

#### **ROADWAY SURFACING OPTIONS PHOTO ALBUM**

**Companion Document to Context Sensitive Roadway Surfacing Selection Guide** 

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Central Federal Lands Highway Division 12300 West Dakota Avenue Lakewood, CO 80228



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Companion Document to Context Sensitive Roadway Surfacing Selection Guide

**Title Page** 

Introduction

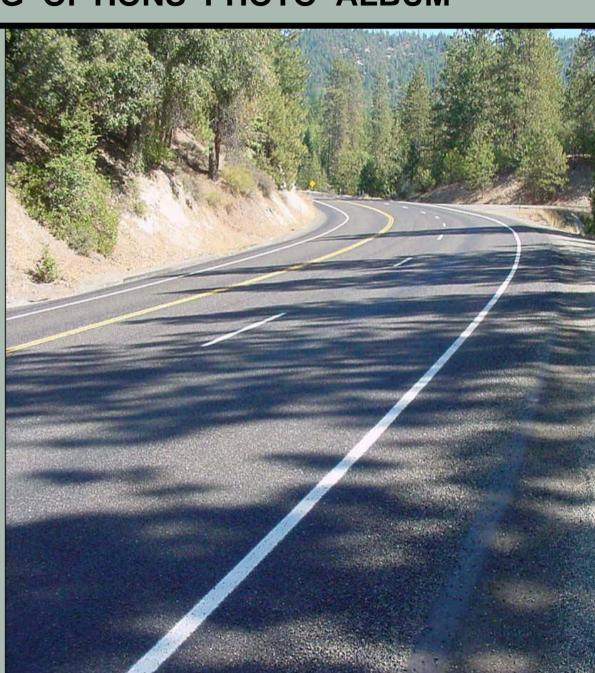
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#### INTRODUCTION

To address context sensitive concerns, the Federal Lands Highway (FLH) Division of the Federal Highway Administration (FHWA) has developed a selection process that includes consideration of environmental impacts, cultural sensitivity, and aesthetics in the selection of roadway surfacing while also facilitating the public consultation process. As a result, the selection process permits a balanced consideration of engineering and environmental factors and better ensures that the completed roadway enhances, or is, at least, compatible with, the surrounding landscape.

The FLH has developed a "Roadway Surfacing Options Photo Album" as a supplement to the "Context Sensitive Roadway Surfacing Selection Guide" (Guide). This album contains product descriptions, photographs, and presents some advantages and limitations for different roadway surfacing types. Additional information for each surfacing type can be found in the Guide. The Guide includes technical and design information for over 50 roadway surfacing options and a detailed description of the context sensitive surfacing selection process.

### **INTRODUCTION** (cont.)

Several assumptions were made in the summaries presented for each surfacing type. It is assumed that best design practices will be used and that certain common design elements will be part of the design. These design elements include: adequate surface and subsurface drainage provisions, structurally stable slopes and embankments, erosion control and shoulder treatments, provisions for cross-drainage and wildlife/fish passage structures, etc.

An estimate of how long the roadway will last under normal conditions has been provided. The life expectancy will vary depending on traffic volumes, in particular the percentage of heavy vehicles, climatic conditions, subgrade types, and level of preventative maintenance that is used. If the traffic volume exceeds the range provided for a particular surfacing type, the life expectancy may be significantly decreased, the road serviceability level may be reduced, or maintenance costs may be unacceptably high.

A unit price estimate has been provided for each roadway surfacing type. This price range is a "ballpark" number provided for preliminary cost comparisons between different surfacings. Prices can vary significantly with location, product availability, and project size. Local unit price estimates should be obtained during roadway planning and design. Prices included are based on Year 2004 estimates.

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#### **ACRONYMS**

AADT Average Annual Daily Traffic

CFLHD Central Federal Lands Highway
Division

CIR Cold In-Place Recycling

**CMAC** Cold Mix Asphalt Concrete

EFLHD Eastern Federal Lands Highway Division

FDR Full Depth Reclamation

FHWA Federal Highway Administration

FLH Federal Lands Highway

**HACP** Hot Asphalt Concrete

**Pavement** 

HIR Hot In-Place Recycling

OGFC Open Graded Friction Course

**PCC** Portland Cement Concrete

**PCCP** Portland Cement Concrete

**Pavement** 

**RAP** Reclaimed Asphalt Product

**RCA** Reclaimed Concrete Aggregate

**RCC** Roller Compacted Concrete

RMP Resin Modified Pavement

WFLHD Western Federal Lands

**Highway Division**