GREATER WASHINGTON
Board of Trade

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May 19, 2008

Ms. Cathy Lada
Alliance for Regional Stewardship
4875 Eisenhower Avenue, Suite 250
Alexandria, Virginia 22304

(Via Fax # 703-212-9512)

Dear Ms. Lada:

It is my pleasure to submit the attached application for the 2008 Regional Stewardship Awards. I am honored to have this opportunity.

Please call (202-857-5935) or email me at bobgrow@bot.org if you have any questions or need further information. Thank you.

Sincerely,

Robert T. Grow
Senior Director, Government Relations
Greater Washington Board of Trade

Attachment

# 2008 Regional Stewardship Awards Cover Sheets


*An affiliate of the American Chamber of Commerce Executives*

Please provide the following information, either on this form or in a separate document.

## Applicant Information

Mr./Ms./Mrs./Dr. MR. Name Robert T. Grow

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Is this application for an... ○ organization ✓ region

## Awards Contact Information (if different)

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## References (4)

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**Program Description:**

The study is an identification, analysis and demonstration of the energy, taxpayer dollar, and CO2 savings that can be accomplished by implementing a system of energy efficient streetlights in Greater Washington and the nation's top 10 metropolitan regions. The study found that our nation's top 10 metropolitan regions can save 1.5 billion kWh in electricity thereby reducing1.2 million metric tons of CO2 emissions which is the equivalent of removing 212,000 vehicles from our highways for one year or the equivalent of not burning 132 million gallons of gasoline. The dollar cost savings in electricity is $90 million annually.

The study has received extensive media coverage including the *Washington Post, Washington Times, BusinessWeek*, the *Chicago Tribune*, *Cleveland Plain Dealer, Daily Press*, and CNN Radio. It was the subject of Neal Peirce's (Citistates Group) nationally syndicated column on urban issues May 11th. The study has also received coverage by numerous radio and television stations and blogs. For a full listing Google "Robert Grow" streetlights.

**Context:**

The energy efficient streetlights study was prepared with the vision of raising awareness regionally and nationally of the potential fiscal and environmental global warming benefits of reducing the electrical consumption of municipal streetlight systems. This study was prepared by Robert T. Grow through an American Chamber of Commerce Executives (ACCE) Ford Fellowship on Regionalism and Sustainable Development. Mr. Grow serves as Senior Director, Government Relations, Greater Washington Board of Trade in Washington, DC.

The vision of this study has been shared nationally through extensive media coverage including *BusinessWeek, The Washington Post, Chicago Tribune, Charlotte Observer*, CNN Radio, numerous radio and television spots as well as various blogs.

Within Greater Washington, the study concept has been incorporated into the draft recommendations report of the Metropolitan Washington Council of Governments Climate Change Steering Committee as well as in Pepco Holdings' considerations for energy conservation. The study has been distributed to all local jurisdictions' chief administrative officers as well as a number of elected officials in Greater Washington through the Council of Governments.

Development of the study required contact and coordination with local jurisdictions including Arlington and Fairfax County Virginia, Washington, DC and Montgomery County Maryland. The draft report was vetted through local contacts and industry officials.

Since March of 2008, publicity and ongoing contact with local and state officials has resulted in Fairfax County engaging LED (light emitting diode) manufacturer Elumen Lighting in a pilot program using 16 LED lights in a municipal parking garage. The City of Chicago Department of Public Works has requested a copy of the study and the Maryland State Highway Administration is examining the cost effectiveness of a managed streetlight system.

Barriers remaining are general lack of awareness of the benefits of energy efficient streetlights and current institutional arrangements in streetlight deployment. The purpose of the study is to raise awareness and it is beginning to accomplish its purpose. On the other side, most municipal streetlight systems are a confusing mix of ownership, maintenance and control responsibilities split between the local jurisdiction, maintenance contractors and the local utility. For example, a local government may own some of its streetlight poles and lamps while others are owned by the local utility and leased to the local government. Whether the poles are government or utility-owned, the utility is responsible for distribution and sale of electricity for the streetlights. Responsibility for maintenance such as changing lamps, repairing damage due to collision with vehicles etc. falls either to the government, an independent contractor or the local utility. For a local government to install an energy efficient streetlight system requires contract and tariff negotiations with the local utility as well as the issue of currently committed system costs and timing issues to transition to a new more energy efficient system. Continuing work to spread the message of the potential benefits of energy efficient streetlights will help break the inertia currently surrounding this opportunity.

The study is noteworthy as it addresses the potential for reducing our nation's carbon footprint while conserving government resources and taxpayer dollars. It applies new technology to address a broadly shared challenge common to all regions in the U.S. The study will help build livable communities by strengthening environmental sustainability through a reduction in CO2 emissions, by advancing better designed and more reliable lighting, by assisting in the accomplishment of community "dark skies" goals, and by saving tax revenues.

**Innovation and Excellence:**

Energy efficient streetlights and managed streetlight systems are used extensively in Europe, however, their widespread application is yet to cross the Atlantic. While the use of LED (light emitting diodes) in streetlights is being experimented with in cities including Ann Arbor, Michigan and Austin, Texas there are currently no regions or municipalities in the U.S. demonstrating savings through the use of managed streetlight systems which can build on the efficiencies of energy efficiency lamps and LEDs by cutting energy use by an additional 50

percent and by providing other management applications.

Managed streetlight systems allow data on all streetlights to feed into a control center at the public works department that keeps track of lights that need to be fixed and automatically dims streetlights to save energy based on the season, local weather and traffic density conditions and local neighborhood preferences for dark skies goals. Streetlights at dawn or during early morning periods, for example, do not have to be at full power and energy savings can be realized by the dimming technology included in the managed system. A managed system also eliminates the need for personnel to search for burned out or malfunctioning streetlights and eliminates the need for residents to call in to public works to report lamps that are out.

Managed streetlights are currently used in Oslo, Norway and are included as a best practice in the Clinton Climate C40 Initiative. This is a compelling opportunity to save energy and CO2 emissions but has yet to be applied in the U.S.

**Performance:**

The study demonstrates performance of building regional capacity by educating government officials, environmental leaders, and the business community as to the potential energy savings and environmental benefits of the subject topic. Tangible results can be easily replicated as this is a proven technology that has simply not yet been implemented in the U.S. It is a sustainable action as its benefits will accrue on an ongoing basis once implemented.

**Cohesiveness:**

The subject application naturally addresses other regional objectives including environmental sustainability, innovative urban design, and government infrastructure investments by the outcomes of its implementation. It links to the other regional objectives including collaborative governance, an innovative economy, and social inclusion by providing improving a vital municipal service while accomplishing environmental, fiscal and design opportunities shared by most regions.

**Replicability:**

Perhaps the most important aspect of the topic is that it can be easily replicated across all regions and municipal jurisdictions of the U.S. Whether the application is simply more standard energy efficient streetlamps, LEDs or a combination of both through incorporation within a managed streetlight system, the energy, dollar, and CO2 emission savings are a common sense win-win for all involved.