

NHTS Users and Uses

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Traffic Safety

TRAFFIC SAFETY

Historically, NPTS has been a primary source of data (along with the Fatal Accident Reporting System – FARS) to compute accident rates, analysis of travel risk, alcohol involvement etc. General Estimates System (GES) and the Fatality Analysis Reporting System (FARS), do not contain information on driver or vehicle exposure. In order to obtain appropriate exposure data estimates of vehicle miles driven (VMD) by different drivers using the NPTS are combined with annual crash rates and injury severity information from the GES for a comprehensive assessment of overall risk to different drivers across vehicle classes.

Some of the uses shown in the appendix are highlighted here:

- The use of 1977 NPTS along with data from the Fatal Accident Reporting System (FARS) to examine travel risks of males vs. females by age group. Similarly, the 1983 NPTS was used in conjunction with the Fatal Accident Reporting System (FARS), driver' s license files and population surveys to calculate alcohol involvement rates in fatal crashes.
- The use of NPTS to determine whether the presence of passengers is associated with an increased risk of crashes fatal to 16- and 17-year-old drivers and whether the risk varies by time of day and age and sex of drivers and passengers.
- The use of 1990 NPTS in conjunction with crash data from the Fatal Accident Reporting System (FARS) and the 1990 General Estimates System (GES) to produce crash involvement rates per vehicle-mile. Similarly, the 2001 NHTS data were used to estimate exposure for pedestrians in a fatality risk assessment.
- Development of Survey Frame for Field Operational test: The use of 2001 NHTS data to develop sample recruitment (representative sample of drivers) to conduct a field operational test using passenger vehicles equipped with two automotive technologies.

Traffic Safety

Academia

- | | | |
|------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1983 | Mortimer, R. G., Fell, J. C. | Mortimer, R. G., and Fell, J. C. Older Drivers: Their Night Fatal Crash Involvement and Risk. <i>Accident Analysis and Prevention</i> . Volume 21, number 3. June 1989. |
| 1983 | Fell, J. C. | Fell, J. C. Alcohol Involvement Rates in Fatal Crashes: A Focus on Young Drivers and Female Drivers. <i>American Association for Automotive Medicine: Proceedings of the 31st Annual Conference</i> , New Orleans, Louisiana. September 1987. |
| 1990 | Massie, D. L. et.al | Massie, D. L., Campbell, K. L., and Williams, A. F. Involvement Rates by Driver Age and Gender Based on the 1990 Nationwide Personal Transportation Survey. HS-041 722. University of Michigan. Ann Arbor. 1993. |
| 1990 | Robert B. Schultz, Auburn University | Relationships Between Highway Accident Involvement and Exposure Characteristics of Elderly Alabama Automobile Drivers. October 1991. |
| 1990 | Massie, D. L. and Campbell, K. L | Massie, D. L. and Campbell, K. L. Analysis of Accident Rates by Age, Gender, and Time-of-Day Based on the 1990 Nationwide Personal Transportation Survey. UMTRI-93-7. University of Michigan, Ann Arbor 1993. |
| 1995 | Young-Jun Kweon, Kara M. Kockelman | Y Kweon, K. M. Kockelman. Overall Injury Risk To Different Drivers: Combining Exposure, Frequency, And Severity Models. <i>Accident Analysis and Prevention</i> 35 (2003) 441– 450. |
| 1995 | Lee, B.H.; Schofer, J.L | Lee, B.H.; Schofer, J.L. Restraint Use and Age and Sex Characteristics of Persons Involved in Fatal Motor Vehicle Crashes. Department of Civil Engineering, Northwestern University, Evanston, IL. November 13, 2002. |
| 1995 | Gabor, K. and Baker, S. P. | Gabor, K. and Baker, S. P. John Hopkins University press release June 1998. |
| 1995 | Chen LH, Baker SP, Braver ER, Li GH. | Chen LH, Baker SP, Braver ER, Li GH. Carrying Passengers as A Risk Factor For Crashes Fatal to 16 and 17 Year-Old Drivers. <i>Journal of the American Medical Association</i> . 283: (12) 1578-1582, March 22, 2000. |

Federal (DOT)

- | | | |
|------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1977 | Carsten, O. | Carsten, O. Use of the Nationwide Personal Transportation Study to Calculate Exposure. Highway Safety Research Institute Research Review, Volume 11. Number 6. Highway Safety Research Institute. May 1981. |
| 1983 | NHTSA | Rudolph G. Mortimer (University of Illinois) and James C. Fell (NHTSA). Older Drivers: Their Night Fatal Crash Involvement and Risk. 32nd Annual Proceedings. Association for the Advancement Of Automotive Medicine, Seattle, WA, September 12-14, 1998. |
| 1990 | U.S. Department of Transportation. | U.S. DOT. What do Traffic Crashes Cost? DOT HS 808 478. January 1996. |
| 1990 | Blatt, J. and Furman, S. M. | Blatt, J. and Furman, S. M. Residence Location of Drivers Involved in Fatal Crashes. National Highway Traffic Safety Administration. |
| 1990 | NHTSA | NHTSA. Female Drivers in Fatal Crashes: Recent Trends. September 1993, Washington D.C. |
| 1995 | Campbell, KL; Joksch, HC; Blower, D; Kostyniuk, Lp; Pendleton, OJ; Griffin, LI, III | Campbell, KL; Joksch, HC; Blower, D; Kostyniuk, LP; Pendleton, OJ; Griffin, LI, III. Sources Of Exposure Data For Safety Analysis. University of Michigan Transp Research Institute Texas Transportation Institute Federal Highway Administration . UMTRI-96-17. 1996. |
| 1995 | Cerrelli, E. C., NHTSA | Cerrelli, E. C. National Highway Traffic Safety Administration, U.S. Department of Transportation. January 1998. |
| 1995 | NHTSA, Research Note | Crash Data and Rates for Age-Sex Groups of Drivers, 1996; National Center for Statistics and Analysis, Washington D.C., January 1998. |
| 2001 | Butler Maura, NHTSA | NHTSAs Standard Breifing Package for Older Drivers |
| 1990 | Cerrelli, E. C. | Cerrelli, E. C. Crash Data and Rates for Age-Sex Groups of Drivers, 1990. HS-041 357. National Center for Statistics and Analysis. National Highway Traffic Administration. May 1992. |

Federal (Non DOT)

2001 Beverly Ross, GAO Report to Congress Summarizing Literature on Accident Causation

Research Entities

2001 Chu, Xuehao, CUTR Chu, Xuehao. A Time-Based Comparative Approach to Understanding the Danger of Walking in the United States. Center for Urban Transportation Research, University of South Florida. July 2003.

1983 International Technical Affairs, MVMA

1990 Baltes, M. R Baltes, M. R. Descriptive Analysis of Crashes Involving Pedestrians in Florida 1990 - 1994. Center for Urban Transportation Research, University of South Florida.

1990 Insurance Institute for Highway Safety Crash Problem on a Per Mile Basis. Status Report. Insurance Institute for Highway Safety September 5, 1992

1995 Committee on School Transportation Safety Committee on School Transportation Safety. The Relative Risks of School Travel: A National Perspective and Guidance for Local Community Risk Assessment. Transportation Research Board, National Research Council. National Academy Press, Washington D.C. July 2002.

1995 Transportation Research Board Transportation Research Board. The Relative Risks of School Travel: A National Perspective and Guidance for Local Community Risk Assessment. Committee on School Transportation Safety, Transportation Research Board Special Report 269, 2002.

2001 Flores-Guri, Daniel. CAFE Standards, Vehicle Size and Highway Fatalities. Skidmore College. 2003.

Congestion

Travel Behavior

Travel Model

Travel Time Issues/Congestion

Commuting

Economy/Sprawl

CONGESTION

NPTS data are widely used across the nation to analyse travel behavior, build travel models, commuting, travel time, mobility, economy and sprawl issues.

Travel Behavior

1995 NPTS data were used to examine the most important socioeconomic variations in urban travel behavior.

- 1990 NPTS data were used to examine trip duration and frequency in comparison to activity duration and frequency to show arguments in favor of activity based models.
- 1990 NPTS travel data were used to justify a non-motorized transportation plan in Pierce County based on the large percentage of trips of five miles or less.
- NPTS data were used to examine the relationship between land-use patterns and individual mobility from a comparative international perspective.
- NPTS data provided evidence to show that in U.S. cities suburbanization has been the dominant and successful mechanism for coping with traffic congestion. Suburbanization has shifted road and highway demand to less-congested routes and away from core areas, leading to contained areawide average speeds.

Travel Model

- NPTS data were used to examine the travel behavior and related characteristics of multiworker households (MWHs) (defined as households with at least two workers) and how they contribute to the ever-increasing demand for transportation services.
- 1995 NPTS data were used for empirical estimation of model parameters in developing a model of prework trip making and home departure time choice.
- The 2001 NHTS data were used to examine the full range of travel characteristics which were used as a comparison to Florida travel statistics.
- NPTS and NHTS are considered as data sources for forecasting future travel and land needs.
- Many metropolitan planning organizations across the United States have embraced transit-oriented development (TOD) as their regional planning paradigm.
- NPTS (No specified year) data were used to provide time-of-day travel data by trip purpose as well as information on peak travel.
- The 1995 NPTS data were used to investigate the influence of workplace employment density and share of retail employment on VMT to assess personal commercial activities.
- 1990 NPTS data were used to expand the Connecticut Department of Transportation's person forecasting model to estimate peak period link volumes.
- Vehicle Miles of Travel Data were used from previous NPTS and the 2001 NHTS as the basis for predicting several input components for modeling and forecasting future VMT.

Travel time issues/congestion

- The 1969 and 2001 NHTS data were used to show that there has been an increase in discretionary travel.
- 1990 NPTS data were used to support the argument that a disproportionate amount of emphasis is being placed on the reduction of work trips and on fixed rail.
- 1990, 1983, and 1977 NPTS surveys were used to make the case that suburbanization has been the most successful factor in alleviating traffic congestion.
- 1990 NPTS was used to show that traffic congestion is getting worse as a result of the increase in travel as well as other factors such as the change in household structure. People are working much more over the last 40 years, shopping somewhat more on the weekends, and staying at home less.
- The 1995 NPTS data were used to examine the effects of adding road capacity by increasing travel speed as it relates to discretionary and non-discretionary activities of workers and nonworkers.
- 1990 NPTS data were used in a Transportation Research Board Special Report to show that motorists receive free parking for 99% of all motor trips. This report suggests that charging motorists for the use of roads should be considered to help alleviate traffic congestion.

Commuting

- 1983 and 1977 NPTS surveys were used to examine peak travel times.
- The 1995 NPTS data were used to establish the average one way commute distance in the U.S. and also the daily per capita PMT for people between 21 and 65 years of age.
- 1990 NPTS was used to examine transit service levels, travel and parking behavior in the U.S., and the effect of parking regulation by cities.
- 1990 NPTS data were used to estimate the effects of transit service and parking charges on commuter mode choice.
- The 1995 NPTS data were used for analysis purposes in terms of traffic demand management which attempts to improve air quality, mobility and reduce congestion.
- Analyzing the 1983-1990 growth of almost 40% in U.S. vehicle miles traveled (VMT), Pisarski shows that much of it is accounted for by a 35.9% jump in average vehicle trip lengths (the other contributors being population growth, decline in vehicle occupancy, mode shifts to privately operated vehicles, and increased trips per capita). Yet, most of the work trip VMT growth was explained by the almost 27% growth in average distance traveled (from 8.6 to 10.9 miles, one-way). In spite of this and depending on how the data are aggregated, average work trip durations either fell slightly or grew by much smaller percentages than distances. Either way, there were significant increases in average trip speeds. This casts doubt on reports of worsening congestion, such as those emanating from the Texas Transportation Institute (TTI).

Economy/Sprawl

- Based on indirect experience that the largest MSAs have the largest portion of noncentral city work ends, the author associated a variety of work trips with a polycentric urban form thesis. They claim that a decentralized settlement pattern is not necessarily uneconomical.

