The Illinois Technology Transfer Center

Our nation’s roads and bridges play a vital role in our transportation system. They link farms, small communities, and busy urban centers – supporting and enhancing safety, commerce, and quality of life for everyone.

From the beginning, the concept of the Local Technical Assistance Program (LTAP) was to provide local highway agencies with improved access to new technologies for the construction, operation, maintenance, and safety of their road and street systems. To carry out the concept, a nationwide network of “Technology Transfer Centers” was established in cooperation with the state highway agencies. These Technology Transfer Centers now operate efficient and effective programs for local agencies in their states.

The Illinois Technology Transfer Center (T²) is one of the 58 T² Centers established by the Federal Highway Administration under LTAP. The purpose of the Technology Transfer Center is to share information between federal, state, and local agencies.

The Illinois T² Center also provides training, technical assistance, and information to local highway agencies, IDOT personnel, and consulting firms. These services are provided through the “Illinois Interchange” Newsletter, T² Training Classes and Seminars, the Video/Publication Library, and the Research and Information Library.

For more information about the T² Center and its activities, contact us at:

Illinois Department of Transportation
Technology Transfer Center, Room 205
2300 South Dirksen Parkway
Springfield, IL 62764
Phone: (217) 785-2350
Fax: (217) 785-7296
E-Mail: DOT.T2LRSDOT@illinois.gov

Website: http://idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/technology-transfer-center/index
Introduction

The Technology Transfer Center has created the Video/Publication Library Catalog to provide local agencies with a listing of available videotapes and publications in a more manageable format. The Video/Publication Library is a valuable source of information which can be used for on-site training, as presentation aids, and as subject specific information sources. The T² Video and Publication Library is stocked with training and safety videos covering a wide range of subjects.

Some of the materials presented were produced in other states and have been included because of the general process, procedures, or information that they provide. Some of the specific details, policies, or references mentioned may not conform to IDOT policy.

The Video Library is composed of two sections. The first section is Reproducible Videos which are numbered V002-V185 and the second section is Special Interest Videos which are numbered V500-V567.

The Reproducible Videos have been reviewed for content, technical presentation, and relevance to our audience. Many of these videos are used for training. These videos have the following guidelines for distribution:

1.) The Illinois T² Center loans these videos (maximum of 4) for two weeks during which time these videos may be copied.
2.) The Illinois T² Center places electronic video streams on the Internet for downloading or web viewing. Most of the reproducible videos are linked online (Windows Media Player is required).

The Special Interest Videos include project and product demonstration videos, promotional videos, and specialty videos. Many of these videos can be used to accompany training seminars, presentations, or speaking engagements. These videos are available for two-wee loan only. All of these videos/dvds are protected by copyright and MAY NOT BE DUPLICATED without specific written permission from the source. The Technology Transfer Center loans these videos for two weeks. Extension of the loan period is likely to be approved if the video is being used for training purposes.

The Publication Library offers renewable source publications and limited copy Strategic Highway Research Program and Federal Highway Administration publications. All are provided free of charge. Links are provided for all of the publications.

The Technology Transfer Center publishes the Video and Publication Catalog in order to improve the performance and durability of our roads, and also to make our roads safer for both motorists and highway workers. The catalog includes materials from a wide array of sources that offer insight into virtually every transportation need. Among these sources are: The Federal Highway Administration, The Strategic Highway Research Program, The Illinois Department of Transportation, and several other departments from across the country. This is not an endorsement by the Illinois Department of Transportation or the Technology Transfer Center for the particular products or information presented.
Catalog Organization

The “Videos and Publications Listed By Topic Heading” pages provide a combined listing of all videos and publications. All videos and publications are listed under the following topic headings:

- Bridges, Culverts, and Drainage
- Computers
- Engineering
- Equipment
- Legal
- Management
- Road Construction and Maintenance
- Safety
- Traffic
- Winter
- Miscellaneous

Video and Publication descriptions include the length (listed by time or # of pages), the source (if known), and a brief review of its content.

Videos are listed first under each topic heading, followed by publications. The reproducible videos, a majority of which are linked online, are numbered V002-V185. Special interest videos, which must be ordered through the T² Center, are numbered V500-V567. All publications included in the Publication Library, numbered P001-P104, are also linked online.

All videos and publications are being offered as a way of sharing information on new technologies. This is not an endorsement by the Illinois Department of Transportation or the Technology Transfer Center for the particular products or information presented.

A copy of the Video/Publication Order form is included at the end of the catalog.

Using the Catalog

For example, you are looking for a video on winter road maintenance. First, you would go to “Videos and Publications Listed by Topic Heading”, and then look under the topic heading “Winter.” Look down the list at potential videos you may find helpful, one of these could be V129, “Good Highway Winter Maintenance/Risk Management.” The page number would then be given where you could find a brief description of the video, the source, and the running time. The description will also include whether or not the video is linked online or not. However, since not all videos are linked online, you can order any videos you need by filling out the order form at the end of the catalog. Order forms can be mailed or faxed, please refer to our contact information at the beginning of the catalog.
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Reproducible Videos

The Reproducible Videos will be numbered V001-V185. These videos have been reviewed for content, technical presentation, and relevance to our audience. Many of these tapes are effective tools for training purposes. Most of the Reproducible Videos are linked online for easier accessibility. For the videos that aren’t linked (or for linked videos as well) an order form is included at the end of the catalog.

The reproducible videos have the following guidelines for distribution:

1.) The Illinois T² Center loans these videos (maximum of 4) for two weeks during which time these videos may be copied.
2.) The Illinois T² Center places electronic video streams on the Internet for downloading or web viewing (Windows Media Player is required).

Videos in numerical order

V002: Pothole Patching, Illinois Department of Transportation

This video covers fixing potholes with a tank/kettle. The video also covers patching by applying emulsions and aggregate in alternate layers until the hole is fixed (31 min 52 sec).

V003: Motor Grader, Nebraska Department of Roads

4-Part video, covering the operation of a motorgrader from the operator’s point of view

Part 1: Introduction to the Machine (18min 22sec)

Part 2: Start-Up, Blade Positions and Maneuvering the Grader (18min 36sec)

Part 3: Operational Techniques (18min 44sec)

Part 4: Maintaining Unpaved Roads (19min 15sec)

V004: Loader Operations, Nebraska Department of Roads

This video covers the operation of a loader from the operator’s point of view and covers the following topics: start-up, loader controls, maneuvering, basic operations, and stock piling (35min 44sec).

V005: Trucks, Nebraska Department of Roads

This video deals with pre-trip inspection, start-up, basic maneuvering, dump operation, and shut down (52min 37sec).
This video deals with utilizing asphalt emulsions from a kettle to fill cracks. A portion of the video deals with routing cracks and installing backer rod (47min 30sec).

V007: Safe Tree and Brush Removal, Illinois Department of Transportation, 2003

This video demonstrates chain saw safety and maintenance, sawing techniques, falling trees, and trimming brush (19min 31sec).

V008: Commercial Driver’s License, Illinois Department of Transportation

This video includes the verbal and driving requirements on the test for obtaining a commercial driver’s license (20min 41sec).

V009: Culvert Replacement, Illinois Department of Transportation

This video covers the step-by-step procedure for replacing an entrance pipe culvert (11min 58sec).

V010: Loading and Towing Heavy Equipment, Illinois Department of Transportation

This video covers safety features to check on the trailer prior to loading, and also discusses how to properly load the equipment (13min 50sec).


This video covers IDOT’s policy on mowing the right-of-way. The video also covers noxious weeds and safety while mowing (17min 29sec).

V012: Radio Communication, Your Vital Link, Illinois Department of Transportation

This video covers the use of mobile radios, the universal “Ten” signals code, and guidelines for talking on the radio (17min 24sec).

V013: Shoulder Repair and Ditch Cleaning, Illinois Department of Transportation

This video covers repairing low and high shoulders, as well as the cleaning of ditches (14min 16sec).

V014: Work Zone Safety, Federal Highway Administration

This is a 4 part video discussing work zone safety (65min 3sec).

V015: The Idea Store: 8 part video covering a wide variety of topics, Pennsylvania Department of Transportation, 1989 (89 min)

Part 1: How to store plow blades when not in use, a handy land level, a level for measuring the crown of a road, and other innovative ideas (8min 8sec).
Part 2: Includes ideas on identifying construction signs, fire hose cone hold down, traffic control guidebooks, motorgrader blade changing, measuring aggregate lost, innovative tools from Iowa, and a public relations flier on snow removal (13min 8sec).

Part 3: Subjects include: two different types of lifter for changing plow blades, the proper way to remove and store locking pin of articulated loader from within the cab, a pamphlet on daily maintenance of motor graders, etc. (9min 43sec).

Part 4: Subjects include: water runoff on rural roads, slush and ice buildup on snow removal equipment, road resurfacing, minimizing aggregate loss, use of discarded tires, portable road closed sign display. (10min 1sec).

Part 5: Subjects include: the horrible hard hat, proper tire inflation, safety grams, proper signing, and adopt a highway. (11min 22sec).

Part 6: Subjects include: roadside wildflowers, effective signs, PA-DOT’s Roads Scholar Program, safety promotions, etc. (17min 7sec).

Part 7: Subjects include: curb Scraper, dump truck air foil, timber bridge info, better cylinder wrench, and ideas from Delaware/Chester P.W.A. (10min 10sec).

Part 8: Subjects include: hard hat medical decals, Montana’s maintenance awareness program, welding a fuel tank, mounting a wing plow, and development of a wing cart. (10min 13 sec).

V016: Wetted Salt, Dow Chemical

This video illustrates the added melting power of salt used for snow and ice control if it is pre-wetted with liquid calcium chloride, and the practical concerns for handling and application (19min 32sec).

V017: Tire Chip Feature, University of Maine

This video is a demonstration of an experiment using tire chips as a road base insulator to protect a highway from frost damage (4min 34sec).

V018: Nuts and Bolts of Jolts, Traffic Research Board

This video discusses traffic signals and eliminating transient voltage (22min 22sec).

V019: Looking Back, John Deere, 1992

This video illustrates the need for observing safety procedures on work sites when working near construction equipment (17min 59sec).

V020: Hydrated Lime - Key to Improved Pavements, National Lime Association

This video demonstrates how the addition of hydrated lime improves durability and lowers the cost of asphalt while providing a permanent bond (21min 28sec).
V021: BOMAG: In-Place Recycling, Koehring Road Division

This video discusses the in-place recycling shown using BOMAG equipment and also recycling with asphalt emulsions (49min 20sec).

V022: Staying Ahead of the Storm, National Research Council – SHRP

This video discusses weather information and predicts systems for highways and demonstrates that by: utilizing these systems, reducing chemical usage, providing less disruption to traffic, and providing efficient maintenance effort (20min 39sec).

V023: Equipment Maintenance: Program and Scheduling, Montana State University

This video presents a practical approach to assuring reasonable maintenance for fleet equipment and highlights the need for continuous equipment checks, maintenance done on schedule, and timely repairs (46min 7sec).

V024: Subdivisions: A Local Dilemma, Montana State University

This video presents examples from Montana’s cities and towns to illustrate the basic principles and reasons for proper planning (28min 49sec).

V025: Partial Depth Patching, Illinois Department of Transportation

This video covers the step-by-step procedure for partial depth patching of a flexible pavement, utilizing bituminous patch material (17min 34sec).

V026: Handling Pesticides Safely-Herbicides, Monsanto

This video discusses the use of herbicides as an effective substitute to mowing and the safe handling of chemicals; it also includes a brochure of how to start a spray program (7min 54sec).

