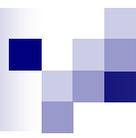


Transforming Payment Choices by Doubling Fees on the Illinois Tollway

Comments

Daniel McMillen

June 12, 2007



Why Did People Take So Long to Adopt I-Pass?

- Same toll with or without I-Pass
- Little time savings during most of day
- Hurdles:
 - Could only obtain directly from tollway authority
 - Costly setup – account with \$50 initial charge, charged again when account falls below \$10
 - Uncertainty about refund, overcharging



Who Was Most Likely to Have I-Pass?

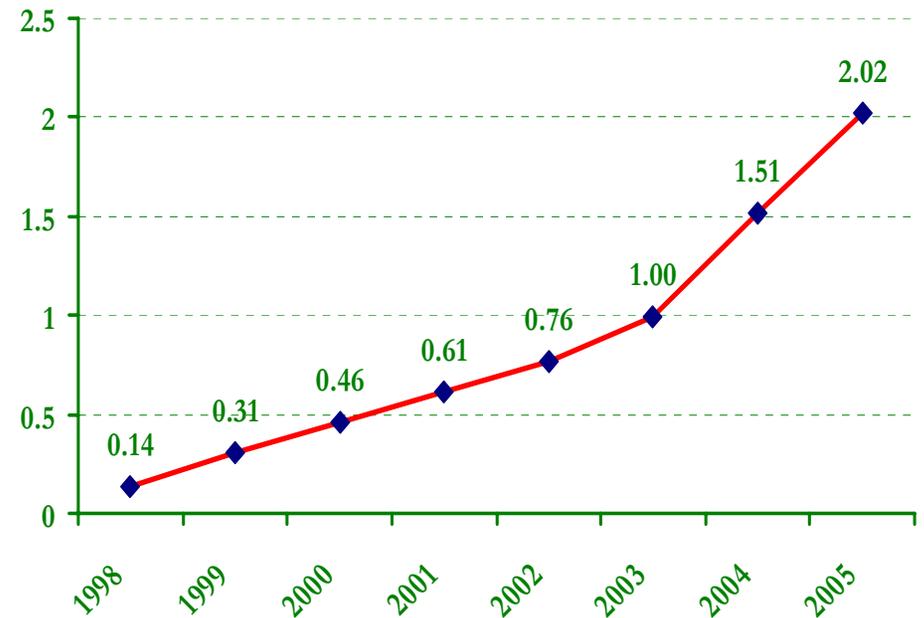
- Commuters
- Distant suburbs along tollways
- High income

People who only occasionally use the tollway for leisure trips would not find the setup cost worthwhile

Setup Cost Reduced and Regular Toll Doubled in 1992



Percentage using I-Pass



Average number of transponders per household



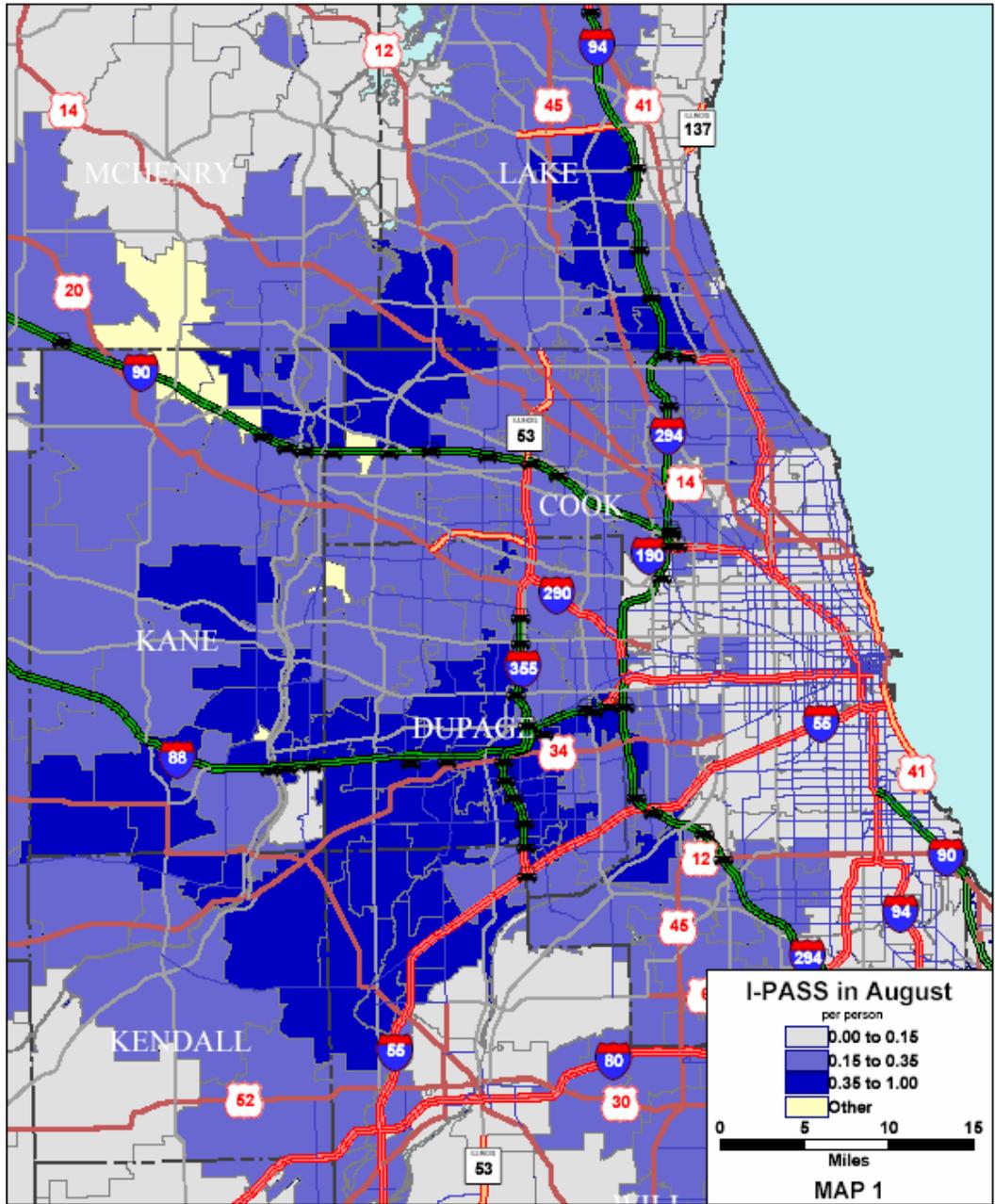
Logit Model of Transponder Ownership by Zip Code – % of Households

