Baystate Roads Program
Local Technical Assistance Program (LTAP)
Tech Notes

Tech Note #44

511 TRAVEL INFORMATION

Telephone services for travelers provide real-time information about work zones, traffic incidents, and other causes of congestion. They allow travelers to make more informed decisions about their travel routes or modes and increase safety by helping motorists avoid areas with congestion or incidents. The U.S. Department of Transportation (USDOT) petitioned the Federal Communications Commission in 1999 for a three-digit dialing code for travel information and was assigned 511 in 2000. In 2001, the Cinncinnati, OH, area became the first location in the country to use 511 for travel information.

Before the 511 dialing code was assigned, more than 300 different telephone numbers provided travel information in the United States. A test drive in 1999 showed that 11 different numbers were required for access on a trip from Washington, DC, to New York, NY. As 10-digit phone numbers and new area codes proliferated, it was decided that a single, easy-to-remember number would help local and interstate travelers and shippers avoid delays and save time.

USDOT is facilitating national implementation of the 511 system to make real-time traveler information more widely available to motorists. It is working with a 511 Deployment Coalition that includes the American Association of State Highway and Transportation Officials, the Intelligent Transportation Society of America, and the American Public Transportation Association. FHWA also provides other assistance and information related to guidance, standards and a model deployment project in Arizona at http://www.ops.fhwa.dot.gov/511.

NATIONAL VISION

511 will be a customer driven multi-modal traveler information service available across the United States, accessed via telephones and other personal communications devices, and realized through locally deployed interoperable systems, enabling a safer, more reliable and efficient transportation system.

How do States fund 511 programs?

Implementation expenses for 511 systems, like other traveler information services, are eligible for regular Federal-aid highway funding. Local or State transportation funds also are used to pay for 511 systems, and, in general, are the only funds used to pay for day-to-day system operations.

How does a typical 511 program work?

It relies on intelligent transportation systems technologies to collect and disseminate traveler information. Callers access it by dialing 511 from any telephone. They hear a menu of available information on highways and public transit and indicate their choices by using the telephone's touchpad, or, for systems with voice recognition technology, by voice. Some 511 systems offer premium services such as personal routing instructions or reservation services, which may involve additional charges.

The most commonly available category of information on 511 is related to traffic; every operational system features information on the covered area's highways, but the depth of coverage varies. Some regions cover every Interstate, major primary roads (US and State routes) and arterials, while others cover only Interstates. Information provided can range from exception reporting of conditions, such as incidents with wide ranging impact, to data as discrete as congestion and travel times within corridors. The most common across all deployments is the provision of road conditions and construction information, but most systems provide incident reports and updates.

Construction information, current and planned, is an important element in delivering a complete picture of the

road network. However, deployers have encountered unique challenges in providing accurate and reliable construction information. Validating the accuracy of construction information is critical. Making sure that construction events are removed from the system in a timely fashion, has proven to be a challenge. While operators entering information into 511 systems often get reports of planned construction months in advance, the challenge to deployers has been how to best present information that is relevant, yet not extraneous, to the caller.

The most common design in dealing with future construction is to offer mainly current construction information, except when it is determined that a planned construction event will create a major detour or otherwise have a significant impact to travelers. In those cases, the information will be accessible in the system two to four days in advance.

Deployment

With a three-digit phone number, travelers can easily access real-time information about conditions and modes, are able to make smarter decisions regarding their intended trips and can avoid traffic congestion, thereby helping to improve the overall performance of the transportation network. Approximately half of the country currently has 511 access; by 2010, it will be available nationwide.

ACTIVE LOCATIONS (dark gray)***:*** *Alaska, Arizona, ARTIMIS, Colorado, Florida, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maine, Minnesota, Montana, Nebraska, Nevada, New Hampshire, North Carolina, North Dakota, Oregon, Orlando, Rhode Island, Sacramento, San Francisco, South Dakota, South Florida, Tampa, Tennessee, Utah, Vermont, Virginia, Washington, Wyoming*

SOURCE: ***www.ops.fhwa.dot.gov/511*** *-- where you can click on a state for updated status and obtain a listing of "BACKDOOR" telephone numbers*

Status of 511 deployments as of 12/31/06

GOALS FOR 2010

511 WILL BE OPERATING NATIONWIDE

OVER 90 PERCENT OF THE NATION'S POPULATION WILL BE AWARE OF 511.

ALL OF THE USERS WILL BE SATISFIED WITH THE SERVICE PROVIDED.

ROAD INFORMATION ON MAJOR ROADS SYSTEMS AND IN METROPOLITAN AREAS WILL INCLUDE TRAVEL TIME, EVENTS, AND WEATHER.

TRANSIT INFORMATION WILL BE AVAILABLE ON MOST SYSTEMS.

INDIVIDUAL SYSTEMS WILL BE LINKED TOGETHER TO FORM AN INTEGRATED, SEAMLESS NETWORK.

THERE WILL BE A SUSTAINABLE BUSINESS MODEL (PUBLIC-SECTOR SUPPORTED WITH FUNDS TO ENHANCE AND GROW).

Systems that have converted existing telephone numbers to 511 have experienced a 300 to 500 percent increase in call volume. A study showed that 45 percent of travelers who received information from the San Francisco Travel Advsory Telephone System changed their travel plans, compared to 25 percent of travelers altering their plans based on television or radio broadcasts.

Additional Resources

The 511 Deployment Coalition has developed quality and service guidelines for 511 systems. The guidelines and other tools for deployment are available at:
http://www.deploy511.org *and*
http://www.ops.fhwa.dot.gov/511

MassHighway is currently negotiating with the cellular and landline phone companies to re-direct their circuits for the abbreviated 511 number to an 800 number that MassHighway has purchased. Current plans include a Request for Response that will solicit a systems integrator to provide for new applications such as voice recognition and a companion 511 web site.