Best Practices/Lessons Learned from Strategic Plan

2013-2015 Final Report Version

Funded by
Southern California Edison Company
Local Government Strategic Plan Strategies Program
under the auspices of the California Public Utilities Commission

Prepared by:
Southern California Edison
1515 Walnut Grove Ave
Rosemead, CA 91770

January 2017

Table of Contents

1. Introduction

Since 2010, Southern California Edison has been working with local governments toward achieving the goals laid out in the California Long-term Energy Efficiency Strategic Plan. This work was directed through three solicitations for work. The following document highlights some of the best practices and lessons learned from the strategic solicitation. These were pulled from "Best Practices/Lessons Learned" deliverables and the "Best Practices/Lessons Learned" section of the "Final Report". This document is organized by strategic plan task to assist any future work more easily utilize prior experiences. This document will be updated as tasks are completed and as more lessons learned/best practices become available.

1.1 California Long-term Energy Efficiency Strategic Plan (CEESP)

California's Long-term Energy Efficiency Strategic Plan ("Strategic Plan") was developed to set the long-term vision for Energy Efficiency throughout the state. The Strategic Plan was divided into sectors, including five goals for the public sector. D.09-09-047 required SCE to execute a competitive solicitation process for city, county, and regional governments to pilot innovative local government ("LGs") strategic plan strategies. D.09-09-047 also directed the IOUs to develop a strategic plan menu of tasks for local governments to select from for Strategic Plan work. SCE and other IOUs worked with the Energy Division and local governments to develop this menu of tasks, which was used as the basis for SCE's solicitation.

1.1.1 Strategic Plan Goals

The Strategic Plan set the following five goals for the public sector:

- **Strategic Plan Goal 1:** "Local governments lead adoption and implementation of "reach codes stronger than Title 24 on both mandatory and voluntary bases"
- **Strategic Plan Goal 2:** "Strong support from local governments for energy code compliance enforcement."
- **Strategic Plan Goal 3**: "Local Governments Lead by Example with their own Facilities and Energy Usage Practices"
- **Strategic Plan Goal 4**: "Local governments lead their communities with innovative programs for energy efficiency, sustainability and climate change"
- **Strategic Plan Goal 5**: "Local government energy efficiency expertise becomes widespread and typical."

2. Strategic Plan Goal 1: Reach Codes

"Local governments lead adoption and implementation of "reach codes stronger than Title 24 on both mandatory and voluntary bases"

2.1 Strategic Plan Task 1.1.1 - Reach Codes

Adopt building energy codes more stringent than Title 24's requirements, using cost-effectiveness studies by Climate Zone done by the utilities; adopt one or two additional tiers of increasing stringency.

No work solicited for this task in 2013-2015.

2.2 Strategic Plan Task 1.1.2 - Green Building Codes

Adopt a Green Building policy for municipal development, commercial development and/or residential development.

2.2.1 Coachella Valley Association of Governments – Phase 3

Local Government Partnership: Desert Cities Partnership

Participating Municipality: City of Palm Desert

Project Title: Adopt a Green Building Policy for Commercial and Residential Development

Project Purpose: The goal of this task is to develop and gain adoption by the Participating Municipality of a Voluntary Green Building policy that was developed in the 2010-2012 LGP Strategic Plan Pilot Program for other jurisdictions by Implementer. The policy will be designed to educate and train planning and building staff to promote energy efficiency measures to homeowner and contractors when they come to the participating municipality for permits.

Project Scope and Components: Develop a voluntary green building (VGB) policy for the Participating Municipality based on the work done in the 2010-2012 LGP Strategic Plan Pilot Program by Implementer for seven (7) participating municipalities. The policy increases the installation of energy efficiency equipment above Title 24, in existing construction in the residential, commercial and industrial (C&I), and municipal sectors, through changes in Participating Municipality's policies and procedures and the provision of educational workshops. The policy will discuss changes to Participating Municipality's policies and procedures for

permitting, plan checking, building inspections, and any other procedures, as well as staff training.

Deliverables:

1. Report on status of Implementer or Subcontractor to help support the Task
2. Draft Assessment and Planning Report for the Voluntary Green Building Policy
3. Final Assessment and Planning Report for the Voluntary Green Building Policy
4. Draft Voluntary Green Building Policy
5. Final Voluntary Green Building Policy
6. Submit Resolution to City Council for Adoption: Provide documentation of why Voluntary Green Building Policy was not adopted and related alternate plans for the policy
7. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): October 2014 **Date Completed (actual):** April 2015

Estimated Cost: $24,030 **Program Final Cost:** $160,965 ($160,200 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• The Green Building Program integrates Title 24, LEED, and CalGreen standards with green building practices to customize it to our region and hot desert climate. • A Zero Net Energy Guide was developed as part of the Green Building Policy. The Participating Municipality completed a zero net energy low-income housing project in early 2016. The ZNE Guide provided a case study of this project and an introduction to this little known topic. • Due to the economic downturn, we chose a voluntary policy as a mandatory program would not be supported by local governments or the building industry. The program emphasizes education for city staff and property owners to “bring them up to speed” on green building. • The Program was supported with easy to read and understand materials that the city

could use to help educate homeowners and contractors.

Lessons Learned

- The Participating Municipality has a strong history of promoting green building. They adopted a Reach Code in 2006. They have been leaders in energy efficiency for many years.
- The review of the Green Building Policy was coordinated through their Sustainability Committee. This helped develop buy-in and create support for the program.
- Having the Green Building Policy already adopted by seven other jurisdictions helped gain support in the Participating Municipality. Their adoption of the policy provides for consistency for the building industry throughout our region.

Knowledge Transferred

- Through the Partnership, Implementer has disseminated Green for Life program information to partners including the Coachella Valley Economic Partnership, Desert Valleys Builders Association, local water districts, chambers of commerce, local community college, and other local governments not served by SCE. We will continue to share information through our Green for Life website, articles in jurisdiction newsletters and websites, outreach events, presentations to community groups, and media/social media outreach.

Next Steps

- Ongoing outreach to the community to promote energy efficiency through the Green for Life program.
- Now that the economy is recovering, interest in green building is increasing. We plan to work with our member cities to promote use of the Green for Life program and a recognition program.
- Use the Zero Net Energy Guide as a tool to educate our region about this big and bold goal for future buildings.

Benefit to the State

- The State will benefit from this green building policy through reduced energy use and reduced GHG emissions.
- The Green Building Policy promotes going beyond Title 24 and is consistent with the California Long Term Energy Efficiency Strategic Plan.
- The Green Building Policy adopted by Participating Municipality includes a Title 24

2013 update

Benefit to Local Government
• The development of the Green Building Program in the 2010-2012 LGP Strategic Plan Pilot Program provided a completed policy that was ready for review, customization and adoption by the Participating Municipality. The work done with the Participating Municipality would not have been possible without the support from SCE and the CPUC. All local governments in our region benefit from having a consistent green building policy that goes beyond Title 24 and promotes energy efficiency in new and existing buildings.

Successes
• The Zero Net Energy Guide was completed, reviewed by the Participating Municipality's staff and adopted by the City Council as part of their adoption of the Green Building Policy. Participating Municipality completed the first Zero Net building in the region in January 2016, providing a living example of the principles of zero net energy design.

Challenges
• The Strategic Plan goal to adopt reach codes was influenced by the economic downturn. Instead of a reach code, we opted for a voluntary green building policy. It would have been very difficult to get a reach code approved given the economic challenges and losses in the construction industry. The building industry was very supportive of our green building programs but would have opposed a reach code. • The timing of trying to potentially propose a reach code with Title 24 being updated to much stricter standards in 2013 was also a challenge.

2.2.2 San Gabriel Valley Council of Governments – Phase 3

Local Government Partnership: San Gabriel Valley Partnership

Participating Municipalities: Alhambra, Arcadia, Baldwin Park, Bradbury, Claremont, Covina, Diamond Bar, Duarte, El Monte, Irwindale, La Canada Flintridge, Monterey Park, Pomona, Rosemead, San Dimas, San Gabriel, South El Monte, South Pasadena, Temple City, Walnut, West Covina

Project Title: Develop and Adopt a Voluntary Green Building Program

Project Purpose: The goal of this task to develop the San Gabriel Valley Green Building Initiative to drive building performance that exceeds Title 24 requirements by capitalizing on the unique position and role that Local Government has in reviewing construction activity taking place in the city.

Project Scope and Components: Implementer will develop a voluntary green building program that increases the installation of energy efficiency equipment for existing construction through education and outreach. Implementer will: develop a Green Building Guidebook with regionally relevant content for residents, builders and developers; review Energy Action Plans for Participating Municipalities for energy efficiency strategies for the Green Building Guidebook; Develop the Green Building Regional website and customize pages for Participating Municipalities that contain city-specific energy information, programs, and goals.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for Green Building Guidebook/Green Building Regional Portal Website
3. Final Assessment and Planning Report for Green Building Guidebook/Green Building Regional Portal Website
4. Outline of Green Building Guidebook
5. Report on Stakeholder Input
6. Draft Green Building Guidebook/Draft Green Building Regional Portal Website Content
7. Final Green Building Regional Portal Website Content/Final Green Building Guidebook
8. Beta Green Building Regional Portal Website
9. Live and Fully Functional Green Building Regional Portal Website
10. Draft Plan for Sharing Lessons Learned/Best Practices with Other Local Governments
11. Final Plan for Sharing Lessons Learned/Best Practices with Other Local Governments
12. Monthly Status Report

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): July 2015 **Date Completed (actual):** July 2016

Estimated Cost: $84,100 **Program Final Cost:** $83,915.67

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $184.33

Best Practices
• Utilizing an existing model from CVAG allowed for significant time and cost savings.

Lessons Learned
• **Early Engagement of Homeowners:** The original program design focused on engaging homeowners when they were seeking permits, with the goal of informing them of potential modifications they could make to their planned projects to increase the energy efficiency of their home. However, after discussions with city staff and other stakeholders and further research of other programs, staff determined that it is critical to engage homeowners *prior* to the start of any major renovation project. This accomplishes several goals: 1) influencing the products, materials and installation method a homeowner might select on a project that they have already committed to undertaking; 2) influencing homeowners to undertake a new project that they may not have been considering; and 3) educating homeowners about the importance of securing a building permit for applicable projects in order to ensure proper installation and performance. By the time a homeowner is seeking a permit, they have usually solidified a scope of work, set a budget, and selected a contractor. Therefore, it is very difficult to influence that project.

Knowledge Transferred
• The SGVEWP includes all of the information from the Green Building Guidebook. Therefore, it is completely accessible to any other local government, non-profit, resident or community group.

Next Steps
• SGVCOG hopes to partner with cities in the future to further promote the Green Building Guidebook and implement a recognition program for property owners that voluntarily exceed Title 24.

Benefit to the State
• The State will benefit from this green building program through reduced energy use

and reduced GHG emissions.

Benefit to Local Government
• Implementer will develop a regionally specific guidebook that will serve as a resource for years to come and a regional web portal to disseminate information and interface with users. Once established, the regional portal will be updated as part of Implementer's commitment to the region's sustainability.

Successes
• Final Green Building website content approved. The website is active. • Final Green Building Guidebook

Challenges
• It would be useful to allow ongoing funding through the Partnership to allow for updates to the Green Building Guidebook at changes are made to Title 24.

2.2.3 County of Santa Barbara – Phase 3

Local Government Partnership: South Santa Barbara Partnership

Project Title: Energy Efficiency Standard for County Owned Facilities

Project Purpose: The goal of this task is to develop and implement a mandatory energy efficiency standard for Implementer's facilities that is more stringent than current applicable codes.

Project Scope and Components: Implementer will develop an energy efficiency standard for Implementer's facilities to increase the level of energy efficiency in those buildings and facilities. The standard will be structured as a resolution, which will make it mandatory for qualified construction projects. In addition to the new standard an implementation guide will be developed to assist staff in working with the energy efficiency standard. The standard and associated documents was submitted and approved by the Board of Supervisors.

The City will:

- Evaluate other county building standards, policies, resolutions, and ordinances that focus on increasing energy efficiency to establish the percentage increase above Title 24 that will serve as the basis of the energy efficiency standard.
- Develop the first draft of the energy efficiency standard. The standard will be structured as a resolution.
- Develop a draft implementation guide. This guide will be a more detailed document designed to educate county staff on what the standard is and which buildings and types of projects apply, and will also provide guidance on the resources needed for implementation.
- Gather stakeholder input. A successful component of the County's 2010-2012 LGP Strategic Plan Pilot was gathering input from the County's Green Team after a strong draft was developed. The County will use this approach again to share the work developed with the Green Team, and gather and incorporate input.
- Develop the final draft of the energy efficiency Standard/Resolution and Implementation Guide.

Deliverables:

1. Report on status of Implementer or Subcontractor to help support the Task
2. EE Standards Assessment and Planning Report
3. Draft Energy Efficiency Standard for County Owned Facilities
4. Draft Energy Efficiency Implementation Guide
5. Report on Energy Efficiency Standards Stakeholder Input
6. Final Energy Efficiency Standard for County Owned Facilities and Implementation Guide
7. Submit Resolution to Board of Supervisors for Adoption: Provide documentation of why the Energy Efficiency Standard was not adopted and related alternate plans (for each Participating Municipality)
8. Train County Staff on Energy Efficiency Standard and Implementation Guide
9. Best Practices Energy Efficiency Standard
10. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (January 2014)

Date Completed (est.): September 2015 **Date Completed (actual):** December 2016

Estimated Cost: $84,616 **Program Final Cost:** Awaiting final invoice, Approximately $80,000

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: Awaiting final invoice, Approximately $4,500

Best Practices

- Develop a Comprehensive End-to-End Energy Efficiency Policy
- In order to enable energy savings consistent with the County's Zero Net Energy Resolution, a comprehensive energy policy is required. A survey of energy efficiency practices in the County revealed there is the potential to achieve significant savings through regulation and enforcement.
- The California State Energy Code regulates a subset of the end-uses found in new construction projects. Specifically, plug and process loads which can be significant consumers of a building's annual energy use are not covered. Furthermore, the code has limited reach and application to existing buildings, which make up a preponderance of the County's opportunity for energy reduction opportunities. Recognizing the potential to close gaps, the Standard was designed to apply to (1) all County owned, operated, and leased buildings and facilities, (2) all County departments, and (3) all project administrative, design, construction, and operations and maintenance activities. The policy was designed to be far reaching and inclusive of all building construction and improvement projects to (1) acknowledge the importance planning has on achieving energy efficiency and (2) reduce the potential impact from deviations from code compliance and energy efficiency best practices experienced downstream of traditional code enforcement processes.

Lessons Learned

- Implement Reach Codes to Advance Energy Efficiency
- This policy leverages state energy codes and reach codes as an important tool for advancing the County's energy performance. Adoption and implementation (compliance and enforcement) of energy codes are key tools for policy makers to improve building energy performance. This Standard makes compliance and enforcement of the California State Energy Code an explicit requirement, and is the County's first priority in moving towards Zero Net Energy. Furthermore, the Standard was designed to allow the County to set local energy efficiency and resource requirements more stringent than the California State Energy Code, to further advance the energy performance of the County's building stock. Specifically, the Standard adopts the California Green Building Standards Code, Tier 1 and Tier 2 compliance paths for energy projects. These reach requirements provide performance criteria for achieving 10% and 15% energy savings over the state energy code, helping to moving the needle closer toward the County's goal of Zero Net Energy.

Knowledge Transferred

- Integrate with and Reinforce Existing Policies
- The County has taken deliberate and proactive steps to manage and improve the immediate and long term energy performance, and operations, and maintenance of its buildings. Several resolutions, policies, and ordinances have been developed, which through implementation have resulted in a reduction in County energy consumption. Even so, to achieve the County's goal of zero net energy, these and all other relevant County policies must be coordinated, integrated, and implemented in a consistent manner. County policy requirements that have not evolved to address the energy efficiency demands of today and those inconsistently applied across the various departments are addressed in this Standard. One such example is payment of energy consumption through the County's Utility Management System. It's estimated that 20% of the County's building portfolio has yet to be integrated with the system. Leveraging the centralized management system will enable County departments to better measure, track, and benchmark facility consumption, consistent with the County's Benchmarking Policy, and plan for energy improvements in a manner consistent with the County's energy goals.

- Next Steps

- Provide Relevant Stakeholder Training and Communication
- Compliance with the Standard invariably relies on implementation by the various project stakeholders. Stakeholders must be made aware of and understand their responsibility for implementing sections relevant to their project role. Stakeholders are many, and therefore communication and training should be developed relative to their immediate responsibility and potential influence on consumption. They include the County Board of Supervisors, internal County staff, external consultants, and building occupants. The Standard was designed to address the specific training needs of internal stakeholders and building occupants. It requires County staff to provide communication to external stakeholders regarding applicability and compliance with the Standard and annual reporting to the Board of Supervisors. Internal stakeholders are required to attend audience specific implementation training. Building occupant and tenant training will be provided at the completion of building improvements projects and will be commensurate with and focused on the energy performing systems they have direct or indirect control over addressing how their actions may influence energy use.

Benefit to the State

- The State will benefit from this task because a green building/energy efficiency policy for municipal facilities will increase the energy efficiency of the Participating

Municipality's facilities resulting in reduced energy use and GHG emissions.

Benefit to Local Government

- The standard is structured as a Resolution, which permanently increases the occurrence of energy efficiency improvements.
- Training will provide context of this Standard/Resolution and the benefits to the County, employees and staff, to ensure ongoing successful implementation.

Successes

- Incorporate Lifecycle Resource Planning
- Project resource planning is instrumental to delivering high quality and high performing energy projects. The Standard recognizes that incorporating energy resource planning into traditional planning and budgeting activities will increase the likelihood realistic budgets are established, and that energy performance requirements are integrated into building construction, operations, and maintenance projects. Planning should include designing and constructing for compliance with all applicable mandatory, prescriptive, and performance requirements and the establishment of annual performance targets. The Standard requires County departments to develop performance objectives and criteria for all new construction, major and minor renovations, and maintenance projects. By establishing performance criteria, projects will be positioned for improved energy performance though identification and commitment of specific criteria included in the project's design and construction, and metrics for which the project's performance will be validated against. Planning should be a continuous process throughout a building's lifecycle with project stakeholders documenting and tracking established performance criteria throughout each project phase.

Challenges

- Departments that develop a strategy that does not include setting performance targets and budgets are less likely to achieve their planned results across their departmental portfolio while minimizing contribution to the County's energy reduction goals.

2.3 Strategic Plan Task 1.1.3 - Point of Sale Program

Develop/adopt point of sale programs such as a Residential or Commercial Energy Conservation Ordinance. Focus on whole building performance.

No work solicited for this task in 2013-2015.

2.4 Strategic Plan Task 1.1.4 - IDSM Code Updates

Change local codes to allow and encourage integration of energy efficiency, demand response, and on-site generation.

No work solicited for this task in 2013-2015.

2.5 Strategic Plan Task 1.1.5 –Programs That Encourage Energy Efficiency

Develop and adopt programs to encourage energy efficiency such as one-stop permitting, on-line permitting, separate Zero Net Energy permit processes, density bonuses, or a recognition program.

2.5.1 City of El Segundo – Phase 3

Local Government Partnership: South Bay Cities Partnership

Project Title: Develop and Adopt Program to Encourage Energy Efficiency through the On-line Permitting Process

Project Purpose: This task will build upon and leverage the success of the City's Online Permit Center developed in the 2010-2012 LGP Strategic Plan Pilot Program by fully integrating EE into its planning and permitting processes through the development of a Project Builder Expert System (ProjectBuilder). While the Online Permit Center promotes EE for more standardized permits, the ProjectBuilder will expand this concept by addressing construction projects from inception through final inspection, influencing larger, more complicated projects including major renovations, additions, and new construction.

The goal of this task is to integrate ProjectBuilder software into its on-line permitting system to guide project developers in identifying and installing energy efficiency measures.

Project Scope and Components: The Implementer will integrate ProjectBuilder software into its on-line permitting system to guide project developers to identify and install energy efficiency measures. ProjectBuilder will provide targeted information on utility incentives to property owners seeking a building permit and will expand more fully into the construction project life cycle, offering an enhanced and earlier opportunity to influence project decisions on energy

efficiency, which is expected to result in deeper energy savings. This innovative approach to integrating energy efficiency information and suggestions into the Implementer's planning and permitting processes is expected to serve as a benchmark and replicable model for other local governments. The Implementer will:

- Develop the ProjectBuilder web-tool;
- Perform testing and troubleshooting; and
- Launch the new system.

Deliverables:

1. Report on status of Implementer or Subcontractor to support the task
2. Draft Assessment and Planning Report for Project Builder Expert System
3. Final Assessment and Planning Report for Project Builder Expert System
4. Detailed Specification Report for Project Builder Expert System
5. Installed and Launched Project Builder Expert System
6. Report on the Installation and Launch of the Project Builder Expert System
7. Plan for sharing lessons learned/best practices with other local governments
8. Monthly Report of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (June 2014)

Date Completed (est.): May 2015 **Date Completed (actual):** November 2015

Estimated Cost: $66,750 **Program Final Cost:** $110,095 ($111,250 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• Through the implementation of the (ProjectBuilder System) the following best practices were used as a guiding standard. • Bring key staff members together to ensure buy in and participating for all affected municipal departments. Establish an internal energy management team, the team should consist of members from each department at the city that can provide input, speak to departmental needs and other important information and how they want the

system to work, look and complement standard operations.

