



Minnesota Mileage Based User Fee Test Results

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How Did MnDOT start?

1990's]	
several small university research studies exploring	Early 2000's large market research MBUF	
alternative financing concepts	project lead by MnDOT planning and policy office	2007 I-35W Bridge Collapse and Gas Tax debate

2007 Legislative Directive via MnDOT Appropriations Bill

"\$5,000,000 is for a pilot project to demonstrate technologies that will allow for the future replacement of the gas tax with a fuel neutral mileage charge."

Reaction to the Directive

- Effort was assigned to MnDOT's Traffic Office
- Initially scoped but decided to "HOLD"

BUT THEN

- \$ was allowed to rollover budget years
- New scope was developed and approved
 - broaden scope with ITS and TZD efforts
 - followed systems engineering approach
 - required a data practices temp classification
 - allowed for a concurrent policy project



Policy Effort

Hired the U of MN to engage key MN stakeholders and consider MBUF issues



- 25 person task force with large data collection effort
- Resulted in identifying 2 defining MBUF objectives
 - 1) GENERATE TRANSPORTATION FUNDING
 - 2) PROMOTE EQUALITY AS A USER PAY SYSTEM
- Generated 6 recommendation to the DOT Commissioner and a minority opinion.

Technology Demonstration

Hired Mixon/Hill, Battelle and SAIC

to design, build, operate and evaluate:

- 500 volunteers from Wright County MN
 - For a 13 month field test (Sept 2011 Nov 2012)
 - 3 waves, each of about 175 people (each wave was 6 months long)
 - Each paid an average of \$320
- Using COTS Smart phones with 3 custom built Apps
 - MBUF, Safety Signs, and Trip data
- Testing the "Opt-In" concept
 - Multiple privacy options
 - 3 odometer readings
- Billed monthly for miles:
 - \$0.03/mile in metro area peak period
 - \$0.01/mile in rural MN
 - \$0.00/mile out of MN



Demonstration Findings

- Satisfied the legislative directive.
 - System was operational and collected alot of data (660 million trip data points, 4 million miles, and 500,000 trips for 478 persons)
- The technology worked, but has it's limits.
 - GPS availability was the most limiting factor
 - Vehicle electrical systems and odometer are not perfect
- Test participants used the system, shared their data, and paid their bills.
 - 82% of the participants share their trip data
 - 77% opt-in rate and received discounted mileage rate
 - \$32,000 collected = 95.5% collection rate
- System administration was labor intensive and focused on individual customers.
 - 8 software versions and 3 generations of hardware upgrades
 - Averaged 4.5 help line calls per day.

Next Steps

- 1) Share results and learn from other MBUF efforts
- 2) Destroy private MBUF project data as mandated by the 2013 Mn State Legislature
- 3) Lead a Pooled Fund Project to continue to research the other MBUF concepts and related national issues.
- 4) Respond to legislative requests Possible October 2013 Hearing



Minnesota Mileage Based User Fee Program

QUESTIONS or COMMENTS?

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Reports Available at:

http://www.dot.state.mn.us/mileagebaseduserfee/index.html













