

Costs and Trip Rates of Recent Household Travel Surveys

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Are you planning a travel survey for your region? Learn what others have experienced.

- How big a sample is typical for cities like mine?
- What do surveys cost, for cities like mine?
- Do costs vary geographically?
- Are costs increasing over time? How fast?
- How much do 'activity' or 'trip' formats cost?
- What cities have recently done 2-day surveys?
- What is the cost for a second day?
- What cities have recently done weekend days?
- What cities have used GPS or web-based designs?
- What are typical trip rates for cities like mine?
- Are trip rates increasing or decreasing over time?
- What is the range of average trip rates, for cities like mine?

Overview

Travel surveys are a staple of transportation planning. They are conducted regularly by regional planning agencies and states, sometimes in conjunction with larger national surveys. Their primary uses are in describing local travel patterns, updating travel models, evaluating major project proposals and monitoring travel trends.

Because of their wide communality, several reviews of travel surveys have been conducted, and several manuals of practice prepared. The University of Minnesota¹ has recently established a repository for travel survey data and reports which contains information on about 73 surveys. Stopher² et. al. summarized the state of the practice in travel surveys, concentrating on survey methodology, question format and categories, and data processing-coding. The Travel Survey Committee of TRB has recently initiated the

¹ Center for Transportation Studies, University of Minnesota, Metropolitan travel survey archive, www.surveymethods.org

² Peter R. Stopher et. al., Standardized Procedures for Personal Travel Surveys, Report 571, National Cooperative Highway Research Program, TRB, 2008. Available at www.trb.org

wiki-edited development of a revised survey manual³ building on Stopher's work. In a 1996 report⁴, Stopher and Metcalf synthesized the methods used in 55 travel surveys conducted primarily in the 1970s and 1980s. Also in 1996, Cambridge Systematics Inc⁵. prepared a detailed manual on the conduct of various travel surveys; the Appendix A to this document discusses cost estimation principles, quotes a widely-noted \$ 100/household rate, and gives examples of cost calculations for external surveys. In a slightly later review, TMIP⁶ summarized the characteristics of 55 largely US travel surveys. In 1995 Axhausen⁷ prepared an international 'survey of surveys' summarizing the question structure of a large number of primarily European-Australian travel surveys, but including about 15 from the US. Richardson et. al⁸. provide guidance on travel survey design; and an earlier USDOT overview⁹ provides documentation of survey methods from the 1960's. As useful as these documents are, however, none provide basic empirical cost information needed to efficiently plan surveys. As newer methods and an increasing focus on 'activity' surveys emerge, it is useful to have a periodic assessment of the cost of these surveys and an overview of their results.

This brief report is intended to summarize, in shorthand form, the costs and primary results from about 115 travel surveys, in a range of metropolitan areas from the largest down to very small regions, and about 17 'statewide' surveys. Most of the surveys are from the US, but a few are from Canada and overseas. They cover many (but certainly not all) surveys conducted over a 20-year period, from 1988 to 2009. The review focuses on 'administrative' data for survey planning purposes:

- Costs and 'unit' (per completed sample) costs.
- Cost trends over time
- Cost estimation models.
- Sample sizes.
- Survey types.
- Household and person trip rates.
- Trip rate trends over time.
- Contact names and emails.

This review is not intended for detailed planning or questionnaire design, or detailed results comparison. For that, the University of Minnesota website is a useful resource, with primary documents. Rather, it is intended to provide basic planning

³ Transportation Research Board, Travel Survey Committee website for the manual, <http://trbtsm.wiki.zoho.com>, 2009.

⁴ Peter R. Stopher and H. Metcalf, Methods for Household Travel Surveys, NCHRP Synthesis 236, TRB, 1996. Available at www.trb.org.

⁵ Cambridge Systematics Inc., Travel Survey Manual, Federal Highway Administration, June 1996. Available at: <http://ntl.bts.gov/lib/4000/4500/4529/1392.pdf> (main document), and <http://ntl.bts.gov/lib/4000/4500/4530/1392a.pdf> (appendices).

⁶ Travel Model Improvement Program (TMIP), *Scan of Recent Travel Surveys*, Travel Model Improvement Program, Report DOT-T-97-08, U.S. Department of Transportation and U.S. Environmental Protection Agency, Washington, DC.

⁷ Kay Axhausen, Current Trends in Travel Demand Data Gathering, 1995.

⁸ A.J. Richardson, Elizabeth Ampt and Arnim Meyburg. *Survey Methods for Transport Planning*, Eucalyptus Press, Melbourne, 1995.

⁹ U.S. Department of Transportation, Federal Highway Administration, *Urban Origin-Destination Surveys*, Washington, D.C., 1973 (reprinted 1975).

nformation needed to begin the process of survey design, and to provide contact names for particular survey features that may be of interest.

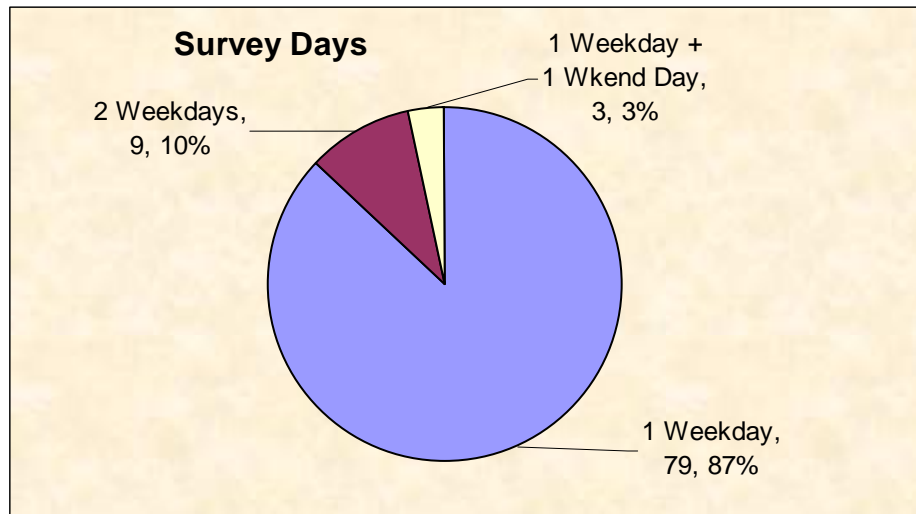
This review is being updated regularly, and therefore the authors would appreciate other surveys, and of course revisions, being brought to their attention.

Results:

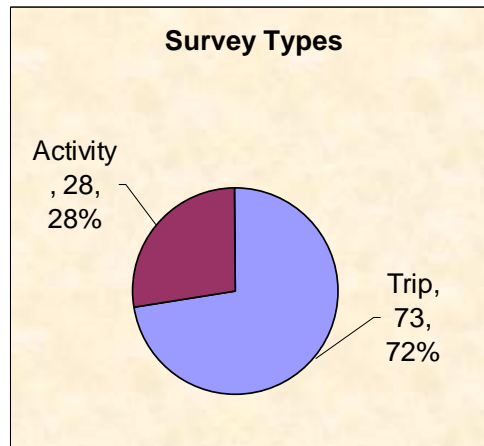
The following graphics and brief points summarize the primary findings of the review. These findings are preliminary, since they are continually being updated.

