

Road System Management Tools for Tribal Agencies – HERS-ST Model

The Upper Great Plains Transportation Institute is offering highway management tools to help Tribal Transportation with planning, budgeting and analysis of their road assets. These powerful tools can help tribal transportation agencies:

- Establish benchmarks and identify trends and hidden costs
- Apply federal planning models and other widely-used planning tools
- Gather and analyze data consistent with state and federal practices
- Allocate transportation investments to make the most positive impact

HERS-ST Model

The state version of the Highway Economic Requirements System (HERS-ST) is used to estimate the direct benefits of making highway infrastructure improvements and to forecast the performance of the highway system in future years. Since the early 1990s, it has been used at the national and state level to describe the condition and status of the nation's highways and to estimate the investments necessary to maintain or improve them.

HERS-ST estimates traveler, societal, and transportation agency benefits resulting from highway investments. Traveler and societal benefits are estimated by comparing the levels of vehicle, user, crash, and emission costs that would occur if an improvement is made to projected levels to those that would occur with no improvement. HERS-ST also estimates the maintenance cost savings resulting from timely resurfacing improvements, as well as the residual value of investments that continue to provide traffic or structural capacity beyond the end of the analysis period.

Highway Data

The HERS-ST software utilizes the Highway Performance Monitoring System (HPMS) database, which includes information regarding the extent, condition, performance, use and operating characteristics of highways throughout the United States. Each state provides updated HPMS to FHWA on an annual basis for use in developing trends, costs and benchmark performance measures to evaluate the national system performance and conditions. While a similar highway dataset does not exist for tribal roads, UGPTI has developed methods to adapt some existing data sources for use with the HERS-ST software. UGPTI can help Tribal agencies use their data in HERS-ST, allowing them to analyze local roads systems by evaluating them against national trends, costs and benchmarks.

Service:

UGPTI offers software, initial training and set-up and ongoing technical assistance at no cost to tribal agencies.

To request the software or other transportation assistance, go to <http://www.ugpti.org/outreach/tribal/> and click on the "Request Technical Assistance" link.

For more information, contact:

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UGPTI Tribal Outreach

The Upper Great Plains Transportation Institute's Tribal Outreach effort improves safe transportation of people and goods on tribal reservations to enhance livability, community and cultural values through increased accessibility to employment, workforce development opportunities, education, healthcare and housing.