Lessons Learned

- Engage all stakeholders at the beginning of the program to gain early buy-in. Many of the tasks required intra-departmental and inter-departmental support from staff not previously familiar with the overall goal and intent of the program. This lack of familiarity caused challenges and delays with the implementation of tasks. In the future, the Implementer would invite key staff from various departments to participate in energy management and planning discussions to ensure transparent communication of the Implementer's energy reduction objectives.
- Obtain a Commitment from Management: Management commitment is crucial in any website or software development project. It is usually management who has requested the project, but many times management was drawn into other projects as this project went through its lifecycle. It is important to include upper management as part of the development team, and as command decisions are necessary, the management team is there to address any and all decisions to move forward.
- Ensure that all staff members are involved with system development: Many times management will want to take the lead in deriving the various needs for the system or conducting interviews themselves and pass this information down to the system designer and developer. Though management may have an understanding of what they want for the system, their view may not be that of the front line staff who will be using the system on a daily basis. Department staff and the jobs they perform will be the key to determining all the elements and the flow of data for the system. Only by having the developer conduct the staff interviews himself can he have an understanding of how staff in each department perform their tasks and what staff indicates need to have included in the system. This also allows the developer to better understand the data elements that will be required to make the system multi departmental, and all modules of the system function as a whole. Management has the big picture goal in mind, but individual department staff that interact with the clients of their departments will be able to direct the system developer in a variety of scenarios they encounter on a daily basis.

Knowledge Transferred

- The implementer has invited several local government agencies through its work in SCE's Energy Leader Partnership Program to test the system and see how the system will help the Implementer achieve its energy reduction goals utilizing the system as an additional strategy.

Next Steps

- Implementer will seek to promote the system, it will use the same platform previously

used to make the online permitting software to residents, contractors and commercial builders in the Implementer. It will also continue to make enhancements to the system as identified if beneficially to the Implementer's overall energy efficiency goals.

Benefit to the State
• Local governments integrating energy efficiency in their municipal operations align with the State's "loading order" of first addressing energy efficiency as California's top priority resources.

Benefit to Local Government
• The ProjectBuilder System has been established and will be used to influence smarter energy buildings in the community, through the educational components and links to utility incentives and it will help streamline the process for residents, commercial builders etc.

Successes
• The Project Builder Expert System site was procured using a module provided by the Implementer's existing building permit vendor. The design of the system and site was developed by integrating energy efficiency information and links into the system. • Project Builder Expert website has been live since November 2015

Challenges
• No significant challenges were encountered in this task.

2.5.2 City of Goleta – Phase 3

Local Government Partnership: South Santa Barbara Partnership

Project Title: Create a Neighborhood Development Floating Zone to Foster Green Community Development

Project Purpose: The goal of this task is to develop and adopt a policy on floating zones, and related tools that will institutionalize green neighborhood development standards, including

energy efficiency, into a single zoning district by incorporating them as eligibility conditions and district regulations, which can then be affixed to appropriate locations.

Project Scope and Components: The Implementer will create a Neighborhood Development Floating Zone to foster green community development and will develop tools for planning and implementation of the floating zone. Analysis will be conducted to develop base case scenarios and various alternative development scenarios on which the effects of the inter-related pros and cons of potential future scenarios will be assessed using models that estimate future conditions across a range of values for different factors, including energy efficiency.

Deliverables:

1. Report on status of Implementer or Subcontractor to support the task
2. Draft Assessment and Planning Report for Neighborhood Development Floating Zone
3. Final Assessment and Planning Report for Neighborhood Development Floating Zone
4. Develop City Baseline and Alternative Development Scenarios
5. Neighborhood Development Floating Zone Scenario Planning Tool Analysis
6. Report on Stakeholder Input
7. Draft Code Establishing Neighborhood Development Floating Zone
8. Final Code Establishing Neighborhood Development Floating Zone
9. Submit Neighborhood Development Floating Zone Code to City Council for adoption; if adopted, provide written evidence it was adopted by the local government and effective date; if not adopted; provide reasons and alternative plans
10. Plan for sharing lessons learned/best practices with other local governments
11. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): December 2015 **Date Completed (actual):** August 2016

Estimated Cost: $43,987 **Program Final Cost: $**21,125

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $22,862

Best Practices
• Timely access to energy usage data is a best practice that would help participants meet program goals - or alternatively - be able to adapt their program framework early in the process if necessary, to be responsive to a lack of useable data. It is helpful for participants to remember that unanticipated events will likely occur throughout such a project development process. In such instances, the ability for the program administrator and program participants to be nimble and quickly adapting to these events will ultimately result in an intact process.

Lessons Learned
• The City's goal with its Phase 3 Strategic Plan Program was to enhance neighborhood sustainability by integrating energy considerations into development decisions. • It was determined that in light of the limited available data, an aging housing stock, and a community that is 99% built-out, supporting the upgrade of the existing multifamily building stock rather than continue to pursue a voluntary ordinance that would potentially apply to a only a few, if any future development projects is a better approach for future activities. • This move is supported by the fact that 85 % of the City's housing stock was built prior to 1990 and is likely to be in need of ongoing maintenance and repair. Additionally, multifamily buildings with 5 or more units comprise approximately 25% of the City's total housing stock.

Knowledge Transferred
• Although the City was not able to proceed with the project as originally designed due to the lack of energy usage data, a significant amount of information was gathered that will be of benefit for future use regarding scenario planning tools, neighborhood assessment tools, and online public engagement tools. The city had shared the successes and challenges with other municipalities in their partnership and looks forward to sharing the lessons learned to date with others.

Next Steps
• Closure of the Phase 3 contract and PO. The city could not proceed due to limitations in data. The city does intend to apply in SCE's new strategic plan model with a revised scope of work.

Benefit to the State
• By implementing this policy energy will be used more efficiently, thereby reducing energy use and GHG emissions. Increasing energy efficiency aligns with the California

Long Term Energy Efficiency Strategic Plan (CLTEESP).

Benefit to Local Government

- Through this task the City will develop a policy to allow the creation of Neighborhood Floating Zone to foster green community development.
- This Neighborhood Floating Zone would institutionalize green neighborhood development practices into the City's planning process. If adopted, the Neighborhood Development Floating Zone would be part of the new zoning code and standard practice of the City and would provide clear policy direction from which to base decisions for development in the City having long term effects beyond the current funding cycle.

Successes

- The City was not able to proceed with the project as originally designed due to the lack of usage data. However, with the passage of time, a change in existing conditions, and the process of considering a revised scope, the City realized it could achieve a more effective and wide ranging result in energy efficiency performance if it would target existing buildings going forward.

Challenges

- The City sought assistance from SCE for aggregated energy usage data at the census tract or block level relative to the residential, commercial, and industrial sectors upon notification of the City's selection for participation in the Phase 3 Strategic Plan activities. The energy usage data would be used to establish an energy baseline and serve as a comparison point for evaluating the application of potential energy efficiency measures and trending overall performance.
- At that time, there was a significant delay in getting access to the necessary data needed to support the NDFZ, which initially impacted the timeline for the analysis and created concern that funds identified for other tasks would need to be reallocated to energy modelling tasks. Ultimately, the agreement deadline was extended and a process instituted whereby jurisdictions could request access to energy usage data.
- Unfortunately, upon reviewing the energy usage data acquired from SCE for the City's residential, commercial, and industrial sectors, it became apparent that many of the census block groups failed the aggregation rules and thus data is not available for approximately 145 commercial properties and 900 residential properties. This lack of available data prevents the City from establishing a usage baseline and effectively employing the scenario planning tool for the originally intended purpose under the approved statement of work.

2.5.3 City of Moreno Valley – Phase 3

Local Government Partnership: Community Energy Partnership

Project Title: Municipal Code Amendment to Provide Residential Density Bonuses for Energy Efficient Projects

Project Purpose: The goal of this task is to amend Implementer's municipal code to encourage more energy efficient and higher performing buildings through density bonuses which integrate energy efficiency into building design.

Project Scope and Components: The Implementer will develop an ordinance that will provide density bonuses for projects that incorporate specific criteria into building design that result in achieving a quantifiable percentage reduction in energy usage beyond the Title 24 building code requirement. Energy producing measures (e.g., solar) would be excluded. New residential developments would meet these criteria by incorporating energy efficiency measures into the building design. The Implementer will conduct research and analysis to assess the parameters used for establishing density bonuses for all new residential developments within the City. Staff will obtain input from internal stakeholders and the development community concerning density bonuses for residential projects based on energy efficiency, which will also include determining the percentage to be achieved beyond the minimum Title 24 building code requirement.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for Municipal Code Amendments to Allow & Encourage Integration of EE, Distributed Generation, and Density Bonuses
3. Final Assessment and Planning Report for Municipal Code Amendment to Allow & Encourage Integration of EE, Distributed Generation, and Density Bonuses
4. Draft Municipal Code Amendments
5. Report on Stakeholder Input
6. Final Municipal Code Amendments
7. Submit Municipal Code Amendments to Planning Commission for Review
8. Submit Municipal Code Amendments to City Council for Adoption; provide effective date of code, or reasons for rejection and alternate plans considered
9. Monthly Status Reports

Date Approved (Advice Letter (NTP)): May 2014 (June 2014)

Date Completed (est.): May 2015 **Date Completed (actual):** February 16, 2016

Estimated Cost: $25,230 **Program Final Cost:** $18,656.25

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $6,573.75

Best Practices
• In assessing all of the research and supporting information, a density bonus tied to project LEED certification appeared to be the appropriate approach. It was difficult to identify a set of standards to be achieved outside of LEED as the energy efficiency standards continue to be ungraded in California through Title 24 and CalGreen. The best practice is to use LEED certification standards to implement residential density bonuses.

Lessons Learned
• Based on the assessment of all of the source documents and research, multi-family development density bonuses tied to LEED appeared to be feasible. In consideration of all the research and careful consideration of the City's existing Codes, there are limitations in the ability to provide a density bonus for the single-family development. Therefore, the ordinance addresses multi-family related uses only. • On February 16, 2016 the City of Moreno Valley City Council approved this Municipal Code Amendment Density Bonus Ordinance.

Knowledge Transferred
• With the adoption of a density bonus ordinance, there has been internal training of planning staff. This will ensure implementation of the ordinance. The intent is for the ordinance to be clear, concise, and easy to implement. Therefore, the need for training should be minimal.

Next Steps
• Planning staff will promote the density bonus through its GREEN MoVal (Getting Residents Energy Efficient Now). There is also the potential to promote the density bonus through the City's Media Services department. Finally, the availability of the

density bonus can be incorporated into the proposed update of hand-outs related to energy efficiency. The City may want to consider recognizing developers that achieve LEED certification as a result of the bonus.

Benefit to the State

- Adopting a density bonus ordinance based on LEED would achieve the purpose of this task. However, complying with LEED will also achieve other benefits related to furthering the implementation of the City's Climate Action Strategy.
- As identified on the USBSC website, LEED stands for "green building leadership." By providing the density bonus incentive for LEED certification, it will demonstrate the City's ongoing commitment toward meeting State goals aimed at greenhouse gas reduction.

Benefit to Local Government

- This municipal code amendment will update an ordinance that will be applied to all future residential development proposals in the City, thus providing sustainable, long term benefit.

Successes

- At present, the City does not have any single-family or multi-family projects that have received any green building certification of any kind. The density bonus will provide a tangible incentive to a developer willing to achieve energy efficient levels existing requirements under existing building codes. Further, it will afford the City the opportunity to be recognized as a City that encourages energy efficient projects without imposing the requirements on a developer.

Challenges

- The biggest challenge was in considering the potential for density bonuses for single-family homes. The City explored applying density bonus to single-family residential development; however, it was not be feasible since the City does not require the review and approval of housing product along with the approval of a tentative tract map for single-family.

2.5.4 City of Oxnard – Phase 3

Local Government Partnership: Ventura Partnership

Project Title: Develop and Implement an Expedited Permitting Program

Project Purpose: The goal of this task is to develop the Expedited Permitting Program to increase the number of energy efficient construction/retrofit projects.

Project Scope and Components: Develop an expedited permitting program for projects that achieve specific building criteria based on developed for the program. The checklist provides a scoring of the project with the points based on green building measures identified in LEED, Energy Star, GreenPoint rating, CALGreen tiers, or other similar energy efficiency rating programs. Checklists will be developed for new construction, major renovations, and tenant improvement projects. Staff will also be trained to provide additional energy efficiency and green building measures recommendations at the permit counter.

Deliverables:

1. Report on status of Implementer or Subcontractor to support the task
2. Draft Assessment and Planning Report for the Expedited Permitting Program
3. Final Assessment and Planning Report for the Expedited Permitting Program
4. Draft EE and Green Building Checklists
5. Final EE and Green Building Checklists
6. Design and Establish the Expedited Permit Program
7. Report on Staff Training on the Expedited Permitting Program
8. Draft Plan for Sharing Lessons Learned/Best Practices with Other Local Governments
9. Final Plan for Sharing Lessons Learned/Best Practices with Other Local Governments
10. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (December 2013)

Date Completed (est.): January 2015 **Date Completed (actual):** December 2015

Estimated Cost: $47,500 **Program Final Cost:** $37,238 ($47,500 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $10,262

Best Practices
• The Implementer has also partnered with regional energy efficiency organizations in the County of Ventura that assist with energy planning, outreach, and energy efficiency trainings and seminars that help municipal staff and industry professionals. • The information sharing and distribution of best practices will help reduce municipal costs through duplication of data, improve and streamline common residential energy efficiency permitting, and simplify energy efficiency permitting and simplify processes.

Lessons Learned
• With the implementation of the 2014 Building Code, it became evident that energy efficiency beyond Title 24 for single family residential was not realistic. • Program success would be optimized if lessons learned, solutions, and opportunities for energy efficiency permitting were shared with larger stakeholder groups, industry organizations, and the building industry to name a few.

Knowledge Transferred
• In order to maximize the City's resources available for this program, potential partnerships with neighboring agencies implementing similar programs were explored. The Implementer has shared the project eligibility checklists and permit processing flow charts with neighboring agencies for review. The checklists and flow charts help explain the same energy efficiency compliance process the County of Ventura and other local governments must follow. • The Implementer is exploring ways to combine resources with neighboring agencies to develop public education materials highlighting energy efficiency best practices. These kinds of partnerships between agencies provide a way for the Implementer to share the findings and best practices of the program success with other local governmental agencies. • The Implementer has partnered with regional energy efficiency organizations in the County of Ventura that assist with energy planning, outreach, and energy efficiency trainings and seminars that help municipal staff and industry professionals. Organizations like the Ventura County Regional Energy Alliance (VCREA) that works with public agencies to develop and adopt policies and ordinances that encourage energy efficiency in all sectors continues to be a great resource and conduit for sharing lessons learned.

Next Steps
• The Implementer continues to share its best practices with local jurisdictions and partnering with the County of Ventura and VCREA to further promotion expedited permitting through the region. The goal is to leverage the best practices for the

program and adopt similar standards for jurisdictions throughout the region.

Benefit to the State
• Through the Implementer's expedited permitting process more importance is given to projects that have inclusion of demand side management activities. • The Implementer's checklists will allow for an increase in energy efficiency projects and a reduction in GHG emissions due to the simplification on the plan submittal process.

Benefit to Local Government
• Implementer benefits from this task by providing users (residents, builders, contractors) with an effective method of encouraging energy efficiency and Green Building practices by using expedited permit processing as the incentive for using the program. Once the program is designed and set up it is integrated into normal operations of the municipality.

Successes
• The Implementer is partnering with local organizations and the County to promote the developments of the expedited permitting process and to support County wide development of the same metrics.

Challenges
• The need for sharing best practices amongst local governments is clear. The difficulty lies in the manner in which timely and precise information is shared with government officials and the public in order to reach a larger audience. Program success would be optimized if lessons learned, solutions, and opportunities for energy efficiency permitting were shared with larger stakeholder groups, industry organizations, and the building industry to name a few. • Determining what efficiency rubric and efficiency index should be utilized. When this project was planned, the Implementer intended to "reach" energy efficiency projects that exceed Title 24. With implementation of the more stringent energy efficiency requirements of the 2014 Building Code, it became evident that energy efficiency beyond Title 24 for single family residential demonstration projects was not realistic. • Determining how to navigate the Title 24, Part 6 Building Energy Efficiency single family prescriptive requirements. Simply navigating the Title 24 prescriptive requirements for single family projects proved to be complex, confusing, and involved. Ultimately, the Implementer was able to develop a streamlined flowchart and checklist

for common single family efficiency projects. However, it is likely the current checklist and flowcharts will have to be updated when Title 24 is next updated.

2.5.5 San Gabriel Valley Council of Governments – Phase 3

Local Government Partnership: San Gabriel Valley Partnership

Participating Municipalities: Alhambra, Bradbury, Covina, Duarte, El Monte, Irwindale, La Canada Flintridge, Monterey Park, Pomona, Rosemead, San Dimas, South El Monte, South Pasadena, Temple City, West Covina

Project Title: Online Permitting Service

Project Purpose: The goal of this task is to install online permitting systems for Participating Municipalities. These systems will be set up to provide the applicant with information regarding energy efficiency and demand response, and other SCE offerings.

Project Scope and Components: Implementer will develop an online permitting system that integrates energy efficiency at strategic points in the building permit process. By streamlining the permit process, code compliance will be more convenient and likely to increase. SCE's program info will be integrated into the system. Information about energy efficiency and incentive/rebates will be provided to applicants at the time of initial application. This may be done via online permitting system or a counter technician for walk-in applications. The on-line system may direct the applicant to the Green Building Regional website, if appropriate.

The system will primarily emphasize and promote energy efficiency measures, but will also integrate other SCE program offerings (e.g., demand response) and provide an incentive to obtain a building permit by streamlining the permit application process. This will result in increased numbers of permit applications, resulting in improved code compliance as these permits go through the normal inspection processes.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for the On-line Permitting Service
3. Final Assessment and Planning Report for the On-line Permitting Service
4. Detailed Specifications Report for the On-line Permitting Service

5. Documentation of Updated Internal Permit Processing Procedures
6. On-line Permitting Service Staff Training Report
7. Draft On-line Permitting Service Customer-facing Website Content, including Instructions for Use
8. Final On-line Permitting Service Customer-facing Website Content, including Instructions for Use
9. Live and Fully Functional On-line Permitting Service for Each Participating Municipality:
10. Draft Implementation Report for the On-line Permitting Service
11. Final Implementation Report for the On-line Permitting Service
12. Draft Plan for Sharing Lessons Learned/Best Practices with Other Local Governments
13. Final Plan for Sharing Lessons Learned/Best Practices with Other Local Governments
14. Monthly Status Report

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): June 2015 **Date Completed (actual):** September 2016

Estimated Cost: $563,010 **Program Final Cost: $**26,537.43

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $536,472.57

Best Practices
• Full knowledge of a municipality's current permitting system is essential to know before implementing online permitting because of the issues of integration (i.e. ability to accept electronic payment, lack of digital permitting data). A municipality would best be served by acquiring an online permitting component when procuring a digitized permitting system, rather than acquiring separately.

Lessons Learned
• One key takeaway from the pursuit of this task is to insure online permitting can be integrated by accounting for the following: • The ability to accept electronic payment

- A realistic procurement timeline
- Electronic permit software already in place

Knowledge Transferred

- Upon the request of patterning agencies, the SGVCOG will share the Best Practices Report to share lessons learned and challenges.

Next Steps

- The online permitting task will not be pursued at this time in the San Gabriel Valley cities due to the lack of commitment from partnering cities.

Benefit to the State

- By implementing this program energy was to be used more efficiently, thereby reducing energy use and GHG emissions. Increasing energy efficiency aligns with the California Long Term Energy Efficiency Strategic Plan (CLTEESP) and the State's "loading order for energy resources".

Benefit to Local Government

- The system would've primarily emphasized and promoted EE measures, but would've also integrate other SCE program offerings (e.g., demand response) and provide an incentive to obtain a building permit by streamlining the permit application process. This was to result in increased numbers of permit applications, resulting in improved code compliance as these permits go through the normal inspection processes.

Successes

- Approved Online Permitting MOU for use with participating cities.
- Compiled a list of interested cities in the online permitting grant.
- Met with 15 cities to develop plans to implement customer-facing online permitting.

Challenges

- Online permitting was not a feasible option for SGV cities because of a lack of resources (strict procurement timeline, no electronic payments, no backend software)

2.5.6 County of Ventura – Phase 3

Local Government Partnership: Ventura County Partnership

Project Title: Purchase and Implement On-Line Electronic Plan Check System

Project Purpose: The goal of this task is to develop and implement a system to enable the on-line submittal of plans/drawings associated with permits. This would increase the permitting of more complex projects and can facilitate the identification of energy efficiency opportunities.

