

**Quality and Productivity Commission**  
**27<sup>th</sup> Annual Productivity and Quality Awards Program**  
**"Saluting County Excellence"**

**2013 APPLICATION**

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

**NAME OF PROJECT: GREEN ROUTING – A TOOL FOR EFFICIENT INSPECTIONS**

**DATE OF IMPLEMENTATION/ADOPTION:** FEBRUARY 10, 2012  
 (Must have been implemented at least one year - on or before June 30, 2012)

**PROJECT STATUS:**                       Ongoing                       One-time only

**HAS YOUR DEPARTMENT PREVIOUSLY SUBMITTED THIS PROJECT?**                       Yes                       No

**EXECUTIVE SUMMARY:** Describe the project in 15 lines or less using Arial 12 point font. Summarize the problem, solution, and benefits of the project in a clear and direct manner

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

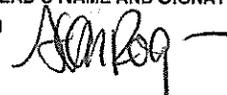
HACoLA administers Section 8 rental subsidy programs for over 24,000 low-income families residing in Los Angeles County. Each family's rental unit must be inspected before initial leasing and at least annually thereafter to ensure it meets health and safety standards. Prior to February 2012, HACoLA employed 17 Section 8 inspectors who traveled daily throughout the County to conduct approximately 43,000 inspections per year. Seven additional staffers were responsible for manually scheduling inspections with landlords and tenants, maintaining a log of inspected units, assigning and mapping inspectors' routes and generating notices. Due to funding reductions, HACoLA had to explore a more cost and time efficient way to handle these labor intensive tasks. HACoLA contracted with RBAS People, LLC to design and implement a Green Route System which uses geographic data to automatically map actual driving distances between inspections, and also create itineraries, generate resident notices, and assign daily inspections for each available inspector. The new system has enabled HACoLA to automate the entire inspection process and absorb the work of four staff persons who could no longer be maintained, without overburdening the current inspectors.

(1) ESTIMATED/ACTUAL ANNUAL COST AVOIDANCE	(2) ESTIMATED/ACTUAL ANNUAL COST SAVINGS	(3) ESTIMATED/ACTUAL ANNUAL REVENUE	(1) + (2) + (3) TOTAL ESTIMATED/ACTUAL BENEFIT	SERVICE ENHANCEMENT PROJECT
\$	\$ 221,561.60	\$	\$ 221,561.60	

<b>SUBMITTING DEPARTMENT NAME AND COMPLETE ADDRESS</b> Housing Authority of the County of Los Angeles (HACoLA) ASSISTED HOUSING DIVISION 700 W. MAIN STREET. ALHAMBRA, CA. 91801	<b>TELEPHONE NUMBER</b>
--	-------------------------

<b>PROGRAM MANAGER'S NAME</b> Margarita Lares, Director	<b>TELEPHONE NUMBER</b> (626) 586-1670
	<b>EMAIL</b> Margarita.Lares@hacola.org

<b>PRODUCTIVITY MANAGER'S NAME AND SIGNATURE</b> <small>(PLEASE CALL (213) 893-0322 IF YOU DO NOT KNOW YOUR PRODUCTIVITY MANAGER'S NAME)</small> Elisa Vasquez 	<b>DATE</b> 7/2/13	<b>TELEPHONE NUMBER</b> (626) 586-1762
		<b>EMAIL</b> Elisa.Vasquez@lacdc.org

<b>DEPARTMENT HEAD'S NAME AND SIGNATURE</b> Sean Rogan 	<b>DATE</b> 7/2/13	<b>TELEPHONE NUMBER</b> (626) 586-1500
--	-----------------------	---

**Quality and Productivity Commission**  
**27<sup>th</sup> Annual Productivity and Quality Awards Program**  
*"Saluting County Excellence"*

**2013 APPLICATION**

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

**NAME OF PROJECT: GREEN ROUTING – A TOOL FOR EFFICIENT INSPECTIONS**

**FACT SHEET – LIMITED TO 3 PAGES ONLY:** Describe the **Challenge, Solution, and Benefits** of the project, written in plain language. Include a discussion of the technology and linkage to the County Strategic Plan. The description should identify Performance Measures.

**CHALLENGE**

The Housing Authority of the County of Los Angeles (HACoLA)'s Assisted Housing Division administers rental subsidy programs for over 24,000 low-income families residing in Los Angeles County. HACoLA must comply with U.S. Housing and Urban Development Department (HUD) regulatory requirements that include a set of Housing Quality Standards (HQS) as a condition for receiving funding. Each family's rental unit must be inspected before initial leasing and at least annually thereafter to ensure it meets health and safety standards. Under HQS, the Division is mandated to conduct timely initial and annual inspections to ensure the unit meets standards of health and safety. If the unit fails the initial annual inspection, repairs for the unit must be made and verified within 30 days. If the unit is found to have life-threatening emergency deficiencies, the deficiency must be corrected and verified within 24 hours. If repairs are not verified by mandated deadlines, HACoLA is out of compliance with HQS requirements and jeopardizes continued funding. More importantly, the health and safety of the household members could potentially be at risk.

Prior to February 2012, HACoLA employed 17 Section 8 inspectors who traveled throughout the County to conduct approximately 43,000 inspections per year spanning across the County's 4,000 square-mile geographic region. Seven additional staffers were responsible for manually performing all administrative tasks that accompany inspections such as:

- providing advance notification to landlords and tenants that their unit is due for inspection;
- sorting spreadsheets by zip code to establish a target inspection area for each day of the week;
- scheduling inspections;
- maintaining an accurate log of inspected units;
- assigning daily routes; and
- mapping directions to the units.

