Transportation Panel Survey (Wave 7)

Overview of the Puget Sound Transportation Panel Survey, 1989-1997

Neil Kilgren

August 6, 1998

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OUTLINE

- Introduction
  - What is the PSTP?
  - Original Objectives - 1988
- Overview of PSTP
  - Unique Characteristics of PSTP
  - Sample Sizes
  - Attrition Rates
- Characteristics of Panel Members
  - Demographics
  - Trip-making

WHAT IS THE PSTP?

- First Urban, General Purpose Travel Panel Survey in the U.S.
- Begun in 1989
- Seven waves
- Sample size:
  - approx. 1,700 households
  - approx. 3,400 persons 15 years and older

ORIGINAL OBJECTIVES - 1988

- Current Region-Wide Population Survey
  - Employment
  - Work Characteristics
  - Household Composition
  - Vehicle Availability
- Better Understanding of:
  - Attitudes Toward Alternate Modes
  - Tripmaking Behavior
  - Travel Decision Making Processes

ORIGINAL OBJECTIVES - 1988 (cont.)

- **Monitor Changes in Travel Patterns**
  - **Mode Choice**
  - **Travel Behavior**
  - **Responses to Changes in Transportation System**
- **Data for Improved Model Development**
  - **Better Prediction of:**
    - **Number of Trips - Peak & Off-Peak**
    - **Trip Characteristics - Purpose & Mode**
    - **Mode Shifts Over Time**

UNIQUE CHARACTERISTICS OF PSTP

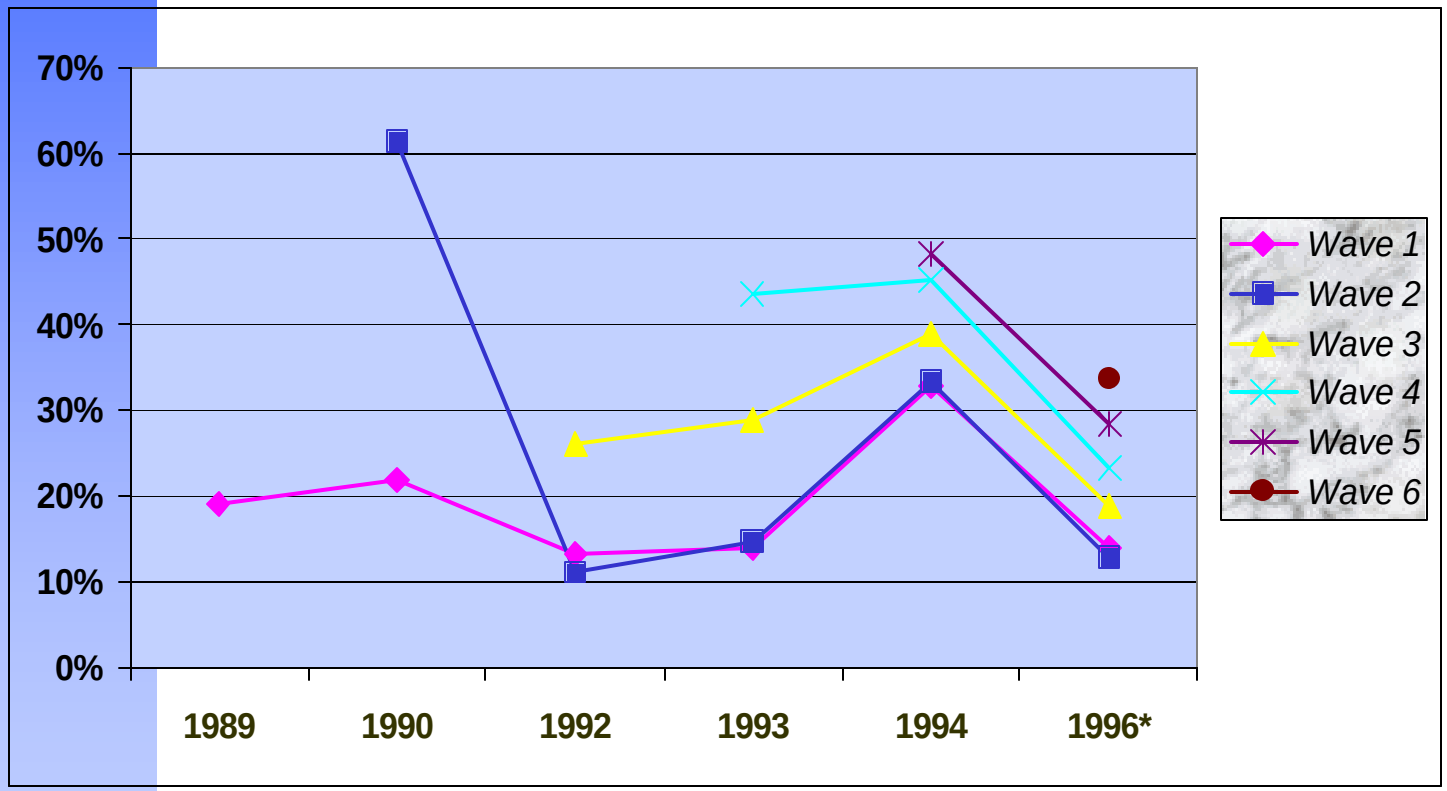
- Longitudinal -- Merges Cross-Section and Time Series Data
- Direct Measurement of Individual Changes
- Smaller Sample Size
- Requires Strategy for Attrition/Replacement of Sample Households

PSTP SAMPLE SIZES

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7
Year	1989	1990	1992	1993	1994	1996	1997
Households	1,712	1,784	1,596	1,906	1,769	1,753	1,990
Persons	3,392	3,658	3,440	3,855	3,735	3,487	4,131
Trips	30,839	32,653	28,868	32,477	30,638	29,505	33,760

- 468 (27%) of the original Wave 1 households were in Wave 7
- Surveys conducted in the fall of each year, except Wave 6, conducted in Spring/Summer of 1996

ATTRITION RATES



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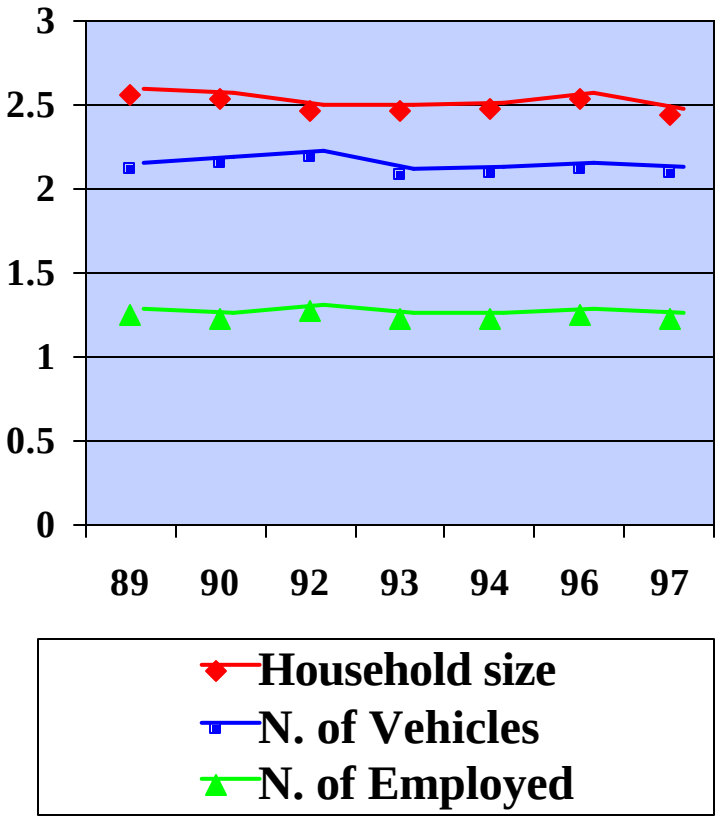
HOUSEHOLD CHARACTERISTICS

