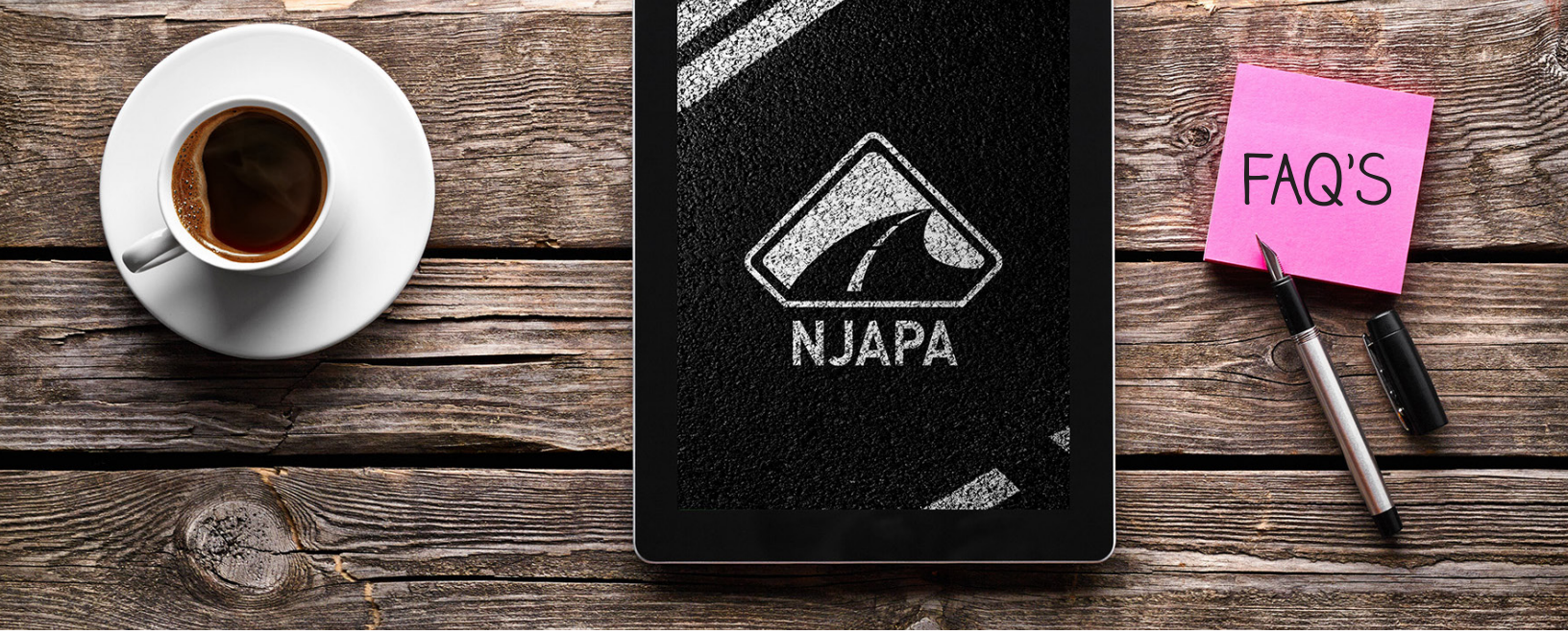


Q What is Pavement Preservation ?

A Pavement preservation is a strategy to enhance pavement performance by extending the life of existing pavements, improving safety, and meeting user expectations.

Q What are the various Pavement Preservation Options?

A While there are a variety of asphalt pavement options, the primary pavement preservation choices are:

- ThinlaysTM - ThinlaysTM are hot mix asphalt pavements that are placed in a thin overlay of less than 1.5 inches. They can be placed as thin as 5/8 of an inch, and are typically ¾ to 1 inch thick.
- Micro-Surfacing – Micro-Surfacing is a technique where asphalt binder and aggregate are sprayed onto an existing pavement. Micro-Surfacing is placed at less than 3/8".
- Slurry Seal – Slurry Seal is another technique where asphalt binder and aggregate are sprayed onto an existing pavement. Slurry Seal is placed at less than ¼".
- Chip Seal and Cape Seal – Chip Seal and Cape Seal are techniques similar to Micro-Surfacing. Chip Seal is a technique where asphalt binder is sprayed onto an existing road surface and fine aggregate is immediately placed on top of it. Cape Seal is a technique where a Chip Seal is overlayed with a Micro-Surfacing treatment

Q When should I choose each option?