Project Scope and Components: Deliverable 1. Implementer will implement an online plan check system that allows permit applicants to submit building/engineering plans online. Through the web interface developed in Task 1.1.5, Deliverable 2, the system would facilitate the identification of energy efficiency opportunities and provide links to energy efficiency information. Implementer will:

- Conduct an assessment of the plan-check needs within the county's affected agencies
- Develop specifications for the system
- Purchase and install the system
- Develop and implement the interface to accommodate on-line plan submittals
- Implement the system

Deliverables:

1. Report on Status of Implementer or Sub-contractor to Support the Task
2. Draft Assessment and Planning Report for the EDRS System
3. Final Assessment and Planning Report for the EDRS System
4. Assessment of EDRS Needs within Agencies
5. Specifications of EDRS System
6. Purchase and Install EDRS System
7. Installation and Training Report
8. Monthly Status Report

Date Approved (Advice Letter (NTP)): May 2014 (June 2014)

Date Completed (est.): June 2015 **Date Completed (actual):** March 2016

Estimated Cost: $150,000 **Program Final Cost: $**76,350.23

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $73,649.77

Best Practices

- The Team spent the first few months gathering information to assure a smooth implementation of the plan check process.
- Contacted other local jurisdictions who were currently implementing an online plan check system, and solicited guidance from them on how to organize and prepare for implementation in Ventura County.
- Team has met with 15 County departments/divisions that participate in the building permitting process to conduct analysis sessions to better understand their business processes, execute any necessary technical adjustments, and address administrative issues that may pose a potential hindrance in the implementation of this new process.

Lessons Learned

- Analysis sessions with each of the participating agencies:
    - Identifying which record types in system would be using electronic plan check;
    - Identifying which County staff would need a license for electronic plan check;
    - Finalizing information that must be standardized and shared by all agencies like statuses, codes, and templates for correction notice reports.

Knowledge Transferred

- New environments will be used by three major agencies in the county and by citizens via the Citizen Access portal.
- Guides are posted online and are continuously updated.

Next Steps

- Continue to develop User Acceptance Training and identify any technical or business process issues that must be addressed prior to go-live.

Benefit to the State

- The State will benefit from this program through increased code compliance, increased energy efficiency, and reductions in energy use and GHG emissions.
- Local government better able to track permit information.
- Provides citizens easier access to information so that projects are safe and permitted.

Benefit to Local Government

- The County expanding Accela Automation and Citizen Access provides an avenue for applicants to submit applications and documents online.
- Also streamline the permitting process for County staff by reducing data entry and tracking information more effectively.

Successes

- Improved resources for citizens and agencies.
- Set up of baseline for improved data tracking.

Challenges

- Other projects taking priority over online permitting and plan checking.
- Software updates that set back kick off

2.5.7 County of Ventura – Phase 3

Local Government Partnership: Ventura County Partnership

Project Title: Deliverable 2. Develop and Implement On-Line Permit Application Program

Project Purpose: The goal of this task is to develop and implement an on-line permitting program whose objective is the Plan Check System installed in Task 1.1.5, Deliverable 1. This program will increase the number of permits issued by making the permitting process more

convenient and would introduce applicants to energy efficiency options and requirements for incorporation into projects.

Project Scope and Components: Deliverable 2. Implementer will develop and implement an on-line permit program that would utilize the on-line permit system installed as Deliverable 1. Implementer will:

- Identify types of permits for inclusion in the program;
- Develop forms and associated materials
- Develop web interface to accommodate on-line application submittals
- Provide training to customers and staff
- Track detailed permit information
- Develop a report to track information beyond program cycle.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for the On-line Permit Application Program
3. Final Assessment and Planning Report for the On-line Permit Application Program
4. Identification of High Volume Permits to be Given On-line Applications
5. On-line Permitting Forms
6. Draft Customer Outreach and Training Plan
7. Final Customer Outreach and Training Plan
8. Implementation Report of the On-Line Permit Application Program and Customer-facing Website
9. Draft Plan to Share Best Practices and Lessons Learned with Peer Counties and Cities
10. Final Plan to Share Best Practices and Lessons Learned with Peer Counties and Cities
11. Monthly Status Report

Date Approved (Advice Letter (NTP)): May 2014 (June 2014)

Date Completed (est.): April 2015 **Date Completed (actual):** December 2016

Estimated Cost: $65,400 **Program Final Cost: $**33,096.77

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $32,303.23

Best Practices
• Conduct analysis sessions with departments within all three County agencies that use and have their own permitting applications and review processes. • Clearly explain the development process to subject matter experts, inquired about the review process and reviewed existing documentation in order to develop the framework and language of the online applications

Lessons Learned
• The following process worked best when implementing changes. (1) Conduct initial research and acquire information in preparation for development, (2) purchase and installation of equipment and licenses, (3) execute analysis sessions with each participating County department, (4) work with Consultant to configure software, and (5) prepare for User Acceptance Testing.

Knowledge Transferred
• Test environment was able to provide training to all users. • Citizens, staff, inspectors and general public will be able to access all information

Next Steps
• Continue to monitor online permit to be sure all information is up to date and system supports all features.

Benefit to the State
• The State will benefit from this online permitting program through increased code compliance, increased energy efficiency, and reductions in energy use and GHG emissions. o Better tracking of the permitting process o Direct permits applicants to energy efficiency resources. o Data on type of projects happening in each jurisdiction

Benefit to Local Government
• Improved contact with applicants. • Provides best local resources. • Improved system using all modules.

Successes
• A robust site that gives the best services to local residents

Challenges
• Time on developing environments and user test environments. • Delay of other systems also being updated at the same time

2.5.8 Western Riverside Council of Governments – Phase 3

Local Government Partnership: Western Riverside Energy Leader Partnership

Participating Municipalities: Perris and Wildomar

Project Title: On-Line Permitting

Project Purpose: The goal of this task is to install on-line permitting systems at the two Participating Municipalities which are expected to increase code compliance and installation of EE measures among city constituents and developers.

Project Scope and Components: Implementer will purchase and install on-line permitting systems for the cities of Perris and Wildomar.

Perris will install and implement a complete on-line permitting system, utilizing the approach taken by other member cities of WRCOG during the 2010-2012 LGP Strategic Plan Pilot Program. The software proposed will be compatible with the Perris' financial system.

Wildomar will enhance its existing online permitting system (installed during the 2010-2012 LGP Strategic Plan Pilot Program) by adding a code enforcement module to further integrate online permitting system into permitting operations.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for the On-line Permitting System/Code Enforcement Module
3. Final Assessment and Planning Report for the On-line Permitting System/Code Enforcement Module
4. Select, Procure and Install Appropriate Software for Participating Municipalities
5. Policies and Procedures for Each Participating Municipality
6. Participating Municipality Staff Training Materials and Training Report
7. Implementation Report for Perris' On-line Permitting System and Wildomar's Code Enforcement Module Enhancement of its On-Line Permitting System
8. Draft Plan for Sharing Lessons Learned/Best Practices with Other Local Governments
9. Final Plan for Sharing Lessons Learned/Best Practices with Other Local Governments
10. Monthly Status Report

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): April 2015 **Date Completed (actual):** October 2016

Estimated Cost: $87,000 **Program Final Cost:** $5,451.46

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $81,548.54

Best Practices
• Through the implementation of the On-Line Permitting Systems for both the Cities of Perris and Wildomar, we have seen a lot of interest in growth for both cities. The cities are reaching their goals for the use of their permitting systems and continue to have users learn and utilized the program. A lot of the program's success has come from learning what other municipalities have done and have worked to learn from one

another's experiences in implementing the systems.

Lessons Learned
• The installation of the on-line operating system has helped the City of Perris provide additional information to applicants that are interested in any rebate incentives that are available for application. The biggest lesson learned for the City of Wildomar was that people learned to use tools differently and at different rates through the implemented learning modules. What works to teach one user may not necessarily work with all users.

Knowledge Transferred
• Knowledge gained from these programs help participating jurisdictions educate their community about important energy efficiency measures. • Such information can be beneficial to neighboring jurisdictions that are interested in these types of programs.

Next Steps
• The Cities of Perris and Wildomar receive and active participation on both ends of their On-Line Permitting System. The City of Perris wants to continue the active participation of users to promote energy efficiency projects for buildings. The City of Wildomar are continuing to help educate the users by creating new learning modules and increase the usages of users for multiple facets of their system.

Benefit to the State
• The State will benefit from this online permitting program through increased code compliance, increased energy efficiency, and reductions in energy use and GHG emissions. • Implemented measure will aid with the reduction of greenhouse gas emissions (GHG's) such as AB 32.

Benefit to Local Government
• The Participating Municipalities expect to increase code compliance of energy efficiency measures among city constituents and developers through the installation of on-line permitting systems.

Successes
• The system has been successful in many ways for both the Cities of Perris and Wildomar. The City of Perris wanted to implement an On-Line Permitting System to help them with the promotion of energy efficiency projects for buildings in their community. The City of Wildomar wanted to update their current On-Line Permitting System to help track and compare and code enforcement issues. Both systems have helped the cities reach their goals and are continuing to make efforts to increase the use of their systems to help their community reach their needs.

Challenges
• Some of the biggest challenges that came about for the City of Wildomar was increasing the education of the On-Line Permitting System to the users. Through this challenge, City of Wildomar staff created learning modules to help assist the users on how to use and obtain the most out of the system. There were around 12 learning modules implemented and the city has received positive input on the new learning system. The biggest challenge that the City of Perris encountered was a flaw in the system that did not allow the users to input their application to the system.

2.6 Strategic Plan Task 1.1.6 – Educational Programs

Develop educational programs for local elected officials, building officials, commissioners, and stakeholders to improve adoption of energy efficiency codes, ordinances, standards, guidelines and programs.

2.6.1 Coachella Valley Association of Governments – Phase 3

Local Government Partnership: Desert Cities Partnership

Participating Municipality: City of Palm Desert

Project Title: Educational Program on Energy Efficiency and Sustainability for Local Officials & Stakeholders

Project Purpose: The goal of this task is to provide education and training to elected officials, city commissioners, and key city staff members on the benefits of energy efficiency, reach codes, and how they impact the participating municipality's energy efficiency and sustainability goals, energy costs, and customers.

Project Scope and Components: Provide education and training to the Participating Municipality's elected officials, city commissioners, and key city staff members focused on the benefits of energy efficiency, reach codes, and how they impact the Participating Municipality's energy efficiency and sustainability goals, energy costs, and customers. Implementer will conduct workshops and provide education and information on Title 24, the benefits of reach codes, and what it takes to attain reach code goals of 15% above Title 24.

The education of elected and appointed officials focused on individual and group meetings, including presentations made at Architectural Review boards and commissions, Sustainability Commission, Planning Commission and City Council meetings. The staff training component of this task was undertaken through a series of workshops where the Green Building Program and its implementation were explained in detail.

Deliverables:

1. Report on status of Implementer or Subcontractor to help support the Task
2. Draft Assessment and Planning Report for City Officials Education Program
3. Final Assessment and Planning Report for City Officials Education Program
4. Draft City Officials Education Program Training Curriculum
5. Final City Officials Education Program Training Curriculum
6. Conduct City Officials Education Program Implementation
7. Implementation Report for City Officials Education Program for the City Officials Education Program
8. Plan for sharing lessons learned/best practices with other local governments
9. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): March 2015 **Date Completed (actual):** March 2015

Estimated Cost: $19,224 **Program Final Cost:** $160,965 ($160,200 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• Implementer used the same successful tool in Participating Municipality for education and outreach among jurisdiction staff and city officials – a Green for Life open house at city hall to launch the program. The open house occurred during lunch hour, with informal stations featuring benchmarking, green building, climate action planning. The open house was very well attended with city council, planning commission, architectural review board, and city staff in attendance to learn about Green for Life and strategic plan goals. • We developed educational energy efficiency cards on topics including HVAC, windows, cool roofs that were available at city halls, and other public locations. Implementer's education and outreach focused on training city staff be familiar with energy efficiency and green building options so they could encourage property owners to adopt these practices. • We provided tools for property owners and contractors to learn about energy efficiency measures and help them understand the benefits of green building.

Lessons Learned
• Presentations at Planning Commissions, Architectural Boards and City Councils were the most effective way to reach out to public officials. • Public officials were receptive to the Green Building Program if it was voluntary. • Public officials were very concerned about the potential for economic impacts associated with the program. • The open houses held at the beginning of the program were effective in raising awareness and support for Green for Life. • Educational opportunities at the open houses were bolstered by the casual, 'energy fair' atmosphere created by the Implementer's team. • Participating Municipality Staff was concerned with adding to their workloads. • Participating Municipality Staff appreciated the handouts for questions raised by customers at the Building and Planning Department counters. • Participating Municipality Staff training was most effective when it included a case study that demonstrated the program directly.

Knowledge Transferred
• Through the Green for Life strategic plan program, the Implementer has disseminated green building and energy efficiency information to partners including the Coachella Valley Economic Partnership, Desert Valleys Builders Association, local water districts, Participating Municipality's Chamber of Commerce, and other local governments not served by SCE. We will continue to share information through our

Green for Life website, articles in jurisdiction newsletters and websites, outreach events, presentations to community groups, and media/social media outreach.

Next Steps

- Ongoing outreach to the community to promote green building and use of the Voluntary Green Building Policy.
- Continue work with SCE and SoCalGas to encourage training and educational outreach (e.g. Title 24 workshops) opportunities for our region. Palm Desert will host a workshop in 2016.

Benefit to the State

- The State benefits from this task through the decisions made by elected officials and other key staff at the Participating Municipality. This training provided the attendees with information on the value of energy efficiency and action planning to the Participating Municipality and its constituents.
- The Green for Life program became a way to make city officials aware of the California Long Term Energy Efficiency Strategic Plan and the big and bold goals for the state.
- Networking structure established which will allow for easy dissemination of information about State issues and programs.

Benefit to Local Government

- The educational materials, staff training and educational workshops were provided to staff and city officials with funding through the Green for Life program. These resources would have been difficult for cities to provide on their own.

Successes

- Training sessions were conducted for Participating Municipality's:
    - City Council
    - Planning Commissioners
    - Architectural Review Board
    - Sustainability Committee
    - Participating Municipality's Staff

Challenges
• No significant challenges were encountered.

2.6.2 City of Redlands – Phase 3

Local Government Partnership: Redlands Partnership

Project Title: Energy Efficiency Training for Key Decision Makers (Elected Officials, Building Officials, and Commissioners) of the City

Project Purpose: The goal of this task is to educate City decision makers on the benefits of reach codes in increasing energy efficiency and achieving GHG goals. Through this task the Implementer will conduct a forum that will educate city officials on the value and benefits of reach codes in GHG reduction strategies, thereby increasing the likelihood that reach codes and policies promoting reach codes will be adopted.

Project Scope and Components: The Implementer will plan, promote, and host a training program on energy efficiency for key decision makers (e.g., elected officials, building officials, commissioners) of the City. The agenda will focus on providing information to these key city officials to enhance the likelihood that they will adopt policies, ordinances, and programs that impact energy efficiency.

Deliverables:

1. Report on status of Implementer or Subcontractor to help support the Task
2. Draft Assessment and Planning Report for the Energy Efficiency Education Program for Key Decision Makers
3. Final Assessment and Planning Report for the Energy Efficiency Education Program for Key Decision Makers
4. Draft Curriculum for the Energy Efficiency Education Program for Key Decision Makers
5. Final Curriculum for the Energy Efficiency Education Program for Key Decision Makers
6. Conduct the Energy Efficiency Education Program for Key City Decision Makers
7. Assess value and benefits of the Energy Efficiency Education Program for Key Decision Makers
8. Plan for sharing lessons learned/best practices with other local governments
9. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (December 2014)

Date Completed (est.): November 2014 **Date Completed (actual):** November 2014

Estimated Cost: $12,000 **Program Final Cost:** $62,190 ($64,000 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• Having three (3) different workshops geared towards each audience, namely, residents, business owners, and City officials, brought unique needs for each group, got their feedbacks, and created broad knowledge based discussion and educational program.

Lessons Learned
• Keeping the topics of residential energy efficiency, commercial building energy efficiency, and municipal energy efficiency separate within distinct workshops worked well. In this way each stakeholder (residents, business owners, and those concerned with municipal government operations) had a workshop that focused on their concerns. • Including speakers from SCE and SGC added value to the workshops and provided the audience with access to experts on the energy efficiency and incentive programs these utilities provided. • Including speakers from neighboring cities helped in providing examples of what could be done within the City. • Conducting surveys toward the end of the workshop helped in soliciting feedback from participants that may have been shy to voice their views publicly.

Knowledge Transferred
• Learn to deal with each different group, their unique needs helped to shape the broader sense of energy efficiency.

Next Steps
• Continue to be available for any educational forum the Implementer desires per fast

pace technologies, Title 24, and available Utility programs.

Benefit to the State
• The State benefits from this task through the decisions made by elected officials and other key staff at the Participating Municipality. This training provided the attendees with information on the value of energy efficiency and action planning to the Participating Municipality and its constituents. • This task contributes the success of meeting the State AB32 goal.

Benefit to Local Government
• By providing local officials with a foundation of information on the benefits of energy efficiency, the impact of codes and standards, green buildings, climate change, and sustainability. This knowledge will guide officials in making the best decisions on longer term policies, ordinances, codes and standards, and climate change plans over the longer term.

Successes
• Three (3) workshops were conducted to address three areas the workshops were to address: o Residential energy efficiency (held on July 9, 2014) o Commercial energy efficiency (held on July 29, 2014) o Municipal operations (August 18, 2014)

Challenges
• No significant challenges were encountered in this task.

2.7 Strategic Plan Task 1.2.1 – Implement Any of the Strategies in SP Strategy 1.1 Through a Process Involving Internal and External Stakeholders, Etc.

Implement any of the strategies in section 1.1 through a process involving internal and external stakeholders, etc.

2.7.1 Coachella Valley Association of Governments – Phase 3

Local Government Partnership: Desert Cities Partnership

Participating Municipality: City of Palm Desert

Project Title: Implement a Green Building Program through a Process Involving Internal and External Stakeholders

Project Purpose: The goal of this task is to implement the Voluntary Green Building Program developed in SP Task 1.1.2.

Project Scope and Components: This task will include activities to implement and promote the VGB Program that is developed in Task 1.1.2 for the Participating Municipality. This task provides for regional marketing and outreach to improve the expertise of local government staff, as well as property owners and contractors about energy efficiency, renewable, and green buildings. This task will leverage the Voluntary Green Building Program developed in the 2010-2012 LGP Strategic Plan Pilot Program by Implementer for seven (7) participating municipalities. This task includes development of a marketing plan, adding Participating Municipality to existing Voluntary Green Building resources, such as marketing materials and web portal.

Deliverables:

1. Report on status of Implementer or Subcontractor to help support the Task
2. Draft Voluntary Green Building Program Assessment and Planning Report
3. Final Voluntary Green Building Program Assessment and Planning Report
4. Voluntary Green Building Program Policy Manual
5. Voluntary Green Building Program Policy Manual
6. Draft Communications Plan for the Voluntary Green Building Program
7. Final Communications Plan for the Voluntary Green Building Program
8. Draft Voluntary Green Building Program Website Content
9. Final Voluntary Green Building Program Website Content
10. Conduct Training of Participating Municipality Staff
11. Implementation Report for the Voluntary Green Building Program
12. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (March 2013)

Date Completed (est.): May 2015 **Date Completed (actual):** Q4 2015

Estimated Cost: $22,428 **Program Final Cost:** $160,965 ($160,200 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• The website and outreach materials were already set up in 2010-2012 LGP Strategic Plan Pilot Program so it was an easy step to have the Participating Municipality added. • The website provides a central location where the Green Building Policy, Energy Action Plans, Benchmarking Policy adopted by the Participating Municipality are available. The Green for Life website supplements the Participating Municipality's website as a place to showcase their energy efficiency and sustainability programs.

Lessons Learned
• Including Participating Municipality in the Green for Life program provides for unified efforts among Coachella Valley cities to promote energy efficiency and green building through the Green for Life program. This approach provided a strong regional message and thus, had a greater impact. • In order to maintain promotion of the Green Building Program, Implementer staff will need to continue to promote program and assist the City. Assistance will need to take the form of ongoing training and outreach events. • Community events were most successful when Green for Life was promoted in existing, established events throughout the area. A "built in audience" was of great benefit to the program. • Continued funding of advertising and public relations efforts would improve the implementation of the program. • Outreach limited to public officials is insufficient to maintain and implement the program. Community support is needed to keep the momentum of Green Building activity in Palm Desert and the Coachella Valley. • The simpler, "low hanging fruit" solutions contained in the Green Building Program can be more easily promoted, and are more likely to be implemented than the larger, whole house/building remodels for energy efficiency.

- Because the Green Building Program was updated to address 2013 Title 24 updates, Implementer has the opportunity to support the program and encourage the City of Palm Desert to promote its implementation for at least three years. The additional time will be valuable in expanding the program.
- Implementer's Coachella Valley Upgrade and HERO Property Assessed Clean Energy (PACE) programs will integrate the Green Building Program in their promotional efforts to expand the audience for all these activities.
- Implementer should continue to look for cross-promotion partners to maximize the outreach potential for the Green Building Program. Enlisting continued support from the US Green Building Council, College of the Desert, University of California and California State University campus programs could provide strong continuing educational opportunities.

Knowledge Transferred

- Through the Energy Leader Partnership, the Implementer has disseminated Green for Life program information to partners including the Coachella Valley Economic Partnership, Desert Valleys Builders Association, local water districts, colleges and universities and other local governments not served by SCE. We will continue to share information through our Green for Life website, articles in jurisdiction newsletters and websites, outreach events, presentations to community groups, and media/social media outreach.

Next Steps

- Plan to promote the Green Building App and the policy adopted by Participating Municipality and all our member cities.