Travel Behavior

Academia

- | | | |
|-------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1999 | Levinson, DM. | Levinson, DM. Space, Money, Life-Stage, and Allocation of Time. <i>Journal: Transportation</i> . Volume 26, Issue 2, Pages 141 -171. May, 1999. |
| 1995 | Niemeier,D | ??Niemeier,D; Redmond, L; Morey, J; Hicks, J; Hendren, P; Lin, J; Foresman, E; Zheng,Y. Bricka, S. Variations in Long-Distance Travel. <i>Transportation Research Circular</i> . Pages 197-206. March 2001. |
| 1969 and | Charles Lave | Charles Lave. University of California, Irvine. <i>The Spread of the Automobile Demon - What Can We Do?</i> February 1990. |
| 1969 and | Charles Lave | Charles Lave. University of California, Irvine. <i>State and National VMT Estimates: It Ain't Necessarily So.</i> February 1990. |
| 1977, 1983, | Gordon, P; Richardson, HW | Gordon, P; Richardson, HW. <i>Congestion Trends In Metropolitan Areas</i> . <i>Transportation Research Board . Transportation Research Board Special Report</i> . 1994. 242. pp 1-31 |
| 1990 | Wegmann, F. J. | Wegmann, F. J. <i>Trip Linkage Patterns for Workers</i> . <i>Journal of Transportation Engineering - ASCE</i> . May-June 1998. |
| 1995 | Niemeier, D. et.al. | Niemeier, D. Redmond, L. Morey, J. Hicks, J. Hendren, P. Lin, J. Foresman, E. Zheng Y. <i>Redefining Conventional Wisdom: An Exploration of Auto Ownership and Travel Behavior in the U.S.</i> Department of Civil Engineering, University of California, Davis. Presented at the <i>Transportation Research Board Conference</i> , June 28 - July 1, 1999. |
| 1995 | Genevieve Giuliano and Dhiraj Narayan | Genevieve Giuliano and Dhiraj Narayan. <i>Another Look at Travel Patterns and Urban Form: The US and Great Britain</i> . <i>Urban Studies</i> , Vol. 40, No. 11, 2295– 2312, October 2003 |
| 1995 | Richardson, AJ; Seethaler, RK | Richardson, AJ; Seethaler, RK. <i>Estimating Long-Distance Travel Behavior From The Most Recent Trip</i> . <i>Transportation Research Board . Personal Travel: The Long and Short of It</i> . <i>Transportation Research Circular</i> . E-C026. 03/2001. pp 237-254 |

- 1995 Thakuriah, P; Virmani, D; Thakuriah, P; Virmani, D; Yun, S; Metaxatos, P.
Yun, S; Metaxatos, P Estimation Of The Demand For Inter-City
Travel: Issues With Using The American
Travel Survey. Transportation Research Board.
Personal Travel: The Long and Short of It. Transportation
Research Circular. E-C026. 03/2001. pp 255-269
- 1995 Lleras, G.C.; Simma, A. Lleras, G.C.; Simma, A; Ben-Akiva, M.E.; Schafer, A.;
Axhausen, K.W.; Furutani, T. Fundamental Relationships
Specifying Travel Behavior - An International Survey
Comparison. Department of Urban Studies and Planning,
Massachusetts Institute of Technology, Cambridge.
November 14, 2002.
- 1995 Pucher, J. Evans, T. and Pucher, J; Evans, T; Wenger, J. Socioeconomics Of
Wenger, J. Urban Travel: Evidence From The 1995 NPTS.
Eno Transportation Foundation, Incorporated.
Transportation Quarterly. 1998 52. 3. pp 15-33

Consultant

- 1990 Weiner, E. Weiner, E. Urban Transportation Planning in the United
States - An Historical Overview. Office of Economics, U.S.
Department of Transportation. November 1992.
- 1990 Nancy McGuckin Factors that Fuel Growth in Travel. Based on the NPTS.
- 1995 Zmud, JP; Arce, CH. Zmud, JP; Arce, CH. Influence of Consumer Culture and
Race on Travel Behavior. Transportation Research Circular
E-C026, Pages 379-389. March 2001.
- 1995 Alan Pisarski Alan Pisarski. Measuring American Travel Behavior. USA-
EU Interchange on Transportation Statistics. November 29,
2001
- 1995 Arthur Webster Arthur Webster. A Stroll through the 1995 NPTS and ATS
- 1995 Arthur Webster Arthur Webster. 1995 NPTS and Taxis/Livery. April 4,
1998.
- 1995 Zmud, J.P. and Arce, Zmud, J.P. and Arce, C.H. The Influence of Culture and
C.H. Race on Travel Behavior. NuStats International. Presented
at the Transportation Research Board Conference, June 28 -
July 1, 1999.

Federal (DOT)

- 1995 Harbaugh, C. and Smith, Harbaugh, C. and Smith, T. Welfare Reform and
T. Transportation: There Is a Connection. U.S. Department of
Transportation, Federal Highway Administration. Volume
61, Number 4 January/February 1998.

1969-83	Robert A. Gorman	Robert A. Gorman. Household Characteristics and Determinants of Travel Behavior. TRB Special Report 191.
1969-83	Robert A. Gorman	Robert A. Gorman. Changing Trends in Travel Behavior. 1969-1984. An Analysis of Personal Transportation Surveys. July 14, 1986
1977-83	David McElhaney, FHWA	David McElhaney, FHWA. Patterns of Non-work Travel and Transportation Trends. 1977-1983. Prepared for TRB Annual Meeting, TRB, Session 32.
1990	Federal Highway Administration.	Federal Highway Administration. Implications of Emerging Travel Trends - What Does NPTS Tell Us? FHWA-PL-94-027, July 1994.
1990	FHWA	FHWA. Trends in Personal Transportation. Administrator's Note, Volume 3, Number 2, September 20, 1991.
1990	Pisarski, A. E.	Pisarski, A. E. Travel Behavior Issues in the 90's. Federal Highway Administration. U.S. Department of Transportation. July 1992.
1990	FHWA	The Future National Highway Program, 1991 and Beyond. Working Paper 2. Trends and Forecasts of Highway Passenger Travel. December 1987, FHWA, Washington D.C.
1995, 2001	FHWA	Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance Report. 2002 Edition. FHWA, Washington D.C.
1995	Gary Maring, FHWA	Gary Maring, FHWA. Multi Modal Household Travel Behavior: Based on the Recent NPTS. FHWA, Washington D.C.

Federal (Non DOT)

1990	U.S. DOE	Lee Schipper and Marina Josefina Figueroa. People on the Move: A comparison of Travel Patterns in OECD Countries. International Energy Studies. Energy Analysis Program.
------	----------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------

MPO

1990	Pierce County Public Works and Utilities	Pierce County Public Works and Utilities, Program Development Division. July 1997.
1995	Kim, H., Sen, A., Sööt. S., and Christopher, E.	Shopping Trip Chains: Current Patterns and Changes Since 1970. Urban Transportation Center, University of Illinois at Chicago, Chicago Area Transportation Study. 1998.

Newspaper

2001 Katherine Shaver, Katherine Shaver; Washington Post; In the Car for Life.
Washington Post 04/20/2003.

Research Entities

1990 CUTR Center for Urban NPTS Demographics and Travel Behavior:
A Comparison of Transportation Research and the United
States. Center for Urban Transportation
Research, College of Engineering, University of South
Florida. January 1993.

1995 Brad Edmondson. Brad Edmondson. In the Drivers Seat. American
American Demographics Demographics, March 1998.

State DOT

1990 Pennsylvania PA DOT. Estimates of Personal and Commerical Travel.
Transportation Policy Plan PA DOT and Parsons Brinckerhoff. August 1, 1995.

Travel Model

Academia

- 1977 NPTS Kuzmyak, J. R. Kuzmyak, J. R. Usefulness of Existing Travel Data Sets for Improved VMT Forecasting. Transportation Research Record 815. Transportation Research Board. 1981.
- 1983 Katiyar, R; Ohta, K Katiyar, R; Ohta, K. Concept Of Daily Travel Time and Its Applicability To Travel Demand Analysis. Department of Urban Engineering, University of Tokyo. 1993 121p
- 1983 and Gordon, P., Kumar, A., and Richardson, H. W. Gordon, P., Kumar, A., and Richardson, H. W. Beyond the Journey to Work. Transportation Research. Part A. Volume 22A. Number 6. November 1988.
- 1990 Gordon, P., Richardson, H. W., and Liao, Y-C Gordon, P., Richardson, H. W., and Liao, Y-C. A Note on the Travel Speeds Debate. Transportation Research, Part A. Volume 31, May 1997.
- 1990 Jha, U., and Ivan, J. Predicting Peak Period Trips Within the Four-Step Transportation Planning Process. Department of Civil and Environmental Engineering. Connecticut University. September 1997.
- 1990 Kitamura, R Kitamura, R. Time-Of-Day Characteristics Of Travel: An Analysis of 1990 NPTS Data. Chapter 4, Volume III Special Reports On Trip And Vehicle Attributes - 1990 NPTS Special Reports. Federal Highway Administration . 02/1995. 57p
- 1995 Yun, DS ; Lee, JY;Sinha, KC Modeling Pre-Work Trip Making and Home Departure Time Choice. Journal of Transportation Engineering ASCE. Volume 126 Number 4 Page 308-312. July - August, 2000.
- 1995 Chatman, D.G. The Influence of Workplace Land Use and Commute Mode Choice on Mileage Traveled for Personal Commercial Purposes. Department of Urban Planning, University of California, Los Angeles. November 15, 2002.
- 1995 Yun, D-S; Lee, J-Y; Sinha, Kc Yun, D-S; Lee, J-Y; Sinha, KC. Modeling Pework Trip-Making And Home Departure Time Choice. American Society of Civil Engineers . Journal of Transportation Engineering. 07/2000 126. 4. pp 308-312

Consultant

- | | | |
|------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2001 | Cambridge Systematics Inc. | Waddell, Paul; Howard, Summer; Schroer, Ellen Loy; Outwater, Maren L. Data Sources for Travel Demand and Land Use Forecasting. University of Washington and Cambridge Systematics Inc., June 30, 2001. |
| 1977 | Sosslau, A. B. | Sosslau, A. B. Home-To-Work Trips and Travel. FHWA/PL-81/002. Federal Highway Administration, Office of Highway Planning. December 1980. |
| 1990 | Siaurusaitis, V. J. and Saben, L. J. | Siaurusaitis, V. J. and Saben, L. J. Transportation Planner' s Handbook on Conversion Factors for the Use of Census Data. Transportation Research Record 1593. Transportation Research Board. 1993. |
| 1990 | Cambridge Systematics, Inc. | Barton Aschman Associates Inc. and Cambridge Systematics, Inc. Model Validation and Reasonableness Checking Manual. Prepared for Travel Model Improvement Program, Federal Highway Administration. February 1997. |
| 1995 | Outwater, ML et. Al. | Outwater, ML; Rasheed, S; Malone, M; Brienzo, M; Kroon, A; Ullah, K. The 1998 Lincoln Model Update. |
| 1995 | Crevo, C. C. and Virkud, U. | Crevo, C. C. and Virkud, U. Practical Approach to Deriving Peak Hour Estimates from 24-Hour Travel Demand Models. September 1998. |

Federal (DOT)

- | | | |
|---------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1997 | Gary Maring, FHWA | Recent Travel Demand Patterns and Implications Based on the NPTS; FHWA, Prepared for a presentation at the Transportation Planning Session at the 1997 XIIIth IRF World Meeting, Toronto, CA |
| 1967, 77, and | Oak Ridge National Laboratory | Parametric Forecasting of Vehicle Travel: Methodology and Accuracy. |

1977	Roskin, M. E.	Roskin, M. E. Purposes of Vehicle Trips and Travel. FHWA/PL-81/001. Federal Highway Administration, Office of Highway Planning. December 1980.
1990	Soot, S; Sen, A; Marston, J; Thakuriah, P	Soot, S; Sen, A; Marston, J; Thakuriah, P. Multiworker Household Travel Demand. Chapter 4, Volume I Demographic Special Reports - In: 1990 NPTS Special Reports. Federal Highway Administration . 1995. 30p
1995	O'Neill, WA; Fulton, PN; Brown, E	O'Neill, WA; Fulton, PN; Brown, E. Evaluating Role Of Distance And Location In Statewide Travel Demand Forecasting By Using American Travel Survey. Transportation Research Board Transportation Research Record. 1999. 1660. pp 41-47
1995, 2001	FHWA	FHWA. Travel Survey Manual: Appendices, July 1996. Travel Model Improvement Program. Department of Transportation . 07/1996. 347p

MPO

1990	Pima Association of Governments.	Pima Association of Governments. Metropolitan Transportation Plan. May 27, 1998.
1990	Sweson Yang	NPTS Indianapolis Metropolitan Area Special Add-on Study, Prepared by City of Indianapolis, Department of Metropolitan Development, Division of Planning, 1992
1995	Niles, J; Nelson, D	Niles, J; Nelson, D. Enhancing Understanding Of Non-Work Trip Making: Data Needs For The Determination Of Tod Benefits. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 537-548
1995	Poorman, J. P.	Poorman, J. P. Transportation Research Board Conference Proceedings 13-2, Pages 143 - 154. 1997. Capitol District Transportation Committee.

Research Entities

1995 TRB Conference TRB Conference. Proceedings Of The Seventh Trb Conference On The Application Of Transportation Planning Methods, Boston, Massachusetts, MARCH 7-11, 1999. Transportation Research Board . Seventh TRB Conference on the Application of Transportation Planning Methods. 2002. 455p

2001 Polzin, Steven E. CUTR Polzin, Steven E.; Chu, Xuehao; Toole-Holt, Lavenia. Forecasts and Observations Regarding The Growth of U.S. Center for Urban Transportation Research, University of South Florida. July 2003.

State DOT

Erlbaum, NS. Erlbaum, NS. Improving Air Quality Models in New York State: Utility of the 1995 National Personal Transportation Survey. Transportation Research Circular E-C026, Pages 515-536. March 2001.

2001 FL DOT Office of Policy Planning, Florida DOT and the Center for Urban Transportation Research, University of South Florida. Trends and Conditions Report 2003. Travel Demand: Travel Demand and Travel Behavior Trends. July 2003.

