



## Minnesota Transportation Finance Database

### A SOLID FOUNDATION FOR DECISION MAKING

An efficient and forward-looking transportation system is critical for the economic vitality of the state and the region. Financing the system, however, is an ongoing challenge. TPEC researchers created the Minnesota Transportation Finance Database (MNTFD) to provide a comprehensive, objective source of transportation finance information. It serves as a solid foundation for understanding transportation finance issues in Minnesota and for promoting informed decision making.

*“An independent and robust source of transportation finance information can help policy leaders better understand the issues and discuss what’s needed to build and maintain a world-class transportation infrastructure for a competitive Minnesota economy.”*  
—Lee Munnich, TPEC director

### A ONE-STOP SOURCE FOR ROBUST, INDEPENDENT DATA

The MNTFD is a longitudinal and spatially integrated database for Minnesota transportation finance—data were collected over time and for different parts of the state. The database compiles data about Minnesota’s current transportation finance mechanisms and shows the change of transportation spending over time. It is composed of annual data from transportation funding sources as well as transportation expenditure allocations (see table).

Downloadable datasets	Data type	Data timeline
Minnesota highway user tax revenue	State level	1975–2014
State of Minnesota revenue and expenditures for transportation purposes	State level	2005–2013
Local highway finance report – all cities	State level	2004–2013
Local highway finance report – all counties	State level	2004–2013
Local highway finance report – all townships	State level	2004–2013
Minnesota county governmental fund data	County level	2004–2013
Minnesota city governmental fund data	County level	2008–2013
Minnesota township governmental fund data	County level	2008–2013
Daily and annual vehicle-miles traveled (VMT) by route system for each county	County level	2001–2013
Centerline miles and lane miles used by route system for each county	County level	2002–2014
Operating and capital funding sources of Minnesota urban transit system	Agency level	1991–2009
Operating expenses, service supplied and consumed by Minnesota urban transit system	Agency level	1991–2010
Expenses of Minnesota rural transit system	Agency level	2007–2012
Minnesota expenditures in trunk highway and trunk highway funds	State level	2002–2013
Minnesota motorization trends	State level	1980–2013
State and local government finance	National	2000–2013

## A STARTING POINT FOR OBJECTIVE ANALYSIS

TPEC researchers have used the database to perform objective analyses of finance issues. For example:

### *Funding redistribution: contributions and allocations*

This analysis shows that transportation funding in Minnesota comes from the joint effort of federal, state, and local government, with a combination of many general or special revenue sources. It also illustrates how transportation funding in Minnesota is allocated—either through state direct expenditures or through intergovernmental grants to local government—across counties. Examining data between 2009 and 2013, the analysis found that the state’s Metro district (which includes eight counties in the Minneapolis–Saint Paul area) contributes about 48% of federal and state transportation revenues and receives about 51% of federal and state transportation expenditures.

### *Spending comparison with other states*

To better understand the factors that influence the transportation funding level, this project developed a cost-adjusted approach to systematically compare highway expenses among states. Researchers found that while Minnesota spends more than average on highways, its spending level ranks low when controlling for the effects of some major cost factors, such as demographics and natural weather conditions.

### *Accumulated capital stocks*

What matters in transportation improvement is not just the money spent in one single year, but also the accumulated amounts invested over a long period of time. TPEC researchers developed two measures of long-term accumulated transportation capital stocks in Minnesota counties during the period of 1995–2011, taking into consideration annual spending, depreciation, and the fluctuation of highway construction costs.

### *Investment and economic development in counties*

This analysis found that investments in local roads and trunk highways show positive returns in property tax values in Minnesota counties. With the information, a county could develop a historical view of the trends of transportation development within its boundaries and then compare its stocks to those of other counties or of comparable or competing peers.

### *Local efforts for roadway expenses*

A common belief is that roadway expenses are mainly paid by transportation special revenues—in particular, federal and state fuel taxes. In fact, local property tax has been the largest single source of transportation revenue in Minnesota. With 2010 data, a TPEC analysis found that local efforts—mostly with property tax—account for 65% of total local road expenses across cities, townships, and counties in Minnesota. For the whole roadway system, including state trunk highways and local roads, the share of local efforts is about 52%, while the remaining 48% comes from federal and state special revenues. State fuel taxes, in particular, account for only about 16% of the whole funding system.

## FOR MORE INFORMATION AND ADDITIONAL ANALYSES

TPEC welcomes public engagement and encourages you to contact us with your questions, comments, and research needs.

### *Zhirong (Jerry) Zhao*

Associate Professor  
Humphrey School of Public Affairs  
612-625-7318  
zrzha0@umn.edu

### *Adeel Z. Lari*

Director of Innovative Financing  
Humphrey School of Public Affairs  
612-624-7746  
Larix001@umn.edu

TPEC is a program of the State and Local Policy Program at the Humphrey School of Public Affairs and of the Center for Transportation Studies.

The University of Minnesota is an equal opportunity educator and employer. This publication is available in alternative formats upon request.

April 2017