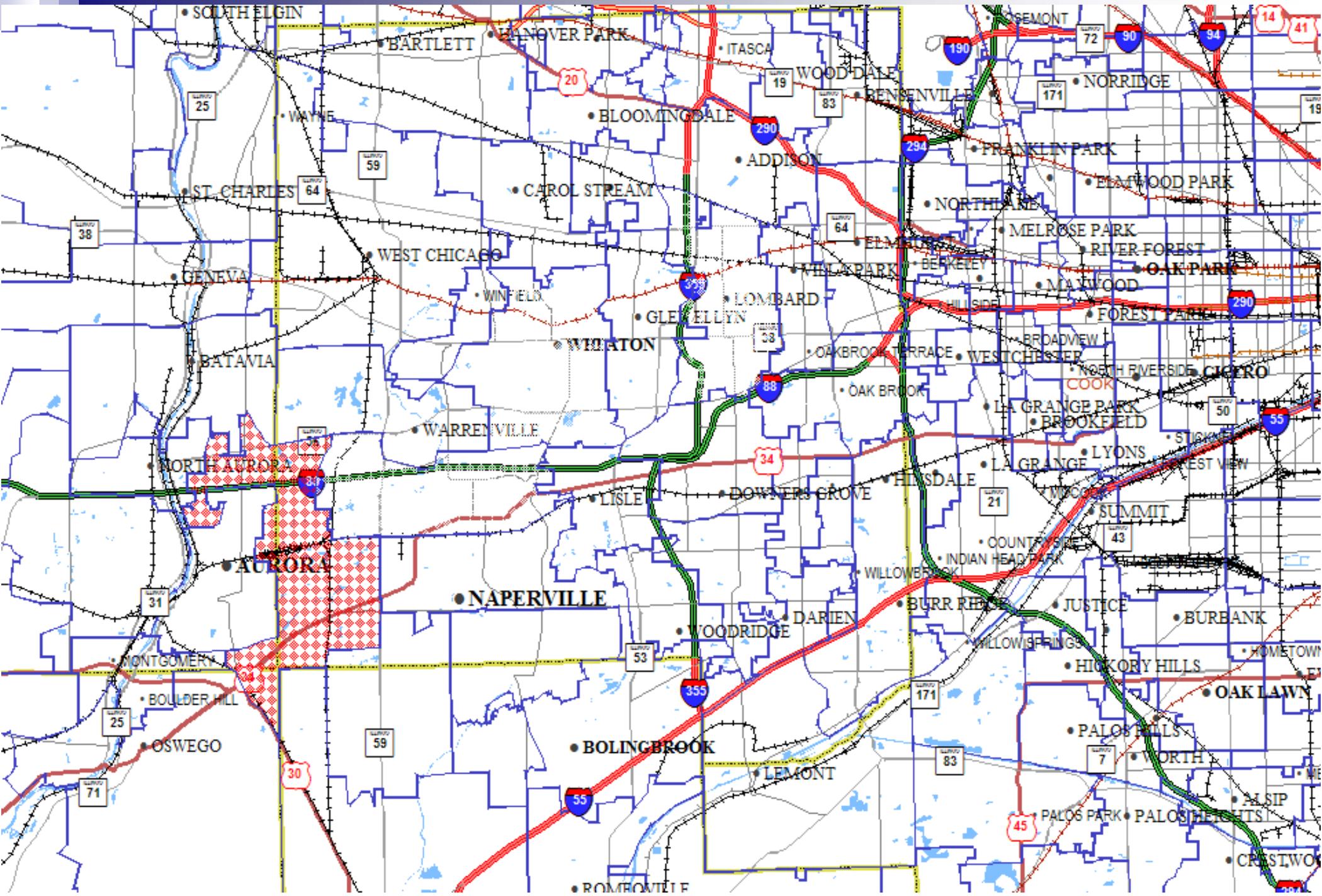
- % of households in various income ranges
- Distance to nearest tollway exit (centroid?)
- Distance to Jewel
- Share of likely tollway commuters (model based on journey to work data)
- Average travel time and toll costs
- Focus throughout is on *commuting*