Benefit to the State

- The State will benefit from this green building policy through reduced energy use and reduced GHG emissions by participating municipalities.
- The program helped promote the state goals in the California Long Term Energy Efficiency Strategic Plan (CLTEESP).

Benefit to Local Government

- The resources – a green building app, Green for Life website, and educational tools would not have been possible without the resources provided by this program.
- Staff and city officials are much more aware of green building benefits and

opportunities.

Successes
• The Participating Municipality has long been a leader in energy efficiency. Their participation in the Green for Life program brings their policies and practices current with state standards (Title 24, CalGreen). The strategy used in Phase 1 to bring together municipal energy efficiency tasks, including benchmarking, commissioning/retro-commissioning, a utility management system, and energy action planning, with sustainability programs – green building and beyond Title 24 tasks as well as an updated greenhouse gas inventory, worked well for Participating Municipality too. These tasks were unified as a green government initiative with the Green for Life brand. • The program provided the opportunity for individual meetings with City Council members to answer questions, address concerns, and get their ideas and input.

Challenges
• Outreach limited to public officials is insufficient to maintain and implement the program. Community support is needed to keep the momentum of Green Building activity in Palm Desert and the Coachella Valley.

3. Strategic Plan Goal 2 – Code Compliance

"Strong support from local governments for energy code compliance enforcement."

3.1 Strategic Plan Task 2.1.1 – Code Compliance Workshops

Local government staff and contract staff attend code compliance workshops offered by the California Energy Commission, utility codes & standards staff, or other local governments with strong compliance records.

No work solicited for this task in 2013-2015.

3.2 Strategic Plan Task 2.1.2 – Redesign Code Compliance and Enforcement Processes

Redesign enforcement, compliance, plan review processes; introduce new forms and templates.

3.2.1 City of Moreno Valley – Phase 3

Local Government Partnership: Community Energy Partnership

Project Title: Redesign Forms: Enforcement Compliance, Plan Review Processes

Project Purpose: The goal of this task is to develop new forms to assist permit applicants with CALGreen compliance, energy efficiency, and Title 24 compliance.

Project Scope and Components: The Implementer will redesign forms and hand-outs, and create hand-out(s) pertaining to CALGreen and the incorporation of energy efficiency into construction projects. These forms will help developers and homeowners by providing information early in the process, and will reflect all changes to Title 24 and CALGreen through the end of 2013.

Through this task the City will evaluate the processes of other cities, including information, forms, and processes on processing permits and plans for CALGreen compliance. Forms and handouts will be developed based on this evaluation.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Assessment and Planning Report Form Redesign
3. Final Assessment and Planning Report Form Redesign
4. Draft Forms and Handouts
5. Final Forms and Handouts
6. Best Practices and Lessons Learned Report
7. Monthly Status Report

Date Approved (Advice Letter (NTP)): August 2013 (June 2014)

Date Completed (est.): June 2015 **Date Completed (actual):** July 26, 2016

Estimated Cost: $16,620 **Program Final Cost:** $6,675

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $10,145

Best Practices
• The building forms have evolved as a result of research on other cities, input from Building Staff, and the fine tuning of Planning Staff to fit within the context of the City of Moreno Valley. The updated forms provide valuable information to the public which encourage incorporation of energy efficiency measures and compliance with CalGreen. The effort provided tangible benefits by providing information on CalGreen and energy efficient measures as early in the process as possible.

Lessons Learned
• Based on the research completed, the City provided the information in the most accessible manner possible. It is important to provide forms that are useful to both homeowners and developers to maximize the accessibility of information on energy efficiency and CalGreen for the public.

Knowledge Transferred
• The updated forms and handouts provide valuable information to homeowners, developers, and builders pertaining to green building practices and the California Green Building Code standards (CalGreen). Therefore, this task furthers implementation of this Energy Reduction measure.

Next Steps
• The forms that are developed will be readily available to the public on the City's website, at the Building Division counter, and in the lobby. In addition, although not part of this task, the intent is to develop a one page webpage with links to various green building resources. The City is in the process of revamping the Building website and new forms have been identified as items that will be on the new website.

Benefit to the State
• The State will benefit from this task through improved code compliance resulting from better trained code enforcement professionals at the Participating Municipality. Increased code compliance can result in reduced energy use and GHG emissions.

Benefit to Local Government
• This task will provide applicants with updated forms, as well as information on how to

comply with CALGreen and Title 24 while incorporating energy efficiency in projects. Increased code compliance can result in reduced energy use and GHG emissions.

Successes
• The updating of forms for the public as well as the City's information on the Building Division webpage provides valuable information to the public regarding energy efficiency and CalGreen requirements.

Challenges
• The only big challenge that occurred in accomplishing this task was that locating the information regarding CalGreen can sometimes be challenging.

3.2.2 San Gabriel Valley Council of Governments – Phase 3

Local Government Partnership: San Gabriel Valley Partnership

Participating Municipalities: Alhambra, Arcadia, Bradbury, Claremont, Covina, Diamond Bar, El Monte, Irwindale, La Canada Flintridge, Monterey Park, Pomona, Rosemead, San Dimas, South El Monte, South Pasadena, Temple City, West Covina

Project Title: Redesign Enforcement, Compliance, Plan Review Processes

Project Purpose: The goal of this task is to incorporate energy efficiency into the inspection process, and modify the role of building and safety departments to increase the installation of energy efficiency for Participating Municipalities.

Project Scope and Components: Implementer will redesign the inspection process by developing an Energy Efficiency Point-of-Permit Program. Materials include forms, templates, checklists, and marketing materials, and training to integrate energy efficiency elements into city permit and inspection processes. The Implementer will:

- Design programs to fit the needs of individual participating cities,
- Develop marketing materials,
- Develop an energy efficiency checklist to identify and document energy efficiency opportunities identified by the inspector during the pre-inspection,

- Work with participating cities to develop implementation procedures for participating cities, and
- Train city building staff to identify EE opportunities and use checklists.

Each Participating Municipality can choose from two options:

- Level One includes using checklists during the pre-inspection process.
- Level Two includes a mandatory assessment, and will require the Participating Municipality to conduct an assessment for major renovations.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Assessment and Planning Report Point-of-Permit Program
3. Final Assessment and Planning Report Point-of-Permit Program
4. Draft Procedures for Implementing Program for Each Participating Municipality
5. << Note: Intentionally left blank>>
6. Final Procedures for Implementing Program for Each Participating Municipality
7. Energy Efficiency Checklist
8. Report on Training City Staff to Implement Program
9. Report(s) on Program Launch
10. Draft Final Best Practices and Lessons Learned Report
11. Final Best Practices and Lessons Learned Report
12. Monthly Status Report

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): June 2015 **Date Completed (actual):** August 2016

Estimated Cost: $202,300 **Program Final Cost:** $185,102

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $17,198

Best Practices

- Utility Partnership: The partnership with Southern California Edison and SoCalGas has helped to establish our programs, as well as provide credibility. Given that the programs were new and lack brand recognition, having the utility companies as partners has allowed for the programs to launch with ease. Residents convey a sense of trust when they are informed that the programs are a partnership between the two utility companies and are more willing to participate in the programs. Also, having the utilities as a resource has allowed program implementers to act as an intermediary for any questions regarding utility programs. Essentially, the utility partnership has virtually no disadvantages and only makes the programs stronger.
- Community Events: Programs have had a high attendance at community events in various cities. The programs have gained exposure at these events and have been successful in engaging residents directly about the programs. Residents curious about the programs were encouraged to ask questions and were approached with a friendly demeanor. Residents were also assured that the event staff they spoke to would be the ones present for any program activities, adding an extra layer of transparency. The community events proved to be the most valuable method to recruiting quality participants to the programs.
- Engaged City Staff: The presence of engaged city staff allowed for the programs to spread rapidly, as well as added to program credibility. City staff acted as a conduit for marketing program materials and assisted with event planning/coordination. City staff also functioned as a program expert to explain to residents the benefit of the programs when implementers are not always available.
- Incentives: The existence of incentives being offered to residents to join the programs helped increase participation rates in the programs. Some cities provided residents with a complimentary energy efficiency kit if they signed up for an assessment. Additionally, staff organized opportunity drawings at community events to encourage participation. This extra incentive encouraged residents to participate in the program and was a key factor in early program development.
- Resource Packets: Providing homeowners and renters with a resource packet filled with educational information on home energy efficiency and water conservation practices has been extremely helpful to us. Having a packet with visual aids that can be referenced as needed not only allows the assessment to flow smoothly, but also does the homeowners a great service by providing them with information they may or may not have known. In addition, all homeowners seem to enjoy the fact that they are receiving reading materials that they can review on their own at a later time. Often times people can be inundated by information during assessments. As such, reassuring homeowners that we will be leaving educational resource packets has been a great way of making the homeowner feel comfortable and relaxed during assessments. Furthermore, the freedom of not having to take notes as a result of this provision allows homeowners to ask pertinent questions and engage in the assessment to a greater degree. All in all, the resource packets have undeniably been one of the best practices as far as assessments are concerned.

Lessons Learned
• Some of the key lessons learned from the project include engaging homeowners before they have begun planning projects or seeking permits; developing an extensive education and outreach plan; and providing comprehensive information about related programs and financing offerings that can assist with implementation of projects. These key lessons learned are described below: • Early Engagement of Homeowners: The original program design focused on engaging homeowners when they were seeking permits, with the goal of informing them of potential modifications they could make to their planned projects to increase the energy efficiency of their home. However, after discussions with city staff and other stakeholders and further research of other programs, staff determined that it is critical to engage homeowners prior to the start of any major renovation project. This accomplishes several goals: 1) influencing the products, materials and installation method a homeowner might select on a project that they have already committed to undertaking; 2) influencing homeowners to undertake a new project that they may not have been considering; and 3) educating homeowners about the importance of securing a building permit for applicable projects in order to ensure proper installation and performance. By the time a homeowner is seeking a permit, they have usually solidified a scope of work, set a budget, and selected a contractor. Therefore, it is very difficult to influence that project. • Developing an Extensive Education and Outreach Plan: Initially, it was challenging to engage homeowners to participate in the program because, as a new program, there was limited awareness of it. Additionally, because the cities opted for a voluntary compliance approach, it was important to find ways to leverage existing channels of communication to provide residents with awareness of the program. In particular, including information on city-sponsored media (i.e. newsletters and website); distributing program information in bill inserts; and promoting the program at community events were particularly successful methods of communication.

Knowledge Transferred
• SGVCOG has already begun to share the results and successes of the program through a program tracking report that is updated monthly. • Additionally, staff from the SGVCOG has shared information, tools and reports with staff from the City of Goleta to assist them in developing a similar program. This includes the program implementation manual. Future efforts may include presenting information at the Statewide Best Practices forum and other local and regional conference.

Next Steps
• In the future, cities should commit to a certain level of participation and promotion of the program prior to the start of the program. Additional time should be built in at the

outset of the program to allow for code changes (if necessary) for any components of the program that would be mandatory for permit seekers.

- Funding and time should be budgeted to allow staff to conduct home assessments to receive green building certification (BPI or other certification) and to utilize additional assessments tools (i.e. duct blaster, blower door, etc.)

Benefit to the State

- The State will benefit from this task through improved code compliance resulting from better trained code enforcement professionals at the Participating Municipality. Increased code compliance can result in reduced energy use and GHG emissions.

Benefit to Local Government

- The Participating Municipalities will benefit from this task by having forms developed and processes and procedures established that will increase energy efficiency with each building permitted and inspected through the program.

Successes

- Held staff training on checklist in December 2014.
- Submitted draft implementation procedures to SCE in December 2014.
- Held staff trainings on home assessment procedures in participating cities in January 2015.
- Launched program in participating cities and delivered educational materials in January and February 2015.
- Staff conducting home assessments and collecting implementation data from participating residents.

Challenges

- Consistent staff engagement: In some cases due to staff workload and changes in staff, some cities only had limited promotion of the program and they opted to not use the staff checklist or use it in a limited fashion.
- Voluntary-Only Program: All of the cities opted for the voluntary-only approach that focused on the pre-screening assessments. This made it impossible to compare the effectiveness of a voluntary versus a mandatory approach.
- Tracking Post-Assessment Results: Only ~25% of the participants responded to follow-up surveys that tracked implementation of EE projects and customer

satisfaction.

4. Strategic Plan Goal 3 - Lead by Example

"Local Governments Lead by Example with their own Facilities and Energy Usage Practices"

4.1 Strategic Plan Task 3.1.1 – Local Government Benchmarking Policies

Develop energy benchmarking policies and procedures to enable ongoing benchmarking of all local government facilities.

4.1.1 Coachella Valley Association of Governments – Phase 3

Local Government Partnership: Desert Cities Partnership

Participating Municipality: City of Palm Desert

Project Title: Develop Energy Benchmarking of All Local Government Facilities

Project Purpose: The goal of this task is to customize a benchmarking policy and related procedures for the Participating Municipality and gain adoption of the policy from the Participating Municipality's City Council.

Project Scope and Components: Through this task Implementer will develop a benchmarking policy and procedures for the Participating Municipality, gain adoption of the policy, and train staff on the use of benchmarking tools. This policy will be based on the Energy Benchmarking Policy and corresponding Procedures for Municipal Buildings that was adopted by the seven (7) Participating Municipalities in 2010-2012 LGP Strategic Plan Pilot Program.

Deliverables:

1. Draft Benchmarking Policy Assessment and Planning Report
2. Final Benchmarking Policy Assessment and Planning Report
3. Draft Benchmarking Policy and Procedures
4. Final Benchmarking Policy and Procedures

5. Documentation of adoption of Benchmarking Policy or documentation of why Benchmarking Policy was not adopted and related alternate plans
6. Report on Training of Participating Municipality's Staff on the Benchmarking Procedures
7. Draft plan to share best practices and lessons learned with other local governments
8. Final plan to share best practices and lessons learned with other local governments
9. Monthly report of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): December 2014 **Date Completed (actual):** November 2014

Estimated Cost: $ 20,025 **Program Final Cost:** $160,965 ($160,200 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• Benchmarking municipal buildings to provide an example and show how Portfolio Manager works gave the City a hands-on demonstration of the benefits of benchmarking. • A building energy benchmarking policy to track and rank energy usage for major facilities. This tool will allow for the targeting of energy efficiency projects and tracking savings of implemented projects.

Lessons Learned
• The actual benchmarking process was a fairly quick process • When the Participating Municipality, City of Palm Desert, was customizing its policies, it was helpful to facilitate the policy selection by presenting a list of options from easiest to most difficult actions to implement. The policy development team also presented the recommended option based on knowledge of the building inventory and jurisdiction resources. City of Palm Desert agreed with and selected most of the recommended options presented. • Portfolio Manager does not have a building type category for most of the building types that are typical of a municipality and therefore many of City of Palm Desert's buildings are not eligible to receive an Energy Star Rating. Many buildings had to be labeled under the "Other" category but the team was consistent in categorizing police

stations, fire stations in the “Other” category.

- Having a “hands-on” benchmarking workshop gave the Participating Municipality a better understanding of the benchmarking process. The benchmarking system will be useful to Participating Municipality:
- Having a benchmarking workshop opened a dialogue for questions and concerns that helped mold the policy. Key discussions addressed the following topics
- Flexibility to modify the policy
- The process for a city to benchmark multi-building properties
- The Participating Municipality chose to adopt a Mandatory Policy

Knowledge Transferred

- Through the Energy Leader Partnership, the Implementer has disseminated Green for Life program information to partners including the Coachella Valley Economic Partnership, Desert Valleys Builders Association, local water districts, and other local governments not served by SCE. We will continue to share information through our Green for Life website, articles in jurisdiction newsletters and websites, outreach events, presentations to community groups, and media/social media outreach. Benchmarking provides some opportunities for sharing with other stakeholders because it is a free tool, through Portfolio Manager.

Next Steps

- Continue to look for opportunities to promote benchmarking and expand the list of Energy Star buildings in our region.

Benefit to the State

- The State will benefit from this task because the end result is that energy will be saved. Benchmarking and related activities is often the first step in identifying energy reduction opportunities. By adopting and implementing benchmarking policies and procedures the Participating Municipality has established a path to managing and reducing its energy use.
- Promoted the benefits of benchmarking which most participants were unfamiliar with when the program started. Educated our region about benchmarking and the California Long Term Energy Efficiency Strategic Plan (CLTEESP).

Benefit to Local Government

The Participating Municipality is able to:

- Benchmark facilities relative to their past performance
- View percent improvement in weather-normalized source energy
- Monitor and trend electric costs
- Report on rankings, electric usage and electric costs
- Customize operating characteristics tailored to each space use category within each building.
- Customize meter names and key information
- Track natural gas and water meters for each facility

Successes

- The energy benchmarking policy and procedure developed by the Implementer in 2010-2012 LGP Strategic Plan Pilot Program was adopted by the Participating Municipality's City Council.
- The Benchmarking Policy identifies the eligible city-owned buildings that would be guided by the policy, the use of the EPA's Portfolio Manager as the benchmarking tool, and the actions that the Participating Municipality would consider for various baseline benchmarking scores for the individual buildings.

Challenges

- There were some challenges in our efforts to obtain Energy Star certification for the Participating Municipality. We completed benchmarking in Portfolio Manager for their City Hall. However, due to solar panels on one of their parking structures which were not fully functional, we were unable to finalize the Portfolio Manager score. We expect that Participating Municipality's City Hall would qualify for Energy Star certification.

4.1.2 City of Norwalk – Phase 3

Local Government Partnership: Gateway Cities Partnership

Project Title: Energy Benchmarking Policy

Project Purpose: An energy benchmarking policy will create a framework to help city staff understand building energy usage, identify high- and low-performing buildings, track energy improvements, and set goals for building energy reduction. The goal of this task is to establish a

benchmarking policy and ensure the appropriate tools are in place to so Implementer can push its buildings' performance to optimal levels.

Project Scope and Components: Implementer will establish a benchmarking policy for its municipal buildings to better understand how its buildings are performing relative to prior performance and other similar buildings, and to help identify energy efficiency opportunities. This policy will:

- Define the benchmarking process
- Describe a systematic approach for categorizing all municipal buildings
- Address how often benchmarking will be conducted,
- Assign roles and responsibilities to sustain the policy
- Clearly identify the process that will be implemented to ensure the information is integrated into its operational decisions

Deliverables:

1. Report on Status of Consultant or Subcontractor to Support the Task
2. Assessment and Planning Report for a Benchmarking Policy
3. Draft Benchmarking Policy
4. Final Benchmarking Policy
5. Draft plan to share best practices and lessons learned with other local governments
6. Documentation of adoption of Benchmarking Policy or documentation of why Benchmarking Policy was not adopted and related alternate plans
7. Final plan to share best practices and lessons learned with other local governments
8. Monthly Report

Date Approved (Advice Letter (NTP)): August 2013 (April 2014)

Date Completed (est.): February 2015 **Date Completed (actual):** Q3 2015

Estimated Cost: $40,478 **Program Final Cost:** $178,357 ($185,251 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $6,894

Best Practices
• The development of the Benchmarking Policy resulted in the following best practices: o Reviewed and assessed local government benchmarking policies. Reviewing other local government benchmarking policies allowed the City to identify best practices to incorporate into the City's policy (e.g. frequency of reporting benchmarking data, process to integrate data into City operations). The developed criteria will enable Norwalk to move forward with their benchmarking policy in an efficient manner. o The use of the Environmental Protection Agency (EPA) Energy Star Portfolio Manager. There are numerous benchmarking tools in the market. Many of these tools charge a fee and provide Energy Star Portfolio Manager's information along with added information about a building's energy use. Using the Energy Star Portfolio Manager, however, does not entail a direct cost and provides valuable information to the City. It is one of the most comprehensive and widely adopted tools used today. o Integration with the City's Utility Manager Software System. In the development of the Policy it was discovered that many of the Utility Manager Software (UMS) systems currently available pull information from ENERGY STAR Portfolio Manager to benchmark facilities. If a City is exploring the purchase of a UMS system for the purposes of tracking energy usage at City facilities and would also like to benchmark facilities, it would be prudent to purchase a UMS that offers both tasks. o With limited City resources, it's important to provide efficient use of Staff time and not duplicate efforts by utilizing two separate systems to achieve the same results. The City of Norwalk will be procuring a UMS system (EnergyCAP) that has the capability to both track energy usage and pull data from ENERGY STAR Portfolio to benchmark facilities. Moving forward, staff will utilize the UMS software to benchmark and track facility energy use through this system.

Lessons Learned
• The development of the Benchmarking Policy resulted in the following lessons learned: o Addressed the integration of the Policy into Implementer operations with limited resources. The practical application of the Benchmarking Policy was a concern for Implementer's staff due to limited resources. As a result, a simplified policy format was created while consolidating the policy itself. o Supported new concepts with proper education. Benchmarking was a fairly new concept to Implementer's staff. Educating Staff about benchmarking was critical to have full support from the Implementer to move forward with the Policy. In addition, implementing a new objective in which Staff must undertake

may seem burdensome to a City with limited resources. Therefore, a gradual transition or adoption of a new goal or objective may be necessary at times so as not to overwhelm staff and allow them to adjust resources accordingly over time. Taking into consideration that Implementer will be integrating the benchmarking process with a utility manager software system, the need for accessing two systems will be virtually eliminated.