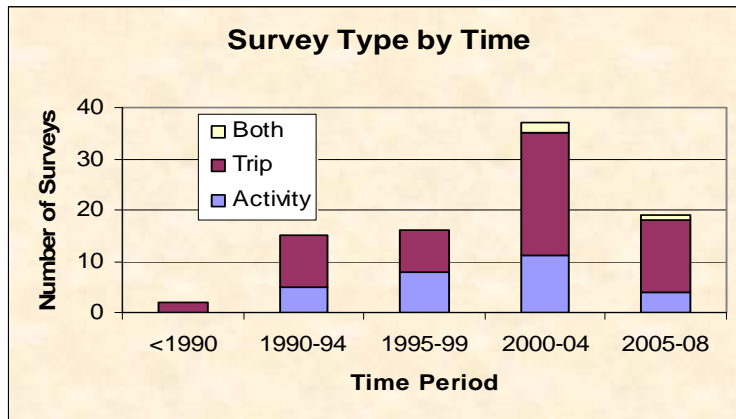
A. Descriptive

- Most travel surveys continue to be 1-day weekday surveys, although a few (9 of 91 reporting) are for 2 weekdays, and 3 are for weekdays and one weekend day. However, most of the surveys not reporting this statistic (about 24) are likely to be 1-day weekday surveys.



- 'Activity' format surveys are about 1/3 of the total but are increasing relatively over time; about 28 surveys were reported as 'activity' focused, and about 73 as 'trip' focused.

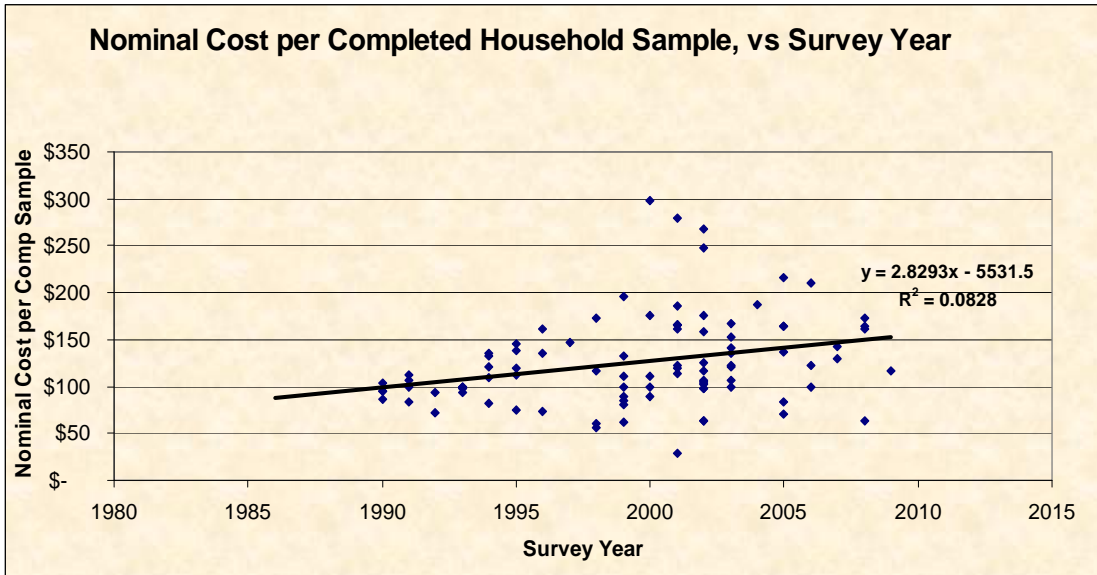




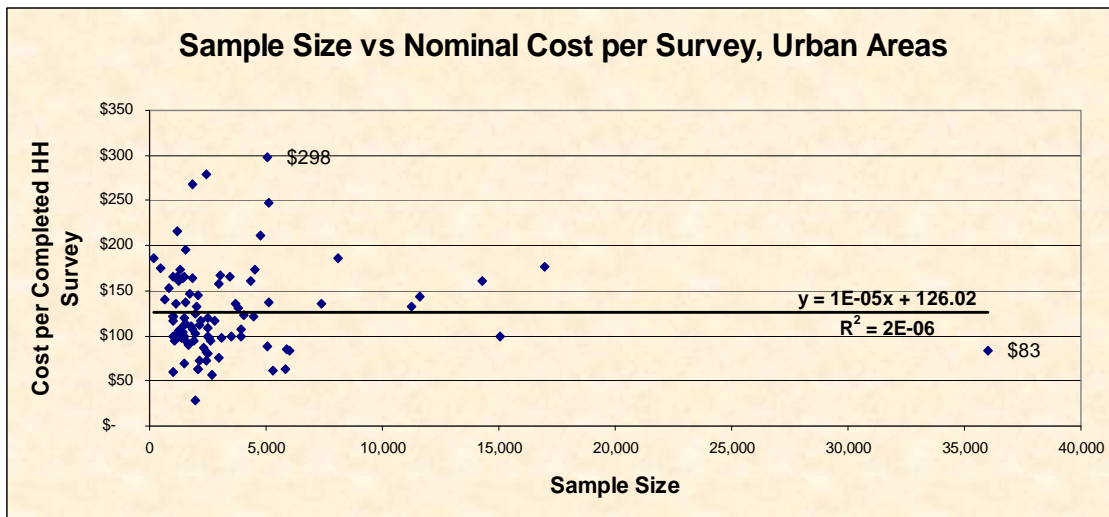
B. Nominal Costs

- Comparative survey costs are difficult to determine since surveys vary widely in length, content, planning and processing. We used here, the contract survey costs, which normally include design, sampling, training and conduct, and also typically include documentation, some coding and processing but not modeling.
- Based on our review, we estimate the average cost of a survey at about \$ 487,000, implying a total 2-decade survey budget of about \$ 194.8 million for 400 regions, or about \$ 9.7 million annually. This is somewhat higher than Stopher and Metcalf's estimate of \$ 7.4 million annually¹⁰, in 1996.
- The nominal (year of survey) unit costs for household travel surveys have been rising over time, from about \$ 105 per completed sample in the late 1980's, to an average of about \$ 150 per completed sample, recently. However, many surveys cost considerably more than the average, and the spread of the data is substantial. During this period, survey costs have increased about \$ 2.83 per sample per year. However, this increase includes inflation.

¹⁰ Stopher and Metcalf (1996) estimated survey costs at about \$ 7.4 million annually in the US, based on an average cost of \$ 400,000 per survey and assuming that ½ of regions conducted surveys per decade.



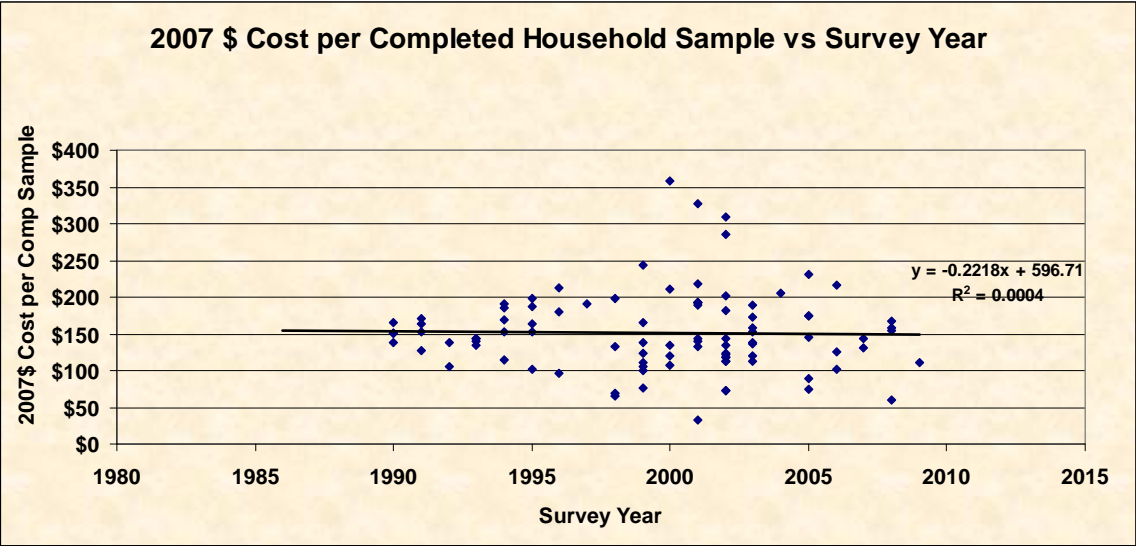
- Survey costs decline very slightly with increasing sample size, a very small ‘economy of scale’.