V027: Blading Unpaved Roads, Federal Highway Administration

This video shows techniques to correct various problems associated with gravel roads (22min 3sec).

V028: Flagging Operations, Federal Highway Administration

This video shows proper flagging techniques and required equipment (18min 4sec).

V029: Pavement Management System for Local Administrators, Federal Highway Administration

This video describes what a pavement management system is, why, and when to use it. This is not a system development program (17min 34sec).

V030: Seal Coating: A Matter of Science & Skill, Minnesota Department of Transportation

This video describes the proper setup and application of seal coat operation (16min 34sec).
V031: Subsurface Utility Engineering, Federal Highway Administration, 1990

This video covers planning for locating underground utilities (16min 38sec).

V032: Soil Stabilization: Selecting a Modifier, Federal Highway Administration

This video discusses the characteristics and suggests uses of lime, lime with fly ash, cement, and bituminous materials and soil stabilizers (19min 27sec).

V033: Backhoe Operation & The Hazards of Hurry, 1993

This video covers the basic parts and functions of the backhoe, proper pre-use inspection, various operating techniques, proper shut down procedures, and backhoe safety. (41min)

V034: LP Gas: Know the Facts, Federal Highway Administration, 1990

This video focuses on the proper handling and use of liquefied petroleum gas, proper storage and transportation, leak detection, and inspection (11min 2sec).

V036: Highway Signing: This is a three part video on highway signing, sign maintenance documentation, and sign management (41 min).

Part A: Highway Signing

Part B: Sign Maintenance Documentation

Part C: Sign Management

V037: A New Way to Lift, National Safety Council

This video describes the safe and proper procedure for lifting heavy objects, helping to minimize back injuries (8min 33sec).

V038: Shooting Good Video, Federal Lands Highway Division, 1996

This award winning video illustrates the proper procedures for making quality video recordings for project documentation or training (2min 40sec).

V039: Pneumatic Tire Operation, Utah Department of Transportation

This video reviews the daily check, start-up/warm-up, basic operation, rolling techniques, and shutdown (18min).

V040: Forklift Operation, Utah Department of Transportation

This video reviews forklift operations to include lifting, tilting, and varying the forks’ spacing; also required daily checks (22min 1sec).

V041: Work Zone Safety - Legal Liability, Federal Highway Administration
This video discusses the legal liability involving work zones (16min 8 sec).

V042: Setting Speed Limits, Vermont LTAP, 1990

This video describes background and misconceptions of speed zones and the procedures for determining speed limits on highways and local roads. Components and considerations of a traffic engineering survey and the adoption of a resolution and the erection of signs for enforcement are also discussed. (10min)

V043: Local Government on Trial, Pennsylvania Department of Transportation, 1995

Part 1 - The Deposition: Follows a district engineer through the process of giving a deposition. Outlines the purpose of the deposition and provides some advice for giving depositions. The video looks at some of the kinds of questions that may be asked. (17 min).

Part 2 - The Trial: Provides the viewer with a mock civil trial. The trial is based upon a fatal automobile accident on a newly reconstructed section of highway where excessive drop off to the road shoulders was blamed as the cause of the accident by the plaintiff (victim's family). The plaintiff sues the contractor and the township where the road is located. Good video for Local Agency Officials whom may be facing litigation involving a work zone related crash. (90 min).

V044: Geotextiles Installation on Gravel Roads, Oklahoma State University, 1990

This video discusses the installation and maintenance of geotextile fabrics on low volume roads (40min).

V045: Problems with Gravel Roads: 3 part video that covers gravel road maintenance, Federal Highway Administration, 1995

Part 1: Discusses the importance of considering the environmental conditions and the materials available when planning to rework a gravel road (14min).

Part 2: Covers the causes, corrections, and prevention of problems that occur with gravel roads (23min 34sec).

Part 3: Shows maintenance equipment and blading techniques (18min 11sec).

V046: Chip Seal Applications, Federal Highway Administration, 1995

This video shows preliminary concerns, materials, equipment, surface preparation, weather requirements, and application rates for chip seal operations. The video also discusses chip seal procedures, binder application, chip spreading, roller operation, as well as detailing chip seal problems that can occur and all of their solutions (41min).

V047: Asphalt Paving Inspection: 3 part video that covers asphalt paving inspection, Federal Highway Administration
Part 1: Preliminary Responsibilities (26min 15sec).

Part 2: Paving Operation (18min 55sec).

Part 3: Problems (14min 21sec).

V048: Sign Maintenance and Installation, Federal Highway Administration, 1995

This video discusses the importance of an effective sign maintenance program, proper sign installation, safety practices, and record keeping procedures (26min 29sec).

V049: Bridge Maintenance for Local Road Crews, Vermont LTAP, 1994

This video shows maintenance procedures local road crews can use to keep bridges in good condition (29min 14sec).

V050: Professional Tree Care Safety: Equipment Safety, National Arborist Association

This video details safety considerations for the use of aerial lifts, stump cutters, tree cranes, chippers, and chain saws. This video also discusses how to work with various types of tree care equipment as well as work site traffic control (26min 5sec).

V051: Maintenance Welding: Welding Safety & Tank Repair, Michigan LTAP, 1994

This video covers fire hazards, hazard prevention, extinguishing fires, and body and eye protection. The tank repair section explains various non-welding methods of tank repair and the proper procedure for the dangerous task of welding or cutting a tank (52min 19sec).

V052: Maintenance Welding: Gas Welding/Metal Identification, Michigan LTAP, 1994

This video explains the proper maintenance of gas welding equipment (tanks, regulators, hoses, torches) and regular setup. It also demonstrates techniques for cutting various types of metal stock, fusion welding, and brazing. The Metal Identification section demonstrates metal identification using chemicals, flame, or the spark test (87min 13sec).

V053: Maintenance Welding: Arc Welding, Michigan LTAP, 1994

This video explains how an arc welder works (AC and DC), welder setup, and special safety issues (open circuit voltage, ventilation, and eye and body protection). It also describes the various electrodes and their uses (49min 53sec).

V054: Brush Cutter, Delaware Department of Transportation

A brush cutter is used to clear roadsides of brush and excess vegetation. This video covers pre-trip inspection, operating techniques, and shut-down procedures (13min 11sec).

V055: Roadway Design: Balancing Safety, Environment, and Cost, Minnesota Department of Transportation, 1995
This video focuses on the importance of considering these three factors when constructing or reconstructing a roadway. The objective is to help educate citizens and public officials on issues affecting roadway design, and to demonstrate engineering practices that are useful in achieving this balance (13min 31sec).


This video explains the Anti-Icing Technology, its applications and benefits for highway agencies. Anti-Icing is an additional tool for snow and ice control (12min 52 sec).

V057: Utility Cut Repair: Doing it Right, Minnesota Local Roads Research Board

The objective of this video is to increase the quality of workmanship associated with making and repairing utility cuts. This video shows possible causes for failed repairs and procedures used in Minnesota for conducting utility cut repairs (10min 45sec).

V058: Driving Modern Roundabouts, Washington State Department of Transportation, 2002

This video demonstrates how to safely maneuver through modern roundabouts (9min 43sec).

V059: Concrete Rubblization and Asphalt Overlay of I-57, Illinois Department of Transportation

This informative video explains the rubblization process and also demonstrates its application on an Interstate Highway project (20min 5sec).

V060: Safety Restoration During Snow Removal Guidelines, Federal Highway Administration

This video provides guidelines to follow to maintain safe conditions during highway snow removal operations. Snow removal situations on bridges, super elevated curves, along guard rails, and at intersections are examined (25min 32sec).

V061: Your Public Image, Texas Department of Transportation

This is an excellent video detailing the importance of understanding the public’s perception of highway employees and ways to improve your public image (18min 46sec).

V062: Stressing Our Future, Iowa Department of Transportation

This video shows the stresses put on rural roads by agricultural vehicles (9min 55sec).

V063: Preventive Maintenance, Federal Highway Administration, 2000

This video provides a better understanding of the various factors, such as existing pavement condition and environmental effects, which must be taken into consideration when selecting the proper pavement for preventive maintenance. This tape also provides a general overview of the
various preventive maintenance treatment options available for both rigid and flexible pavements (14min 18sec).

V064: Importance of Road Drainage, Federal Highway Administration, 1997

The importance of surface and drainage maintenance and the inspection of drainage systems are discussed. Topics also discussed include: environmental issues associated with road drainage, federal and state permits, and liability for elements of design and maintenance (18min 18sec).

V065: Using Snow Plows on Motorgraders, Federal Highway Administration, 1997

This video details the correct way to attach snow plows to motorgraders and basic information on using snow plows. Three different types of plows are shown: front single, v plow, and the wing plow (15min 8sec).


Various elements of EMS are discussed including shop management, inventory control, fluid dispensing, and financial control (17min 13sec).

V067: Smart Moves, Federal Highway Administration, 1996

This video describes intelligent transportation systems and how some local agencies have developed programs to make their transportation systems more user friendly and efficient (10min 2sec).

V068: Stop & Think - A Campaign Against Vandalism, Pierce County, Washington

This video portrays the impact of vandalized traffic signs and controls. This video also features two dramatizations depicting safety and liability concerns related to vandalized traffic signs. The costs to taxpayers and an interview with a man involved in taking a stop sign that contributed to a fatal accident are shown (9min 45sec).

V069: Train the Trainer - Turning Field Experts into Expert in the Classroom, North Carolina LTAP, 1998

This video illustrates teaching techniques to help field experts become effective instructors and presenters (31min 17sec).

V070: Iowa Snow & Ice Control: 5 part video that covers snow and ice control from Iowa DOT's perspective. 1998 (115 min)

Part 1: Introduction to Winter Operations. This video shows different types of snow and ice removal equipment and explains their uses. (12 min)

Part 2: Pre-Season Preparation. This video discusses vehicle and equipment checks and maintenance to perform prior to snow and ice season. (30 min)
**Part 3:** Equipment Operation. This video discusses pre- and post-storm equipment checks, proper radio procedures, and the proper clothing to wear for working outdoors in the winter. (11 min)

**Part 4:** Snow Plowing Technique. This is a very good video showing proper plowing techniques on two-lane and divided four-lane highways, around islands and curbed medians, and through intersections. (31 min)

**Part 5:** This is a technical video explaining brine making, anti-icing and deicing practices, and road weather information systems (RWIS). (31 min)

**V071: Adopt A Highway, Illinois Department of Transportation, 2004**

The Illinois Department of Transportation requires that certain safety measures be taken while participating in the Adopt-A-Highway Program. This safety video provides rules and safety tips for participants (5min 8sec).

**V072: Meth Lab Waste Recognition for Adopt-a-Highway Volunteers, Colorado Department of Transportation, 2004**

This video educates Adopt-a-Highway volunteers with the dangers of meth lab waste products that may be encountered during clean up. (8min)

**V073: Storm Water Management Systems, Tri-County Regional Planning Commission, 2004**

This video is a brief overview of waste water management, causes of water pollution, and ways to avoid water pollution. Also, it describes EPA regulations, NPDES requirements, and programs to evaluate and control water pollution. (11min)

**V075: Pothole Repair: Proven Practices, Minnesota Local Roads Research Board, 1999**

This video provides an effective overview of the causes of potholes and repair methods. Guidelines for three repair categories are shown: permanent patching, semi-permanent patching, and temporary patching (13min 50sec).

**V076: Bridge Deck Construction in Illinois, Illinois Department of Transportation, 1999**

This video provides the viewer with construction techniques to reduce bridge deck cracking caused by improper construction techniques. This video is beneficial for: construction inspectors, bridge construction personnel, and anyone else who is involved with bridge deck construction (25min 41sec).

