

CTS Research Brief 2011-01

Funding Surface Transportation in Minnesota: Past, Present and Prospects

“There is no single magic solution to solve the urgent issue of insufficient transportation funding. New approaches must be created and experimented with in the search for alternative transportation funding sources.”

– Zhirong (Jerry) Zhao

Study Overview

Transportation funding is a complex and urgent problem in Minnesota. This study examined how transportation projects have been funded in the past, discusses current transportation funding challenges, and presents transportation funding options for the future.

The Funding Problem

Minnesota transportation funding faces a three-fold challenge: demand for transportation on both highways and transit is increasing dramatically, tax revenues are falling, and construction prices are increasing. Minnesota's increasing demand for transportation is being fueled by growth in the state population, growth in the number of trips taken, and growth in the length of trips.

The Current Picture

Funding for transportation in Minnesota has three primary sources: federal funds, state funds, and local revenue sources.

- **Federal funds** primarily come from federal fuel taxes.
- **State funds** are mainly the motor vehicle fuel tax, motor vehicle sales tax, and motor vehicle registration tax. State transit funding includes the motor vehicle sales tax and general revenues.
- **Local revenue sources** include property taxes, special assessments, and miscellaneous general income. Local transit funds come from sales tax revenues, property taxes, and fares.

In Minnesota these transportation funds are collected and distributed based on a funding formula—most of the revenue is pooled in the State Trunk Highway Fund for highway use.

Pressing Challenges

Federal fuel and vehicle taxes are not keeping pace with current conditions: drivers now pay about half the amount of tax per vehicle-mile traveled as they did in the 1960s.

Two significant challenges continue to affect the current funding system. The first is political resistance to increasing the fuel tax. The second is technological advances that are significantly increasing fuel efficiency, leading to a further decline in fuel tax revenues.

The Metropolitan Council's 2030 Transportation Policy Plan for the Twin Cities metro area gives projections for future transportation funding under the current system. The study found that the limited construction possible under current funding levels will result in significant highway congestion increases—reducing the region's competitiveness in the national and international markets.

Options for the Future

Options for future funding of Minnesota's transportation system fall into three categories: general revenues, user fees, and value capture.

General revenue—relies on tax increases. Options include:

- Levy state or local sales taxes to fund transportation projects.
- Use special property tax levies to fund local transportation projects.

User fees—link transportation costs with user benefits by requiring users to pay for transportation infrastructure. Options include:

- Raise the federal fuel tax and index it to keep pace with inflation.



- Extend state taxes used for transportation funding and index them to keep pace with inflation.
- Implement local fuel tax options, such as the wheelage tax and local fuel taxes.
- Employ distance-based charges such as a vehicle-miles traveled (VMT) tax to replace or supplement current fuel taxes.
- Use congestion pricing to charge motorists for travel on particular roads based on the amount of traffic at a given time.
- Levy a federal transit tax on transit trips.
- Use emissions-based fees to impose higher taxes on vehicles with greater carbon emissions.

About the Research

This study was conducted by Zhirong (Jerry) Zhao, an assistant professor in the Hubert H. Humphrey School of Public Affairs at the University of Minnesota; graduate student Kirti Vardhan Das; and Carol Becker, Humphrey Institute finance director. The research was sponsored by the Center for Transportation Studies. The final report—*Funding Surface Transportation in Minnesota: Past, Present and Prospects*—is available for download at www.cts.umn.edu/Publications/ResearchReports/reportdetail.html?id=1728.

Zhao was also a principal investigator in the Value Capture for Transportation Finance study led by CTS in FY2009. To read about the study and its findings, please see www.cts.umn.edu/Research/ValueCapture.

Value capture—aims to fund transportation without placing the cost directly on users and the general public. These methods leverage the value large transportation investments frequently create for adjacent private land to generate transportation funding. Options include:

- Tax land value to capture the increase in the price of land due to improved accessibility from transportation networks.
- Use tax increment financing to finance the initial costs of development with future increases in property taxes generated by infrastructure improvements.
- Levy special assessments to charge property owners within a designated area for the benefits they receive from a transportation improvement.
- Implement transportation utility fees to charge residents for transportation like other local services, such as water and sewer.
- Utilize development impact fees to charge project developers for infrastructure associated with their projects, such as sewers and roads.
- Require developers to pay for public services associated with their project using negotiated exactions, either through in-kind contributions or in-lieu fees.
- Negotiate joint development arrangements, which include private sector payments to the public entity or private sector sharing of capital costs.
- Lease or sell air rights (development rights above or below a transportation facility) to offset project costs.