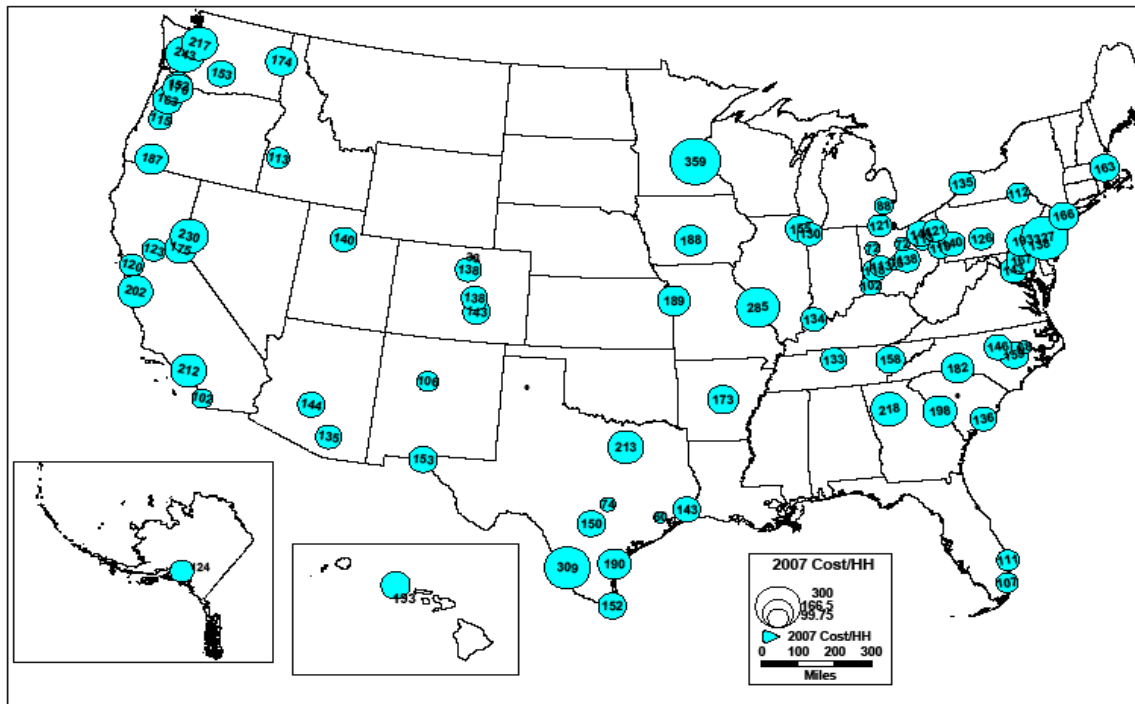
C. Survey Costs Adjusted for Inflation

- However, when adjusted for inflation (i.e., what the survey would have cost if conducted in 2007, using national CPI growth rates), survey costs are estimated to average about \$ 529,000 in 2007 dollars, implying a ‘going forward’ annual national cost of travel surveys of about \$ 10.6 million annually.
- The average 2007 cost per completed sample has actually *declined slightly* over the past several decades, from about \$ 155 per completed sample in 1990 (in \$2007) to about \$ 151 in 2008, a decline of about \$ 0.22 per year over the

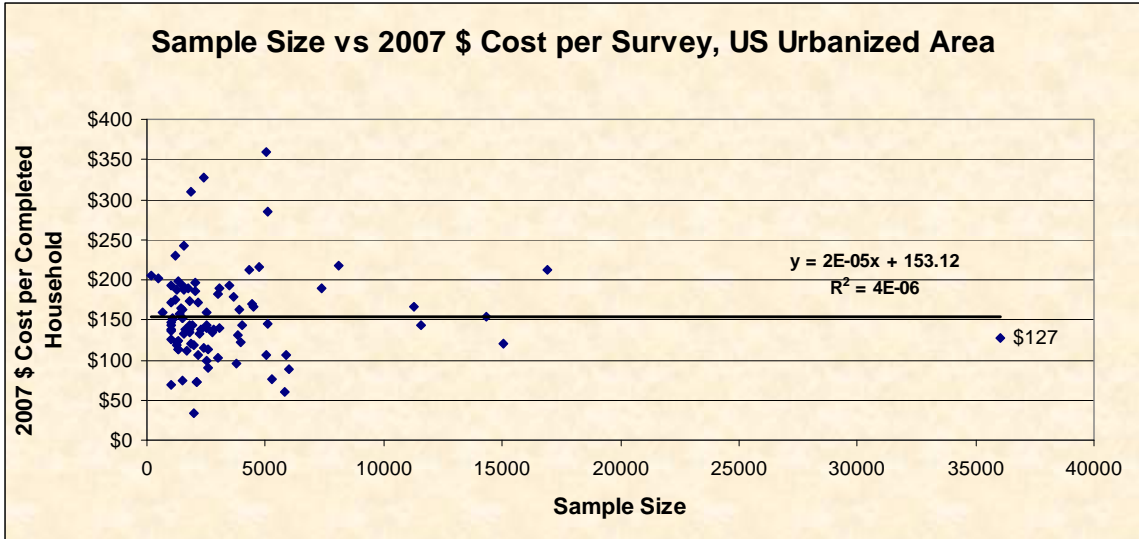
past two decades. However many recent surveys conducted since 2000 have cost much more than the average, some as much as \$ 300-\$350 per sample.



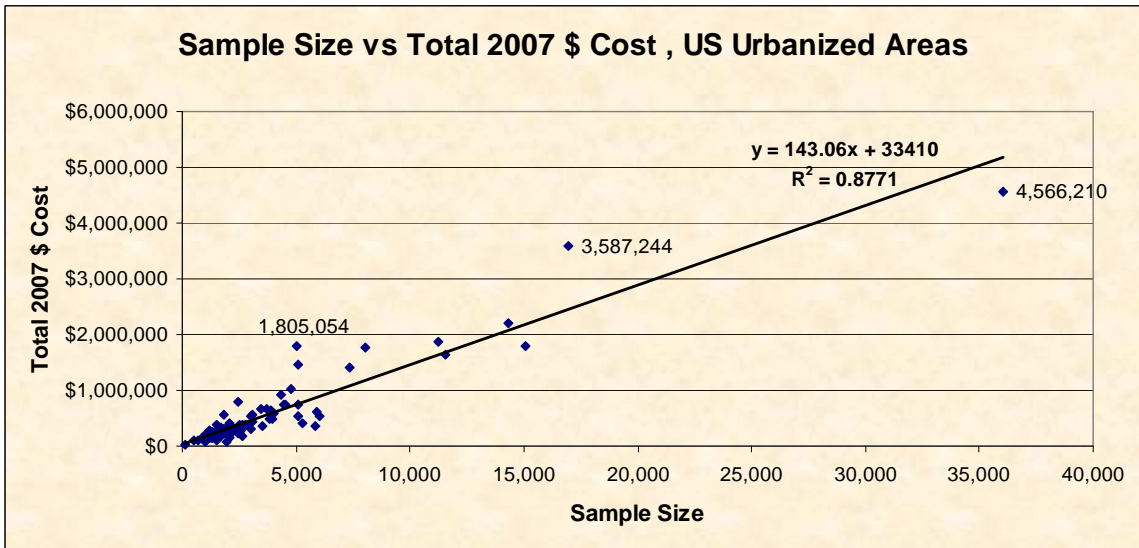
- The geographic distribution of unit survey costs (2007\$) is shown in the following figure. While there is clearly some slight tendency for ‘mid-US’ surveys to cost less, per completed sample, than ‘coast State’ surveys, the effect is probably not significant. Nevertheless, the tendency of large-city ‘coastal’ cities to cost more, per unit, cannot be overlooked. More research is needed to determine whether this is a ‘cost-of business’ effect, or perhaps something related to survey length or other factors.



