

Maryland State Highway Administration

Statewide Maryland



Annual Energy and
Operational Savings
over \$2.1 Million

Project Background

The Maryland State Highway Administration's (SHA) primary mission to efficiently provide mobility for all Marylanders is supported by 7 district offices located statewide.

The SHA selected Energy Systems Group (ESG), a specialized energy services and performance contracting company (ESCO), to complete over \$24.3 million of critical infrastructure upgrades and comprehensive energy efficiency improvements, statewide, to 604 buildings (2,505,976 square feet) and 8,604 sign lights. These measures and improvements will reduce the energy usage in these facilities by 12% with annual energy savings of about \$1.9 million and annual operational maintenance savings of over \$270,000.

The SHA-ESG partnership further advances the environmental stewardship of the Maryland Department of Transportation, a participating agency of the Maryland Smart, Green & Growing initiative. Introduced by Governor Martin O'Malley in October 2008, it was created to strengthen the state's leadership role in fostering smarter, more sustainable growth and inspiring action among all Marylanders to achieve a more sustainable future. The initiative brings together state agencies, local governments, businesses and citizens to create more livable communities, improve transportation options, reduce the state's carbon footprint, support resource based industry, invest in green technologies, preserve valuable resource lands and restore the health of the Chesapeake Bay.

Strategies & Solutions

The energy conservation measures and infrastructure improvements developed by ESG include the following:

- Interior and Exterior Lighting Systems Upgrades
- Building Envelope Improvements
- Boiler replacements
- Installation of a new chiller condenser and multiple other upgrades and improvements to the mechanical systems and controls
- Automated Energy Management System
- Replacement of 8,604 sign lights with long-life LED lights

Environmental Benefits

This sustainable project will reduce the SHA's carbon footprint by more than 14,360 tons of carbon dioxide and will provide annual environmental benefits equivalent to the removal of emissions from more than 2,380 cars or generating enough electricity to power more than 1,800 homes.