**V077: Snow & Ice Control: 6 part video that covers snow and ice control from Illinois DOT's perspective. 2002 (59 min)**

**Part 1:** Plows & Blades
Part 2: Spreaders & Spinners

Part 3: Forecasting & Chemical Application

Part 4: Pre-Storm Preparation

Part 5: Plowing Techniques

Part 6: Post-Storm Clean Up


This video explains what frost damage is and how freezing temperatures and moisture affects the Subgrade, and also how it can damage and deteriorate various materials through thawing and freezing cycles. (11min)


This video provides information on the advantages of preventative maintenance and discusses preventive pavement maintenance, specialty techniques and training, improved planning methods, and dedicated funding. (14min)

V080: Sudden Change in Plans, Iowa Department of Transportation

(7min 37sec).

V081: Highway Work Zone Safety - Traffic Control: This video series has been photographed at operating work zones. The viewers will see examples of good safety practices, as well as actual safety hazards and unsafe working conditions. Each videotape in the series has an accompanying instructor’s guide. The first 3 part grouping contains information concerning traffic control. 1997 (69 min)

Part 1: Professional Flagging. Flaggers are responsible for the life-or-death safety of everyone who works near traffic. This videotape covers basic principles, basic procedures, and applications for effective and safe flagging. (47 min)

Part 2: Traffic Control Safety. This video shows how to be safe by following some simple, logical procedures for setting up traffic controls. The program also describes the most common kind of work zone accident, the rear-ender. (11 min)

Part 3: One Step from Death. This video shows five accident simulations based on typical safety problems found in highway work zones. (11 min)

V082: Highway Work Zone Safety - Pre-Construction: This video series has been filmed at operating work zones. The viewers will see examples of good safety practices, as well as actual safety hazards and unsafe working conditions. Each videotape in the series has an accompanying instructor’s guide. The first 3 part grouping contains information concerning traffic control. 1999 (65 min)
Part 1: Utility Safety in Work Zones. This video shows the above and below ground hazards of telecommunications, electric, gas, water, and sewer utilities; the on-site consequences when they are disrupted; and the off-site consequences to those affected by the disruptions. The video also emphasizes contacting a One Call System (JULIE in Illinois) to help locate underground utility hazards. (14 min)

Part 2: Surveying Safety. This video describes some of the important hazards surveyors face as they work in every phase of construction, from pre-con to post-con, both inside and outside the work zone. (17 min)

Part 3: Loading, Transporting, and Unloading Heavy Equipment. This video shows the special considerations involved with moving equipment too large to be self-transported over long distances. Emphasis is on visibility and respect for the size of the equipment. (12 min)

Part 4: Removal/Demolition Safety. This video shows the hazards associated with the demolition and removal of roads, structures, and utilities in preparation for new construction. Emphasis is on personal safety by being knowledgeable about the job, the equipment, and the plan. (11 min)

Part 5: Plant Site Safety. This video covers some of the safety hazards in permanent and portable ACC, PCC, bulk plant, and crushing operations. It shows what to watch out for if you’re a pedestrian on the ground, a crane operator, or a truck driver, traveling between the plant and construction sites. (11 min)

V083: Highway Work Zone Safety - Maintenance and Construction: This video series has been filmed at operating work zones. The viewers will see examples of good safety practices, as well as actual safety hazards and unsafe working conditions. Each video in the series has an accompanying instructor’s guide. The last 4 part grouping contains information concerning maintenance and construction safety. 1999 (51 min)

Part 1: Moving Operations/ Maintenance Safety. This video describes a variety of short-term highway operations from snow plowing to patching, from the least dangerous to the most dangerous. It emphasizes awareness of hazards and individual responsibility for safety where standard traffic controls are at a minimum. (13 min)

Part 2: Grading Safety. This video covers some of the safety hazards you'll find on typical grading sites, from clearing and grubbing to final grading. Emphasis is on personal responsibility for safety and awareness of the hazards. (14 min)

Part 3: Paving Safety. This video shows some of the hazards of paving with Portland cement concrete (PCC) and asphalt cement concrete (ACC), including night paving operations. Emphasis is on taking personal responsibility for being aware of the changing hazards during paving operations. (11 min)

Part 4: Structures Safety. This video covers some of the typical hazards around the construction of bridges and culverts, with emphasis on falling, falling objects, and crane hazards. (13 min)
V084: Let's Clean the Air, Chicago Area Transportation Study, 1996

This video highlights the primary causes of ground level ozone and its effects on our quality of life. It includes steps everyone can take to reduce the emissions that lead to ground level ozone (10min 18sec).

V085: Aesthetic Bridge Rails and Guardrails, Federal Highway Administration, 1991

Alternatives and improvements for aesthetic bridge rails and guardrails are discussed. The video also summarizes the crash testing and special features of concrete bridge rails and guardrails as described in the “Summary Report on Aesthetic Bridge Rails and Guardrails.” (8min)

V086: Concrete Bridge Railings: The Modified Three Beam Guardrails - Cable Guardrails, Federal Highway Administration

Covers the AASHTO Design guidelines for bridge railings and also reviews bridge railing tests and designs for all design classifications in accordance with the new AASHTO Guidelines (13min 35sec).

V087: Cleaning and Clearing of Bridges, Federal Highway Administration

This video describes how and why to clean all types of bridges and their components (13min 10sec).

V088: Concrete Bridge Deck Repair, Federal Highway Administration

This video details procedures for permanent repairs of partial and full-depth bridge deck holes with cement concrete. Also, proper procedures and proper use of equipment and tools for cutting concrete and cleaning out the hole are discussed (17min 25sec).

V089: Bridges Unbroken Inspection of Timber Piling, Federal Highway Administration, 1991

This video presents new methods for inspecting timber bridge pilings. (21min)

V090: A Gift of Value- Value Engineering, Federal Highway Administration, 1987

This video presents the six steps of value engineering. (9min)

V091: Breakaway Timber Utility Poles, Federal Highway Administration, 1989

This video shows crash test results and actual installation by a utility crew of the breakaway apparatus. (15min)

V092: Testing and Field Inspection of Roadway Delineation, Federal Highway Administration, 1992

This video covers inspection points important to surface markings as well as other types of delineation: signs, object markers, etc. (36min)
V093: Traffic Signal Systems-Go For The Green, Federal Highway Administration

This video demonstrates the need for proper traffic signalization and installation. The video also describes design, installation, operation, and maintenance of state of the art signal control (28min 54sec).

V094: Pedestrian Safety: What you Can Do, Federal Highway Administration

This video discusses designing safer pedestrian walkways and the Walk Alert Program (8min 49sec).

V095: Common Maintenance Problems/Corrections, Federal Highway Administration, 1985

This video identifies the main causes of most road maintenance problems and discusses the importance of doing maintenance tasks correctly. (20min)

V096: Caution, Litigation Ahead: The Road to Effective Risk Management, Federal Highway Administration

This video explains how planning, organizing, and training for safety can reduce tort liability (24min 41sec).

V097: Reshaping Earth and Gravel Shoulders, Federal Highway Administration, 1988

This video shows the proper procedures for reshaping earth and gravel shoulders to correct shoulder drop-off, rutting, buildup of materials, and excessive weed growth to maintain a safe shoulder. (16min)

V098: Base and Sub-Base Repair, Federal Highway Administration, 1988

This video shows a procedure for repair of base and sub-base that will save money and insure longer lasting repairs as well as covering the equipment needed. (16min)

V099: Walk, Federal Highway Administration

This video explains the importance of, and shows how to plan for pedestrian traffic and safety (12min 24sec).

V100: Utility Cuts in Paved Roads, Federal Highway Administration, 1995

This video details the utility cut operation from the importance of communication among interested parties during the planning stage to finished pavement repair (40min 8sec).

V101: Training: The Obscured Advantage, Federal Highway Administration, 1996

This is a video detailing the benefits of training for the agency, the supervisors, and the work crews (5min 46sec).

This video demonstrates the cost and safety benefits of diamond grinding. (10min)

V103: Bituminous Seal Coat, Washington Department of Transportation

This video discusses preliminary checks and equipment, surface preparation and tack coats, delivery of hot-mix paving, compaction, and final product acceptance (16min 5sec).

V104: Bridge Evaluation and Posting, Federal Highway Administration, 1993

This 5 part video consists of: Bridge Components and Inspection Standards, Bridge Deficiencies and Deterioration, Forces and Material Properties Affecting Strength, Bridge Posting and Permitting Process, and Bridge Management. This is an excellent video for evaluating bridges and explaining the bridge posting process. (38min)

V105: Fit To Be Tied: Retrofitting PCC Pavement with Dowel Bars, Dowel Bar Insertion for Load Transfer at Mid Panel Crack, Retrofitted Load Transfer Devices, Federal Highway Administration, 1997

This video illustrates cost effective techniques for installing dowel bars in PCC pavements (53min).

V106: Mechanical Cleaning of Unlined Ditches Federal Highway Administration, 1985

This video illustrates ditch cleaning using a motor grader and a grade all (backhoe). The video also defines the four principle features of a ditch and their functions. Set-up, ditch cleaning operations, and the reestablishment of positive drainage are also illustrated. (20min)


This video compares two agencies during snow and ice control. One agency uses conventional snow and ice control methods and the other uses new Road Weather Information Systems and Anti-Icing Technology. The differences in services and costs are compared (6min 9sec).


This video describes types of air pollution in general and specifically transportation related air pollutants. The video also emphasizes compliance with the State Air Pollution Control Plan and how under compliance can impact federal funding for transportation related projects. This is the ideal video for urban transportation planners in major metropolitan areas (19min 5sec).

V109: FHWA Emergency Relief Program, Federal Highway Administration, 2000

This video provides step by step procedures to follow in repairing damage to federal aid highways. This video also discusses eligibility procedures, including Gubernatorial Proclamation, procedures in emergency or permanent repairs, assessment of damages, eligibility in permanent
and or emergency repairs, explains items that are covered by ER funds and items that are not, damage reports, and quick relief method for catastrophic damage.

Part 1 (19min 12sec)

Part 2 (21min 4sec)

V110: Stockpile Recovery to Minimize Segregation, Federal Highway Administration, 1999

This video shows how aggregates should be stockpiled to reduce segregation (7min 51sec).

V111: Comparable Concepts for Replacement Housing, Federal Highway Administration, 2001

This video covers how homes and businesses are evaluated while being bought for right of way. The video also explains how homes are evaluated and compared according to space and value. The video also covers other factors such as location factors, assessments, relocation of business, what is paid out for relocation, and what will be reimbursed to the business (25min 18sec).

V112: Making the Effort Works: Reducing Utility Delays During Construction, Federal Highway Administration, 2002

This video shows you how the utility companies and DOT’s are working together to ensure fast, efficient, and the least expensive work possible (19min 15sec).

V114: Effective Pavement Preservation by Identifying Distress Conditions, Causes and Cures, Federal Highway Administration, 2002

This video provides a brief description of HMA and PCC pavement distresses and also provides possible cures for each type of distress (16min 54sec).

V115: It's About Time... Traffic Signal Management: Cost Effective Street Capacity, Federal Highway Administration

This video discusses traffic movement and ways to improve flow by using existing equipment, or updating equipment to improve traffic flow which may also cure commuting problems such as road rage, traffic accidents, and congestion. Timing of traffic lights and lane additions are also options which are also discussed in the video (13min 17sec).

