

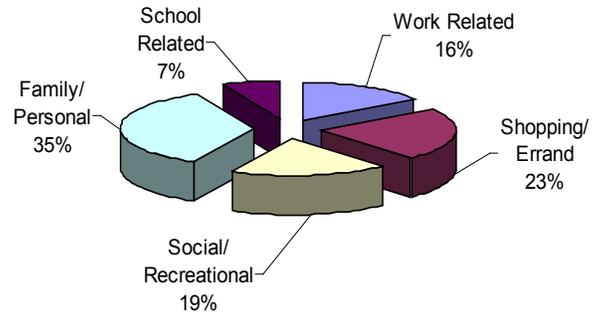
Transportation Trends, Conditions and Issues

Travel Characteristics

Why Do People Travel?

Over one-half of trips taken in Dane County are for family/personal reasons or for shopping and errands, according to a special county add-on sample of the 2001 National Household Transportation Survey (NHTS). Work trips account for just 16% of trips. Nationally, the percentage of trips that are work related has dropped from over 25% in 1969 to 16% in 2001 as a result of increased trip making for other purposes. The work trip is still very important, because it is often the longest trip of the day¹ and many non-work trips are planned around the work trip, such as dropping children at school or shopping. Commuting, whether direct trips to and from work or trip tours (including stops made on the way to/from work), contributes heavily to peak period congestion.

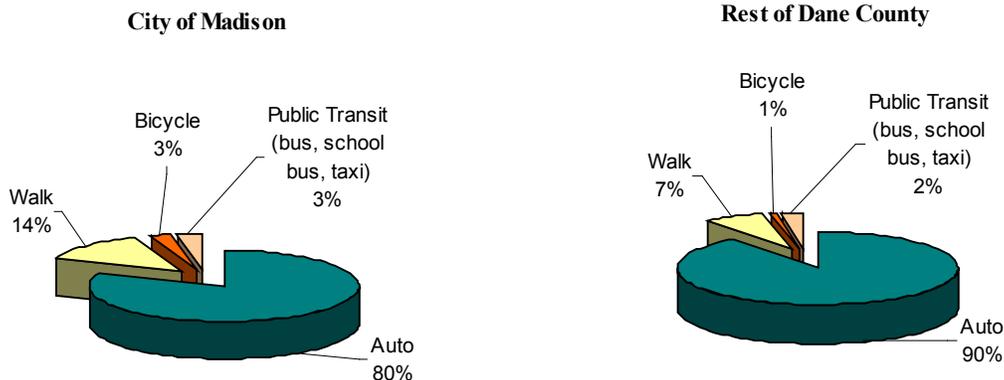
Trip Purpose Distribution
All Person Trips in Dane County



How Do People Travel?

The vast majority of trips are made by personal motor vehicle, accounting for 80% of all trips in the City of Madison and 90% in the rest of Dane County. Walking, bicycling, and transit use is much higher in the City of Madison.

Mode of Travel for All Person Trips



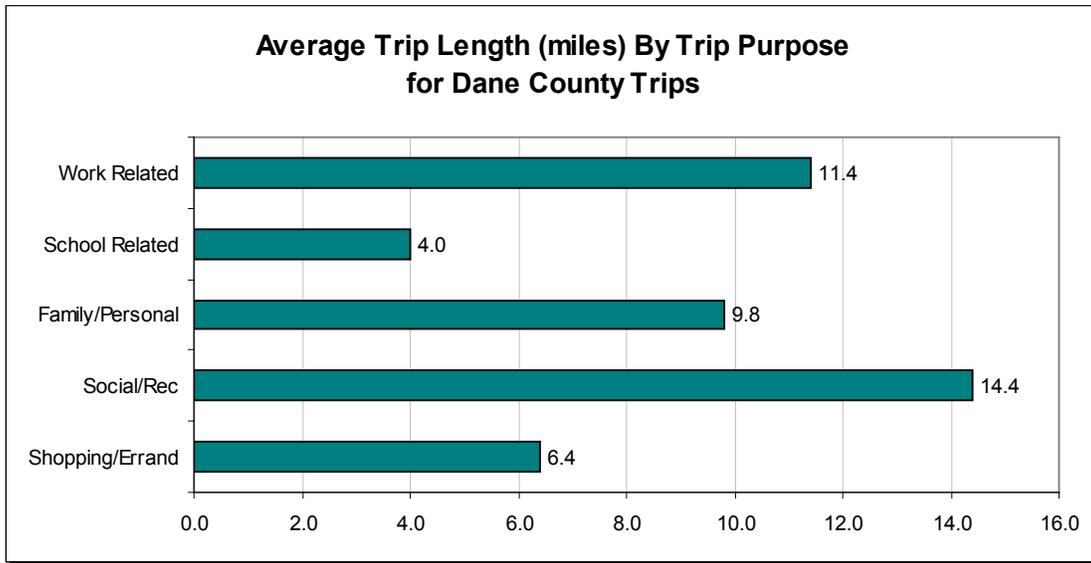
How Much and How Far Do People Travel?

