Rideshare and TDM
Part of the Transportation System

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Ridesharing

• A large factor in Transportation Demand Management
• Ridesharing - sharing a ride - for commute trips appears primarily in the form as carpooling and vanpooling.
• 1910’s – Hitching a ride with spread of personal auto
• 1940’s – Official “carpool clubs” during WWII
• 1970’s – Employee rideshare due to energy crises
• 1980’s – Funding for Carpool and Vanpool Projects
• 1990’s – Reliable ridesharing systems
• 2000’s – Technology-enabled ridematching
• Current – Confusing usage of rideshare terminology
Ridesharing Technology

• Rideshare programs (local governments, organizations, employers) often employ a ridematching software
  – RidePro, RideShark, RideAmigos, etc.

• Consumers often use web- and app-based resources to help with ridesharing
  – Craigslist
  – iCarpool
  – Ridejoy
  – Carpoolworld
  – Ridescout
  – Carma
  – Zimride
  – Hitch
Ridematching systems
– Emergency ride home programs
– Preferred parking options
– HOV / HOT lane access
– Favorable employer policies
  • Scheduling accommodations
  • On-time departure commitments
  • Transit benefits
– Park and pool lots
– Incentive programs
– Availability of bikeshare, carshare, transit, etc.
– On-site consumer services
Houston Regional Vanpool History

• 1970’s – Employer-sponsored vanpools prosper
• 1980’s – METRO opens “transit-way” to vanpools
• 1980’s – METRO offers “ridematching” to find riders
• 1990’s – METRO adds financial incentive for riders
• 1990’s – H-GAC (MPO) launches TDM initiatives
• 1996 – CMAQ funding makes vanpool regional
• 2004 – H-GAC launches miniPOOL project
• 2007 – METROVan and miniPOOL consolidated
• 2008 – STAR is new Regional Vanpool brand
• 2009 – STAR promotes new business model
METRO STAR Vanpool

- Unique public-private partnership of FHWA, TxDOT, H-GAC, METRO, private contractors, private vehicle providers and employers
- Regional program covers 8-county Houston-Galveston-Brazoria commute to work trips
- 80/20 FHWA/Local (METRO) funding for vehicle capital (STP) and program marketing (CMAQ) (past FTA JARC)
- Employer (destination) based outreach and marketing
- Groups of 5-15 individuals sharing costs and responsibility in STAR-provided vehicle
- Supported with vehicle arrangements, ridematching, emergency ride home, and customer assistance
METRO STAR Vanpool

- Urban, suburban and rural worksites can benefit from vanpool
  - Over 90% of STAR routes serve areas outside the CBD
  - Typical commutes via STAR are over 25 miles one-way
  - Parking demand is a significant influencer for employers:
    - Harris County Appraisal District reduced employee parking 10%
    - Michael E. DeBakey VA Medical Center and Regional office reduced parking demand by over 600 spaces
  - Corporate relocations motivate employers as retention tool:
    - Baker Hughes employees formed more than 50 vanpool routes in consolidating to their North Houston facility
    - ExxonMobil implemented commuter choice transit benefits in support of employee migration to new campus in Spring
  - Attractiveness of employee benefits affect hiring and retention
    - Tax advantages of transit benefits are win-win for employers and staff
TDM in the H-GAC Region

- Transit Services
- HOV/HOT/Managed Lanes
- METRO STAR Regional Vanpool
- NuRide Incentives for Transit, Rideshare, Telework, Bike/Ped
- Commute Solutions Telework
- Alternative Work Arrangements (flex-time)
- Transit Pilot Projects Program
- Carsharing and Bikesharing
- Real-Time Ridematching
Commute Solutions 2013 Impacts

• Transit Usage (all providers)
  – 541.5 million passenger miles traveled

• METRO STAR Regional Vanpool
  – 60,753,527 vehicle miles traveled reduction
  – 51.0 tons NOx emissions reduction

• NuRide Carpool Incentivies
  – 49,278,824 vehicle miles traveled reduction
  – 25.8 tons NOx emissions reduction

• Commute Solutions Telework
  – 8,242,810 vehicle miles traveled reduction
  – 1,800 teleworkers in supported programs
TDM in the Transportation System

• Transportation Demand Management - taking fewer trips and choosing wisely how to take the ones we do
• The Clean Air Act originally included mandatory employee trip reduction rules, repealed in 1977
• An expansion of local trip reduction rules and TDM ordinances is now occurring across the nation
• IRS Code provides for transit benefits for employees
• FHWA, FTA and EPA have federal funds for TDM
• Local and regional governments and districts support TDM initiatives
• Planning and development guidelines support TDM
• Employers support TDM programs in many places.
Planning Resources – CUTR/NCTR

• National Center for Transportation Research at the Center for Urban Transportation Research, University of South Florida (www.nctr.usf.edu; www.cutr.usf.edu)

• Research into TDM practices and impacts, including:
  – Worksite Trip Reduction Model & Manual – predicts extent incentives, disincentives and programs will impact worksite trips
  – An Analysis of TDM Impacts on a Corridor Segment – found the correlation of TDM policies with reduction in congestion, time delay and fuel consumption on I-5 segment in Seattle
Planning Resources – TSRC

• Transportation Sustainability Research Center, University of California at Berkeley (www.tsrc.berkeley.edu)

• Research into Rideshare and Shared Use Mobility, including:
  – Shared Use Mobility Summit – the first national summit on the convergence of shared use options including transit, carshare, bikeshare, and rideshare, and resulting report on the current state of shared use
  – Ridesharing in North America – Past, Present & Future – a short history of ridesharing to the present with current influences that will affect the future
Planning Resources – CNT

• The Center for Neighborhood Technology (www.cnt.org)
• Research into relationships with land use, transit and walk access for parking:
  – Locations that support transportation needs without a personal auto are increasingly attractive
  – Parking pricing and supply policies will impact actual parking per unit

• For more on this study, see the Feb 2013 ITE Journal
Implementation Resources – ACT

- The Association for Commuter Transportation (actweb.org) - an international trade association and leading advocate for commuter transportation and transportation demand management
  - Public TDM Programs
  - TDM Service Providers
  - TDM Consultants
  - Metropolitan Planning Organizations
  - Transportation Management Associations
  - Management Districts
  - Universities
  - Local Governments
Implementation Resources – ACT

• Association members in Texas:

- Capital Area Metropolitan Planning Organization
- Car2go N.A., LLC
- Central Texas Regional Mobility Authority
- Commute Solutions Coalition
- Dallas Area Rapid Transit
- Energy Corridor District
- Enterprise Rideshare
- Houston-Galveston Area Council
- Metropolitan Transit Authority of Harris County Texas
- Movability Austin
- North Central Texas Council of Governments
- NuRide
- Rice University
- Texas A&M University
- Texas Tech University
- TREK Transportation Management Organization
- 2Plus of Texas, Inc.
- University of Texas at Austin
- vRide
Questions?

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