



TTAP Video Catalog  
Phone: 1-800-252-ROAD (inside TN)  
(865) 974-5255 (outside TN)  
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Email: [ttap@utk.edu](mailto:ttap@utk.edu)

## **TTAP Paving, Pavement, and Potholes Videos**

### ***Alkali-Silica Testing***

Strategic Highway Research Program 1994 20 minutes Video ID # 326

This program discusses alkali-silica reactivity (ASR), which is one of the major causes of cracking in concrete. The program covers ASR determination and prevention, as well as conventional and new testing methods.

### ***Asphalt Crack Treatment***

MN DOT / MN Local Roads 1993 15 minutes Video ID # 147

A road crew supervisor introduces asphalt crack treatment to his co-worker who has been leading up on the latest research on crack treatments. Explains the difference between sealing and filing. Shows equipment and discusses procedures.

### ***Asphalt Overlays: The Four P's***

MN DOT / MN Local Roads 1994 16 minutes Video ID # 125

Overlying can be a cost effective way of restoring a road's surface. Explains how to evaluate a road to see if overlays would effectively solve the road's problems. Pavement Management Systems are briefly explained.

### ***Asphalt Pavement Applications***

Transportation Information Exch. 1983 32 minutes Video ID # 129

Covers the highlights of surface treatment techniques. Details several types of techniques including, slurry seal, sand seal, and tack coat.

### ***Asphalt Pavement Inspection***

FHWA 60 minutes Video ID # 312

Provides information to contractors and maintenance crews needed to effectively inspect asphalt pavement operations. Discusses preliminary responsibilities of the inspector, the paving operation itself and various associated problems.

### ***Asphalt Pavement Rejuvenation***

Pavement Technology, Inc. 12 minutes Video ID # 243

Detailed promotional video on the make up of asphalt pavement, how it is produced and why it deteriorates. Outlines a chemical rejuvenation process that may be used to renew existing asphalt pavement.





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***Building the Notched Wedge Joint***

Nat'l Asphalt Paving Assoc. 1998 8 minutes Video ID # 246  
Outlines the benefits of using the notched wedge joint in asphalt paving applications as well as giving practical information on the paving process.

***Carbide Grinding***

Keystone Engineering 14 minutes Video ID # 247  
Promotional video showing the Keystone engineering carbide tipped pavement grinder. To increase slip resistance on roadways, small grooves are cut in the pavement. The Keystone system is compared to the diamond blade grinder and different cutting patterns are demonstrated.

***Chip Seal Application***

FHWA 1995 40 minutes Video ID # 135  
Covers the basic aspects of chip seals, the procedures to be followed and some common problems. Offers general information about materials. Not specific to NYS specifications.

***Crack Sealing***

FHWA/ITRE 16 minutes Video ID # 303  
Directed at small sealing crews this video discusses the importance of crack sealing at the proper time. The video also illustrates a clear, simple and effective crack sealing procedure for asphalt pavements.

***Demonstration of the AMZ Machine: Bartlett, TN 12-13-1994***

1994 12 minutes Video ID # 248  
Product demonstration of a pavement patching machine that uses high pressure to dispense aggregate to the area being patched.

***Early Opening of Full-Depth Concrete Repairs***

SHRP 1994 10 minutes Video ID # 137  
Looks at the major considerations for the early opening of full-depth concrete repairs. Also explains how the success of an early opening project depends on planning, scheduling and evaluating the work.

***Effective Pavement Preservation by Identifying Distress Conditions, Causes, & Cures***

FHWA 18 minutes Video ID # 315  
Assists in recognizing common causes of pavement distress through visual identification. Ideas of available means to preserve pavement and a discussion of resources for determining the best, most cost effective solution for each situation are also included.



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***Everyone Pays for Potholes***

Cornell University                      1986                      28 minutes                      Video ID # 153

For every dollar spent by highway agencies to maintain roads, road users pay at least \$60 in out-of-pocket costs for extra fuel and car repairs. This problem identifies the cause of the problem and presents ideas to solve the problem.

***Full-Depth Repair of Jointed Concrete Pavement***

SHRP    1994                      18 minutes                      Video ID # 138

Five major topics relating to repair of jointed concrete pavement: distress requiring full depth repair, field survey, transverse joint design, materials and repair procedures.

***Hot In-Place Recycling (New Technology for Old Roads)***

Asphalt Recycling & Reclaiming Assoc.    1992                      10 minutes                      Video ID #139

Provides an overview of hot-in-place recycling, the benefits and applications.

***Hot Mix Asphalt is the Best Buy...All of the Time***

NAPA    1997                      8 minutes                      Video ID # 249

Promotional video espousing the benefits of hot-mix asphalt for use in road construction. Some advantages include: durability, lower expense vs. concrete, and faster project completion.

***Hydrated Lime: The Key to Improved Asphalt Performance***

National Lime Association                      22 minutes                      Video ID # 140

Discusses the usage of lime as an anti-stripping agent, and a stiffening agent when mixed with asphalt. Shows lab and field tests that illustrate the effectiveness of lime.

***Inlay Patching w/ Small Cold Planar***

Oregon State Highway Div.                      17 minutes                      Video ID # 307

Discusses the affects of water on each layer of pavement buildup. Illustrates the use of a cold planar to repair each layer of pavement to prevent future reoccurring problems without reconstructing the entire road.