- Unit costs for surveys decline with increasing sample size. For surveys of about 500-600 samples, costs in the range of \$ 140-160 per completed sample might be typical, while for larger surveys, in the 1000-sample range, costs range from \$ 100-\$ 250/sample. Generally, costs per sample decline by about \$0.02 for each increased sample.
- However when adjusted for \$ 2007 prices, the relationship is flatter; per-sample costs decline about \$0.01 for each added sample. However, both relationships are quite weak.



- As expected, *total* survey costs (\$2007) increase linearly with sample size. The following graphic suggests that the increase is about \$ 143 per completed sample, with a ‘base’ cost of about \$ 34,000. So, a 1000-completed sample survey might be expected to cost about \$ 177,000 or about \$ 177/completed sample.



- The following two ‘2007\$ cost models’ have been developed from the 78 surveys for which full data is available:

$$\begin{aligned}
2007 \text{ \$ Total survey cost} &= - 30440 \\
&+ 11.74 \text{ Pop07K} && \text{(regional population)} \\
&+ 133.90 \text{ Sample Size} \\
&+ 93716 \text{ (Number of Survey Days: 1, 2, ..)} \\
&- 75718 \text{ ("1" if "activity" format)}
\end{aligned}$$

$$\begin{aligned}
N &= 78 \\
RSQ &= 0.90
\end{aligned}$$

$$\begin{aligned}
2007\$ \text{ Unit survey cost (per completed household)} \\
&= 121.11 \\
&+ 0.0014 \text{ Pop07K} \\
&- 0.0007 \text{ Sample Size} \\
&+ 29.71 \text{ (Number of Survey Days: 1, 2, ..)} \\
&- 20.33 \text{ ("1" if "activity" format)}
\end{aligned}$$

$$\begin{aligned}
N &= 78 \\
RSQ &= 0.06
\end{aligned}$$

While the first model is stronger, it is an ‘aggregate’ model based on total costs. The second model, estimating per-sample costs, may be more useful for planning.

A simple example will illustrate the use of these models. Consider a proposed household survey, one-day, activity format, 1000 households, for a region of 1.5 million persons. The estimated cost is:

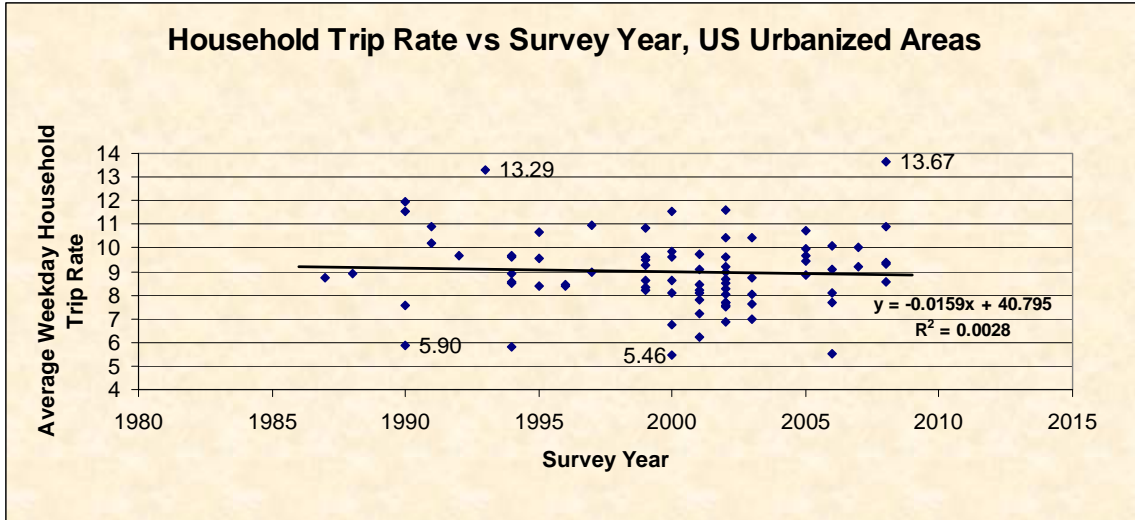
$$\begin{aligned}
\text{Total Cost} &= - 30440 + (11.74)(1500) + (133.9)(1000) + (93716)(1) - (75718)(1) \\
&= \$ 139,068, \text{ or } \$ 139.07 \text{ per completed sample.}
\end{aligned}$$

$$\begin{aligned}
\text{Unit cost} &= 121.11 + (0.0014)(1500) - (0.0007)(1000) + (29.71)(1) - (20.33)(1) \\
&= \$ 131.89, \text{ or } \$ 131,890 \text{ for 1000 samples.}
\end{aligned}$$

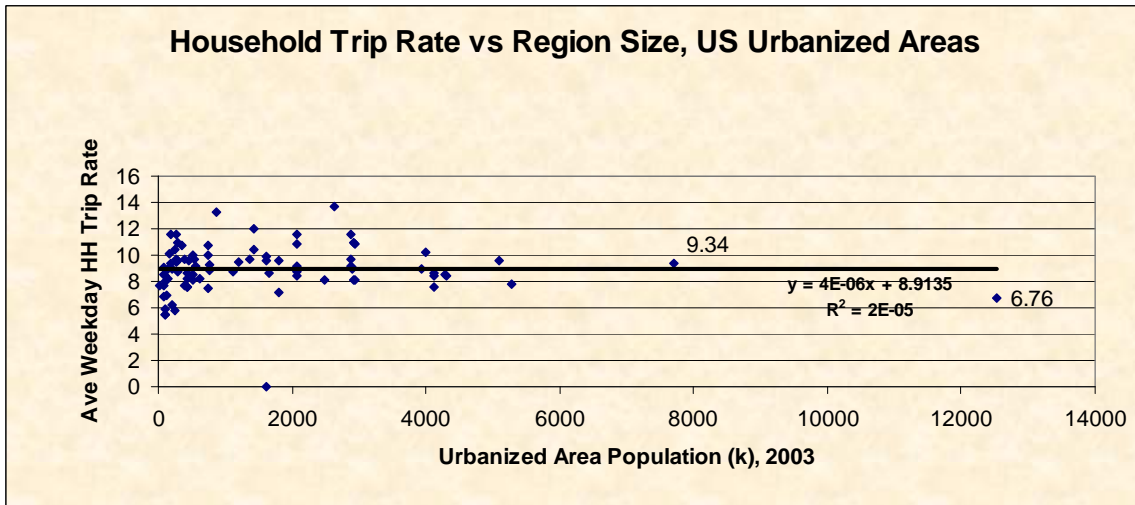
The effect of extra days’ in these models is interesting. In the first, the addition of a second day would add about 67% to the total cost. In the second model, adding an additional day would add about 23% to the total survey cost.