It is estimated that an average daily total of 1,745,000 one-way person trips were taken in Dane County in 2001. This amounts to a little over four trips per person and 9.5 trips per household based upon the 2001 population and household estimates for the county. National data from the 2001 NHTS indicates that the average number of daily trips peaked among the working population aged 25-54 at 4.6. There was no significant difference in trip frequency based upon gender.

It is estimated that average daily travel in Dane County totaled 13,497,000 miles in 2001. This amounts to a daily average of 31 miles per person and 73 miles per household. Figure 5, on the next page, shows the average trip length varies by trip purpose. Average trip lengths for City of Madison residents were shorter, particularly for work (9.0 mi.), school (2.8 mi.), and family/personal (8.5 mi.) trips.

¹ The average social/recreational trip is longer than the average work trip, but social/recreational trips are not made on a daily basis, particularly on weekdays.

FIGURE 5



Overall Patterns

The growth of major employment and commercial retail centers on the periphery of the Madison area—many of them located outside the Beltline and Interstate system—has led to a more dispersed travel pattern with a lower percentage of trips destined for the central area. It is estimated that just 5% of the 1.7 million daily trips in the county in 2001 were destined for the Central Business District. Around 28% of daily trips were destined for central Madison, an area bounded by Whitney Way to the west, Aberg Avenue to the east, and the Beltline and City line to the south. The Near West/UW campus and Far West/Middleton areas (Super Districts 2 and 4) accounted for the largest percentage of trip making, together accounting for 29% of all trip origins and destinations. Figure 6, on the next page, illustrate the dispersed trip making pattern, showing total person trip flows from Madison’s Southwest and Southeast sides to other areas in the metropolitan area and countywide.

