

# Appendix B: Trip Rates



## Appendix B

### TABLE 1

#### Recommended Methodology for Estimating Annual Program-Related Rural Passenger Transportation Demand (From TCRP Report 3)

---

##### D= Annual One-Way Person-Trips

##### Program Type

##### ***Developmental Services: Adult***

Participants < 25;     D = 358 x Number of Participants

Participants > = 25;   D = 430 x Number of Participants - 1,686

##### ***Developmental Services: Case Management***

D = 39.2 x Number of Participants

##### ***Developmental Services: Pre-School***

D = 224 x Number of Participants

##### ***Group Home***

Participants < 10;     D = 2.05 x Number of Participants x Days of Operation  
or, if the number of days of operation is not known,  
D = 615 x Number of Participants

Participants > = 10;   D = (1.42 x number of Participants + 5.94) x Days of Operation  
or, if the number of days of operation is not known,  
D = 291 x Number of Participants + 3,760

##### ***Headstart***

D = 263 x Number of Participants

##### ***Headstart: Home Base***

D = 0.16 x Number of Participants x Days of Operation  
or, if the number of days of operation is not known,  
D = 30.5 x Number of Participants

---

**TABLE 1, continued**

**Recommended Methodology for Estimating Annual Program-Related  
Rural Passenger Transportation Demand  
(from TRCP Report 3)**

---

**D = Annual One-Way Person-Trips**

Program Type

***Headstart: Other***

D = 1.86 x Number of Participants

***Job Training***

D = 137 x Number of Participants

***Mental Health Services***

D = 347 x Number of Participants

***Mental Health Services: Case Management***

D = 6.35 x Number of Participants

***Nursing Home***

Participants < 50; D = 9.10 x Number of Participants

Participants > = 50; D = 12.5 x Number of Participants - 173

***Senior Nutrition***

D = 248 x Number of Participants

***Shelter Workshop***

D = 1.58 x Number of Participants x Days of Operation  
or, if the number of days of operation is not known,  
D = 384 x Number of Participants

---

**TABLE 2**

**Recommended Methodology for Estimating Annual Non-Program-Related  
Rural Passenger Transportation Demand**  
(from TRCP Report 3)

---

$$D = R_e E \left( \frac{1}{1 + k_e e^{-U_e}} \right) + R_m M \left( \frac{1}{1 + k_m e^{-U_m}} \right) + R_p P \left( \frac{1}{1 + k_p e^{-U_p}} \right)$$

where:

D = annual demand for Non-Program-Related passenger transportation.  
(One-Way Trips Per Year)

$R_e = 1,200$

$R_m = 1,200$

$R_p = 1,200$

E = number of persons age sixty or over.

M = number of mobility-limited persons age sixteen to sixty-four.

P = number of persons, age sixty-four or less, in families with incomes below the poverty level.  
The definition of the poverty level is that used for the 1990 U.S. Census.

$k_e = e^{6.38}$

$k_m = e^{6.41}$

$k_p = e^{6.63}$

$U_e = 0.000510 \times \frac{\text{Annual Vehicle-Miles Available to Elderly Market}}{\text{Area of the County}}$

$U_m = 0.000400 \times \frac{\text{Annual Vehicle-Miles Available to Mobility-Limited Market}}{\text{Area of the County}}$

$U_p = 0.000490 \times \frac{\text{Annual Vehicle-Miles Available to Low-Income Market}}{\text{Area of the County}}$

---