Travel time issues/congestion

Academia

- | | | |
|-------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1969 | Charles Lave | Charles Lave. University of California, Irvine. Things Won't Get a Lot Worse: The Future of U.S. Traffic Congestion. February 1990. |
| 1977 | Peter Gordon et.al, USC | Peter Gordon, Ajay Kumar and Harry W. Richardson. U.S.C, Congestion, Changing Metropolitan Structure, and City Size in the United States. International Regional Science Review, Vol 12. No. 1 pp- 45-56, 1989. |
| 1990 | UIC News | UIC News; Stuck in Traffic? Researchers say it's only going to get worse. UIC News. September 1994. |
| 1990 | Gordon, P. and Richardson. H. W. | Gordon, P. and Richardson. H. W. The Facts About ' Gridlock' in Southern California. Policy Study No. 165. August 1993. |
| 1990 | Peter Gordon and Harry W. Richardson | Trends in Congestion in Metropolitan Areas Peter Gordon and Harry W. Richardson, University of Southern California, LA |
| 1990 | Ajay Kumar and David Levinson | Temporal Variations on Allocation of Time, Ajay Kumar and David Levinson, Transportation Research Record 1493 |
| 1990, 1983, | Gordon, P., and Richardson, H. W. | Gordon, P., and Richardson, H. W. Congestion Trends in Metropolitan Areas. by Transportation Research Board Special Report 242. 1994. |

Federal (DOT)

- | | | |
|----------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1969 and | U.S. Department of Transportation | Why Don' t More People Use Advanced Traveler Information? Evidence from the Seattle Area. U.S. Department of Transportation, Volpe National Transportation Systems Center. August 1, 2003. |
| 1990 | Highway Quarterly | Highway Quarterly. Time Spent Driving a Vehicle. FHWA. Number 2, June 1995. |

Other Non-transportation

- | | | |
|------|----------------|----------------------------------------------------------------------------------------|
| 1983 | Eric S. Belsky | Eric Belsky. Traffic Congestion. National Association of Home Builders. June 26, 1991. |
|------|----------------|----------------------------------------------------------------------------------------|

Research Entities

- | | | |
|------|---------------------|------------------------------------------------------------------------|
| 2001 | TTI, Mobility Study | Urban Mobility Study; published by the Texas Transportation Institute. |
|------|---------------------|------------------------------------------------------------------------|

Commuting

Academia

- 1977, 83-84 Peter Gordon, Ajay Kumar, and Harry W. Richardson Transportation Research A, Vol. 22 A., No 6. pp. 419-426, 1988
- 1983 and Gordon, P., Kumar, A., and Richardson, H. W. Gordon, P., Kumar, A., and Richardson, H. W. Peak-Spreading: How Much? Transportation Research. Part A. Volume: 24A, Number 3. May 1990.
- 1990 Ball, W. L. Ball, W. L. Commuting Alternatives in the United States: Recent Trends and a Look to the Future. Publication No. DOT T 95 11. Center for Urban Transportation Research, University of South Florida. December 1994
- 1990 Turner, T., and Niemeier, D. Turner, T., and Niemeier, D. Travel to Work and Household Responsibility: New Evidence. Transportation, Volume 24, November 1997.
- 1990 Gordon, P; Richardson, HW Gordon, P; Richardson, HW. Geographic Factors Explaining Worktrip Length Changes. Chapter 2, Volume III Special Reports On Trip And Vehicle Attributes - 1990 NPTS Special Reports. Federal Highway Administration . 02/1995. 43p
- 1990 Mokhtarian, P. L. Mokhtarian, P. L. A Synthetic Approach to Estimating the Impacts of Telecommuting on Travel. Department of Civil and Environmental Engineering and Institute of Transportation Studies, University of California. October 1997.
- 1990 Ferguson, E. Ferguson, E. The Rise and Fall of the American Car Pool: 1970 -1990. Transportation. Volume 24 , Number 4, November 1997.
- 1990 Strathman, J. G., and Dueker, K. J. Strathman, J. G., and Dueker, K. J. Transit Service, Parking Charges, and Mode Choice for the Journey to Work: An Analysis of the 1990 NPTS. Journal of Public Transportation. Volume 1, November 1996.
- 1990 Mildner, G. Et.Al. Mildner, G. C. S., Strathman, J. G., and Bianco, M. J. Parking Policies and Commuting Behavior. Transportation Quarterly, Volume 51, 1997.

1990	Journal of Public Transportation	"Transit Service, Parking Changes, and Mode choice for Journey to work: An analysis of the 1990 NPTS." James G. Strathman and Kenneth J. Deuker "Journal of Public Transportation" Vol 1, No. 1, pg 13-38
1995	Drucker, Joshua; Khattak, Asad j.	Drucker, Joshua; Khattak, Asad j. The Propensity to Work from Home: Modeling Results from the 1995 Nationwide Personal Transportation Survey. Department of City and Regional Planning, University of North Carolina at Chapel Hill. July 1999.
1995	Choo, S.; Mokhtarian, P.L.; Salomon, I.	Choo, S.; Mokhtarian, P.L.; Salomon, I. Does Telecommuting Reduce Vehicle-Miles Traveled? An Aggregate Time Series Analysis for the U.S. Department of Civil and Environmental Engineering, University of California, Davis. August 1, 2002.

Consultant

1990	Niles, J. S., and Telematics, G.	Niles, J. S., and Telematics, G. Beyond Telecommuting: A New Paradigm for the Effect of Telecommunications on Travel. September 1994.
1990	Joanne H. Pratt	Homebased Work and Travel. Joanne H. Pratt. Statement of Work.

Federal (DOT)

1990	Pisarski, A. E.	Pisarski, A. E. New Perspectives in Commuting. FHWA-PL-92-026. Office of Highway Information Management, Federal Highway Administration. July 1992
1995	FHWA, US DOT	"NPTS data confirm that Reliance on Private Vehicle Travel Often Reflects the Need to Make Stops on the Way to and from Work" Highway Information Update by Office of Highway Information Management, November 24, 1997

MPO

1995	Daivamani Sivasailam Jon Williams	Estimating Impacts of Transportation Control Measures on Work-Related Trips" Daivamani Sivasailam and Jon Williams, MWCOCG, Washington D.C., Transportation Research Record 1518, 1998.
1990	Gregg Scott, Wasatch Front Regional Council	Gregg Scott, Wasatch Front Regional Council. Comparing Work Trip Trends from Census, AHS, and NPTS

Newspaper

1990	Wall Street Journal	Odds and Ends. Wall Street Journal, October 19, 1992. Page B1.
1990	Hannah Holmes	Telecommuting. In Garbage April/May 1993

Other transportation

1977	Traffic Audit Bureau	Assorted topics including Publications No. 111, 112. "The economy keeps looking up - sales of minivans" "Are we solving the commuting problem" "Working Women"
------	----------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Research Entities

2001	The Road Information Program.	Designing Roadways to Safely Accommodate the Increasingly Mobile Older Driver: A Plan to Allow Older Americans to Maintain their Independence
1990	Ball, W. L. et. Al	Ball, W. L., York, M. P., Dieringer, S., and Hartmann, M. Demographic & Commuting Trends in Florida. Center for Urban Transportation Research, University of South Florida. February 1994.
1990	American Demographics	"Alone in the Road." Brad Edmondson, Editor in Chief, American Demographics. June 1994.
1995	Cleland, F.	Cleland, F. Carpooling Statistics: It' s all a matter of perspective. TDM Review. Volume 7, Issue 3. Association for Commuter Transportation. October, 1999.

Economy/Sprawl

Academia

1977 USCA

"The Cost of Urban Sprawl - Some new evidence" P. Gordon, H.L Wong.
School of Urban & Regional Planning & Department of Civil Engineering, USCA

Federal (DOT)

1990 Pisarski, A. E.

Pisarski, A. E. Transportation Investment and Metropolitan Economic Development: A Reconnaissance of Research Availability and Requirements. Presented at the Effects Of Added Transportation Capacity Conference. December 16 & 17, 1991.

1990 Jim March, FHWA

Informational, see brief description.

Environment

ENVIRONMENT

NPTS data are widely used in many contexts. The state of the practice in emission factor modeling relies heavily on default parameters imbedded in the models. A methodology was developed to derive vehicle activity parameters (such as starts distribution, fraction of VMT, trip length distribution, soak time distributions and VMT mix distribution) from NHTS. Sensitivity analysis of the MOBILE6 model with respect to these derived inputs were conducted. When inputs derived from travel surveys are compared with MOBILE6 default inputs; wide variations in the inputs are observed.

- Similarly, data from the 1995 Nationwide Personal Transportation Survey (NPTS) were analyzed to derive soak times. Detailed analyses were conducted to relate soak time variability to geographic, trip-purpose, and time-of-day variables. The findings reinforce the prevailing general guidance on inputs to modeling the emissions from mobile sources.
- The New York State Department of Transportation (NYSDOT) conducted several analyses of the 1995 Nationwide Personal Transportation Survey (NPTS) to address issues raised by the New York State Department of Environmental Conservation (ENCON), the state's environmental agency, and the NYSDOT. They were identified during the development of the Air Quality State Implementation Plan, and related activities, such as creating VMT inventories, updating ENCON's emission model, and the conformity analyses of the department's transportation program.
- The 1995 NPTS data were used to examine household characteristics and travel patterns of older vehicles in order to identify policies that would be most effective in mitigating the pollution from this older segment of vehicles.
- The 1995 NPTS data were used to analyze soak times in terms of their variability to geographic, trip-purpose, and time of day variables.
- NPTS (No specified year) data were used to distinguish between cold transient and hot transient modes in terms of auto emissions. The first 505 seconds of engine operation are considered to be transient mode.

Environment/Air Quality

Academia

- 1995 Dill, J. Dill, J. Older Vehicles and Air Pollution: Insights from the 1995 NPTS. Transportation Research Circular E-C026. Pages 491-514. March 2001.
- 1995 Dill, J. Dill, J. Older Vehicles and Air Pollution: Insights from the 1995 NPTS Department of City and Regional Planning, University of California, Berkley. Transportation Research Board Conference, June 28 - July 1, 1999.
- 1990,95 Chatterjee, A. et.al Chatterjee, A. Reddy, P. M., Venigalla, M. M., and Miller, T. L. Operating Mode Fractions on Urban Roads Derived by Traffic Assignment. Transportation Research Record 1520. Transportation Research Board. 1996.
- 1995 Dill, J Dill, J. Older Vehicles and Air Pollution: Insights From The 1995 NPTS. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 491-514
- 1995 Bernard III, M. J. Using Nationwide Personal Transportation Survey Data to Indicate Electric Vehicle Market Potential in Rural Areas. Transportation Research Record 1537. Transportation Research Board, 1996.
- 1995 Nair, HS; Bhat, CR; Kelly, RJ Nair, HS; Bhat, CR; Kelly, RJ. Modeling Soak-Time Distribution Of Trips For Mobile Source Emissions Forecasting: Techniques And Applications. Transportation Research Board . Transportation Research Record. 2001. 1750. pp 24
- 1995 Venigalla, MM; Pickrell. Venigalla, MM; Pickrell. DH. Soak Distribution Inputs to Mobile Source Emissions Modeling: Measurement and Transferability. Transportation Research Record. Issue 1815, pp 63-70. 2002.

Federal (DOT)

- 1969-1990 Ed Weiner, OST Transportation, Telecommuting and the Clean Air Act, Presented at the “ Conference on Telecommuting: A means for implementing Clean Air Objectives in the Mid-Atlantic Region.” April 1993
- 1990 NPTS Jerry Everett, FHWA Jerry Everett and Prasanth Rudrangi. “ Emissions Impacts of Using Vehicle Class Distributions by Mode for TDM Analysis.” April 1995.

Research Entities

2001 NHTS Goldwater Institute Semmens, John., "Buses, Trains, and Automobiles: Finding the Right Transportation Mix for the Phoenix Metro Region"

State DOT

1995 Erlbaum, NS. Erlbaum, NS. Improving Air Quality Models in New York State: Utility of the 1995 National Personal Transportation Survey. Transportation Research Circular E-C026, Pages 515-536. March 2001.

1995 Erlbaum, NS Erlbaum, NS. Improving Air Quality Models in New York State: Utility of the 1995 Nationwide Personal Transportation Survey. Transportation Research Board. Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03//2001. pp 515-536

1995 Erlbaum, N. S. Erlbaum, N. S. Improving Air Quality Models in New York State: Utility of the 1995 National Personal Transportation Survey. New York State Department of Transportation, Planning and Strategy Group. Written May 13, 1999 and presented at the Transportation Research Board Conference, June 28 - July 1, 1999.

Energy Consumption

ENERGY CONSUMPTION

- NPTS was used as a reference in preparing the Energy and Transportation Task Force Report. This is one of seven reports prepared for the President's Council on Sustainable Development. 1996.
- 1977 NPTS data were used to estimate the impact of national energy shortages in six different sized urban areas under numerous future scenarios.
- The 2001 NHTS data are considered as a potential candidate for filling a data gap left by the discontinuation of the Residential Transportation Energy Consumption Survey (RTECS).
- One of the important trends observed in the 1990 Nationwide Personal Transportation Survey (NPTS) data has been the increasing share of vehicle miles of travel generated by the older vehicle fleet. This is a product of two factors: the increasing proportion of the fleet that consists of older vehicles; and the increasing travel activity of these older vehicles.
- NPTS data is the fundamental source to examine the characteristics of the vehicle fleet specifically in terms of age, identify the characteristics of the owners of the vehicles in the aging fleet, and describe the ways in which those vehicles are used.

Energy Consumption

Academia

- | | | |
|------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1977 | Hennigan, M. E., and Neveu, A. J. | Hennigan, M. E., and Neveu, A. J. A Quick Assessment of Local Area Impacts Resulting From National Energy Shortages. Transportation Research Record 1049. Transportation Research Board. 1985. |
| 2001 | Chalumuri, S; Venigalla, MM | Chalumuri, S; Venigalla, MM. Methodology For Deriving Vehicle Activity Parameters From Travel Survey Databases. Transportation Research Board . Transportation Research Record. /2004. 1880. pp 108-118 |
| 2001, 1995 | Venigalla, MM; Pickrell, DH | Venigalla, MM; Pickrell, DH. Soak Distribution Inputs to Mobile Source Emissions Modeling: Measurement and Transferability. Transportation Research Board . Transportation Research Record. /2002. 1815. pp 63 |

Federal (Non DOT)

- | | | |
|--------------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1990 | Energy Information Administration. | Energy Information Administration. Alternatives to Traditional Transportation Fuels 1994, Volume 2, Greenhouse Gas Emissions. DOE/EIA-0585(94)/2. Office of Coal, Nuclear, Electric and Alternate Fuels. U.S. Department of Energy. September 1996. |
| 2001 | Dwight K. French. EIA | Dwight K. French. Estimating Transportation End-Use Energy Consumption Using the 2001 National Household Travel Survey. Transportation Research Board 82nd Annual Meeting. Observations on the NHTS. January 12, 2003. |
| 2001 | Schipper, Mark A. and Pinckney. Derrick S., | Supplementing The 2001 National Household Travel Survey With Energy-Related Data. Schipper, Mark A. and Pinckney. Derrick S., Energy Information Administration. November 13, 2003. |
| 2001 to 1969 | U.S. Department of Energy | U.S. Department of Energy, Energy Efficiency and Renewable Energy Program. "Fact of the Week: Number of Household Vehicles Has Grown Significantly" Vehicle Technologies Program, Fact of the Week #301. January 5, 2004. |

Research Entities

1990	Natural Resources Defense Council.	Natural Resources Defense Council. Keeping the ‘ E’ in ISTEA - Transportation Energy and the Federal Role in Conservation. March, 1997.
1990	Church, R., et.al	Church, R., Jain, K., Little, C., Moavenzadeh, J., and O’ Donnell, J. Light Truck Capabilities, Utility Requirements, and Uses: Implications for Fuel Economy. HS-808 378. Volpe National Transportation Systems Center, Economic Analysis Division. April 1996.