D. Household Trip Rates

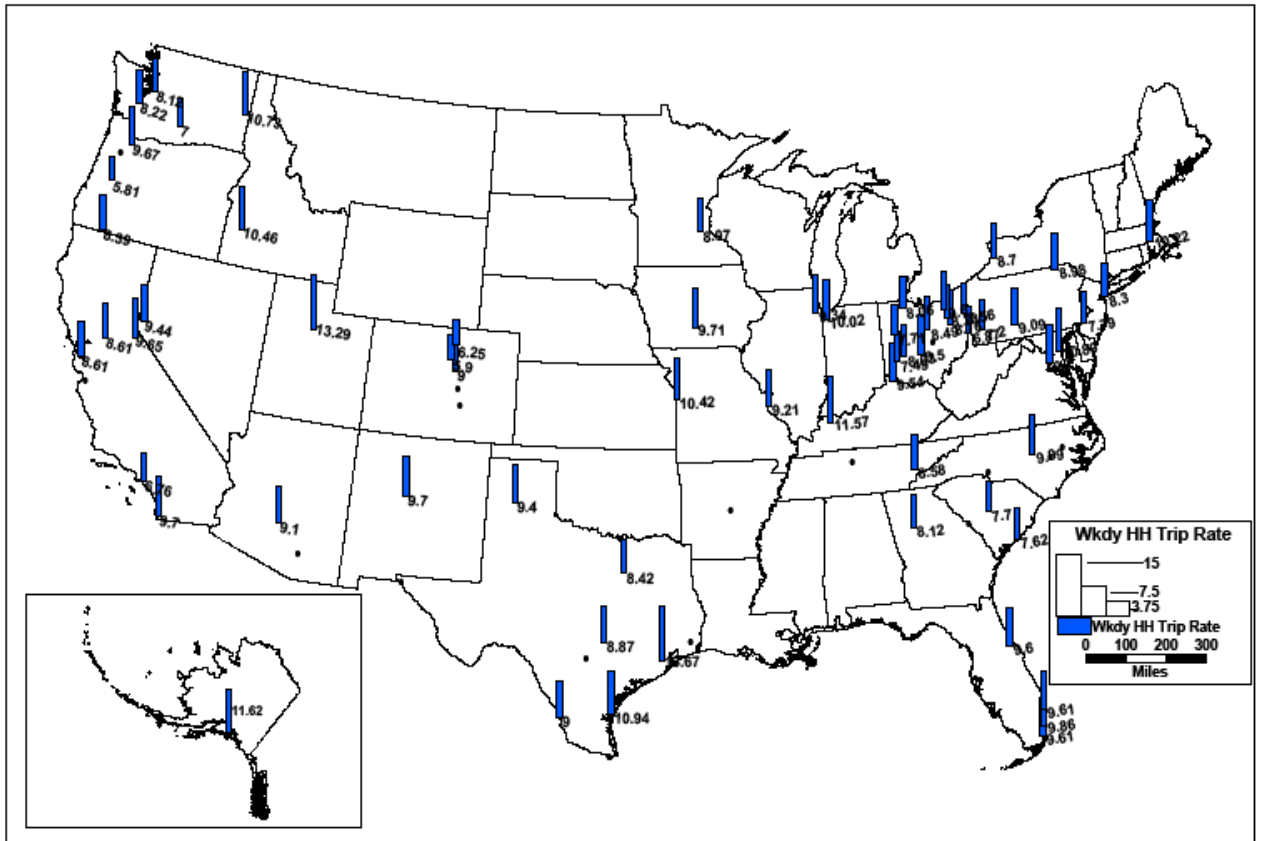
- Average weekday household trip rates have been quite stable, on average, over the past 2 decades, averaging about 9 trips per household, with many surveys, however, reporting somewhat higher or lower rates. Household trip rates seem to have fallen slightly over the past 20 years, from about 9.1 in 1990 to about 8.9 in 2008. However, the variation in rates is very large, and this may be merely the effect of variation in regional demographic and survey procedures, along with generally declining household size.



- There is some evidence that trip rates are slightly lower in larger regions. Trip rates seem to average about 8.9 for small regions, declining to about 8.75 for regions with 15 million persons. This effect is therefore quite small, about 1.7% difference (-0.15) between the smallest and largest regions. If true, it might be a combination of density and possibly demographic (income and household size) effects. The spread of the data is substantial.

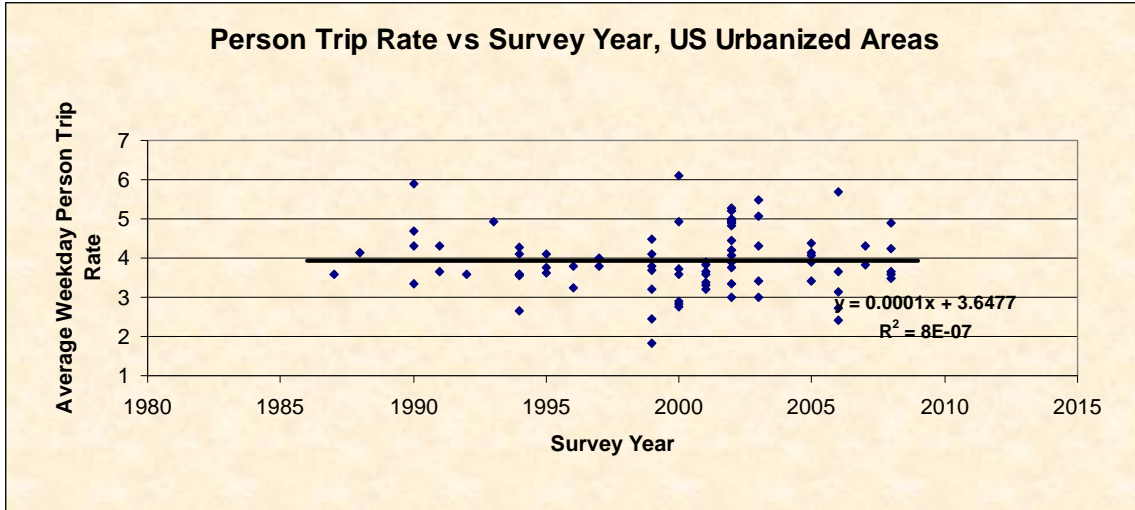


- While household trip rates vary quite widely, there is no obvious evidence that this is a geographic phenomenon. The following figure shows average trip rates for cities reporting across the US. The figure suggests that average trip rates seem to be a function of regional demographics rather than US location.

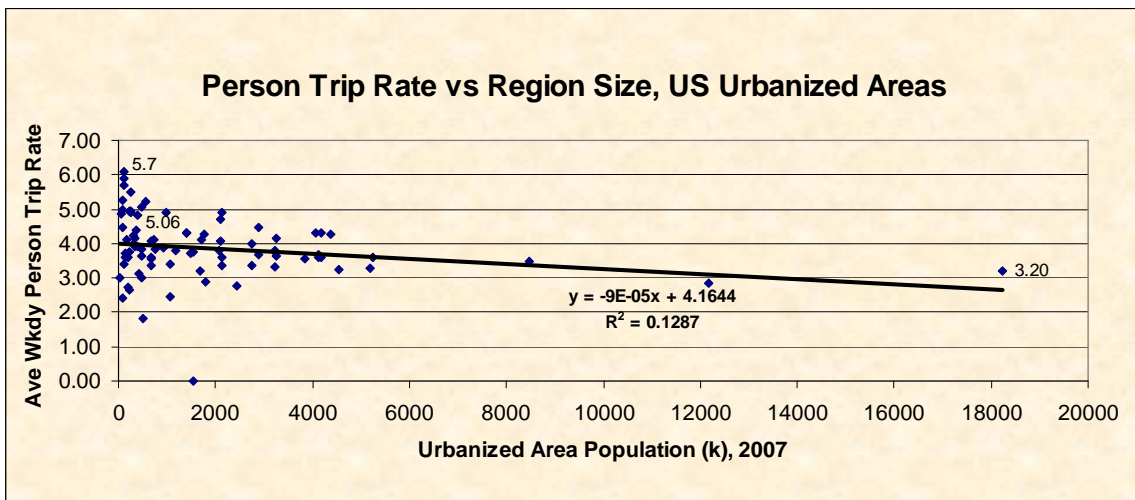


E. Person Trip Rates

- Average weekday person trips also seem to be largely stable over time. Over the past 2 decades, the average weekday person trip rate has been essentially flat, at about 3.90 – 4.00 trips per person.



- Person trip rates seem to be somewhat more sensitive to region size than household trip rates. On average, person trip rates decline from about 4.16 in small regions to about 3.2-to-3.6 in very large regions. They seem to decline slowly with increasing region size. This might be the result of smaller family sizes in large regions (imposing, on average, fewer travel-related activities), possibly different demographics (income), or possible density effects producing higher walk-bike shares which are often not surveyed in travel surveys. However, as in most of the relationships, the model is weak with considerable variation.



- The following table summarizes basic administrative information and costs for the surveys in the study. We appreciate the efforts of many MPOs, consultants and others in providing this information. We would appreciate being informed of

other surveys not listed, or new surveys underway, particularly those using innovative survey methods. We hope to update this listing regularly.

Administrative Summary of Recent Travel Surveys, Oct 27, 2009, The Hartgen Group, www.hartgen.com

Region or State	State Prov	2007 Pop K	Survey Year	Compl Sample Size	Nominal Cost per Compl Sample	Survey Days	Survey Type	Ave Wkday HH Trip Rate	Ave Wkday Person Trip Rate	Agency Contact	Contact Email
US Urbanized											
NY-NJ Metro	NY	18223	2009	in progr						Jorge Argote	jargote@dot.state.ny.us
NY-NJ Metro	NY	18223	1999	11,264	\$ 133	1 WD	Activity	8.30	3.20	Jorge Argote	jargote@dot.state.ny.us
Los Angeles Area, Southern CA	CA	12171	2000	16,939	\$ 176	1 WD	Trip	6.76	2.83	Javier Minjares	minjares@scag.ca.gov
Los Angeles Area, Southern CA	CA	12171	1991	36,037	\$ 83	1 WD	Trip	0.00	0.00	Javier Minjares	minjares@scag.ca.gov
Chicago Area	IL	8467	2008	14,315	\$ 161	1WD 1WE	Activity	9.34	3.47	Sandy Perpignani	sperpignani@cmap.illinois.gov
Miami-Dade Area, Southeast FL	FL	5244	2000	5,067	\$ 89	1 WD	Trip	9.61	3.60	Jose Luis Mesa	jlml1@miamidade.gov
Miami Area	FL	5244	1998	2,650	\$ 57	1 WD	Trip			Jose Luis Mesa	jlml1@miamidade.gov
Philadelphia	PA	5178	2001	2,425	\$ 279	1 WD	Trip	7.79	3.30	Matthew West	mwest@dvrpc.org
Dallas Area	TX	4549	1996	4,338	\$ 161	1 WD	Activity	8.42	3.24	Francisco Torres	ftorres@nctgoc.org
Houston/ Galveston Area	TX	4370	2008	5,810	\$ 63	1 WD	Activity	13.67	4.25	Sharon Ju	sharon.ju@h-gac.com
Houston/ Galveston Area	TX	4370	1996	2,443	\$ 73					Chris Van Slyke	chris.vanslyke@h-gac.com
Washington Area	DC	4174	2007	11,578	\$ 143	1 WD	Trip	9.20	4.30	Clara Reschovsky	creschovsky@mwkog.org
Washington Area	DC	4174	2004	150	\$ 187					Clara Reschovsky	creschovsky@mwkog.org
Washington, DC Area	DC	4174	1994	4,865		1 WD	Trip	8.57	3.59	Clara Reschovsky	creschovsky@mwkog.org
Atlanta Area	GA	4118	2001	8,069	\$ 186	2WD+Sat	Both	8.12	3.58	Guy Rousseau	grousseau@atlantaregional.com
Atlanta Area	GA	4118	1991	2,138	\$ 112	1 WD	Trip	10.90	3.67	Guy Rousseau	grousseau@atlantaregional.com
Boston Area	MA	4078	1991	3,906	\$ 107	1 WD	Activity	10.22	4.31	Karl Quackenbush	karlq@ctps.org
Detroit Area	MI	3832	2005	6,000	\$ 83					Carmine Palombo	palombo@semkog.org
Detroit Area	MI	3832	1994	7,361	\$ 136	1 WD	Trip	8.90	3.57	Carmine Palombo	palombo@semkog.org
Phoenix Area	AZ	3255	2001	4,018	\$ 123	1WD 1WE	Trip	9.10	3.64	Dr. Vladimir Livshits	vlivshits@mag.maricopa.gov
Phoenix Area	AZ	3255	1988	2,993		1 WD	Trip	8.93	4.14	Dr. Vladimir Livshits	vlivshits@mag.maricopa.gov
San Francisco Area	CA	3214	2000	15,064	\$ 100	2 WD	Activity	8.61	3.74	Chuck Purvis	cpurvis@mtc.ca.gov

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Region or State	State Prov	2007 Pop K	Survey Year	Compl Sample Size	Nominal Cost per Compl Sample	Survey Days	Survey Type	Ave Wkday HH Trip Rate	Ave Wkday Person Trip Rate	Agency Contact	Contact Email
San Francisco Area	CA	3214	1996	3,678	\$ 136	2 WD	Activity	8.40	3.78	Chuck Purvis	cpurvis@mtc.ca.gov
San Francisco Area	CA	3214	1990	9,359		1 WD	Trip	7.56	3.33	Chuck Purvis	cpurvis@mtc.ca.gov
Seattle Area	WA	2897	2006	4,746	\$ 211	2 WD	Activity	8.12	3.67	Neil Kilgren	nkilgren@pscr.org
Seattle Area	WA	2897	1999	5,874	\$ 85	2 WD	Activity	10.83	4.47	Neil Kilgren	nkilgren@pscr.org
San Diego Area	CA	2748	2006	3,536	\$ 99	1 WD	Trip	9.70	4.01	Kristen Rohanna	kroh@sandag.org
San Diego Area	CA	2748	1995	2,055	\$ 145	1 WD	Trip	9.20	3.35	Kristen Rohanna	kroh@sandag.org
San Diego Area	CA	2748	1986	1,107		1 WD	Trip	11.60		Kristen Rohanna	kroh@sandag.org
Minneapolis- St. Paul Area	MN	2438	2000	5,032	\$ 298	1 WD	Trip	8.07	2.76	Mark Filipi	mark.filipi@metc.state.mn.us
Baltimore Area	MD	2133	2008	4,500	\$ 173	1 WD	Trip	10.89	4.90	Robert Berger	rberger@baltimetro.org
Baltimore Area	MD	2133	2001	3,456	\$ 165	1 WD	Trip	8.45	3.37	Robert Berger	rberger@baltimetro.org
Baltimore Area	MD	2133	1987	2,692		1 WD	Trip	8.71	3.58	Robert Berger	rberger@baltimetro.org
St. Louis Area	MO	2103	2002	5,094	\$ 248	1 WD	Trip	9.21	4.08	Les Sterman	les.sterman@ewgateway.org
St. Louis Area	MO	2103	1990	1,446	\$ 104	1 WD	Trip	11.56	4.69	Les Sterman	les.sterman@ewgateway.org
Denver Area	CO	2088	1997	3,824		1 WD	Trip	9.00	3.80	Erik Sabina	esabina@drcog.org
Ft. Lauderdale Area	FL	1800	2000	5,168		1 WD	Trip	9.86	2.90		
Portland Area	OR	1780	1994	4,451	\$ 121	3 WD	Activity	9.67	4.29		
Cleveland Area	OH	1706	1994	1,408		1 WD	Trip	9.60	4.10	Renee Daniels	rdaniels@mpo.noaca.org
Pittsburgh Area	PA	1688	2001	2,500	\$ 120	1 WD	Trip	7.20	3.20	Kristin Baum	kbaum@spcregion.org
Cincinnati Area	OH	1547	2009	In proc		GPS Veh tracking	Trip			Andrew Rohne	arohne@oki.org
Cincinnati Area	OH	1547	1995	3,000	\$ 75	1 WD	Trip	9.54	3.77	Andrew Rohne	arohne@oki.org
Sacramento Area	CA	1489	1999	3,942	\$ 99	1 WD	Trip	8.61	3.70	Matt Carpenter	mcarpenter@sacog.org
San Antonio Area	TX	1441	1990	2,643	\$ 95					Stephanie Lee	slee@sametroplan.org
Kansas City Area	MO	1409	2003	3,049	\$ 167	1 WD	Trip	10.42	4.29	Mell Henderson	mellh@marc.org
Kansas City Area	MO	1409	1990	1,221		1 WD	Trip	11.97	4.30	Mell Henderson	mellh@marc.org