Knowledge Transferred

- Implementer has the basis to begin comparing energy use metrics of their buildings against similar facilities to help understand the relative energy efficiency of performance of buildings.

Next Steps

- Utilizing the Benchmarking Policy to manage energy costs, and make energy performance measurable and improve efficiency of its buildings and can utilize information to drive new investment into additional energy efficiency improvements.
- Using benchmarking data to drive energy performance improvement in the city's facilities, can save taxpayer dollars while paving the way for private sector benchmarking policies. The city hopes to disclose public building energy performance data can build public trust and confidence in the effectiveness of its policies.

Benefit to the State

- The State will benefit from this task because the end result is that energy will be saved. Benchmarking and related activities is often the first step in identifying energy reduction opportunities. By adopting and implementing benchmarking policies and procedures the Local Government has established a path to managing and reducing its energy use.

Benefit to Local Government

- Benchmarking will identify buildings that have below average energy performance relative to similar buildings. By understanding and comparing the energy consumption and energy costs of Implementer's facilities, the Implementer will be able to make improvements for greater energy efficiency in underperforming buildings. The Implementer will be better informed to commit resources to improve the energy performance of buildings to bring them in line with their peers.

Successes
• Implementer developed and adopted a Benchmarking Policy that will be utilized to assist Staff in future decision making and allocation of resources.

Challenges
• The EPA's Energy Star Portfolio Manager may have shortcomings related to benchmarking smaller buildings which are the type that are commonly operated by municipalities. Some buildings won't receive an energy star score due to the type of the building. Future/new facilities that don't have 12 months of energy data cannot be scored. If there are multiple meters at a facility, the building cannot receive a score as well.

4.2 Strategic Plan Task 3.1.2 – Local Government Utility Manager Program

Set up a 'utility manager' computer program to track municipal usage. Identify need for sub-metering to plan, budget and manage bills.

4.2.1 Coachella Valley Association of Governments – Phase 3

Local Government Partnership: Desert Cities Partnership

Participating Municipality: City of Palm Desert

Project Title: Set up a Utility Manager Computer Program to Track Municipal Usage

Project Purpose: The goal of this task is to establish EEMIS for the Participating Municipality, enabling the Participating Municipality to track and analyze energy usage and cost, identify energy efficiency opportunities, assess greenhouse gas emissions, and monitor energy efficiency installations to evaluate performance.

Project Scope and Components: During the 2010-2012 LGP Strategic Plan Pilot Program Implementer worked with seven (7) participating municipalities and the County of Los Angeles (LA County) to make the County's Enterprise Energy Management Information System (EEMIS) available to those jurisdictions. In this task, Implementer will work with LA County to add Participating Municipality to EEMIS. This task includes:

- Completing all necessary agreements and forms between the County, the Implementer and Participating Municipality,
- Completing appropriate forms to allow the transfer of data to EEMIS,
- Transfer energy use data to EEMIS; and
- Train Participating Municipality staff on how to use EEMIS.

Deliverables:

1. EEMIS Assessment and Planning Report
2. Documentation of procurement of EEMIS (invoice for purchase of EEMIS or if the County of Los Angeles' EEMIS is selected, MOU between Implementer and the County to implement EEMIS)
3. Draft EEMIS Installation Report
4. Final EEMIS Installation Report
5. EEMIS Training Program Plan
6. Status Reports on EEMIS Training
7. Best Practices on Using EEMIS
8. Monthly report of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): February 2015 **Date Completed (actual):** Spring 2015

Estimated Cost: $22,428 **Program Final Cost:** $160,965 ($160,200 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• The Participating Municipality, City of Palm Desert, agreed with our selection of the LA County EEMIS system as the most effective system. The support and training provided by LA County staff was very helpful in integrating EEMIS into the Green for Life program.

Lessons Learned
• Implementer was able to apply the lessons learned from the 2010-2012 LGP Strategic Plan Pilot Program to make the process of setting up EEMIS much more efficient in the 2013-2014 LGP Strategic Plan Pilot Program. Obtaining the data necessary to set up EEMIS for our member jurisdictions was a challenge in the 2010-2012 LGP Strategic Plan Pilot Program. City of Palm Desert s staff were knowledgeable about their meters, electricity demands, and utility management opportunities.

Knowledge Transferred
• Implementer has the basis to begin comparing buildings and their energy use against similar facilities.

Next Steps
• Implementer continues to work with City of Palm Desert and our other member jurisdictions and LA County to train new staff in the use of EEMIS and to promote its use. New more user friendly interface and “green button” data transfer from SCE is being explored.

Benefit to the State
• The State will benefit from the installation of the utility manager program by enabling the Local Government to identify energy usage patterns and target energy reduction strategies where impacts can be optimized, thereby reducing energy use and GHG emissions. • The use of EEMIS is consistent with statewide California Long Term Energy Efficiency Strategic Plan (CLTEESP) goals.

Benefit to Local Government
• The EEMIS system provides a good tool for tracking energy use and identifying opportunities to reduce energy use. Through the Green for Life program we were able to provide the EEMIS system along with training and resources that would not have been readily available without the SCE/CPUC support.

Successes
• EEMIS installation successful. • The Implementer selected LA County’s EEMIS system as the Utility Manager system

for its Participating Municipalities, after reviewing proposals from six vendors. The EEMIS system supports the Green for Life program goals of providing each Jurisdiction with an energy management tool to monitor and analyze facility electric bill data that will support the development of cost effective energy management programs and policies for their facilities.

- Trainings by LA County comprised three phases where: Phase 1 was introductory and provided attendees with basic information on the system; Phase 2 was a hands-on training for the primary users of EEMIS within the city; and Phase 3 was targeted at those that would benefit from EEMIS and provided direction on how to use and interpret the data and incorporate the system into normal operations.

Challenges

- No significant challenges. Having done this task in Phase 1 smoothed the way for Participating Municipality.

4.2.2 City of Norwalk – Phase 3

Local Government Partnership: Gateway Cities Partnership

Project Title: Deploy a Utility Manager System

Project Purpose: The goal of this task is to develop a system to collect energy usage data for Implementer's buildings and facilities in an organized manner. These data will be used by the Implementer to inform planning and policy efforts, such as the Energy Action Plan, as well as enable the Implementer to assess its building operations and help optimize energy use for efficient operation.

Project Scope and Components: The Implementer will select and deploy a Utility Manager System for its municipal facilities. The Utility Manager System will provide tools to track energy use, achieve energy cost savings, and set up a system to measure success in reducing energy use and greenhouse gas emissions. The Implementer will ensure the selected Utility Manager System will allow users to review and analyze energy usage data, allowing for analysis of program success and identify ways to maximize all available cost and energy savings opportunities. The Implementer will:

- Evaluate systems and select one that best meets the City’s requirements;
- Address data acquisition and transfer procedures;

- Prepare user documentation;
- Develop reports and analytic procedures;
- Prepare and conduct staff training; and
- Develop a plan to fund sustained operations.

Deliverables:

1. Status of Consultant or Subcontractor to Support the Task
2. Assessment and Planning Report for Utility Manager System
3. Staff Training Plan
4. Evidence of Procurement of Utility Manager System
5. Utility Manager System Installation Report
6. Staff Training Report
7. Draft Case Study
8. Final Case Study
9. Monthly Report

Date Approved (Advice Letter (NTP)): August 2013 (April 2014)

Date Completed (est.): March 2015 **Date Completed (actual):** Q3 2015

Estimated Cost: $58,520 **Program Final Cost:** $178,357 ($185,251 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $6,894

Best Practices
• Implementer's Staff worked closely with their internal departmental staff to develop a list of key functions and criteria needed for the UMS to both meet the city's expectations and meet the overall goals of the program. The UMS would bring to the city improved availability of consistent energy consumption and cost data to remove a primary barrier to effective decision-making in energy efficiency project prioritization. o The project began with a kick-off meeting including all city staff that would be

regular and frequent users of the software program. The meeting provided an overview of the intent and common practices of the UMS. Attending staff members represented multiple departments including: public works, parks and recreation, buildings, and transportation.

  - Implementer identified three (3) potential UMS providers for evaluation. Each provider was given an opportunity to present their software and provide staff members a live demonstration. The following information was gathered to create a software comparison matrix: software capabilities, cost, implementation schedule, number of users, additional cost beyond the funding period and training. Based on this information implementer selected a UMS that met both program requirements and city expectations.
  - Implementer working closely with software provider and its consultant created an implementation plan and a training schedule. The team met once monthly to review implementation progress and complete training.

- This task was intended to enhance and provide for consistent access to energy data; a critical component of improving energy management for the city. And to work in partnership with energy policies and the city's energy reduction strategies.

Lessons Learned

- Implementer staff thoroughly reviewed all their utility service accounts, and requested the city's last three (3) years of energy usage information. The city wanted to not only have future energy consumption and cost data but also wanted information for past years. In total the city uploaded 2010, 2011, 2012, 2013, 2014 for past data.
- Implementer needed the UMS data to align with the city's benchmark year of 2010. And the city wanted to see patterns in energy use among municipal facility stock from 2010 to date. In order to do that the city needed to create historical data to align with that year.
- Need to consider utility data to software provider is not an automated process and requires significant staff time to upload and manipulate in order for import to be achieved.
- Advanced real-time metering is still not a cost-effective viable option for local governments.

Knowledge Transferred

- Implementer has a basis for establishing an ongoing energy monitoring program of energy use within its municipal facilities.
  - Municipal staff can use data as a driver for energy efficiency; practices will include assessing energy performance, setting energy savings goals, and regularly evaluating progress, all of which require ongoing access to consistent

data.

- Other local governments will be able to use the model for selection, implementation, data gathering and ongoing energy use monitoring as a tool.

Next Steps

- Implementer is working with electric utility to streamline a process for automated energy consumption and cost data to be easily imported into the software program.
- Implementer is working to develop an internal reporting strategy of energy consumption data to distribute to internally to departments.
- Implementer is engaging with gas utility provider to upload Therm usage and cost information next year for a more comprehensive energy usage picture.

Benefit to the State

- The State will benefit from the installation of the utility manager program by enabling the Local Government to identify energy usage patterns and target energy reduction strategies where impacts can be optimized, thereby reducing energy use and GHG emissions.
- Local governments integrating energy efficiency in their municipal operations align with the state's "loading order" of first addressing energy efficiency as California's top priority resources.

Benefit to Local Government

- Implementer has greater access to consistent historical and ongoing data better enabling city staff to set and track energy management goals, benchmark building energy performance, and choose effective investments for lower-performing buildings.

Successes

- Implementer completed program requirements, selected and deployed the use of a utility management software provider for all electric service account (244).
- City staff was trained on the software program and staff populated the software with over 3 years of historical data.

Challenges

- Automated transfer of data directly into a utility manager software program from

utilities other than the EPA's Energy Star Portfolio is currently not an option. Manual data entry of energy consumption is a tremendous effort for local governments already experiencing limited staff resources.

- Providing automated electronic access to data by the city's billing or benchmarking system.

4.2.3 City of Thousand Oaks – Phase 3

Local Government Partnership: Ventura County Partnership

Project Title: Set Up a Utility Manager System

Project Purpose: The goal of this task is to install a Utility Manager System that will be used to track and manage participating municipal facility's energy use. The intended use of the Utility Manager System is to benchmark specific facilities, assist staff in identifying inefficiencies, forecast energy consumption for budgeting purposes, and provide opportunities for energy efficiency opportunities.

Project Scope and Components: The Implementer will select and deploy the installation of a Utility Manager System for Implementer's facilities. Specifically, the Implementer will:

- Assess Utility Manager System solutions used by peer municipalities, including the process these municipalities used to select and install software.
- Prepare a report on the findings of this assessment and a plan for procuring and deploying the selected Utility Manager System.
- Procure and install Utility Manager System.
- Assess which facilities qualify for gathering "real-time" data and determine which facilities qualify for the installation of equipment to collect these data.

Deliverables:

1. Assessment and Planning Report for Utility Manager System
2. Procure Utility Manager System and Provide SCE with Documentation of procurement of the Utility Manager System (e.g., invoice for purchase of the Utility Manager System)
3. Draft Utility Manager System Installation Report
4. Final Utility Manager System Installation Report
5. Monthly report of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (December 2013)

Date Completed (est.): June 2014 **Date Completed (actual):** December 2014

Estimated Cost: $84,100 **Program Final Cost:** $82,136 ($84,100 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• The Implementer follows the most effective practices by adhering to the Implementer's Energy Action Plan (2012), and Visioning Report 2064. There is great value in being able to track, monitor and share utility data for the Implementer's energy use portfolio through a Utility Manager System. Being able to compare or benchmark Implementer's facilities will quantify energy usage and inefficiencies, allow for identifying energy opportunities and allow for continuous reassessment.
• Sharing information through reporting across facilities and departments is a benefit to the Implementer in that department managers can share practices, progress, and engage other managers or partners to leverage resources.

Lessons Learned
• There are many challenges in the process of getting data from utilities due to privacy concerns and system requirements to ensure protection of the data. This is very much appreciated from the city perspective but does add some additional steps in the process and delays the timeline to ensure the appropriate protocols are in place.

Knowledge Transferred
• Sharing information regarding the Implementer's Utility Manager System with other municipalities helps increase awareness of energy efficiency successes and challenges, improves processes, and promotes a higher standard of operations/performance through forming cooperative partnerships.

Next Steps
• System will be transitioning to receive data through Green Button Connect from SCE.

The city is also working to sub-meter their larger facilities to better track energy on different floors and in different buildings in its Civic Arts Plaza complex.

Benefit to the State

- The State will benefit from the installation of the utility manager program by enabling the Local Government to identify energy usage patterns and target energy reduction strategies where impacts can be optimized, thereby reducing energy use and GHG emissions.

Benefit to Local Government

- By systematically and routinely providing the jurisdiction with usage data to assess the energy performance of its facilities the Implementer will assess and manage the performance of its facilities. The city is expected to maintain the database and analysis of the data in these systems beyond the program cycle.
- The Implementer will quickly be able to identify energy usage and help target energy reduction strategies especially during peak periods. The Implementer plans to use the available usage and billing information in the utility management system to further participate in energy efficiency and DR programs.

Successes

- Contracted with Digital Energy for Utility Manager System.
- Utility Manager System dashboard is live and undergoing evaluation. Determined that augmented contract with Digital Energy needed for tasks outside of Phase 3. The City is currently evaluating this augmented component (interface of Utility Manager System with the SCE Green Button connect data feed).

Challenges

- Delays in receiving monthly and real-time data from the electric, gas, and water utilities severely hindered the progress of the project and reduced the successful outcomes in meeting the project's intended goals.
- SCE's delay in providing ongoing data to the SCE was a hurdle to earlier completion. The city is happy that now both interval and billing data are available in one platform through Green Button Connect but the process did take significantly longer than anticipated.

4.3 Strategic Plan Task 3.2.1 – Local Government EAP/CAP

Develop/adopt an energy chapter for City/County climate or energy action plan.

4.3.1 City of Norwalk – Phase 3

Local Government Partnership: Gateway Cities Partnership

Project Title: Develop a Municipal Energy Action Plan

Project Purpose: The goal of this task is to develop and adopt a municipal Energy Action Plan (EAP) that will establish goals and strategies to increase the energy efficiency of Implementer's facilities.

Project Scope and Components: Implementer will develop and adopt a municipal Energy Action Plan that will guide Implementer towards improving the energy efficiency in its own buildings and facilities. The Implementer will develop a plan for City Council adoption that will establish the following goals and objectives:

- Recognize energy efficiency as a high-priority energy resource;
- Make a strong, long-term commitment to implement cost-effective energy efficiency;
- Broadly communicate the benefits of and opportunities for energy efficiency;
- Identify potential energy efficiency measures for consideration;
- Identify sufficient, timely, and stable funding opportunities to deliver cost-effective energy efficiency;
- Modify policies to align utility incentives with the delivery of cost-effective energy efficiency; and
- Utilize the EAP as a roadmap to achieve reduction goal targets.
- The Implementer will use the EAP to investigate, assess, and recommend methods appropriate for the Implementer.

Deliverables:

1. Status of Consultant or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for Municipal EAP
3. Final Assessment and Planning Report for Municipal EAP
4. EAP Outline

5. EAP Stakeholder Input Report
6. Draft EAP
7. Final EAP
8. Resolution Adopting the EAP by City Council or Documentation of why EAP was not Adopted and Alternate Plans
9. Draft Report on Best Practices and Lessons Learned
10. Final Report on Best Practices and Lessons Learned
11. Monthly Report

Date Approved (Advice Letter (NTP)): August 2013 (April 2014)

Date Completed (est.): April 2015 **Date Completed (actual):** Dec 2015

Estimated Cost: $48,191 **Program Final Cost:** $178,357 ($185,251 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $6,894

Best Practices
• The following are best practices of the Energy Action Plan: o Develop a well-defined focus. Reducing the Implementer's time and cost in pursuit of achieving energy goals is crucial. Cost-effective approaches outlined in the EAP were considered and developed that would mitigate any waste in resources. In doing so, the EAP focused on feasible energy reduction initiatives that would yield the most cost effective savings. The Implementer also prioritized projects based on those that would yield the most benefit in terms of environmental comfort and return on investment. o Created a collaborative environment. Collaborating with partners such as SCE through the Energy Leader Partnership was key to the success of the development of the EAP. The team was able to gather data necessary to assess the Implementer's energy usage, coordinate efforts to identify projects, and start the development of an implementation plan. The Implementer will need to continue working with partners to identify energy efficiency projects and to implement projects that are already in the pipeline (e.g., retrofits, pumps, street lights). Tying in potential energy savings projects led to a comprehensive EAP that centralizes all efforts by the Implementer to create a proper roadmap to reach its energy goals. The Implementer recognizes the

emergence of energy conservation, renewable energy production, and climate change as critical issues related to long-term sustainable development. As an advocate of sustainable practices and energy efficiency, the Implementer is committed to leading the local community by curbing its energy usage and greenhouse gas emissions across their municipal portfolio of operations.

Lessons Learned

- The following are lessons learned through the development of the Energy Action Plan:
    - Build Staff Capacity. Increasing the baseline energy knowledge of staff is critical to the success of developing an effective EAP. Staff targeted to participate in the development of the EAP should have some understanding of the purposes of an EAP. The Local Government Commission, Statewide Energy Efficiency Collaborative, and ICLEI all have resources that can help staff gain a firm understanding of action planning. Reviewing EAPs from other local governments is also a valuable resource for learning energy management strategies. All relevant stakeholders should participate from the beginning of the process to have appropriate context and understanding of the objectives.
    - Used several crucial peer resources in developing the EAP:
        - Local Government Commission
        - ICLEI: Local Governments for Sustainability
        - California Energy Commission
        - Institute for Local Governments
        - Including other energy sources like water and gas.

Knowledge Transferred

- Implementer has a basis for using the Energy Action Plan implementation schedule and target goal setting to aggressively pursue energy efficiency upgrades outlined in the plan.

Next Steps

- Implementer staff is reviewing all energy efficiency projects identified in the energy action plan and preparing a timeline for implementation.
- All projects identified for implementation in 2016 are currently being prepared to inclusion in the next funding cycle.

Benefit to the State
• The State will benefit from the municipal EAP/CAP developed through this task by the reduced energy use when the plan is implemented. The EAP/CAP has energy reduction goals and energy reduction strategies that, when implemented, will reduce energy use and GHG emissions. The EAP/CAP is in alignment with California's Long Term Energy Efficiency Strategic Plan, as well as AB 32. • Local governments integrating energy efficiency in their municipal operations align with the state's "loading order" of first addressing energy efficiency as California's top priority resources.

Benefit to Local Government
• Implementer will benefit from this task because they were provided both immediate and long-term energy efficiency strategies that can be implemented. The EAP will also be available for other peer municipalities to reference as they update their General Plans or certain elements of their plans, such as the Conservation Element. • Implementer's city council has adopted the EAP and committed to facilitating energy efficiency projects which will help the city meet its target goals.

Successes
• Implementer developed, completed and adopted a Municipal Energy Action plan. Within this plan implementer set target reduction goals and identified energy efficiency strategies.

Challenges
• The city staff and elected officials had various levels of knowledge on energy efficiency and the goals of the state at the beginning of this project, which made it more it difficult at times. Continued information sharing and education were crucial to the development of the EAP.

4.4 Strategic Plan Task 3.2.2 – Local Government Building Standard

Adopt a policy to require LEED, Energy Star Ratings, or other program standard for municipal facilities.

4.4.1 City of Moreno Valley – Phase 3

Local Government Partnership: Community Energy Partnership

Project Title: LEED Standards for New Municipal Buildings

Project Purpose: The goal of this task is to develop and adopt a policy that would require new municipal buildings to meet a specific standard that will be determined through the task. This standard will be based on LEED or other similar energy rating system.

Project Scope and Components: Implementer will prepare and adopt a policy requiring new city buildings to be designed consistent with more efficient standards than currently required. As part of the task, Implementer will:

- Implement a measure that is included in Implementer's Energy Action Plan and Climate Action Strategy.
- Develop a standard that requires new City buildings to meet LEED standards without undergoing the LEED-certification process. Since LEED-certification is costly, this standard would result in buildings that are more energy efficient than simply meeting code while avoiding the cost of LEED-certification.

