Minnesota Mileage Based User Fee Test Results

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MnDOT
How Did MnDOT start?

1990’s
several small
university research
studies exploring
alternative financing
concepts

Early 2000’s
large market
research MBUF
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 a lot of data (660 million trip data points, 4 million miles, and 500,000 trips for 478 persons)
- The technology worked, but has its 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