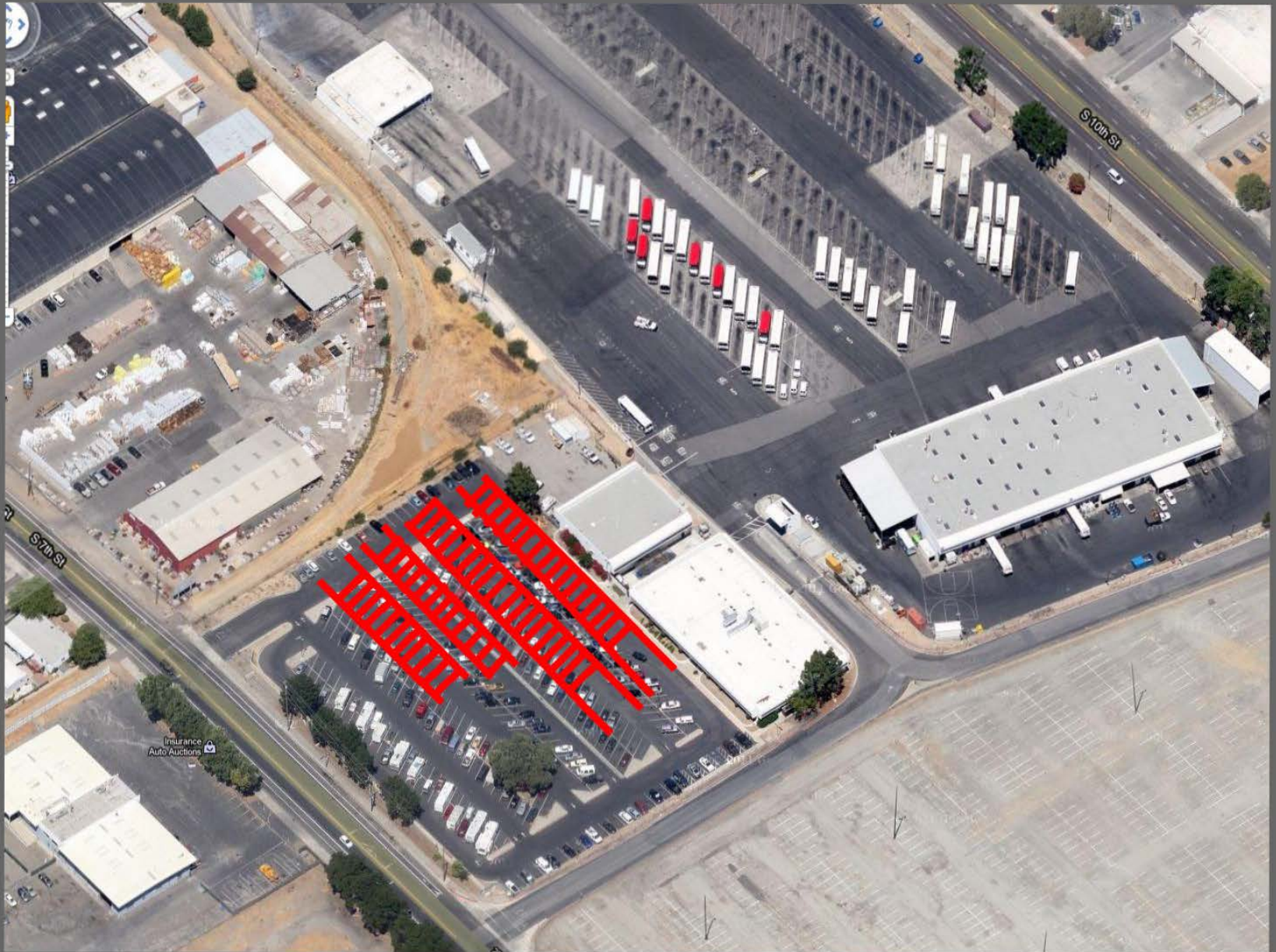
North Yard – Mountain View, CA



Cerone Division – San Jose, CA



Chaboya Division – San Jose, CA



Time Line

- Public Agency Coordination – Fall/ Winter 2009
- County PPA RFP – March 2010
- Interviews – June 2010
- Signed Agreement – Feb. 2011
- Financing – Summer 2011
- Construction – Aug.-Nov. 2011
- Operational– Dec. 2011



Triple Bottom Line

- Financial Benefit:

- › CSI rebate, no/low upfront costs
- › PPA fixed rates – reduces future uncertainty of energy \$
- › Save on our energy bills

