Is congestion a modern problem caused by the availability of cars?
Or an historical condition of transportation desires outstripping infrastructure capabilities?
In the absence of any pricing of highway usage we seem to be faced with the following dilemma. *Either we construct a highway system of extravagant proportions,* which, while no greater than needed to carry its volume of traffic without congestion, is nevertheless much larger that the users would be willing to pay for if they had their choice between paying their share or doing without the facility or with one less ample, and being relieved of the corresponding share of the cost.

*Alternatively, we construct a highway system that is severely congested during the rush hours,* sufficiently so that resort to rail transit is the better alternative, if that is available, or possibly to bus transit if the busses can be sufficiently insulated for the impact of congestion, itself an expensive arrangement to provide. Nor is there any particularly attractive middle ground. *Specific pricing of highway usage is needed and needed badly.*

Congressional Committee meeting November 1959
It’s a historic problem with a known solution

So what has changed that makes us believe we can tackle it now?
Technology
Infrastructure
Economics

- Better understanding of market factors
- Infrastructure maturity
- User acceptance
- Better benefit-cost and asset management methodology
Value Pricing Pilot Program

• Tolling
  – Congestion Pricing
    • HOT lane conversion
    • Full facility tolling (SR520)
  – Active Traffic Management
    • Speed harmonization
    • Part time hard shoulder running

• Non-Tolling
  – Parking Pricing
  – Dynamic Ride Sharing
  – Peer to Peer Car Sharing
SR 520 – Washington State

• Variable Pricing to manage performance
• All electronic tolling using transponders and license plates recognition
• Revenue targeted to replacing the aging floating bridge
• Utilizes ATDM
• VPPP grant
• Impact on travel
Traffic Impacts

- Overall lower volume on SR520
- Better lane performance
- Peaks have now formed
- Transit ridership is up
- Some diversion evident (I-90)
- Reduction or redistribution of discretionary trips? Driver survey underway might answer this question.
Volume: Westbound SR 520 bridge (weekdays)

Volume: Eastbound SR 520 bridge (weekdays)

(10th/90th percentile)
Volume: Eastbound I-90 bridge (weekdays)

**Volume: Reversible I-90 bridge (weekdays)**

International Road Pricing Scan

ROAD PRICING TO MANAGE DEMAND

Top 3 Lessons Learned

• Host countries and regions used clearly defined and well communicated policy goals to advance road pricing as part of an overall strategy to address broader needs

• Public involvement was integrated throughout the project development and implementation process to engage key stakeholders

• In Stockholm and the Netherlands, major demonstration projects were used to garner public acceptance, test technology and refine business approach
Cost of my Vehicle Operation

Based on:

- Vehicle purchase price + interest ($17,000),
- Value of vehicle after 48 months ($4,500)
- Number of miles after 48 months (100,000)

Car Cost: $.125 per mile

- Fuel only $1,625 ($0.0813 per mile)
- User Fee – Fed & State $250 ($0.0125 per mile)
- Insurance: $763 ($0.0381 per mile)
- Maintenance/service/tires: $610 ($0.0305 per mile)

Total: $.287 per mile

User Fees about 4% of total ownership cost
Addressing Public Concerns

• Acceptance of tolling
• Traffic diversion to other routes
• Equity
• Tolls as double taxation
• Administrative costs
• Privacy
Questions