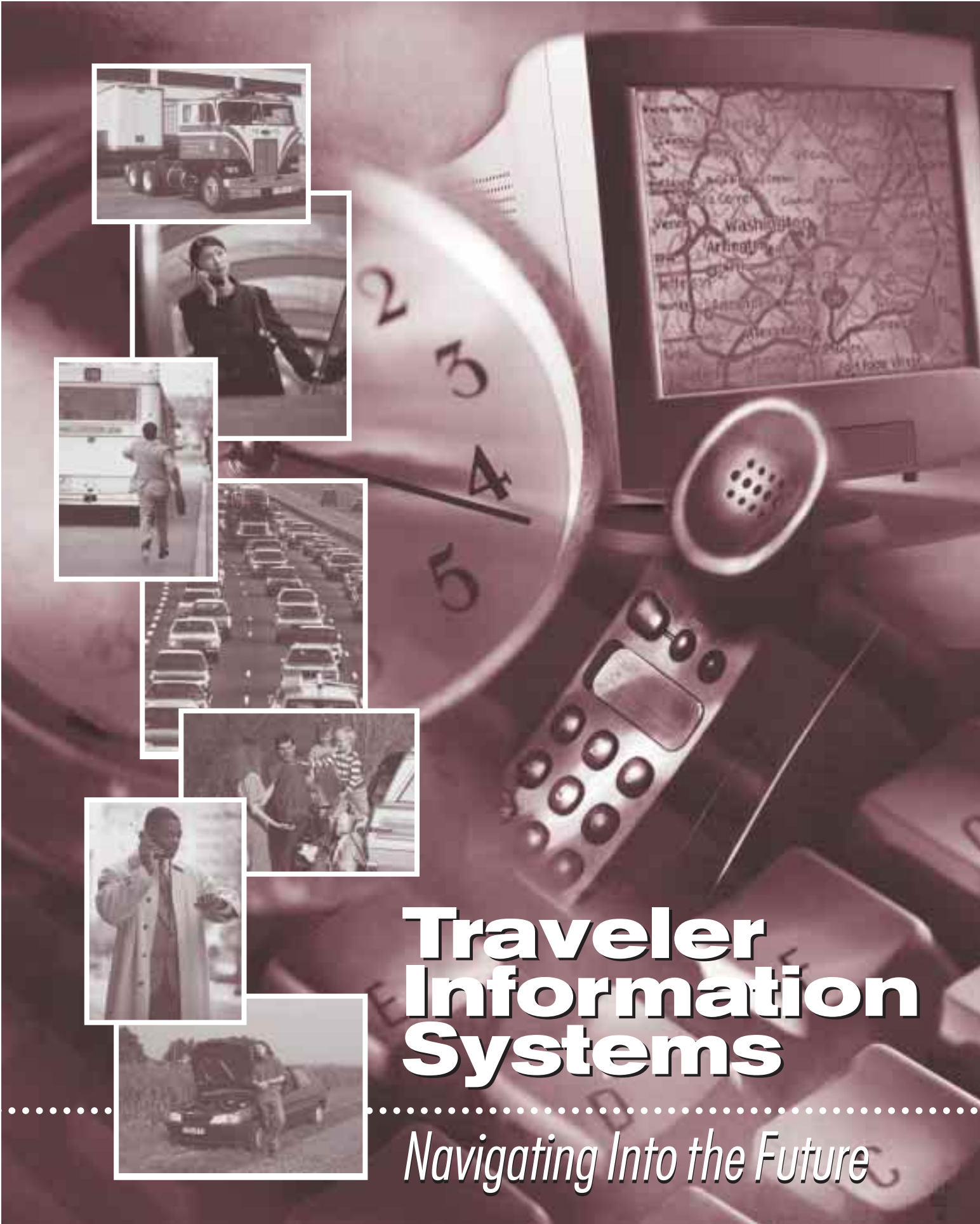
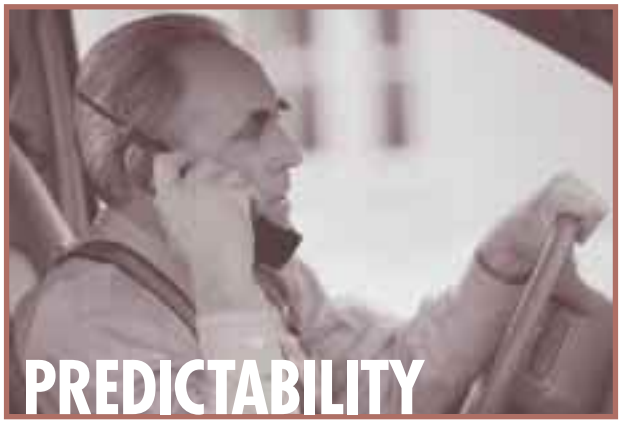