Deliverables:

1. Report on Status of hiring Consultant or Subcontractor to Support the Task
2. Assessment and Planning Report for the Development of LEED Standards for New Municipal Facilities
3. Draft LEED Standards for New Municipal Facilities
4. Final LEED Standards for New Municipal Facilities
5. Policy submitted to City Council for adoption; if adopted, provide written policy and evidence the policy was adopted by the local government; effective date of plan; if rejected, reasons for rejection and alternative plans.
6. Monthly Status Reports

Date Approved (Advice Letter (NTP)): August 2013 (June 2014)

Date Completed (est.): May 2015 **Date Completed (actual):** March, 1, 2016

Estimated Cost: $16,820 **Program Final Cost:** $12,062.50

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $4,757.50

Best Practices
• The information pertaining to preparing the policy has largely been accomplished through researching other city policies, and reviewing LEED requirements and other green rating systems. Input has been obtained from the City Engineer, and coordination on the policy with Public Works-Capital Projects staff. • Buildings designed to the LEED standard result in energy savings and a reduction in aggregate operational costs over the life of the project. In many cases, the upfront costs of designing and building to the LEED standard will not differ from conventional building methods. In other cases, the upfront costs of designing to a LEED standard can be recovered early on in the life cycle of the project. However, there could be circumstances for certain building types or project sizes which result in prohibitive upfront costs, and building to LEED standards would not occur.

Lessons Learned
• The City reviewed the LEED rating system and determined it to be the most suitable standard to achieve a meaningful level of energy efficiency and other sustainable building measures in support of the City's Climate Action Strategy.

Knowledge Transferred
• The establishment of this policy will be promoted on the green page of the City's website. The potential to expand the City's green page and link it with the economic benefits and economic development will be explored further.

Next Steps
• The policy will be implemented by City staff as required by the policy.

Benefit to the State
• The State benefits from this task because a green building/energy efficiency policy for municipal facilities increases the energy efficiency of the Participating Municipality's

facilities resulting in reduced energy use and GHG emissions.

Benefit to Local Government

- Through this task the Implementer developed and adopted a policy that requires new municipal building to meet a specific standard that were be determined through the task. This standard is be based on LEED or other similar energy rating system. The City benefits from this task because a green building/energy efficiency policy for municipal facilities increases the energy efficiency of the Participating Municipality's facilities resulting in reduced energy use and GHG emissions.

Successes

- In researching other sources of information, staff identified a Green Building Survey by a consulting firm completed in 2010. The survey included 1,600 design and construction professionals from across the nation, and addressed current attitudes toward green building, its risks, costs, certification processes and trends. The survey suggested that even during the recession there was still considerable support for green building among design professionals with approximately 92% of those supporting it.
- The assessment of the existing resources clearly indicates that there are many cities that have approved policies to utilize LEED as the basis for the design of city buildings. Utilizing LEED also has other advantages in that it furthers other identified green building measures included in the City's Climate Action Strategy.

Challenges

- Based on the research, there would appear to be strong evidence that the energy savings over the life of City projects would far outweigh the initial investment to achieve a potential green rating. For this reason, the benefit of developing the policy far outweighs any costs. The question is what the particular guidance in the policy should include. Certainly, the ratio of cost of applying LEED and other green rating systems to return in energy savings will generally be higher for a smaller new project or a retrofit project.

  In view of this, and based on the research as a whole, it is appropriate for the policy to either include a higher end threshold (e.g. 10,000 square feet) for triggering the requirement for a green rating system, and/or include provisions that would exempt certain buildings from the policy if it is determined to not be cost effective. Currently no new City building projects have occurred since adopting this policy.

4.5 Strategic Plan Task 3.2.3 – Local Government Revolving Energy Efficiency Fund

Develop policy for a revolving energy efficiency fund for City/County facilities.

4.5.1 County of Inyo – Phase 3

Local Government Partnership: Eastern Sierra Partnership

Project Title: Develop a Policy for a Revolving Energy Efficiency Fund for County Facilities

Project Purpose: The goal of this task is to establish a revolving energy efficiency fund that will enable Implementer to implement energy efficiency projects without relying on its general fund to finance the projects.

Project Scope and Components: Implementer will develop and approve a policy and plan for a revolving energy efficiency fund (REEF) for its facilities. The REEF will provide a fund to finance EE projects without the use of the general fund to help the Implementer reach its energy reduction goals. Implementer will:

- Develop REEF goals and policy
- Develop a REEF program plan that includes:
    - Identified opportunities for seed money
    - Methodology for monitoring and reimbursements
    - Expected paybacks and timeframes
    - Project selection criteria
    - Methodology for incorporating other incentive programs into the funding mechanism

Deliverables:

1. Report on status of Implementer or Subcontractor to help support the Task
2. Energy Efficiency Revolving Loan Fund Policy Assessment and Planning Report
3. Present Assessment and Planning Report for Energy Efficiency Revolving Loan Fund to Board of Supervisors for Comment
4. Draft Program Plan for Energy Efficiency Revolving Loan Fund

5. Present Draft Program Plan for Energy Efficiency Revolving Loan Fund to the Financial Advisory Committee and Board of Supervisors for Comment
6. Submit Program Plan for Energy Efficiency Revolving Loan Fund to the Board of Supervisors for to Board of Supervisors for Adoption: Provide documentation of adoption or a report stating why the EERLF was not adopted and related alternate plans.
7. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (February 2014)

Date Completed (est.): April 2014 **Date Completed (actual):** Mar 2016

Estimated Cost: $44,889 **Program Final Cost:** $34,743 ($44,889 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $10,146

Best Practices
• Created a separate internal County fund that is “loaned” out to the County itself and repaid through energy savings. Very basic repayment mechanism.

Lessons Learned
• Finding Seed Money is difficult. • Due to the County’s small size and scale of facilities, there are not huge reductions and cost savings to make the program as enticing as staff had hoped. • There is resistance within the status quo to create a funding source limited to energy reduction projects. • The EERLF is easier for elected officials and financial staff to embrace if the payback from savings can go to the County’s General Fund and not directly back to the EERLF.

Knowledge Transferred
• This document serves as the primary mechanism of conveying best practices and lessons learned from this task. However, the County is available to discuss this further with any interested parties.

Next Steps
• Staff will locate seed funding to initiate the EERLF. The Board of Supervisors adopted the EERLF on December 12, 2015 with direction to staff that the program would not be implemented unless outside seed funding could be found in the amount of $172,000. If such funding is found, staff is to return to the Board of Supervisors to review the policies and the EERLF program; therefore, no changes can be attributed to the program as yet.

Benefit to the State
• The State will benefit from a revolving energy efficiency fund because the Participating Municipality will have the means for fund energy efficiency projects, thereby reducing energy use and GHG emissions.

Benefit to Local Government
• The Implementer will benefit from the development of the policies and procedures for a sustainable source of funding that derives its revenue stream from the implementation of energy efficiency projects. Energy savings resulting from energy efficiency projects are quantified and distributed to a REEF and the general fund based on a process defined in the program policy. Funding from this Program will not be used for "seed" money. • If the Implementer is able to secure seed funding, it will be able to implement the projects identified in its Energy Action Plan easier, which can work to help the State meet its energy goals.

Successes
• During this period, the Implementer performed case study research on other municipal revolving loan funds, and conducted research into available seed funding to capitalize a similar fund. This research was compiled in the Energy Efficiency Revolving Loan Fund Assessment and Planning Report. The Assessment and Planning Report was presented to the Implementer's Financial Advisory Committee for review and feedback, and subsequently presented to the Board of Supervisors for review and approval. Concurrently, the Implementer began incorporating lessons learned from other municipalities into an Energy Efficiency Policy Report that defines the goals of a revolving loan fund, describes fund administration, and identifies project selection criteria. The Implementer also worked on developing an accounting tool for tracking cost and energy savings and internal loan repayment.

Challenges
• Finding actual Seed Funding for the fund particularly difficult and has not been accomplished as yet. The fund was approved by the Board of Supervisors contingent on finding Seed Funding. • The EERLF was not an especially popular project with Implementer's officials. There was a real concern about scarce county resources being dedicated to a single program. • The greatest obstacle that was overcome was getting the EERLF approved by the Board of Supervisors.

4.5.2 City of Santa Barbara – Phase 3

Local Government Partnership: South Santa Barbara Partnership

Project Title: Energy Efficiency Revolving Loan Fund (EERLF) for Municipal Facilities

Project Purpose: The goal of this task is to design an energy efficiency fund that will build upon itself through energy cost savings and utility incentives received from carrying out energy efficiency projects to fund future energy efficiency projects.

Project Scope and Components: Develop and approve an energy efficiency revolving fund (EE Fund). This task will include:

- Forms and process flow charts and procedures
- Required internal resources necessary to establish the EE Fund.
- Identify sources of seed capital for the fund
- Establish the EE Fund from seed money and/or previously identified energy savings
- Determine the candidacy criteria for the Implementer's facilities and energy efficiency measures to ensure long-term persistence of savings and high probability of achieving significant levels of efficiency.

The Implementer will develop a proposal to establish an energy efficiency revolving loan fund (EE loan fund) for City Council approval. Each fiscal year, the Implementer will calculate the estimated financial savings attributable to the energy efficiency projects implemented in its facilities. The calculated amount will be set aside for continued investment in energy efficiency

projects in the Implementer's facilities. This approach systematically ensures funding will be made available for energy efficiency projects.

Deliverables:

1. Report on the Status of Subcontractor to Support the Task
2. Final RFP for consultation services for Energy Efficiency Revolving Fund creation and implementation.
3. Bid award announcement for consultation services for Energy Efficiency Revolving Fund creation and implementation.
4. Final Energy Efficiency Revolving Fund Assessment and Planning Report.
5. Draft Energy Efficiency Revolving Fund Policies and Procedures
6. Final Energy Efficiency Revolving Fund Policies and Procedures
7. Submit Energy Efficiency Revolving Fund Policy to City Council for adoption; if adopted, provide evidence it was adopted by the Local Government and effective date; if not adopted, provide reasons and alternative plans.
8. Final Energy Efficiency Revolving Fund White Paper
9. Draft Energy Efficiency Revolving Fund Project Report
10. Final Energy Efficiency Revolving Fund Project Report
11. Draft Forecast and Recommendation Report
12. Final Forecast and Recommendation Report
13. Report on the Implementation of the Fund
14. Meeting minutes from all meetings held with Implementer's finance department as Work under this task
15. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (201)

Date Completed (est.): May 2016 **Date Completed (actual):** March 2016

Estimated Cost: $52,250 **Program Final Cost:** $49,544 ($52,250 Budget)

Local Match Contribution: $7,750

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• Centralize utility account payments to improve the management of energy expenditures • Leverage utility rebates and incentives to grow the Fund and, in turn, fund more energy efficiency projects. • Develop a Fund Oversight Committee to help select projects and ensure that Fund procedures are being followed. • Track completed project savings and return to Fund • Incentivize Staff to reduce energy consumption

Lessons Learned
• Involve ALL stakeholders early – especially the Finance dept. • Have a plan to phase in Enterprise Funds, which work slightly differently than General Fund. • Have a strong growth plan to increase the fund.

Knowledge Transferred
• The City developed a white paper to disseminate to other local jurisdictions about their Fund model and growth strategies. The City created a replicable model in hopes other organizations will follow.

Next Steps
• The Implementer will also continuously seek out grant and award opportunities to add to the account.

Benefit to the State
• The State will benefit from a revolving energy efficiency fund because the Participating Municipality will have the means for fund energy efficiency projects, thereby reducing energy use and GHG emissions. • This task produced a replicable model for other local governments to follow and increase energy efficiency, contributing to an effective aggregate effect at the State level.

Benefit to Local Government
• Provides a dedicated funding stream for otherwise tough to fund projects. • Leverages utility rebates and incentives to continually grow the Fund.

Successes
• The development of the Fund Plan • Unanimous decision to implement the Fund in FY 17

Challenges
• Developing a mechanism by which Enterprise Funds can participate

4.5.3 County of Santa Barbara – Phase 3

Local Government Partnership: South Santa Barbara Partnership

Project Title: Revolving Energy Efficiency Fund

Project Purpose: The goal of this task is to establish a Revolving Energy Efficiency Fund that provides a sustainable source of funding for Energy Efficiency projects for County facilities.

Project Scope and Components: Implementer will establish an internal fund to function as a Revolving Energy Efficiency Fund (REEF) to provide ongoing funding for energy efficiency projects. Implementer will:

- Identify seed funding for REEF.
- Develop Administrative Manual.
- Develop REEF worksheet models to provide REEF administrators with fund management tool(s)
- Obtain approval of Board of Supervisors for the
- Establish fund for Santa Barbara County.

Deliverables: This task was dropped by Implementer during negotiations and was not included in the Agreement. Thus there is no schedule of deliverables.

Date Approved (Advice Letter (NTP)): August 2013 (January 2014)

Date Completed (est.):

Date Completed (actual): This task was dropped by Implementer during negotiations and was not included in the Agreement.

Estimated Cost: $64,554

Program Final Cost: N/A

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: N/A

Best Practices

- None. This task was dropped by Implementer during negotiations and was not included in the Agreement

Lessons Learned

- None. This task was dropped by Implementer during negotiations and was not included in the Agreement

Knowledge Transferred

- None. This task was dropped by Implementer during negotiations and was not included in the Agreement

Next Steps

- None. This task was dropped by Implementer during negotiations and was not included in the Agreement

Benefit to the State

- None. This task was dropped by Implementer during negotiations and was not included in the Agreement

Benefit to Local Government

- None. This task was dropped by Implementer during negotiations and was not included in the Agreement

Successes

- None. This task was dropped by Implementer during negotiations and was not included in the Agreement

Challenges

- None. This task was dropped by Implementer during negotiations and was not included in the Agreement

4.5.4 Western Riverside Council of Governments – Phase 3

Local Government Partnership: Western Riverside Energy Leader Partnership

Participating Municipalities: Calimesa, Canyon Lake, Eastvale, Hemet, Lake Elsinore, Menifee, Murrieta, Norco, Perris, San Jacinto, Temecula, and Wildomar

Project Title: Revolving Energy Efficiency Fund

Project Purpose: The goal of this task is to establish a Regional Revolving Energy Efficiency Fund to provide a sustainable source of funding for energy efficiency projects for Participating Municipalities.

Project Scope and Components: A Regional Revolving Energy Efficiency Fund (RREEF) will be established for participating cities. This task will include the following activities:

- Identify seed funding for RREEF
- Develop a RREEF administrative manual with operating procedures and worksheet models to assist administrators with fund management
- Establish the fund, including the development of staff approval materials, presentations to necessary board committees, and coordination with auditors and counsel (internal and external) to properly establish a distinct fund for this purpose.

Deliverables:

1. Consultant or Subcontractor Agreement for Resource to Support the Task
2. Draft Assessment and Planning Report for RREEF
3. Final Assessment and Planning Report for RREEF
4. Report on Identification of Seed Funding for RREEF
5. Administrative Manual Completed
6. Potential Municipal Projects Listing from Local Governments
7. RREEF Operating Worksheet Models Completed
8. Fund Established at WRCOG
9. Participating Municipalities Engagement through Project Loan Requests
10. Initiate Funding from RREEF for First Projects
11. Monthly Status Report

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): June 2015 **Date Completed (actual):** September 2016

Estimated Cost: $126,150 **Program Final Cost:** $15,231.43

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $110,918.57

Best Practices

- Through the implementation of the RREEF, one of the best practices we obtained was the shared knowledge that we gained from multiple organizations that have created a revolving loan fund. Learning from their experience has been a crucial part in the development of the RREEF.

Lessons Learned

- One of the biggest lessons learned through the implementation and creation of the RREEF was working on the identification of Seed Funding. The goal of the program is to help the WRCOG member jurisdictions focus on the implementation of EE projects. Through the identification of grants from multiple sources, we can be able to help the WRCOG member jurisdictions reach such goals.

Knowledge Transferred

- Implementer's Staff will become educated on the types of qualified energy efficiency projects that are eligible for additional incentives that both Municipal and Commercial facilities can participate in. This will position cities to lead by example by promoting similar energy efficiency projects to their communities.

Next Steps

- Pursue Implementer's Board Action to provide seed funding to the Revolving Loan Fund and begin ongoing education, monitoring of the fund
- Identify energy efficiency projects that can support the Revolving Loan Fund

Benefit to the State

- The State will benefit from a revolving energy efficiency fund because the Participating Municipality will have the means to fund energy efficiency projects, thereby reducing energy use and GHG emissions.
- Implemented measure will aid with the reduction of greenhouse gas emissions (GHG's) such as AB 32.

Benefit to Local Government

- Such benefits from implementing the RREEF will create opportunities for WRCOG member cities to work on energy efficiency projects.

Successes

- Some successes that came about the implementation of the RREEF was with the creation of an Administrative Manual the provides information of the Seed Funding as well as an idea of EE projects that local governments will be interested in pursuing with the use of the RREEF.

Challenges

- One of the biggest challenges that were confronted in implementing the creation of the RREEF was identifying the Seed Funding for the revolving fund. The need for identifying the funds was highly important to help with the creation of the RREEF.

4.6 Strategic Plan Task 3.2.4 – Local Government Commissioning/Retro-Commissioning Policy

Develop commissioning/retro-commissioning policies for municipal facilities.

4.6.1 Coachella Valley Association of Governments – Phase 3

Local Government Partnership: Desert Cities Partnership

Participating Municipality: City of Palm Desert

Project Title: Develop A Policy for Commissioning and Retro-commissioning On Municipal Facilities

Project Purpose: The goal of this task is to tailor develop and adopt a Commissioning (Cx) and Retro-Commissioning (RCx) Policy for Municipal Buildings for the Participating Municipality.

Project Scope and Components: Implementer will customize a Commissioning (Cx) and Retro-Commissioning (RCx) Policy for Municipal Buildings for the Participating Municipality. This policy was adopted by participating municipalities in the 2010-2012 LGP Strategic Plan Pilot Program. The policy provides the procedures that Participating Municipality can use to optimize energy performance in its municipal facilities.

The Cx/RCx approach focuses on equipment such as mechanical equipment, electrical, lighting and related controls

Upon completion of the policy, Implementer will work with Participating Municipality to gain approval from the City Council.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Cx/RCx Policy Assessment and Planning Report
3. Final Cx/RCx Policy Assessment and Planning Report
4. Draft Cx/RCx Policy
5. Final Cx/RCx Policy
6. Documentation of adoption of Cx/RCx Policy by City Council or documentation of why Cx/RCx Policy was not adopted and related alternate plans. Documentation must be provided for each Participating Municipality.
7. Conduct Training of Participating Municipality Staff on Cx/RCx
8. Draft plan to share best practices and lessons learned with other local governments
9. Final plan to share best practices and lessons learned with other local governments
10. Monthly report of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): February 2015 **Date Completed (actual):** Summer 2015

Estimated Cost: $20,025 **Program Final Cost:** $160,965 ($160,200 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: Y / N

Program Budget Unspent: $0

Best Practices
• Combining the adoption of a Cx/RCx policy with other tasks in the Green for Life program was a definite best practice. Retro-commissioning is little known and not easy to explain in simple terms. Linking the benchmarking and Cx/RCx policies with green building, and greenhouse gas reductions helped justify the need for these policies.

Lessons Learned
• Participating Municipality's officials had concerns about the cost of implementing a retro-commissioning program. Having examples of RCx programs that had been implemented by other local governments or commercial property owners was helpful; more examples and real world case studies would have been beneficial.

Knowledge Transferred
• Implementer has the knowledge and tools necessary for performing continued commissioning practices which facilitate the implementation of strategies that will improve building performance.

Next Steps
• Implementer continues to look for opportunities to promote and implement RCx.

Benefit to the State
• The State will benefit from this task by having buildings and facilities that are operating at optimal energy efficiency, thereby reducing energy use and GHG emissions. • Implementation of this task is consistent with the California Long Term Energy Efficiency Strategic Plan (CLTEESP) goal in our region.

Benefit to Local Government
• Brought together multiple municipal energy efficiency tasks which resulted in increased participation and acceptance.

Successes
• The Participating Municipality adopted the same Commissioning and Retro-commissioning (Cx/RCx) Policy in use in other nearby jurisdictions within the partnership. The policy identified: o Criteria for determining eligible and exempt facilities o Timelines for Cx/RCx o Frequency and trigger points for Cx/RCx o Roles and responsibilities for implementing the policies o Procedures for implementing the policies

Challenges
• RCx is not well understood and implementation may be a challenge. Implementer tried to simplify the descriptions of RCx and use analogies (e.g. “well-tuned car”). More is needed to clarify benefits of RCx.

4.6.2 City of Norwalk – Phase 3

Local Government Partnership: Gateway Cities Partnership

Project Title: Develop a Commissioning/Retro-commissioning (Cx/RCx) Policy for Municipal Facilities

Project Purpose: The goal of this task is to develop and adopt a Cx/RCx policy and a corresponding set of procedures and a training plan to enable ongoing Cx/RCx of qualified municipal facilities. By integrating Cx/RCx into the standard O&M procedures, continuous commissioning will become a normal process in maintaining buildings and equipment.

Project Scope and Components: Develop and adopt a commissioning/retro-commissioning policy that addresses non-capital, operations and maintenance (O&M) oriented opportunities in a building’s energy systems to improve the energy efficiency of the building. The policy will:

- Define Cx/RCx
- Describe the Cx/RCx approach
- Develop procedures and training plan
- Assure integration of Cx/RCx into Implementer’s O&M program

- Conduct staff training on the policy and procedures, as well as, best practices for implementing RCx activities through enhanced operations and maintenance procedures.