V116: Clark Bridge and Price Lock, Illinois Department of Transportation, 1994

This video shows the construction of the New Clark Cable Stayed Bridge and the Price Lock and Dam in Alton, IL. (64min)

V117: Old Clark Bridge Demolition, Illinois Department of Transportation

This video gives the history of the Old Clark Bridge over the Mississippi River at Alton, Illinois from its planning in 1803 to demolition in 1994 (16min 24sec).
V118: Modified Rock Spreader, Illinois Department of Transportation, 1995

This video demonstrates a rock spreader attached to a motor grader, for applying rock to raise shoulder drop offs (6min 46sec).

V119: Give ‘em a Brake: Highway Work Zone Safety, Illinois Department of Transportation

An IDOT presentation of the “Give ‘em a Brake” Program aimed at public audiences (13min 50sec).

V120: Kennedy Expressway’s Reversible Gate System, Illinois Department of Transportation, 1995

This video shows the operation of the reversible lane gate system on Chicago’s Kennedy Expressway (2min 33sec).

V121: Ralumac I-474 Over Illinois River at Peoria, Illinois Department of Transportation

This video is a microsurfacing demonstration under the trade name Ralumac over the Illinois River at Peoria, IL (7min 7sec).

V122: Half-Smart Project US 36 Douglas County, Illinois Department of Transportation

This video demonstrates a one lift asphalt application with seal coat under the “Surface Maintenance At the Right” guidelines (8min 44sec).

V123: Full Containment Bridge Painting, Illinois Department of Transportation

This video demonstrates full containment bridge painting (12min 25sec).

V124: IDOT Aerial Surveys Section, Illinois Department of Transportation

This video details the activities of the IDOT Aerial Survey section (19min 38sec).

V125: IDOT Bridges to Your Future, Illinois Department of Transportation

This video describes the career opportunities offered at IDOT and discusses the Co-Op Program as well (23min 22sec).

V126: Paths of Thunder - Safety at Railroad Crossings, Florida East Coast Railway Company

This video discusses safe diving practices and the use of common sense while negotiating railroad crossings (19min 59sec).

V127: European Concrete Pavement: Michigan Paves the Way, Michigan Department of Transportation, 1994

Michigan follows European techniques of constructing better concrete pavements. (16min)

V128: Bituminous Paving Inspection, Michigan Department of Transportation, 1991
5 part video discussing bituminous paving inspection. (151min)

V129: Good Highway Winter Maintenance/ Risk Management, Salt Institute, 1995
This video shows the need for a highway winter maintenance program and its relation to risk management (8min 27sec).

V130: The Snow Fighters, Salt Institute, 1995
This video contains updated information on cost vs. benefits of salt as a highway deicer, maintenance and winter preparation, spreader calibration, snow fighting techniques, and more (20min 30sec).

V131: Making Safer Roads, Insurance Institute, 1995
This video explains the importance of roadside safety and how to spot potential roadside hazards before they are involved in an accident (12min 20sec).

This video shows ways to accommodate pedestrians with disabilities (47min 13sec).

V133: Road Repair: Do the Right Thing at the Right Time, Minnesota Department of Transportation, 1991
A guide to preventive road repair on how to save money compared to postponing work when it will cost more. (20min)

V134: Asphalt Crack Treatment, Minnesota Department of Transportation, 1992
This video demonstrates how crack sealing can prolong asphalt pavement life. (15min)

This video provides basic education in “lay terms” and illustrates on the effects of loads and weather on road pavements. The video also shows how roads function and wear over time. (17min)

This video offers information on how public officials develop reasonable, research-based traffic control strategies, and choose traffic control devices. The video also explains why officials should arrive at a systematic and system-wide traffic control policy and should then establish a track record of following that policy (12min 25sec).

This video shows safety aspects of selection, maintenance, and operation of a chain saw. (31min)

This video reviews several types of shoring and provides rules for their correct use. (10min)

This video explains how local agencies can work together when a disaster strikes. A mutual aid program ensures that public safety is restored quickly and effectively (12min 8sec).

V142: Breakaway Sign Program, New Jersey Department of Transportation
This video gives an overview of the breakaway sign system that was established in the 1970’s. The video also discusses and shows components of the sign supports, assembly and installation details, crash tests, and repair procedures following collision damage (11min 22sec).

V143: In-SITU Cold Recycling, New Mexico Department of Transportation
This video describes the cold recycling method used by the New Mexico DOT (12min 46sec).

V144: Maintaining Asphalt Roads Blade Patching, New Mexico Department of Transportation
This video illustrates the process of blade patching, which involves cleaning and preparing surface to be patched, laying material, lifts, tapers, compaction, and final rolling and clean-up (11min 45sec).

This video demonstrates practices and procedures to follow at construction sites to control erosion and sediment. (18min)

V146: Coordinated Signal Data Acquisition and Playback System, Ohio Department of Transportation, 1991
This video discusses the coordinated data acquisition and playback system for traffic signals. (28min)

V147: Bridge Deck Repair, Oklahoma Department of Transportation, 1981
A hole in a concrete bridge deck is repaired from travel surface by using a form hanger technique. (9min)

V148: Fabric Forms for Erosion Control, Oklahoma Department of Transportation, 1980
This video shows uses for geotextile fabric forms in erosion control. (15min)
V150: Timber Bridge #2, Pennsylvania Department of Transportation

This video shows modern timber bridges can be installed by local construction firms or municipal employees at lower cost and less time than traditional bridge construction (27min 30sec).

V151: Hazardous Material: Design, Construction, Maintenance, Pennsylvania Department of Transportation

This video details hazardous materials encountered in different areas of highway construction and how to protect yourself and others (63min 31sec).

V152: Surface Treatment, Pennsylvania Department of Transportation

This video is a presentation on chip sealing and also includes information on emulsified asphalt properties, proper distributor oil temperature, spray bar height and operation, and rock spreading (20min).

V153: Field Testing Concrete, Washington Department of Transportation

This video discusses: preparation, sampling, and testing; slump test and casting cylinders, and air content (33min 24sec).

V154: Modern Timber Bridges, Rhode Island LTAP

This video chronicles the construction of a demonstration timber bridge in Foster, Rhode Island. The video also outlines the benefits of building timber bridges (16min 48sec).

V155: Bridge Deck Overlays, Strategic Highway Research Program, 1994

This video explains the bridge deck overlays in four major parts: deck condition, materials, surface preparation, overlay placement. (20min)

V156: Concrete Bridge Protection, Repair, and Rehabilitation, Strategic Highway Research Program, 1994

This video examines existing repair techniques and development of new techniques on retaining much existing salt contaminated concrete in place. (5min)


This video covers four of the most common maintenance activities: pothole repair, spall repairs, crack sealing, and joint filling and sealing. These activities are presented in terms of extending repair life, speeding up repair time, and reducing motorist delay (16min 44sec).


Shows SHRP projects aimed at improving maintenance operations. (15min)
V159: Asphalt Pavements that Perform, Strategic Highway Research Program, 1994

The video briefly describes the advanced asphalt pavement technique “Superpave.” This method incorporates performance based specifications, new test methods, and computerized mixed design systems. (5min)


This video discusses Alkali-Silica Reactivity (ASR) as a major cause of cracking in concrete. The video contains the conventional and new methods of determination, prevention, and testing of ASR. (21min)

V161: Concrete Pavement Overlays, Strategic Highway Research Program, 1994

This video provides general information and steps for constructing concrete overlay including design consideration, pre-overlay repairs, surface preparation, concrete placement and curing, joint sawing and sealing. (22min)

V162: Early Opening of Full Depth Concrete Repair, Strategic Highway Research Program, 1994

This video explains the major considerations of early opening full-depth concrete repairs. Planning, scheduling, and evaluating work are also discussed. (10min)

V163: Full Depth Repair of Jointed Concrete Pavements, Strategic Highway Research Program, 1994

This video discusses five major topics relating to jointed concrete pavement: distress requiring full depth repair, field surveys, transverse joint designs, materials, and repair procedures. (18min)

V164: Introduction to Rehabilitation of Highway Concrete, Strategic Highway Research Program, 1994

This is the first of a five video series about rehabilitation of highway concrete. This video introduces five activities: partial-depth repairs, full repairs, full slab replacement, concrete overlays on existing pavement, and overlaying bridge decks. (11min)

V165: Partial Depth Repair of Concrete Pavement, Strategic Highway Research Program, 1994

This video explains the materials and repair process of partial-depth repair of concrete pavement. (15min)

V166: Quality Control of Concrete on Cite, Strategic Highway Research Program, 1994

This 4 part video deals with quality control at the construction site. (59min)

This video program is designed for the safety of workers in work zone areas and also discusses several safety equipment features such as warning devices, pothole speed bumps, delineation devices, lighting devices, and signal flagging devices. (17min)

This video discusses causes and prevention of freezing the concrete pavement in addition to conventional and new testing. (25min)

V169: Effective Snow Fences, Strategic Highway Research Program, 1994
This video outlines the important procedures to be followed during snow storms in order to provide efficient and safe movement to traffic. The video also shows the proper storage of salt and the role of salt during snow storms. (21min)

This video highlights the innovations in snow plow design for better visibility, control, and energy savings. (8min)

V171: AASHTO 1991 Technology Transfer Fair, Strategic Highway Research Program, 1994
This video describes research products exhibited at AASHTO’s fair in Milwaukee. Major topics covered include worker safety, snow and ice control, highway maintenance, concrete, and asphalt. (59min)

V172: SHRP Innovations Snow and Ice Control, Strategic Highway Research Program, 1994
This video provides an overview of SHRP products developed to improve snow and ice control effectiveness and safety. The video also includes equipment ideas, weather information systems, as well as materials and methods for snow and ice control. (13min)

V173: Mailboxes May be Hazardous to Your Health, Texas Department of Transportation
This video shows examples of acceptable supports for single and multiple box installations. Crash tests illustrate the dangers of many typical installations. (14min)

V174: Causes of the Failures of the Big Sioux Bridge, United States Department of Transportation
This video examines the reasons behind the collapse of the Big Sioux Bridge over the Missouri River in 1962 (32min 20sec).

This video talks about how our transportation system affects the country, how to create positive public relations, and creating a communications plan for the public. The video also discusses how to work with the media and how to establish credibility with the media. The video emphasizes the importance of using credible spokespeople to explain transportation policies. Finally, the video covers public service announcements and how to get messages out with greater success (18min 41sec).

**V176: Oakwood Bottoms-Take Wing With Us (Shawnee National Forest), United States Forest Service, 1996**

Oakwood Bottoms is the northernmost bottomland hardwood forest in the Lower Mississippi Alluvial Valley. It is located in the Southwest Region of the Shawnee National Forest two miles east of the Mississippi River and adjacent to the Big Muddy River. It has been restored to mimic the natural way the area would have evolved if man-made levees had not been constructed to preserve privately owned land (20min).

**V177: White Gold, United States Forest Service, 1998**

This video illustrates a low cost method for fabrication of timber decks over steel grinders using methods developed by John Smelen, County Engineer for Ashtabula Co., Ohio (25min 31sec).

**V178: Prefabricated Timber Bridge Deck Panels, United States Forest Service, 1998**

This video illustrates a low cost method for fabrication of timber decks over steel grinders using methods developed by John Smelen, County Engineer for Ashtabula Co., Ohio (10min 3sec).

**V179: Earth & Gravel Road Maintenance: 6 Part Series, United States Forest Service, 2002 (110 min)**

**Part 1: Forest Roads and the Environment:** This tape provides information on how to keep the environment in mind when repairing or maintaining environmental or low volume roads. Can be applied to local roads and streets (18min).