State DOT

1995	Erlbaum, NS.	Erlbaum, NS. Improving Air Quality Models in New York State: Utility of the 1995 National Personal Transportation Survey. Transportation Research Circular E-C026, Pages 515-536. March 2001.
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Demographic Trends

DEMOGRAPHIC TRENDS

- 1990 NPTS was used to show the trend of increasing vehicle life-span, that travel to work and back comprises 32.8 percent of all personal driving.
- The 1995 NPTS data were used to update the Dutchess County Model as well as to support other projects and initiatives by the Council.
- The 2001 NHTS data were the foundation of a discussion that personal automobile continues to be the overwhelmingly dominant mode of transportation among all populations including the poor, elderly and minorities.
- The 1995 NPTS survey was used to examine three specific areas: 1. Growth in personal motor vehicle travel and the sources of that growth. 2. Changes in the characteristics of household vehicles. 3. Determinants of household vehicle utilization patterns and demands for private vehicle use.
- 1995 NPTS data were used to compare travel characteristics between area types such as urban, second city, suburban, town and rural.
- The NPTS data were used to study the transportation problems of low income American households.
- NPTS (No specified year) data were used to show that the average amount of time men and women spend behind the wheel of a car each day.
- 1990 NPTS data were used to examine the affect of population density on vehicle use and ownership.
- The 1995 NPTS data are used to examine the household characteristics and travel patterns of light duty trucks and to question the appropriateness of the current CAFE standards.
- The 1969 NPTS and 2001 NHTS data are used to show that the number of household vehicles in the U.S. has nearly tripled between 1969 and 2001.

Demographic Trends

Academia

- 1977, 1990 Pucher, J; Williams, F Pucher, J; Williams, F. Socioeconomic Characteristics of Urban Travelers: Evidence From the 1990-91 NPTS. Eno Foundation for Transportation, Incorporated . Transportation Quarterly. 10/1992 46. 4. pp 561-581
- 1990 Ferguson, E. Ferguson, E. Demographics of Carpooling. Transportation Research Record 1496. Transportation Research Board, 1995.
- 1990 Schimek, P. Schimek, P. Household Motor Vehicle Ownership and Use: How Much Does Residential Density Matter? Schimek, P., Transportation Research Record 1552. Transportation Research Board, 1996.
- 1990 Richard G. Crepeau Richard G. Crepeau. Zero Vehicle Households: Issues of Travel and Housing. School of Social Ecology. University of California at Irvine. Presented at the 74th Annual Meeting of the Transportation Research Board, January 26, 1995.
- 1995 Pucher, John and Renne, John, L Pucher, John and Renne, John, L. Socioeconomics of Urban Travel: Evidence from the 1995 NPTS Survey.
- 1995 Deb Niemeier et. al. UC, Davis Redefining Conventional Wisdom: Exploration of Automobile Ownership and Travel Behavior in the United States. Niemeier,D; Redmond, L; Morey, J; Hicks, J; Hendren, P; Lin, J; Foresman, E; Zheng,Y. Transportation Research Circular E-C026, Pages207-219. March 2001.
- 1995 Pickrell, D; Schimek, P. Pickrell, D; Schimek, P. Growth in Motor Vehicle Ownership and Use: Evidence from Nationwide Personal Transportation Survey. Journal of Transportation Statistics, Vol 2, Issue 1, May 1999.
- 1995, 2001 Alissa Gardenhire, Harvard University "Economic and Socio-Demographic Influences on Autolessness: Are missing variables skewing results?"
- 1995 Delucci, M. A. Delucci, M. A. The Annualized Social Cost of Motor-Vehicle Use in the U.S., Summary of Theory, Data, Methods, and Results. Institute of Transportation Studies, University of California, Davis. June 1998.
- 2001 Pucher, John and Renne, John, L Pucher, John and Renne, John, L. Socioeconomics of Urban Travel: Evidence from the 2001 NHTS Survey.

- 2001 Hayton, James C. Forecasting the Impact of Telecommuter Rail-Cars on Modal Choice: A Behavioral Disaggregate Demand Analysis. Mineta Transportation Institute, Utah State University. August 2003.
- 2001 NHTS Bullard, Robert D. Bullard, Robert D. New Routes to Transportation Equity: Why Race Still Matters, A Newsletter of the Environmental Justice Resource Center at Clark Atlanta University. Volume 6, Number 1, Fall/Winter 2003

Consultant

- 1990 Pisarski, AE Pisarski, AE. The Demography of the U.S. Vehicle Fleet: Observations from the NPTS. Chapter 3, Volume III Special Reports On Trip And Vehicle Attributes - 1990 NPTS Special Reports. Federal Highway Administration . 02/1995. 44p
- 1995 Mallett, WJ Mallett, WJ. Long-Distance Travel by Low-Income Households. Transportation Research Board. Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 169-177

Federal (DOT)

- 1990 Federal Highway Administration. Federal Highway Administration. Cost of Owning & Operating Automobiles, Vans, and Trucks. FHWA PL 92 019. U.S. Department of Transportation. 1991.
- 1990 Lave, C; Crepeau, R Lave, C; Crepeau, R. Travel by Households Without Vehicles. Chapter 1, Volume II Travel Mode Special Reports - 1990 NPTS Special Reports. Federal Highway Administration . 12/1994. 45p
- 1990 DOT Today Dominic Nguyen. The Changing Work Force: A new Chapter. DOT Today, Volume 1, No. 2, November 1991.
- 1990, 1995 Ruth Asin Ruth Asin, FHWA. The Graying of America and its Implications For Travel. September 1, 1998.
- 1995 Highway Information Quarterly Public Release of 1995 NPTS in September, FHWA, Office of Highway Information Management, Vol 4., No. 3, Sept. 1997.
- 1995 Highway Information Quarterly NPTS data confirms reliance on private vehicle often reflects need to make stops on the way to and from work, FHWA, Office of Highway Information Management, Vol

5., No. 1, March 1998.

1995	Highway Information Quarterly	"Travel Time as a measure of customer mobility and system performance ", FHWA, Office of Highway Information Management, Vol 4., No. 2, June 1997.
1995	Highway Information Quarterly	"Press Conference on Issuance of Report, Our Nations Travel" "1995 NPTS - Low Income Household Travel", FHWA, Office of Highway Information Management, Vol 4., No. 4, December 1997.
June 1998	Gary Maring and Nancy McGuckin	"Household Travel Behavior" paper for the 8th World Conference on Transportation Research, University of Antwerp, Belgium
2001 to 1969	U.S. Department of Energy	U.S. Department of Energy, Energy Efficiency and Renewable Energy Program. "Fact of the Week: Number of Household Vehicles Has Grown Significantly" Vehicle Technologies Program, Fact of the Week #301. January 5, 2004.

MPO

1990	David Levinson et.al. MNCPC	David Levinson and Ajay Kumar. "Is Residential Density a Transportation Issue?" Maryland-National Capital Park and Planning Commission, Submitted to Urban Studies on May 26, 1993
1995	MPO in NY	Poughkeepsie-Dutchess County Transportation Council. Unified Planning Work Program 2002-2003 March 28,2002.
2001	Plachcinski, Doug	Business Travel Statistics, Clair County Coastal Communities Land Use Guide: Planning News Article. November 13, 2003.

Newspaper

1990	Rocky Moretti, TRIPNET.ORG	
1990	Stephen C. Fehr	"In a Congested Era, Its Women Behind the Wheel" Washington Post, August 11, 1992
1990	Stephen C. Fehr	Stephen C. Fehr. Auto Fleet is Aging, Signaling Hazards Ahead. Washington Post, 8/29/94
1995	Wald, M. L	Wald, M. L. Man Is Being Lapped by His Machine. New York Times. September 21, 1997.
1995	Baltimore Sun	Baltimore Sun.. Number of Cars in the United States now Equals the number of drivers. 9/21/1997.
1995	Barlow, J.	Barlow, J. Commuting isn't always a turnoff. Houston Chronicle. March 17, 1998.

Other Non-transportation

2001	The Robert Wood Johnson Foundation	"America' s Growing Numbers: Inactivity and Obesity"
------	------------------------------------	------------------------------------------------------

Research Entities

1969-77	AASHTO	
1990	Ball, W. L. et. Al	Ball, W. L., York, M. P., Dieringer, S., and Hartmann, M. Demographic & Commuting Trends in Florida. Center for Urban Transportation Research, University of South Florida. February 1994.
1990	Center for Urban Transportation Research, USF	Center for Urban Transportation Research. NPTS demographics and travel behavior: A Comparison of Florida and the United States. Center for Urban Transportation Research, College of Engineering, University of South Florida. January 1993.
1990	Urban Mobility Corporation.	Urban Mobility Corporation. The Aging of the U.S. Vehicle Fleet. Innovation Briefs, Volume 5, October 1994.
1995	Fisher, C	Fisher, C. The Not-So-Great American Road Trip. Dow Jones and Company, Incorporated . American Demographics. 05/1997 19. 5. pp 43-48
1995	Urban Transportation Monitor, Vol 11, 18	NPTS Results Released, September 26, 1997.
1995	Ross, C; Dunning, A.	Ross, C; Dunning, A. Land Use Transportation Interaction: An Examination of the 1995 NPTS Data. Conference title: Nationwide Personal Transportation Survey Symposium. February 1999.
1995	World Resources Institute.	World Resources Institute. World Resources 1996- 97 A Guide to the Global Environment. United Nations Environment Programme, United Nations Development Programme, and The World Bank.

State DOT

1990	Wisconsin Department of Transportation.	Wisconsin Department of Transportation. Impacts of Highway Facility Improvements On Travel and Regional Development. Division of Planning and Budget. January 1994.
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Special Population Groups

Elderly

Children's Issues

Race, Ethnicity, And Gender

SPECIAL POPULATION GROUPS

NPTS data is the backbone of analyses on elderly issues, Children's issues, and Race and Gender studies.

Elderly

- The 2001 NHTS data are used to examine trends and travel pattern of older drivers age 70 and over. Some NPTS findings include: (1) Over 1 in 5 people in the United States aged 65 and older do not drive. (2) Over 1/2 of these individuals stay home on a particular day because they do not have transportation options.
- 1995 NPTS data were used to identify personal and community characteristics measured by the survey that are associated with trip making among the non-driving population of age 75 and older.
- NPTS data were used to show that the elderly are the fastest growing component of the U.S. population and the very old are the fastest growing component of the elderly. Most elderly people today are drivers and over three fourths live in low density suburban or non-metropolitan places - places where the use of the private car is either encouraged or absolutely necessary.
- Results of the 2001 survey showed that older Americans travel extensively and rely on personal vehicles as heavily as their younger counterparts. Older Americans conduct 89% of their travel in personal vehicles, and tend to be less mobile in that they take fewer trips, travel shorter distances, and have shorter travel times. This pattern is even more pronounced among older women, who are also more likely to suffer from self-reported medical conditions further limiting their travel.
- Older men and women take long-distance trips at about the same rates and show a strong preference for using personal vehicles. And, while men and women take an equal percentage of their trips by air, older women show a strong preference for bus travel.
- The 1995 NPTS data were used to establish the number of adults age 65 and older who possess a current driver's license as well as their travel trends.

Children's issues

- 1995 NPTS data were used to know how the key attributes of how sprawl (low residential density and extensive travel in private vehicles) affects poor children and their families in comparison with the general U.S. population. The findings show that urban sprawl has allowed those who are able to travel extensively greater economic opportunities. Poor families with children are shown to own fewer vehicles, travel more by walking and public transit, and make shorter trips than households generally.
- The 2001 NHTS data were examined to determine private vehicle travel patterns of children age 5 and under. The data showed a sharp decline in children who walk or bike to school.
- 1995 NPTS data and FARS data to determine the impacts on safety and economics of prohibiting children age 15 and under from riding in the back of pickup trucks.
- The 1995 NPTS data were used to examine how travel behavior changes as teenagers age.

Race, Ethnicity, and Gender

Based primarily on the series of NPTS, a body of literature on travel by people of color has evolved to better understand how Americans of all ethnic backgrounds are using our transportation systems today and to generate ideas to improve transportation mobility. The topics include race, inequality, and travel patterns; demographics; commuting; residential location; mode choice; and gender differences.

- 1995 NPTS was used to examine trip chaining behavior of adult men and women traveling Monday through Friday.
- 1995 NPTS data were used to compare travel characteristics of women 40 - 49 with women 75 and older and men 75 and older. The purpose was to estimate the impact of an aging population on vehicle ownership and Vehicle Miles Traveled.
- The 1995 NPTS data were used in conjunction with the ATS survey, Consumer Expenditure (CES) survey and the Bureau of the census to examine the relationship between race, ethnicity and consumer culture as it relates to travel.
- 1990 NPTS data were used during the 1997 African American Mobility Issues - Forging the Dream, a symposium to discuss travel trends in general and to compare travel trends of African Americans to the general population.
- 1990 and 1983 NPTS data were used to study travel trends of Blacks in the United States.
- NPTS data allowed a comprehensive look at mobility and mode choice behavior of people of color for their non-work travel. Travel by people of color is of strong policy interest because it is a growing and changing share of the total travel market and is expected to continue to grow much faster than overall travel well into the next century.
- 1995 Data were used to examine vehicle ownership characteristics among those households which are below the poverty line.
- 1990 Nationwide Personal Transportation Survey (NPTS) was used in order to identify and evaluate the differences, if any, in the travel behavior of women in different household and family settings today. As women obtain jobs, increase their income, and acquire licenses they drive longer and use the car for more of their trips, just as men in the paid labor force have traditionally done. However, because their work duties are added to their childcare and domestic responsibilities they also exhibit markedly different patterns than working fathers.
- 1990 NPTS was used to examine differences in the travel behavior of women in different household and family settings.

