Innovations in Travel Modeling or How I spent my summer vacation

3rd Conference May 10-12 Tempe Arizona





Conference Summary

- > 200 Attended [NC well represented]
- > 59 Presentations
- Dodgers beat the Diamondbacks (though it was too cold to stay to the end of the game)



Impressions

- 1. Theme: Integrating dynamic demand & supply
- 2. Small and large MPOs are moving farther apart
- 3. More MPOs now have (and are developing) activity based models
- 4. Policies that drive this are time of day pricing and land use policies related to green house gases



Some Ideas I Thought Were Interesting

- Agile software development techniques applied to models – start simple then add components, but always have a working model
- 2. Writing applications for the iPhone to collect data on bicycle use



More Detail

- SHRP2 C10 project is under way
 - ➤ A "partnership to develop an integrated, advanced travel demand model"
 - > Will integrate SACSIM with DynusT
 - > Software to be implemented in a web browser
 - Project has a web site to track: http://www.shrp2c10.org



Yet More Detail

- ARC Activity Model Complete
 - Done jointly with MTC
 - Using TP+ and Cube
 - JAVA parallel processing framework
 - Now have 2,027 TAZs, will expand to 6,000 TAZs and a NAVTEC network



Some Insights

- Day to day variation in travel is greater than variation between households – Brian Gregor
- 2. If a supply model passes impedances back to the demand model, even in small time slices, it is a feedback model not a dynamic model Mark Bradley
- 3. Advanced choice techniques still focus on estimation year fidelity, not forecasting Frank Koppelman



More Insights

- 4. If you break an optimization problem into pieces you will never get as good a fit as you will jointly estimating the model Frank Koppelman
- 5. Primary application of DTA is operations, not forecasting Hani Mahmasani
- 6. If you assume a single value of time then you will over estimate the response to congestion pricing Hani Mahmasani

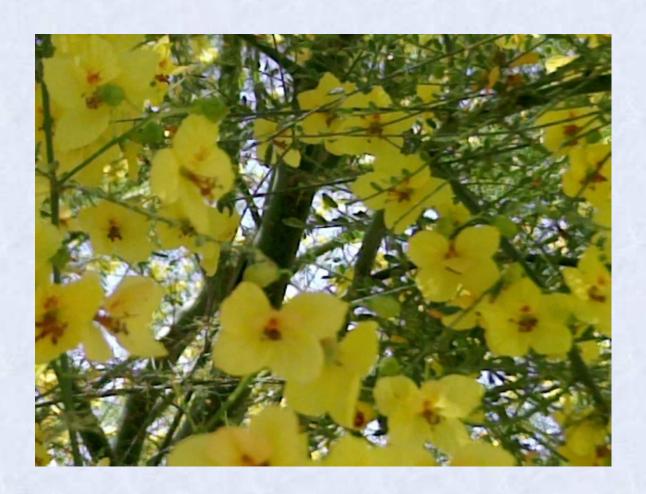




Solar Array on Parking Garage

ASU





Street Trees in Tempe

Desert in bloom – Palo verde





Light Rail Station

ASU





Fare Payment Kiosk

Metro Light Rail





Light Rail Station

Bus to rail connection





Bus to Rail

ASU station – police station to left

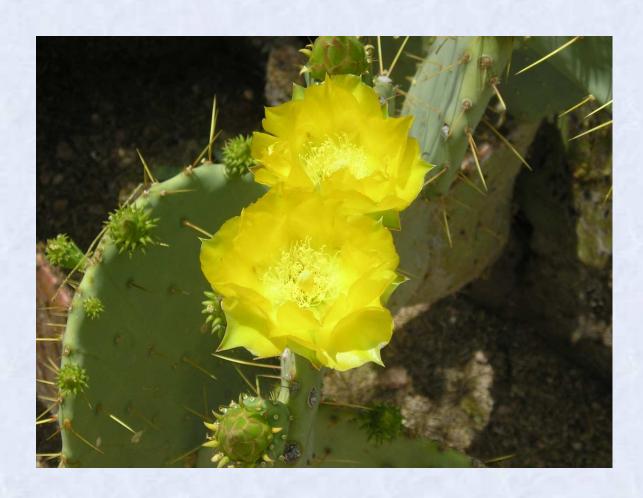




Use of recycled glass in station

ASU station





Desert Botanical Garden

Cacti in bloom





Desert Botanical Garden

Yuccas in bloom





Taliesin West

Frank Lloyd Wright's western studio