RESOURCES

ITS Benefits and Costs Database What is it and how do you use it?



What is the ITS Benefits and Costs Database?

The Intelligent Transportation System (ITS) Benefits and Costs Database is a comprehensive collection of information on the effects of ITS projects and the costs of deploying and operating ITS. The database is available online at *www.benefitcost.its.dot.gov*.

What information is available in it?

The benefits database Web site contains detailed summaries of ITS evaluations sponsored by the USDOT's ITS Joint Program Office (JPO) and others. Summary pages provide additional background on the context of the evaluations, evaluation methodologies used and, where available, links to the source documentation.

The costs database, a companion to the benefits database, contains two types of data—unit costs and system costs. Unit cost is the cost associated with an individual ITS element and is organized by subsystem similar to the National ITS Architecture. System cost is the cost of a project and usually includes the cost of major components. System cost summaries include a brief background of the project.

How can it help you?

The database is a central site for ITS benefits and costs data and is available to transportation profes-

sionals in public agencies, research institutions and private firms who support the transportation decisionmaking process. The database can assist in the following ways:

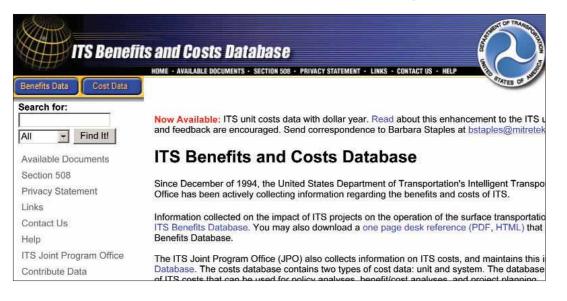
- ➔ Aid in identifying and justifying potential ITS investments. What did a metropolitan area with similar demographics deploy and what results were achieved?
- ➔ Identify appropriate ITS applications to address specific challenges in transportation operations (such as incident response, signal retiming, traveler information and road weather systems).
- → Learn from other's experiences.
- ➔ Document successes.
- ➔ Identify cost estimates—build bottom up estimates and compare project costs of deployments.

How can you use it?

1. Identify areas of interest—define the problem. Search the benefits database for relevant experiences and evaluation results.

For example, a search for road weather information systems (RWIS) presents several results. One example is a customer satisfaction evaluation of a RWIS in Spokane, WA, USA.

The evaluation, conducted as a before and after survey, included interviews with Washington State DOT (WSDOT) operations and maintenance per-



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sonnel, commercial motor carriers and the traveling public. Samples findings include:

- ➤ The WSDOT road maintenance crews ranked RWIS pavement conditions data as the most useful ITS technology deployed, followed by camera images, then radar data on the Internet.
- Over half of travelers (56 percent) responding to an online survey agreed the information helped them avoid travel delays.
- 2. Search the costs database for related cost information.

The Spokane, WA, USA, evaluation report also included costs associated with deployment. A summary of system costs is available in the costs database. The total cost of the project was approximately \$447,000. The cost of major components, such as weather stations, highway advisory radio systems and costs associated with installation, is provided. The system cost summary includes links to applicable unit costs where users can select applicable ITS elements and build a bottom-up cost estimate.

A wide variety of benefits and costs data for ITS deployments is available in the database, although corresponding information for the same ITS deployment is not always available.

There are several ways to find benefits and costs data in the database—relevant keyword search, application areas (such as freeway, emergency, transit), goal areas (such as capacity/throughput, safety, cost savings) and location (state and country).

What next?

Searching the database gives you some basic talking points for making the case for a more detailed exploration of ITS to address challenges in transportation operations.

Next steps could include:

- Obtaining a full copy of relevant evaluation studies (the database provides links to full reports, when available online); and
- ➔ Developing a benefit cost analysis for the particular project using in-house/agency spreadsheets or the ITS Deployment Analysis System (IDAS), for example.

Can you contribute data?

Are you aware of a report or source of data that is not in the database? Users are encouraged to submit reports via the "contribute data" link at *www.benefitcost.its.dot.gov*.

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Benefits and costs examples drawn from: Evaluation of Rural ITS Information Systems Along U.S. 395, Spokane, WA, USA. Federal Highway Administration (FHWA), Washington, DC. January 2004.