Traveler
Information
Systems
Navigating Into the Future

Benefits of Traveler Information Systems

Quality of Life, Security, Economic Development: Traveler Information Systems support better decisions in work and daily life with reliable, up-to-the-minute information about transportation conditions through Intelligent Transportation Systems technology (ITS).

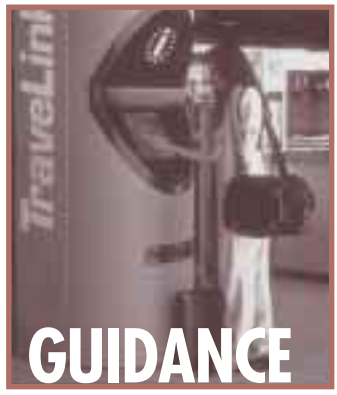


A commuter uses his cell phone to learn if there are any unexpected traffic bottlenecks on his way home.

***Commuters, tourists, and through travelers* can make informed choices about the transportation mode and route that will get them to their destinations in the safest and most efficient manner.**

Traveler Information Systems can:

- Warn motorists about unexpected traffic tie-ups or dangerous road conditions
- Guide travelers to their destinations in unfamiliar surroundings
- Summon assistance in emergencies



A tourist stops at a kiosk to check on the address of lodging at her destination.

***Businesses and commercial carriers* can operate more efficiently thanks to improved ability to schedule, deliver, and receive goods and services.**

Traveler Information Systems can:

- Assist businesses with just-in-time shipments
- Help freight delivery services better manage fleet operations
- Improve business travelers' ability to keep appointments

A long-distance truck driver consults his computer about traffic conditions to determine if extra time is needed to meet his client's schedule.

Telephone & Cellular Call-In

A transit passenger waiting at a bus stop checks an electronic sign to see if his bus will be on time.

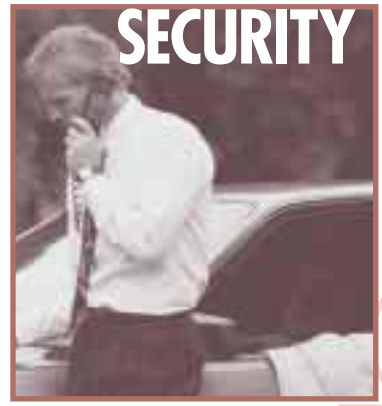
***Local governments and transportation agencies* can provide more effective and responsive public services.**

Traveler Information Systems can:

- Improve traffic flow with signal timing based on new vehicle sensors and probes
- Attract new transit users with reliable bus and train arrival times through automated location systems
- Improve emergency response by detecting problems more quickly and getting response equipment to the scene faster
- Enhance public fleet operations with advanced communications and management systems

A regional traffic operations center uses new technology to coordinate state and local agency response to road conditions, transportation problems, and public safety concerns.

Pager



A motorist runs out of gas and uses a Mayday device to signal his location to the Mayday service center. Help is soon on the way.

PASSENGER INFORMATION DISPLAYS

Investment in advanced information and communication infrastructure not only is essential to the effective functioning of the transportation system, but also offers an opportunity for government-wide efficiencies and economies.

Traveler Information Systems Are Working!

Traveler Information Systems provide commuters, businesses, and other travelers with timely and accurate information about travel choices. This information can be received at home, at work, or en route via a range of communication media.

Here's how they work...

Prior to departure...

phone, radio/TV, pager, and other devices can offer timely information about travel conditions — accidents, congestion, weather, and transit options on given routes — enabling travelers to choose the best travel mode, route, and time of departure.

Once travel begins...

car radios, in–vehicle screens, and advanced communication devices can provide travelers with updates about roadway conditions or transit connections and display routing options around problems to desired destinations.

If accidents or breakdowns occur...

emergency in-vehicle Mayday systems with global positioning system locators enable travelers and operators of transit vehicles to call for assistance.