***Introduction to Rehabilitation of Highway Concrete***

SHRP    1994                      10 minutes                      Video ID # 141

Details a process for deciding the proper remedy for concrete pavement distress. Describes some of the repair techniques and indicates when they may be appropriate.

***Magnum Pothole Patcher***

AMZ    10 minutes                      Video ID # 314

Advertises the AMZ Magnum Pothole Patcher as a big improvement over conventional methods of road repair and better than hot patch techniques. Stresses the characteristics, quality and components of the AMZ trailer.



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***Microsurfacing - Scan Road - KOCH Materials***

Bass 40 minutes Video ID # 313

Advertises using Micro surfacing techniques as a new alternative to create a durable surface course on asphalt roads. The system utilizes polymers and additives to create a thin wearing course installed in one hour.

***New Research into Cost-Effective Pavement Repairs***

SHRP 1992 19 minutes Video ID # 250

SHRP Researches material and techniques for typical pavement problems. In particular: pothole repairs, spall repairs, crack sealing, and joint filling. Outlines the procedures that SHRP follows for testing and their goals for the research program.

***Partial-Depth Repair of Concrete Pavement***

American Concrete Pavement Assoc. 1994 15 minutes Video ID # 142

These slides provide a complete description of the proper procedures, tools and methodology needed for partial-depth repair of spalled joints, cracks and other surface problems. A companion publication, "TB003 Guidelines for Partial-Depth Repair", is available as a study reference.

***Pavement Management Systems for Local Administrators***

FHWA / US DOT 1990 17 minutes Video ID # 143

Presents concepts, benefits and cost of pavement management including, locating pavements which are in need of repair, when repairs are required, what repair methods are appropriate, and the need of highway personnel for guidance from elected officials.

***Pavement Repair: Do the Right Thing at the Right Time***

MN DOT / MN Local Roads 1991 22 minutes Video ID # 146

Local homeowner walks the viewer through the basics of pavement maintenance. He explains in non-technical terms why asphalt pavements break up, the consequences of broken pavement, how local transportation agencies gather data on roads, and alternatives.

***Pavement Structure Repair Techniques Part 1***

NC Inst for Transportation Res. & Educ. 1989 87 minutes Video ID #144

Pavement structure repair techniques show basic principles and techniques for the maintenance of gravel roads, ditch maintenance, pothole patching, crack sealing, and basic traffic control.

***Pavement Structure Repair Techniques Part 2***

NC Inst for Transportation Res. & Educ. 1989 43 minutes Video ID #145

Part two of this series continues with more basic principles and techniques on shoulder maintenance and asphalt chip seals.





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***QV-Flexible Pavement (Tapes 1-2)***

Army Corp of Engineers      1991      231 minutes      Video ID # 154

Covers a wide range of pavement types and the intricate process of pavement design. Discusses the functional requirements for different pavement types. Gives an overview of a flexible roadway system.

***Rehabilitation of Portland Cement Concrete Pavements using Hot Mix Asphalt***

Asphalt Institute      18 minutes      Video ID # 305

Discusses using hot mix asphalt overlays or recycling asphalt layers to rehabilitate and restore concrete pavements. Discusses reflective cracking detailing four rehabilitation techniques including cracking & seating, breaking and seating, rubilizing and sawcut & sealing.

***Repair of Depressions, Rutting, and Corrugations***

IRF      1985      14 minutes      Video ID # 155

The basic repair methods for depressions, rutting, and corrugations are discussed with proper procedures and with the use of a motor grader. Special consideration for placing and compacting each layer in a deep depression are illustrated.

***Retrofitted Load Transfer Devices***

Indiana D.O.T.      4 minutes      Video ID # 252

Case study of a procedure to repair cracked concrete pavement on an interstate roadway. Goes through the procedure step by step from milling the surface slots to setting rebar in the slots. No results are presented.

***Road Repair: Do the Right Thing at the Right Time***

Minnesota Local Res. Board      22 minutes      Video ID # 310

Outlines reasons and consequences of pavement breakup, how engineers make decisions about what to do and what alternatives and procedures are available to handle problems.

***Save That Road: Chip Sealing***

OK DOT      35 minutes      Video ID # 157

Describes the advantages to using a chip seal overlay to lengthen the usable life of the roads. Goes through the steps to properly apply a chip seal application.

***Subgrade Improvement Base Reinforcement***

TEHSAR      12 minutes      Video ID # 311

Illustrates the use of TENSAR geogrids. Ranges of grids are illustrated for use in various loading situations. The video also details how they are made, characteristics and how the system works.



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***Truck Impacts on Pavement***

FHWA / US DOT                      1988                      24 minutes                      Video ID # 158

A synthesis of the available information on the damaging effects of heavy vehicles on highway pavement. Topics include types of pavements, effects of environment, use of truck data in design, and effects of increased truck size and weight.

***Uses of Asphalt Rubber***

Asphalt Rubber Producers Group                      1989                      7 minutes                      Video ID # 159

About seventy percent of a scrap tire is high quality rubber. The scrap rubber can be granulated into crumb rubber and blended with asphalt cement. A gel that is called asphalt-rubber is created in this blending process. Describes how scrap tires can be recycled into an improved road building material.

***Weather and Loads: The Effect They Have on Roads***

Minnesota DOT    17 minutes                      Video ID # 304

Discusses how engineers and public maintenance workers understand and deal with the effects of weather and loads on asphalt. The video uses examples to illustrate the effects of loading and fatigue on each layer of pavement and the effects of freeze/thaw patterns.