



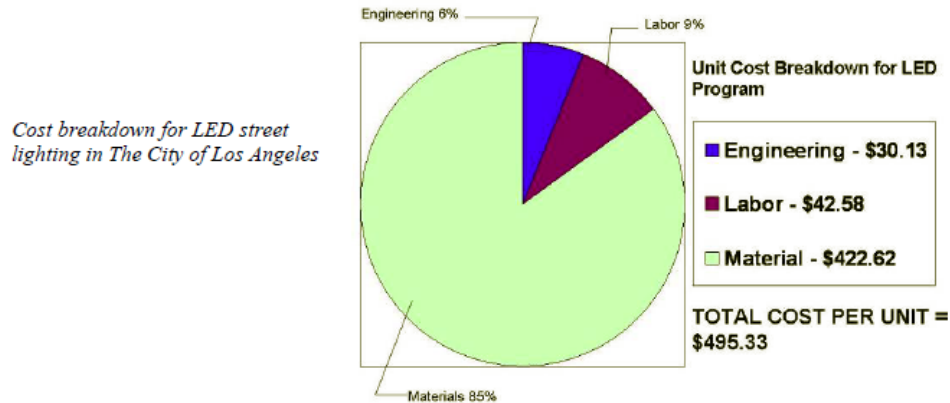
2010 DOE Solid-State Lighting
MARKET INTRODUCTION WORKSHOP
July 20–22, 2010 • Philadelphia, Pennsylvania

SSL MARKET INTRODUCTION WORKSHOP REPORT

Solid-State Lighting Portfolio
Building Technologies Program
Office of Energy Efficiency and Renewable Energy
U.S. Department of Energy

October 2010

Ed Ebrahimiyan of The City of Los Angeles described his city's experience with selecting and installing LED street lighting to replace the incumbent technology, which primarily consists of high-pressure sodium (HPS). He explained that 20,000 LED street lights are already installed, with another 120,000 to be installed over the next four years. Ebrahimiyan noted that not all manufacturer claims are true. He also observed that the change from HPS to LED luminaires not only improved visibility, but was perceived by end-users to significantly increase lighting levels, even though this was not actually the case. Ebrahimiyan said the LED luminaires have better uniformity than HPS, bring energy savings of 55 percent, and have garnered mostly positive feedback.



Lighting designer Frank Florentine described a project installing LED lighting in a 5,000-square-foot gallery in the Steven F. Udvar-Hazy Center (National Air and Space Museum) to replace the incumbent standard mercury units. He reviewed the advantages of LED fixtures in that setting, including energy efficiency, ease of installation, lighter weight, a multi-tap ballast, and instant on and off. Florentine noted that the energy savings from switching to SSL ranged from 76 percent for 2-x-2' drop-ins to 40 percent for PAR 36 and track lighting, with less ultraviolet light emitted and higher illumination levels.



An attendee questions members of Panel 4 (from left): moderator Bruce Kinzey, PNNL; Harry Hobbs, InterContinental San Francisco; Ed Ebrahimiyan, The City of Los Angeles; Lighting designer Frank Florentine

Question-and-Answer Session

Ebrahimiyan was asked about utilizing remote dimming, and he said Los Angeles has plans to install within the next several months dimmable fixtures or drivers that can be controlled by remote monitoring units. "It's an opportunity we don't want to miss," he said. Hobbs was asked