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
   Overlaying 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.
Asphalt Pavement Repair (Module 2)

FL T2 Center Van Program 35 minutes Video ID # 244
This module identifies various asphaltic concrete and surface treatment pavement failures, causes for those failures, and repair procedures. Cause identification is stressed with the emphasis on repairing the root cause to achieve lasting repairs.

Asphalt Paving Inspection

FHWA 1995 60 minutes Video ID # 130
Gives a general overview of hot-mix paving operations and inspection of the work. Covers basic responsibilities, paving operations and some common problems with paving operations.

Asphalt Recycling in Minnesota

MN DOT 23 minutes Video ID # 126
Explains the proper and best procedure for recycling asphalt and when it is appropriate. Recycling is discussed as a useable alternative method for both cities and counties.

Asphalt Road Rehabilitation: Cold in Place Recycle Machine

Roadtec, Inc. 9 minutes Video ID # 245
Product demonstration of the Roadtec RX-120 re-paving machine. Gives detailed description of how cold in-place recycle paving is done.

Bituminous Concrete Paving

WI DOT 1985 45 minutes Video ID # 132
Three part training video for construction inspectors: (1) preliminary checks and equipment; (2) surface preparation and tack coats; (3) delivery of hot-mix, paving, compaction, and final project acceptance.

Bituminous Pavement Quality: It Is Up to You

Indiana Dept. of Highways 18 minutes Video ID # 133
Discusses the importance in periodic maintenance in the way of resurfacing to lengthen the life of roads. Details the bituminous paving process as well as giving a procedure for inspecting a resurfacing operation.

Bituminous Plant Inspection

WA DOT 1984 37 minutes Video ID # 131
Covers the basics of bituminous plants and their inspection. Subjects include, materials, batch plant operations, and drum-mix plants.

Bridge Deck Overlays

FHWA / SHRP 1994 19 minutes Video ID # 134
Presents SHRP research findings and recommendations for bridge deck repairs. Identifies suitable candidates and details installation procedures.
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.

   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.
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-striping 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.
Microsurfacing - Scan Road - KOCH Materials
Bass 40 minutes Video ID # 313
Advertises using Microsurfacing 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.
Pavement Surface Condition Rating Video
Washington State DOT 30 minutes Video ID # 271
Discusses the different types of pavement distresses and failures. The video is designed to train employees to objectively determine both the extent and severity of pavement failures. This knowledge is often used to create a pavement management system.

Paving the Way for Tomorrow's Highways
SHRP 1989 16 minutes Video ID # 148
The Strategic Highway Research Program (SHRP) is a five year, $150 million program administered as a unit of the National Research Council. The program strives to seek solutions through research to common but costly problems, such as pavement deterioration.

Pothole Busters
Sylvax Corp. 1989 11 minutes Video ID # 251
Program initiated by the Sylvax Corporation to have citizens call in to report potholes to their municipal officials. This increases their awareness of the existence of potholes and enables them to guarantee repair within 48 hours.

Pothole Repair (Parts 1-2)
PennDOT 55 minutes Video ID # 152
Video presentation designed to discuss the causes of potholes and the proper procedure for the repair of potholes. Provides training to foreman and other supervisors in charge of road repair as well as ways to make pothole repair as effective as possible.

Potholes: Causes, Cures, & Prevention
Army Corp of Engineers 1983 11 minutes Video ID # 149
Presents a detailed description of how potholes develop, how to repair potholes, and how to prevent pothole formation.

Protecting our Pavements: Preventative Maintenance
FHWA/MichDOT 15 minutes Video ID # 293
Stresses the importance of preventative maintenance to protect pavements and maintain the investment the United States has in our transportation infrastructure.

Puff Asphalt Maintenance Systems
One Man Inc. 5 minutes Video ID # 309
This video is a commercial advertising Puff asphalt maintenance systems. The video discusses equipment including truck characteristics, components and innovative safety features on board.
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.
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.