

PAVEMENT TYPE SELECTION

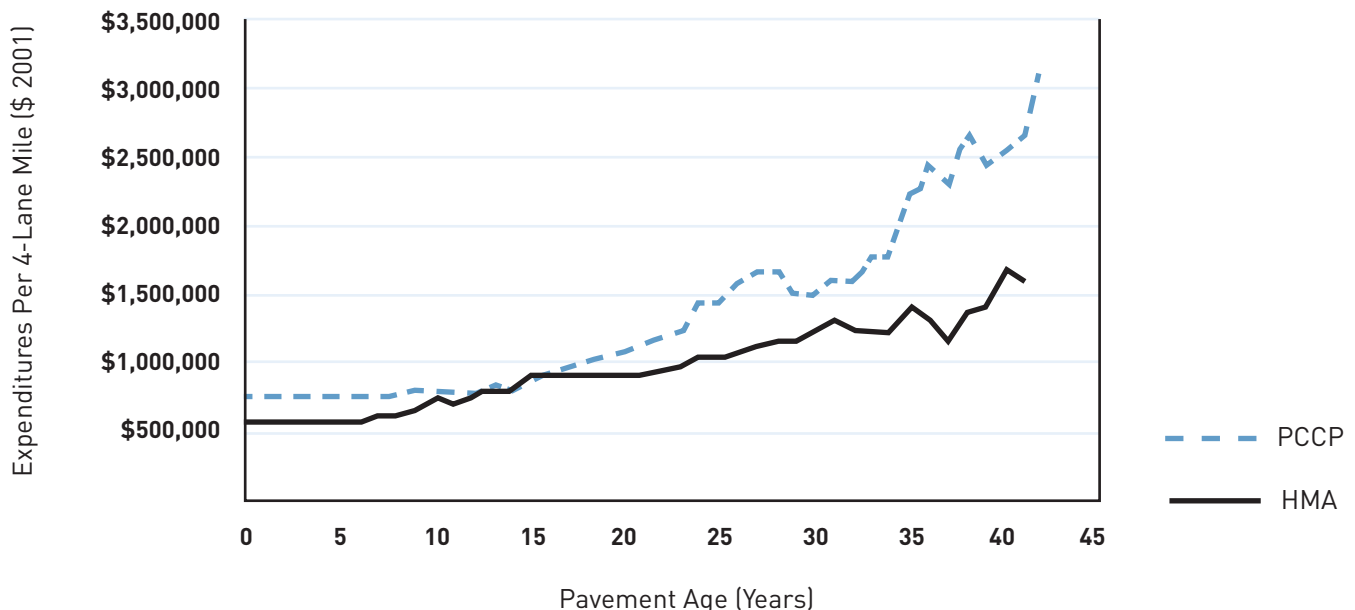
A Position Paper — Executive Summary

In making a decision concerning the type of pavement to use on a roadway, an agency is obligated to get the best value for the taxpayers. This is especially true in an era when so many agencies are facing severely constrained budgets. It is up to the contractors to provide the pavement that gives the best possible performance at the lowest possible price. Thus, pavement type selection should be focused on delivering the best value for the public, not on industry interests.

A Pavement Type Selection position paper was prepared by the Asphalt Pavement Alliance, and it is available at AsphaltRoads.org. The primary considerations in pavement type selection are discussed in the full document including traffic, soil characteristics, climate, recycling, costs, sustainability, and more.

In order to accomplish this, the system used to select pavement type should be objective, defensible, understandable, based on historical records, primarily driven by economics, and periodically reviewed. It is important that the timing and rehabilitation needs of different pavement types should be based on historical records and periodically reviewed. For example, a 2001 study evaluated Kansas' rural interstate pavements data to help determine accurate inputs for the Kansas DOT's pavement type selection process. As shown in Figure 1, the life-cycle cost of hot-mix asphalt (HMA) pavements was about 50 percent of PCCP (Portland cement concrete pavements).

FIGURE 1: INFLATION ADJUSTED LIFE-CYCLE COST PERFORMANCE FOR KANSAS RURAL INTERSTATE PAVEMENTS
(REFERENCE: CROSS, STEPHEN A. AND ROBERT L. PARSONS. EVALUATION OF EXPENDITURES ON RURAL INTERSTATE PAVEMENTS IN KANSAS. 2001. UNIVERSITY OF KANSAS. LAWRENCE, KANSAS.)



Asphalt pavements offer several advantages to the public and agencies including:

- Asphalt is Flexible in Construction, Maintenance, and Rehabilitation
- Asphalt Offers Easy Maintenance and Rehabilitation
- Asphalt Pavements Last and Stay Smooth
- Asphalt is Used on All Types of Soils
- Asphalt Pavements Can Handle Heavy Loads
- Asphalt Pavements Can Be Designed for Any Weather
- Asphalt Pavements Offer Staging Options
- Asphalt Pavements Can Be Built Fast
- Asphalt Construction Timing Is a Matter of Flexibility
- Asphalt is America's Most Recycled Material
- Asphalt Pavements Use Other Reused/Recycled Materials to Enhance Performance
- Asphalt Pavements are Sustainable
- Asphalt Pavements are Quiet
- Asphalt Pavements Help Provide for Safety

Summary

Asphalt pavements offer many advantages to fiscally constrained agencies and the public. Among these are low life-cycle costs, flexibility and speed of construction, the ability to handle heavy loads, a long life, and complete recyclability. Furthermore, asphalt pavements allow an opportunity to reduce traffic noise at the source and improve ride quality. Asphalt pavements should be considered in every pavement type decision. The checklist shown may be used as a handy reference when considering the pavement type to be selected.

For the full Pavement Type Selection document or for more information, visit AsphaltRoads.org.

Pavement Type Selection Checklist

Consideration	Alt. 1	Alt. 2	Alt. 3	Alt. 4
Cost				
Initial				
Future				
User Delay				
Constructability				
Speed of Construction				
Timing of Work Zones				
Performance				
Frequency of Rehabilitation				
Ease of Rehabilitation				
Need for Reconstruction				
Sustainability				
Recyclability				
Carbon Footprint				
Conservation of Materials				
Other				
Noise				
Roughness				
Safety				