PSTP

- HH size: 2.49
- Vehicles: 2.12
- Employed 1.24

1990 Census

- HH size: 2.49
- Vehicles: 1.81
- Employed 1.30



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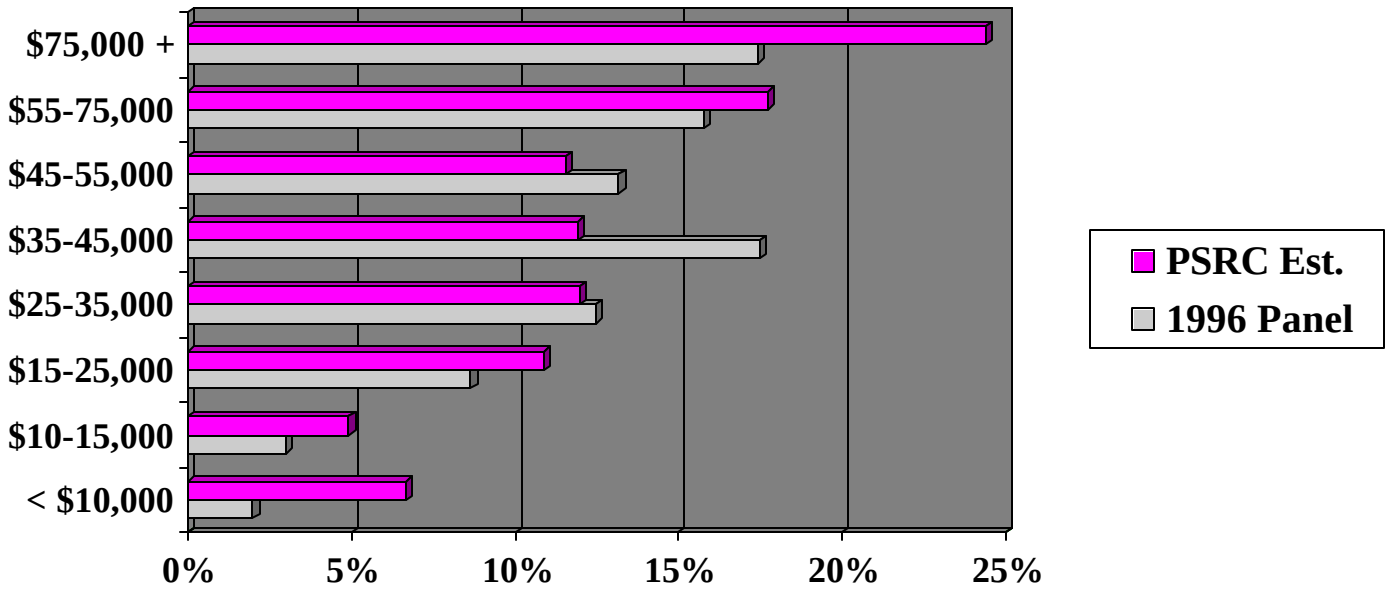
HOUSEHOLD INCOME



Median		**1989**		**1996**
Income	**PSTP**	**$33,788**	**PSTP**	**$46,051**
	Census	**$34,820**	**PSRC 96 Est.**	**$48,067**

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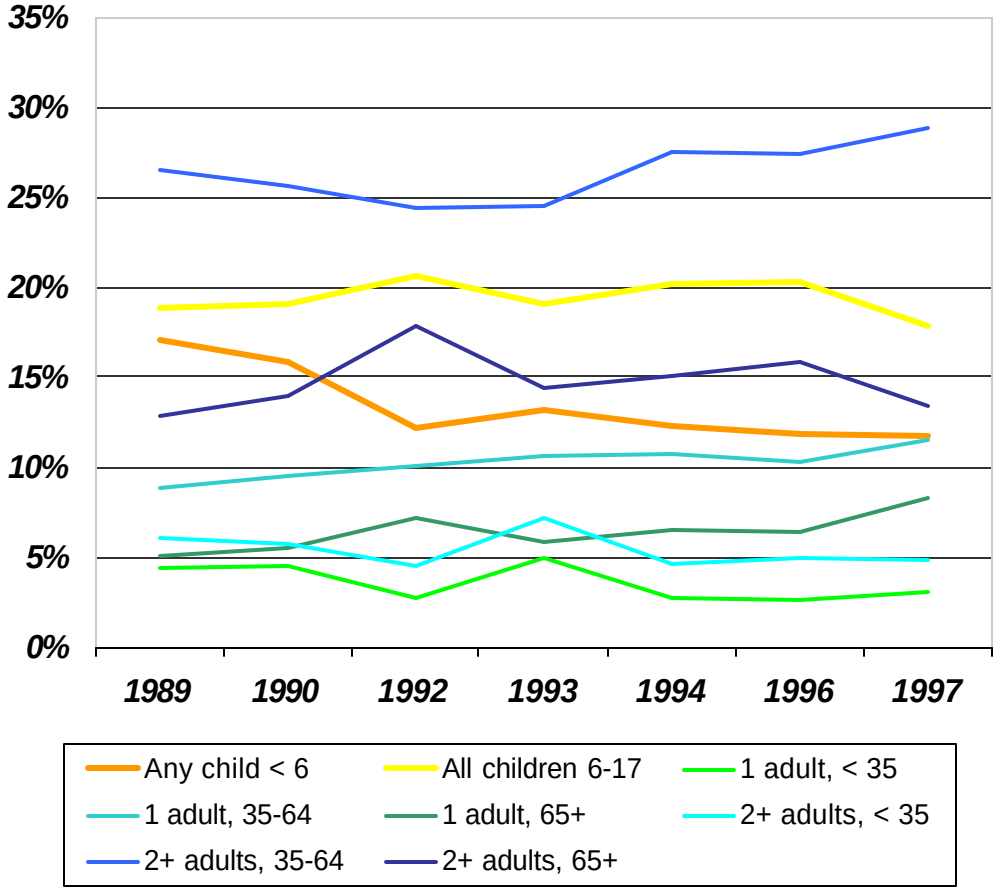
LIFECYCLE

