

# Module 10



Benefits,

Funding

Opportunities,

& Resources

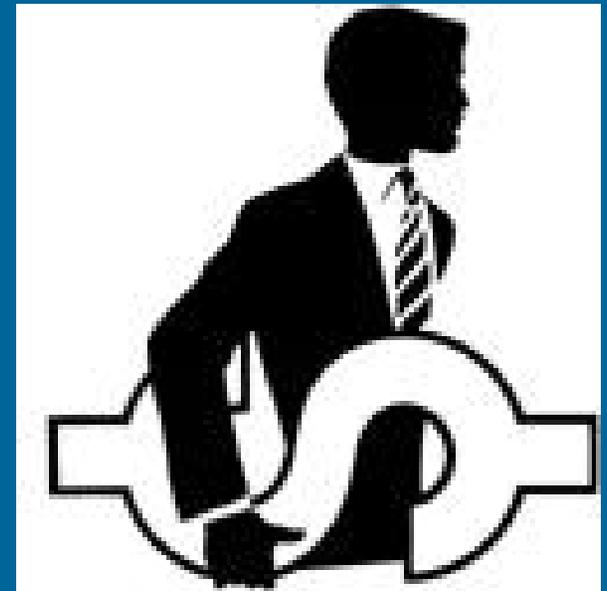
# Benefits of Advanced Technologies

## Benefit Measures

- Cost Savings
- Safety
- Delay/Time
- Energy & Environment
- Quality of Life

# STAR Transit Benefits

- An increase in ridership from 5,000 to 9,000 passengers per month
- No increase in dispatch staff
- A reduction of operational expense of 50% over a 5-year period.



# Benefits of the Advanced Rural Transit Information & Coordination System

- Safety of drivers and passengers increased
  - constant communication
  - vehicle tracking
- Allows more potential passengers
  - reservations made in real-time

# Benefits of Gate Operations

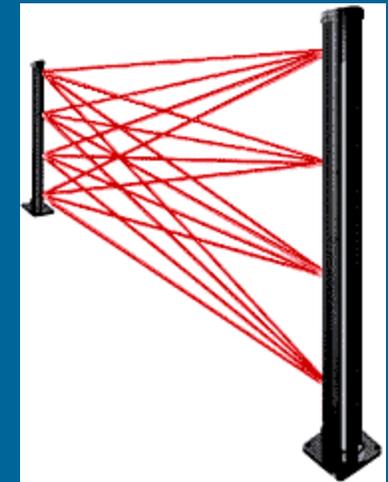
- Snowplows make up to 60% less passes for the road to be 95% clear
- Reduction in delays for both passenger vehicles and heavy trucks
- Reduction in snow and ice related crashes



Source: [www.dot.state.mn.us/guidestar/pdf/gatereport.pdf](http://www.dot.state.mn.us/guidestar/pdf/gatereport.pdf)

# Automatic Fog-Signaling System

- 8 to 10 kph decrease in speed.
- 15% reduction in the number of crashes.



Source: [idf.mitretek.org/its/benicost.nsf/frm/entrance](http://idf.mitretek.org/its/benicost.nsf/frm/entrance)

# Rural Transit

- Use of a coordinated paratransit with a dispatch system has the potential to reduce fraud in Medicaid by \$11 million annually.



Source: [idf.mitrotek.org/its/benicost.nsf/frm/entrance](http://idf.mitrotek.org/its/benicost.nsf/frm/entrance)

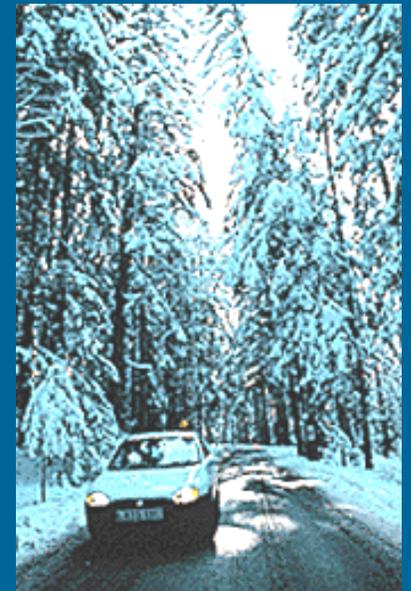
# Computer Aided System for Planning Efficient Routes

- Equipment and operating cost for winter maintenance has been reduced by \$11 to \$14 million.
- 8 - 10% reduction in the number of routes needed to service the network.



# Winter Weather System

- Consists of ice detection systems and a snow forecasting model.
- \$75,000 in reduced salt per storm.
- For 15 storms or approximately a season the reductions would be 37,500 tons of salt or \$1,125,000.



# Intelligent Vehicle & Highway Systems Technologies w/Commercial Vehicle Operations

- A 65 mph weigh-in-motion mainline by-pass saves \$267.8 million.
- AVI saves \$17.7 to 53 million for motor carriers.
- \$22.1 million saved annually from better enforcement.



Source: [idf.mitretek.org/its/benicost.nsf/frm/entrance](http://idf.mitretek.org/its/benicost.nsf/frm/entrance)

# How To Get Involved

Contact your...

- State Department of Transportation
- FHWA Division Office
- US Department of Transportation

and your local...

- Emergency Service Providers
- Transportation Professionals
- Law Enforcement Professionals
- Transit Professionals
- Operations & Maintenance Professionals



# Resources

## Transit

- Community Transportation Association of America (<http://www.ctaa.org/>)
- Transit Cooperation Research Program (<http://www.apta.com/tcrp>)
- Advanced Rural Transit Systems
- Rural Transit Assistance Program (<http://www.ctaa.org/ntrc/rtap/home.shtml>)

# Resources

## National Organizations

- US Department of Transportation  
(<http://www.dot.gov/>)
- Federal Highway Administration  
(<http://www.fhwa.dot.gov>)
- Transportation Research Board  
(<http://www4.nationalacademies.org/trb/homepage.nsf>)

# Resources

## National Organizations

- ITS America (<http://www.itsa.org/home.nsf>)
- National Highway Traffic Safety Administration (<http://nhtsa.dot.gov>)
- State Departments of Transportation (<http://www.fhwa.dot.gov/webstate.htm>)

# Resources

## Universities

- Western Transportation Institute, Montana State U. (<http://www.coe.montana.edu/wti/default.htm>)
- Partners for Advanced Transit & Highways (PATH), UC - Berkeley (<http://www.path.berkeley.edu>)
- Advanced Highway Maintenance & Construction Technology Research Center (AHMCT), UC - Davis (<http://www-ahmct.engr.ucdavis.edu/>)

# Resources

## Consultants

- Castle Rock Consultants  
(<http://www.crc-corp.com/>)
- Science Applications International Corporation (<http://www.saic.com/>)

# Resources

## Pooled Fund Studies

- Frontier  
(<http://www.coe.montana.edu/wti/default.htm>)
- ENTERPRISE (<http://enterprise.prog.org>)
- AURORA (<http://www.aurora-program.org>)
- Animal Vehicle Crash Mitigation  
(<http://www.coe.montana.edu/wti/default.htm>)

# Funding Opportunities

- Federal, State, County, or City Transportation Funding
- Organizations and Programs -- State Police, Media, Traveler Services, etc.
- User Fees and Advertising
- Vendors -- Selling Data Rights