

March 1993

More to ADA than accessibility

By Kim Shelquist
Editorial Assistant

The Americans with Disabilities Act (ADA) is not just about equal access to goods and services, it's about equal treatment of all Americans. With this in mind, officials can look for innovative ways to increase accessibility while staying within their budget.

As an associate professor of Architecture at Iowa State University and a consultant on building and safety issues, Arvid Osterberg is well informed on the many facets of the ADA. To Osterberg, the ADA is about civil rights, not building codes.

"Too many times people with disabilities are treated as special people who need help to function in society. The real intent of the ADA is to create an atmosphere where everyone is treated equal, and where people with disabilities aren't separated from the rest of society," he said.

A good example of this type of separation, he says, is the typical handi-



Don Denning uses a passenger assist handle to easily pull a door closed after entering the Warren County annex building in Indianola.

capped entrance. Often, such entrances are at the rear or side of

buildings and can give people the feeling of being isolated from the rest of the public.

"On a new building there's no reason why the main entrance shouldn't be accessible to all people. Disabled people shouldn't have to go to another location to enter a building," he said.

Osterberg feels the ADA is a tool which can change the way people with disabilities are viewed by the rest of society.

"The act won't change the way people think overnight, but it will begin to shape the way people think in the future," he said.

Mary Years, Extension Housing Specialist for ISU, is working with Osterberg to produce a publication on the ADA. She agrees that making changes to both attitudes and structural barriers will take time.

continued on page 5

ITC soon moving into new offices

The Iowa Transportation Center will finally be under one roof when it moves to its new location in Ames. Our new location is by the Gateway

Center just south of Highway 30 at the Elwood Drive Exit.

The move will mean little change for the people who use the Center's re-

sources. Phone numbers for Director Tom Maze, Assistant Director Jan

continued on page 4

New funds mean new duties for ITC

Thanks to a change in federal funding, the mission of the Iowa Transportation Center and other technology transfer programs (known as T-squared programs) has expanded to include urban areas with populations up to one million.

The funding was provided by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. With this change, the Federal Highway Administration changed the name of the program to the Local Technology Assistance Program (LTAP). Prior to the funding increase, the T-squared programs focused on rural local governmental issues and the program was known as the Rural Technology Assistance Program (RTAP).

This change gave the ITC an opportunity to expand the LTAP advisory committee structure to allow for input from larger urban areas. Last fall an LTAP advisory committee was convened of transportation professionals with various local governments including large cities and regional transportation planning organizations.

In its first meeting, the advisory committee recommended that the Center develop three new programs — one on excavation safety, a program on asphalt and concrete pavement



The Iowa Transportation Center's Local Government Advisory Committee includes, from left in the first row Larry Stevens, Oskaloosa City Engineer; Del Jespersen, Story County Engineer; James Thompson, Director of Transportation Planning, Des Moines; and Ralph Speer, Director of Public Works, West Des Moines. Members from left in the back row are: Robert Sperry, Wester County Engineer; Brian Parker, Assistant Planning and Research Engineer, Iowa Division of the FHWA; Lowell Richardson, Director, Office of Local Systems, Iowa Department of Transportation; and Kevin Gilchrist, Transportation Planner, Des Moines Area Transportation Planning Committee.

maintenance, and assist the Iowa Chapter of the American Public Works Association with a program on equipment operation and safety. Urban members of the committee

agreed to help the Center's new traffic engineer, Joe Henderson, develop traffic engineering and traffic planning related training programs.

Technology News is published by the Iowa Transportation Center, Iowa State University, 194 Town Engineering, Ames, Iowa 50011-3233 Phone: 515/294-8103 Fax: 515/294-0467

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The preparation of this newsletter was financed through the Technology Transfer (T²) Program. The T² Program is a nationwide effort financed jointly by the Federal Highway Administration and the Iowa Department of Transportation. Its purpose is to translate into understandable terms the latest state-of-the-art technologies in the areas of roads, bridges, and public transportation.

The opinions, findings, or recommendations expressed here are those of the Iowa Transportation Center and do not necessarily reflect the views of the Federal Highway Administration or the Iowa Department of Transportation.



Iowa Transportation Center

Commission OKs ISTEA proposal

A portion of an interim plan implementing the Surface Transportation Program (STP) of the Intermodal Surface Transportation Efficiency Act (ISTEA) deferred at a December meeting was approved by the Iowa Transportation Commission during its February session.