Elderly

Academia

- 1990 Rosenbloom, S Rosenbloom, S. Travel by the Elderly. Chapter 3, Volume I Demographic Special Reports - In: 1990 NPTS Special Reports. Federal Highway Administration. 02/1995. 49p
- 1990 Chu, X. Chu, X. The Effects of Age on the Driving Habits of the Elderly. Report number NUTI93USF3.2. National Urban Transit Institute, University of South Florida. October 1994.
- 1990 Robert B. Schultz, Auburn University "Relationships Between Highway Accident Involvement and Exposure Characteristics of Elderly Alabama Automobile Drivers. October 1991. Doctoral Dissertation.
- 1990 John Eberhard John Eberhard. Tomorrow' s Older Drivers: Who? How Many?
- 1990, 1995 Sandra Rosenbloom Sandra Rosenbloom. The Mobility Needs of the Elderly. National Research Council. University of Texas at Austin. June 1998.s
- 1995 Eberhard, John; Trilling, Donald. Eberhard, John; Trilling, Donald. The Graying of America, Safe Mobility for Life-Developing a National Agenda: Potential Roles for CIREN in National Agenda. This PowerPoint Presentation was presented in Hawaii, November 2001.
- 1995 Harrison, A.; Ragland, D. Harrison, A.; Ragland, D. Consequences of Driving Reduction or Cessation for Older Adults. University of California Traffic Safety Center, Institute of Transportation Studies, University of California, Berkeley. July 31, 2002.
- 1995 Okla, A. Departure Time Choice for Recreational Activities by Elderly Non-Workers. University of Texas, Austin. November 15, 2002.
- 1995 Georggi, NL; Pendyala, RM Georggi, NL; Pendyala, RM. Analysis of Long-Distance Travel Behavior of the Elderly and Low Income. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 121-150
- 2001 Hargett, S. and Smith, R Hargett, S. and Smith, R. Factors Influencing the Transportation Patterns of African American Elderly: The Effects of Age, Gender, Household Structure and Residential Location. By the Morgan State University National Transportation Center, Baltimore, Maryland.
http://www.eng.morgan.edu/~ntc/Research_Projects/Completed_Projects/Final0102_005hargett.doc

Consultant

1969, 1977, FHWA Travel Profile of older drivers and pedestrians

Federal (DOT)

1983 NPTS NHTSA Rudolph G. Mortimer (University of Illinois) and James C. Fell (NHTSA). Older Drivers: Their Night Fatal Crash Involvement and Risk. 32nd Annual Proceedings. Association for the Advancement Of Automotive Medicine, Seattle, WA, September 12-14, 1998.

1990, 1995 Ruth Asin Ruth Asin, FHWA. "The Graying of America and its Implications For Travel." September 1, 1998.

2001 Collia, DV; Sharp, J; Giesbrecht, L Collia, DV; Sharp, J; Giesbrecht, L. The 2001 National Household Travel Survey: A Look into the Travel Patterns of Older Americans. Elsevier . Journal of Safety Research. /2003 34. 4. pp 461-470

Federal (Non DOT)

1983 Interagency Forum for Aging Related Statistics

Research Entities

1995 Evans, E. L. Evans, E. L. Influences on Mobility Among Non Driving Older Americans. I T American Association of Retired Persons. Transportation Research Board Conference, June 28 - July 1, 1999.

1995 Edward L. Evans, AARP "Influences on Mobility Among Non-Driving Older Americans" (Unpublished)

1995 Urban Mobility Corporation Mobility and the Elderly, Urban Mobility Corporation. Innovation Briefs, Vol 9, No. 4

2001 Austin, RA; Faigin, BM Austin, RA; Faigin, BM. Effect of Vehicle and Crash Factors on Older Occupants. Elsevier . Journal of Safety Research. /2003 34. 4. pp 441-452

2001 Bailey, L Bailey, L. Aging Americans: Stranded Without Options. Surface Transportation Policy Project . 04/2004. 20p

2001 The Road Information Program The Road Information Program, "Older Driver Fatalities on the Rise"

Children's issues

Academia

- | | | |
|------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1995 | Clifton, K.J. | Independent Mobility Among Teenagers: An Exploration of Travel to After-School Activities. Urban and Regional Planning, University of Iowa. November 18, 2002. |
| 1995 | TRB | "The Relative Risks of School Travel: A National Guidance on Local Community Risk Assessment" Transportation Research Board, National Research Council |
| 1995 | Chu, X. | Chu, X. The Problem of Children Riding in the Back of Pickup Trucks in Florida: A Preliminary Investigation. University of South Florida, Tampa: Center for Urban Transportation Research. June 1999. |

Federal (DOT)

- | | | |
|------|-----------------------------------|--------------------------------------------------------------------------------|
| | Maria Vegega, NHTSA | OECD Survey Form on Children' s Travel in the US |
| 2001 | Centers for Disease Control (CDC) | Needed amount of time infants spend in the car by race and region of residence |
| 2001 | John Fegan, NHTSA | |

Federal (Non DOT)

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|------|--------------------------------------|--------------------------------------------------------------------------|
| 2001 | U.S. Environmental Protection Agency | Travel and Environmental Implications of School Siting. EPA 231-R-03-004 |
|------|--------------------------------------|--------------------------------------------------------------------------|

Newspaper

- | | | |
|------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2001 | Washington Post | Shaver, Katherine. The Road Too Much Traveled: For Many Children, Drive Time Just Keeps Going. Washington Post Staff Writer, Monday, January 27, 2003: Page A01. |
| 2001 | Washington Post | Katherine Shaver "Washington Post" "The Road Too Much Traveled" Children's drive time keeps on increasing. |

Research Entities

- | | | |
|------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1995 | Helling, A | Helling, A. Transportation, Land Use, and the Impacts of Sprawl on Poor Children and Families. In: Urban Sprawl: Causes, Consequences And Policy Responses. Urban Institute. 2002. pp 119-139 |
| 1995 | Beverly Huey, NAS | Beverly Huey, Report of School Transportation Safety, March 7, 2002 |

Race, Ethnicity, and Gender

Academia

- 1983, 1990, Polzin, SE; Chu, X; Rey, JR. Polzin, SE; Chu, X; Rey, JR. Mobility and Mode Choice of People of Color for Non-Work Travel. Transportation Research Circular E-C026, Pages 391-412. March 2001.
- 1990 Pickup, L Pickup, L. Housewives' Mobility And Travel Patterns. Transport and Road Research Laboratory. TRRL Laboratory Report. 1981. 971. 35p
- 1990 Rosenbloom, S Rosenbloom, S. Travel By Women. Chapter 2, Volume I Demographic Special Reports - 1990 NPTS Special Reports. Federal Highway Administration. 1995. 57p
- 1990 Baker, S. P. Baker, S. P. Motor Vehicle Occupant Deaths Among Hispanic and Black Children and Teenagers. Archives of Pediatrics & Adolescent Medicine. December 1998.
- 1990 Rosenbloom, S. Rosenbloom, S. Travel by Women. Federal Highway Administration, Office of Highway Information Management. 1995.
- 1990 CUTRLINES, USF Joel R. Rey. Will the Amount of Travel by Men Continue to Increase? CUTRLines, Fall 1994.
- 1990 Massie, D. L. and Campbell, K. L. Massie, D. L. and Campbell, K. L. Analysis of Accident Rates by Age, Gender, and Time-of-Day Based on the 1990 Nationwide Personal Transportation Survey. UMTRI-93-7. University of Michigan, Ann Arbor 1993.
- 1995 Smith, Robert J. and Ahmed, Ashraf. Smith, Robert J. and Ahmed, Ashraf. Travel Behavior of African-Americans: A Comparative Analysis of the Influence of Household Structure and Selected Demographic Variables 1999. National Transportation Center, Morgan State University, Baltimore, Maryland.
- 1995 Spain, D. Spain, D. Societal Trends: The Aging Baby Boom and Women' s Increased Independence. Conference Nationwide Personal Transportation Symposium. February 1999.
- 1995 Polzin, SE. Rey, JR. Chu, X. Polzin, SE; Chu, X; Rey, JR. Mobility And Mode Choice Of People Of Color For Non-Work Travel. Transportation Research Board. Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 2001. pp 391-412

2001 Ortoleva, Stephanie Ortoleva, Stephanie. Getting to Equality: Better Transportation Choices for Underserved Communities, The 2003 AICP Symposium. November 13, 2003.

Consultant

1995 Zmud, JP; Arce, CH. Zmud, JP; Arce, CH. Influence of Consumer Culture and Race on Travel Behavior. Transportation Research Circular E-C026, Pages 379-389. March 2001.

1995 Zmud, J.P. and Arce, C.H. Zmud, J.P. and Arce, C.H. The Influence of Culture and Race on Travel Behavior. NuStats International. Presented at the Transportation Research Board Conference, June 28 - July 1, 1999.

Federal (DOT)

1990 NHTSA NHTSA. Female Drivers in Fatal Crashes: Recent Trends. September 1993

1995 FHWA FHWA Travel Patterns Of People Of Color. Battelle, Final Report. 06/30/2000. 266p

1995 McGuckin, N:Murakami, E McGuckin, N:Murakami, E. Examining Trip Chaining Behavior: A Comparison of Travel by Men and Women. Federal Highway Administration. 1999.

1995 Mallett, WJ Mallett, WJ. Long-Distance Travel By Women: Results From The 1995 American Travel Survey. Transportation Research Board. Transportation Research Record. 1999. 1693. pp 71-78

Federal (Non DOT)

1990 Researchers working for CDC at Johns Hopkins Univ. "Are Female Drivers Safer? An Application of the Decomposition Method." Guohua Li, Susan Baker, Jean A. Langlois, and Gabor D. Kelen, Johns Hopkins University, December 17, 1997

1990, 1995 U.S. DOE U.S. Department of Energy, Energy Efficiency and Renewable Energy Program. Household Travel by Gender. Freedom CAR and Vehicle Technologies Program, Fact of the Week #259. March 17, 2003.

Newspaper

1995 The Sun Marina Sarris. Gender Gap on the Road is Narrowing. The Sun, April 1, 1998.

Other transportation

1990 Forging the Dream

Research Entities

1990,1983 National Urban Transit Institute Assessing Travel Behavior by Blacks in the United States: A New Perspective. Report number: NUTI93USF3.1. National Urban Transit Institute, University of South Florida. October 1994.

State DOT

1995 Gardenshire, A. A. and Sermons, W.M. Gardenshire, A. A. and Sermons, W.M. Understanding Automobile Ownership Behavior of Low Income Households: How Behavioral Differences May Influence Transportation Policy. Harvard University, University of Maryland. Presented at the Transportation Research Board Conference, June 28 - July 1, 1999.

Bike and Pedestrian Studies

BIKE AND PEDESTRIAN STUDIES

- 1990 NPTS was used to support the Roanoke Valley Area Bikeway Plan in Roanoke, VA. Fifth Planning District Commission office.
- The 1969 NPTS and 2001 NHTS were used to show that there has been a dramatic decline in the percentage of students who walk or bike to school.
- The 1995 NPTS and 2001 NHTS data were used to make a comparison between travel patterns in the U.S. and those in Germany and the Netherlands.
- The use of 2001 NHTS Survey to promote the building of roads and streets to accommodate all modes of transportation including bicycles and pedestrians
- The 2001 NHTS data were used to develop time of day risk profiles for a comparison between walking and motoring.
- The 2001 NHTS data were used to estimate exposure for pedestrians in a fatality risk assessment. The purpose of this paper is to present the results of an evaluation of travel characteristics associated with households and individuals making non-motorized trips.