PSTP

- Age: 45.1
- Females: 52.7%
- Males: 47.3%

Census

- Age: 41.4
- Females: 50.4%
- Males: 49.6%



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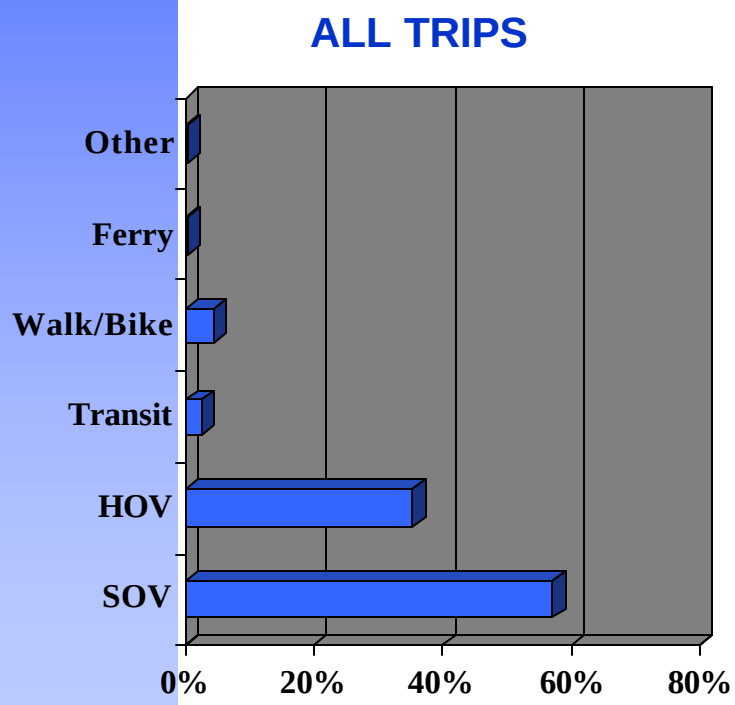
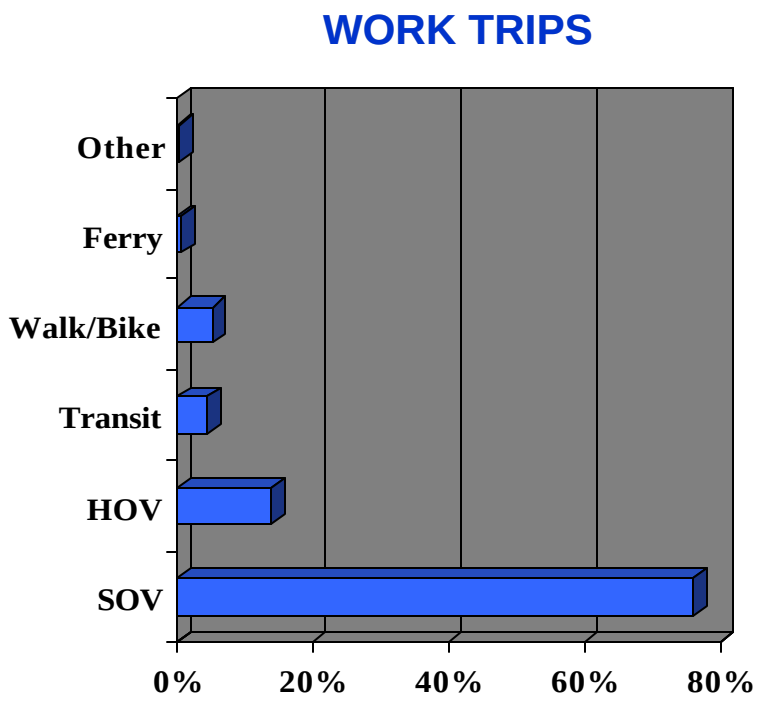
MODE OF TRAVEL - 1997





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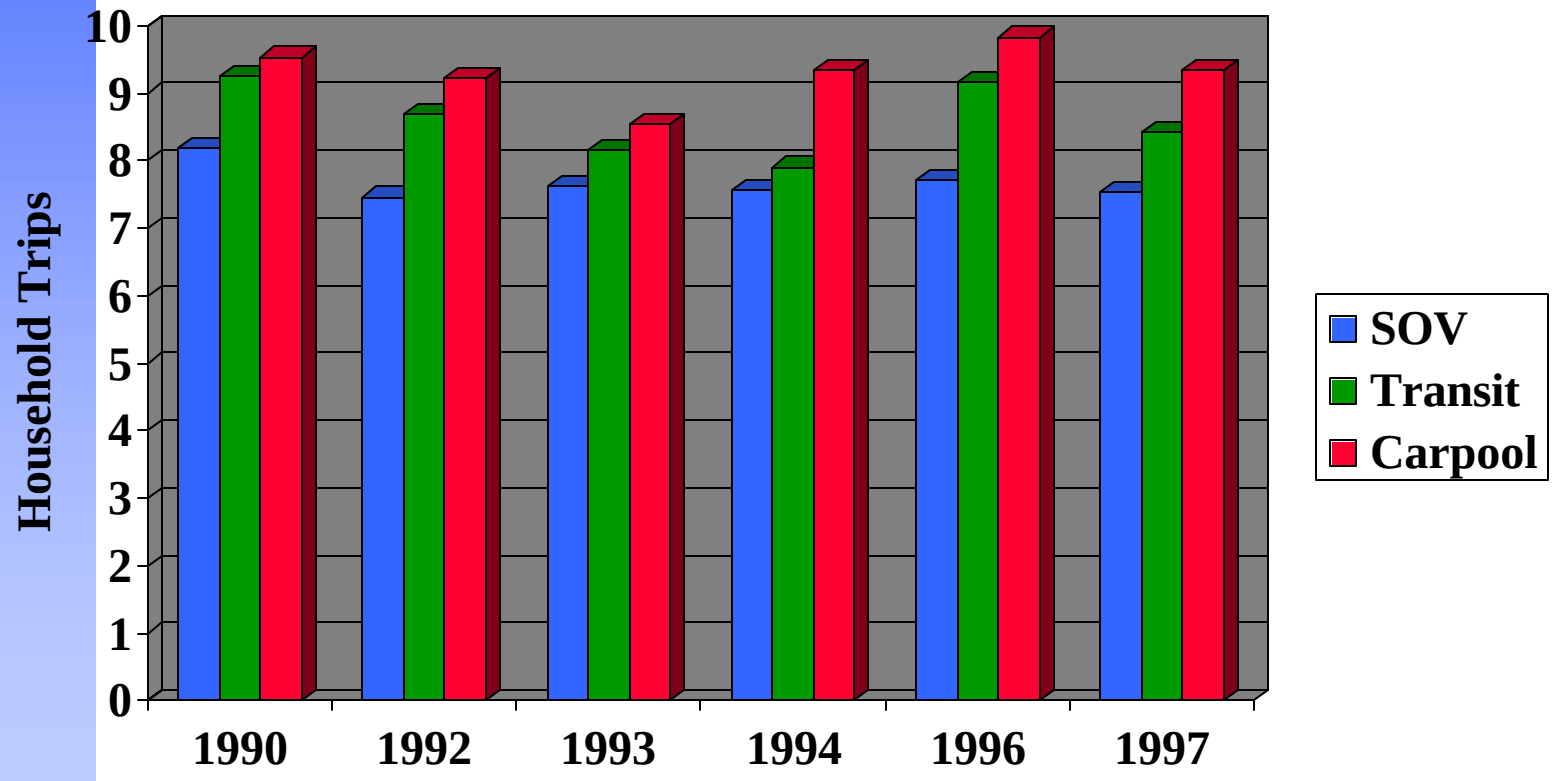
HOUSEHOLD TRIP RATES