Work Trip Commuting Patterns

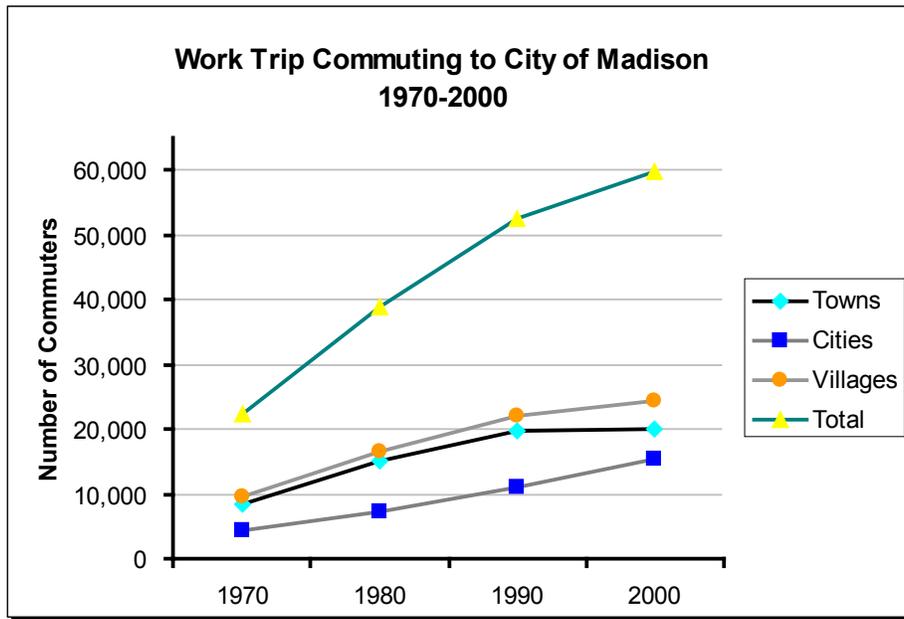
Growth in employment in Dane County and the Cities of Madison, Middleton, and Monona continues to outpace growth in the resident labor force. The resident labor force from surrounding counties and communities fills this gap by commuting into the county and these cities on a daily basis. This trend, which is expected to continue into the future for the county as a whole and for Madison and Middleton, has a significant impact on regional travel patterns. The increasing time spent in travel to and from work influences the mode of travel and the propensity to make non-work related trips on the way to or from work. According to data from the 2001 National Household Transportation Survey (NHTS), more than one-half (54%) of weekday commuters stop for a non-work purpose (e.g., dropping off a passenger or shopping) during their commute.

In 2000, there were around 30,000 workers commuting into Dane County from eight adjacent counties, an 83% increase from 1990, according to U.S. Census data. Of those, around 19,500 were commuting to the Madison Area² (a 74% increase from 1990) and 16,000 were commuting to the City of Madison (a 63% increase from 1990). “Reverse” commuting from Dane County to adjacent counties has increased as well, but the numbers are much smaller. Approximately 9,000 Dane County workers commuted to adjacent counties, a 50% increase from 1990. Figure 7, on page 28, shows 2000 work trip commuting to and from Dane County.

In 2000, there were almost 60,000 workers commuting to the City of Madison from other Dane County communities in addition to the 16,000 commuting from eight adjacent counties. This represented a 14% increase from 1990, which continued to put increasing travel demands on the arterial roadway system in the Madison area. Figure 8 on page 29 shows the increase in work trip commuting to the City of Madison from cities, villages, and towns in Dane County from 1970 to 2000.

²Including the Cities of Madison, Middleton, Fitchburg, and Monona and the Village of McFarland.

FIGURE 8



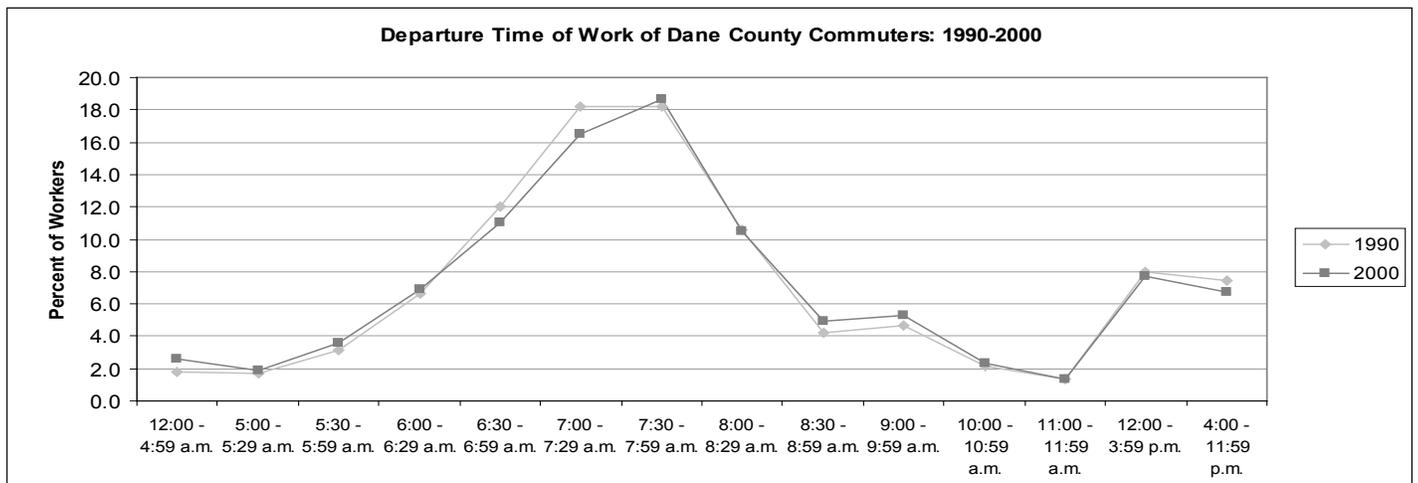
Figures 9 and 10, on pages 30 and 31, show the percentage of workers in these communities commuting to the City of Madison in 1970 and 2000.