Bike and Pedestrian Studies

Academia

- | | | |
|------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1995 | Pucher, J; Komanoff, C; Schimek, P. | Pucher, J; Komanoff, C; Schimek, P. Bicycling Renaissance in North America? Recent Trends and Alternative Policies to Promote Bicycling. Transportation Research Part A, Vol. 33, Nos. 7/8, 1999, Pages 625-654. 1999. |
| 1990 | Niemeier, DA; Rutherford, GS | Niemeier, DA; Rutherford, GS. Non-Motorized Transportation. Chapter 3, Volume II Travel Mode Special Reports - in: 1990 NPTS Special Reports. Federal Highway Administration . 12/1994. 24p |
| 1990 and | National Urban Transit Institute | "Selling Sidewalks Short", Urban Transportation Monitor, May 8, 1998. |
| 1990 NPTS | John Fegan | Walking and Biking Study |
| 1995 | Litman, T.A. | Litman, T.A. Economic Value of Walkability. Victoria Transport Policy Institute. November 14, 2002. Presented at the Transportation Research Board 82nd Annual Meeting. Paper 03-2731. |
| 1995, 2001 | John Pucher, Rutgers University | |
| 1995 NPTS | Pucher, John; Dijkstra, Lewis | Promoting Safe Walking and Cycling to Improve Public Health: Lessons from The Netherlands and Germany. American Journal of Public Health, Vol. 93, No. 9, September 2003. |

Federal (DOT)

- | | | |
|-----------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 1990 | Federal Highway Administration. | Federal Highway Administration. FHWA Study Tour for Pedestrian and Bicyclist Safety in England, Germany, and The Netherlands. October 1994. |
| 1995 NPTS | Federal Highway Administration. | Federal Highway Administration. Bicycle/Pedestrian Trip Generation Workshop: Summary. FHWA-RD-97-141. March 1998. |

MPO

- | | | |
|------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1990 | Montgomery County Pennsylvania. | Bicycling Road Map - A Bike Mobility Plan for Montgomery County Pennsylvania. |
| 1990 | Oliver, A. | 1990 NPTS was used to support the Roanoke Valley Area Bikeway Plan in Roanoke, VA. Fifth Planning District Commission office. Roanoke, VA. PDC News Release January 13, 1997. |

Newspaper

- | | | |
|------|------------------------------|----------------------------------------------------------------------------------|
| 2001 | SolesandSpokes.com | Who is Walking and Bicycling in Northeastern Illinois? SolesandSpokes.com. 2003. |
| | Reference to Adam Z. Horvath | Not made for Walking. Newsday, Long Island, NY, Sunday, November 24, 1991 |

Other Non-transportation

Ananda Chaudari, Self
Magazine

Other transportation

- | | | |
|------|-------------|---------------------------------------------------------------------------------------------|
| 2001 | Boyle, John | Boyle, John. Bicycling By The Numbers. The Bicycle Coalition of Greater Philadelphia. 2003. |
|------|-------------|---------------------------------------------------------------------------------------------|

Research Entities

- | | | |
|---------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1969 and 2001 | William; Greene | William; Greene and Ewing, Reid; Schroeer, Location and Student Travel: Analysis of Factors Affecting Mode Choice" The 83rd TRB Annual Meeting, January 2004. |
| 2001 | Chu, Xuehao, CUTR | Chu, Xuehao, CUTR. Infrastructure and the Danger of Walking. Center for Urban Transportation Research, University of South Florida. July 2003. |
| 2001 | Walkinginfo.org
Americabikes.org | Fact Sheets: Walking by the Numbers
Complete the Streets for safer bicycling and walking, Americabikes.org. January 16, 2004. |
| 2001 | Chu, Xuehao, CUTR | Chu, Xuehao. A Time-Based Comparative Approach to Understanding the Danger of Walking in the United States. Center for Urban Transportation Research, University of South Florida. July 2003. |

State DOT

- | | | |
|------|---------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 1995 | Georgia Department of Transportation. | Georgia Department of Transportation. East/West Study - Appalachian Scenic Corridor. News Letter No. 14. 1997 |
|------|---------------------------------------|---------------------------------------------------------------------------------------------------------------|

Trend Analysis and Market Segmentation

Trend Analysis

Market Segmentation

TREND ANALYSIS AND MARKET SEGMENTATION

Trend Analysis

- 1995 NPTS data were used to understand trends in personal daily travel of U.S. households on trip purpose, means of transportation used, travel time, time of day, day of week, number of people in the vehicle, driver characteristics, and vehicle attributes. It also provides information by subgroups of population, e.g., by age, gender, race, zero-vehicle households.
- VMT predicting formulas were enunciated to enable National Household Travel Survey information to be used to predict input components in forecasting future VMT. Two VMT predictions are provided and compared with a forecast reported in "2002 Status of the Nations Highways, Bridges, and Transit: Conditions and Performance."

Market Segmentation

- The 1995 NPTS data were used in conjunction with the ATS survey, Consumer Expenditure (CES) survey and the Bureau of the census to examine the relationship between race, ethnicity and consumer culture as it relates to travel.
- 1983, 1990, and 1995 NPTS surveys were used to examine travel patterns and characteristics for non-work travel among people of different racial and ethnic groups.
- 1977 NPTS was one of the three most used sources to assess underlying traffic cost in Highway Traffic Forecasting System (HTFS).
- 1995 NPTS data are used to explore subtle differences in ownership and use patterns between light duty trucks and passenger cars.
- A tool was developed for the town of Williston, Vermont to assess the impact of proposed developments on the towns transportation system. The 1995 NPTS data were used to fill in gaps where local data were not available.
- 1995 NPTS was used to show that Americans continue to spend more time in their cars making them a captive audience for the advertising industry.
- Understanding non-work travel is becoming increasingly important due to its growing influence in people's lives and on the transportation system. Non-work travel includes travel for personal and family business, school activities, and religious activities, health care, and social and recreational activities. By 1995, work trip travel declined to about 20% of all local travel. Even during traditional commuting rush periods, non-work travel comprises more than 70% of all trips. Using information from the 1983, 1990, and 1995 NPTS databases, mode choice differences across groups for non-work travel were analyzed by examining how patterns of difference in mode choice vary with personal, household, geographic, and trip characteristics as reported in the 1995 NPTS.

Trend Analysis

Academia

- 2001 Pucher, J; Renne, JL Pucher, J; Renne, JL. Socioeconomics Of Urban Travel: Evidence From The 2001 NHTS. Eno Transportation Foundation, Incorporated . Transportation Quarterly. 2003 57. 3. pp 49-77
- 2001 Polzin, SE; Chu, X; Toole-Holt, L Polzin, SE; Chu, X; Toole-Holt, L. Forecasts Of Future Vehicle Miles Of Travel In The United States. Transportation Research Board . Transportation Research Record. 2004. 1895. pp 147-155

Consultant

- 1990 Meil, James P. Meil, James P. A Supplier' s Perspective. The 10th Annual Automotive Outlook Symposium. Presented by Eaton Corp. 2003.
- 1995 Parsons Brinckerhoff Quade and Douglas Inc. Urban, Suburban, and Exurban Miles of Travel: An analysis of the 1995 NPTS Katherine Gray Still, and Samuel Neskin, Parsons Brinckerhoff Quade and Douglas Inc., Prepared for the 80th Annual TRB Meeting, 2001.

Federal (DOT)

- 1990 Gary Maring, FHWA Recent Travel Demand Patterns and Implications Based on the NPTS Gary Maring, and Carol Harbaugh, FHWA, Washington D.C., Prepared for a presentation at the Transportation Planning Session at the 1997 XIIIth IRF World Meeting, Toronto, CA
- 1990 FHWA The Future of the National Highway Program, 1991 and Beyond. Working Paper 2. Trends and Forecasts of Highway Passenger Travel. December 1987, FHWA, Washington D.C.
- 1995 Transporter Exploring our Nations Travel, FHWA Research and Technology, Transporter, November 1997
- 2001 Joseph Tessmer, NHTSA
- 2001 Hu, PS; Reuscher, TR Hu, PS; Reuscher, TR. Summary Of Travel Trends: 2001 National Household Travel Survey. Oak Ridge National Laboratory Federal Highway Administration . 12/2004. 135p

Federal (Non DOT)

- 1990 U.S. Dept. of Agriculture Trends in Transportation. Family Economics Review. U.S. Dept. of Agriculture January 21, 1992.
- 1995 Hu, PS; Young, JR Hu, PS; Young, JR. Summary Of Travel Trends: 1995 Nationwide Personal Transportation Survey. Oak Ridge National Laboratory . 12/29/1999.
- 969, 1977, U.S. DOE U.S. Department of Energy, Energy Efficiency and Renewable Energy Program. Fact of the Week: Vehicle Age by Type of Vehicle. FreedomCAR and Vehicle Technologies Program, Fact of the Week #253. February 3, 2003.

MPO

- 1990 Sweson Yang NPTS Indianapolis Metropolitan Area Special Add-on Study, Prepared by City of Indianapolis, Department of Metropolitan Development, Division of Planning, 1992

Newspaper

- 2001 Gilmore, Susan The Lowdown on our Yearly U.S. Travels. The Seattle Times, October 19, 2003.
- 1995 Drivers.com staff Cars Still King on American Highways, December 9, 2003.

Research Entities

- 1983 Dunphy, R. T. Dunphy, R. T. Travel Trends and The Transportation Impacts of New Projects. Urban Land, Volume 45. Number 7. July 1986.
- 1983, 1990, Polzin, CUTR Polzin, Steven E.; Chu, Xuehao; Toole-Holt, Lavenia. Trends in Socio-Economic Conditions and Travel Speeds and Their Influence on VMT Growth. Center for Urban Transportation Research, University of South Florida. 2003.
- 1990 Ball, W. L. et. Al Ball, W. L., York, M. P., Dieringer, S., and Hartmann, M. Demographic & Commuting Trends in Florida. Center for Urban Transportation Research, University of South Florida. February 1994.
- 2001 Urban Mobility Corporation Urban Mobility Corporation. Travel Habits And Demographic Trends At The Turn Of The Century. Urban Mobility Corporation . Innovation Briefs. 2001 12. 5. 2p

Market Segmentation Studies

Academia

- 1983, 1990, Polzin, SE; Chu, X; Rey, JR. Polzin, SE; Chu, X; Rey, JR. Mobility and Mode Choice of People of Color for Non-Work Travel. Transportation Research Circular E-C026, Pages 391-412. March 2001.
- 1990 Bernard, M. Bernard, M. Station Cars: Personal Mobility With Reduced Cost. ON THE GROUND - A Multimedia Journal of Community, Design and Environment. 1990
- 1995 Polzin, SE. Rey, JR. Chu, X. Polzin, SE; Chu, X; Rey, JR. Mobility and Mode Choice of People of Color For Non-Work Travel. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 391-412
- 1995 Kockelman, K; Zhao, Y. Kockelman, KM; Zhao, Y. Behavioral Distinctions: The Use of Light-Duty Trucks and Passenger Cars. Journal of Transportation and Statistics, Vol 3, Issue 3. Dec 2000.
- 1995 Edmondson, B. Edmondson, B. Americans Are Hitting the Road ... Should Your Advertising Campaign do the Same? From Real Times, a monthly online newsletter. April 1998.

Consultant

- 1977 Waterhouse and Price
- 1995 Zmud, JP; Arce, CH. Zmud, JP; Arce, CH. Influence of Consumer Culture and Race on Travel Behavior. Transportation Research Circular E-C026, Pages 379-389. March 2001.
- 1995 Watkins, K.; Plumeau, P.; Munson, M. A New Tool for Assessing Developments: The Land Use Transportation Index. Wilbur Smith Associates and Town Planner, Town of Williston, VT. July 31, 2002.

Research Entities

- 1990 Grayson, A Disaggregate Model of Mode Choice in Intercity Travel. Transportation Research Board . Transportation Research Record. 1981. 835. pp 36-42

Transit Planning

TRANSIT PLANNING

- 1990 NPTS was used to help develop a methodology which allows transit operators to identify which non traditional services might be appropriate for which areas given local demographic, land use, and geographic factors.
- The 2001 NHTS data are used to demonstrate that although transit accounts for only 2 percent of all trips nationwide, transit plays a much larger role in urban settings which is not evident by the 2 percent figure.
- The 1995 NPTS Survey was used to show that the transit market is strongly shaped by captive riders without driver' s licenses or vehicles.
- 1995 NPTS data are used to argue against New Urbanism philosophies which promote mass transit systems and higher density populations.
- The 2001 NHTS data were used to analyze transit trip characteristics.
- 1995 NPTS data were used to study the relationship between population density and transit use.

Transit Planning

Academia

1977, 1983, Oliver Smith, CUTR, USF

- | | | |
|------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1990 | Strathman, J. G., and Dueker, K. J. | Strathman, J. G., and Dueker, K. J. Transit Service, Parking Charges, and Mode Choice for the Journey to Work: An Analysis of the 1990 NPTS. Journal of Public Transportation. Volume 1, November 1996. |
| 1990 | UT Austin | 1990 NPTS was used to help develop a methodology which allows transit operators to identify which non traditional services might be appropriate for which areas given local demographic, land use, and geographic factors. School of Architecture, The University of Texas Austin. May 1990. |
| 1990 | Journal of Public Transportation | Transit Service, Parking Changes, and Mode choice for Journey to work: An analysis of the 1990 NPTS. James G. Strathman and Kenneth J. Deuker Journal of Public Transportation Vol 1, No. 1, pg 13-38 |
| 1995 | Polzin, SE. Rey, JR. Chu, X. | Polzin, SE. Rey, JR. Chu, X. Public Transit in America: Findings From the 1995 Nationwide Personal Transportation Survey Report number NUTI4-USF-4. National Urban Transit Institute, University of South Florida, Urban Transportation Research Center, September 1998. |
| 1995 | Polzin, SE; Chu, X; Rey, JR. | Polzin, SE; Chu, X; Rey, JR. Density and Captivity in Public Transit Success: Observations from the 1995 National Personal Transportation Study. Transportation Research Record, Issue 1735, 2000. |
| 1995 | National Urban Transit Institute | You are Captive to the Mode on Which you Leave Home |

Consultant

- | | | |
|------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1983 | Charles River Associates, Inc. | Charles River Associates, Inc. Allocation of Federal Transit Operating Subsidies to Riders by Income Group. UMTA-UBP-30-86-1. March 1986. |
| 1990 | Padron, M. | Padron, M. Impacts of Changing Demographics on Transit Planning. Manuel Padron & Associates Atlanta, Georgia. April 1997. |
| NPTS | Alan Pisarski | Alan E. Pisarski. The Real Prospects for Transit Substitution of Highway Travel. |

Federal (DOT)

- | | | |
|------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1983 | Charles River Associates | Distribution of Transit Subsidies Among Riders
(contract for UMTA) |
| 1983 | UMTA | Samuel L. Zimmerman. National Transportation Data Needs for the 1990s: Transit Strategic Planning. Presented at the TRB Midyear Meeting Conference, TRB Transportation Data and Information System Committee, October 24-25, 1989 |

Newspaper

- | | | |
|------|---------------------|----------------------------------------------------------------------------------------------------------------|
| 1977 | Wall Street Journal | Wall Street Journal. Tracking Mass-Transit Ridership. December 2, 1983. |
| 1990 | Wall Street Journal | Frederick Rose. Despite Huge Outlays Transit Systems Fail to Lure Drivers. Wall Street Journal. June 29, 1993. |
| 2001 | Dittmar, Hank. | Rail Foes' Funny Math a Costly Joke Houston Chronicle, October 13, 2003. |

Research Entities

- | | | |
|------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2001 | Taylor, Brian D.; Miller, Douglas | Taylor, Brian D.; Miller, Douglas Analyzing the Determinants of Transit Ridership Using a Two-Stage Least Squares Regression on a National Sample of Urbanized Areas 83rd TRB Annual Meeting, January 2004. |
| 1990 | Love, J., Cox, W., and Moore, S. | Love, J., Cox, W., and Moore, S. AMTRAK at Twenty Five: End of the Line for Taxpayer Subsidies. Cato Policy Analysis No. 266. December 1996. |
| 1990 | Cox, W. | Cox, W. Evaluation of the FDOT FOX Miami Orlando Tampa High Speed Rail Proposal. James Madison Institute Policy Report #21. April 1997. |
| 1990 | Community Transportation Association of America. | Community Transportation Association of America. Status Report on Public Transportation in Rural America, 1994. A report to the Federal Transit administration, 1994. |
| 1995 | Cox, Wendell. | Cox, Wendell. The President' s New Sprawl Initiative: A Program in Search of a Problem. The Heritage Foundation. Number 1263. March 18, 1999. |
| 1995 | Intertec Publishing Corporation | Intertec Publishing Corporation. Transportation Survey Sheds Light on Urban Transit American City and County, Journal Volume 114, Issue 5. May 1999. |

Policy and Mobility

Policy

Mobility

POLICY AND MOBILITY

Policy

The 2001 National Household Travel Survey (NHTS) confirms most of the same travel trends and variation among socioeconomic groups documented by its predecessors, the Nationwide Personal Transportation Surveys of 1969, 1977, 1983, 1990 and 1995. The private car continues to dominate urban travel among every segment of the American population, including the poor, minorities and the elderly. By comparison, public transportation accounts for less than 2 percent of all urban travel. 2001 NHTS shows the doubling in modal share of walking trips in cities, due to a much improved survey technique that captured previously unreported walks. Overall, the poor, racial and ethnic minorities, and the elderly have much lower mobility rates than the general population. Moreover, the poor, blacks and Hispanics are far more likely to use transit than other groups. Minorities and low-income households account for 63 percent of the nation's transit riders. Different socioeconomic groups also have different rates of carpooling, taxi use, bicycling and walking. All these facts have important consequences for public policy.

