

CTPP Journey to Work GIS-T 2008 Houston, TX



U.S. Department
of Transportation
Federal Highway
Administration

Mark Bradford

BTS





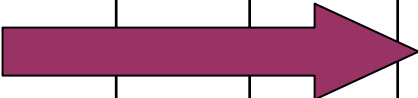
CTPP has long history



1960	First Journey-to-Work Flow tables for OMB
1970, 1980	UTPP using decennial Census, individual contracts with MPOs and States.
1990, 2000	CTPP using decennial Census, single contract coordinated thru AASHTO
2009 +	CTPP using ACS, single contract coordinated thru AASHTO

Understanding Accumulations of records over Time in ACS

Data Release Schedule

Type of Data	Population Size of Area	Data for the Previous Year Released In the Summer of:						
		2006	2007	2008	2009	2010	2011	2012+
Annual Estimates	65,000+							
3-year averages	20,000+							
5-year averages	Less than 20,000							

Workplace Allocation (Imputation)

- About 25 percent of survey responses have insufficient information from which to geocode workplace location to a TAZ or census block.
- The process to impute the workplace has changed over time.
- 4 variables are used: Travel mode, travel time, Industry and Occupation
- detail in Industry and Occupation was expanded in 2000, compared to 1990.

Journey To Work (BTS)

- BTS Geospatial Information Program
- Similar Projects
 - Commodity Flow Survey BTS/Census

Journey To Work (BTS)

- Teleatlas Network
- Census Tract Nodes

- FHWA/Census
- Origin Destination (threshold)
 - County to County

 - Road

The Process

- Combined individual state networks into multi state blocks
 - Entire network except ...
 - A given state may appear in one or more networks
- Census Tract Nodes (population)
- Simple routing using travel time
 - Network Analyst
 - OD Matrix
 - Prince George County MD (183 tracts = 33,489)
 - <5 minutes to run

Example

O_State	O_County	O_Track	D_State	D_County	D_Track	Total_Time	Total_Len
24	033	800102	24	033	806300	18.21	13.76
24	033	800102	24	033	803607	18.40	14.08
24	033	800102	24	033	806400	18.40	14.02
24	033	800102	24	033	805801	18.47	13.91
24	033	800102	24	033	805201	18.59	14.12
24	033	800102	24	033	804400	18.79	15.24
24	033	800102	24	033	800408	18.82	12.45
24	033	800102	24	033	803602	18.98	15.14
24	033	800102	24	033	806200	19.14	14.38
24	033	800102	24	033	803200	19.44	15.61
24	033	800102	24	033	805101	19.44	14.47
24	033	800102	24	033	805000	19.51	14.71
24	033	800102	24	033	803401	19.53	16.38
24	033	800102	24	033	803100	19.74	16.45
24	033	800102	24	033	803508	19.75	16.26

What are they doing with the results?

- Adding impedance values
 - Suburban to urban
 - Urban to suburban
 - Suburban to suburban
- Match to 25% incomplete responses to identify target tracks > industry and occupation
- Pick tract, then block, and ultimately TAZ
- Added to CTPP – home to work flow

TAZ definition Schedule

- Plan to define TAZs for CTPP approximately February 2009. **PUT IN YOUR WORKPLAN NOW!**
- Use a GIS-based program, may be web-based, or desktop based. Will not require purchase of GIS software, will be standalone.
- Hope it is as user-friendly as TAZ-UP used for CTPP2000!

ACS Training and Research

- NCHRP Report 588 Guidebook **Using the American Community Survey Data for Transportation Planning** **NOW Available!**
- Census Bureau ACS Data Users Handbook
<http://www.census.gov/acs/www/Downloads/Handbook2006.pdf>
- NCHRP 8-36 Project **Disclosure Avoidance Techniques to Improve ACS Data** (\$75k) *In progress.*
- NCHRP 8-36 Task 81: **Enhancing ACS as a source for Home-to-Work Flows** (\$60k) *Just started.*

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