**Part 2: Reading the Traveled Way:** Explains the different types of problems that occur on the roads and what you can do about them, such as: potholes, destroyed road templates, scour, loss of surfacing, damage to bridges, damage to fords, etc...(16min).

**Part 3: Reading Beyond the Traveled Way:** Informs you how to properly identify problems pertaining to the environmental road and how to safely repair gullies, cracks and slumps, roadside ditch, etc...(16min).

**Part 4: Smoothing and Reshaping the Traveled Way:** Properly explains how to smooth or reshape crowned, insloped, outsloped, and transition roads while keeping their shape (17min).

**Part 5: Maintaining the Ditch and Surface Cross Drains:** Shows you how to maintain ditches and cross drain, as well as show you how to make water bars and why they are essential to the environmental and local roadways 16min).
Part 6: Dangerous Travelers: covers the best management practices to assist road maintenance crews in controlling the rapid spread of invasive plants. Topics that are covered include: plant identification, inventory systems, mapping, mechanical removal, herbicide treatments, weed free products, maintenance techniques, and cleaning of equipment (26min).

V180: Patch PCC with PCC, Utah Department of Transportation

This video demonstrates the steps involved in patching PCC with PCC (31min 56sec).


This video demonstrates two types of joint sealant that IL DOT’s Bureau of Materials and Physical Research (BMPR) evaluated to reduce longitudinal joint degradation (10min 13sec).

V182: Detectable Warnings on Walking Surfaces, Stampcrete, 2003

This video details the manufacturer’s recommended construction practices for installing truncated domes to comply with ADA requirements using specialized concrete stamping processes (7min 26sec).

V184: Meth Labs: California’s Hidden Danger, California Department of Justice, 2001

This video was prepared to introduce individuals to the dangers of meth labs by making them aware of what to look for and how they could possibly be harmed by the gases and residue of leftover chemicals used in processing methamphetamines. This video also explains how meth labs in the local area can be discovered by the ability to identify the waste being dumped. Meth labs have been found in parks, cars, hotels, and even in picnic baskets. This video will assist emergency personnel in identifying potential dangers when responding to emergency calls. (18min)


This video explores the relationship between the people and the land- past, present, and future as it celebrates the partnership between the Forest Service, Federal Lands Highway Administration, and State and local communities in providing continued stewardship and access to our national forests (32 min).
Special Interest Videos

The special interest videos include project and product demonstration videos, promotional videos, and specialty videos. Many of these videos can be used to accompany presentations or speaking engagements. These videos are for two-week loan only. Many of these videos are protected by copyright and MAY NOT BE DUPLICATED without specific written permission from the source. The videos in this section will be numbered V500-V564. An order form is included in the back of this catalog.

The Special Interest Videos are being offered as a way of sharing information on new technologies. This is not an endorsement by the Illinois Department of Transportation or the Technology Transfer Center for the particular products or information presented.

Videos in numerical order:

V500: Plow Power, American Public Works Association
   
   This video illustrates safety and snow plowing techniques on city streets, at intersections, and in subdivision cul de sacs (15min).

   
   This video discusses the advantages of using flowable fill as an alternative to conventional backfilling with its main advantage being its ability to support with minimal settlement (7min).

V502: All American Disk, Doyle Inc., 1996
  
  This video shows how the All-American disk reclaims gravel and fills in shoulder drop-offs along roadways (5min).

V503: Hand Signals For Crane Operation, Link-Belt Corporation
  
  This video illustrates the correct hand signals to use when guiding a crane operator (11min).

V504: Computer Literacy, Learn PC, 1992
  
  3 part video that introduces computers to new users
  
  Part 1: Introduction to PCs (30min)
  
  Part 2: The Power of your Computer (50min)
  
  Part 3: Productivity at your Fingertips (20min)

V505: Underground Safety: Personal Protection, National Utilities Contractors Association
  
  This video illustrates personal protection practices to follow when working underground (10min).
V506: Back To Basics: Back Injury Prevention, Association of General Contractors

This video provides helpful suggestions to prevent back injuries (15min).

V507: Tool Box Talks: Scaffold Safety, Association of General Contractors

This video provides safety tips to follow while working on or near scaffolds (5min).

V508: Avoid Hot Mix Hazards: Working Safely with Hot Mix, Association of General Contractors

This video shows how to work safely when using hot mix asphalt (14min).

V509: RULES OF THE GAME: Employee Safety Orientation, Association of General Contractors

This video is based on building construction safely but can be applied to highway construction and maintenance operations. Some valuable safety information is provided (12min).

V510: SI Metric in the Workplace, Workplace Training

Part 1: Introduction to SI Metric

Part 2: Units of Measure

Part 3: Reading and Writing Rules

This video is designed as an introduction to the metric system for engineers and all support staff. The video is accompanied with a participant’s workbook developed by the Technology Transfer Center (20min).

V511: Drugs at Work, National Institute on Drug Abuse

This video covers the human and monetary costs and consequences associated with drugs in the workplace. The Drug Free Workplace program is also discussed (24min).


This video discusses the right to know information regarding chemicals present in the workplace. The video also addresses training, labeling, and containing devices (20min).

V513: It's Everyone's Concern, Coastal, 2002

This video examines some security measures that may be encountered in public buildings and discusses why they are necessary. Simple tools are given to ensure the peace of mind that comes with working in a safe and secure public building (17min).

V514: AGC Partnering Program, Association of General Contractors, 1992

The owner-contractor management concepts of total quality management and partnering are discussed (12min).
V515: Traffic Control Series, International Road Federation, 1994

5 Part video covering traffic control on a global basis (104min)

Part 1: Markings and Islands.

This video follows MUTCD guidelines on the design and application of markings and islands (19min).

Part 2: Traffic Controls for Schools, Railroad Crossings, and Bicycle Facilities.

This video follows MUTCD traffic controls for three traffic control conditions requiring extra safety considerations: schools, railroad crossings, and bicycle facilities (24min).

Part 3: Traffic Control Signals at Intersection.

This is a basic introduction to how engineers determine if a signal is needed and the basic principles of signal controller phasing and traffic signal timing. Intersection studies are briefly described, and types of warrants for signalization are given. Signal equipment is also shown (18min).

Part 4: Traffic Sign Inspection and Maintenance.

This video shows the importance of sign inspection, inventory, and maintenance procedures (21min).

Part 5: Traffic Sign Placement and Location.

This video covers the placement and location of signs in general and specifically at their placement and location in three areas: urban, rural, and freeways (22min).

V516: Jobsite Safety Series, International Road Federation, 1994

2 Part video that covering jobsite safety on a global basis (45min)

Part 1: Developing Jobsite Traffic Control Plans

This video follows the development of an effective traffic control plan from the preplanning process, through the design and writing, the implementation, evaluation, and even revision (21min).


This video shows types of traffic control devices, their installation, and inspection at a basic worksite based on a traffic control plan (24min).

V517: Snow Removal Techniques - Plowing Tips From the Pros, Vista Videos
This video provides excellent tips for snow plow operators to help them do a better job. This video can be used as a training video for new operators and can give new information to experienced operators (23min).

V518: Right Before Your Eyes, ATSSA, 1993

This video gives a general presentation on the need for effective pavement markings (10min).

V519: Super Bridge, PBS- NOVA, 1997

This video takes a look at the construction of the (cable stayed) Clark Bridge spanning the Mississippi River at Alton, IL. (120min)


This video explains Illinois law regarding JULIE notification, the proper procedures to follow, and location information needed (24min).

V521: On Solid Ground, Association of General Contractors

This video describes the importance of trench shoring and safety steps (18min).

V522: Principles of the Asphalt Paver, Barber-Greene, 1992

This video illustrates the operation of the Barber-Greene asphalt paver to produce a quality paving surface (18min).

V523: Discovering the Internet, Learn PC, 1995

This video explains how the Internet works. Topics include the Internet and the World Wide Web, on-line services, Internet providers, web browsers, web pages, using email, and performing searches on the web (60min).

V524: Cutler Repaving History, Cutler

The Cutler Repaver is demonstrated (10min).

V525: How to Prevent Segregation, Video University Productions, 1992

This video discusses the causes of segregation in asphalt mixes and how to prevent it (26min).

V527: Road Oyl: Resin Modified Emulsion, Road Products Corporation, 1993

This video explains Road Oyl, which is a non-water soluble, high bonding strength emulsion developed for use in pavement applications, dust control and erosion control (25min).

V528: Building the Notched Wedge Joint, National Asphalt Pavement Association, 1998
This video provides the viewer with the construction technique utilized to create the “Notched Wedge Joint” and its reported benefits including: enhanced pavement life and increased safety. This video is ideal for: design engineers, inspectors, and asphalt paving personnel (8min).

V529: Cold In-Place Recycling, ARRA

This video describes the cold in-place recycling process, core sample testing, and design recycling content procedures, as well as advantages and disadvantages (40min).

V530: Full Depth Reclamation, ARRA, 1992

This video covers the applications and issues of full depth reclamation and fully describes the short term and long term benefits (12min).

V531: Hot In-Place Recycling, ARRA, 1991

This video describes how hot in-place recycling can extend the existing asphalt life at half the cost of conventional recycling while protecting the environment (7min).

V533: Principles in Quality Concrete, PCA

This video discusses all phases of achieving high strength concrete, from selection of materials to placement and curing (36min).

V534: Construction Trenching and Shoring: Hard Hat Series, Coastal, 2002

OSHA estimates that approximately 90 deaths occur every year because someone did not know basic trenching and shoring safety guidelines. The practical safeguards covered in this video can help prevent these needless casualties. Topics include: evaluating an excavation site, effective worker protection systems, and emergency response (10min).

V535: Defensive Driving for Government Employees, Coastal, 2002

This video program looks at techniques to help prevent accidents from happening, and in the case of unavoidable accidents, help lessen their severity. Topics include: What is Defensive Driving?, Respect for your Vehicle, Your Responsibility as a Driver, Proper/Safe Driving Techniques, Seat Belts, Driving in Poor Weather; Speeding; Right-of-Way, Passing, Tailgating, and Distractions and Road Rage (19min).

V536: Personal Protective Equipment: Don’t Start Work Without It (Safety 101), Coastal, 2002

This video discusses proper equipment for each job, and how to use equipment correctly. Topics include: Eye and Face Protection, Hearing Protection, Hand and Foot Protection, and Basic PPE Rules (15min).

V537: Construction Lockout/Tagout, Coastal, 2003
This video summarizes the six-step safety procedure for preventing unexpected start-ups of equipment during service and maintenance. Topics include: How Lockout/Tagout Systems Work, When to Use Lockout/Tagout Procedures, and the Six Steps Required in Lockout/Tagout Process (10min).

V538: Construction Confined Space Entry, Coastal, 2002

This video discusses the necessary skills to prevent or escape dangerous or even fatal accidents while working in a confined space. Preparation begins with this overview: Identifying Confined Spaces & their Hazards, OSHA’s Confined Entry Permit Program, and Duties of Confined Space Entry Team (10min).

V539: Flagging: You’re the Director, Coastal, 2002

The job of the flagger is crucial for preventing highway work zone accidents. However, flaggers are often not properly trained or even trained at all. This video reviews vital flagging procedures including: Flagger Requirements, Proper Clothing & Equipment, Flagger Position, and Stopping and Releasing Traffic (18min).

V540: Highway Work Zone Safety: The Basics, Coastal, 2002

This video will help your employees understand and comply with MUTCD and learn what it takes to keep themselves, drivers, and pedestrians safe. Topics include: Being Safety Conscious, Traffic Control Devices, Slowing Down Traffic, Detours and Closures, and Communication (18min).