The Iowa Department of Transportation submitted a proposal to the commission in December. The portion that was deferred at that meeting proposed using council of governments (COG's) to develop regional transportation plans. In February, the DOT recommended to the commission and it was approved that the 16 transit planning regions already existing be used as a "starting point" for regional organizations. The DOT's policy on regional alignment, however, allows counties the option of determining their own regional partners. A deadline of May 1 was suggested for counties to determine their alignment.

"The regional transportation agencies have been used quite a lot in the past," Stan Peterson, a DOT transportation planner, said. "The counties and cities will then be given the op-

portunity to continue to operate under those regional planning agencies or they can form their own regional affiliations to conduct the planning and programming. Although we could end up with a few more regions than what we have now, we don't expect a lot of reshuffling because these people have worked together before."

This recommendation was made after several DOT meetings with representatives of the Iowa County Engineers Association, the Iowa State Association of Counties, the American Public Works Association, the County Conservation Board Association, the Iowa Association of Regional Councils, the League of Iowa Municipalities, and metropolitan planning agencies. Those present at a final meeting before the February commission meeting "didn't think it would be hard to establish those regional affiliations," Peterson said.

Each regional area will be responsible for developing a transportation improvement plan (TIP's). The TIP's from these areas, as well as TIP's from Metropolitan Planning Organi-

zations (MPO's) and Transportation Management Areas (TMA's), are reviewed at the state level and incorporated into a state-wide TIP which must be approved by the state transportation commission.

This approach differs from past approaches because it gives local agencies more input on which projects to fund. Past funding methods distributed money to jurisdictions like cities and counties. The regional approach gives local agencies and organizations the means to fund the projects which they deem important to their area.

The interim proposal continues funding urban and rural projects through "current administrative practices." The proposal also meets the ISTEA requirement of spending a specific amount on "transportation enhancement" projects by soliciting project ideas from regional and metropolitan planning agencies.

The interim program will be used for two years. By 1995, the state must have reviewed regional programs and developed a state TIP to be submitted to federal authorities.

IDOT calls meeting to review IVHS plan

The Iowa Department of Transportation has contracted for "A Strategic Plan for Intelligent Vehicle-Highway Systems (IVHS) in Iowa." The plan, prepared by Castle Rock Consultants of Leesburg, Va., identifies four areas where IVHS technology may be used in Iowa:

- traveler information
- incident management
- commercial vehicle services
- rural and urban highway travel.

Traveler information may include services that will help people make route decisions and obtain up-to-the-minute weather information and traffic conditions. Incident management provides information that will help provide emergency services and information that can offer drivers the option of avoiding the incident location. Commercial vehicle services help trucks and buses travel legally and safely in Iowa. IVHS technologies can provide information to driv-

ers traveling on rural and urban highways that may make trips a little easier and safer.

The Midwest Transportation Center and the DOT are sponsoring a seminar May 13, 1993 to review the plan and make modifications for final printing. The seminar will be held at Iowa State University. There is no charge for attending the seminar. Draft copies of the plan can be obtained from the Iowa Transportation Center. For more information, call Bill McCall at 515/294-8103.

Software defines network's functions

This Microtechnology is the final one in a series about networking. Previously, networks were discussed in terms of whether the benefits outweigh the expense of installing a network and different ways in which networks can be arranged. This month, we look at software considerations.

The network software is as important as hardware decisions. Hardware places some physical limitations on a network, but features and services are largely defined by the software.

Operating systems such as DOS or Windows lack the features that a network needs if it is going to function efficiently. Networking operating systems share many common functions with a computer operating system, but also must manage data transfers to other computers, provide access to the network for any single computer, and interconnect all other devices on the network.

There are many brands of network software, but Novell's Netware and Lantastic are two of the more popular. In general, larger networks involved in data-intensive activity (like accessing databases) benefit from

Microtechnology

By Larry Mendenhall
Editor, *Technology News*

Netware's processing power. Lantastic is better suited for smaller networks because it's easy to install and is very user friendly.

Netware is the *de facto* standard in the industry much the same way that Lotus 123 is the standard for spreadsheets. That is one of Netware's advantages. There may be fewer compatibility problems because many software packages are written to be compatible with it. Netware's performance gives it the additional advantage of being able to handle massive amounts of data without slowing down the entire network.

Netware also offers excellent technical support, according to Chris Kelly, the Iowa Transportation Center's networking consultant. That can be both an advantage and a disadvantage. To get the most out of Netware's technical support, Netware is installed by a certified Novell technician on Novell certified hardware.

Because Netware is an industry standard, Novell certified machines are no more costly than any others, but the installation cost is not included in the purchase price. The user's investment pays off when he or she calls Novell's technical support department because the technicians already know the machine's configuration and that the software is installed correctly.