“Reverse commuting” from the City of Madison has also increased, but again the numbers are much smaller. Around 21,200 City of Madison residents commuted to other Dane County communities for work in 2000, a 62% increase from the 13,100 in 1990. Another 2,600 Madison residents commuted to work in adjacent counties, compared to 1,500 in 1990.

The number of residents of Dane County cities and villages who worked in the place they resided decreased from 62% in 1990 to 56% in 2000. This contributed to an increase in mean travel time to work for Dane County residents from 18.1 minutes in 1990 to 19.9 minutes in 2000.

Well over one-half (57%) of all Dane County commuters depart to work between 6:30 a.m. and 8:30 a.m., greatly contributing to the peak period congestion during this time. Increasing traffic congestion, particularly on the Beltline, is starting to spread out the peak period, but not as significantly as seen in larger metropolitan areas. While this peak spreading has not yet become apparent in the data for all trips countywide, it is expected to occur more in the future, particularly for trips using the Beltline and other congested roadways. Figure 11 shows departure time to work for all Dane County commuters in 1990 and 2000. There was little change over this time period.

FIGURE 11



The percentage of workers commuting to work in Dane County who drove alone has continued to increase, while the percentage of workers using alternative means of transportation has decreased. From 1990 to 2000, the percentage share of drive alone work trips countywide increased from 68% to 75%. The percentage share of drive alone trips work trips by City of Madison residents rose from 60% to 65%. The overall number of commuters taking transit and bicycling to work increased, but the percentage share of trips still declined. The same trend of increased single-occupant vehicle commuting was true for those who worked in the downtown and UW-Madison campus areas. However, the percentages of those using alternative means of transportation were much higher due to the concentration of employment centers and UW-Madison campus area, parking cost, and excellent bus service. In addition, the percentage of those using transit and bicycling actually increased to 11.2% and 4.8%, respectively.



Table 12 below shows the means of transportation to work for all Dane County workers and for those working in the downtown and UW-Madison campus areas in 1990 and 2000.

**TABLE 12
MODE OF TRANSPORTATION FOR WORK: 1990 & 2000**

Trips within/to Dane County				
Mode	1990		2000	
	Number	Percent	Number	Percent
Drive Alone	147,642	68.4	198,841	74.7
Carpool	29,115	13.5	28,062	10.5
Transit	9,445	4.4	10,010	3.8
Bicycle	3,966	1.8	4,148	1.6
Walk	17,190	8.0	15,071	5.7
Other	1,280	0.6	1,120	0.4
Work at Home	7,339	3.4	9,194	3.5
Total	215,977	100.0	266,446	100.0
Trips to the Downtown and UW-Madison Campus Areas				
Mode	1990		2000	
	Number	Percent	Number	Percent
Drive Alone	24,076	47.5	30,625	53.7
Carpool	8,613	17.0	7,552	13.2
Transit	5,265	10.4	6,404	11.2
Bicycle	2,236	4.4	2,767	4.8
Walk	9,725	19.2	9,053	15.9
Other	371	0.7	283	0.5
Work at Home	431	0.8	383	0.7
Total	50,717	100.0	57,067	100.0

Source: Census Transportation Planning Package