How LTAP Can Help

In conjunction with offering our **Roads Scholar #7: Pavement Preservation & Road Surface Management** course, LTAP is able to provide supplemental technical assistance, including:

- Presenting to elected officials on the importance of pavement management;
- Providing on-site technical assistance to interested agencies (e.g., on conditional evaluation and treatment selection);
- Conducting a mini-workshop focused on how to start a pavement management program; and
- Other requests (upon review).

Interested local agencies will need to request the above assistance – by either filling out the corresponding form (QR code below) or directly contacting LTAP (contact information on back).

LTAP is part of the

Louisiana Transportation Research Center (LTRC)

A joint venture of the Federal Highway Administration (FHWA), Louisiana Department of Transportation & Development (DOTD), and Louisiana State University (LSU)

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PAVEMENT PRESERVATION & ROAD SURFACE MANAGEMENT

A Brief Summary

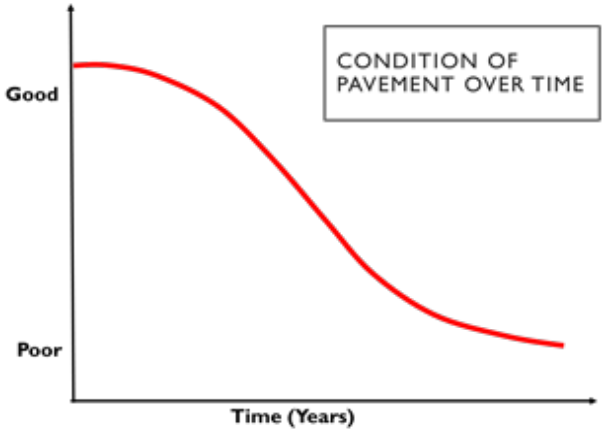
If your local public agency is like most others, there are always more roads/streets that need repairing than available funding to do so.

Is there a way to stretch your agency's limited budget to make it go further, while at the same time improving the overall condition of your road or street system?
Fortunately, there is – it's called pavement preservation and management.

This brochure provides a high-level summary of pavement preservation, its main benefits, and how the Louisiana Local Technical Assistance Program (LTAP) can help agencies develop a program.

Pavements Deteriorate

As the graph below demonstrates, asphalt pavements naturally deteriorate over time. This is due to a combination of traffic loads, environmental effects (e.g., temperature changes and rainfall), and the aging process.



Traditional Approach

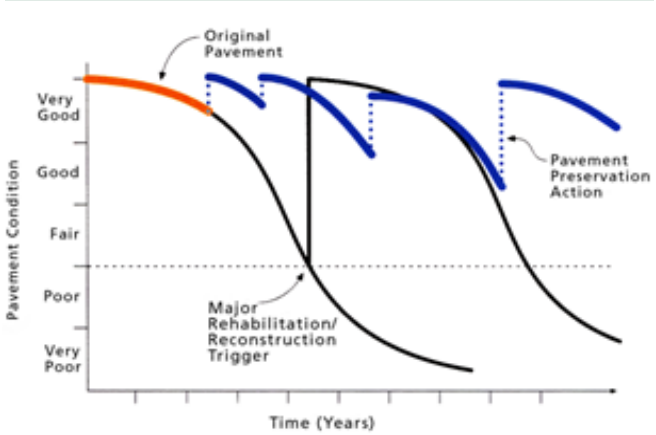
Traditionally, local agencies allowed the structural condition of roadways to deteriorate substantially before taking preventative action. This is termed as the "worst-first" approach – and prioritizes failed pavements, and as such, expensive treatments. Projects using this approach require extensive planning, significant structural treatment, major disruptions to traffic and utilities, and much higher costs. Simply, this approach is not sustainable – as the overall value of the road network will decline more per year than the money allocated for such projects.

Pavement Preservation

Pavement preservation keeps good roads in good condition, rather than allowing them to fully deteriorate through their life cycle. The focus is on strategies that preserve and maintain existing good and fair roads, extending their life span at less cost than traditional approaches.

Pavement preservation treatments include chip seals, slurry seals, hot mix asphalt (HMA) overlays, and crack seals, among others. These treatments can be applied to a road segment quickly, relative to major rehabilitation or reconstruction. Pavement preservation provides its best return when roads are in better condition (i.e., low-good and high-fair conditions) – and applies a "mix of fixes" approach. In fact, **the key to successful pavement preservation is choosing the right treatment for the right road, at the right time.**

As shown in the graph below, successive pavement preservation treatments (in blue) maintain the road at "good" levels, extending the road's useful life.



Benefits

The main benefits of pavement preservation are summarized as:

- **Savings**—improved performance and fewer failures keep a pavement network in a state of good repair at a lower cost;
- **Performance**—treatments contribute to improved pavement performance, providing smoother and safer roads;
- **Flexibility**—retaining a mix of successful treatments in the toolbox provides agen-cies greater flexibility in placing the right treatment on the right pavement at the right time; and
- **Safety**—treatments are typically installed in shorter work zones and during off-peak hours, reducing the likelihood of incidents, and improved skid resistance is a key benefit of preservation.

Obstacles

Typical obstacles of implementing a pavement preservation program include:

- "We've always done it this way".
- Treatments may be perceived as "wasting money".
- Past, similar treatments have resulted in poor performance.
- Lack of local agency expertise.
- Simply, treatments are not a priority, not "headline material".