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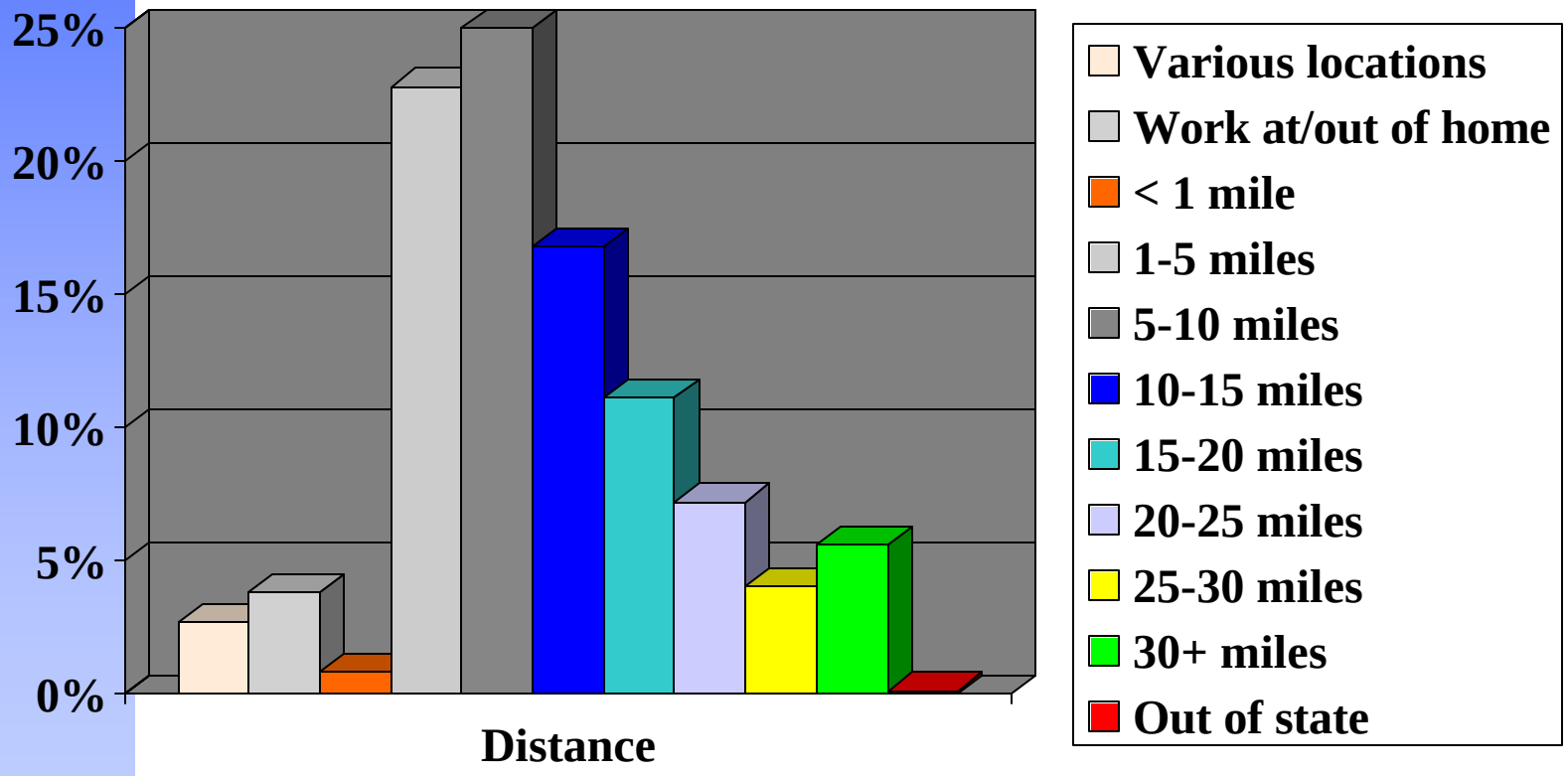
DISTANCE TO WORK - 1997



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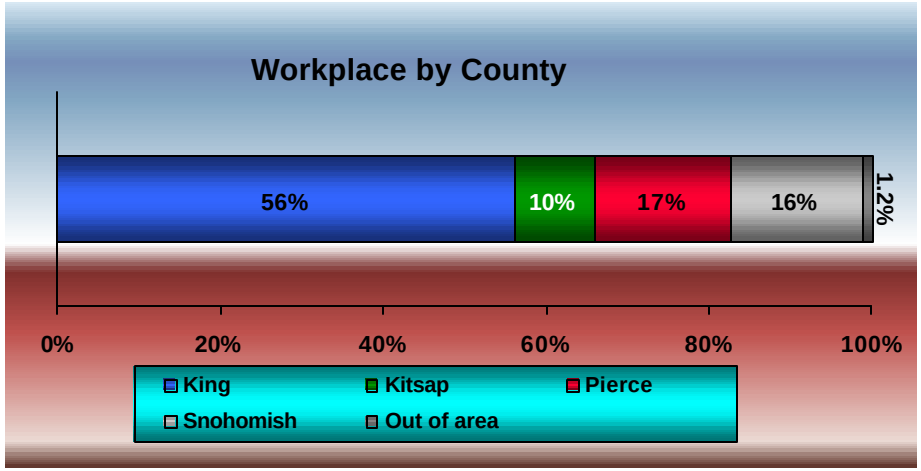
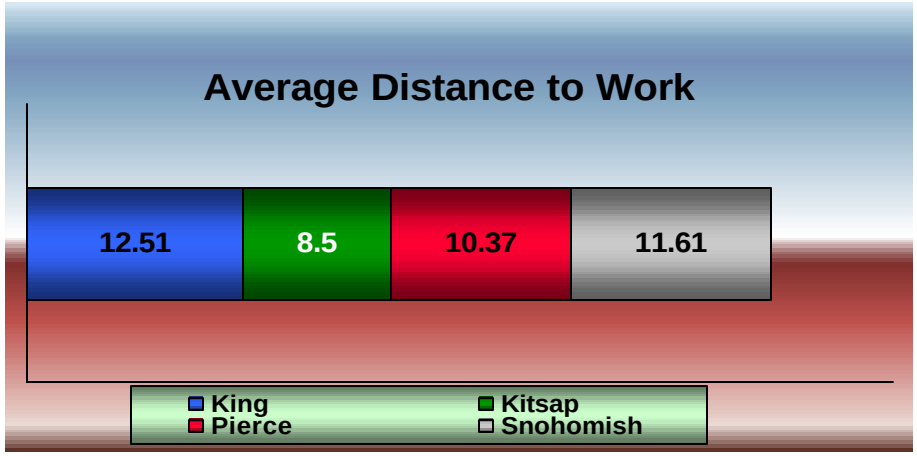
JOURNEY TO WORK -- 1997

- More than 1/4 of Panel members work in Seattle -- 9% in downtown Seattle.
- 16% work in south King County.
- 12% work in Tacoma -- nearly 3/4 of all those who work in Pierce County.





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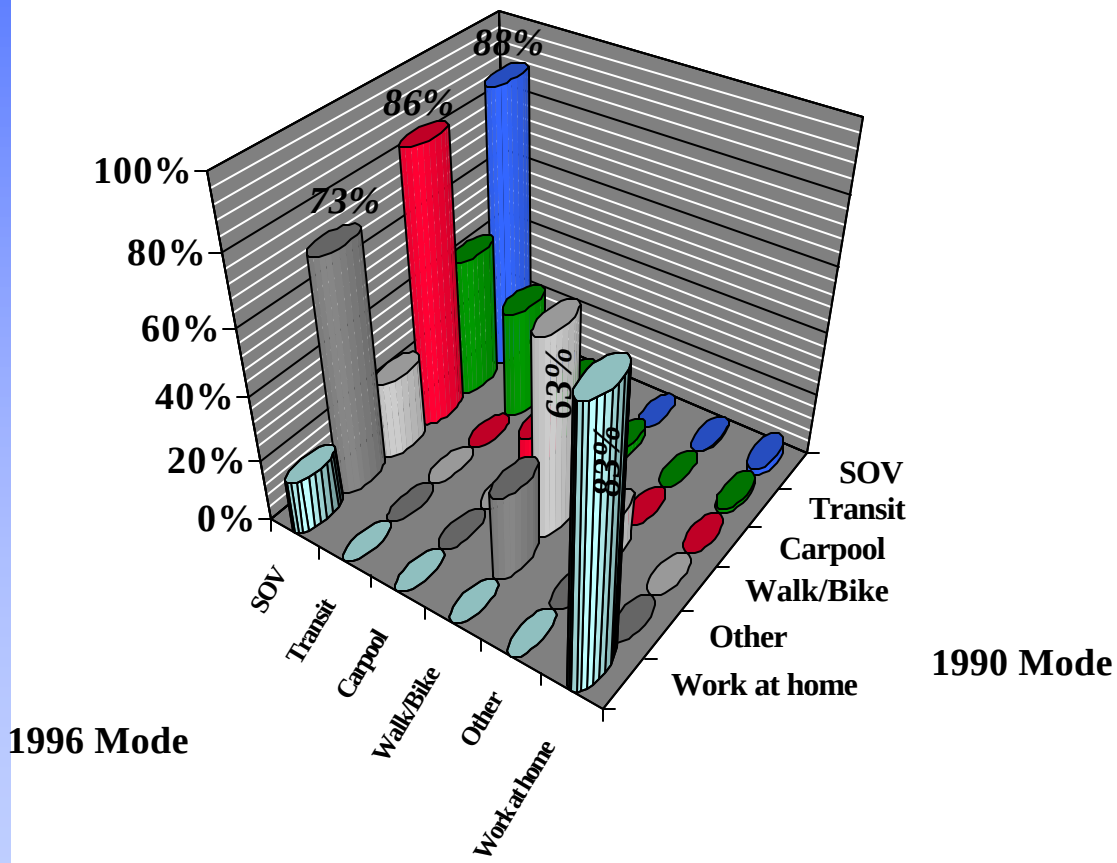
CHANGE in MODE to WORK, 1990-1996



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Transportation Panel Survey (Wave 7)

Personal Daily Travel Choices Survey (ITS Supplemental)

Monica Welle

August 6, 1998

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ITS Supplemental

- **Sponsored by Regional Council, WSDOT, & USDOT**
- **Wave 7 Analysis by Regional Council & Volpe Center**
- **Additional Analysis with Wave 9 (1999)**

Survey Results

- **Examples of Questions & Results**
- **Unweighted Results**
- **Individual Responses**

Survey Questions

- **Travel Behavior**
- **Use of Technology**
- **Attitudes Related to Transportation**

Travel to Work/School

- *Q: Think about the means of travel you most often use when you go to your workplace. Check all the types of transportation you use as part of your way of getting there.*

Vehicle	**88.6%**
Bus	**15.6%**
Walk	**9.1%**
Bike	**3.4%**
Ferry	**2.9%**
Vanpool	**2.1%**

Work/School Schedule

- *Q: Which of the following statements best describes your working hours or the times you have to be at school or college? (Check only one)*

– **No flexibility**	**46.8 %**
– **Not more than 30 minutes**	**28.0%**
– **Free to adjust schedule**	**25.2%**

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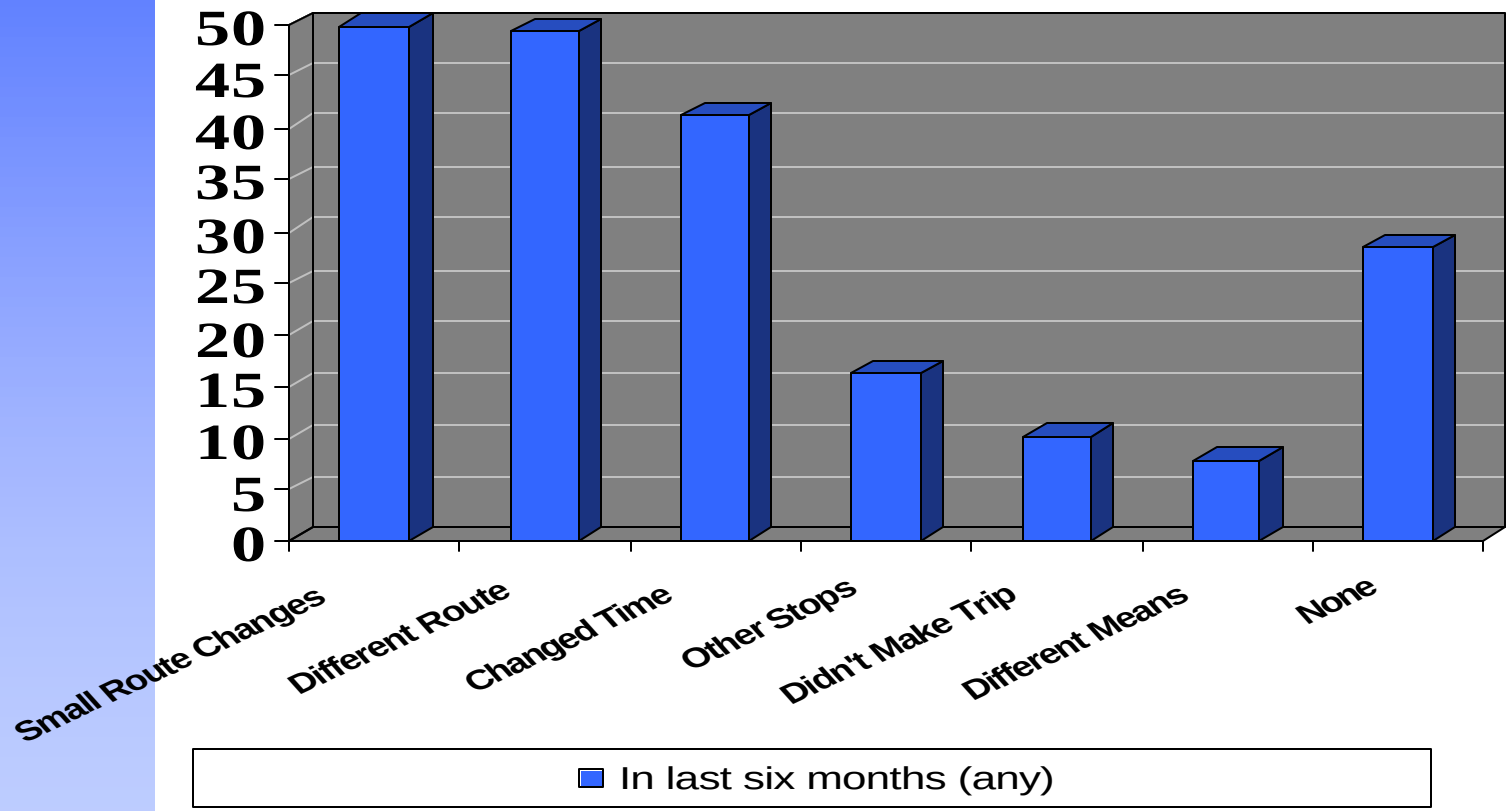
Travel Responses (% by vehicle users)



Q: Have you done any of the following for your trip to work/school as a result of learning about traffic problems before you left for your trip?

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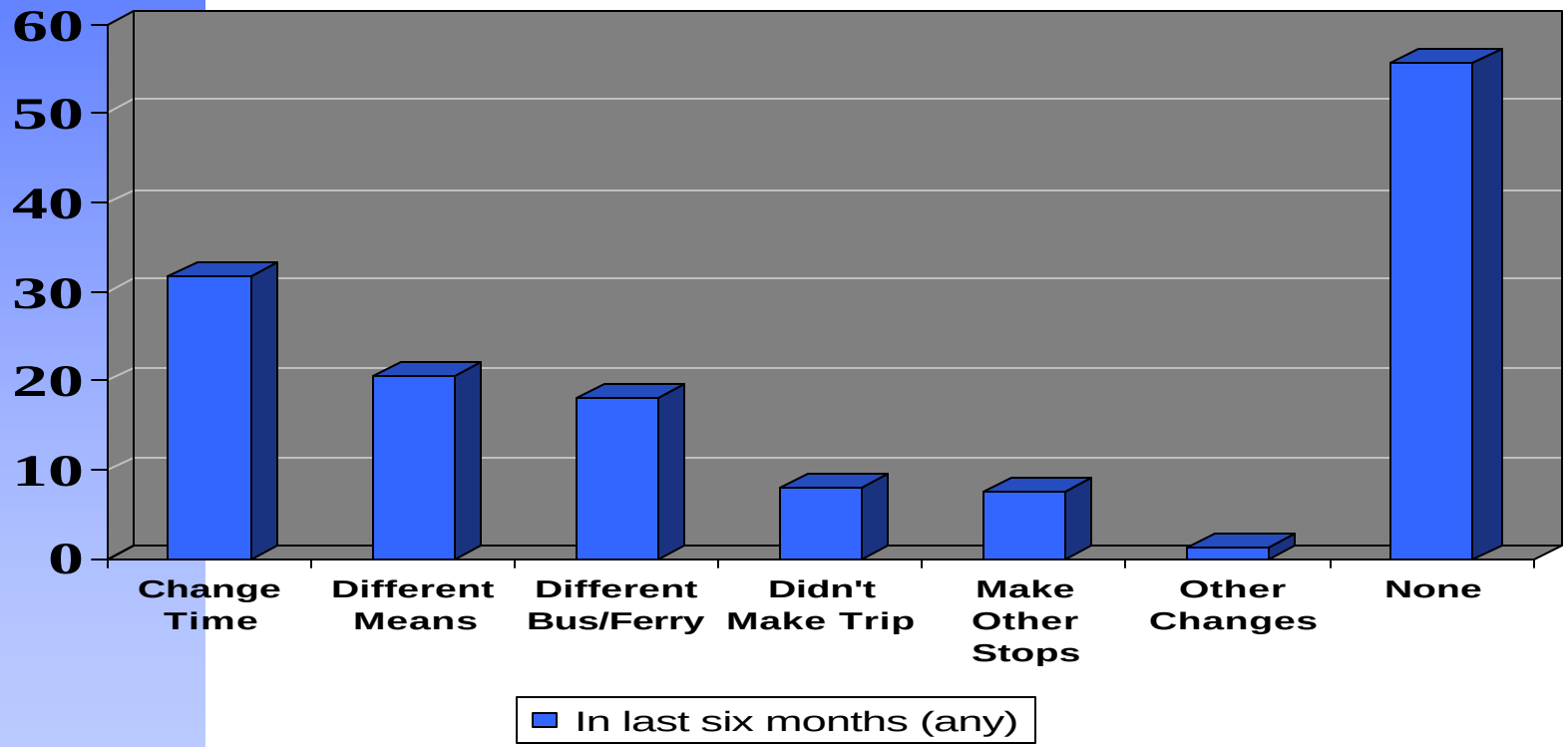
Travel Responses (% by bus/ferry users)



Q: Have you done any of the following for your trip to work/school as a result of learning about bus/ferry problems before you left for your trip?

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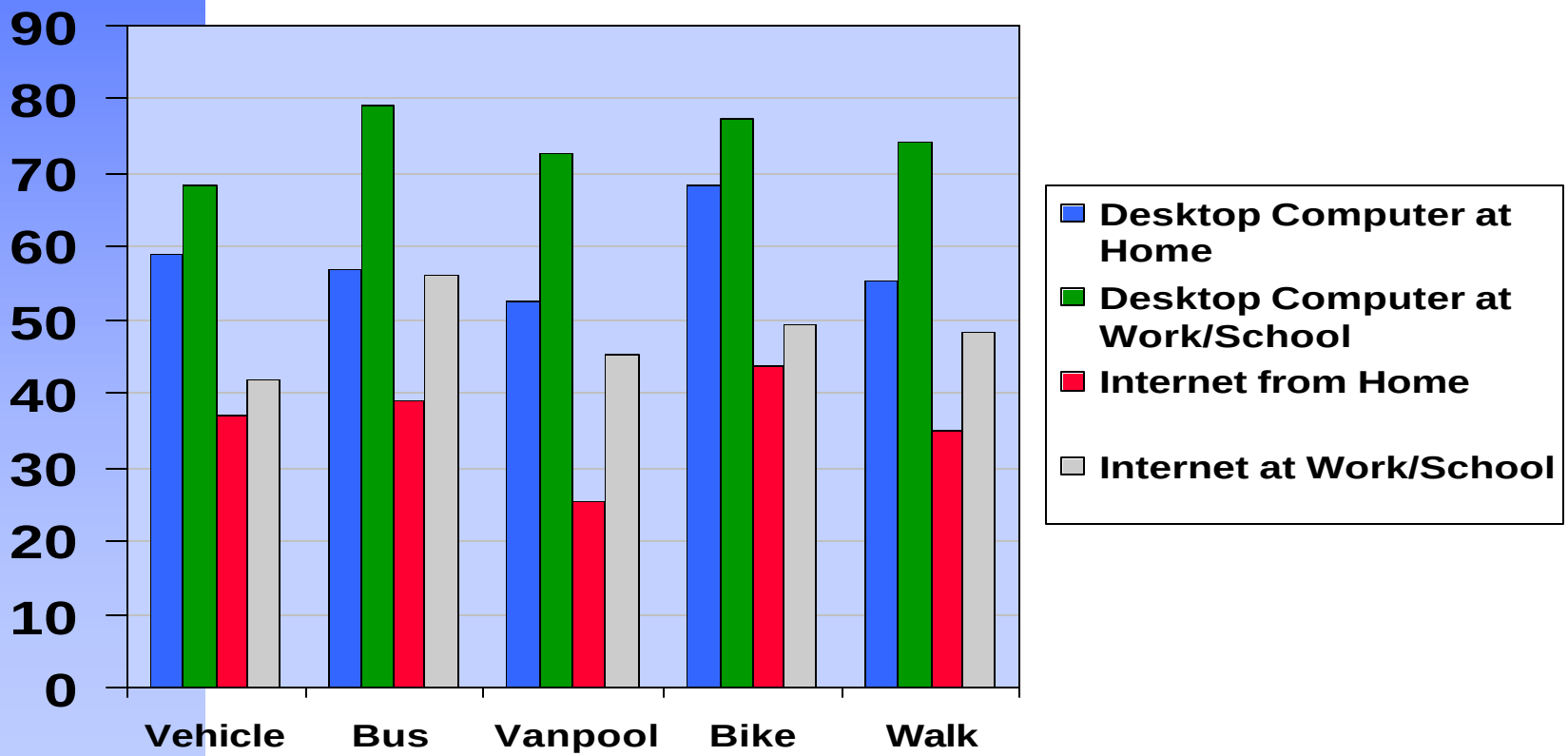
Electronic Equipment (%)



Q:Which of the following do you personally use at least once a week on average? (Check all that apply)

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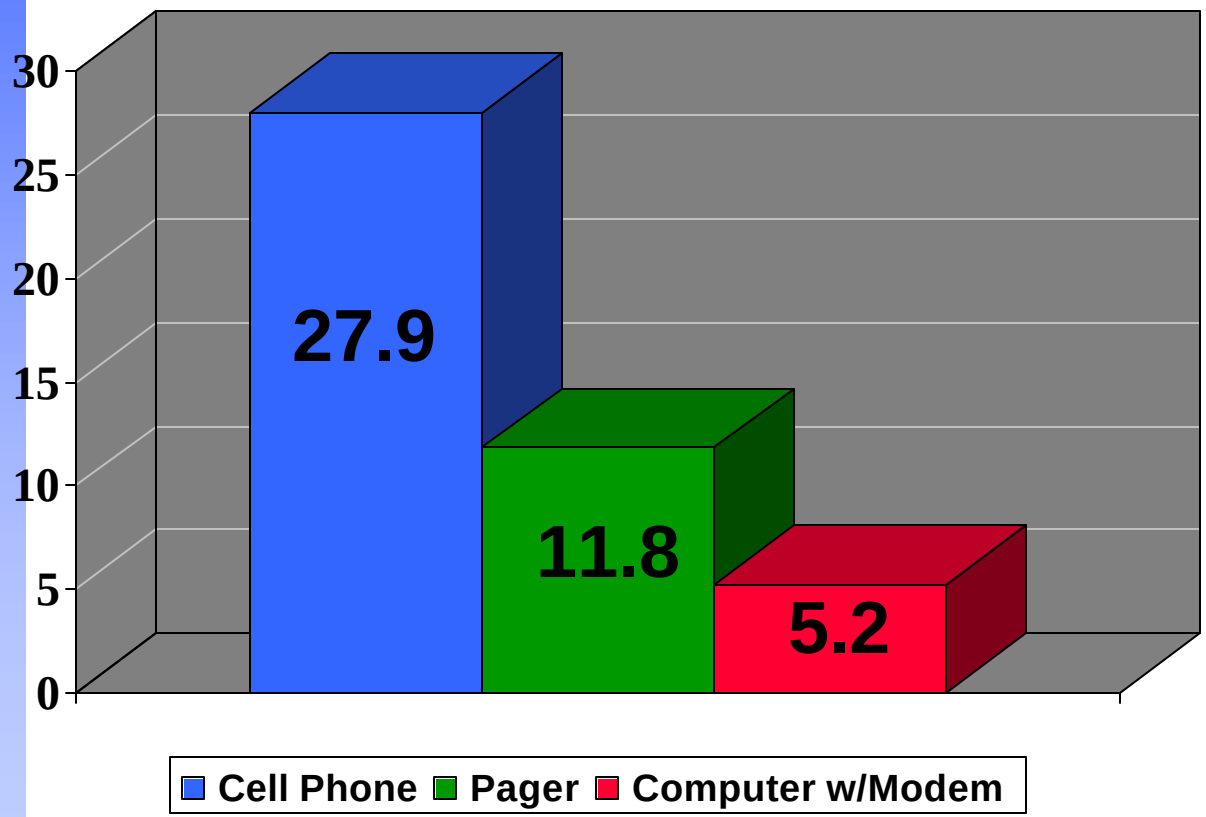
Information Services (%)



Q: Which of the following do you carry with you at least ten times a month? (Check all that apply)

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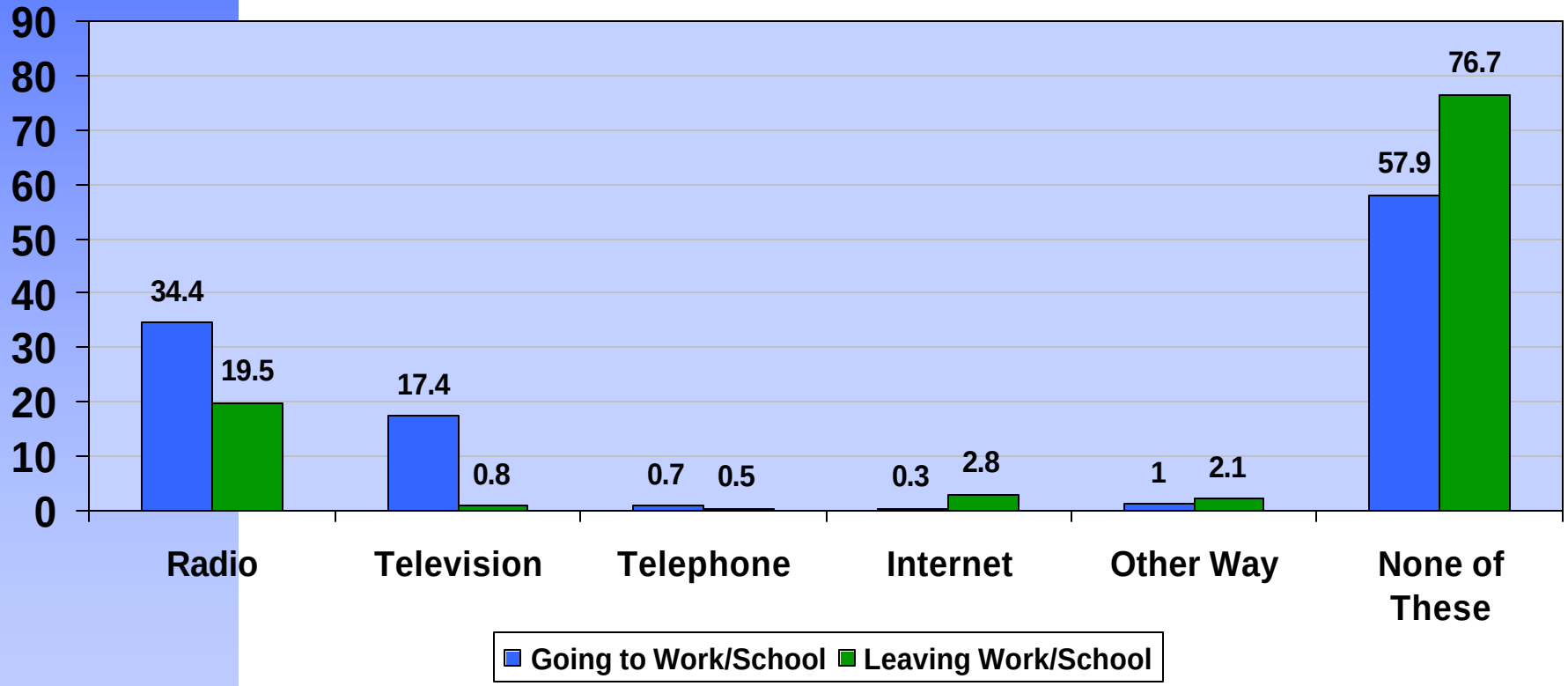
Information Sources (%)



Q: Before you go to or leave from work or school, which of the following do you do most days? (Check all that apply)

