LONGER LIFE PAVEMENTS

Lower costs, reduced environmental impacts, and positive social benefits

The design lives of longer life pavements may range from 30 to more than 60 years for both asphalt and concrete pavements. Longer life pavements are generally justified for higher volume facilities and may afford the opportunity to reduce life-cycle costs, user costs, and environmental impacts as compared to conventional pavement designs.

ECONOMIC

Reduced pavement life-cycle costs

ENVIRONMENTAL

Reduced waste from fewer rehabilitations

Reduced impact to surrounding ecosystems

Reduced energy usage

SOCIAL

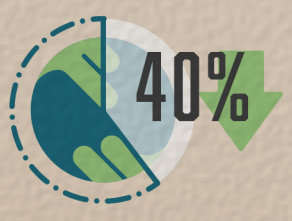
Improved safety and ride quality

Reduced disruptions to traveling public

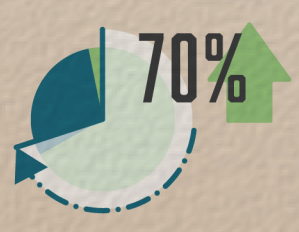
CASE STUDIES

MINNESOTA

Long-Life Concrete Pavement*



40% reduction in ozone depletion potential and smog formation compared to conventional MnDOT concrete pavement designs



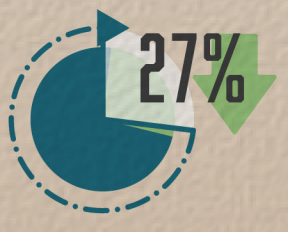
70% increase in service life with modest 5% increase in initial cost compared to conventional MnDOT concrete pavement designs

*learn more about the Minnesota DOT long-life concrete pavement on I-94

IOWA

Perpetual Asphalt Pavement*

20% reduction in ozone depletion potential and smog formation compared to conventional asphalt pavement



27% reduction in life-cycle cost compared to conventional asphalt pavement

*learn more about the Iowa DOT perpetual asphalt pavement project on State Highway 100

SUSTAINABLE PAVEMENTS PROGRAM

U.S. Department of Transportation
Federal Highway Administration

www.fhwa.dot.gov/pavement/sustainability