
Chapter 4 Mode Choice

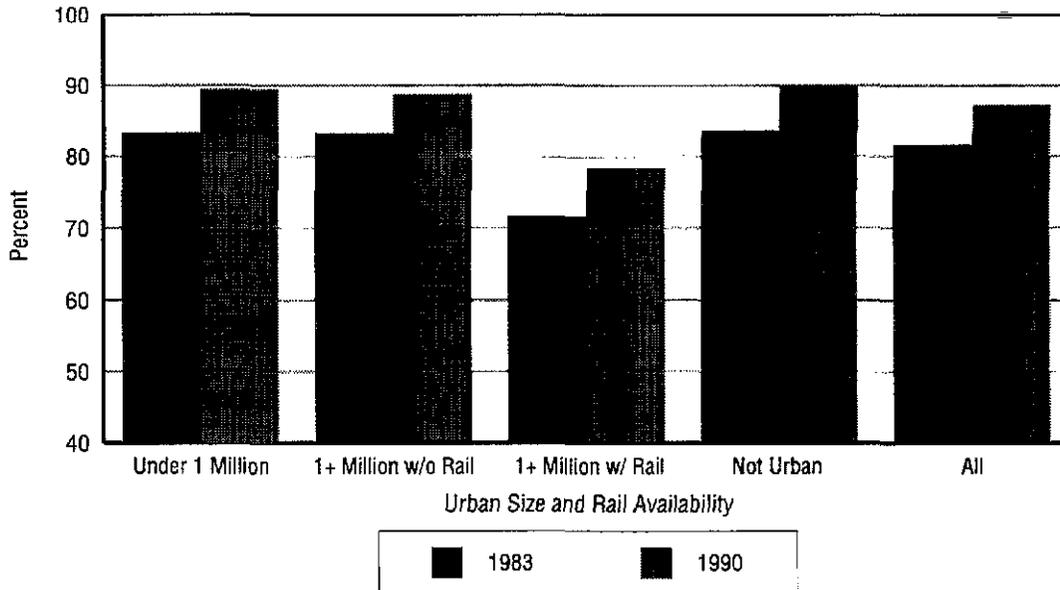
This chapter discusses travel mode for 1990 trip-making. Comparisons are made between large urban areas with rail transit service and large urban areas without such service. Comparisons are also made with 1983 mode choices.

The information is for trips of 75 miles or less.

Key Findings

- The privately operated vehicle is the dominant travel mode. This domination increased between 1983 and 1990.
- Walking was the second most favored travel mode in both 1983 and 1990, eclipsing bus, rail, taxi, and bicycle choices by about a 4-to-1 ratio.
- Privately operated vehicles are the favored choice for commuting. More than nine out of every 10 urbanized area workers selected autos, trucks, vans, and other private vehicles for their travel to and from work.
- As expected, the highest transit use (rail and bus) is in large urban areas with rail service. However, the proportion of person trips by transit modes declined between 1983 and 1990.

FIGURE 4-1
Private Vehicle Share of Person Trips by Urban Size Group



Note: Excludes trips greater than 75 miles.

Private Vehicles Dominate Personal Trip-making

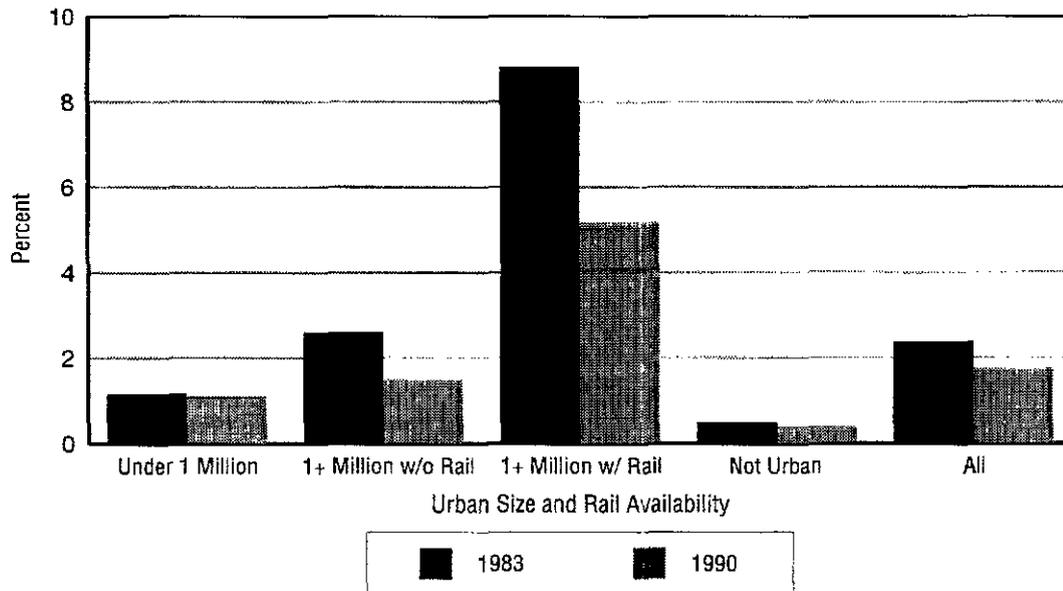
Of the more than 242 billion person trips made in 1990, 87.4 percent were made in POVs (Table 4-1). This mode share was up from 81.8 percent in 1983. Walking was a distant second place in 1990, with 7.4 percent of all person trips.

In small communities and urban areas of under 1 million population, the proportion of person trips in POVs reached 89.9 percent and 89.6 percent, respectively (Figure 4-1). Among the urban size groups in Table 4-1, the privately operated vehicle mode choice was the lowest, at 78.5 percent, in the areas of more than 1 million population that had rail service.

