

## Priority, Market-Ready Technologies and Innovations

### Transportation, Economic, and Land Use System (TELUS)

**Problem:** Faced with numerous projects and limited funds, metropolitan planning organizations and State departments of transportation need to prioritize projects and streamline the transportation planning process

Each metropolitan planning organization (MPO) and State department of transportation (DOT) must decide which projects to include in their respective Transportation Improvement Program (TIP) and State Transportation Improvement Program (STIP). These decisions are based on a variety of factors, including future travel demand, project life cycle costs, land use changes, economic growth, and environmental impacts.

MPOs and State DOTs also must be able track these projects as they pass through various stages toward actual construction, with such stages including facility planning, engineering, and design; right-of-way acquisition; advertising; bid review; construction scheduling; and related phases of work. These stages typically occur over several years, and projects frequently are being modified as they pass through the stages.

In addition, MPOs and State DOTs are required under Federal transportation planning regulations to ensure increased participation by local officials and citizens in the transportation planning and decisionmaking processes. All of these duties and functions require MPOs and State DOTs to use increasingly sophisticated data management, decision support, and information dissemination techniques. To do this, transportation officials need an information management system that is easy to use, can store and manipulate large amounts of data, and can present these data to

decisionmakers and the public in a coherent and timely manner.

**Solution:** Transportation, Economic, and Land Use System (TELUS) software helps agencies manage their TIP and STIP processes

TELUS is a fully integrated information-management and decision support system to help MPOs and State DOTs develop their transportation improvement programs and carry out other transportation planning responsibilities, particularly, public participation in the transportation planning process.

#### Information Management Features

- User-friendly templates for entering project information.
- Project query and selection capabilities.
- Project schedule, cost, and funding tracking.
- Geographic information systems interface.
- Fully customizable.

#### Benefits

- Significant time and cost savings for agencies managing TIP and STIP information.
- Enhanced public access to project information via a Web interface.
- User-friendly analysis tools for project rating and prioritization.

- System security.
- Preformatted and customizable reports.

**Decision Support Features**

- Project scoring.
- Project interrelationships.
- Economic impacts (regional input-output model).
- Land use model.

TELUS is available in both a standalone desktop version and a Web-based version. The Web-based version of TELUS was designed to provide a direct interface between TIPs developed by MPOs and STIPs developed by State DOTs. The Web-based version also helps facilitate the public involvement process by enabling citizens to query project information using a Web browser. Current development efforts are focused on creating a paperless STIP submission and approval process using Web-based TELUS.

**Successful Applications: Alabama and New York lead the way**

Several State DOTs and MPOs are using TELUS to facilitate their transportation planning processes. Alabama DOT, for example, is using a statewide Web-based version of TELUS to link all of the State’s TIPs into one database. In addition, the New York Metropolitan Transportation Council is using TELUS to exchange project updates with New York State DOT and FHWA’s New York Division Office and to obtain electronic approval of TIP and STIP amendments.

**Deployment Statement**

TELUS currently is being distributed for free to all MPOs and State DOTs. In addition, free technical assistance is available through the TELUS Web site to help users install and use the system.

**Deployment Goal**

The goal is to make all MPOs aware of TELUS, and for at least 20 percent of MPOs to use TELUS for

their transportation planning activities. To assist with this effort, staff from the New Jersey Institute of Technology is providing technical assistance to States and MPOs in installing and customizing TELUS to meet their specific needs.

**Deployment Status**

Agreements have been signed with both the Association of Metropolitan Planning Organizations and the National Association of Regional Councils to market TELUS to their member agencies. There currently are more than 150 registered TELUS users, and more than 50 MPOs that use TELUS for TIP development.

**Additional Resources**

To learn more about TELUS, including how to obtain a free copy of the software, visit the TELUS Web site at <http://www.telus-national.org>.

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