Deliverables:

1. Report on Status of Consultant or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for Cx/RCx Policy
3. Final Industry Assessment of Cx/RCx Policy
4. Draft Cx/RCx Policy
5. Final Cx/RCx Policy
6. Cx/RCx Training Plan
7. Draft Report on Best Practices and Lessons Learned
8. Cx/RCx Policy Submitted to City Council or City Manager for Approval
9. Final Report on Best Practices and Lessons Learned
10. Monthly Report

Date Approved (Advice Letter (NTP)): August 2013 (April 2014)

Date Completed (est.): February 2015 **Date Completed (actual):** Dec 2015

Estimated Cost: $38,062 **Program Final Cost:** $178,357 ($185,251 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $6,894

Best Practices
• Involvement of Implementer's staff in the development of commissioning/retro-commissioning policy and procedures. o Fostering the involvement of Implementer's staff and industry professionals was critical to the development of the commissioning/retro-commissioning policy and procedures. Staff is fully familiar with the operations, their own city building stock, and resources available to make the adoption successful by identifying which buildings have opportunities for commissioning/retro-commissioning. • Utilize external resources to provide technical guidance in the development of the

procedures and policies.

  - Properly commissioning/retro-commissioning a building requires technical knowledge to ensure energy savings. External resources (e.g., Southern California Edison, California Commissioning Collaborative, and California Energy Commission) were used to provide training and education to the Implementer. These resources can also provide continual support to the Implementer as it undergoes commissioning/retro-commissioning projects in the future.

- Promotes O&M building performance excellence and encourages energy efficiency
  - Commissioning/retro-commissioning promotes operations and maintenance and building performance excellence, it also requires the involvement of all stakeholders, including senior management, engineering, O&M personnel, contractors, vendors and facility users/occupants. The commissioning process is not a onetime event, but rather an ongoing activity that continues throughout the life-cycle of a facility.

Lessons Learned

- There is a lack of commissioning/retro-commissioning policies from peer municipalities, organizations, or associations to review.
  - Examples of commissioning/retro-commissioning policies of peer municipalities, organizations, and associations were difficult to obtain, leading to the inability of measuring the benefits for commissioning/retro-commissioning policies for municipalities. The few that were available were for much larger facilities than the current building stock of the Implementer.
- The existing policies had limited applicability to the Implementer.
  - It was found that commissioning/retro-commissioning is most common for larger facilities (25,000 square feet and above) with sophisticated control systems that are highly interactive such as energy management systems. These industry-wide practices suggest that it may be cost-effective to focus efforts on buildings of these types. Therefore, retro-commissioning smaller buildings may not be a wise investment for the Implementer.

Knowledge Transferred

- Implementer has the knowledge and tools necessary for performing continued commissioning practices which facilitate the implementation of strategies that will improve building performance.

Next Steps

- Implementer will utilize existing policy to further integrate effectively in municipals operations and maintenance programs continuous commissioning activities as a normal process in maintaining buildings and equipment.

Benefit to the State

- The State will benefit from this task by having buildings and facilities that are operating at optimal energy efficiency, thereby reducing energy use and GHG emissions.
- Local governments integrating energy efficiency in their municipal operations align with the state's "loading order" of first addressing energy efficiency as California's top priority resources.

Benefit to Local Government

- The Cx/RCX Policy promotes operations and maintenance and building performance excellence; implementation of procedures and tools developed through this program will provide the city with persistence of benefits and continuous performance improvement over time.
- By adopting a retro-commissioning policy and developing an of set procedures the Implementer's facilities will be updated to operate more efficiently, which will lower overall energy use and provide cost savings to the Implementer. An additional outcome is to improve the overall building environment and comfort.

Successes

- Implementer developed and adopted a Cx/RCx Policy and a set of procedures that ensure city facilities function in a manner that promotes energy efficiency and optimizes equipment operation. Through the development of this policy and its implementation, the City will reduce its energy consumption and improve operation and maintenance (O&M) procedures to ensure persistence of savings over time. By ensuring Staff is an integral part of the process, they will gain valuable experience necessary to RCx additional facilities with in-house resources.

Challenges

- Implementer encountered lack of peer organizations that had developed and adopted Cx/RCx Policies, difficult to gage how other cities implemented the policy and embedded the procedures in municipal operations.

5. Strategic Plan Goal 4 – Leading the Community

"Local governments lead their communities with innovative programs for energy efficiency, sustainability and climate change"

5.1 Strategic Plan Task 4.1.1 – Community-Wide EAP/CAP Template

Develop a regional template for Climate Action Plans (CAP) or Energy Action Plans (EAP).

5.1.1 Ventura County Regional Energy Alliance – Phase 3

Local Government Partnership: Ventura County Partnership

Participating Municipalities: Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Santa Paula, Simi Valley, Thousand Oaks, and Ventura, and Unincorporated Areas of Ventura County

Project Title: Develop a Regional Template for a Climate Action Plan (CAP)

Project Purpose: The goal of this task is to develop resources (energy inventory and GHG inventory and templates for CAPs with energy chapters) for Participating Municipalities to use to fully develop their own community CAPs.

Project Scope and Components: Develop the following tools that Participating Municipalities can use to develop their Climate Action Plans (CAP):

- Develop energy and greenhouse gas (GHG) inventories for each Participating Municipality (except for Oxnard which already has an inventory)
- Develop CAP templates with energy efficiency chapter for each Participating Municipality, as well as a regional template. The templates will include the results of the energy inventory and GHG inventory for each Participating Municipality and will identify potential target areas to be considered for mitigation strategies.
- These templates will be provided to the Participating Municipalities. The Participating Municipalities will then further develop their respective CAPs by establishing goals and strategies to meet those goals.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task

2. Draft Assessment and Planning Report for Developing CAP Templates for Participating Municipalities
3. Final Assessment and Planning Report for Developing CAP Templates for Participating Municipalities
4. Collect Energy Data for Implementer Region
5. Analyze Data and Identify Opportunities for Reduction
6. Present Energy and GHG Inventory to Implementer's Board
7. Revise Energy and GHG Inventory Based on Feedback
8. Develop Draft Templates for Climate Action Plan with Input from Stakeholders
9. Revise Templates Based on Feedback
10. Draft Plan to Share Best Practices and Lessons Learned with Peer Counties and Cities
11. Final Plan to Share Best Practices and Lessons Learned with Peer Counties and Cities
12. Report on Stakeholder Input
13. Monthly Status Report

Date Approved (Advice Letter (NTP)): August 2013 (November 2013)

Date Completed (est.): January 2015 **Date Completed (actual):** December 2015

Estimated Cost: $140,000 **Program Final Cost:** $151,884 ($140,000 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• Year to year data on GHG emissions and reports on energy efficiency program results provide decision makers and the general public with a greater understanding of the nature of community GHG emissions and the impact various energy efficiency programs can have on overall community emissions. • Implementer's staff and champions within the Participating Municipalities have developed an in-depth understanding of the need for data when establishing targets for public information and education programs, and for working with utility partners on energy efficiency measures. The addition of a community-wide inventory for cities and for the region will allow for a more informed targeting of future programs.

- Available Resources: The California Air Resources Board's Local Government Operations Protocol was used to identify emissions from government operations. The Climate Registry published annual GHG emission factors, used for community wide emission calculations. CAPCOA provided guidelines on calculating potential reductions from future projects. The team considered use of ICLEI's reporting tools and considered them more appropriate for single entity reporting.

Lessons Learned

- More reliable and granular data on energy use at the community level would have allowed VCREA to accomplish more by developing weighted sectoral strategies, particularly for commercial, industrial and agricultural uses. The types of measures required to improve energy efficiency and reduce GHGs among the three sectors are not comparable.
- Know the data confidentiality rules the utilities must follow for their customer data. For example, some large customers may be removed from the data that is transmitted.
- Perform early and aggressive review of data, immediately upon its receipt to ensure the data are complete and accurate. This could have shortened the time required to complete the project.
- Direct communication between data analysts at VCREA and data analysts at utilities could have improved and hastened questions related to data integrity and errors.
- Better municipal records on rooftop solar will allow local and regional governments to identify the energy and GHG savings (avoided emissions) that result from this form of renewable energy. Currently, that data is highly variable and generally not available.
- Two or three additional meetings with the Participating Municipalities' program champions, at their locations, could have increased interest in the program. The challenge for small cities is staff availability. This also holds true for implementing any energy efficiency programs, and may require investment of professional time and boots on the ground on the part of utilities.

Knowledge Transferred

- An additional presentation will be made to the Implementer's Board, at which time the Board will be presented with options for their action. Staff will recommend that Implementer consider updating the inventory on a bi-annual basis.
- Individual presentations will be made to each of the Participating Municipalities, during City Council meetings, pending their approval and as coordinated with Participating Municipalities' champions.
- Implementer Staff will be available to present results of the project to State, regional and local groups.

Next Steps

• Will continue to work with individual cities
  o Develop plans further or have Council adopt
  o Continue updating GHG inventories
  o Set up all partners to have adopted plans and update
• Will work with other countywide entities (transportation commission, air pollution control board) to further expand and adopt a countywide report

Benefit to the State
• Developing a template for CAP/EAP provides Local Governments, and the State, the benefit of helping to simplify the development of a CAP/EAP. The simplification will help drive increased development of quality CAP/EAP, providing the Local Government with a roadmap for reducing energy use and GHG emissions. • To have all VCREA partners tracking their GHG emissions and have an adopted Climate/Energy Action Plan that will be used to identify further improvements. Have a baseline for all cities and develop a practice of tracking usage in order to further reduce.

Benefit to Local Government
• Participating Municipalities will benefit from this task by having customized CAP templates that facilitate the development of the CAP by the Participating Municipality. Much of the detailed upfront work of developing the inventories will have been done, as well as preliminary potential target areas for mitigation through more detailed strategy development by the Participating Municipality.

Successes
• Having a countywide report and individual reports for each city.

Challenges
• Problems with data integrity   o Under the IOU Rules, and a number of CPUC proceedings, including California Public Utilities' Commission Rulemaking 08-12-009 and related guidance, utilities are required to protect the confidentiality of client data, either through aggregation or by redacting data related to energy usage for customers with large percentages of an area's market share.

- Additional confidentiality issues and CPUC hearings occurred while the project was underway, precipitated by the introduction of smart meters and other new technologies

As a result, especially for non-residential energy use, data was inconsistent from year to year and inconsistent with load data reported by the California Energy Commission (http://www.ecdms.energy.ca.gov). The following table (excerpted from an updated version of the October 2015 Climate on the Move report) demonstrates the difference between the two data sources:

- Data was delivered with errors that were not always immediately obvious. Upon identification of the errors, additional delays were experienced in communicating with utilities staff in charge of pulling data to (a) identify the source of the error, (b) secure new data and (c) re-analyze the data. In one case, this process went through three cycles, as the utilities changed their data reporting systems.

5.2 Strategic Plan Task 4.1.2 – Customized EAP/CAP

Customize CAP with energy efficiency language and data

5.2.1 City of Beaumont – Phase 3

Local Government Partnership: Beaumont Partnership

Project Title: Develop an Energy Efficiency Chapter of a Community Climate Action Plan (EE-CAP)

Project Purpose: To develop and adopt a Community Climate Action Plan (EE-CAP) that will include a Municipal Action Plan that addresses funding requirements for municipal EE projects.

Project Scope and Components: Develop an energy efficiency chapter of a Community Climate Action Plan (EE-CAP) to provide a set of measures for how the community can increase their energy efficiency. Through this task Implementer will develop and incorporate a municipal action plan (MAP) that will address funding requirements for municipal energy efficiency projects that are identified though the task. The MAP will integrate Implementer's capital improvement process into the plan and will incorporate data from the utility manager system the City installed during the 2010-2012 LGP Strategic Plan Pilot.

Deliverables:

1. Report on Status of Consultant or Subcontractor to Support the Task
2. Draft EE-CAP Assessment and Planning Report

3. Final EE-CAP Assessment and Planning Report
4. Draft EE-CAP
5. Final EE-CAP
6. Report on Public and Internal Stakeholder Collaboration
7. Resolution adopting EE-CAP by Implementer or documentation of why EE-CAP was not adopted and related alternate plans
8. Draft plan to share EE-CAP documents, best practices and lessons learned with other local governments
9. Final plan to share EE-CAP documents, best practices and lessons learned with other local governments
10. Monthly report of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (December 2013)

Date Completed (est.): January 2015 **Date Completed (actual):** July 2015

Estimated Cost: $55,323 **Program Final Cost:** $76,055 ($84,100 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Amount of Program Monies Unspent and to Where Returned: $8,045

Best Practices
• Educate and present successful “case studies” to elected officials well before presenting an EE-CAP. • Find out what local commercial and residential developers are already doing to address energy efficiency requirements in their buildings. • Identify key stakeholders within the community to participate and provide feedback throughout the EE-CAP development process. • Compile and maintain a reliable set of data.

Lessons Learned
• Create buy-in from the community prior to presenting new policies to the governing body. This assists the City Council in their decision making process by hearing directly from their constituents.

- Assess the education level of your City Council prior to inviting presenters to City Council meetings. The final presentation made to the Beaumont City Council was difficult, as there were three newly elected and seated City Council members who had not been involved in the development process for the entire EE-CAP document. Therefore, it would have been beneficial for Staff to provide a brief history on the project before asking for a vote.
- Work cooperatively through SCE's network of other Local Governments participating in energy efficiency programs, such as the Energy Leaders Partnership, the Statewide Energy Efficiency Collaborative, and the Institute for Local Government's Beacon Award program to share lessons learned from the work completed on this task.

Knowledge Transferred

- With GHG emission analysis completed through this project, Implementer will be able to set the realistic energy efficiency goal for both Municipal and Community.

Next Steps

- The Implementer will be monitoring the GHG emissions reduction by implementing the energy efficiency projects and policies set forth.

Benefit to the State

- The State will benefit from this task because the strategies developed for the Participating Municipality will help to meet state Green House Gas (GHG) reduction goals - AB 32 which sets the state adopted target to reduce GHG emissions to 1990 levels by 2020 and the state's long-term goal to reduce emissions 80% below 1990 levels by 2050.
- The Energy Chapter in City's Climate Action Plan will help the State meet AB 32 goal.

Benefit to Local Government

- The Implementer will benefit from this task by having a long term energy efficiency plan in place that will be implemented.
- The Municipal Action Plan provides a detailed financial plan for the recommended municipal energy efficiency measures.

Successes

- Final EE CAP Adopted by City Council Agenda Item 4.a.11 of Dec. 2, 2014 City

Council Meeting.

- Hosted two public workshops on Feb. 7, 2014 focused on EE-CAP; presented preliminary findings to City Council on March 4, 2014. Identified potential projects for MAP to be quantified and identified in the EE-CAP.

Challenges

- During the course of this project, turn over in staff who was managing this project and the Implementer's officials made this process a little unsettled.

5.2.2 City of Redlands – Phase 3

Local Government Partnership: Redlands Partnership

Project Title: Customize Energy Action Plan (EAP) with Energy Efficiency Language and Data

Project Purpose: The goal of this task is to develop a comprehensive, long-term community EAP to increase energy efficiency in the community and municipal facilities. The EAP will provide the community with a long-term vision and plan for energy efficiency.

Project Scope and Components: The Implementer will develop an EAP for its community. The EAP will provide a long-term vision and plan for energy efficiency, its facilities as well as the community. In developing the EAP, the Implementer will:

- Develop an inventory of electric equipment;
- Study electricity usage;
- Establish reduction goals and milestones;
- Investigate and assess approaches to reduce energy;
- Prioritize municipal energy efficiency projects and identify funding mechanisms;
- Develop GHG inventory with San Bernardino Association of Governments (SANBAG); and
- Adopt the EAP.

Deliverables:

1. Report on Status of Consultant or Subcontractor to Support the Task

2. Assessment and Planning Report for the Development of a Community Energy Action Plan
3. Draft EAP
4. Final EAP
5. Submit EAP to Implementer's City Council for Adoption and provide effective date
6. Report on Stakeholder Input
7. Submit Monthly Status Report

Date Approved (Advice Letter (NTP)): August 2013 (December 2014)

Date Completed (est.): April 2015 **Date Completed (actual):** December 2015

Estimated Cost: $52,000 **Program Final Cost:** $62,190 ($64,000 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• Engaging various stakeholders through educational workshops (SP Task 1.1.6) undertaken simultaneously helped to understand the Implementer's needs for sustainability and set up the GHG reduction goals.

Lessons Learned
• Careful consideration needs to be made in order to have positive engagement with local interest groups. For example, the EAP gained the interests of the Sustainability Committee (a committee of local volunteers within the community) and the local branch of the Tea Party. The concerns of these two groups with differing viewpoints need to be addressed appropriately to ensure a successful process. • Engaging City planning staff and including them during the development of the EAP would have provided some continuity between the EAP and the General Plan Update process.

Knowledge Transferred
• Engaging City's residents, business owners, and City officials when developing the

plan, definitely help City to shape the realistic goal and implementation plan.

Next Steps
• The Implementer will be monitoring the success of GHG emission reduction goal by setting a small step goal which is to achieve 12% reduction by 2017.

Benefit to the State
• The State will benefit from this task because the strategies developed for the Participating Municipality will help to meet state Green House Gas (GHG) reduction goals - AB 32 which sets the state adopted target to reduce GHG emissions to 1990 levels by 2020 and the state's long-term goal to reduce emissions 80% below 1990 levels by 2050. • This task helps the State meet AB 32 goal.

Benefit to Local Government
• The EAP will provide the foundation and framework to develop a comprehensive CAP and put the City on a measureable path toward energy and GHG emissions reductions. • This task provides the Implementer with a long term plan that commits to achieving targeted levels of GHG reductions by implementing specific activities that will increase energy efficiency.

Successes
• This Energy Chapter development and adoption was the great step towards meeting the City’s existing Sustainability Plan which was developed in 2009.

Challenges
• No significant challenges were encountered in this task.

5.2.3 South Bay Cities Council of Governments – Phase 3

Local Government Partnership: South Bay Partnership

Participating Municipalities: Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Lomita, Manhattan Beach, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance

Project Title: Customize Community Climate Action Plan with EE Language and Data (EECAP)

Project Purpose: The goal of this task is to develop EECAPs for the 15 Participating Municipalities, as well as a sub-regional EECAP.

Project Scope and Components: The Implementer will customize Climate Action Plans (CAPs) for each of its 15 participating cities and will develop a CAP at the sub-regional level. The CAP will focus on the development and customization of the EE chapter of the CAPs, including addition of EE language and data; this portion of the CAP is referred to as the Energy Efficiency Climate Action Plan (EECAP). The Implementer will:

- Develop the EECAPs for each Participating Municipality. This includes calculating current and projected greenhouse gas (GHG) emissions data, identifying existing and new energy efficiency strategies to reduce energy use and emissions, and devising an implementation and monitoring plan for the energy efficiency strategies. This work will be incorporated into an EECAP for each of the participating cities and will also be used to develop the sub-regional EECAP.
- Present the EECAPs to the city council of each Participating Municipality.
- Present the sub-regional EECAP to the Implementer's Board of Directors for adoption.

This scope of work will build upon work previously completed by Implementer, including municipal and community GHG emission inventories completed for 2005 (baseline) and 2007 for each Participating Municipality. While the participating cities and the Implementer have begun to identify municipal and community energy efficiency strategies for their work with SCE and the Energy Leader Partnership Program, this task will allow for a broader and more detailed analysis of energy efficiency strategies and will guide the participating cities and the Implementer in continued leadership in energy efficiency programs and policies

Deliverables:

1. Report on status of Consultant or Subcontractor to support the Task
2. Consultant Selection
3. Draft EECAP Assessment and Planning Report
4. Final EECAP Assessment and Planning Report
5. GHG Emissions Inventories and Forecasts
6. City-Specific and Sub-regional EE Measures, Programs and Policies Analysis Report
7. Draft EECAP for each Participating Municipality and the Sub-region
8. Final EECAP for each Participating Municipality and the Sub-region
9. Documentation of the adoption of the EECAP or documentation of why the EECAP was not adopted and related alternate plans for each Participating Municipality and Implementer for Sub-region
10. Monthly reports of tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (November 2013)

Date Completed (est.): March 2015 **Date Completed (actual):** Dec 2015

Estimated Cost: $771,630 **Program Final Cost:** $824,811 ($771,630 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• Implementer's Staff worked closely with key members of each city staff to develop a tailored menu of energy efficiency measures, programs, and policies. Each set of reduction measures is city-specific and takes into account the work that the city is already doing. A thorough engagement process resulted in a 100% adoption rate of the measures at the commission and council levels. • An EECAP Working Group was created that allowed all city staff together every two months to discuss program progress, opportunities, and challenges. • This task was intended to create the first chapter, the Energy Efficiency Climate Action Plan (EECAP), of a complete Climate Action Plan (CAP) for 15 cities in the South Bay and the Sub-region. The EECAP can be used as a stand-alone document, but it will join chapters on transportation, land use, energy generation and storage, and waste to form a complete CAP.

