



# Green Cities 2013

*U.S. Expert Biographies*



**Ed Ebrahimian** is the Director of the Bureau of Street Lighting in the Department of Public Works, City of Los Angeles. Ebrahimian has more than 26 years of experience in the Bureau of Street Lighting and oversees and manages all policies, programs, and activities of the Bureau. The City of Los Angeles has the 2nd largest municipal street lighting system in the United States with over 200,000 streetlights. This system provides illumination to more than 4,500 miles of streets.



**Joe Paulson** has been the City of Boulder, Colorado's Transportation Engineer: Signals & Lighting since 1990. Paulson oversaw the conversion of Boulder's traffic signal lamps from incandescent to LED technology, a conversion that reduced traffic signal energy consumption by close to 90%. Paulson is now working on the first LED street lighting project in Boulder, including a wireless monitoring and control system.



**Ben Goldstein** is a Management Analyst in the Westminster, Colorado City Manager's Office. Goldstein leads an inter-departmental team to evaluate and transition to more efficient street lighting to reduce the nearly \$2.5 million spent annually on street lighting energy and maintenance. This effort includes the installation of LED street lighting demonstration sites throughout Westminster, the development of street lighting design guidelines, and the implementation of new energy rates with the local utility.



**Michael Barber** is a co-founder of Continuum Industries, an energy efficiency development company that works with utilities, cities, and military facilities. Barber was formerly the Outdoor Lighting Program Manager and Resource Efficiency Coordinator in the Mayor's Office of Anchorage, Alaska. He was the project manager for Anchorage's LED roadway replacement program, the first of its kind in the United States. When not working on lighting efficiency projects, Michael is a research economist for renewable energy projects in Alaska.



**Nancy E. Clanton** is founder and President of Clanton & Associates, a lighting design firm specializing in sustainable design. Clanton was a topic editor for the Illuminating Engineering Society's (IES) Lighting 9th Edition Handbook and her committee was responsible for the production of the IES Recommended Practice on Lighting for the Exterior Environment. She was the lighting group leader for the Greening of the White House project, and led the lighting workshops for the C40 conference in Seoul.



**Dr. Ron Gibbons** is the Director of the Center for Infrastructure Based Safety Systems at the Virginia Tech Transportation Institute (VTTI). Dr. Gibbons is responsible for lighting and visibility associated research projects and projects that consider roadway safety as they relate to lighting. He is currently the principle investigator on a project designed to develop a method for applying adaptive lighting to roadway lighting and to establish the potential benefit of the spectral components of a light source. He is a past president of the Illuminating Engineering Society of North America.



**Robert (Bob) Doherty** has been the Chief Financial Officer of Ensyn Corporation, since May 3, 2013 as well as a partner at Renova Capital Partners. He has over 20 years of senior investment banking experience, and during his career, has structured or advised on over \$25 billion worth of infrastructure and municipal transactions. Prior to joining Ensyn, Doherty worked for Renova Capital Partners, a Denver-based investment firm founded in 2007 to develop, own, and aggregate clean energy infrastructure assets. Ensyn, Doherty's current company, is a producer of renewable fuels.