



**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

Memorandum

Subject: Revised Departmental Guidance
Valuation of Travel Time in Economic Analysis

Date:

From: Emil H. Frankel 
Assistant Secretary for Transportation Policy

Reply to
Attn. of:

PBelenky
x65421

To:
Assistant Secretaries
Modal Administrators

On April 9, 1997, DOT published a memorandum, "Departmental Guidance for the Valuation of Travel Time in Economic Analysis" to assist analysts in developing consistent evaluations of actions that save or cost time in travel. That memorandum recommended an array of values for different travel purposes, modes and distances. The parameters specified for each category were: a normal percentage of hourly income; a range of percentages defining upper and lower bounds about the normal value for sensitivity testing; and an average hourly income level. Special values were assigned to walking and waiting time for transit passengers, travel by general aviation, and truck drivers.

While we find no necessity of altering the normal percentages of hourly income and the ranges of percentages that were assigned in the 1997 memorandum, more recent information is available from the several sources used to specify hourly incomes. Accordingly, we are publishing Revision 1 to the tables in that memorandum (Tables 1-8). Sources of data are identified on the tables. Tables 1 and 2 are unmodified but are included for completeness.

Links to the original guidance memorandum and to this revision will be found on the Transportation Policy website at: <http://ostpxweb.dot.gov> .

Attachment

Table 1 (Revision 1 - unmodified)

Recommended Values of Travel Time Savings (per person-hour as a % of wage rate)			
Category	Surface Modes*	Air Travel	Truck Drivers
Local Travel			
Personal	50%	--	--
Business	100%	--	100%
Intercity Travel			
Personal	70%	70%	--
Business	100%	100%	100%

* Surface figures apply to all combinations of in-vehicle and other transit time. Walk access, waiting, and transfer time should be valued at 100% of the wage rate when actions affect only those elements of transit time.

Table 2 (Revision 1 - unmodified)

Plausible Ranges for Values of Travel Time Savings (per person-hour as a % of wage rate)			
Category	Surface Modes*	Air Travel	Truck Drivers
Local Travel			
Personal	35-60%	--	--
Business	80-120%	--	100%
Intercity Travel			
Personal	60-90%	60-90%	--
Business	80-120%	80-120%	100%

* Surface figures apply to all combinations of in-vehicle and other transit time. Walk access, waiting, and transfer time should be valued at 100% of the wage rate when actions affect only those elements of transit time.

Table 3 (Revision 1)

Recommended Hourly Earnings Rates for Determining Values of Travel Time Savings (2000 U.S. \$ per person-hour)			
Category	Surface Modes	Air Travel*	Truck Drivers
Local Travel			
Personal	\$21.10	--	--
Business	\$21.20	--	\$18.10
Intercity Travel			
Personal	\$21.10	\$33.30	--
Business	\$21.20	\$40.10	\$18.10

* Hourly earnings of \$45.00 are to be used for general aviation passengers when they are included as a separate category.

Table 3 (Revision 1, continued)

Sources:

- (1) Local and intercity personal travel by surface modes: median income for all U.S. households in 2000 (\$42,148), divided by 2,000 hours per year. Reported in U.S. Census Bureau, *Income 2000*, Table 1 (<http://www.census.gov/hhes/income/income00/inctab1.html>).
- (2) Local and intercity business travel by surface modes: total compensation cost per hour worked in 2000 (\$21.16). Reported in Bureau of Labor Statistics, *Employer Costs for Employee Compensation, 1986-2001*, Table 1 (<http://stats.bls.gov/ncs/ect/sp/ecechist.pdf>).
- (3) Intercity personal and business travel by airline: weighted average incomes for domestic “business” and “other” trips, respectively, in 1998, divided by 2,000 hours per year. Reported in Air Transport Association of America, *Air Travel Survey, 1998*, Table D72. Escalated by the increase in median annual income for U.S. households from 1998 to 2000 (8.4%), from U.S. Census Bureau, *Income 2000*, Table 1 (<http://www.census.gov/hhes/income/income00/inctab1.html>).
- (4) Truck Drivers in local and intercity travel: median weekly earnings of full-time truck drivers for 2000 (\$564) divided by average weekly hours for full-time operators in transportation and material moving occupations (45.7 hours per week). Reported in Bureau of Labor Statistics, *Employment and Earnings*, January 2001, Tables 39 and 23 (<ftp://ftp.bls.gov/pub/special.requests/lf/aa2000/AAT39.TXT>, <ftp://ftp.bls.gov/pub/special.requests/lf/aa2000/AAT23.TXT>). Plus total benefits (\$5.80) from Bureau of Labor Statistics, *Employer Costs for Employee Compensation, 1986-2001*, Table 1 (<http://stats.bls.gov/ncs/ect/sp/ecechist.pdf>).
- (5) General aviation travelers: median annual income from 2000 survey of members by the Aircraft Owners and Pilots Association (\$90,000), divided by 2,000.