Variation within Suburbs

- Loop v. suburban job
- Percentage who commute by train
- Length of commute by income group
- Leisure trips
- Census blocks/tracts v. zip codes



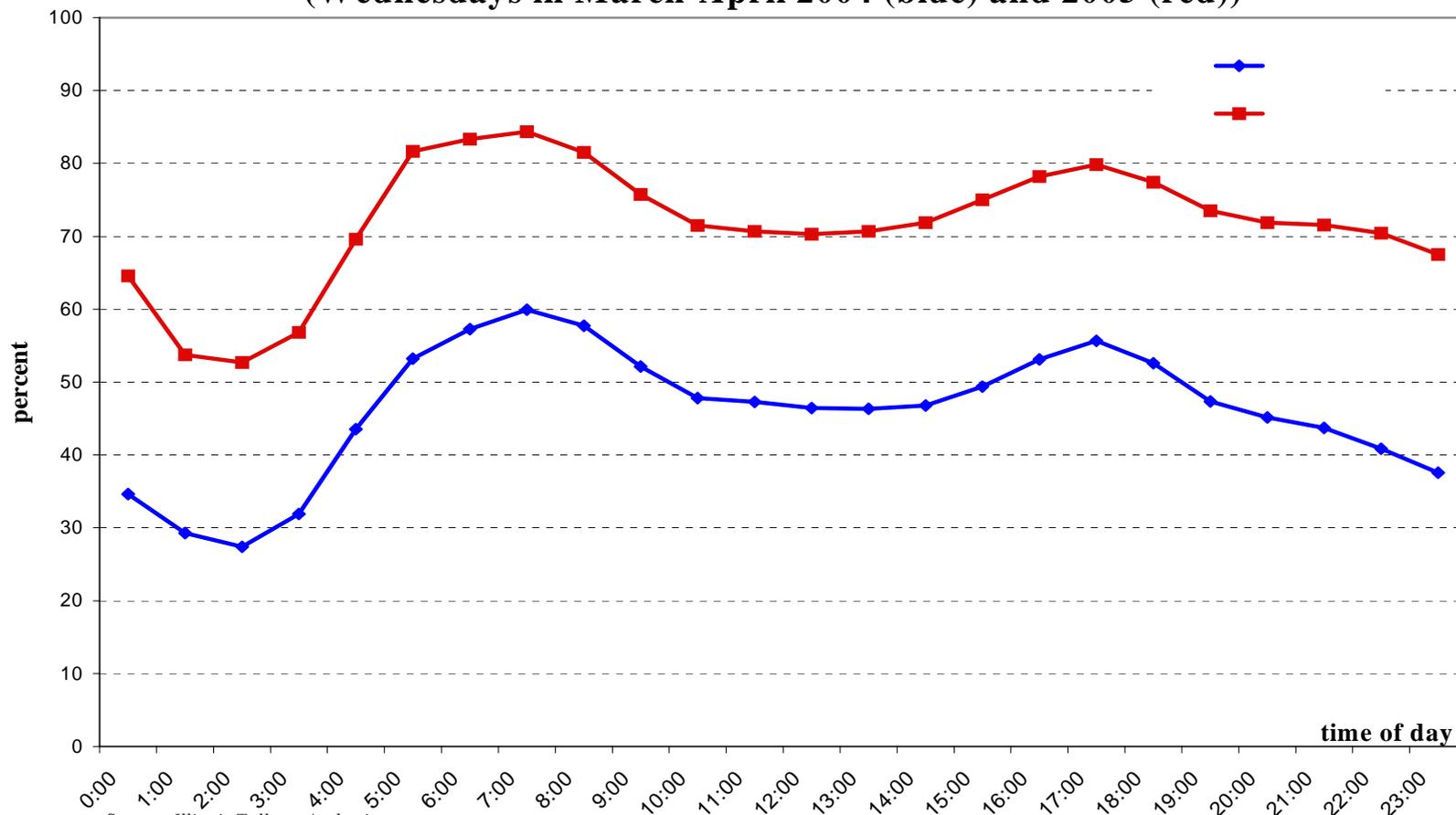




Optimal Toll

- Congestion Charge
- Time of Day
- Traffic Conditions
- Trip Pattern

Share of Hourly Transactions Paid Electronically (Wednesdays in March-April 2004 (blue) and 2005 (red))



Source: Illinois Tollway Authority

Notes: 1) Excludes Plaza 3 due to measurement issues; 2) Data reflects only passenger vehicles without trailers (class 1)



Results of I-Pass

- Eliminate costly bottlenecks
- Use existing highway capacity more efficiently
- Make time of day pricing feasible
- Can consider implementing an optimal toll