Sustainable Transportation Case Study:

Los Angeles Metro

Summary:
Los Angeles, California, while often considered the poster child of transportation-induced smog, is also home to several promising sustainable transportation initiatives, in part spurred by the environmental challenges of this mountain ringed metropolis. Metro, the public transportation provider, opened one of the United States’ first full featured bus rapid transit (BRT) systems, the Metro Orange Line, in 2005; the Orange Line is exceeding ridership projections, reducing travel times, easing congestion, and attracting people out of their cars – thus reducing regional emissions. Metro also plans, funds, and coordinates an extensive bike network and allows bikes on its trains and buses. Metro was the first transit agency in the U.S. to use compressed natural gas (CNG) buses on a massive scale, dramatically reducing criteria pollutant emissions. In 2009, Metro won a competitive grant award from FTA under the Transit Investments Generating Greenhouse Gas and Energy Reduction (TIGGER) program to install in its subway system a wayside energy storage substation that captures regenerative braking energy, electrify its CNG systems, and expand its CNG bus fleet. Metro is also reducing its environmental impact through the development of comprehensive environmental and sustainability policies, signing the APTA Sustainability Commitment, and participating in the implementation of an FTA sponsored Environmental Management System.
Results:

- Transitioning to a CNG bus fleet reduced Metro’s criteria pollutant emissions by 98%.
- Opening year ridership on Metro Orange Line was three times higher than expected.
- Full implementation of an agency-wide sustainability program that encourages the use of transit and the use of sustainability strategies in capital projects to reduce personal and facility carbon footprint.

Next Steps:
The Orange Line is just one part of Metro’s plan for Sustainable Mobility Corridors and Transit Boulevards, which optimize the transportation services in a corridor to increase person and goods throughput, safety, and security while reducing energy and emissions. A north-south extension is currently being built; the Metro Gold Line Eastside Extension was recently opened; and other transit expansions include the Exposition Line, Red Line Westside Extension, and Wilshire Boulevard Dedicated Bus Lane. Following up on Metro’s existing two megawatts of installed solar power, Metro is considering growing its renewable energy generation. Metro will expand its Environmental Management System agency-wide with plans of obtaining ISO 14001 certification. Bike studies are also underway in support of FTA’s livability initiative.

Links:

