

Title: **Commuting time stability: A test of a co-location hypothesis**

Accession Number: 01095665

Record Type: Component

Language: English

Record URL: <http://www.sciencedirect.com/science/a...MM3-1/1/4b18e18c293646985e13ab2fb1e5e312>

Abstract: During the past few decades, the populations of many US and European cities have shown the same residence and workplace mobility patterns: annually, approximately 10% of the population changed residences and approximately 20% of employed workers changed workplaces within the same metropolitan area. Even though the Seattle metropolitan region experienced a substantial amount of residential and workplace mobility and a boom in employment and population in the 1990s, the morning commute time and distance were roughly constant. To explain this situation, researchers have proposed a co-location hypothesis, that is, residents and workers will change their residence or workplace or both adapt to worsening congestion. This research attempted to shed light on the mechanism of the co-location hypothesis using the Puget Sound Transportation Panel data consisting of seven waves of two consecutive years between 1989 and 1997 conducted by the Puget Sound Regional Council. Because most studies used cross-sectional work trip data to study location and commuting, the underlying relationship between location and commuting was limited. This study attempted to understand commuting patterns by residential and workplace changers. The study found that the commuting patterns of residence and workplace location changers were the same and this was reinforced by existing gravity model. Particularly, when workers change their locations, they prefer similar commuting zone (i.e., time and distance) compared to their previous commuting zone. These behaviors caused the average commute time and distance to be stable, regardless of high residence and workplace mobility, and the rapid growth of employment and population.

Supplemental Notes: Abstract reprinted with permission from Elsevier

TRIS Files: HRIS

Media Type: Print

Pagination: pp 524-544

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Features: Figures (7) ; References; Tables (22)

Availability: Find a library where document is available
Order URL: <http://worldcat.org/issn/09658564>

Publication Date: 20080300

Serial: Transportation Research Part A: Policy and Practice
Volume: 42
Issue Number: 3
Publisher: Elsevier
ISSN: 0965-8564
Serial URL:
<http://www.sciencedirect.com/science/journal/09658564>

Index Terms: Co-location; Commuting; Gridlock (Traffic); Patterns; Place of residence; Puget Sound Region; Residential location; Seattle-Tacoma Metropolitan Area (Washington); Testing; Traffic congestion; Traffic flow stability; Trials (Testing); Workplaces

Subject Areas: Highways; Operations and Traffic Management; Safety and Human Factors; I71: Traffic Theory

Title: **Accessibility Trade-Offs in Household Residential Location Decisions**

Accession Number: 01089194

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/2077-10>

Abstract: The literature for residential location choice is deficient in two aspects. First, many studies model location choice as a static choice, with no memory of the past. Second, current understanding of household trade-offs between attributes is limited. These two issues are addressed by developing and estimating a residential location model that accounts for prior locations by using the Puget Sound Panel (1989–2002) data set. Four types of accessibility attributes are examined: work, open space, retail opportunity, and recreation. A comparison between the proposed model and the existing literature model

demonstrates the superiority of the former. Prior commute distance, open space, and recreation opportunity are all shown to influence current residential location choices.

TRIS Files: HRIS

Media Type: Print

Pagination: pp 71-79

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Features: Figures (6) ; References (30) ; Tables (3)

Monograph Title: Crosscutting Techniques for Planning and Analysis 2008

Monograph Accession Number: 01118269

Availability: Transportation Research Board Business Office
500 Fifth Street, NW
Washington, DC 20001 USA
Order URL:
http://www.trb.org/news/blurb_detail.asp?id=9915

Find a library where document is available
Order URL: <http://worldcat.org/isbn/9780309125895>

ISBN: 9780309125895

Publication Date: 20080000

Serial: Transportation Research Record: Journal of the Transportation

Research Board
Issue Number: 2077
Publisher: Transportation Research Board
ISSN: 0361-1981

Index Terms: Accessibility; Alternatives analysis; Commuting; Decision making; Greenbelts; Greenways; Households; Open space corridors; Open spaces; Past ; Place of residence; Puget Sound Transportation Panel; Residential location; Trade off analysis; Travel distance; Trip length

Subject Areas: Highways; Planning and Forecasting; I72: Traffic and Transport Planning

Title: **Guidelines for Samplers: Measuring a Change in Behaviour from Before and After Surveys**

Accession Number: 01044722

Record Type: Component

Language: English

Abstract: Before and after studies are not frequently used to evaluate transportation policies and investments. This paper discussing the use of this type of study to evaluate behavioral changes in response to transport policies and investments and demonstrates that there are almost always considerable economies to be obtained by using a panel to undertake evaluation rather than successive independent cross-sectional surveys. The paper also addresses the issue of sample size requirements for measuring changes of a relatively small magnitude in travel behavior; i.e., to state, with 95% confidence, that if there is a δ percent change in behavior for the sample, there is a δ percent $\pm e$ percent change in the behavior of the population, where e is the sampling error. A method is presented for calculating such sample size requirements from first principles and the applicability both hypothetically and then empirically using data from the Puget Sound Transportation Panel is demonstrated. The formulation enables designers of before and after surveys to investigate the trade-offs between the statistical accuracy of their predictions and the sample size requirements systematically, without the need to specify δ a priori. The authors indicate that this latter point is crucial because we have limited information on δ , yet it drives the sample size requirements. This method is also statistically sound for

assessing and interpreting the results of previous behavioral change programs.

TRIS Files: HRIS
Media Type: Print
Pagination: pp 1-16
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Features: References; Tables (5)

Availability: Find a library where document is available
Order URL: <http://worldcat.org/issn/00494488>

Publication Date: 20070100

Serial: Transportation: Planning, Policy, Research, Practice
Volume: 34
Issue Number: 1
Publisher: Springer
ISSN: 0049-4488

Index Terms: Before and after studies; Behavior modification; Evaluation and assessment; Guidelines; Panel studies; Policy analysis; Puget Sound Region; Return on investment; Sampling (Statistics); Seattle-Tacoma Metropolitan Area (Washington); Standard error; Statistical sampling; Transportation policy; Travel behavior

Subject Areas: Data and Information Technology; Economics; Highways; Planning and Forecasting; Policy; Society; I72: Traffic and Transport Planning

Title: **Catching the Next Big Wave: Do Observed Behavioral Dynamics of Baby Boomers Force Rethinking of Regional Travel Demand Models?**

Accession Number: 01046147

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/2014-09>

Abstract: The aging of American baby boomers creates various new policy contexts and problems. Depending on institutional preparedness and baby boomers' behavior, the changing demand for transportation services by this group may be positive or negative. This potential change in demand is described through an analysis of individual longitudinal histories over a long period (1989 to 2003) that explores the effects of personal changes (e.g., entry to and exit from the labor force), household changes (e.g., relocation and dissolution), and changes in land use characteristics. The Puget Sound Transportation Panel (PSTP)—a record of approximately 20,000 travel diaries of Seattle residents, each of whom provided 2-day reports for 10 repeated contacts (waves)—was used. Within-household dynamics and the effect of within-household change on individual and household behavior are studied. Focus groups are used to extract behavioral themes, latent class cluster analysis is used to identify groups of behavior, and an array of regression models of change is used to identify the key determinants that underlie behavioral dynamics. Findings include a need to focus on employment, heterogeneity in land use impact, and the significant effect of household composition. Together, the findings imply the need for models that can handle more diverse behavior and the need to accommodate employment status and within-household demographics in forecasting models.

TRIS Files: HRIS

Media Type: Print

Pagination: pp 67-75

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Features: References (8) ; Tables (5)
Monograph Title: Activity and Time Use Analysis 2007
Monograph Accession Number: 01084474
Availability: Transportation Research Board Business Office
500 Fifth Street, NW
Washington, DC 20001 USA
Order URL:
http://www.trb.org/news/blurbs_detail.asp?id=8658
Find a library where document is available
Order URL: <http://worldcat.org/isbn/9780309104401>
ISBN: 9780309104401
Publication Date: 20070000
Serial: Transportation Research Record: Journal of the Transportation Research Board
Issue Number: 2014
Publisher: Transportation Research Board
ISSN: 0361-1981
Index Terms: Baby boomer generation; Demographics; Households; Puget Sound Transportation Panel; Regional planning; Travel behavior; Travel demand; Travel models (Travel demand)
Subject Areas: Highways; Planning and Forecasting; Society; I72: Traffic and Transport Planning

Title: **The Seattle-area Market for ATIS: Changes in Awareness and Use of Traveler Information, 1997-2003**
Accession Number: 01127084
Record Type: Monograph
Language: English

Record URL: http://ntl.bts.gov/lib/jpodocs/repts_te/14159_files/14159.pdf

Record URL: http://ntl.bts.gov/lib/jpodocs/repts_te/14159.htm

Abstract: This report provides an overview of the market for traveler information in the Seattle metropolitan area, focusing on three areas: population-wide awareness and use levels, profiles of frequent information users, and enhancement priorities. It is based on the most recent wave of the Puget Sound Transportation Panel survey and is designed to complement earlier work with this data source. Among the principal findings is the fact that about 50 percent of the region's population was familiar with the major traffic and transit websites in 2003, an increase from 2000 levels. However, other ATIS services continue to have very low awareness levels, even among the population subgroups that comprise their target audiences. The survey also finds evidence of a rise in ATIS usage levels since 2000, with, for example, about 2 percent of the population reporting that they use the Puget Sound Traffic website at least three times in a typical week. However, use of all ATIS services continues to be dwarfed by that of broadcast traffic reports on television and radio. The profiles of regular traveler information users generated here are quite consistent with earlier findings. Namely, these frequent information users are largely employed commuters with above-average levels of income and advanced technology use, with a greater inclination to plan ahead and express dissatisfaction with their commute. Users of ATIS services that are internet-based are even more distinct along these dimensions. Enhancement priorities for traffic ATIS have changed little since 1997; large pluralities continue to state that improvements to the timeliness and geographic scope of the information are their top priorities. This sentiment is strongest among frequent users, while less frequent users express relatively more interest in additional content options and formats.

TRIS Files: HRIS, NTL, UMTRIS

Media Type: Web

Pagination: 18p

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Features: Figures (10) ; References (15)

Corporate Authors: Federal Highway Administration
ITS Joint Program Office, 1200 New Jersey Avenue, SE
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Research and Special Programs Administration
John A. Volpe National Transportation Systems Center
Cambridge, MA 02142 USA

Publication Date: 20041200

Index Terms: Advanced transport telematics; Advanced traveler information systems; ATT; Awareness; Intelligent transportation systems; Intelligent vehicle highway systems; ITS (Intelligent transportation systems); IVHS; Markets; Road transport informatics; RTI; Seattle (Washington); Utilization; Websites (Information retrieval)

Subject Areas: Data and Information Technology; Highways; Public Transportation; I72: Traffic and Transport Planning

Title: **Sample size requirements for measuring a change in behaviour**

Accession Number: 01011359

Record Type: Component

Language: English

Source Agency: Transport Research Laboratory
Crowthorne House, Nine Mile Ride
Wokingham, Berkshire RG40 3GA United Kingdom

Source Data: ITRD E211745

Abstract: Before and after surveys are designed to detect a change in travel-behaviour following an intervention policy, such as a travel-modification program . Longitudinal panel surveys are the preferred method for detecting such changes, because the variance of the difference between the before and after surveys

is substantially reduced, enabling changes to be detected with smaller sample sizes than if a repeated cross-sectional survey is used. A key issue concerns the size of sample required to be able to generalise the Panel results to the population; that is to state, with 95 per cent confidence that if there is a change in behaviour for the sample, there is a change in the behaviour of the population. In this paper the authors present the rationale for an alternative formulation and demonstrate its applicability both hypothetically and then empirically using data from the Puget Sound Transportation Panel. The results have important ramifications both for those implementing future behaviour change programs and those interpreting the results reported in previous studies. (a)

TRIS Files: ITRD

Pagination: 13P

Authors: STOPHER, P R
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Availability: Find a library where document is available
Order URL: <http://worldcat.org/issn/14403501>

Publication Date: 20040800

Serial: Institute of Transport Studies Working Paper
Issue Number: ITS-WP-04-20
Publisher: RAILTRACK PLC
ISSN: 1440-3501

Index Terms: Before and after studies; Behavior; Behaviour; Change; Education; Human behavior; Journeys; Mathematical analysis; Modal split; Mode share; Sampling (Statistics); Statistical sampling; Travel; Trips

Subject Areas: Data and Information Technology; Operations and Traffic Management; Planning and Forecasting; I71: Traffic Theory; I72: Traffic and Transport Planning

Title: **Sample size requirements for measuring a change in behaviour**

Accession Number: 01013524

Record Type: Component

Language: English

Source Agency: Transport Research Laboratory
Crowthorne House, Nine Mile Ride
Wokingham, Berkshire RG40 3GA United Kingdom

Source Data: ITRD E211838

Abstract: Before and after surveys are designed to detect a change in travel-behaviour following an intervention policy, such as a travel-modification program. Longitudinal panel surveys are the preferred method for detecting such changes, because the variance of the difference between the before and after surveys is substantially reduced, enabling changes to be detected with smaller sample sizes than if a repeated cross-sectional survey is used. A key issue concerns the size of sample required to be able to generalise the panel results to the population. In this paper the authors present the rationale for an alternative formulation and demonstrate its applicability both hypothetically and then empirically using data from the Puget Sound Transportation Panel. The results have important ramifications both for those implementing future behaviour change programs and those interpreting the results reported in previous studies. (a) For the covering entry of this conference, please see ITRD abstract no. E211825.

TRIS Files: ITRD

Pagination: 15P

Authors: STOPHER, P R
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Monograph Title: ATRF 04: papers of the 27th Australasian Transport Research Forum, volume 27, Adelaide, 29 September-1 October 2004, Transport Systems Centre, University of South Australia

Monograph Accession Number: 01013511

Availability: Find a library where document is available

Order URL: <http://worldcat.org/isbn/1920927123>

ISBN: 1920927123

Publication Date: 20040000

Serial: AUSTRALASIAN TRANSPORT RESEARCH FORUM (ATRF), 27TH, 2004, ADELAIDE, SOUTH AUSTRALIA, AUSTRALIA
Volume: 27
Publisher: University of South Australia, Adelaide

Index Terms: Before and after studies; Behavior; Behaviour; Change; Conferences; Congresses; Errors; Field tests; Human behavior; In situ tests; Journeys; Sampling (Statistics); Statistical sampling; Symposia; Travel; Trips

Subject Areas: Data and Information Technology; Operations and Traffic Management; Planning and Forecasting; I71: Traffic Theory; I72: Traffic and Transport Planning

Title: **MULTILEVEL STRUCTURAL EQUATION MODEL FOR ACTIVITY PARTICIPATION AND TRAVEL BEHAVIOR: DATA FROM THE PUGET SOUND TRANSPORTATION PANEL**

Accession Number: 00985923

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/1898-07>

Abstract: A multilevel structural equation model (SEM) is applied to handle the hierarchical nature of the data and explain complex relationships among socioeconomic factors for individuals and households, activity participation, and travel behavior by using data from Wave 3 of the Puget Sound Transportation Panel. On the basis of the model structure, variations in individual activity participation and travel behavior can be divided into two categories: within-household variation and between-household variation. Empirical results show that the interdependency index of leisure activity duration for household members within a household has a value of 0.33, indicating high interdependency. Total travel time duration likewise has a value of 0.26, indicating high similarity. These results suggest that the

multilevel SEM approach is an appropriate modeling methodology and can provide additional information on activity and travel behavior. The effects from exogenous variables on endogenous variables developed in this study also provide meaningful and interpretable results, which are consistent with results of previous studies. Most personal and household characteristics influence activity participation and travel behavior within a household as well as between households.

Supplemental Notes: This paper appears in Transportation Research Record No. 1898, Travel Demand and Land Use 2004.

TRIS Files: HRIS

Pagination: p. 52-60

Authors: Chung, J-H
Kim, S
Lee, Y-K
Choi, Y-S

Features: Figures (2) ; References (27) ; Tables (6)

Monograph Title: TRAVEL DEMAND AND LAND USE 2004

Monograph Accession Number: 00985916

Corporate Authors: Transportation Research Board
500 Fifth Street, NW
Washington, DC 20001 USA

Availability: Transportation Research Board Business Office
500 Fifth Street, NW
Washington, DC 20001 USA
Order URL: http://trb.org/news/blurb_detail.asp?id=4740

Find a library where document is available
Order URL: <http://worldcat.org/isbn/0309094933>

ISBN: 0309094933

Publication Date: 20040000

Serial: Transportation Research Record
Issue Number: 1898
Publisher: Transportation Research Board
ISSN: 0361-1981

Index Terms: Activity participation; Equations; Households; Mathematical models; Puget Sound Transportation Panel; Socioeconomic aspects; Socioeconomic factors; Travel behavior

Subject Areas: Economics; Highways; Planning and Forecasting; Society; I72: Traffic and Transport Planning

Title: **TRAVEL DEMAND AND LAND USE 2004**

Accession Number: 00985916

Record Type: Monograph

Language: English

Abstract: This Transportation Research Record contains 24 papers on the subject of travel demand and land use. Specific topics discussed include departure time choice and mode choice for nonwork trips; activity-travel scheduling and rescheduling; personal time-space prism vertex locations; travel demand modeling; use of park-and-ride facilities; accuracy of regional models used in transportation and air quality planning; activity participation and travel behavior model using Puget Sound Transportation Panel data; perception of in-vehicle travel time; intercity travel mode choice model for high-speed rail demand analysis; multimodal choice set composition; intrahousehold interactions impact on individual daily activity travel patterns; household allocation module of Oregon2 model; advanced integrated land use-transport model in Sacramento, California; application of TRESIS to Sydney, Australia; parking management and downtown land development in Berkeley, California; on-street parking in large cities; modeling of residential location choice; decentralization in Hartford, Connecticut; shopping travel behavior in Prague, Czech Republic; land use impact on travel behavior in Santiago, Chile; discrete choice models; travel and housing expenditures in Toronto, Canada; and businesses' transportation needs, location choice and perceived accessibility.

TRIS Files: HRIS, UMTRIS

Pagination: 220 p.

Features: Figures; References; Tables

Corporate Authors: Transportation Research Board
500 Fifth Street, NW

Washington, DC 20001 USA

Availability: Transportation Research Board Business Office
500 Fifth Street, NW
Washington, DC 20001 USA
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ISBN: 0309094933

Publication Date: 20040000

Serial: Transportation Research Record
Issue Number: 1898
Publisher: Transportation Research Board
ISSN: 0361-1981

Index Terms: Accessibility; Air quality planning; Businesses; Choice models; Choice of transportation; Decentralization; Departure time; Dwellings; Expenditures; Fringe parking; High speed trains; Houses; Intercity travel; Journey time; Land use; Locating; Location; Mathematical models; Modal choice; Mode choice; Nonwork trips; On street parking; Park and ride; Parking management; Place of residence; Placement (Location); Residential buildings; Residential location; Service industries; Shopping; Site selection; Travel behavior; Travel demand; Travel models (Travel demand); Travel patterns; Travel scheduling; Travel time

Subject Areas: Highways; Planning and Forecasting; Public Transportation; Terminals and Facilities; I72: Traffic and Transport Planning

Title: **TRAVEL BEHAVIOR CHANGES: EVIDENCE FROM A LONGITUDINAL TRAVEL SURVEY**

Accession Number: 00960670

Record Type: Component

Language: English

Abstract: Changes in travel behavior and in the factors affecting travel behavior can provide useful input to policy definitions, and also have important implications for the design of decision support

systems for transport policy analysis. The primary source of behavioral changes and models for decision support systems is a panel survey; that is, repeated observations by the same persons over time. This paper analyzes data from 9 waves of the Puget Sound Transportation Panel in order to study travel behavior change and the sources of this travel behavior change. The frequency of trips and the proportion for each mode are studied by means of a series of Poisson and linear regression models. A complex pattern of relationships emerged from this analysis with some findings confirming prior research, while others indicated inconsistent correlations in time.

TRIS Files: HRIS

Pagination: p. 437-446

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Features: Figures (1) ; References (7) ; Tables (3)

Corporate Authors: WIT Press
Ashurst Lodge, Ashurst
Southampton SO40 7AA United Kingdom

Availability: Computational Mechanics Incorporated
25 Bridge Street
Billerica, MA 01821 USA

Find a library where document is available
Order URL: <http://worldcat.org/isbn/1853129615>

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Publication Date: 20030300

Conference: Urban Transport IX. Ninth International Conference on Urban Transport and the Environment in the 21st Century
Location: Crete, Greece
Date: 20030310 - 20030312
Sponsors: Wessex Institute of Technology

Serial: Publication of: WIT Press
Publisher: WIT Press
ISSN: 1462-6101

Index Terms: Decision support systems; Longitudinal studies; Puget Sound Region; Puget Sound Transportation Panel; Regression; Regression analysis; Seattle-Tacoma Metropolitan Area (Washington); Transportation policy; Travel behavior; Travel distance; Travel patterns; Travel surveys; Trip length

Subject Areas: Data and Information Technology; Highways; Planning and Forecasting; Policy; Society; I72: Traffic and Transport Planning

Title: **ANALYSIS OF LIFESTYLE CHOICES:
NEIGHBORHOOD TYPE, TRAVEL PATTERNS, AND
ACTIVITY PARTICIPATION**

Accession Number: 00935504

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/1807-15>

Abstract: Activity-based travel modeling has begun to make significant progress toward a more behavioral framework for simulating household travel behavior. A significant challenge remains in the need to address the interaction of daily activity and travel patterns with longer-term household choices of vehicle ownership, residential location, and employment location. The choices often depend on one another and jointly define the lifestyle of the household. These choices are likely to evolve over the course of the life cycle as households are formed; as children are born, raised, and ultimately depart to form their own households; and as retirement and old age change patterns of residence, work, and travel. A framework is developed for analyzing household choices relating to three dimensions of lifestyle: travel patterns (including vehicle ownership), activity participation, and residential location (neighborhood type). With cluster analysis on data from the Puget Sound Transportation Panel, nine classifications of lifestyle are uncovered. These clusters demonstrate empirically how decisions of residential location reinforce and affect daily decisions related to travel patterns and activity participation. The applicability of these lifestyle clusters for land use transportation planning is discussed.

Supplemental Notes: This paper appears in Transportation Research Record No.

1807, Traveler Behavior and Values 2002.

TRIS Files: HRIS, UMTRIS

Pagination: p. 119-128

Authors: Krizek, K J
Waddell, Paul

Features: Figures (1) ; References (25) ; Tables (5)

Corporate Authors: Transportation Research Board
500 Fifth Street, NW
Washington, DC 20001 USA

Availability: Transportation Research Board Business Office
500 Fifth Street, NW
Washington, DC 20001 USA

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ISBN: 0309077338

Publication Date: 20020000

Serial: Transportation Research Record
Issue Number: 1807
Publisher: Transportation Research Board
ISSN: 0361-1981

Index Terms: Activity choices; Aggregation; Automobile ownership; Cluster analysis; Land use planning; Life styles; Neighborhoods; Place of residence; Puget Sound Region; Residential location; Seattle-Tacoma Metropolitan Area (Washington); Transportation planning; Travel behavior; Travel patterns

Subject Areas: Highways; Planning and Forecasting; Public Transportation; I72: Traffic and Transport Planning

Title: **LAND USE AND TRANSPORTATION: RESOURCE PAPER**

Accession Number: 00939743

Record Type: Component

Language: English

Record URL: http://onlinepubs.trb.org/onlinepubs/conf/reports/cp_28.pdf

Abstract: In discussing the research needs in the area of land use and transportation, this paper focuses primarily on the topic of the linkage between land use and travel behavior. While a great deal has been learned in recent years about the ways in which land use and transportation interact, significant gaps remain in our ability to explain or to predict the outcome of specific land use policies and transportation-investment actions. Presented in this paper are some of the emerging areas where considerable effort is required to help provide practitioners with analytical tools and approaches to addressing the types of questions that are now surfacing. Some of these areas of inquiry have always been of great interest to planners, decision makers, and even the general public, but were not accessible. In some cases they are now becoming available through vast improvements in data and computing methods. The areas discussed are activity center design, residential location choice, "self-selection" or community preference, the Puget Sound Transportation Panel, conveyance and visualization, and equity considerations.

TRIS Files: ATRIS, HRIS, MRIS, RRIS, UMTRIS

Pagination: p. 127-136

Authors: Frank, L

Features: Figures (2) ; References

Monograph Title: ENVIRONMENTAL RESEARCH NEEDS IN TRANSPORTATION: REPORT OF A CONFERENCE, WASHINGTON, D.C., MARCH 21-23, 2002

Monograph Accession Number: 00939734

Corporate Authors: Transportation Research Board
500 Fifth Street, NW
Washington, DC 20001 USA

Availability: Transportation Research Board Business Office
500 Fifth Street, NW
Washington, DC 20001 USA

Find a library where document is available
Order URL: <http://worldcat.org/isbn/030907715X>

ISBN: 030907715X

Publication Date: 20020000

Conference: Environmental Research Needs in Transportation
Location: Washington, D.C.
Date: 20020321 - 20020323
Sponsors: Federal Highway Administration; U.S. Environmental Protection Agency; Center for Transportation and Environment, North Carolina State University; and Transportation Research Board.

Serial: Transportation Research Board Conference Proceedings
Issue Number: 28
Publisher: Transportation Research Board
ISSN: 1073-1652

Index Terms: Activity centers; Conferences; Congresses; Consumer preferences; Consumers' preferences; Environmental protection; Equity (Justice); Fairness (Social equity); Goals; Land use; Major activity centers; Objectives; Place of residence; Priorities; Puget Sound Transportation Panel; Research; Residential location; Social equity; Social justice; Strategic planning; Strategies; Symposia; Transport; Transportation; Transportation industry; Travel behavior; Travel surveys; Visualisation; Visualization

Subject Areas: Environment; Planning and Forecasting; Research; Society; Transportation (General)

Title: ANALYSIS OF ACTIVITY DURATION USING THE PUGET SOUND TRANSPORTATION PANEL

Accession Number: 00800338

Record Type: Component

Language: English

Abstract: This paper extends earlier analyses of temporal effects by examining the factors associated with activity generation and duration over 4 waves of the Puget sound transportation panel survey. A Cox proportional hazards model was specified for each of 5 activities: visiting, appointments, free time, personal business, and shopping. For each activity, the duration times are modeled with an emphasis on examining important higher order interactions. Results suggest that activity durations have changed significantly over the survey period. Many of the differences in activity durations over time were significant, and

were often associated with increasing numbers of children in the household and higher order interactions between sex and the sequencing of activities.

- TRIS Files:** HRIS
- Pagination:** p. 607-624
- Authors:** Yee, J L
Niemeier, D A
- Features:** References; Tables (10)
- Corporate Authors:** Elsevier
The Boulevard, Langford Lane
Kidlington, Oxford OX5 1GB United Kingdom
- Availability:** Elsevier Science, Incorporated
660 White Plains Road
Tarrytown, NY 10591-5153 USA
- Find a library where document is available
Order URL: <http://worldcat.org/issn/09658564>
- Publication Date:** 20001100
- Serial:** Transportation Research Part A: Policy and Practice
Volume: 34
Issue Number: 8
Publisher: Elsevier
ISSN: 0965-8564
Serial URL:
<http://www.sciencedirect.com/science/journal/09658564>
- Index Terms:** Activity choices; Activity generation; Demographics; Puget Sound Region; Puget Sound Transportation Panel; Seattle-Tacoma Metropolitan Area (Washington); State of Washington; Temporal effects; Transportation planning; Travel behavior; Travel patterns; Trip purpose; Washington (State)
- Subject Areas:** Highways; Planning and Forecasting; Society; I72: Traffic and Transport Planning
-

Title: **LINKING LAND USE WITH HOUSEHOLD VEHICLE EMISSIONS IN THE CENTRAL PUGET SOUND: METHODOLOGICAL FRAMEWORK AND FINDINGS**

Accession Number: 00790236
Record Type: Component
Language: English
Source Agency: Transport Research Laboratory
Crowthorne House, Nine Mile Ride
Wokingham, Berkshire RG40 3GA United Kingdom

Source Data: IRRD E104386

Abstract: A leading cause of air pollution in many urban regions is mobile source emissions that are largely attributable to household vehicle travel. While household travel patterns have been previously related with land use in the literature (Crane,R, 1996. Journal of the American Planning Association 62 (1, Winter); Cervero,R and Kockelman,C, 1997. Transportation Research Part D 2(3), 199-219), little work has been conducted that effectively extends this relationship to vehicle emissions. This paper describes a methodology for quantifying relationships between land use, travel choices, and vehicle emissions within the Seattle, Washington region. The authors' analysis incorporates land use measures of density and mix which affect the proximity of trip origins to destinations; a measure of connectivity which impacts the directness and completeness of pedestrian and motorized linkages; vehicle trip generation by operating mode; vehicle miles/h of travel and speed; and estimated household vehicle emissions of nitrogen oxides, volatile organic compounds, and carbon monoxide. The data used for this project consists of the Puget Sound Transportation Panel Travel Survey, the 1990 US Census, employment density data from the Washington State Employment Security Office, and information on Seattle's vehicle fleet mix and climatological attributes provided by the Washington State Department of Ecology. Analyses are based on a cross-sectional research design in which comparisons are made of variations in household travel demand and emissions across alternative urban form typologies. Base emission rates from MOBILE5a and separate engine start rates are used to calculate total vehicle emissions in grams accounting for fleet characteristics and other inputs reflecting adopted transportation control measures. Emissions per trip are based on the network distance of each trip, average travel speed, and a multi-stage engine operating mode (cold start, hot start, and stabilized) function. (A)

TRIS Files: ITRD

Pagination: p. 173-96

Authors: Frank, L D
STONE, B
Bachman, W

Features: References (30)

Corporate Authors: Elsevier
The Boulevard, Langford Lane
Kidlington, Oxford OX5 1GB United Kingdom

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Serial: Transportation Research Part D: Transport and Environment
Volume: 5D
Issue Number: 3
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ISSN: 1361-9209
Serial URL:
<http://www.sciencedirect.com/science/journal/13619209>

Index Terms: Air pollutants; Air pollution; Emissions; Journeys; Land use; Pollutants; Travel; Trips; Vehicles

Subject Areas: Vehicles and Equipment

Title: **DYNAMIC ANALYSIS OF TRAVELER ATTITUDES AND PERCEPTIONS USING PANEL DATA**

Accession Number: 00800144

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/1718-07>

Abstract: A dynamic analysis of travelers' attitudes, preferences, and values was carried out using three waves of the Puget Sound Transportation Panel survey to investigate dynamics in traveler attitudes and perceptions. An in-depth descriptive analysis was performed to examine the variations in attitudinal ratings over time. A traditional one-way analysis of variance (ANOVA)

method was used to explore for similarities and differences in traveler attitudinal ratings across different waves of the panel survey. A similar analysis was performed on the stayer sample (i.e., the respondents who participated in all three waves of the panel used in this study). The ANOVA results show significant differences in mean attitudinal ratings across the three waves of the panel survey. The differences in traveler attitudes and perceptions among stayers, dropouts (respondents who leave the panel survey), and refreshments (respondents who are newly recruited as the panel survey proceeds) were also captured. Finally, differences in traveler attitudes and preferences across different modal market segments were examined. The results indicate the need for greater consideration of attitudinal dynamics in transportation planning and policy analysis.

Supplemental Notes: This paper appears in Transportation Research Record No. 1718, Activity Pattern Analysis and Exploration: Travel Behavior Analysis and Modeling.

TRIS Files: HRIS, UMTRIS

Pagination: p. 52-60

Authors: Sunkanapalli, S
Pendyala, R M
Kuppam, A R

Features: References (12) ; Tables (6)

Corporate Authors: Transportation Research Board
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ISBN: 0309066972

Publication Date: 20000000

Serial: Transportation Research Record
Issue Number: 1718
Publisher: Transportation Research Board
ISSN: 0361-1981

Index Terms: Analysis of variance; Attitudes; Highway users; Market segmented groups; Mental attitudes; Perception (Point of view); Policy analysis; Puget Sound Region; Puget Sound Transportation Panel; Seattle-Tacoma Metropolitan Area (Washington); Stated preferences; Surveys; Transportation planning; Travel behavior; Travelers; Travellers; Variance analysis

Subject Areas: Data and Information Technology; Highways; Planning and Forecasting; Policy; Public Transportation; Society; I72: Traffic and Transport Planning

Title: **PERIOD EFFECTS AND COHORT EFFECTS IN LIFE CYCLES: PRELIMINARY ANALYSIS**

Accession Number: 00800149

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/1718-12>

Abstract: Travel behavioral data from five successive waves of the Puget Sound Transportation Panel were examined to determine whether period effects or cohort effects have a significant effect in life-cycle behavior. It was found that period and cohort effects may have a greater influence in household life-cycle models than previously believed. The results bring into question current methods using cross-sectional data analysis for life-cycle models, since predicted changes in activity behavior were not observed in households that made life-cycle transitions. The results are not conclusive, since other variables influencing activity behavior were not accounted for in the analysis.

Supplemental Notes: This paper appears in Transportation Research Record No. 1718, Activity Pattern Analysis and Exploration: Travel Behavior Analysis and Modeling.

TRIS Files: HRIS, UMTRIS

Pagination: p. 90-96

Authors: Marker Jr, J T

Features: References (10) ; Tables (5)

Corporate Authors: Transportation Research Board

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Publication Date: 20000000

Serial: Transportation Research Record
Issue Number: 1718
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ISSN: 0361-1981

Index Terms: Cohort effects; Forecasting; Households; Life cycle analysis;
Life cycle planning; Period effects; Projections; Puget Sound
Transportation Panel; Scenarios; Surveys; Travel behavior;
Travel demand; Travel models (Travel demand)

Subject Areas: Highways; Planning and Forecasting; Public Transportation;
Society; I72: Traffic and Transport Planning

Title: **LONGITUDINAL ANALYSIS OF ACTIVITY AND
TRAVEL PATTERN DYNAMICS USING
GENERALIZED MIXED MARKOV LATENT CLASS
MODELS**

Accession Number: 00769265

Record Type: Component

Language: English

Abstract: In this paper data from the Puget Sound Transportation Panel (PSTP) are analyzed to identify change in the patterns of time allocation by the panel participants (i.e., patterns of activity participation and travel). The data analyzed are sequences of states in categorical data from reported individuals' daily activity participation and travel indicators. This is done separately for activity participation and trip making using probabilistic models that generalize the restrictive Markov chain

models by incorporating unobserved variables of change. The PTSP data analysis here suggests the more likely presence of multiple paths of change for time allocation to activities, non-stationary switching of activity participation from one year to the next, and day-to-day stationarity in activity participation pattern switching. Travel pattern change is best explained by a single path of change with stationary day-to-day pattern transition probabilities that are different from their year-to-year counterparts.

- TRIS Files:** HRIS
- Pagination:** p. 535-557
- Authors:** Goulias, K G
- Features:** Figures; References; Tables
- Corporate Authors:** Elsevier
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Kidlington, Oxford OX5 1GB United Kingdom
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Order URL: <http://worldcat.org/issn/01912615>
- Publication Date:** 19991100
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- Index Terms:** Activity choices; Markov processes; Puget Sound
Transportation Panel; Time studies; Travel patterns; Trip
purpose
- Subject Areas:** Highways; Planning and Forecasting; I21: Planning of
Transport Infrastructure
-

Title: A DYNAMIC ANALYSIS OF ACTIVITY AND TRAVEL PATTERNS

Accession Number: 00796493

Record Type: Component

Language: English

Source Agency: Transport Research Laboratory
Crowthorne House, Nine Mile Ride
Wokingham, Berkshire RG40 3GA United Kingdom

Source Data: IRRD E105595

Abstract: In transport studies longitudinal models have been used to understand behavior dynamics of households and their household members targeting unobserved variables of behavior and their relationship with observed behavioral indicators. Information from multi-day travel diaries combined with yearly observation of the same individuals over time (panel surveys) allow to study the interplay among observed indicators and latent variables. For example, one can estimate day-to-day and year to year behavioral change models in the latent and manifest domains, thus, depicting unobserved heterogeneity in its totality. The models enable researchers to make assumptions about behavioral dynamics, test the models, and identify the most likely data generating stochastic process underlying the data in discrete time and discrete state space. In this paper travel diary data from the Puget Sound Transportation Panel (PSTP) are used to analyze latent dynamic variables representing latent time allocation by the panel participants (i.e., patterns of activity participation and travel). The data analysis summarized in the paper contains examples of the dynamic interplay among activity pattern travel pattern categories, a longitudinal analysis among different activity sequencing patterns, and an analysis of trips made by people alone or with others. In all three analyses, the estimated models suggest the more likely presence of multiple paths of change in the dynamics for time allocation to activities, non-stationary switching of activity-travel patterns from one year to the next, day-to-day stationarity in activity-travel pattern switching, and significant differences in the paths of change when different indicators of behavior are used. For the covering abstract see ITRD E105584.

TRIS Files: ITRD

Pagination: p. 135-57

Authors: Goulias, K G

Features: References (7)

Corporate Authors: PTRC Education and Research Services Limited
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Publication Date: 19990900

Conference: TRANSPORTATION PLANNING METHODS.
PROCEEDINGS OF SEMINAR F, EUROPEAN
TRANSPORT CONFERENCE, 27-29 SEPTEMBER 1999,
CAMBRIDGE, UK.
Location:
Date: 00000 - 00000

Index Terms: Behavior; Behaviour; Citizen participation; Classification;
Conferences; Congresses; Dynamics; Households; Human
behavior; Interviewing; Journeys; Local participation;
Mathematical analysis; Mathematical models; Public
involvement; Public participation; Random processes;
Recording; Stochastic processes; Surveillance; Symposia;
Travel; Trips; Variables

Subject Areas: Data and Information Technology; Society

Title: **EVALUATING EFFECTS OF TRANSPORTATION
DEMAND MANAGEMENT STRATEGIES ON TRIP
GENERATION BY USING POISSON AND NEGATIVE
BINOMIAL REGRESSION**

Accession Number: 00780202

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/1682-09>

Abstract: Most trip generation models are insensitive to the effects of transportation demand management (TDM) strategies. To

evaluate the potential effectiveness of TDM solutions, transportation professionals must rely largely on the results of case studies, which cannot be generalized for all urban areas. To evaluate TDM strategies in a context that is sensitive to the unique characteristics of each urban area, TDM strategies should be incorporated into regional travel demand models. Five TDM strategies affecting trip generation rates are examined: telecommunications, alternative work schedules, on-site amenities, pricing strategies, and land use strategies. To analyze these strategies, data from the Puget Sound Transportation Panel (PSTP) were used. Variables derived from the PSTP data that may help explain the impacts of these strategies were evaluated for significance in trip generation models for several home-based and non-home-based trip purposes. The trip generation models were specified using Poisson and negative binomial regression techniques. After the models were estimated, the significance of the variables representing the impacts of TDM strategies was analyzed. Many of the TDM variables were indeed significant in the trip generation models; however, in some cases, the significance of the variables can be attributed to factors such as trip chaining, which does not describe the effects of TDM strategies. Additional research is needed to fully determine the effects of trip chaining on the variables examined in this study, and additional data could enable the development of variables that more accurately describe the effects of TDM strategies.

Supplemental Notes: This paper appears in Transportation Research Record No. 1682, Transportation System Management, Transportation Demand Management, and High-Occupancy Vehicle Systems.

TRIS Files: HRIS

Pagination: p. 70-77

Authors: WALLACE, B
Mannering, F
Rutherford, G S

Features: Figures (2) ; References (8) ; Tables (3)

Corporate Authors: Transportation Research Board
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Serial: Transportation Research Record
Issue Number: 1682
Publisher: Transportation Research Board
ISSN: 0361-1981

Index Terms: Binomial distributions; Goals; Hours of labor; Hours of service (Work hours); Impacts; Land use; Objectives; On-site amenities; Poisson distributions; Pricing; Priorities; Puget Sound Transportation Panel; Regression; Regression analysis; Strategic planning; Strategies; TDM measures; Telecommunication systems; Telecommunications; Traffic generation; Transportation demand management; Travel demand management; Trip chaining; Trip generation; Trip purpose; Trip reduction; Work days; Working hours

Subject Areas: Data and Information Technology; Highways; Planning and Forecasting; I72: Traffic and Transport Planning

Title: **ANALYSIS OF THE ROLE OF TRAVELER ATTITUDES AND PERCEPTIONS IN EXPLAINING MODE-CHOICE BEHAVIOR**

Accession Number: 00778888

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/1676-09>

Abstract: An analysis was carried out using the 1991 wave of the Puget Sound Transportation Panel data set to determine the role played by attitudinal and preference variables in explaining commuter mode-choice behavior. Different modal market segments were compared to determine the extent to which attitudes and preferences differ across mode choices. A factor analysis was performed on the sample to identify a few distinct factors that would summarize the multitude of attitudinal

variables present in the data set. Multinomial logit models of mode choice were estimated using different utility specifications. Three types of models were estimated: one that included only demographic variables, another that included only attitudinal factors, and another that included both demographic and attitudinal variables. Likelihood ratio tests were applied to assess the significance of the contribution of different types of variables in explaining mode-choice behavior. Results show that demographic variables and attitudinal variables are extremely important in explaining mode-choice behavior. More noteworthy, however, is the finding that the contribution of attitudinal factors is greater than that of demographic variables, thus emphasizing the need for greater consideration of attitudinal and preference variables in travel-demand-modeling applications.

Supplemental Notes: This paper appears in Transportation Research Record No. 1676, Travel Behavior and Passenger Travel Demand Forecasting.

TRIS Files: HRIS, UMTRIS

Pagination: p. 68-76

Authors: Kuppam, A R
Pendyala, R M
Rahman, S

Features: References (16) ; Tables (4)

Corporate Authors: Transportation Research Board
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ISBN: 0309071011

Publication Date: 19990000

Serial: Transportation Research Record
Issue Number: 1676
Publisher: Transportation Research Board

ISSN: 0361-1981

Index Terms: Attitudes; Choice of transportation; Commuters; Consumer preferences; Consumers' preferences; Demographics; Factor analysis; Logit models; Logits; Mental attitudes; Modal choice; Mode choice; Multinomials; Puget Sound Region; Puget Sound Transportation Panel; Seattle-Tacoma Metropolitan Area (Washington)

Subject Areas: Highways; Passenger Transportation; Planning and Forecasting; Public Transportation; Society; I72: Traffic and Transport Planning

Title: **EXPLORATORY LONGITUDINAL ANALYSIS OF SOLO AND JOINT TRIP MAKING USING THE PUGET SOUND TRANSPORTATION PANEL**

Accession Number: 00778889

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/1676-10>

Abstract: The Puget Sound Transportation Panel is used to study the propensity of people to make solo and joint trips. The analysis consists of trip-based models in which solo versus joint trip making is explained in terms of person and household sociodemographics, daily activity and travel patterns, dwelling unit and workplace level of service and land use characteristics, and trip attributes. The analysis is repeated for all the days and all the waves (years) of the panel at hand. The analysis reveals that the major factor that determines joint trip making is the life-cycle stage of the household. It is also observed consistently across all the waves that, as the age of the person increases, the number of joint trips he or she makes also increases. Other factors that consistently affect joint trip making are household size, age of the household members, number of vehicles in the household, daily activity and travel patterns, and certain accessibility measures such as the access from transit to auto.

Supplemental Notes: This paper appears in Transportation Research Record No. 1676, Travel Behavior and Passenger Travel Demand Forecasting.

TRIS Files: HRIS

Pagination: p. 77-85

Authors: Chandrasekharan, B
Goulias, K G

Features: References (18) ; Tables (5)

Corporate Authors: Transportation Research Board
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ISBN: 0309071011

Publication Date: 19990000

Serial: Transportation Research Record
Issue Number: 1676
Publisher: Transportation Research Board
ISSN: 0361-1981

Index Terms: Accessibility; Activity choices; Age; Automobile ownership; Demographics; Dwellings; Households; Houses; Land use; Level of service; Puget Sound Region; Puget Sound Transportation Panel; Residential buildings; Seattle-Tacoma Metropolitan Area (Washington); Travel patterns; Vehicle occupancy; Workplaces

Subject Areas: Highways; Planning and Forecasting; Society; Terminals and Facilities; I72: Traffic and Transport Planning

Title: **APPLICATION OF POISSON REGRESSION MODELS TO ACTIVITY FREQUENCY ANALYSIS AND PREDICTION**

Accession Number: 00778890

Record Type: Component

Language: English

Record URL: <http://dx.doi.org/10.3141/1676-11>

Abstract: The Poisson regression model and its variants are used to estimate individuals' daily activity frequencies by activity type using the first 4 years of the Puget Sound Transportation Panel. The estimated model coefficients are applied to the 5th-year observed data to predict daily activity frequencies by activity type. Forecasting accuracy is measured with indicators of deviation between observed and predicted values. Examples of model estimates and their forecasting performance are provided. Comparisons between the observed and predicted 5th-year data show the predictions to be fairly accurate. Subsistence activity is the most accurate among all types, followed by trip chains, out-of-home leisure, and maintenance activities. The analysis also indicates that different theoretical distributions should be used for different dependent variables.

Supplemental Notes: This paper appears in Transportation Research Record No. 1676, Travel Behavior and Passenger Travel Demand Forecasting.

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Pagination: p. 86-94

Authors: Ma, J
Goulias, K G

Features: Figures (1) ; References (22) ; Tables (5)

Corporate Authors: Transportation Research Board
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Publication Date: 19990000

Serial: Transportation Research Record
Issue Number: 1676
Publisher: Transportation Research Board
ISSN: 0361-1981

Index Terms: Accuracy; Activity choices; Activity frequency; Coefficients; Daily; Diurnal variations; Forecasting; Mathematical models; Poisson distributions; Projections; Puget Sound Region; Puget Sound Transportation Panel; Regression; Regression analysis; Scenarios; Seattle-Tacoma Metropolitan Area (Washington)

Subject Areas: Data and Information Technology; Highways; Planning and Forecasting; I72: Traffic and Transport Planning

Title: **EVALUATION OF TRAVEL DEMAND MANAGEMENT STRATEGIES IN THE TRIP GENERATION PHASE OF A NETWORK-BASED MODELING APPROACH**

Accession Number: 00755091

Record Type: Monograph

Language: English

Record URL: <http://ntl.bts.gov/lib/21000/21000/21093/PB98180334.pdf>

Abstract: Current trip generation models are insensitive to the effects of travel demand management (TDM) strategies. To evaluate the potential effectiveness of TDM solutions, transportation professionals must rely largely on the results of case studies, which can not be generalized for areas other than the one in which the study was performed. To evaluate TDM strategies in a context that is sensitive to the unique characteristics of each urban area, TDM strategies should be incorporated into regional travel demand models. Five TDM strategies affecting trip generation rates were examined: land-use strategies, pricing strategies, telecommunications, alternative work schedules, and on-site facilities. To analyze these strategies, household, person, and trip data from the Puget Sound Transportation Panel (PSTP) were used. Variables derived from the PSTP data that may help explain the impacts of these TDM strategies were evaluated for significance in trip generation models for the following purposes: home-based work, home-based shopping, home-based other, work-other, and other-other. The trip generation models were specified with Poisson and negative binomial regression techniques. After the models had been estimated, the significance of the variables representing the impacts of TDM strategies was analyzed and justified. Many of the "TDM variables" were indeed significant in the trip generation models; however, in some cases, the significance of the variables can be attributed to factors that are not related to the effects of TDM

strategies. For example, the effects of trip chaining appeared to have played a major role in the significance of certain variables. However, some variables appeared to explain the effects of certain TDM strategies quite well. With further research, the four-step modeling process may provide a viable mechanism for evaluating the impacts of TDM strategies on trip generation rates.

TRIS Files: HRIS, NTL

Report Numbers: WA-RD 458.1
Final Research Report

Contract Numbers: T9903, Task 74

Pagination: 146 p.

Authors: Wallace, B P

Features: Figures (14) ; References; Tables (20)

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Index Terms: Goals; Impacts; Mathematical models; Objectives; Priorities; Puget Sound; Puget Sound Region; Seattle-Tacoma Metropolitan Area (Washington); Strategic planning; Strategies; TDM measures; Traffic generation; Transportation demand management; Travel demand management; Trip generation; Trip reduction; Variables

Subject Areas: Highways; Planning and Forecasting; I72: Traffic and Transport Planning

Title: TRAVEL TRENDS USING THE PUGET SOUND PANEL SURVEY: A GENERALIZED ESTIMATING EQUATIONS APPROACH

Accession Number: 00744007

Record Type: Component

Language: English

Abstract: This paper examines longitudinal mode use trends using four waves of the Puget Sound Transportation Panel. The analysis is conducted using generalized estimating equations for model estimation. In addition to examining mode use frequencies over time, the authors also consider mode use trends conditioning on household income and lifecycle stage. As expected, results indicate an overall increase in the number of worktrips made between 1989 and 1993 and these trips were marked by increasing use of single occupancy vehicles. Results indicate that the mean number of worktrips made by driving alone significantly increased from wave 1 to wave 4; with a 95% C.I. the rate of percent increase was estimated between 8.2 and 24.5%.

TRIS Files: HRIS

Pagination: p. 21-34

Authors: Yee, J L
Niemeier, D A

Features: References; Tables

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Index Terms: Choice of transportation; Households; Journey to work; Modal choice; Mode choice; Panels; Puget Sound; Puget Sound Region; Seattle-Tacoma Metropolitan Area (Washington); Surveys; Travel patterns; Work trips

Subject Areas: Highways; Operations and Traffic Management; Society; I71: Traffic Theory