V541: Heat Stress, Coastal, 2003

This video focuses on preventing illness and minimizing safety hazards. The video complies with NIOSH and OSHA recommendations. Topics include: Hazards of Hot Environments and First Aid (16min).

V542: Construction Fall Protection: Get Arrested! Coastal, 2002

This video program will help your employees work safer and smarter as well as train your employees on what’s new, what’s in, and what’s out, as far as fall arrest equipment and safety procedures go. Topics include: Requirements for Guardrail Construction, Strength and Minimum Height Standards, Proper Anchorage Techniques, and When & How to Use Lifelines & Positioning Devices (11min).

V543: Winter Safety, Coastal, 2002

Freezing temperatures and icy roads are not only uncomfortable, they can be deadly. Either on the job or during recreational time, winter weather can pose special dangers to everyone. Topics include: Signs & Treatment of Hypothermia & Frostbite, Prevention of Hypothermia & Frostbite, and Off the Job Winter Safety (14min).
V544: Road Rage, Safety Shorts, 1998

This video explains road rage and its causes from aggressive drivers to rude drivers. This video also discusses various ways of stress management and ways to avoid confrontations with rude operators (6min).

V545: Quick-Change Movable Barrier, Barrier Systems Inc., 2002

This video shows the general operation and discusses the advantages of the Quick-Change System. The system is demonstrated on the Texas I-30 Contraflow HOV Lane (18min).

V546: Stabilization for Low Volume Roads, American Road and Transportation Builders Association

This video details the six steps to soil stabilization for unpaved roads or as a base under pavement (11min).

V547: Trenching and Shoring: The "Hole" Story, Safety and Training Services, 1998

This video reviews OSHA’s trenching requirements for cave in prevention and worker safety (13min).


This video reviews safety practices pertaining to Hot Mix Applications in three stages including paver operations and roller operations. The video also covers different tasks performed by laborers and tips on proper paving techniques. Also includes Spanish version (30min).

V549: Back Safety: Lift Well, Live Well, Coastal, 2001

This video will show you how you can “head off back pain” when you use your head and remember to protect your back from stress (14min).

V550: AEMA Paving the Way...to the 21st Century, AEMA, 1995

This video covers the applications and benefits of using asphalt emulsions (11min).

V551: What's Hot Mix Asphalt, National Asphalt Mix, 1993

This video explains what hot mix asphalt is and its uses (12min).

V552: Ultra-Thin Whitetopping: Today's Choice for Durable Pavement Overlays, American Concrete Pavement Association

This video shows an alternative to HMA for overlays and also provides benefits and a brief overview of the Ultra-Thin Whitetopping process (8min).

V553: Chainsaw Sharpening, Forest Products Accident Prevention Association
This video shows that proper chain saw sharpening increases safety, as well as efficiency (7min).

V554: In Place Concrete Recycling System, Paradigm Equipment Company, 1993

This video explains the paradigm in place concrete recycling process and its benefits (9min).

V555: Safe and Secure, Coastal, 2001

Coastal’s HazMat: Safe and Secure video examines the types of threats that exist for facilities that manufacture, store, use, or transport hazardous materials. It covers the details of a security vulnerability analysis, as well as tips to make your facility safer and more secure (24min).

V556: Qualification Based Selection (Contractor Selection), Consulting Engineers Council of Illinois

This video explains the qualification-based selection process and how it is used for professional or public projects. The video also explains the selection process and how to evaluate and rank different firms for your project. Selection of qualified engineers/architects for projects and avoiding low bid catastrophes are also discussed (15min).

V557: Crisis Under Control, Coastal, 2000

OSHA’s 1910.38 require each company develop a workable emergency action plan. These plans are necessary due to new threats facing our society today, such a plan is required not only for compliance, but also for survival. Make sure your organization has a well thought out plan in place by following the guidelines provided in this program (16min).


This video was produced with the FHWA and explains the basics of superpave material selection, laboratory compaction, and the required mix evaluation processes. This video is based on the national recommendations however; IDOT has made minor changes to the national recommendations (13min).

V559: Sensible Wood Cutting: Tips from the Pros, Husqvarna Forest and Garden, 2003

This video provides some basic tips and techniques that can make your cutting experiences safer and more productive. The video also covers: Personal Protective Equipment, Safety Features of Husqvarna Chain Saws, Making a Cutting Plan, and Various Felling Techniques (25min).


This video describes accident and safety steps that are abused routinely by experienced operators. The video also covers what injuries can cost most companies, the three points of contact, how to complete a walk around inspection, and common checks that will help avoid falls as well as injuries for operators (18min).

This video contains information on identifying highway safety programs and solutions, evaluating and selecting the best safety alternatives, and evaluating safety program results (58min).

V562: Highway Safety Improvement- Equipment Management Systems Series International Road Federation, 1996

This video provides an introduction to EMS and discusses keeping a record of equipment inventory, equipment maintenance, parts and supplies management, financial management, equipment management information sub-systems and EMS implementation. (60min)

V563: Pavement Management Systems (PMS), International Road Federation, 1996

This 4 part video provides an overview on pavement management systems, pavement management system data collection/management, and developing & implementing pavement management systems (67min).

V564: Maintenance Management Systems (MMS), International Road Federation, 1996

This 5 part video provides an overview of maintenance management systems and information on developing maintenance standards, the MMS work planning process, MMS work authorization and scheduling, and MMS work reporting and evaluation (100min).

V565: Highway Safety and Trees: The Delicate Balance, U.S. Department of Transportation,

This video further explores the issue of the safe placement of trees along our country’s roadsides. The video stresses the design of highway projects should be a cooperative effort involving the highway agency, concerned communities, organizations, and individual citizens. These types of cooperative efforts provide an opportunity for all parties to recognize the benefits and risks associated with trees (12 min).

V566: Transportation Visualization, Halff Associates

Halff’s in depth experience with their clients, their understanding of transportation needs, as well as their exceptional project delivery make them a leader in the development and design of streets, highways, toll roads, rail systems, and airports. This video is helpful before undertaking any transportation project (7 min).

V567: Crack Filling and Sealing, LTS Productions, 2003

This twelve minute video breaks down and discusses crack filling and sealing into six segments: introduction, equipment, crack refacing, crack cleaning, sealant installation, and quality control (12 min).
Publication Library

The Publication Library offers renewable source publications and limited copy Strategic Highway Research Program and Federal Highway Administration publications. All are provided free of charge and are linked online.

Available publications in numerical order

**P001:** Work Area Protection Guide, IDOT, Bureau of Operations, 1997

This pamphlet provides MUTCD (part 6) traffic control layouts for different types of encroachments onto the pavement (83 pages).

**P003:** Flagger Handbook, IDOT, Bureau of Local Roads, 2003

This booklet is a “how to” guide for flaggers (21 pages).

**P004:** Illinois Highway Design Standards for Traffic Control, IDOT, Bureau of Operations, 2003

IDOT’s current traffic control standards, includes the 5 urban cities (47 pages).

**P005:** Work Zone Traffic Control, IDOT, Bureau of Operations, 2002

This booklet contains excerpts from the IDOT Specifications book and the Supplemental Specifications and Recurring Special Provisions regarding work zone traffic control (60 pages).

**P006:** Quality Standard for Work Zone Traffic Control Devices, IDOT, Bureau of Operations, 2010

This booklet is a visual identification system to identify acceptable, marginal, and unacceptable signs, panels, drums, and cones (17 pages).

**P007:** Maintenance of Signs and Sign Supports for Local Roads & Streets, FHWA, 2010

Publication FHWA-RT-00-00

This is a guide for street and maintenance personnel, it also covers repairs and replacement of sign panels and supports, and the materials and equipment to do this (66 pages).

**P008:** Rating Unsurfaced Roads, US Army Corps of Engineers, 1988

This is a field manual for measuring maintenance problems and also covers dividing your road network into branches and sections, inspecting unsurfaced roads, and calculating ratings (35 pages).

**P009:** Pothole Primer, US Army Corps of Engineers, 1989
This is a public administrator’s guide to understanding and managing pothole problems, it also covers identifying and cataloging causes of why potholes form and discusses how to resolve problems. This guide also discusses patching procedures for all types of potholes (28 pages).

**P011:** Writing the Metric Way, IDOT, Bureau of Local Roads, 1994

This training workbook provides anyone who writes, transcribes, or types metrics, a working knowledge of the metric units, their proper usage and the editorial rules for using the metric (SI) system. This booklet is intended as a metric reference guide and not the sole authority for the complete metric system (24 pages).


Publication FHWA-RD-95-202

This manual provides information for successful implementation of an effective highway anti-icing program. It is written to guide the maintenance manager in developing a systematic and efficient practice for maintaining roads in the best conditions possible during a winter storm. It describes the significant factors that should be understood and must be addressed in an anti-icing program, also recognizing the development of the program must be based on the specific needs of the site or region within its reach. The manual includes recommendations for anti-icing practices and guidance for conducting anti-icing operations during specific precipitation and weather events (70 pages).

**P016:** Concrete- PASER Manual, University of Wisconsin-Madison, 2002

This manual will help people in local agencies use the PASER system to evaluate concrete pavement surface condition. They alone can use techniques to manage pavements, or incorporate them into a more comprehensive management system (32 pages).

**P017:** Asphalt- PASER Manual, University of Wisconsin-Madison, 2002

This bulletin will help people in local agencies use the PASER system to evaluate asphalt pavement surface conditions. They can use techniques alone to manage pavements, or incorporate them into a more comprehensive management system (32 pages).

**P018:** General Administrative Duties for the Township Highway Commissioner, IDOT, Bureau of Local Roads, 2013

This manual was prepared for use in General Administrative Duties of the Township Highway Commissioner’s Seminar. The manual went through extensive revisions in 2001 and was prepared through cooperative efforts of the Illinois Association of County Engineers, the Township Officials of Illinois, the Illinois Department of Commerce and Community Affairs, and
the Illinois Department of Transportation Bureau of Local Roads and Streets' Technology Transfer Center. The manual was updated in July 2013 (79 pages).


Describes USDOT transportation professional capacity building (PCB) efforts, and provides links and contacts for 9 PCB programs and 8 partners (156 pages).


This guide provides a brief overview on GASB-34 requirements (12 pages).

P021: Extended Life Continuously Reinforced Concrete Pavement, IDOT, D5, 2003

Summary of I-70 reconstruction project using new PCC extended life design (11 pages).

P022: Gravel - PASER Manual, University of Wisconsin-Madison, 2002

This bulletin will help people in local agencies use the PASER system to evaluate gravel pavement surface conditions. They can use techniques alone to manage pavements, or incorporate them into a more comprehensive management system (24 pages).


This booklet was prepared for IDOT employees only. This is the Department's policy for the proper application of traffic control devices for all operations work, except for snow and ice control and emergency traffic patrol. These cases establish the minimum requirements. If additional devices are needed to enhance safety, they should be added when necessary (112 pages).


This booklet was prepared for IDOT employees only. This is the Department's policy for the proper application of traffic control devices for all IDOT employees working on or near open traffic lanes. These cases establish the minimum requirements. If additional devices are needed to enhance safety, they should be added when necessary (146 pages).

P025: Implementing Bicycle Improvements at the Local Level, FHWA, 1998
Publication FHWA-98-105

The purpose of this document is to provide detailed information on how to implement some of the most useful and popular bicycling components intended to increase the levels of safety of bicycle use within the affected communities. The advice contained herein will be most useful for
those at the local - typically below the Metropolitan Planning Organization (MPO) - level working to implement the MPO long-range plans (100 pages).