Netware requires a dedicated server, meaning that one computer must be devoted solely to networking and can't be used as a workstation. Lantastic is peer-to-peer, or distributed, network software. That means that networking responsibilities can be distributed among computers on the network, eliminating the need to dedicate one computer to the network.

Once either Lantastic or Netware is installed, they become transparent to the user. That is, they are capable of performing their networking duties without a lot of fine tuning. One person in any agency, however, should be designated as the "network manager." That person should be the one responsible for calling the vendor for help should it be needed.

An agency that wants to install a network should examine carefully what it wants from the network to make the best decisions on hardware and software. Agencies should also remember that a good networking system is transparent to the users. That is, someone working at a computer shouldn't have to approach work any differently than if the computer was not networked. At the same time, networks should be user friendly and make it easy to access the network when needed.

ITC to move continued from page 1

Graham, Center Librarian Stan Ring, Program Coordinator BarBara Holden, and secretary Margaret Hammer will remain the same.

The Center's library of over 1,000 publications and over 300 videotapes will also be moving to the new location. The Center hopes that the new location will entice more people to stop in and take advantage of the library.

The Center's new address is:

Iowa Transportation Center
2521 Elwood Drive – Suite 125
Ames, Iowa 50010-8263.

You may call the Center at 515/294-8103 or fax messages to us at 515/294-0467. You can also contact our Bulletin Board Service at 515/294-9784.

ADA compliance costs vary continued from page 1

"This is a transition period, it's a time to set goals and make long range plans. Businesses and government agencies need to know that the ADA is doable," she said.

Physical accessibility isn't the only area of discrimination addressed by the ADA. The act is divided into four major sections or titles which prohibit discrimination. Title I deals with employment, Title II with state and local government services and public transportation, Title III with public accommodations and Title IV covers telecommunications. Title IV goes into effect July 26, 1993, the last of the titles to be enacted.

State and local agencies will be most concerned with Title II of the ADA. This section addresses the accessibility of government services and public transportation. Title II requires that state and local governments conduct a self-evaluation of services, programs, policies, and practices in order to identify those which don't meet ADA standards. Next the agency must develop a program for correcting problem areas and then set a timetable for phasing in needed changes. Basically, what this means is that agencies must make sure that services and programs offered to the public are available to the entire public. The alterations needed to meet this standard may be as complex as installing an elevator in a multiple-story building or as simple as lowering a bulletin board where public information is posted.

Warren County, Iowa did its self-evaluation by recruiting a committee of three disabled people which evaluated public facilities, not only for violations of the ADA, but for useability in general.

"It's the smartest thing for anybody to do. I can't always see where a problem might arise, but a disabled person can," says Mike Hensch, ADA coordinator for Warren County.

Warren County's committee is a good example of how agencies can comply with the spirit behind the ADA to ensure all people are treated equally. Hensch says the committee also points out areas of difficulty which aren't in violation of the ADA but might still cause problems. A case in point, he says, is the ramps which lead to many automatic doors. While the slant of the ramp may meet specifications, it might still cause a problem for a person in a wheelchair who must stop to press the button which activates the door, and then finds it hard to keep the chair from rolling down the ramp. In a case like this the angle of the ramp may need to be decreased below specifications set by the act. Hensch says these are issues the county tries to be sensitive to.

Don Denning is a member of the committee formed to examine Warren County's facilities. Denning, who is confined to a wheelchair, has developed a good knowledge of ADA requirements through his work with the Paralyzed Veterans of America and the American Legion. He adds that the committee, which also includes Lester Davison and Sandra Kilgore, isn't limited to just helping the county comply with ADA regulations in its office buildings. The group also works with county and state officials to make recreation facilities accessible to anyone who wants to use them.

The cost of complying with the ADA can vary depending on what

changes need to be made, but there are many inexpensive ways to increase accessibility. Warren County uses its own maintenance department to perform many of the structural changes and Maintenance Supervisor Don Wood works closely with the committee to find low cost ways to make the necessary changes. For instance, Wood has installed passenger assistance straps like those used in automobiles to make doors easier to close. While ADA compliance can require large scale remodeling, it can often be as simple as lowering the mirrors and paper towel holders in a restroom or making other similar modifications.

For some agencies, however, meeting the ADA's requirements present larger problems. In areas where funding is limited and government buildings are older, compliance is harder to achieve. The city clerk in one small rural Iowa town says city administrators are aware of the ADA, but continue to avoid the issue simply because there's no money available to make the changes needed in the town's older buildings. She says the city attempts to make services accessible for all residents, for example the public library offers curb service, but officials are aware such measures are not viable for long-term compliance with ADA guidelines. She adds that even with curb service disabled residents have only partial access to library services.