- 1990 NPTS data were used to examine non-motor travel in the United States in order to determine what should be done in the future to encourage non-motor modes of travel.
- 1990 NPTS travel data are included in a collection of transportation data from government and private sources.
- NPTS (No specified year) was examined to see how the quality of future transportation data can be improved.
- 1990 NPTS was used to examine transit service levels, travel and parking behavior in the U.S., and the effect of parking regulation by cities.
- The 1995 NPTS data were used to examine the relationship between road capacity and vehicle miles of travel.

Mobility

- 1995 NPTS data are used to examine the most important socioeconomic variations in urban travel behavior.
- The 1995 NPTS was used to make observations and comparisons between different modes of transportation in terms of their travel speed. 1983, 1990, and 1995 NPTS surveys were used to examine travel patterns and characteristics for non-work travel among people of different racial and ethnic groups.
- Data from the 2001 National Household Travel Survey are used to compare travel behavior in rural and urban areas of the United States. As expected, the car is the overwhelmingly dominant mode of travel. Over 97% of rural households own at least one car vs. 92% of urban households.
- The 2001 NHTS data were used to provide statistics on trip modes for travels that involved air travel.
- 1995 NPTS data are used to study how travel times and activity duration are affected by increasing highway capacity.

Policy

Academia

- | | | |
|------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1990 | Mildner, G. ET.AL. | Mildner, G. C. S., Strathman, J. G., and Bianco, M. J. Parking Policies and Commuting Behavior. Transportation Quarterly, Volume 51, 1997. |
| 1990 | Antonakos, C. L. | Antonakos, C. L. Nonmotor Travel in the 1990 Nationwide Personal Transportation Survey. Transportation Research Record 1502. Transportation Research Board, 1995. |
| 1995 | Hwang, H-L; Chin, S-M; Hopson, J; Ammah-Tagoe, F | Hwang, H-L; Chin, S-M; Hopson, J; Ammah-Tagoe, F. Evaluating the Accessibility of U.S. Airports: Results from the American Travel Survey. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 287-305 |
| 1995 | Strathman, JG et. Al | Strathman, JG; Dueker, KJ; Sanchez, T; Zhang, J; Riis, AE. Analysis of Induced Travel in the 1995 NPTS. Center for Urban Studies, Portland State University. June 2000. |
| 2001 | Tom Golob, U.C. Irvine | Tom Golob, "Measuring the Impact of Land Use Density on Mode Choice, Vehicle Usage and Fuel Consumption Using the 2001 NHTS", 2005 Transportation Planning Applications Conference, April 2005, Portland, Oregon |

Consultant

- | | | |
|------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1990 | Shoup, D. C. | Shoup, D. C. TRB Special Report 242. 1994. |
| 1995 | Niles, J. and Nelson, D. | Niles, J. and Nelson, D. Enhancing Understanding of Non Work Trip Making: Data Needs for the Determination of TOD Benefits. Global Telematics and Integrated Transport Research. Presented at the Transportation Research Board Conference, June 28 - July 1, 1999. |

Federal (DOT)

- | | | |
|------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1990 | Weiner, E. | Weiner, E. Transportation Data Used Currently for National Planning Activities. Transportation Research Record 1271. Transportation Research Board. 1990. |
| 1990 | Harrington, P., and Bradley, K. | Harrington, P., and Bradley, K. National Transportation Statistics Annual Report, 1992. DOT-VNTSC-RSPA-92-1. Volpe National Transportation Systems Center, Center for Transportation Information. June 1992. |
| 1995 | FHWA, US DOT | "Ownership and Operating Costs of a Privately Owned Vehicle" Highway Information Quarterly, FHWA, Volume 2 No. 4, December 1995 |

1990 US DOT National Transportation Strategic Planning Study, Chapter 1, footnote 27. Chapter 5, footnotes 5,9,15. Chapter 12,

Research Entities

1977 Urban Land Harry W. Richardson and Peter Gordon. Counting Nonwork Trips - The Missing Link in Transportation, Landuse, and Urban Policy. Urban Land, September 1989

Mobility

Academia

- 1983, 1990, Polzin, SE; Chu, X; Rey, JR. Polzin, SE; Chu, X; Rey, JR. Mobility and Mode Choice of People of Color for Non-Work Travel. Transportation Research Circular E-C026, Pages 391-412. March 2001.
- 1990 Journal of Public Transportation "Transit Service, Parking Changes, and Mode choice for Journey to work: An analysis of the 1990 NPTS." James G. Strathman and Kenneth J. Deuker "Journal of Public Transportation" Vol 1, No. 1, pg 13-38
- 1995 Eberhard, John; Trilling, Donald. Eberhard, John; Trilling, Donald. The Graying of America, Safe Mobility for Life-Developing a National Agenda: Potential Roles for CIREN in National Agenda. This PowerPoint Presentation was presented in Hawaii, November 2001.
- 1995 Pucher, J; Evans, T; Wenger, J Pucher, J; Evans, T; Wenger, J. Socioeconomics of Urban Travel: Evidence from the 1995 NPTS. Eno Transportation Foundation, Incorporated . Transportation Quarterly. /1998 52. 3. pp 15-33
- 1995 Chu, Xuehao.; Polzin, Steven E. Chu, Xuehao, Polzin, Steven. Comparative Modal Speeds: Observations from NPTS Urban Transportation Monitor. Volume 12, Number 24, December 18, 1998.
- 1995 Kanchi, Seshasai; Levinson, David. Kanchi, Seshasai; Levinson, David. Whence Induced Demand: How Access Affects Activity. PATH working paper; UCB-ITS-PWP-2000-21. 2000.
- 1995 Polzin, SE. Rey, JR. Chu, X. Polzin, SE; Chu, X; Rey, JR. Mobility And Mode Choice of People of Color for Non-Work Travel. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 391-412
- 1995 Qiao, F.; Li, G; Yu, L.; Oey, H.S. Qiao, F.; Li, G; Yu, L.; Oey, H.S. Adjusting Vehicle Mileage Accumulation Rates Based on Small Sample Survey. Submitted for presentation at the Transportation Research Board 82nd Annual Meeting. TRB Paper #03-2555. January 2003. Department of Transportation Studies, Texas Southern University.
- 2001 Pucher, J; Renne, JL Pucher, J; Renne, JL. Urban-Rural Differences in Mobility and Mode Choice: Evidence from the 2001 NHTS. Rutgers University, New Brunswick. 04/2004. 23p
- 2001 Seshadri, Anand; Trani, Seshadri, Anand; Trani, Antonio; Baik, Hojong, Lee,

Antonio Myunghyun. "A Model to Assess the Door to Door Mobility of Travelers Taking the Air Transportation Model" The 83rd TRB Annual Meeting, January 2004.

Federal (DOT)

1995 Bryant, B. Bryant, B. Big Surprise - Not! Public Roads. Volume 61 Number 4. January/February 1998.

1995 FHWA, US DOT "Travel Time as a Measure of Customer Mobility and System Performance -- Preliminary results from NPTS" Highway Information Update by Office of Highway Information Management, April 2, 1997

2001 Wilson, J Wilson, J. TRB Special Report: Measuring Personal Travel And Goods Movement: A Review of the Bureau of Transportation Statistics' Surveys. Transportation Research Board . TR News. 09/2004. 234. pp 28-31

1995 BTS Bureau of Transportation Statistics. Transportation Statistics Annual Report 1997 - Mobility and Access U.S. Department of Transportation. 1997.

Other transportation

1977 American Geographical Society "Urban Transportation in North America" FOCUS, American Geographical Society, Vol 34, No. 2

Research Entities

1990 TRR TRR. Housewives' Mobility and Travel Patterns. Transport and Road Research Laboratory . TRRL Laboratory Report. /1981. 971. 35p

1995 Urban Mobility Corporation Mobility and the Elderly, Urban Mobility Corporation. Innovation Briefs, Vol 9, No. 4

2001 Urban Mobility Corporation Increasing Reliance on the Automobile Documented in Latest Survey. Urban Mobility Corporation. Innovation Briefs, Vol 14, No. 3

2001 TTI, Mobility Study "Urban Mobility Study" published by the Texas Transportation Institute.

1977 Frances Carp, National Academy of Sciences

Survey and Other Issues

Survey

Others

Holiday/Long Distance Travel

SURVEY AND OTHER ISSUES

Survey

Although the NPTS is a national survey, results and the methodology of the survey are widely used as checks and guidance at the local and state levels. One of the added features of NPTS is to be able to transfer some general trip data to local geography.

- Aggregate data extracted from 1995 NPTS and the North Central Texas Council of Governments Survey of 1996 were used to explore the potential of transferability of transportation planning data used to estimate travel-demand model input.
- The FHWA Travel Survey Manual derives a lot of information from NPTS and provides transportation planners with guidance for developing and implementing the most common types of travel surveys.
- 1995 NPTS results were used as a comparison for the results of an alternative travel survey method for the Lexington Area Travel Data Collection Test.
- An empirical analysis was conducted using a sample drawn from the 1995 Nationwide Personal Transportation Survey in an effort to cast the investigation in the context of a typical, current travel survey. The analysis revealed that Artificial Neural Networks provide a viable alternative method of data imputation for travel surveys.
- Census data from the 1990 Public Use Micro-data Sample (PUMS) and the 1995 NPTS were used in a simulation of trip characteristics in terms of number of trips by purpose, mode, time of departure, and trip length are simulated, using a Monte Carlo type of simulation procedure.
- 1990 NPTS was used for comparison and also as an example in developing some parts of the San Francisco Bay Area 1990 Regional Travel Characteristics WP #4 MTC Travel Survey.
- Nearly one hundred users attended an NPTS symposium in Bethesda, Maryland, in October, 1997 to discuss the results of their work. Lively discussions during the policy panels reflected the continuing need to address mobility, economic development, safety and environmental preservation as part of the transportation program.
- The 2001 NHTS served as the basis for an analysis of telephone survey methodologies.

Others

- Anthony Downs of Brookings Institution used NPTS as a source in his remarks to the U.S. House Subcommittee on Highways and Transit, March 22, 2001
- 1990 NPTS was used in conjunction with the 1992 Truck Inventory and Use Survey to quantify the uses of light trucks for both personal and commercial purposes.
- The 2001 NHTS data were used to show the percentage of trips made for shopping errands in large vehicles which are beginning to overwhelm the dimensions of current parking lots.
- The 2001 NHTS data are used to help planners and officials better understand current and future requirements of the South Dakota Highway system.

Survey

Academia

- 1995 Wilmot, CG; Shivananjappa, S Wilmot, CG; Shivananjappa, S. Comparison of Hot-Deck And Neural-Network Imputation. Transport Survey Quality And Innovation. Elsevier . 2003. pp 543-554
- 1995 Wilmot, CG; Stopher, PR. Wilmot, CG; Stopher, PR. Transferability of Transportation Planning Data. Transportation Research Record, Issue 1768. Pages 36-43. 2001.
- 2001 Stopher, PR; Greaves, SP Stopher, PR; Greaves, SP. Simulating Household Travel Survey Data In Metropolitan Areas. Louisiana State University, Baton Rouge Louisiana Transportation Research Center Federal Highway Administration. FHWA/LA.03/356; Final Report. 09/2003. 54p
- 2001 J. De D. Ortuzar, Chile

Consultant

- 1977, 1983, Denno, NA Denno, NA. Local Travel Survey Data Versus Nationally Derived Defaults. Institute of Transportation Engineers. ITE Journal. 05/1992 pp 24-28
- 1995 McGuckin, N; Keyes, M; Banks, D McGuckin, N; Keyes, MA; Banks, D. Are Households With Interrupted Phone Service Like Those With No Telephone Service? Comparison Using Public-Use Microdata Set And Nationwide Personal Transportation Survey. Transportation Research Board . Transportation Research Record. 2001. 1768. pp 99-105
- 1995 Tierney, K; Decker, S; Proussaloglou, K; Rossi, T; Ruiter, E; McGuckin, N Tierney, K; Decker, S; Proussaloglou, K; Rossi, T; Ruiter, E; McGuckin, N. Travel Survey Manual. Cambridge Systematics, Federal Highway Administration FHWA-PL-96-029. 1996. 594p
- 1995 Battelle Transportation Division. Battelle, Global Positioning Systems for Personal Travel Surveys - Lexington Area Travel Data Collection Test. September 1997.
- 1995 Zmud, JP; Arce, CH Zmud, JP; Arce, CH. Item Nonresponse In Travel Surveys: Causes And Solutions. Transportation Research Board . Transport Surveys: Raising the Standard. Transportation Research Circular.2000

1995, 2001 Cambridge Systematics Cambridge Systematics. Scan Of Recent Travel Surveys. Cambridge Systematics, Department of Transportation Environmental Protection Agency . DOT-T-97-08. 06/1996.