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Columbus Area	OH	1175	1999	5,300	\$ 61	1 WD	Trip	9.50	3.80	Robert Lawler	rlawler@morpc.org
Austin Area	TX	1052	2005	1,499	\$ 70	1 WD	Trip	8.87	3.42	Michael Dutton	michael.dutton@campotexas.org
Austin Area	TX	1052	1999	2,500	\$ 80	1 WD	Trip	9.27	2.45	Michael Dutton	michael.dutton@campotexas.org
Salt Lake City Area	UT	970	1993	3,082	\$ 97	1 WD	Activity	13.29	4.91	Wayne Bennion	wbennion@wfr.org
Buffalo Area	NY	927	2002	2,779	\$ 117	1 WD	Trip	8.70	3.89	Hal Morse	hmorse@gbnrtc.org
Charlotte Area	NC	913	2002	3,000	\$ 158					Joe McLelland	jwmclelland@ci.charlotte.nc.us
Nashville Area	TN	816	1998	2,200	\$ 116					Michael Skipper	skipper@nashvillempo.org
Tucson Area	AZ	779	1993	1,913	\$ 94					Cherie Campbell	ccampbell@pagnet.org
Gary Area	IN	750	2007	3,838	\$ 130	1WD 1WE	Trip	10.02	3.83	Bill Brown	wbrown@nirpc.org
Gary Area	IN	750	1995							Bill Brown	wbrown@nirpc.org
Honolulu/ Oahu Island	HI	735	2001	1,500	\$ 165					Lori Arakaki	lori.arakaki@oahumpo.org
Honolulu/ Oahu Island	HI	735	1995	4,060		1 WD	Trip	10.69	4.10	Lori Arakaki	lori.arakaki@oahumpo.org
El Paso	TX	693	1994	2,510	\$ 110					Roy Gilyard	rgilyard@elpasompo.org
Dayton Area	OH	683	2002	1,950	\$ 103	1 WD	Activity	7.49	3.35	Ana Ramirez	aramirez@mvrpc.org
Albuquerque Area	NM	681	1992	2,155	\$ 72	1 WD	Trip	9.70	3.60	Nathan Masek	nmasek@mrco-nm.gov
Raleigh-Durham	NC	670	2005	5,107	\$ 137	1 WD	Trip	9.99	4.06	Joe Huegy	jbhuegy@ncsu.edu
Raleigh Area	NC	670	1994	2,045	\$ 133	2 WD	Activity	8.50	3.54	Joe Huegy	jbhuegy@ncsu.edu
Akron Area	OH	567	2002	1,936	\$ 125	1 WD	Activity	8.24	5.22	Amy Pater	prateam@ci.akron.oh.us
Palm Beach Area	FL	501	1999	1,676	\$ 89	1 WD	Activity	9.61	1.83	Robert Weisman	public@co.palm-beach.fl.us
Wilmington Area	DE	500	2003	1,000	\$ 122					Dave Racca	dracca@udel.edu
Toledo Area	OH	484	2003	1,869	\$ 107	1 WD	Activity	8.06	5.06	Marc Vondeylen	vondeylen@tmacog.org
Charleston Area	SC	466	2003	1,000	\$ 121	1 WD	Trip	7.62	3.00	Ron Mitchum	ronm@bccog.com
Knoxville Area	TN	465	2008	1,400	\$ 164	1 WD	Both	8.58	3.64	Michael Conger	mike.cogner@knoxtrans.org
Knoxville Area	TN	465	2001	1,538	\$ 113	1 WD	Both	8.21	3.84	Michael Conger	mike.cogner@knoxtrans.org

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Columbia Area	SC	416	2006	1,000		1 WD	Trip	7.70	3.13		
Des Moines Area	IA	388	2001	1,231	\$ 161	1 WD	Trip	9.71	3.90	Tom Kane	tjkane@dmampo.org
Youngstown Area	OH	383	2002	1,251	\$ 105	1 WD	Activity	7.56	4.83	Kathleen Rodi	krodi@eastgatecog.org
Little Rock Area	AK	366	2003	856	\$ 153					Jim McKenzie	mckenzie@metroplan.org
Spokane Area	WA	363	2005	1,828	\$ 164	1 WD	Trip	10.73	4.39	Glenn Miles	contact.srtc@srtc.org
Augusta Area	GA	340	1998	1,300	\$ 173	1 WD	Trip			George Patty	gpatty@agustaga.gov
Lancaster Area	PA	337	2008							Janet Wall	jwall@padutchcountry.com
Lancaster Area	PA	337	2001	1,000	\$ 165					Janet Wall	jwall@padutchcountry.com
Lake Tahoe Basin Area	NV CA	332	2005	1,220	\$ 165	1 WD	Activity	9.65	3.90	Nick Haven	nhaven@trpa.org
Reno Area	NV	332	2005	1,200	\$ 217	1 WD	Trip	9.44	4.13	Peter Bang	pbang@rtcwashoe.com
Reno Area	NV	332	1990	1,050	\$ 95	1 WD	Trip			Peter Bang	pbang@rtcwashoe.com
Vancouver WA Area	WA	330	1995	1,500	\$ 112					Shinwon Kim	shinwom.kim@rtc.wa.gov
Boise Area	ID	311	2002	2,582	\$ 98	1 WD	Trip	10.46	4.22	Mary Waldinger	mwaldinger@compassidaho.org
Corpus Christi Area	TX	301	1997	1,712	\$ 147	1 WD	Activity	10.94	4.00	Victor Mendieta	victormendieta@swbell.net
Canton Area	OH	260	2003	1,319	\$ 100	1 WD	Activity	8.76	5.49	Bob Nau	ranau@co.stark.oh.us
Daytona Beach Area	FL	260	2002	1,397		1 WD	Trip	9.60	4.92	Karl Welzenbach	staff@volusiacountypmo.com
Anchorage Area	AK	239	2002	1,293	\$ 107	1 WD	Trip	11.62	4.96	Craig Lyon	lyonch@muni.org
Eugene Area	OR	237	1994	2,415	\$ 82	2 WD	Activity	5.81	2.64	Andrea Riner	ariner@lcog.org
Salem Area	OR	229	1995	1,500	\$ 120					Richard Schmid	rschmid@mwwcog.org
Ft. Collins (North Fr Range)	CO	221	2001	1,958	\$ 29	1 WD	Trip	6.25		Arvilla Kirchoff	akirchoff@nfrmpo.org
Evansville Area	IN	216	2000	1,800	\$ 111	1 WD	Trip	11.57	4.94	Bradley Mills	bmills@evansvillempo.com
Laredo Area	TX	212	2002	1,838	\$ 268	1 WD	Trip	9.00	3.75	Charlie Hall	cdhall@dot.state.tx.us
Brownsville Area	TX	202	2006					10.07	2.72	Mark Lund	bmmpo@cob.us
Brownsville Area	TX	202	1991	1,500	\$ 100		Trip			Mark Lund	bmmpo@cob.us

