

## CHAPTER 8: INTELLIGENT TRANSPORTATION SYSTEMS

Intelligent Transportation Systems (ITS) is a program designed to identify, analyze, and implement new and existing technologies and services aimed at improving safety, increasing efficiency, and reducing transportation costs in the movement of people and goods throughout the U.S. ITS represents the *integrated* application of advanced information, electronic, communications, and other technologies to better manage surface transportation systems, facilities, and resources.

TEA-21 mandated the integration of ITS into the transportation planning process. To ensure consistent deployment of ITS, Metropolitan Planning Organizations are required to include an ITS element in their Long Range Transportation Plans consistent with the National ITS Architecture (plan), and the architecture developed by their State. The goal is to mainstream ITS into transportation planning, either as individual projects, or as elements of proposed transportation improvement projects.

The Alaska Department of Transportation and Public Facilities (ADOT&PF) is nearing completion of its Statewide Deployment Strategy for ITS. The State's goals for the Alaska Intelligent Transportation System (called "I-Ways") are

- to make travel safer, more efficient, and more convenient, and
- to improve road, sea, and air way transportation by applying integrated technologies and information systems.

Real-time traveler information will be available to the public on the internet, including road weather conditions, road construction or maintenance activities, and the location of Alaska Marine Highway System (AMHS) vessels. I-WAYS projects include weather stations along state highways to collect real-time road weather information. One of these sites is located in Eagle River, south of the Artillery Road overpass. Images are drawn every ½ hour. These road weather condition images are now available for viewing at ADOT&PF's Road Weather Information System (RWIS) website. Travelers will also have more information to make informed trip planning decisions by clicking onto Travel in the Know. This site, currently under development, will offer real-time road condition reports, and information on accidents and alerts.

ADOT&PF is also using ITS applications to make commercial vehicles operations more efficient. Instrumented weigh stations will help commercial vehicles which meet weight, safety and security requirements to move faster through check points. The Alaska Railroad Corporation is also investigating Positive Train Control, another ITS application, to improve scheduling and tracking of trains and loads, including hazardous materials.

In December 2000, AMATS received two grants to develop the MPO regional ITS architecture. The first grant was for a short-term project, with assistance from the State's ITS contractor, to identify and interview agencies, groups, and individual stakeholders that have ITS involvement within the Municipality of Anchorage. Information gained from these interviews served as input to a draft MOA ITS Architecture (plan) document, currently under development. The ITS Architecture will 1) identify existing ITS applications within the Municipality; 2) identify which informational or operational needs can reasonably be met by ITS technologies, and 3) offer preliminary recommendations for new ITS strategies. Grant funds have also been used to

provide National Highway Institute training courses on ITS to educate stakeholders from various agencies about ITS technologies.

The draft MPO Regional ITS Architecture and draft ITS Implementation Plan will be completed by the spring of 2003.