Lessons Learned
• To make sure that we understood each city's emissions, we reviewed two existing years' worth of data and built inventories for two additional years. That means the cities now have accurate, comparable GHG emissions data for 2005, 2007, 2010 and 2012. The baseline year was 2005. Emissions forecasts for 2020 and 2035 were developed. With this information in mind, 2020 and 2035 were selected for reduction target years for each Participating Municipality to align with state policy. • Need to consider on-going energy efficiency projects within the Participating Municipality to ensure the proper accounting and eliminate double counting of impacts.

Knowledge Transferred
• Implementer has a basis for establishing training and educational programs for the Participating Municipalities collectively focusing on strategies to implement their EECAPs, and can effectively convene the cities to foster collaboration and sharing of resources. • Adopted GHG accounting methodologies and used a comprehensive menu of reduction measures. The scale of this project was very substantial and it is believed that a scale any larger would not be successful nor would accomplish more.

Next Steps
• Participating Municipalities' staffs are developing educational opportunities for staff and residents; developing and promoting green building programs; considering the adoption of reach codes; promoting use of grey water systems; increasing potential for recycled water; developing tree planting programs; and increasing the installation of cool roofs and cool pavements. • The program to develop and adopt measures to reduce energy consumption and GHG emissions has been successful, but this is just the first step toward achieving climate action. The next steps will be to: o Implement the reduction measures in each city and through the Sub-region o Establish a timeline and tracking systems o Complete GHG inventories in future years to measure progress toward reduction goals

Benefit to the State
• The state will benefit from this project because the strategies developed for the

municipalities and the sub-region will help to meet state Green House Gas (GHG) reduction goals - AB 32 which sets the state adopted target to reduce GHG emissions to 1990 levels by 2020 and the state's long-term goal to reduce emissions 80% below 1990 levels by 2050.

- This project helped to set a clear path for municipalities to implement efficiency programs that reduce the use energy and conserve state resources
- The program strategies build on efforts at the state level such as California Building Code Title 24 which increases energy efficiency standards for new building construction and Senate Bill X7-7 which reduces per-capita water use 20% by 2030.

Benefit to Local Government

- Each Participating Municipality will benefit from this task because they will be provided both immediate and long-term energy efficiency strategies that they can implement. The EECAPs will also be available for the Participating Municipalities to reference as they update their General Plans or certain elements of their plans, such as the Conservation Element.
- Participating Municipalities have a basis for developing reduction measures as well as a tool to quantify effectiveness of those reduction measures. In addition, they have a basis for collecting GHG data for future years.
- Implementer has a basis for establishing training and educational programs for the Participating Municipalities collectively focusing on strategies to implement their EECAPs, and can effectively convene the cities to foster collaboration and sharing of resources.
- Participating Municipalities' staff will be able to leverage the resources of the Implementer to achieve the targeted reductions.
- Participating Municipalities have four (4) years of GHG emissions data to track trends in emissions and efficacy of programs over time.
- Participating Municipalities now have a reporting tool to track and monitor changes in energy consumption and GHG emissions over time and progress towards the 2020 and 2035 reduction goals.
- Implementer's Board of Directors has committed to facilitating regional projects which will help cities individually attain their goals.

Successes

- Implementer completed an EECAP for 15 Participating Municipalities and the Sub-region. The City Council of each Participating Municipality, with one exception, approved and adopted the GHG reduction measures included in the EECAP. The one City Council did not adopt because the city already has an adopted Energy and

Climate Action Plan. Instead, the GHG measures were presented to this city's Planning Commission as a step toward implementation of the City's existing ECAP.

Challenges

- Staff turnover both at the Implementer and within the Participating Municipalities impacted the timeline of the project.
- This task required a tremendous volume of work. For 15 Participating Municipalities and the Sub-region the following products were completed: community and municipal inventories updates for two years; IFT reports; municipal and community reduction measures reports; and a final EECAP.
- This task required a tremendous amount of data to update the GHG inventories for each Participating Municipality. The data came from the utilities in various forms, which made it difficult to compare data sets.
- The city staff and elected officials had various levels of knowledge on climate change and climate change mitigation energy efficiency measures at the beginning of this project, which made it more difficult to complete the work. Kick-off meetings with each Participating Municipality helped mitigate this challenge.

5.3 Strategic Plan Task 4.1.3 – Community-Wide Planning for Energy Efficiency

Update General Plan/Conservation Element with Climate policies. Provide energy efficiency framework and data for other people doing planning.

5.3.1 City of Moreno Valley – Phase 3

Local Government Partnership: Community Energy Partnership

Project Title: Amend the City's General Plan – Energy Efficiency

Project Purpose: The goal of this task is to update the Conservation Element of Implementer's General Plan to include energy efficiency.

Project Scope and Components: The Implementer will update the conservation element of its General Plan to include a detailed discussion of energy efficiency. The updated General Plan will provide an overview of the larger context of energy efficiency policy, and the Implementer's recently approved Climate Action Strategy and Greenhouse Gas Analysis. The final General

Plan document will provide information that can be integrated into the planning efforts for use by the general public, private developers, and city staff or other governmental entities.

Deliverables:

1. Report on Status of Consultant or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for Updating the General Plan with a Discussion of Energy Efficiency
3. Final Assessment and Planning Report for Updating the General Plan with a Discussion of Energy Efficiency
4. Draft General Plan Update with energy efficiency discussion
5. Conduct and Report on Public Review
6. Final General Plan Update with energy efficiency discussion
7. Submit Updated General Plan to Planning Commission for Adoption
8. Submit Updated General Plan to City Council for Adoption
9. Report on Dissemination of Lessons Learned/Best Practices to Other Municipalities
10. Monthly Status Reports

Date Approved (Advice Letter (NTP)): August 2013 (June 2014)

Date Completed (est.): June 2015 **Date Completed (actual):** December 15, 2015

Estimated Cost: $42,050 **Program Final Cost:** $28,381.25

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $13,668.75

Best Practices
• The General Plan Amendment evolved as a result of research on other cities, input of the public, and the fine tuning of City Staff to fit the City of Moreno Valley. On December 15, 2015 the City of Moreno Valley City Council approved the General Plan Amendment that adds Energy Efficiency Section 7.6.3 within the existing framework of the City's General Plan. In addition our City already had a tract record of GREEN policies. We believe that this tract record contributed to the approval of the Energy Efficiency General Plan Amendment.

Lessons Learned
• Planning Staff added Section 7.6.3 Energy Efficiency within the existing framework of the City's General Plan. Staff identified various past, current and potential policies and practices that further energy efficiency and can lead to reduction in greenhouse gas emissions. • The final General Plan document will provide useful information that can be integrated into the planning efforts for use by the general public, private developers, and city staff or other governmental entities.

Knowledge Transferred
• Internal training of other planning staff was provided to ensure implementation of the General Plan. The intent is for the General Plan to be clear, concise, and easy to implement. In addition a staff report about this General Plan Amendment was presented at Planning Commission and City Council, and additional knowledge was passed on to the decision makers and the general public.

Next Steps
• Planning staff will promote the Energy Efficiency General Plan Section through its GREEN MoVal (Getting Residents Energy Efficient Now) web site. There is also the potential to promote the Energy Efficiency Plan Section through the City's Media Services department.

Benefit to the State
• The State will benefit from this task because the Participating Municipality's General Plan will be updated with energy efficiency language. This is consistent with the California Long Term Energy Efficiency Strategic Plan (CLTEESP).

Benefit to Local Government
• Participating Municipality's General Plan will be updated with energy efficiency language. This is consistent with the California Long Term Energy Efficiency Strategic Plan (CLTEESP).

Successes
• The final General Plan document provides useful information that can be integrated into the planning efforts for use by the general public, private developers, and city staff

or other government entities. The measure of effectiveness is that energy efficiency will be part of the General Plan and that the City of Moreno Valley continues to promote energy efficiency.

Challenges
• The biggest challenge in considering the potential con of adding an Energy Efficiency Section to the General Plan was the potential that this could be viewed as a restriction that could affect development and stunt growth. The Energy Efficiency Section to the General Plan was written to be general and promote energy efficiency. In addition, other sections of the General Plan are also written in a general nature and give a general guidance.

5.4 Strategic Plan Task 4.1.4 – Community-Wide EE Savings Analysis

Conduct the energy efficiency savings analysis for an annual Greenhouse Gas inventory for the City/ County.

5.4.1 City of Beaumont – Phase 3

Local Government Partnership: Beaumont Partnership

Project Title: Energy Analysis of Annual Greenhouse Gas Inventory

Project Purpose: The goal of this task is to identify community focused energy efficiency measures by conducting an energy efficiency analysis of the Implementer's GHG Inventory that will be incorporated into the EE Chapter of the Implementer's General Plan.

Project Scope and Components: Conduct an analysis of its GHG inventory to identify community-focused energy efficiency measures that will be incorporated into the EE-CAP.

The Implementer will:

- Update the GHG baseline energy consumption data in The Climate Registry's CRIS data system;
- Conduct an analysis of EE savings based on data from CRIS;
- Conduct community engagement activities, including the Community Climate Action Planning Summit;
- Engage numerous community stakeholders to collaborate and participate in the planning process, to develop a set of community-defined energy efficiency strategies that will be

integrated into the Implementer's General Plan as an "Energy Efficiency Chapter" of the General Plan. Stakeholders may include schools, water districts, the Chamber of Commerce, and interested local residents. Additionally, the Implementer will outreach to several rural, agriculturally focused non-profit organizations to collaborate on continuing support for a sustainable agricultural/rural lifestyle that the region (San Gorgonio Pass) is known for; and

- Integrate community-defined energy efficiency strategies as an "Energy Efficiency Chapter" into the Implementer's General Plan.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for the Development Energy Efficiency Analysis of the GHG Inventory
3. Final Assessment and Planning Report for the Development Energy Efficiency Analysis of the GHG Inventory
4. Draft Report of Energy Efficiency Analysis of the GHG inventory submitted to the CPM for comment and recommendations
5. Final Report of Energy Efficiency Analysis of the GHG Inventory
6. Report on Public and Internal Stakeholder Collaboration
7. Monthly reports of tracked Performance Indicators.

Date Approved (Advice Letter (NTP)): August 2013 (December 2013)

Date Completed (est.): March 2015 **Date Completed (actual):** July 2015

Estimated Cost: $28,777 **Program Final Cost:** $76,055 ($84,100 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Amount of Program Monies Unspent and to Where Returned: $8,045

Best Practices
• Educate and present successful "case studies" to elected officials well before presenting an EE-CAP, which incorporates the results of this task.

Lessons Learned
• Find out what local commercial and residential developers are already doing to address energy efficiency requirements in their buildings. • Identify key stakeholders within the community to participate and provide feedback throughout the GHG Inventory process. • Compile and maintain a reliable set of data.

Knowledge Transferred
• GHG emission analysis for community provided important information on setting the realistic goal for energy efficiency.

Next Steps
• The Implementer will be monitoring GHG emission for community by implementing energy efficiency projects and policies set forth.

Benefit to the State
• The development of the energy efficiency analysis of the Implementer's GHG inventory will benefit the State by providing a more in-depth analysis of energy efficiency strategies that can be included in the Implementer's Climate Action Plan or Energy Action Plan. When implemented these strategies will result in reduced energy use and reduced GHG emissions. • This task will help the State to meet AB 32 goal.

Benefit to Local Government
• Through this task the City will conduct an analysis of GHG inventory data to identify energy efficiency measures that will be integrated into the city's General Plan.

Successes
• City staff has reviewed potential measures and selected measures to include in 2014-15 and 2015-16 Capital Improvement Plans. City Council approved energy efficiency measures at the Waste Water Treatment Plant at the August 19th City Council meeting.

Challenges
• During this process, turn over in staff who was managing this project and the City officials made this project a little unsettled.

5.4.2 Coachella Valley Association of Governments – Phase 3

Local Government Partnership: Desert Cities Partnership

Participating Municipality: City of Palm Desert

Project Title: Conduct the Energy Savings Analysis for Annual Greenhouse Gas Inventory

Project Purpose: The goal of this task is to update the GHG inventory for the Participating Municipality and conduct an analysis of past energy efficiency program activities.

Project Scope and Components: The Participating Municipality completed its first greenhouse gas (GHG) inventory in 2010. This task will update that GHG inventory to the most current year for which data are available, and evaluate the energy efficiency activities the Participating Municipality has undertaken in the last few years. The GHG inventory update will follow ICLEI's GHG protocol statement. The GHG inventory and energy efficiency analysis will be completed for the most recent year for which data are available. The inventory will include development of sustainability, energy efficiency, and GHG reduction goals and policies to be incorporated in a future General Plan update.

Deliverables:

1. Report on Status of Implementer or Subcontractor to Support the Task
2. Draft Assessment and Planning Report for the Development Energy Efficiency Analysis GHG Inventory
3. Final Assessment and Planning Report for the Development Energy Efficiency Analysis GHG Inventory
4. Draft Report of Energy Efficiency Analysis for the Participating Municipality's GHG Inventory
5. Final Report of Energy Efficiency Analysis for the Participating Municipality's GHG Inventory
6. Final Report of Energy Efficiency Analysis results for GHG inventory for City Council/Board of Supervisors; if approved, provide written evidence of approval by the local government and effective date; if not approved; provide reasons and alternative plans

7. Draft Best Practices GHG Report
8. Final Best Practices GHG Report
9. Monthly reports of tracked Performance Indicators.

Date Approved (Advice Letter (NTP)): August 2013 (March 2014)

Date Completed (est.): January 2015 **Date Completed (actual):** Spring 2015

Estimated Cost: $32,040 **Program Final Cost:** $160,965 ($160,200 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• The Participating Municipality completed their first GHG Inventory in 2010. The updated GHG Inventory completed for this project provided an opportunity to evaluate their progress since their first inventory. • The implementation of this task included use of the ClearPath program to track progress and measure success in meeting the City's climate action goals. This provided a pilot for ClearPath that can be used as we work with other jurisdictions on GHG tracking. • The Participating Municipality staff was already familiar with GHG Inventory process and were helpful in providing the necessary data.

Lessons Learned
• Communicate frequently with the jurisdiction about the benefits of the project, what to expect and when to expect it, deadlines, etc. • Review all existing inventories in the surrounding region (local, regional, county level). • Become familiar with various data sources specific to the region, including census data, local Air Quality Management District reports, Local Government organization reports or minutes, local and regional industry publications, etc. • Understand the underlying protocols used to develop the inventory so the data and methodologies are coordinated and used effectively. • Draw very specific boundaries (both literal and figurative) for the inventory, to answer

the questions: “What’s in, what’s out?”

- Maintain a spreadsheet tracking all data requests
    - When submitted
    - To whom submitted
    - Date of follow-up
    - Date of received data
    - Date/notation of thank you note
- Gather all pertinent background material, in particular accurate maps of the region including current political boundaries, service areas of utilities, school districts, public transportation, etc.
- Make sure data collection sheet includes or asks for the “unit of measurement,” e.g., gallons, miles, hours, etc.
- Create tracking spreadsheet to follow which data has been analyzed, proofed for quality control, entered into the ICLEI’s CACP software, outputs verified, and included in graph spreadsheets.

Knowledge Transferred

- The use of ClearPath for the Participating Municipality GHG Inventory is the first time this tool has been applied in our region. The knowledge gained by the Implementer Team will be extremely beneficial to other cities/tribes in the CVAG region. We plan to use the Participating Municipality’s pilot of ClearPath as a best practice and real world example for other jurisdictions.

Next Steps

- Establish a funding mechanism for updates to GHG Inventories.
- Use the Participating Municipality’s results and ClearPath pilot as a teaching tool for other jurisdictions.

Benefit to the State

- The development of the energy efficiency analysis of the Implementer's GHG inventory will benefit the State by providing a more in-depth analysis of energy efficiency strategies that can be included in the Implementer's Climate Action Plan or Energy Action Plan. When implemented these strategies will result in reduced energy use and reduced GHG emissions.
- The Participating Municipality updated its GHG Inventory, consistent with statewide

goals and the California Long Term Energy Efficiency Strategic Plan (CLTEESP).

Benefit to Local Government
• The Participating Municipality was able to complete an update to its 2010 GHG Inventory through the support of SCE and the CPUC Strategic Plan funding.

Successes
• CISR forms completed and approved to provide data transfer from all sources. • Draft GHG Inventory completed. This is update to 2010 inventory. • Work with city staff on tools for tracking GHG emissions from projects on ongoing basis. • ICLEI training for ClearPath in Sept. 2014; additional training planned.

Challenges
• No significant challenges for this task due to the Participating Municipality's familiarity with GHG Inventory process.

6. Strategic Plan Goal 5 – EE Expertise

"Local government energy efficiency expertise becomes widespread and typical."

6.1 Strategic Plan Task 5 – EE Expertise

Any task that advances the goal of Local government energy efficiency expertise becoming widespread and typical.

6.1.1 City of El Segundo – Phase 3

Local Government Partnership: South Bay Cities Partnership

Project Title: Develop Implementation Processes & Procedures to Embed Energy Efficiency into Implementer's Operations

Project Purpose: The goal of this task is to develop a set of implementation procedures and processes that will facilitate the implementation and coordination of the energy efficiency

policies and tools developed by Implementer through the 2010-2012 LGP Strategic Plan Pilot, including the development of policies for retro-commissioning, green buildings, benchmarking, and greenhouse gas inventory, and the development of the Enterprise Energy Management Information System (EEMIS) and Portfolio Manager. There are many overlapping functionalities and themes that can be coordinated into more cohesive energy management procedures that staff can understand and effectively implement.

Project Scope and Components: This task will include development of implementation processes and document working procedures for the policies and tools developed through the 2010-2012 Strategic Plan Strategies Program. This information will serve as a guide for current and future staff, institutionalizing knowledge and building the needed capacity to deliver the Implementer's long term energy efficiency goals.

The Implementer will develop integrated procedures for optimal implementation across departments and function. These include:

- Retro-commissioning Policy
- Benchmarking Policy
- LEED Certification Policy
- Greenhouse Gas Inventory Policy
- Enterprise Energy Management Information System (EEMIS)
- Portfolio Manager Benchmarking Tool

Deliverables:

1. Report on status of Implementer or Subcontractor to support the task
2. Draft Assessment and Planning Report for the Development of Implementation Procedures and Processes
3. Final Assessment and Planning Report for the Development of Implementation Procedures and Processes
4. Establish Energy Management Team
5. Draft Implementation Procedures and Processes
6. Final Implementation Procedures and Processes
7. Report on Task Performance Indicators
8. Plan for sharing lessons learned/best practices with other local governments
9. Monthly Report: Status of task and tracked Performance Indicators

Date Approved (Advice Letter (NTP)): August 2013 (June 2014)

Date Completed (est.): May 2015 **Date Completed (actual):** Dec 2015

Estimated Cost: $44,500 **Program Final Cost:** $110,095 ($111,250 Budget)

Local Match Contribution: $0

Project Reimbursed for LG Staff Time: (Y) / N

Program Budget Unspent: $0

Best Practices
• The development of Implementation Processes and Procedures, allowed the Implementer to focus on the missing component, lack of structure in place to bring the Implementer's energy policies and strategies from the 2010-2012 LGP Strategic Plan Pilot Program of the Strategic Plan Program into practice. The Implementer directed its attention to bridging the gap between policy and implementation for the following strategies: Green Building Standards, Benchmarking Policy, Retro-Commissioning Policy, EEMIS Procedures, and GHG Update Policy. It aligned the implementation of their energy policies/strategies with operational processes with the least amount of impact to each department involved. This process allowed the Implementer to search out innovative and cost-effective ways in which policies could be implemented without additional funding or staff, an issue crucial to the Implementer under the current economic climate and staff resources.
• Before establishing the implementation procedures and processes, the Implementer recognized the importance of being a leader in the community through the performance of municipal facilities and energy usage practices. However, the Implementer lacked the necessary structure and roadmap to continue to push forward with its policies. The Implementer is now better positioned than ever to take on a sustainability leadership role in the community and region.

Lessons Learned
• Engage all stakeholders at the beginning of the program to gain early buy-in. Many of the tasks required intra-departmental and inter-departmental support from staff not previously familiar with the overall goal and intent of the program. This lack of familiarity caused challenges and delays with the implementation of tasks. In the future, the Implementer would invite key staff from various departments to participate in energy management and planning discussions to ensure transparent communication of the Implementer's energy reduction objectives.

Knowledge Transferred
• The implementation of this task developed step-by-step processes for each of the Implementer's energy policies. A set of guidelines to be followed by departmental staff as well as the energy management team. The aim of this initiative was to share knowledge of how the energy policies could easily be implemented with limited impact to staff and existing resources. The knowledge learned will be shared with other peer municipalities searching for ways to further embedded energy efficiency into operational processes.

Next Steps
• Staff will continue to modify and adjust processes and additional staff comes on board or areas of improve in procedures are identified

Benefit to the State
• Local governments integrating energy efficiency in their municipal operations align with the State's "loading order" of first addressing energy efficiency as California's top priority resources.

Benefit to Local Government
• By developing implementation processes and procedures for energy policies adopted in 2010-2012 LGP Strategic Plan Pilot Program the Implementer is bridging the gap between policy and implementation therefore will reap the benefits intended from each policy. • The Implementer will have a concrete roadmap for how each policy or energy strategy will integrate into municipal and departmental operations

Successes
• Implementer developed implementation processes and procedures to fully integrate policies in operations.

Challenges
• A problem that was encountered was how to develop procedures and processes with minimal impact to operational budget while keeping in mind limited staff resources for

implementation.