A Pavement preservation is best done when you choose the right treatment for the right road at the right time. It is important to know the condition of your road before deciding which treatment is the right one. Pavements that are not displaying any distress are candidates for slurry seal, micro-surfacing, and chip / cape seals. Distressed pavements, provided the distress is not major, are candidates for ThinlaysTM. Even severely distressed pavements can be preserved with ThinlaysTM - these would require milling to remove the distressed material first.

Q What option is most cost effective?

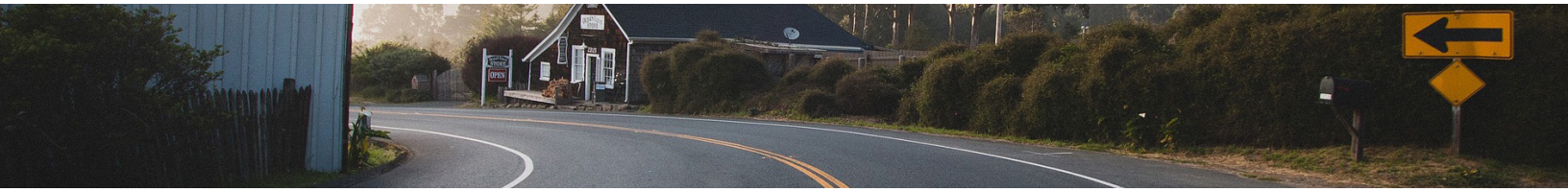
A Studies show that ThinlaysTM, including Ultra-Thin Friction Course and High Performance Thin Overlays have the lowest overall annual cost. UTFC and HPTO each have an annual cost per lane mile which is lower than both Micro-Surfacing and Slurry Seal.

Q What option is best to improve ride quality?

A Ride quality is measured by the International Roughness Index, or IRI. ThinlaysTM provide an average improvement to pavement smoothness of 18%-36%. Micro-Surfacing and Slurry Seal teatments will typically improve smoothness by less than 10% and often will provide no improvement.

Q Are there safety issues I should consider?

A Professional Engineers often consider the Skid Resistance of a roadway as an important safety factor. ThinlaysTM have been shown to be skid resistant. While Micro-Surfacing and Slurry Seals can also provide improved skid resistance, the roughness of these surfaces is noisier and less pedestrian-friendly.



Q **What option is best for residential areas where noise may be a concern?**

A Noise surveys of various pavement treatments have indicated that ThinlaysTM treatments have the lowest level of On Board Sound Intensity, which measures the noise level inside a vehicle. Traditional Hot Mix Asphalt provides only slightly higher noise readings while Micro-Surface and Slurry Treatments have been proven to be significantly louder.

Q **I care about the environment, are any of these options environmentally friendly and sustainable?**

A Thinlays™ use 100% recycled/recyclable materials for environmental sustainability.

Q **What do the experts think about Pavement Preservation?**

A "...thin overlays and chip seals have superior performance, compared to slurry seal and crack seal." FHWA Tech Brief (FHWA-HRT-11-049)

"The immediate benefit to ride quality ranges from an 18 to a 36% decrease in International Roughness Index (IRI), a 5 to 55% reduction in rut depth, and a 1 to 10% improvement in the pavement surface condition rating." Analysis of Long-Term Effectiveness of Thin Hot-Mix Asphaltic Concrete Overlay Treatments (Transportation Research Record No. 1940)

"It is significant to note that the Minnesota Department of Transportation received the Asphalt Pavement Alliance Perpetual Pavement Award three years in a row from 2002 through 2004, and that in each of these pavements, thin overlays played a vital role in ensuring the longevity of the pavement structure." Thin Asphalt Overlays for Pavement Preservation (NAPA Information Series 135)

Q **Where can I get more information ?**

A New Jersey Asphalt Pavement Association
njapa.com

National Asphalt Pavement Association
asphaltpavement.org

Thinlays™ Position Paper SR-210

Thinlays™ Information Series 135

Federal Highway Administration (Tech Brief)

International Slurry Surfacing Association
slurry.org

Pavement Preservation and Recycling Alliance
ppralliance.org