Less Reliance on Private Vehicles in Rail Urban Areas

The greatest proportion of person trips on bus and rail transit vehicles (5.2 percent) was in large urban areas with rail service. The proportion of walking trips was also highest (13.1 percent) in the large urban areas with rail. These mode choice findings (Table 4-1) reflect not only a wider variety of transportation services available in the large rail transit urban areas but also residential and employment densities that promote less reliance on private vehicle trip-making.

FIGURE 4-2
Transit Share of Person Trips by Urban Size Group



Note: Excludes trips greater than 75 miles.

Between 1983 and 1990, Transit Lost Ground to POV Trip-making

As a proportional share of all person trips, bus and rail transit dropped from 2.3 percent in 1983 to 1.8 percent in 1990 (Figure 4-2). (Trips of more than 75 miles are excluded, and, therefore, intracity trips, such as by Greyhound bus and AMTRAK, are not included in the tabulations.) Even in the large urban areas with rail transit service, bus and rail lost in the market share of person trips, from 8.8 percent in 1983 to 5.2 percent in 1990. Much of the transit mode share loss is attributable to increased POV shares. Transit is not alone; all other modes also lost shares over the 1983 to 1990 period to the POV mode.

Nine Out of 10 Commuting Trips are by POV

Table 4-2 indicates that 92.2 percent of the 31.6 billion 1990 urbanized area commuting trips were by five subcategories of POV. Rail and bus trips accounted for 5.3 percent. The table also shows the proportions of urbanized area commuting trips by each mode of travel that fall within 11 trip length categories. (For more information on trip length, refer to Chapter 3.)

**TABLE 4-1
Person Trips by Mode and Urban Size Group**

1983

Travel Mode	Urban Size Group				
	Under 1.25 Million	1.25 Million + w/o Rail	1.25 Million + w/ Rail	Not Urban Area	All
Privately Operated Vehicle	83.45%	83.40%	71.75%	83.80%	81.78%
Bus ¹	1.18	2.61	5.38	0.50	1.75
Rail/Subway ¹	*	*	3.45	*	0.55
Taxi	*	0.33	0.53	*	0.18
Bicycle	0.85	0.84	0.53	0.70	0.75
Walk	8.70	8.38	13.81	6.63	8.61
Other	2.29	2.10	2.26	4.23	2.98
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Person Trips (in Millions)	73,104	32,258	34,588	84,779	224,728

¹See "Limitations of Data on Transit," page 5.

* Insufficient data

Note: Excludes trips greater than 75 miles.

1990

Travel Mode	Urban Size Group				
	Under 1 Million	1 Million + w/o Rail	1 Million + w/ Rail	Not Urban Area	All
Privately Operated Vehicle	89.55%	88.87%	78.45%	89.91%	87.35%
Bus ¹	1.11	1.50	2.98	0.39	1.29
Rail/Subway ¹	*	*	2.21	*	0.47
Taxi	*	*	0.41	*	0.16
Bicycle	0.79	0.79	0.74	0.62	0.72
Walk	6.16	6.72	13.14	5.40	7.37
Other	2.23	1.96	2.04	3.50	2.62
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Person Trips (in Millions)	54,454	48,578	48,039	91,034	242,104

¹See "Limitations of Data on Transit," page 5.

* Insufficient data

Note: Excludes trips greater than 75 miles.

TABLE 4-2
Commute Trips by Mode and Trip Length
(Urbanized Area Households)

1990

Trip Length (Miles)

Travel Mode	< .5	1	2 to 3	4 to 5	6 to 7	8 to 10	11 to 15	16 to 20	21 to 30	31 to 50	50 to 75	All	Total	Average Trip Length	Commute Trips (in Millions)
Auto	4.59%	7.84%	18.12%	14.91%	9.09%	15.62%	13.39%	6.51%	6.08%	3.30%	0.57%	72.70%	100%	9.54 Mi.	22,987
Pickup/ Other Truck	3.14	6.00	17.88	14.06	8.58	13.86	13.31	10.18	7.50	4.60	0.88	13.90	100%	11.15	3,779
Van	3.26	8.10	20.80	14.52	6.80	13.96	12.42	6.29	7.86	4.11	1.89	4.06	100%	10.75	1,140
Other POV	2.99	2.77	18.87	17.12	5.04	17.04	8.19	9.03	7.12	3.15	8.69	1.50	100%	14.66	309
Bus ¹	5.38	6.89	17.39	17.99	13.47	13.17	11.30	6.27	4.43	1.98	1.73	3.15	100%	9.40	994
Rail/Subway ¹	5.95	4.02	13.10	8.67	5.85	13.08	9.24	9.32	12.77	15.69	2.29	2.13	100%	17.01	673
Taxi	7.04	23.81	42.73	13.70	4.17	1.93	4.80	*	*	1.82	*	0.09	100%	3.90	71
Bicycle	21.95	22.62	40.38	9.11	3.03	2.83	*	*	*	*	*	0.08	100%	2.06	124
Walk	69.97	17.66	8.27	1.19	1.19	0.49	0.11	0.81	*	0.22	*	0.46	100%	0.98	1,423
Other	3.75	1.30	21.94	28.48	5.06	21.32	12.51	*	2.88	2.21	0.53	0.21	100%	8.20	77
All	7.42%	7.98%	17.77%	14.17%	8.57%	14.48%	12.47%	6.71%	6.10%	3.55%	0.78%	100.00%	100%	9.55 Mi.	31,584

¹See "Limitations of Data on Transit," page 5.

* Insufficient data

Note: Excludes trips greater than 75 miles.