Federal (DOT)

2001 Maria Vegega NHTSA OECD Survey Form on Childrens' Travel in the US

1977 Torene, R; Cannon, J Torene, R; Cannon, J. The 1977 Census of Transportation: An Update. Transportation Research Board . Transportation Research Record. 1980. 779. pp 16-21

1990 Liss, S Liss, S. Nationwide Personal Transportation Study: Experiences With Previous Surveys And Options For The Future. Transportation Research Board Transportation Research Record. 1986. 1097. pp 31-33

1990 Hu, PS; Lee, R Hu, PS; Lee, R. Results From The 1990 Us Nationwide Personal Transport Study (NPTS). Oak Ridge National Laboratory. 06/1992. 13p

1990 McElhaney, DR; Jarema, FE; Pisarski, A; Fulton, P; Tweedie, R; Purvis, C FHWA Study Tour For National Travel Surveys. Federal Highway Administration Loyola College, Baltimore . FHWA-PL-95-003. 1994. 53p

1990 Grush W., and B. Gross. Grush W., and B. Gross. Vehicle Occupancy - A Comparison of Household Survey Data and Roadside Observation Data. Office of Highway Information Management. FHWA. September 1995.

1995 FHWA FHWA. Proceedings From The Nationwide Personal Transportation Survey Symposium, October 29-31, 1997, Bethesda, Maryland. MultiConsultant Associates, Federal Highway Administration . Nationwide Personal Transportation Survey Symposium. FHWA-PL-99-003; HPPI/6-99(5M)EW. 02/1999. 242p

1995 BTS BTS. 1995 American Travel Survey. Bureau of Transportation Statistics. BTS/ATS95-US. 10/1997. 15p

1995 FHWA FHWA. Travel Survey Manual, July 1996. Travel Model Improvement Program. Department of Transportation . 07/1996. 586p

1995	FHWA	FHWA. Personal Travel Unit (Ptu) Development And Initial Testing. Federal Highway Administration Battelle Columbus Laboratories . 12/29/2000. 35p
1995	Zimowski, M; Tourangeau, R; Ghadiali, R; Pedlow, S	Zimowski, M; Tourangeau, R; Ghadiali, R; Pedlow, S. Nonresponse In Household Travel Surveys. NORC Federal Highway Administration Bureau of Transportation Statistics Environmental Protection Agency . FHWA-PD-98-029, HEP-20/6-; 98(1500)EW. 10/1997. v.p.
1995	Liss, S	Liss, S. NPTS: The U.S. National Household Travel Survey. Transportation Research Board . Transport Surveys: Raising the Standard. Transportation Research Circular. E-C008,; Paper III-D. 08/2000. 13p
2001	BTS	BTS. Highlights Of The 2001 National Household Travel Survey. Bureau of Transportation Statistics . BTS03-05. 2003. 36p
2001	TRB Conference	TRB Conference. 2001 National Household Travel Survey - National Data And Data Analysis Tool. Bureau of Transportation Statistics Federal Highway Administration . CD-ROM. 2004.

Federal (Non DOT)

1963, 1972,	U.S. Census Bureau	U.S. Census Bureau. National Travel Survey- 1963, 1972, 1977. Bureau of the Census
1972	U.S. Census Bureau	U.S. Census Bureau. Census Bureau Guide To Transportation Statistics, 1976. Bureau of the Census . One-Time.
1972	U.S. Census Bureau	U.S. Census Bureau. Census Of Transportation, 1972. National Travel Survey: Spring Travel. Bureau of the Census. TC72-N1. 03/1973.
1972	U.S. Census Bureau	U.S. Census Bureau. Census Of Transportation, 1972. National Travel Survey: Travel During 1972. Bureau of the Census. TC72-N3. 09/1973. 165 pp
1972	Jackson, EM	Jackson, EM. Data Access Descriptions: Transportation Statistics Available From The Bureau Of The Census. Bureau of the Census . 02/1974. 30 pp

1972	U.S. Census Bureau	U.S. Census Bureau. Census Of Transportation, 1972. National Travel Survey: Summer Travel. Bureau of the Census. TC72-N2. 07/1973. 96 p
1977	U.S. Census Bureau	U.S. Census Bureau. Census Of Transportation. Bureau of the Census .
1995	Hu, P.S. and Young, J.	Hu, P.S. and Young, J. Using the NPTS and ATS Together: A Case Study. Center for Transportation Analysis, Oak Ridge National Laboratory and the University of Tennessee, Knoxville. Presented at the Transportation Research Board Conference, June 28 - July 1, 1999.
1995	Hu, PS; Young, J	Using The NPTS And the ATS Together: A Case Study. Transportation Research Board. Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 221-236
1995	Reuscher, T.R.; Schmoyer, R.L. Jr.; Hu, P.S.	Transferability Of Nationwide Personal Transportation Survey Data To Regional and Local Scales. Center for Transportation Analysis, Statistics and Data Analysis Program, Oak Ridge National Laboratory. October 2001.

MPO

1990	MTC, Oakland CA	1990 NPTS was used for comparison and also as an example in developing some parts of the San Francisco Bay Area 1990 Regional Travel Characteristics WP #4 MTC Travel Survey.
1995	Baber, CM; Bandy, G	Baber, CM; Bandy, G. Baltimore Region Household Travel Survey: Methods And Procedures. Transportation Research Board Washington State Department of Transportation . Fifth National Conference on Transportation Planning Methods Applications-Volume I: A Compendium of Papers Based on a Conference Held in Seattle, Washington in April 1995. 06/1995.

Research Entities

1995	TRB Conference	TRB Conference. Personal Travel: The Long And Short Of It. Conference Proceedings, June 28 - July 1, 1999, Washington, D.C.. Transportation Research Board. Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. 586p
2001	Cairns, S; Davis, A; Newson, C; Swiderska, C	Cairns, S; Davis, A; Newson, C; Swiderska, C. Making Travel Plans Work: Research Report. London: Department Of Transport. Executive Summary And Conclusions. Association for European Transport . European Transport Conference Proceedings. 00/2002.
2001	TRB Conference	TRB Conference. Data For Understanding Our Nation's Travel: National Household Travel Survey Conference, November 1-2, 2004, Washington, D.C.. Transportation Research Board . Data for Understanding Our Nation's Travel. Transportation Research E-Circular. E-C071. 01/2005.
2001	TRB Conference	TRB Conference. Measuring Personal Travel And Goods Movement: A Review Of The Bureau Of Transportation Statistics' Surveys. Transportation Research Board . Transportation Research Board Special Report. 00/2003. 277. 147p

Others

Academia

- | | | |
|------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1995 | Axhausen, KW | Axhausen, KW. Presenting and Preserving Travel Data. Transportation Research Board . Transport Surveys: Raising the Standard. Transportation Research Circular. E-C008,; Paper II-F. 08/2000. 19p |
| 1995 | Stopher, P.R.; Greaves, S.; Bullock, P. | Stopher, P.R.; Greaves, S.; Bullock, P. "Simulating Household Travel Survey Data: Application to Two Urban Areas." Institute of Transport Studies, University of Sidney, Australia. Submitted to the Transportation Research Board 82nd Annual Meeting. January 2003. |
| 2001 | Hogan, H. | Hogan, H. Dashboard Convergence: A Look at In Car Computing. High Technology Careers Magazine. September, 1998. |

Federal (DOT)

- | | | |
|------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1995 | Highway Information Quarterly | "Coordinated Analysis of Daily and Intercity Travel" Highway Information Quarterly, June 1998. |
| 1995 | McGuckin, Nancy; Keyes, Mary Ann; Liss, Susan. | McGuckin, Nancy; Keyes, Mary Ann; Liss, Susan. "Hang-ups, Call-Backs, and Incompletes: Non-Response in Telephone Surveys" The 83rd TRB Annual Meeting, January 2004. |
| 1977 | OST | Nationwide Personal Transportation Study, Transportation Information Systems, July 1984 |
| 2001 | BTS | BTS. Transportation Availability and Use Study for Persons with Disabilities, 2002. Bureau of Transportation Statistics . /2003. 535p |
| 2001, 1995 | FHWA/FTA Summer 2003 Planners Seminar | Susan Liss presented on the uses of NHTS |

Federal (Non DOT)

- | | | |
|------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1977 | Traversi, M., and Barbarek, L. | Traversi, M., and Barbarek, L. Phase 1 of the Near Term Hybrid Passenger Vehicle Development Program. NASA-CR-163221. National Aeronautics and Space Administration. May 1979. |
| 1995 | Government Accounting Office | |
| 2001 | U.S. Army | |

MPO

1990	Timothy F. Trabold and Jeffrey W. Trombly	Application of 1990 NPTS in Travel Survey Sample Design Niagara Frontier Transportation Committee, Roger Creighton Associates Inc., August 1992
------	-------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------

Newspaper

2001	Pothier, Mark and Boston Globe staff	Big Vehicles Put Shoppers in Parking Squeeze, The Boston Globe, December 22, 2003.
------	--------------------------------------	------------------------------------------------------------------------------------

Other Non-transportation

1977	Westat	Development of a national exposure data survey
------	--------	------------------------------------------------

Research Entities

1995	Civil Engg. News	Civil Engg. News. Survey Highlights Need For Infrastructure Funding. Civil Engineering News, Incorporated . Civil Engineering News. 01/1998 9. 12. p 15
1995	Anthony Downs	Testimony to Congress
2001	TRIPNET, The Road Information Program	The Road Information Program., South Dakota' s Road and Bridge System: Impact of Current Federal Highway Program and Potential Benefits of Proposed New Program. 2003.

Holiday Travel/Tourism

Academia

- 1995 Chin, S-M; Hwang, H-L Chin, S-M; Hwang, H-L. Identifying Passenger Corridors on the U.S. Highway System Using ATS Data. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 467-489
- 1995 Bender, Alan R.; Tacker, Thomas L.; Chumley, Kathy Bender, Alan R.; Tacker, Thomas L.; Chumley, Kathy. Social Impacts of Airline Pricing. Transportation Research Forum . Proceedings of the 40th Annual Meeting of the Transportation Research Forum. /1998. p 689
- 1995 Addante, E Addante, E. Air Travel Market Segments: A New England Case Study. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 307-319
- 1995 Eby, DW; Molnar, LJ. Guidelines for Developing Information Systems for the Driving Tourist. University of Michigan Transportation Research Institute. December 1999.

Consultant

- 1995 Bricka, S. Bricka, S. Variations in Long Distance Travel. NuStats International. Transportation Research Board Conference, June 28 - July 1, 1999.
- 1995 Mallett, WJ; McGuckin, N Mallett, WJ; McGuckin, N. Driving To Distractions: Recreational Trips in Private Vehicles. Transportation Research Board . Transportation Research Record. /2000. 1719. pp 267-272
- 1995 Bricka, S Bricka, S. Variations in Long-Distance Travel. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 197-206
- 1995 Zmud, JP; Arce, CH Zmud, JP; Arce, CH. Influence of Consumer Culture and Race on Travel Behavior. Transportation Research Board . Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 379-389

Federal (DOT)

- 1995 O'Neill, WA; Brown, E O'Neill, WA; Brown, E. Long-Distance Trip Generation Modeling Using ATS. Transportation Research Board. Personal Travel: The Long and Short of It. Transportation Research Circular. E-C026. 03/2001. pp 271-286
- 1995 BTS BTS. Home For The Holidays. Bureau of Transportation Statistics . /1999. 8p
- 1995 Rollow, J; Hwang, HL Rollow, J; Hwang, HL. Data Processing Procedures And Methodology For Estimating Trip Distances For The 1995 American Travel Survey (ATS). Oak Ridge National Laboratory Department of Energy . ORNL/TM-2000/141. 05/2000. 82p
- 1995 Baldwin, GG; Robinson, E Measuring the Canada-United States Aviation Passenger Market: How High is Up? Transportation Research Forum . Transportation Research Forum, 38th Annual Meeting, Volume 1. 10/1996. pp 258-270
- 1995 Contrino, H; Mallett, W; Brown, E Contrino, H; Mallett, W; Brown, E. Long-Distance Leisure Travel in the United States. Bureau of Transportation Statistics . /1996. 19p
- 2001 BTS BTS. Findings From The National Household Travel Survey: U.S. Business Travel. Bureau of Transportation Statistics . 10/2003.
- 2001 BTS BTS. Freedom To Travel. Bureau of Transportation Statistics . BTS03-08. /2003. 52p
- 2001 BTS BTS. U.S. Holiday Travel. Bureau of Transportation Statistics . 11/2003. 4p

MPO

- 1995 CATS CATS. Focus On Long Distance Travel.. Transportation Facts About the Northeastern Illinois Region. 1998.

Newspaper

- 2001 Vartanian, Dan 9 of 10 Holiday Travelers use Personal Vehicle. Online, Michigan Network of Employers for Traffic Safety. December 1, 2003.
- 2001 Poynteronline: Al' s "Christmas Travel", December 24, 2003. Morning Meeting

Research Entities

1995 NPTS American Demographics The Not-so-great American Road Trip. American
Demographics May 1997