Osterberg points out that measures like those taken in this town show a willingness to comply with the ADA, and he says that counts for something. He feels, however, that because state and local agencies are

continued on page 6

Tips From The Field

Pre-fab detectors a hit in Waterloo

The City of Waterloo's traffic department has developed a way to incorporate detector loops during a construction or rehab job without having to cut into the asphalt. The end results are detector loops that are protected from traffic and weather-related problems.

Mike Mrzlak, supervisor of traffic operations for the city, says his department sets preformed detector loops in the rock base of a road and then pours the concrete. The city makes its own detector loops, using 1/2-inch PVC Schedule 40 conduit cut to length and heated to the point where it can be easily manipulated. A frame is used to bend the PVC into the proper shape. The necessary wiring is then threaded through the conduit.

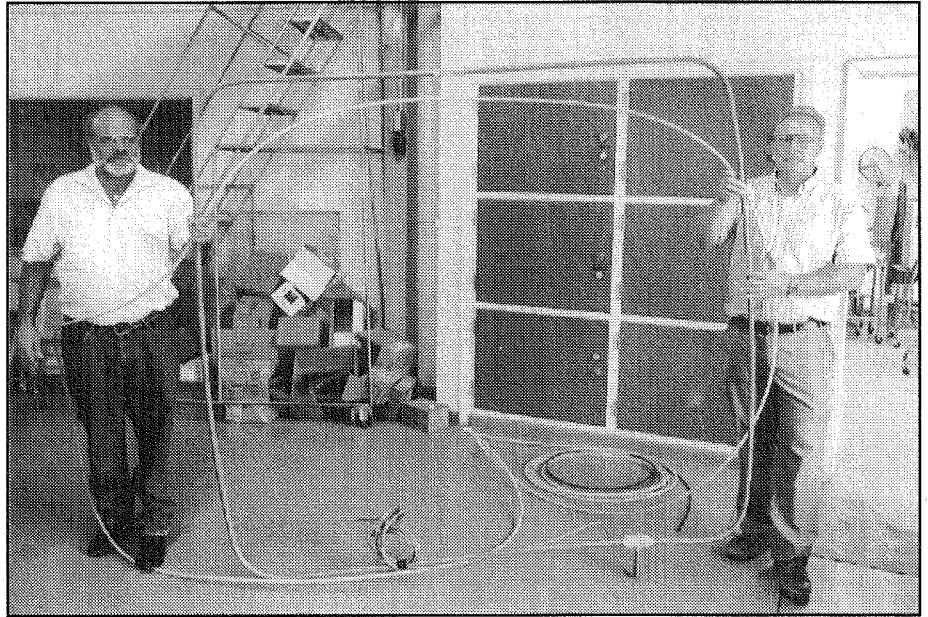
These loops have worked so well that Waterloo has been using them since 1985 with very few problems.

Waterloo has also been using a preformed detector loop on asphalt overlay projects. These loops are made of high temperature material and are tacked to the existing pavement and are incorporated in the asphalt binder course. Then a 1 1/4

ADA continued from page 5

government entities, they may be subject to greater scrutiny when questions of compliance arise.

Government agencies and private businesses can get help in understanding the ADA through several sources. One is the Division of Developmental Disabilities (319/356-1521)



Mike Mrzlak, (left), supervisor of traffic operations, and John Mozena, city engineer, show a pre-fabricated detector loop used by The City of Waterloo.

inch asphalt surface course is put down on top.

John Mozena, an associate engineer with the city, said that installing the loops during construction saves the city from paying the usual \$500 to \$600 it costs to cut in loops. But, he says, the major advantage is elimi-

nating the freeze-thaw effect that can push cut-in detectors above pavement level where they are likely to be damaged during snow or normal traffic operations.

For more information call Mozena at 319/291-4312.

And justice for all

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at the University of Iowa. It offers seminars to government agencies, private businesses, and others to help them adopt and implement the ADA. Another source of information on the ADA is the Regional Disability and Business Accommodation Center at 800/949-4232.

For More Information

The videotapes and publications listed in this column are available on a loan basis by contacting Stan Ring, Iowa State University, Iowa Transportation Center, 194 Town Engineering, Ames, Iowa 50011 or by calling 515/294-9481 Monday, Wednesday, and Friday mornings.

