

Hot in-place recycling helps the combined City and County of Denver meet its sustainability goals while lowering energy requirements and extending pavement life. The City of Denver is increasing its use of hot in-place recycling in order to meet their own sustainability criteria, in terms of the amount of material recycled, and cumulative emissions as opposed to other conventional maintenance methods.

#### BACKSTORY:

In November of 2007 the City and County of Denver passed a property tax increase that was dedicated to the maintenance of existing of existing infrastructure. It increased the street resurfacing program by about \$6 million which translated into an increase in the hot in-place program.

#### PROBLEM:

An extensive pavement management program determined that the street maintenance division needed to increase its resurfacing efforts substantially in order to maintain the quality of the 1,800 centerline miles of roads within the network.

#### SOLUTION:

By working with Cutler Repaving's hot in-place process, Denver initiated yet another strategy to extend the life cycle of many roads which would have been targeted for mill and overlay at a much higher cost. The City estimates saving 30 percent by using the hot in-place process over the conventional 2 inch mill and overlay approach.

#### PHOTOS:



One third the cost of a conventional mill and fill treatment



37 percent reduction in energy using HIR vs conventional mill and overlay



The resulting finished pavement is 60% recycled material, culminating in a 40 percent materials savings.



Cutler Repaving's single pass recycling process completes the recycling and resurfacing simultaneously, thereby minimizing delay and inconvenience to the traveling public.



New hot mix asphalt produced in Denver's own hot mix plant is delivered to the Cutler Repaving equipment.