This pamphlet was prepared to provide local agencies and consultants with a quick reference to the development and usage of specifications and special provisions. It is intended that the provisions of this pamphlet be a reference and not the final authority (15 pages).


This booklet seeks to assist law enforcement officers and other first responders to safely investigate crashes, deaths, and injuries at highway - rail grade crossings and on railroad rights-of-way (16 pages).


This publication gives a general overview of superpave concepts and was developed for use in NHI Course Number 131053 (163 pages).

**P029: The Illinois Grade Crossing Protection Fund, IDOT, Bureau of Local Roads, 2013**

This publication gives an overview of the use, operation, and administration of the IL grade crossing protection fund (43 pages).

**P030: Signing of Road District and Township Highways, IDOT, Bureau of Local Roads, 1997**

This booklet is to furnish guidance to the Highway Commissioner, regarding signs and their uses as well as traffic control devices. Any reference to the "Manual" is to the "Manual on Uniform Traffic Control Devices" or the "Illinois Supplement to the National Manual on Uniform Traffic Control Devices" (78 pages).


This pamphlet was prepared to provide local agency's officials with a quick reference to the source, distribution, and uses of Motor Fuel Tax funds. The intent is the provisions of this document be a reference and not the final authority on the receipt or expenditure of Motor Fuel Tax funds (14 pages).

**P032: Motor Fuel Tax Funds: Source, Distribution, & Uses for Municipalities, IDOT, Bureau of Local Roads, 2012**

This pamphlet was prepared to provide local agency's officials with a quick reference to the source, distribution, and uses of Motor Fuel Tax funds. The intent is the provisions of this
This pamphlet was prepared to provide local agency's officials with a quick reference to the source, distribution, and uses of Motor Fuel Tax funds. The intent is the provisions of this document are a reference and not the final authority on the receipt or expenditure of Motor Fuel Tax funds (14 pages).


These guidelines summarize highway jurisdiction issues and outline the process required for jurisdictional transfers. It also addresses vacations and additions to the township and road district system. These guidelines take you step by step through the process describing the required actions and if applicable, alternatives (140 pages).


This manual is intended to provide critical information, which is found throughout IDOT plans and manuals. R.H.I.D.E. is intended to supplement and augment existing emergency plans, policies, and procedures. Specific attention is given to "immediate actions" and enabling IDOT personnel to react to the situation as it occurs. Your personal safety is of primary concern when evaluating and taking action (43 pages).


This publication summarizes the state-of-the-art design, installation, and effectiveness of detectable warning surfaces used in the U.S. and abroad. It will be helpful to transportation engineers, planners, and other interested persons working to make public rights-of-way more accessible to people who have visual impairments (150 pages).

P037: Working with Positive Protection, IDOT, 2004

This brochure is intended to inform workers of the nature of positive protection in highway work zones, to note the limitations of positive protection, and to let workers know what they can do to maximize safety when working in areas separated from traffic by positive protection (2 pages).

P038: Selecting a Preventive Maintenance Treatment for Flexible Pavements, FP2, 2000

This report specifically addresses flexible pavement preventive maintenance, including the types of pavements that are candidates for preventive maintenance, the available treatments, where
and when they should be used, their cost effectiveness, the factors to be considered in selecting
the appropriate treatment strategy, and a methodology to determine the most effective
treatment for a particular pavement (90 pages).

Compliance Board, 2001

The design guide was developed by the U.S. Architectural and Transportation Barriers
Compliance Board (the Access Board) in collaboration with the U.S. Department of
Transportation (DOT)/Federal Highway Administration (FHWA) to assist public works and
transportation agencies covered by title II of the Americans with Disabilities Act (ADA) in
designing and constructing public sidewalks and street crossings. The recommendations in this
publication may also be applied to shared-use paths that occupy a public right-of-way. State and
local transportation engineers, planners, landscape architects, civil engineers, and others who
design pedestrian facilities will also find useful guidance here for improving existing public
pedestrian circulation networks to be more usable by pedestrians who have disabilities (134
pages).

P040: Handbook for Simplified Practice for Traffic Studies, Iowa State University, 2002

This handbook describes simplified traffic study procedures that are easy to apply and are
written for all potential users (civil engineers and traffic engineers, public works managers, city
managers and attorneys, and the general public). (178 pages).

P041: Asphalt Seal Coats, Washington State Department of Transportation, 2003

This publication explains the different types of seal coats and provides an overview of
construction methods (36 pages).


The Illinois Manual on Uniform Traffic Control Devices (IMUTCD) consists of the national Manual
on Uniform Traffic Control Devices (NMUTCD) issued by the Federal Highway Administration as
amended by the Illinois Supplement to the MUTCD (40 pages).

P048: Asset Management Overview, Federal Highway Administration, 2007

Asset management, as described in this publication, is a business process and a decision-making
framework that covers an extended time horizon, draws from economics and engineering
theory and practice, and considers a broad range of assets. The approach incorporates the
economic assessment of tradeoffs between alternative investment options at both the project
level and the network or system level, and uses this information to help agencies make cost-
effective investment decisions. This publication identifies next steps, challenges, and strategies
in implementing a Transportation Asset Management program (52 pages).
**P049: Traffic Monitoring: A Guidebook, FHWA, 2010**

This guidebook will provide an overview of traffic monitoring through simple descriptions which explain the various basic concepts related to a successful traffic monitoring program. The intent of this guidebook is to consolidate and simplify technical and highly detailed traffic monitoring information into a document that can be used as a first step or introduction toward understanding traffic monitoring equipment capabilities and limitations. Furthermore, this document investigates some of the challenges associated with a traffic monitoring program including variability in traffic, adjustment factors, and strategies for assisting with under-funded programs (48 pages).

**P050: Erosion and Sediment Control Field Guide for Construction Inspection, IDOT, 2010**

The purpose of the Illinois Department of Transportation (IDOT) Storm Water Quality (SWQ) and Erosion Control Manual is to provide a technical guide containing practices for the correct installation, maintenance, inspection, and compliance of storm water erosion and sediment control (ESC) for IDOT's roadway projects. This Manual provides guidance in the form of Best Management Practices (BMPs) that will assist a Resident Engineer/Technician (RE/T) in the management of pollutants on a construction site in order to minimize the discharge of pollutants into Illinois waters (75 pages).

**P051: Concrete Pavement Field Reference: Preservation and Repair, IDOT, 2008**

This reference is not intended to be the final word in repair and restoration. Rather, it is a common-sense guide for quality concrete pavement repair and resurfacing. It represents some current practices, as well as a good-faith representation of methods, materials, machines, and instruments currently available for field repairs of concrete pavements (228 pages).


This publication is based on the results of ICT-R27-87, Implementing Pavement Management Systems for Local Agencies. ICT-R27-87 was conducted in cooperation with the Illinois Center for Transportation; the Illinois Department of Transportation (IDOT), Division of Highways; and the U.S. Department of Transportation, Federal Highway Administration (46 pages).

**P053: Snow Fence Guide, Strategic Highway Research Program, 2001**

Publication SHRP-H-320

This guide contains everything maintenance personnel need to know in order to design and locate snow fences correctly. A 21-minute video, "Effective Snow Fences," supplements this guide (76 pages).

**P054: Materials and Procedures for Repair of Potholes in Asphalt-Surfaced Pavements, FHWA, 2001**

40
This Manual of Practice is an updated version of the 1993 SHRP Pothole Repair Manual. It contains the latest information pertaining to the types and performance characteristics of repair materials and methods, as well as, the proper ways of planning, designing, constructing, and monitoring the performance of pothole repair projects. It also details how the cost effectiveness of pothole patch types can be determined and it provides an updated partial listing of material and equipment manufacturers (73 pages).

**P055:** Materials and Procedures for Repair of Joint Seals in Portland Cement Concrete Pavements, FHWA, 2001

This Manual of Practice is an updated version of the 1993 SHRP Joint Seal Repair Manual. It contains the latest information pertaining to the performance of sealants and resealing methods, the availability and relative costs of sealant materials, and the proper ways of planning, designing, constructing, and monitoring the performance of joint resealing projects. It also provides an updated partial listing of material and equipment manufacturers (112 pages).

**P056:** Innovative Materials, Development, and Testing: Pothole Repair, Strategic Highway Research Program, 1993

Publication SHRP-H-353

This report presents a summary of all aspects of the pothole repair experiment, including test site installation, material testing, field performance, and data analysis, in an effort to determine the optimum combination of materials and procedures for improving cost effectiveness of patching operations (227 pages).

**P057:** Distress Identification Manual for the Long Term Pavement Performance Project, FHWA, 2003

Publication FHWA-RD-03-031

Accurate, consistent, and repeatable distress evaluation surveys can be performed by using this manual. Color photographs and drawings illustrate the distresses found in three basic pavement types; asphalt concrete-surfaced; jointed (plain and reinforced) Portland cement concrete; and continuously reinforced concrete. Drawings of the distress types provide a reference to assess their severity. Methods for measuring the size of distresses and for assigning severity levels are given. The manual also describes how to conduct the distress survey, from obtaining traffic control to measuring the cracks in the pavement. Sample forms for recording and reporting the data are included. The manual also tells how to calibrate and operate fault measurement devices (169 pages).

**P058:** Emergency Relief Manual (Federal-Aid Highways), FHWA, 2013

This manual provides updated guidance and instructions on the FHWA’s (FHWA) emergency relief (ER) program. This manual provides information for FHWA, State, and local transportation
agency personnel on policies and procedures for requesting, obtaining, and administering ER funds (72 pages).

**P059:** Highway/Utility Guide, FHWA, 1993

This guide discusses better practices to follow to address issues arising from highway and utility facilities sharing common right-of-way (316 pages).

**P060:** Crumb Rubber Modifier, FHWA, 1992

This guide describes the design and construction of asphalt paving materials with crumb rubber modifier (132 pages).

**P061:** Utility Cuts in Paved Roads, FHWA, 1996

This pocket guide focuses on making and restoring utility cuts in a timely and safe manner, with as little disruption of traffic and commerce as possible, without leaving behind a defective pavement. Proper procedures, precautions, work steps, methods, equipment, and materials are highlighted (36 pages).

**P062:** Salt Storage Handbook, Salt Institute, 2006

This publication is an excellent guide discussing the ordering, storing, and handling of deicing salt. Environmental issues of salt storage are also explained (24 pages).

**P063:** Improving Highway Safety at Bridges on Local Roads, FHWA, 1998

This publication is a general guide to effective, low-cost methods of improving and enhancing bridge and bridge approach safety. This is not a design manual, but a guide to identify existing inadequacies and suggestions for cost-effective, improvements (35 pages).

**P064:** Gravel Roads Maintenance and Design Manual, South Dakota LTAP, 2000

The purpose of this manual is to provide clear and helpful information for doing a better job of maintaining gravel roads. This manual contains guidelines to help answers questions about the maintenance of gravel roads (91 pages).

**P065:** Real Estate Acquisition Guide, FHWA, 2003

This guide is intended to serve as a basic reference for local public agencies and others who receive Federal-aid highway funds for projects involving the acquisition of real property (95 pages).

**P066:** Excavator Handbook, JULIE, 2005

Helps excavators understand what is necessary to ensure safe digging from start to finish (32 pages).

This report is a synthesis of current practices for performing mobile operations at night. The information presented in this report is based on a review of work zone manuals from a selection of state and local highway agencies, discussions with highway officials, and field observations of a select number of nighttime highway mobile work zone operations (53 pages).