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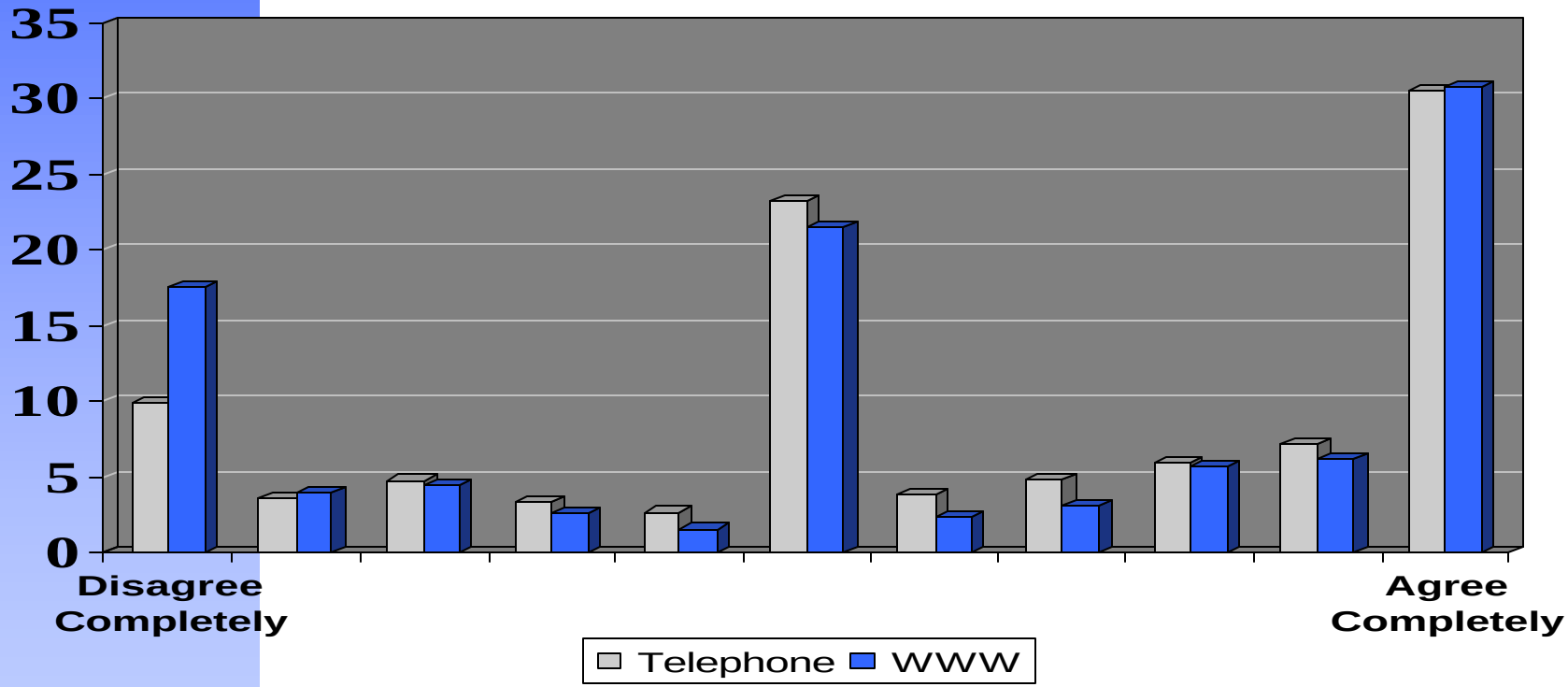
Internet/Telephone Information (% by bus/ferry users)



- *I don't know where to call to get **telephone** traffic reports.*
- *I don't know where to find Puget Sound area transit info on the **WWW**.*

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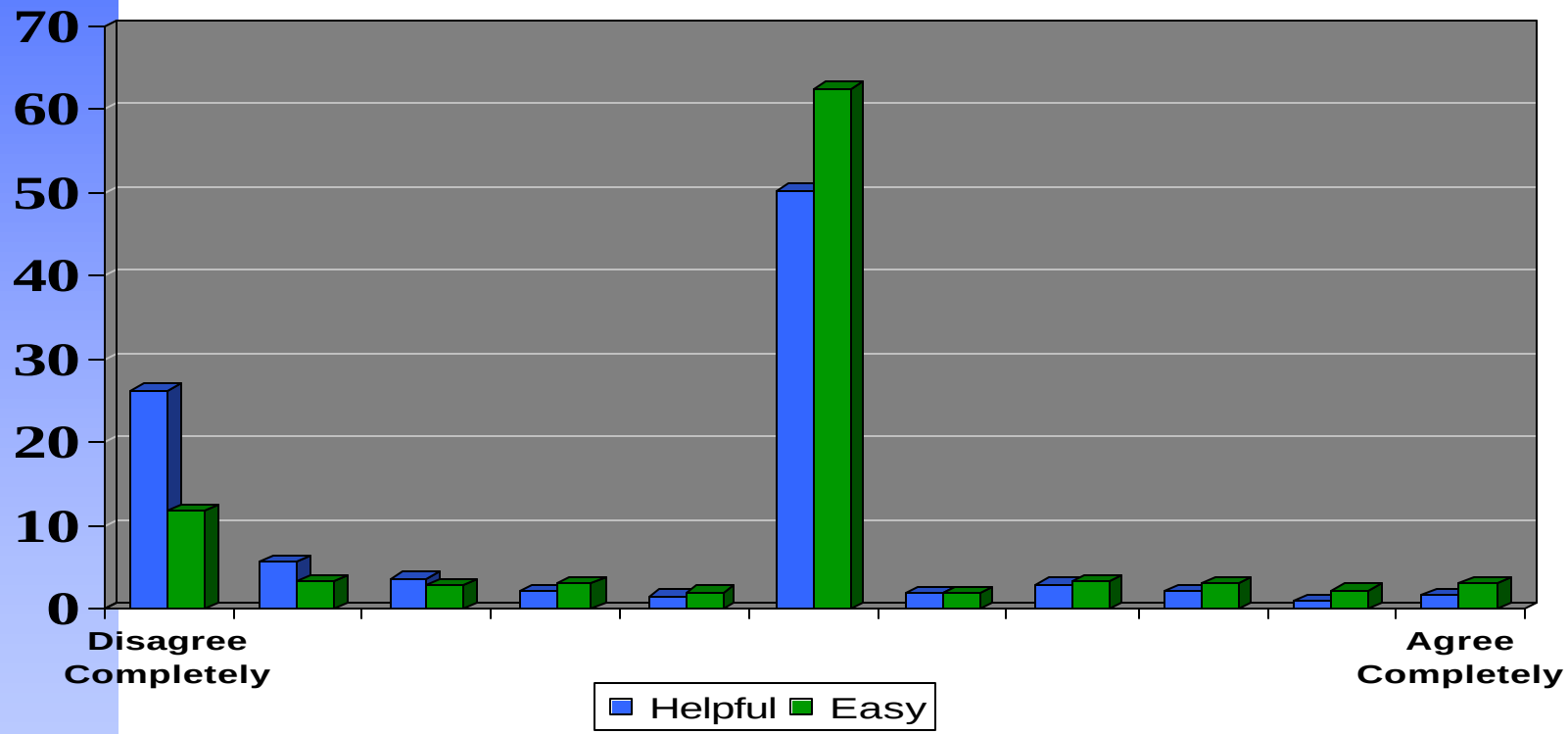
Internet (% by vehicle users)



•*Using the WWW to check on Puget Sound area traffic problems is* ***helpful*** *in making travel decisions.*

•*Puget Sound area traffic reports on the WWW are* ***easy*** *to obtain.*

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Summary

- **Sample Questions & Results**
- **More Analysis in Next Couple Months**
- **Preliminary Findings:**
  - **Access to Work/School Computer +**
  - **Use of Transportation Information -**
    - **Radio, TV, etc.,**
    - **Internet and Telephone**