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STRATEGIES AND OUTLOOK FOR ITS FINANCING

ITS IS IMPORTANT.

- It needs to be funded at an increasing level to address the safety, mobility, environmental and economic issues faced today and in the future.
- But the U.S. is falling behind other industrialized nations in deploying new technologies due primarily to a lack of investment.
- The U.S. spends just $100 million annually, mostly on research rather than deployment.
- The Information Technology & Innovative Foundation (ITTF) recommends significantly increasing federal funding for intelligent transportation systems by $2.5 billion to $3 billion annually.

ITS IS SMART INVESTMENT

- While highway capacity investments can deliver a benefit-cost ratio of 2.7-to-1, intelligent transportation system technologies can deliver a 9-to-1 ratio and more.

- A national real-time traffic information system is estimated to cost $1.2 billion but would deliver value benefits of $30.2 billion, a 25-to-1 ratio.

- A traffic operations management system in Broward County, FL with a $9.9 million annual cost yielded a benefit of $142 million in reduced travel time, fuel consumption, emissions and secondary accidents (a 14-to-1 ratio).

ITS IS COST-EFFECTIVE

Intelligent Transportation System Technologies

Project	Description	Benefit-Cost Ratio or Other Metric	Safety Benefit	Mobility Benefit	Enviornmental Benefit
Traffic Signal Optimization/ Retiming	Coordinates traffic signals to reduce congestion, improve traffic flow	17:1 to 62:1	High	High	High
Traffic Adaptive Signal Control Systems	Adjusts the length of traffic signal phases based on real time information about traffic	Improves travel time 6 to 11 percent	Medium	High	High
Ramp Metering Systems	Uses traffic signals at on-ramps to control the rate of vehicles entering the freeway	15:1	Low	High	Medium
Traveler Information/ Dynamic Message Signs	Provides real time, traffic-related information to drivers	3 percent decrease in crashes	Low	High	Medium
Parking Management Systems	Monitors availability of spaces and disseminates information to drivers; reduces traffic congestion associated with looking for spaces	5 percent to 9 percent reduction in travel time.	Medium	Medium	Low
High Occupancy Toll (HOT)/High-Occupancy Vehicle (HOV) Facilities	HOV facilities manage traffic volume by restricting some lanes to transit vehicles, vanpools and carpools. HOT facilities use electronic toll systems to charge single occupancy vehicles for use of an HOV lane.	23 percent would play $2 to save 10 minutes; 59 percent would pay $2 to save 20 minutes.	Medium	High	Medium
Road Weather Information Systems	Uses technology to detect and share information about hazardous road conditions.	2:1 to 10:1	High	High	Medium
Electronic Toll Systems	Uses technology such as open road tolling to process toll transactions at full highway speeds.	2:1 to 3:1 Reduced crash rates up to 49 percent and increased speed up to 57 percent.	Medium (High for open road tolling)	High	High

FUNDING CHALLENGES

- While some intelligent transportation system technologies are local, many others must be deployed on a national scale - a key funding and implementation challenge.

- Much of our transportation funding is allocated without consideration of performance, giving transportation planners little incentive for investments that can have a maximum impact on optimizing system performance such as ITS.

- ITS projects often compete for funding with road repairs that may be more immediately pressing and more politically popular but don't deliver the same long-term returns.

HOW DOES THE U.S. STACK UP?

- Other countries are leading the way in implementing intelligent transportation systems.
- The U.S. spends just $100 million annually, mostly on research rather than deployment.
- That's a fraction of what countries like Japan (almost $700 million annually) and South Korea ($230 million annually) are spending.
- States, however, are playing an important role in testing and implementing many components of an intelligent transportation system.

ITIF RECOMMENDATIONS

- Significantly increasing funding for ITS by $2.5 billion to $3 billion annually, including funding for large-scale demonstration projects, deployment and ongoing operations and maintenance of already-deployed technologies.

- Expanding the role of the U.S. Department of Transportation's ITS Joint Program Office to move beyond research and development to include deployment.

- Tying federal surface transportation funding to states' actual improvements in transportation system performance.

- Charging the U.S. Department of Transportation with developing, by 2014, a national real time traffic information system, particularly in the top 100 metropolitan areas, with this vision including the significant use of probe vehicles to assess road conditions.

- Authorizing a comprehensive research and development agenda including investments in basic research, technology development and pilot programs to begin moving to a mileage-based user fee system.

ITS GRASS ROOTS FUNDING CHALLENGES AT THE STATE AND LOCAL LEVEL

1. Initial capital funding

   - Overall $$ shortfall, aging infrastructure

2. Systems management & operations

   - Limited staffing, expertise, $$

3. Maintenance

   - Limited staffing and equipment/materials

4. Upgrade

   - Limited staffing, expertise, $$
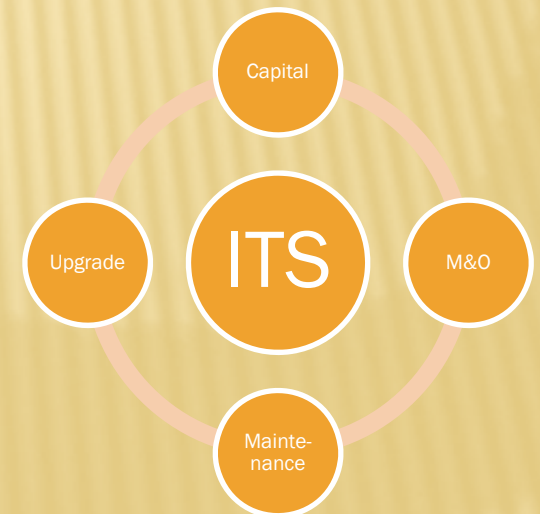
SO WHAT TIPS AND TRICKS EXIST?

- Know the Federal funding resources
- Know your State funding resources
- Work the MPO process
- Promote ITS at the local level – ALL phases
- Monitor performance & promote ITS B/C
- Develop a formal business plan
- Develop performance-based standards/specs
- Utilize life-cycle cost analysis in equipment/system acquisitions
- Include well-defined warranties
- Maintenance contracts (performance-based)