Searching for destinations...

roadside service and tourist attractions can be provided via "electronic yellow pages," the Internet, or kiosks located in airports, malls, transit terminals, hotels, and highway rest areas — and, soon, through in-vehicle PCs.

Personal Computer Websites

Here's how public and private groups are implementing Traveler Information Systems...

Private Traveler Information Systems are widely available

Private traffic reporting services offer commercially sponsored drivetime radio/TV traffic reports and telephone call-in systems in more than 60 metropolitan areas. Major automobile manufacturers are introducing on-board emergency alert (Mayday) devices as optional equipment. Traveler information is being offered on certain commercially operated Internet web sites and can be received through portable devices.

Public agency transportation information programs are growing in number

Most state departments of transportation use roadside cameras, electronic message signs, and highway advisory radio to inform motorists of congestion and hazardous road conditions ahead. Several metropolitan transportation agencies provide construction disruption and transit information over the telephone, public radio, and community channels on cable TV. Real-time transportation conditions are currently displayed on more than 20 Internet web sites set up by state and local transportation agencies, and more such web sites are being added every month.

Public-private partnerships are helping advance the state of the art

Since 1988, a large number of field operational tests have been undertaken to advance traveler information technology. Four public/private partnerships created the Metropolitan Model Deployments. These initiatives focus on enhancing multi-modal traveler information and finding financially sustainable strategies. Other recent projects involve specialized Traveler Information Systems for rural and recreational areas.

IN-VEHICLE NAVIGATION DEVICES

Roadside Highway Advisory Radio

Portable Personal Communication Devices

Implementing Traveler Information Systems
Advice to Local Decision-Makers

There is a range of strategies that you, a local decision-maker, can use to minimize deployment costs and reduce long-term lead times.

Capitalize on Existing Infrastructure Investments

Many jurisdictions already have some of this infrastructure in place, such as fiber-optic lines, computer networks, or wireless communication systems. By using existing technology and equipment to the fullest, local government can hold down the overall cost of implementation.

Create Public-Public Partnerships to Share Transportation Information

Most jurisdictions already monitor traffic as part of their transportation control and incident management responsibilities. Transportation and transit agencies may already collect needed data. These resources can also be used to keep the public currently informed of travel conditions.

Develop Creative Ways of Acquiring Additional Telecommunications Capacity

Public land and rights-of-way are attractive to private telecommunications companies. Local governments can trade the right to use public lands for private cable or towers in return for free provision of telecommunication capacity and service.

Consider Commercialization and Public-Private Partnerships

While some traveler information services may be appropriately free (and tax-supported), partnership arrangements with private traffic reporting companies can be considered to offset costs and reduce public expenditures as well as enhance technical skills that local government may need.

Develop Regional Community Support and Collaboration

A coalition of key stakeholders can develop a strategic plan with active stakeholder support. To create seamless information service delivery across local jurisdictions, obtain the cooperation of various units of local government, the transit authority, and the state department of transportation.

Assess Public Costs and Identify Funding Sources

Consider the broadest range of sources — public and private — to cover program costs. These might include Federal transportation programs, state infrastructure banks, revenue from leasing public right-of-way, and creative revenue-sharing arrangements with the private sector.

Generate Visibility, Early Winners, and a Problem-Driven Rationale

Use special problems, such as holiday periods, and major public events to underscore the need for a Traveler Information System.

Kiosk Terminals

For More Information About Traveler Information Systems

Office of Traffic Management and ITS Applications
Federal Highway Administration
U.S. Department of Transportation
www.fhwa.dot.gov/hst/its.htm
(202) 366-2197

Office of Mobility Innovation
Federal Transit Administration
U.S. Department of Transportation
www.fta.dot.gov
(202) 366-4995

Office of Motor Carriers (ITS Division)
Federal Highway Administration
U.S. Department of Transportation
www.fhwa.dot.gov/omc/omchome.htm
(202) 366-0950

The Intelligent Transportation Peer-to-Peer Program
An ITS technical assistance program sponsored by FHWA and FTA for transportation professionals.
(888) 700-PEER
e-mail: dotpeer@erols.com

The National Associations Working Group for ITS

The National Associations Working Group for ITS is a partnership of the U.S. Department of Transportation and more than thirty state and local government associations. The web site is a shared Internet resource of continuously updated ITS information from these associations and other sources.

web site: www.nawgits.com/icdn

U.S. Department
of Transportation

Federal Highway Administration

Federal Transit Administration

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