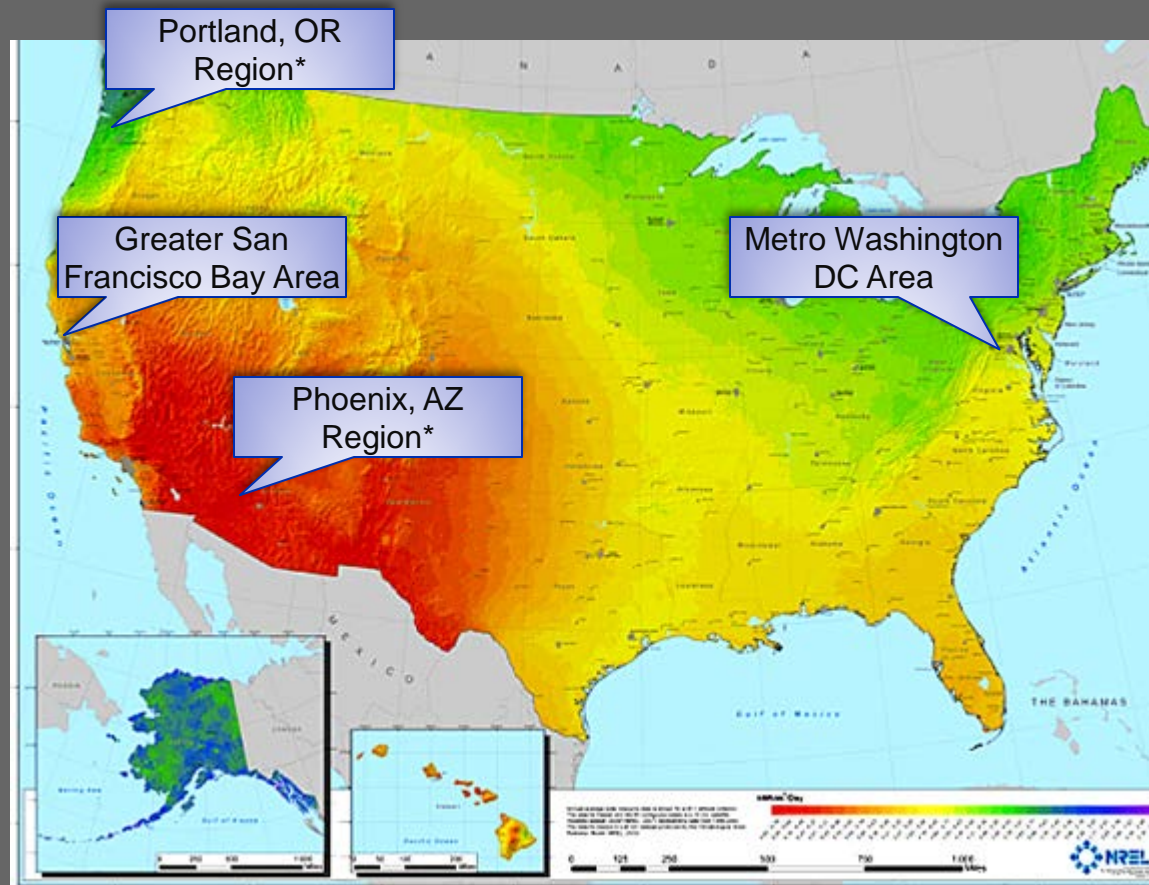
- Environmental Benefit:

- › Arrays are sized to meet our needs, require low maintenance, efficient design
- › Renewable energy source reduces carbon emissions

- Division Operational Benefit:

- › Provides shade and cooling effect for vehicles
- › Promotes sustainable activities

More Major Regional Efforts Underway in 2011



Getting Started

- Identify sites across your organization for potential solar development
- Define goals, constraints and success factors
- Evaluate financing options for your agency
- Determine procurement process and requirements
- Recruit other agencies to aggregate sites and combine efforts
- Utilize internal and external expertise to assess sites technically and economically
- Convene stakeholders to review plans and build support for the initiative!

Resources:

- World Resources Institute
 - Purchasing Power: Best Practices Guide
- EPA Green Power Partnership
 - www.epa.gov/greenpower/cecp
- DOE Solar America Communities
 - http://solaramericacommunities.energy.gov/resources/guide_for_local_governments/
- Interstate Renewable Energy Council
 - Field Inspection Guidelines, Publications, and Reports on Solar Market Trends: <http://irecusa.org>



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