To keep on schedule, staff needed to identify approximately 1,500 to 2,000 units due for a standard annual inspection each month. With a manual tracking process to handle such a large caseload, human error was inevitable, and units could be overlooked at the time of scheduling, or inspectors wasted time circling through their assigned area due to inefficient mapping of their daily itinerary. HACoLA struggled to find a solution to the manual time-intensive administrative tasks.

Quality and Productivity Commission  
**27<sup>th</sup> Annual Productivity and Quality Awards Program**  
*"Saluting County Excellence"*

**2013 APPLICATION**

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):  
**NAME OF PROJECT: GREEN ROUTING – A TOOL FOR EFFICIENT INSPECTIONS**

Additionally, as HUD continued to cut administrative funding for subsidized housing programs, HACoLA was faced with strategically meeting regulatory requirements with reduced funding to maintain staff and had to explore a more cost and time efficient way to handle these labor intensive tasks.

**SOLUTION**

In 2011, HACoLA contracted with RBAS People, LLC to assist with the design of the Green Route System (GRS). HACoLA outlined its needs and expectations and worked closely with the vendor to ensure this customized system would address the concerns encountered at each step of the inspection process. RBAS used cutting edge Geographic Information System (GIS) technology to design the GRS to specifically automate and maximize efficiencies in the HQS inspections process. After significant testing by Assisted Housing staff and HACoLA's Information Technology Unit, the GRS went live on February 10, 2012.

GRS is a highly configurable, parameter driven system that utilizes geographic data to automatically map actual driving distances between each inspection, taking into account the drive, and the time it takes to conduct the inspection. Encompassing such details enables HACoLA to pinpoint the number of inspections to be scheduled per day. The GRS provides the ability to maximize the efficiency of each inspector's daily itinerary by avoiding backtracking and eliminating the need for an employee to manually plot the inspector's routes through online mapping programs.

Further, GRS retrieves data from HACoLA's property management system, Yardi Voyager, to flag units scheduled for upcoming inspections, and generate notices to the landlord and resident advising them of their upcoming appointment. The GRS also creates itineraries with maps to allow inspectors to easily locate the desired unit.

Moreover, GRS is configured to retrieve data from HACoLA's employee time reporting system, PeopleSoft, to take into account the inspector's scheduled leave and flexible work schedules when creating itineraries. As an added advantage, GRS is also configured to receive last minute assignments and to transmit real time unit results via an iPad from each inspector that is out of the office conducting business.

**BENEFITS**

GRS' effectiveness was instantly proven by eliminating the manual administrative tasks involved in identifying, mapping, and scheduling of HQS inspections. What used to take administrative staff weeks to complete, GRS completes during overnight processing. Each night, GRS determines all units that require an annual inspection and re-inspection and groups them geographically and schedules and assigns them appropriately to an available inspector. In addition to the immediate advancement in administrative automation, GRS' GIS component further maximized the number of inspections that could be conducted per day. Prior to GRS, inspectors conducted an

Quality and Productivity Commission  
**27<sup>th</sup> Annual Productivity and Quality Awards Program**  
*"Saluting County Excellence"*

**2013 APPLICATION**

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

**NAME OF PROJECT: GREEN ROUTING – A TOOL FOR EFFICIENT INSPECTIONS**

average of 12 inspections per day. Since the implementation of the GRS, inspectors are now able to conduct an average of 16 inspections per day, an increase of 33%.

Overall, the GRS resulted in the reorganization of the HQS inspections department. The new system has enabled HACoLA to automate the entire inspection process and absorb the work of three eliminated administrative positions and one inspector position who could no longer be maintained, without overburdening the current inspectors.

Additionally, by automating the inspections and moving away from manual tracking and processing, the GRS eliminated the opportunity for human error, and resulted in overall improved efficiency in mapping and driving directions.

GRS' technological based solution resulted in a total annual costs savings of \$221,561.60 in administrative personnel expenditures.

LINKAGE TO THE COUNTY STRATEGIC PLAN (DETAIL IS REQUIRED FOR COUNTY DEPARTMENTS):

N/A HACoLA is not a County Department

**Quality and Productivity Commission  
27<sup>th</sup> Annual Productivity and Quality Awards Program  
"Saluting County Excellence"**

**2013 APPLICATION**

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):  
**NAME OF PROJECT: GREEN ROUTING – A TOOL FOR EFFICIENT INSPECTIONS**

(1) ACTUAL/ESTIMATED ANNUAL COST AVOIDANCE	(2) ACTUAL/ESTIMATED ANNUAL COST SAVINGS	(3) ACTUAL/ESTIMATED ANNUAL REVENUE	(1) + (2) + (3) TOTAL ANNUAL ACTUAL/ESTIMATED BENEFIT	SERVICE ENHANCEMENT PROJECT
\$	\$221,561.60	\$	\$ 221,561.60	<input type="checkbox"/>

**ANNUAL = 12 MONTHS ONLY**

**COST AVOIDANCE, COST SAVINGS, AND REVENUE GENERATED (ESTIMATED BENEFIT):** If you are claiming cost benefits, include a calculation on this page. You must include an explanation of the County cost savings, cost avoidance or new revenue that matches the numbers in the box. Remember to keep your supporting documentation.

Cost Savings: A reduction or lessening of expenditures as a result of program outcomes.

**STAFFING:**

Previous employment of 3 full-time administrative employees  
*Hourly Wage plus Benefits Costs*  
 2,080 hours x \$25.96/hr = \$53,996.80 per employee  
 \$53,996.80 X 3 employees = \$161,990.40

Previous employment of 1 full-time inspector  
*Hourly Wage plus Benefits Costs*  
 2,080 hours x \$28.64/hr = \$59,571.20

**Total Cost Savings = \$161,990.40 + \$59,571.20 = \$221,561.60**