

Lasting Impressions

Enlightened agencies evaluate more than just first costs in highway, roadway selections.

It's an all-too familiar story for all too many of the traveling public. Sensing a way to make limited dollars go farther, many state and local agencies of the past turned to asphalt, thinking that its initial price tag would make it the best choice for highways and roadways.

The sobering news is that asphalt was rarely cheaper than concrete pavement in the long term. Now, because of rising oil prices, the initial costs of an asphalt pavement are often higher than an equivalent concrete pavement.

Bad News is Getting Worse

Let's face it—America's highways and roadways are getting more congested and are crumbling because there's not enough funding to expand the system to meet drivers' demands.

As a result, state and local agencies are spending dollars and time just trying to keep up with maintenance and repairs.

If this weren't bad enough, the bad news continues to get worse every time the price of oil increases. Rising oil prices mean higher prices for asphalt, a byproduct of crude oil production.

Many agencies are reporting they're able to do even less repair and maintenance than before. The net effect? More traffic jams, no relief from dangerous driving conditions, and more vehicle repairs.



"Poor road conditions cost U.S. motorists \$54 billion per year in repairs and operating cost—\$275 per motorist."

- ASCE Infrastructure Report Card 2005

Motorists beware ... Rising oil prices are making asphalt road repairs and maintenance even more expensive. As a result, many agencies are being forced to cut vital road repair programs.

Simple truths about life-cycle cests

Picture this: Two roadways are built with 40year design lives.

An asphalt road requires maintenance every 2 to 4 years and resurfacing every 8 to 14 years.

The concrete road is requires relatively little maintenance. Depending on usage, it may

require some minor rehab every 12 to 16 years, but won't need to be resurfaced for 30, 40, or even 50 years.

Over time, the average asphalt pavement can cost up to 3 times more than an equivalent concrete pavement. Rising crude oil and asphalt prices will make an asphalt pavement's "life cycle" cost even greater, and more unpredictable.



Concrete Pavements - Small arrows indicates rehab at about 12-16 year increments. Large arrow indicates replacement at 30-40 years. Illustration is for example only and is not to scale.

Asphalt Pavements - Small arrows indicates maintenance every 2-4 years. Large arrows indicate resurfacing at 8-14 years. Illustration is for example only and is not to scale.

There is a Better Way

There is a better way, which is simply to build highways and roadways right the first time. Concrete pavements have historically provided the best value over time, because they require far less maintenance and fewer repairs than asphalt. Now, with the skyrocketing cost of asphalt oil, both the initial costs and the costs of the roadway over time are lower with concrete pavement than asphalt.

The secret to holding down road construction and rehab costs can be found with an economic analysis tool known as life-cycle cost analysis (LCCA). LCCA compares the true costs of asphalt and concrete pavement. not just on initial cost, but over the life of the pavement.

You do have a choice! Ask your local agency to use concrete pavements, which have long been the longest lasting pavement choice, which provides the greatest value over time.

Perhaps the roadways you rely on most will be among the many examples of concrete pavements that are still carrying people where they need to be ... for 30, 40, and even 50 years!



