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STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
RESEARCH AND PLANNING DIVISION

ORIGIN AND DESTINATION SURVEY CODING INSTRUCTIONS

CARD COLUMN NO.	ITEM	INSTRUCTION
1-2	Card Type	External O & D - 30 Internal O & D - 20 Internal O & D Trucks - 40 Internal O & D Taxi - 50
3-4-5	Study No.	Code _____
6	Vehicle Type	Code same as on Interview Sheet
7-8-9	Zone of Residence	Where car is garaged, leave blank on Internal Truck and Taxi Interviews
10-11	Time Trip Made	Military Time. On external it is hour of interview. On internal it is hour during which trip was made. External trip made 1:15 would be coded 13.
12-13-14-15 16-17	Date of Interview	External July 14, 1968 would be coded 14-07-68
18-19-20	Zone of Origin	This is zone or station where trip originated in study area.
21-22-23	Zone of Destination	This is zone or station where trip was destined within study area.
24-28	Origin outside Study Area	If actual origin was outside study area, code IBM Standard Code. If origin was within study area, leave blank.
29-33	Destination outside Study Area	If actual destination was outside study area, code IBM Standard Code. If destination was within study area leave blank.
34	Mode	On internal, code mode as indicated on interview form.
35	Trip Purpose From	Use code as indicated on interview form
36	Trip Purpose To	Use code as indicated on interview form

CARD COLUMN NO.	ITEM	INSTRUCTION
37-38	Vehicle Occupancy	Number of persons in vehicle including driver
39-40-41	Zone or Station of Interview	Code station interviewed or zone where interview was made
42-45	Land Use at Origin	Use standard land use code manual
46-49	Land Use at Destination	Use standard land use code manual
50-53	ADT Factor	Instructions on back of these Instructions for external-internal will be supplied by someone in the Urban Planning Division

METHOD FOR COMPUTING THE ORIGIN AND DESTINATION FACTORS

Two factors must be computed to determine the total 0 and D factor. The first factor is a figure which will convert the number of hourly interviews to the total number of vehicles which passed the station in that hour. This factor is computed by dividing the number of hourly interviews into the hourly classification count.

Factor 1 = hourly classification count/hourly number of interviews. This factor computed for each hour. The second factor is a figure which will convert the classification count to the average daily traffic at that station. This factor is computed only once per station. This is done by dividing the sum of the classification counts into the ADT; factor 2 = ADT classification count.

The total factor is computed by multiplying factor 1 by factor 2; factor 1 x factor 2 = total factor. Of course the total factor may be computed in one operation if this is desirable; hourly classification count/no. of hourly interviews x ADT/sum of the classification counts = total 0 and D factor.

As a check on computing this factor the following procedure can be used. First, multiply the hourly total factor by the number of interviews taken that hour; do this for each hour. Second, sum these computed figures. The sum of the computed figures should equal ($\pm$.02) of the ADT at that station.

It should be noted that the ADT, the classification counts and the number of interviews are dual-directional; that is both in and out-bound.

Attached is a sample form with the factors computed.

E X A M P L E

Hour	Classification Count	Number of Interviews	Factor 1	Factor 2	Total Factor
8	50	49	1.02	1.40	1.43
9	75	70	1.07	1.40	1.50
10	100	98	1.02	1.40	1.43
11	100	97	1.03	1.40	1.44
12	125	120	1.04	1.40	1.46
1	150	140	1.07	1.40	1.50
2	100	96	1.04	1.40	1.46
3	100	99	1.01	1.40	1.41
4	125	120	1.04	1.40	1.46
5	150	145	1.03	1.40	1.44
	1075	1034			

ADT = 1500

Factor 2 = $\frac{1500}{1075}$ = 1.40

CHECK:

Interviews	x	Total Factor	=	Expanded Interviews
49		1.43		70
70		1.50		105
98		1.43		140
97		1.44		140
120		1.46		175
140		1.50		210
96		1.46		140
99		1.41		140
120		1.46		175
145		1.44		209
				1504

1504 is only 4 more than the 1500 ADT or $\frac{4}{1500}$ = .0027 - which is within the accuracy needed.

TENNESSEE DEPARTMENT OF HIGHWAYS
HIGHWAY PLANNING SURVEY DIVISION

________ Origin & Destination Survey Factors

Station No. ________ Date ________

(1) Hour Period	(2) Class Count	(3) Number of Interviews	(4) Factor 1 (2)/(3)	(7) Total Factor (4)x(6)	(8) Check (3)x(7)
TOTAL					

(5) 196 ADT ________

(6) ADT Factor ((5)/total of (2)) = ________

Check: total of (8)/(5) must be between .98 and 1.02