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Region or State	State Prov	2007 Pop K	Survey Year	Compl Sample Size	Nominal Cost per Compl Sample	Survey Days	Survey Type	Ave Wkday HH Trip Rate	Ave Wkday Person Trip Rate	Agency Contact	Contact Email
Amarillo Area	TX	190	2008	1,521		1 WD	Trip	9.40	3.60	Charlie Hall	cdhall@dot.state.tx.us
Salinas Area	CA	167	2002	500	\$ 176					Bhupendra Patel	bpatel@ambag.org
Olympia Area	WA	163	1999	1,537	\$ 195	2 WD	Trip	8.22	4.11	Thera Black	blackvt@trpc.org
Medford (Rogue Valley)	OR	140	1995	1,550	\$ 138	2 WD	Activity	8.39	3.61	Dick Converse	dconverse@vcog.org
Binghamton	NY	140	2009	1,034	\$ 116	1 WD	Trip	8.98	3.72	John Sterbentz	jsterbentz@co.broome.ny.us
Beaumont Area	TX	137	1993	2,500	\$ 100					Shaun Davis	sdavis@setrpc.org
Pueblo Area	CO	128	1993	1,000	\$ 100					Bill Moore	bmoore@peublo.us
Yakima Area	WA	117	2003	1,107	\$ 136					J. Page Scott	scottp@yvcog.org
Boulder Area	CO	108	2006	1,200		1 WD	Trip	5.50	5.70	Chris Hagelin	hagelin@boulder.colorado.gov
Boulder Area	CO	108	2000	1,241		1 WD	Trip	5.46	6.10	Chris Hagelin	hagelin@boulder.colorado.gov
Boulder Area	CO	108	1990	2,300	\$ 87	1 WD	Trip	5.90	5.90	Chris Hagelin	hagelin@boulder.colorado.gov
Greenville Area	NC	97	1998	1,000	\$ 60	1 WD	Trip			Daryl Vreeland	dvreeland@greenvillenc.gov
Springfield Area	OH	87	2002	1,349	\$ 98	1 WD	Activity	8.03	5.00	Greg Giaimo	greg.giaimo@dot.state.oh.us
Altoona Area	PA	80	2006	1,024	\$ 122	1 WD	Trip	9.09	2.41	John Ciprich	jciprich@state.pa.us
Steubenville Area	OH	80	2002	1,276	\$ 103	1 WD	Activity	6.87	4.46	John Brown	jbrown@bhjmpc.org
Mansfield Area	OH	71	2002	2,101	\$ 63	1 WD	Activity	8.49	5.27	Richard Adair	radair@rcrpc.org
Lima Area	OH	70	2002	2,098	\$ 63	1 WD	Activity	7.71	4.88	Thomas Mazur	tmazur@lacrpc.com
Newark Area	OH	65	1999	1,800	\$ 111					Jerry Brems	jbrems@lcounty.com
Goldsboro Area	NC	63	2003	675	\$ 141		Trip			Nora McCann	namccann@ncdot.gov
Pikes Peak Area	CO	35	2002	1,816		1 WD	Trip	7.70	3.00	Robert MacDonald	go to website to email www.ppacg.org
Pikes Peak Area	CO	35	1992	1,600	\$ 94	1 WD	Trip			Robert MacDonald	go to website to email www.ppacg.org
Statewide and Special											
Kentucky (4 rural counties)	KY	420	2001	1,000	\$ 165	1 WD	Trip			Lynn Soporowski	lynn.soporowski@ky.gov
UC Davis Campus (web based)	CA	45	2009	4,133		1 WD	Trip			Kristen Lovejoy	'kelovejoy@ucdavis.edu'

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Region or State	State Prov	2007 Pop K	Survey Year	Compl Sample Size	Nominal Cost per Compl Sample	Survey Days	Survey Type	Ave Wkday HH Trip Rate	Ave Wkday Person Trip Rate	Agency Contact	Contact Email
UC Davis Campus (web based)	CA	45	2002	1,024	\$ 30	1 WD	Trip		4.00	Kristen Lovejoy	'kelovejoy@ucdavis.edu'
58 Counties around CA	CA	25000	2001	17,040	\$ 113	1 WD	Trip	10.32	4.38	Diana Portillo	dianaportilla@dot.ca.gov
Texas	TX	23904	2001	3,500	\$ 165	2 WD	Trip			David Pearson	David-pearson@tamu.edu
New York	NY	19298	2001	13,423	\$ 134	1 WD	Trip	8.81	3.91	Jorge Argote	jargote@dot.state.ny.us
Ohio	OH	11467	2002	2,500	\$ 105	1 WD	Activity	7.92	4.94	Amy Prater	prateam@ci.akron.oh.us
Michigan	MI	10072	2004	14,996	\$ 140	2 WD	Trip	8.71	2.47		
New Jersey	NJ	8686	1987	3,700	\$ 38					James DeRose	
Wisconsin	WI	5602	2001	1,600	\$ 165					Ruben Anthony Jr	sec.exec@dot.stae.wi.us
Maryland	MD	5618	1991							Ron Spalding	rspalding@mdot.state.md.us
Maryland	MD	5618	1966							Ron Spalding	rspalding@mdot.state.md.us
Hawaii (less Oahu Island)	HI	550	2001	1,500	\$ 165					Brennon Morika	
Oregon	OR	3747	2008	19,000						Becky Knudson	rebecca.a.knudson@odot.state.or.us
Oregon	OR	3747	2005	1,828						Becky Knudson	rebecca.a.knudson@odot.state.or.us
Oregon (8 rural counties)	OR	1200	1996	3,200	\$ 114	2 WD	Activity	7.70		Becky Knudson	rebecca.a.knudson@odot.state.or.us
Sydney, AUS	X-AUS		2004	3,500						Tim Raimond	Tim.Raimond@transport.nsw.gov.au
London Area, UK	X-UK		2002	6,815						O. Christopherson	Olivia.christphersen@dft.gsi.gov.uk
Toronto Area, Canada	X-CAN		2006			1 WD	Trip	7.08	2.64	Gerry Steuart	stuart@ipint.utoronto.ca
Toronto Area, Canada	X-CAN		2001	30,000		1 WD	Trip	7.20	2.67	Gerry Steuart	stuart@ipint.utoronto.ca
Toronto Area, Canada	X-CAN		1996	30,000		1 WD	Trip	6.96	2.57	Gerry Steuart	stuart@ipint.utoronto.ca
Average			1999					8.94	3.88		