This publication contains the latest information pertaining to the performance of treatment materials and methods, the availability, and relative costs of sealant/filler materials, and the proper ways of planning, designing, constructing, and monitoring the performance of crack treatment projects. It also provides an updated partial listing of material and equipment manufacturers (94 pages).

P069: Materials and Procedures for Rapid Repair of Partial-Depth Spalls in Concrete Pavements, FHWA, 2001

This manual contains the latest information pertaining to the performance of repair materials and methods, the availability and relative costs of repair materials, and the proper ways of planning, designing, constructing, and monitoring the performance of partial-depth spall repair projects. It also provides an updated partial listing of material and equipment manufacturers (135 pages).

P070: The Snowfighter’s Handbook, Salt Institute, 1999

This manual prepared by the Salt Institute is dedicated to the thousands of men and women in public works agencies at all levels whose task is providing safe streets and highways during winter storms (27 pages).

P071: Primer: GASB 34, FHWA, 2000

This primer outlines the accounting requirements required by the Governmental Accounting Standards Board Statement 34 (50 pages).

P072: Emergency Response Guidebook, U.S. Department of Transportation, 2004

The 2004 Emergency Response Guidebook (ERG2004) was developed, for use by fire fighters, police, and other emergency services personnel who may be the first to arrive at the scene of a transportation incident involving dangerous goods. It is primarily a guide to aid first responders in quickly identifying the specific or generic hazards of the material(s) involved in the incident, and protecting themselves and the general public during the initial response phase of the incident. (374 pages)

P073: A Quick Reference to High-Visibility Safety Apparel, 3M Occupational Health and Environmental Safety Division, 2005
Covers various reflective Material class 1, 2, and 3 designed to be worn by Highway-road-Emergency workers, shows ANSI/ISEA requirements (8 pages).

P074: Pavement Preservation Check List Series, Foundation of Pavement Preservation, 2001

This series of 13 checklists was created to guide State and local highway maintenance and inspection staff in the use of innovative pavement preventive maintenance processes.

P075: Erosion Control Treatment Selection Guide, United States Department of Agriculture, 2006

This guide presents a strategy and information to assist professional judgment in developing cost-effective erosion control treatments for conditions commonly encountered on USDA Forest Service lands. This guide focuses on erosion control treatment and does not specifically address sediment control (53 pages).


This document provides guidance to construction site operators that need to prepare a SWPPP in order to receive NPDES permit coverage for their storm water discharges. The Clean Water Act provisions, EPA regulations and EPA’s Construction General Permit described in this document contains legally binding requirements. This document does not substitute for those provisions, regulations or permit, nor is it a regulation or permit itself. It also does not substitute for requirements under State law or construction general permits issued by States. It does not impose legally-binding requirements on EPA, States, or the regulated community, and may not apply to a particular situation based upon the circumstances. EPA and State decision-makers retain the discretion to adopt approaches on a case-by-case basis that differ from this guidance where appropriate (46 pages).


The goal of this Domestic Intersection Safety Scan was to reduce fatalities, personal injuries, and crashes at intersections in the United States by documenting and subsequently promoting innovative intersection treatments and comprehensive safety processes and procedures that have been implemented by transportation agencies specifically to improve intersection safety (81 pages).

P078: New MUTCD Sign Retroreflectivity Requirements, Federal Highway Administration, 2007

The second revision of the 2003 MUTCD introduces new language establishing minimum retroreflectivity levels that must be maintained for traffic signs. Agencies have until January 2012 to establish and implement a sign assessment or management method to maintain minimum levels of sign retroreflectivity. The compliance date for regulatory, warning, and
ground-mounted guide signs is January 2015. For overhead guide signs and street name signs, the compliance date is January 2018 (4 pages).

P079: W-Beam Guardrail, FHWA, 2008


P080: Vegetation Control for Safety, FHWA, 2009


This publication summarizes the state-of-the-art design, installation, and effectiveness of detectable warning surfaces used in the U.S. and abroad. It will be helpful to transportation engineers, planners, and other interested person working to make public rights-of-way more accessible to people who have visual impairments (150 pages).

P083: Context Sensitive Solutions: Report to the Illinois Governor and General Assembly, IDOT, 2004

There are three purposes to this report, corresponding to its three parts. The first is to provide the Governor and Legislature with a description of IDOT’s research and development of CSS policy. The second is to set out guidelines for design flexibility and stakeholder involvement which IDOT practitioners can use to achieve transportation excellence. Third, IDOT outlines the further work IDOT must do to expand upon and develop good Context Sensitive Solutions policies and practices (12 pages).


This guide will assist students in completing the National Incident Management System (NIMS) introductory training. The training should be completed by all local agency personnel that may respond to an incident and is available online at www.training.fema.gov/emiweb/is/is700.asp (80 pages).

P085: Roadway Signing Final Report, Federal Highway Administration, 2005

The purpose of this review was to examine the current state-of-the-practice in the area of sign maintenance on the rural local road system. The review consisted of an evaluation of current procedures being followed for sign maintenance of township roads, rural county roads, and local streets in communities with populations under 5,000. The team used the threshold of under 5,000 residents for three basic reasons: 1) State Transportation Program – Urban funds are available to municipalities with over 5,000 residents; 2) Municipalities with over 5,000 residents are considered urban areas; and 3) Municipalities with less than 5,000 residents don’t generally have public works departments (96 pages).
**P086: Best Practices Handbook on Asphalt Pavement Maintenance, Minnesota LTAP, 2000**

The purpose of this handbook is to provide background information about the importance of pavement preservation and preventive maintenance, as well as present maintenance techniques for a variety of distresses and conditions. The major focus of this handbook is on preventive maintenance activities, which are performed while the roadway is still in good condition with only minimal distress, before the pavement falls into a condition where structural overlays, major milling or reclaiming, or replacement is necessary (113 pages).

**P087: Intelligent Transportation Systems: Peer-to-Peer Program, Federal Highway Administration, 2002**

This program provides assistance through its network of over 120 USDOT-approved ITS professionals who have planned, implemented, and operated ITS in urban and rural areas (2 pages).


This guide provides a single, comprehensive document with methods for evaluating the safety and operations of signalized intersections and tools to remedy deficiencies. The treatments in this guide range from low-cost measures such as improvements to signal timing and signage, to high-cost measures such as intersection reconstruction and grade separation. Additional resources and references are highlighted for the student, practitioner, researcher, or decision-maker who wishes to learn more about a particular subject (369 pages).

**P089: LTAP Solutions, Federal Highway Administration, 1995**

This pamphlet describes the Local Technical Assistance Program and the services it provides to local agencies (16 pages).

**P090: Specifications for Chip Seal, Slurry Seals, and Crack Sealing, Strategic Highway Research Program, 1992**

Publication SHRP-H-322 Volume 1 contains North Central Regions (which includes Illinois) special contract requirements that amend and supplement the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects with regard to rating the application of pavement maintenance (chip seals, slurry seals, and crack sealing) treatments (65 pages).

**P091: Highway Salt and Our Environment, Salt Institute, 2004**

An informational guide for public policy makers concerned with snow and ice control on public traffic ways and related public safety, health, and environmental issues. (28 pages)

**P092: Life Cycle Cost Analysis**
Life Cycle Cost Analysis is explained and provides examples to improve money management. Equipment purchase/repair decisions and maintenance alternatives can be compared to make the most informed decision (4 pages).

**P093: Motor Grader Maintenance of Aggregate Suraced Roads**

This manual provides the reader with information on various motor grader operations for maintaining aggregate surfaced roads. These operations include drainage and crowning, smoothing (dragging), blading super elevations, reshaping, and blading at intersections. A motor grader is a complex and powerful machine. Proper operation and maintenance practices will provide more economical and safer aggregate roads for the rural user (4 pages).

**P094: Anti-Icing Technology**

This manual provides information on winter anti-icing strategies and the use of new chemicals and practices to improve snow and ice control. This article provides case studies examining the effectiveness of anti-icing, test results, the importance of team participation, and post storm assessment. Anti-icing has been shown to improve service levels, reduce maintenance costs, improve air quality, and can be applied during better road conditions (4 pages).

**P095: Journal of the Transportation Research Board, Low Volume Roads No. 2472, 2015**

This journal is one of the most cited and prolific transportation journals in the world, offering unparalleled depth in the coverage of transportation-related topics. This specific issue covers the improvements and challenges to management of low volume roads, road design, environmental factors effecting roadway construction/usage, strategic safety plans, and traffic engineering (242 pages).

**P096: Journal of the Transportation Research Board, Low Volume Roads No. 2473, 2015**

This journal is one of the most cited and prolific transportation journals in the world, offering unparalleled depth in coverage of transportation-related topics. This specific issue offers several entries under four different transportation topics: maintenance and pavements, geotechnical engineering, stabilization, and geosynthetics (249 pages).

**P097: Journal of the Transportation Research Board, Low Volume Roads No. 2474, 2015**

This journal is one of the most cited and prolific transportation journals in the world, offering unparalleled depth in coverage of transportation-related topics. This specific issue offers several entries under five different transportation topics: materials, pavement, freeze-thaw, heavy loads, and construction (224 pages).


The Field Operations Guide provides easily accessible on-the-job guidance to safety patrol operators. This guide can both improve safety for responders and motorists as well as reduce
liabilities for operators and agencies. This guide would be utilized best if personnel carry it with them in their vehicle at all times so it can be used as a quick reference while performing patrol tasks (86 pages).

**P099: Travel Better, Travel Longer: A Pocket Guide to Improve Traffic Control and Mobility for Our Older Population, U.S. Department of Transportation, 2003**

The Federal Highway Administration prepared this guide to assist transportation professions in making decisions about the use of traffic control devices, taking into account the unique needs of our nation’s increasingly elderly population. This guide is intended to be used by engineers, technicians, construction contractors, researchers, educators, and anyone else involved in traffic control, roadway design and construction, or transportation (44 pages).

**P100: A Resident’s Guide for Creating Safer Communities for Walking and Biking, U.S. Department of Transportation, 2015**

This guide is intended to assist residents, parents, community association members, and others in getting involved in making communities safer for pedestrians and bicyclists. The guide includes information on identifying problems, taking action to address pedestrian and bicycle concerns, finding solutions to improve safety, and resources to get additional information (92 pages).

**P101: Guidance: Managing Flagging Operations on Low-Volume Roads, Federal Highway Administration, 2015**

This document supplements the MUTCD by focusing on the typical applications and solutions most often used on low-volume roads. Specifically, temporary traffic control methods such as two-flagger, single-flagger, self-regulating, and mobile operations are all discussed with specific commentary on applying these methods to low-volume roads (21 pages).


This guide is designed to provide community leaders and local elected officials with basic information to improve roadway safety in their communities. It is intended to be a hands-on, user-friendly document providing you with:

- Strategies you can use to begin making roads, roadsides, and bridges safer
- Basic information needed to work with state and local transportation departments, highway engineers, highway safety officials, civic groups, and other safety advocates
- Clear descriptions of key funding and decision-making processes that affect roadway safety (96 pages)

**P103: Guidance: Use of Work Zone Clear Zones, Buffer Spaces, and Positive Protection Deflection Distances, Federal Highway Administration, 2014**
The purpose of this document is to help work zone designers and workers understand the role of separation distances and positive protection device deflection distances in regard to safety for workers and motorists as well as how to properly install, maintain, and use these methods in various types of work zones (11 pages).


This manual is mainly designed for the benefit of local agency officials, managers, and grader operators who are responsible for designing and maintaining gravel surfaced roads. The information provided in this manual is as nontechnical as possible without sacrificing clear guidelines and instructions on how to perform the operation well (153 pages).
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