

# LCCAEXPRESS SOFTWARE

Asphalt.

## QUICK, EASY, AND UNBIASED

New software called LCCAExpress is making life easier for engineers who perform life-cycle cost analysis (LCCA) for pavements. The new software, available free from the Asphalt Pavement Alliance (APA), uses the principles recommended by the Federal Highway Administration (FHWA) to compare the economics of alternative designs for a given road project.

LCCAExpress is a simplified version of the APA's original LCCA software. Geared to less-complex projects, it's quick and easy to use. Beyond ease of use, it's important that it is based on the standard principles set out by FHWA. LCCAExpress is unbiased and reliable.

Download LCCAExpress for free at [AsphaltRoads.org](http://AsphaltRoads.org). While you're there, note that the original LCCA software is still available for more-complex projects.



» Asphalt Pavement Alliance  
[AsphaltRoads.org](http://AsphaltRoads.org)

## THREE EASY STEPS TO GOOD LCCA ANALYSIS

### 1. Discount Rate: The Real Deal

While some have argued in favor of a negative discount rate, the APA points out that the time value of money doesn't work that way. A 2010 dollar is inevitably worth more than a 2030 dollar, or a 2050 dollar. Accordingly, LCCAExpress uses a real discount rate, based on published information from the U.S. government's Office of Management and Budget.

### 2. Inputs: Use Real Information

Inputs should come from relevant, historical data on previously bid projects of a comparable scale for a given location. Pavement performance periods (initial, rehabilitation, overlay, etc.) should be determined based on pavement data and historical experience. Don't let promoters tell you what data to use – get it from the historical records.

### 3. Include All the Costs:

Life-cycle cost analysis should look at initial costs and discounted future costs. Future costs include maintenance, reconstruction, rehabilitation, restoration, and resurfacing over the life of the project. And don't forget to factor in user delay. Even though not borne directly by the agency, user delay costs are real; they reflect the cost of construction delays incurred by the public.

# ASPHALT PAVEMENTS YOUR BEST INVESTMENT

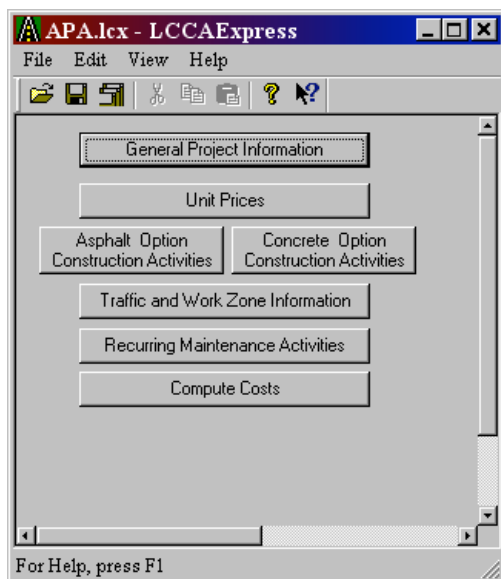
We are all taxpayers and the responsibility lies with each generation to invest wisely in our infrastructure. Smooth, durable, safe, quiet pavements constructed with asphalt stand up to the punishment of heavy trucks and other vehicles, significantly reducing initial and total costs over the entire life cycle of a road.

With asphalt pavements, initial construction, maintenance, and rehabilitation all cost less. And, user delay costs are far less with asphalt because construction, maintenance, and rehabilitation are quicker and can be accomplished in off-peak hours.

When maintenance is needed, asphalt offers the widest variety of alternatives geared to solve the precise problems on the roadway. Asphalt parking lots, runways, and roadways can be repaired and maintained cost-effectively with overlays rather than a costly removal and reconstruction. Overlays also have the benefit of adding structural capacity to accommodate increased traffic loading.

Asphalt conserves precious natural resources, too. Asphalt can be reused and recycled, saving dollars and preserving nonrenewable natural resources. There are over 18 billion tons of asphalt pavement in place on America's roads today. This material is a resource that our children's children will be able to use for the infrastructure of tomorrow.

## TRY LCCAEXPRESS TODAY



## REFERENCE

For background information on the discount rate, how it works, and what value should be used in life-cycle cost analysis, consult Circular No. A-94 from the White House Office of Management and Budget.  
[www.whitehouse.gov/omb/rewrite/circulars/a094/a094.html](http://www.whitehouse.gov/omb/rewrite/circulars/a094/a094.html)