AASHTO- Highway Design and Operational Practices Related to Highway Practices This 1974 publication is called the yellow book. It is intended as a guide to good practices by removing hazards that exist, and by improving design practices. 92 pages – for loan only. **Request #853**

AASHTO Guide for the Development of Bicycle Facilities This 1991 publication covers the planning consideration, design, construction, operation, and maintenance of bicycle facilities. 44 pages – for loan only. **Request #858**

Economic Analysis of Scenic Bikeways in Iowa, Kansas, Missouri, and Nebraska This report by the Midwest Transportation Center covers a study to develop models capable of measuring the direct eco-

nommic impact of a scenic bikeway program. 123 pages – free copies. **Request #860**

1993 Auto Vehicle Dimensions This six-page publication provides information on Ford, Chrysler, and General Motors vehicles for parking and street maneuvering design considerations. Free copies. **Request #847**

Arrow Panels-Barrier Delineation in Work Zones The first part of this videotape deals with the application and placement of arrow panels. The second part concerns safety and visibility concerns on concrete barrier applications. 50:00 minutes. For loan only. **Request #287V**

Trenching Safety-Parts I and II These two videotapes look at trench cave-ins and safety concerns. They have a check list of safety precautions and emergency procedures. Both videos should be viewed together. 6:00 minutes each. For loan only. **Request #288V and #289V**

The Big Reach-I This videotape is concerned with cranes and their safe

use. Hazards are identified and a check list for safety considerations is included. 5:30 minutes. For loan only. **Request #290V**

Anatomy of a Lift This supplements #290V and covers the safe operation of a crane. It emphasizes that understanding the underlying factors behind crane accidents is the key for preventing them. 4:30 minutes. For loan only. **Request #291V**

Lock Out/Tag Out Procedures This videotape shows how failure to use proper lock out/tag out procedures can have tragic consequences. The equipment must be shut down and rendered safe until work is completed. 22:00 minutes. For loan only. **Request #295V**

Superpave - Asphalt Pavements That Perform This videotape was produced by the Texas DOT in conjunction with the SHRP and emphasizes a newly developed process for designing and applying asphalt pavement which is expected to provide added longevity to asphalt pavements. 5:00 minutes. For loan only. **Request #267V**

Publication order form

To obtain the materials listed from the ITC, return this form to the Iowa Transportation Center, Iowa State University, 194 Town Engineering, Ames, IA, 50011-3233.

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Please send a complete listing of all publications from your office.

Please send a complete listing of all audio visual materials available.

Conference Calendar

Symposium on Practical Solutions for Bridge Strengthening and Rehabilitation April 5-6 Des Moines, Iowa This symposium provides an opportunity for engineers, contractors, fabricators, and researchers to present and hear papers on practical bridge strengthening and rehabilitation solutions. For more information call Professor F. W. Klaiber 515/294-8763.

Traffic Issues for Local Governments April 6 – Ottumwa; April 8 – Mason City This workshop is designed as an introduction for local government road maintenance crew supervisors, crew members, street superintendents, and county and municipal officials. Contact Carole Seifert 515/294-1400.

Second Annual Geographic Information System Demonstration Fair April 12, Iowa State University Memorial Union Sponsored by the ISU Geographic Information Systems Support and Research Facility, this

fair will include a presentation by Dr. Michael F. Goodchild, Director of the National Center for Geographic Information and Analysis; GIS software demonstrations, and displays by students, faculty, and government agencies. Contact Jim Majure, 515/294-2279.

Management for Street and Road Maintenance Supervisors April 13 – Creston; April 15 – Waterloo This seminar covers basic supervisory and management techniques which will aid the supervisor in planning, directing, and motivating in an efficient manner. Contact Carole Seifert 319/294-1400.

Pavement Rehabilitation Techniques April 30 Scheman Center, Iowa State University The objective of this conference is to instruct the county and city engineering and maintenance staffs in the proper way to address pavement problems in terms of pavement rehabilitation. Contact Carole Seifert 319/294-1400.

Garage Waste Management May 11 – Mason City; May 12 – Council Bluffs This conference is intended for vehicle fleet management personnel who need to understand new environmental regulations concerning garage waste materials. Contact Carole Seifert 319/294-1400.

MOVITE, ITCSA, CPPA Joint Meeting May 26-28 Cedar Rapids, Iowa This joint meeting provides separate traffic and parking technical workshops in addition to technical tours and exhibits. New information on regulations, equipment, and procedures will also be presented. Contact Bill Meeks at 319/398-5176.

ITE 27th Annual District IV Conference and Parking Principles Workshop June 16-18 Milwaukee, Wisconsin This conference will cover a wide range of categories, including highway capacity changes, communication, impact fees, advanced signal systems, and transit. Contact Ken Voigt, 414/359-2300.

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