

Dakota Asphalt Pavement Ass

on Interstate 29 north of Beresford, SD, on Interstate 94 between Beach, ND and Dickinson, ND and on US Highway 14/281 north of Wolsey, SD, to name a few.

Economics

Asphalt is the most economical choice for pavements. Both for initial construction and over the long haul, asphalt pavements cost less.

1. ***Perpetual Pavements constructed of asphalt can last indefinitely.***
Perpetual Pavements are constructed in layers that are designed to limit distress to the surface, so that routine maintenance is a simple matter of infrequent milling followed by an overlay. The material that is reclaimed is reused or recycled. A Perpetual Pavement never needs to be removed and replaced. A Perpetual Pavement is there for a lifetime, making it the most economical choice.
2. ***Asphalt pavements offer the lowest life-cycle cost.*** Studies around the United States have validated that asphalt pavements are both less costly to construct initially and less costly to maintain. Properly designed and constructed asphalt pavements have lasted well beyond their expected lives and have carried far more traffic than ever expected, with minimal routine maintenance. A new asphalt pavement can be expected to last 15 to 20 years or more before needing maintenance. When maintenance and rehabilitation are needed, the process is economical, fast and simple.
3. ***Hedging against inflation.*** Because asphalt is 100 percent recyclable, existing asphalt pavements constitute a treasury of material. Both the asphalt cement and the aggregate in RAP can be swapped one for one, allowing for maximum economic benefit. RAP retains both its glue-like properties and its aggregate properties when reused in new asphalt mix. Reincorporating RAP into new asphalt mitigates construction inflation and maintains agencies' buying power.

Performance

Smoothness: Smoother roads, regardless of the type of surface, are more comfortable for the traveling public. What's even more important is that they *conserve fuel, save money, and contribute to sustainability.*

Conserving fuel: A study at a test track in Nevada showed that trucks driving on smooth pavements consume 4.5 to 5 percent less fuel.

Saving money: Driving on substandard roads causes maintenance problems for vehicles. These costs are estimated by a nonprofit research institute at \$65 billion a year, or \$413 per urban motorist.

Contributing to sustainability: When trucks drive on rough roads, their tires bounce on the pavement, delivering impact loadings that cause roads to deteriorate prematurely. Smoothness makes a pavement last longer; long life is one reason that asphalt is the choice for pavements that are both economically and environmentally sustainable. Asphalt roads tend to be smoother than all pavement alternatives, both when newly constructed and years later.

Speed of Construction and Ease of Maintenance

No pavement will last forever without maintenance. Once roads are in place, taking them out of service for rehabilitation causes delays and difficulties. Therefore it makes sense to construct them out of a material that can be maintained and rehabilitated with minimum inconvenience to the traveling public.

- 1. Construction is faster with asphalt.*** Newly constructed asphalt pavements can be opened to traffic as soon as they have been compacted and cooled, without curing time.
- 2. With asphalt, maintenance and rehabilitation can be accomplished in off-peak hours.*** Sometimes, commuters never see an orange barrel; they find out about roadwork when they drive on a new, smooth, quiet pavement the next day.

Conclusion

The Dakota Asphalt Pavement Association is committed to working with public agencies and customers at all levels to provide the best possible value for building and maintaining America's property, roads and highways. When considering whether to choose asphalt for new construction, we encourage specifiers and consumers to consider the most economical use of their or the taxpayers' money and rely on the expertise in our communities in accordance with our mission, "*Quality Asphalt Pavement through Education, Research and Training*".