

Concrete vs. Asphalt

Presented by Concrete Paving Association of Minnesota

Following are the benefits of concrete which may surprise you!



Concrete costs less in the long run

- ▶ Federally funded studies show that concrete Interstate pavements cost 13–28% less in the long run than asphalt Interstate pavements.
 - ▶ Recent U of M studies in Olmsted and Waseca counties show that the use of concrete pavement saved up to 19% in the long run over the cost of using and maintaining similar asphalt roads.
 - ▶ The same studies shows that maintenance costs were reduced 75% when concrete was used to pave roads in these counties.
- ▶ Advancements in concrete technology have reduced the cost of concrete paving while improving performance greatly; advancements in asphalt technology (so-called "SuperPave" mixtures) have increased paving costs significantly (even before considering skyrocketing oil prices) with only modest increases in performance.

Concrete lasts longer with less need for maintenance and repair

- ▶ No potholes – so concrete pavements stay smoother longer.
- ▶ No ruts form to fill with water and cause wet weather accidents. Fewer traffic interruptions for repair and maintenance.
- ▶ Mn/DOT reports that the average life expectancy of their concrete pavements is 27.5 years before repair while asphalt pavements have an average life expectancy of only 15.5 years before repair.
- ▶ Federally funded studies show that concrete Interstate highways around the U.S. last about 2.5 times longer on average than asphalt Interstate highways.
- ▶ New Minnesota concrete pavement designs are expected to last for 60+ years with minimal maintenance.

Concrete costs less for users, too

- ▶ Heavy trucks get up to 20% better mileage on concrete.
- ▶ Better long-term performance means fewer interruptions and lower user costs.
- ▶ Concrete roads are not subject to spring load restrictions that increase the number of truck trips or driving distances.

Concrete is quiet

► After years of testing and research, Mn/DOT has adopted concrete paving designs and techniques that make concrete roads as quiet as most asphalt roads, while maintaining superior skid resistance.

Concrete is safer

- Concrete provides better and longer lasting skid resistance.
- No rutting or potholes to cause loss of vehicle control.
- Concrete offers better visibility on rainy nights.
- Concrete is generally less slippery in wet weather.

Concrete is environmentally friendly

- Concrete is completely recyclable.
- Concrete doesn't release odorous petroleum products into the air.
- Concrete conserves oil, which is used to produce asphalt pavements.
- Replacing asphalt pavements with concrete can help to lower summertime temperatures.
- Concrete reflects sunlight instead of absorbing it.
- The "heat island" effect seen in large cities has been attributed, in part, to the use of asphalt pavements.

Concrete is aesthetically pleasing

- Concrete pavements have a clean appearance and brighten neighborhoods, both day and night!
- Concrete can be colored and textured to produce attractive designs and patterns

For more information and resources, please visit us at <http://www.concreteisbetter.com>