Table 4 (Revision 1)

Recommended Hourly Values of Travel Time Savings (2000 U.S. \$ per person-hour)			
Category	Surface Modes*	Air Travel**	Truck Drivers
Local Travel			
Personal	\$10.60	--	--
Business	\$21.20	--	\$18.10
All Purposes ***	\$11.20	--	--
Intercity Travel			
Personal	\$14.80	\$23.30	--
Business	\$21.20	\$40.10	\$18.10
All Purposes ***	\$15.60	\$28.60	--

* Surface figures apply to all combinations of in-vehicle and other transit time. Walk access, waiting, and transfer time should be valued at \$21.10 per hour for personal and \$21.20 per hour for business travel when actions affect only those elements of transit time.

** When a weighted average value for air travel must be constructed, the value of \$31.50 should be used for general aviation passengers on personal travel and that of \$45.00 for general aviation passengers on business travel.

Table 4 (Revision 1, continued)

*** Weighted averages, using distributions of travel by trip purpose on various modes. Distribution for local travel by surface modes: 94.4% personal, 5.6% business. Distribution for intercity travel by surface modes: 86.9% personal, 13.1% business. Distribution for intercity travel by air: 68.7% personal, 31.7% business. All figures derived from on-line analysis of PMT data from the *1995 Nationwide Personal Transportation Survey* at <http://www-cta.ornl.gov/npts/1995/Doc/index.shtml>

Table 5 (Revision 1)

Plausible Ranges for Hourly Values of Travel Time Savings (2000 U.S. \$ per person-hour)					
Category	Surface Modes*		Air Travel**		Truck Drivers
	Low	High	Low	High	
Local Travel					
Personal	\$7.40	\$12.70	--	--	--
Business	\$17.00	\$25.40	--	--	\$18.10
All Purposes ***	\$7.90	\$13.40			--
Intercity Travel					
Personal	\$12.70	\$19.00	\$20.00	\$30.00	--
Business	\$17.00	\$25.40	\$32.10	\$48.10	\$18.10
All Purposes ***	\$13.20	\$19.80	\$23.80	\$35.60	--

* Surface figures apply to all combinations of in-vehicle and other transit time. Walk access, waiting, and transfer time should be valued at \$21.10 per hour for personal and \$21.20 per hour for business travel when actions affect only those elements of transit time.

** When a weighted average value for air travel must be constructed, the value of \$31.50 should be used for general aviation passengers on personal travel and that of \$45.00 for general aviation passengers on business travel.

Table 5 (Revision 1, continued)

*** Weighted averages, using distributions of travel by trip purpose on various modes. Distribution for local travel by surface modes: 94.4% personal, 5.6% business. Distribution for intercity travel by surface modes: 86.9% personal, 13.1% business. Distribution for intercity travel by air: 68.7% personal, 31.7% business. All figures derived from on-line analysis of PMT data from the *1995 Nationwide Personal Transportation Survey* at <http://www-cta.ornl.gov/npts/1995/Doc/index.shtml>

Table 6 (Revision 1)

Sample Computation of Value of Travel Time Savings				
Category	Hours of Travel Time Saved		Dollar Value	
	Vehicle-Hrs.	Person-Hrs.	per Hour	Total
Local Auto	200	320	\$11.20	\$3,584
Intercity Auto	100	230	\$15.60	\$3,588
Transit Passengers	20	500	\$11.20	\$5,600
Truck Drivers	80	80	\$18.10	\$1,448
Total	400	1,130	\$12.58	\$14,220

Table 7 (Revision 1)

Sample Computation Using Low Values of Travel Time Savings				
Category	Hours of Travel Time Saved		Dollar Value	
	Vehicle-Hrs.	Person-Hrs.	per Hour	Total
Local Auto	200	320	\$7.90	\$2,528
Intercity Auto	100	230	\$13.20	\$3,036
Transit Passengers	20	500	\$7.90	\$3,950
Truck Drivers	80	80	\$18.10	\$1,448
Total	400	1,130	\$9.70	\$10,962

Table 8 (Revision 1)

Sample Computation Using High Values of Travel Time Savings				
Category	Hours of Travel Time Saved		Dollar Value	
	Vehicle-Hrs.	Person-Hrs.	per Hour	Total
Local Auto	200	320	\$13.40	\$4,288
Intercity Auto	100	230	\$19.80	\$4,554
Transit Passengers	20	500	\$13.40	\$6,700
Truck Drivers	80	80	\$18.10	\$1,448
Total	400	1,130	\$15.04	\$16,990