Summary of Results of Houten Travel Behavior Survey

By: Nicole Foletta, ITDP Europe

July 2010

In June and July 2010, with the help of ITDP Europe, the city of Houten conducted an internet-based survey of residents in order to collect information about travel behavior. Respondents included members of the city's digital 'Burgerpanel'. The results of the survey are summarized here.

Household Size

Respondents were asked how many adults and children reside in the household. The survey average household size, including adults and children, is 3.3 persons per household. Further, 46% of households have at least one child younger than 18. 12% of households have 1 child, 23% of households have 2 children, 10% of households have 3 children and 2% of households have 4 or more children.

Vehicle Ownership

Respondents were asked about household vehicle ownership. It was found that, on average, each household has 1.39 cars, and overall there are 0.43 cars per resident. 6% of households have zero cars, 58% of households have one car, 30% have 2 cars, and 6% have 3 or more cars.

Respondents were also asked about motorized two-wheelers. 8% of households have one motorcycle and 1% have 2 motorcycles. Only 7% of households have a moped or scooter.

Not surprisingly, the bicycle ownership rate is very high in Houten, as is common in Holland. Overall there is one bicycle per resident. Only 2% of households have no bicycle.

Households without a car were asked the importance of various factors in their decision not to own a car. The two most important factors were that public transit and cycling in the area make owning a car superfluous (see Figure 1). These were followed by 'Healthy lifestyle', 'Cost' and 'Environmental reasons'. Based on these responses, it appears that good public transport access and cycle facilities are important to residents and that it is not difficult to find parking in Houten.

Only 2% of households have a carsharing membership (such as Greenwheels or Wheels4All). 3% of households never had a car, 1% gave up their only car before moving to Houten, and 2% gave up their only car after moving to Houten. Most cars owned by residents were built since 1999 (68%). Newer cars produce fewer emissions than older cars, therefore the vehicle fleet in Houten is fairly fuel efficient.



Figure 1: Importance Factor of Reasons for not Owning a Car

Travel to Work and School

Among those who work or study, 31% live within 10 kilometers of their place of work or education; 33% live between 10 and 19 kilometers from their place of work or education, and 36% live 20 or more kilometers away (see Figure 2). Those living close to work or school can more easily walk or bike. However, those living farther away may decide to take public transport or drive, which produces more emissions. Overall it was found that 56% of residents travel to work or school by car (either as passenger or driver), 42% by bike, 22% by public transport (either by bus, train or tram) and 8% on foot, as seen in Figure 3 (combinations of mode of travel are possible, so in total it is more than 100%).

Houten residents spend, on average, 66 minutes traveling to and from work or school every day (33 minutes in each direction) and live an average of 23 kilometers from their places of work/education. On average, residents who work, work 4.2 days per week and 31% work from home at least one day per week. Working from home reduces travel and travel-related emissions.

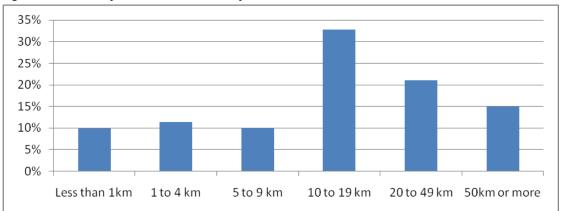
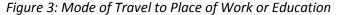
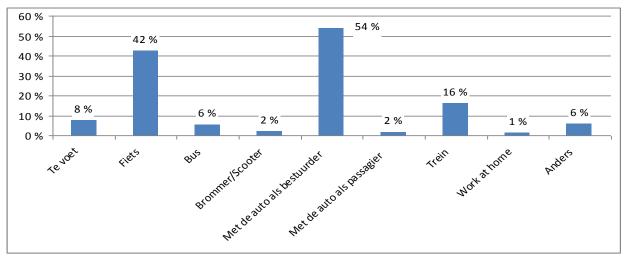


Figure 2: Distance from Home to Place of Work or Education





Other Travel

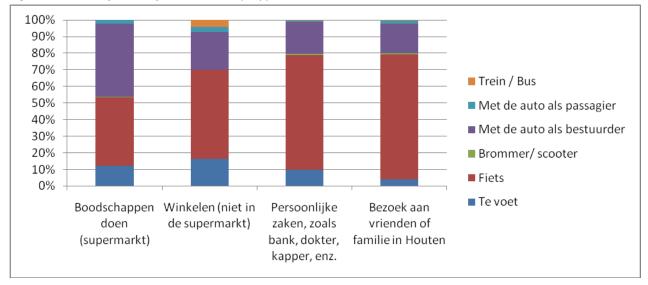
18% of residents live within 500 meters of their supermarket, 33% live between 500 meters and 1 kilometer, 21% live between 1 and 2 kilometers, 18% live between 2 and 4 kilometers and 10% live 4 or more kilometers from their supermarket (see Figure 4). These short distances make it easy for residents to walk or bike to the supermarket.

45% of resident typically go by car to the supermarket while 41% go by bike. 53% of residents conduct other shopping trips by bike, 68% run service-related errands (visiting the doctor, bank, etc.) by bike, and 73% visit family and friends in Houten by bike (see Figure 5). These figures show that the bicycle appears to be a very popular mode of transportation in Houten, especially for trips within the city.

35% 30% 25% 20% 15% 10% 5% 0% Less than 500m 500m - 0.99km 1km - 1.99km 2km - 3.99km 4km or more

Figure 4: Distance from Home to Supermarket





29% of residents have some sort of public transport periodic pass. 16% have a treinabonnement, 6% have an OV-jaarkaart, 1% have a busabonnement, and 8% have another type of public transport pass. Some residents have more than one type of public transport pass.

All Trips

Overall, residents travel a total of 250 kilometers per week on average. The majority of this distance is by car. Residents travel 141.5 kilometers by car as driver per week, on average. They walk an average of 8.6 kilometers per week and bike an average of 27.8 kilometers per week (see Figure 6). This is an average of all residents, so some residents will bike more/less and others will drive more/less than this average.

On average, residents make 3.9 trips per week by car as driver, 4.9 trips by bike and 4.7 trips by foot, as seen in Figure 7. Residents walk an average of 1.8 kilometers per trip, an average biking trip is 5.7 kilometers and an average driving trip is 36 kilometers, as seen in Figure 8. Overall, 31% of trips (for all

purposes) are by car, 28% by bike, 27% by foot, 11% by public transport and 3% by moped or scooter (see Figure 9).

On average, residents pay more for car fuel than for public transport tickets. Each household in Houten spends, on average, 55.20€ per week on car fuel and 16.70€ per week on public transport tickets. These amounts of money include possible refunds from employers.

Most households (90%) never use home delivery services for groceries, 5% use them less than once per month, 2% use them once per month, and 3% of households use grocery home delivery services once per week. Therefore, few emissions are generated from grocery home delivery services.

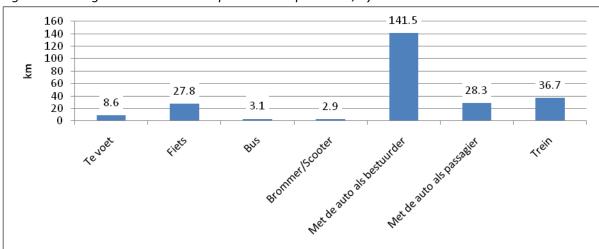
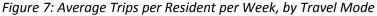


Figure 6: Average Distance Traveled per Resident per Week, by Travel Mode



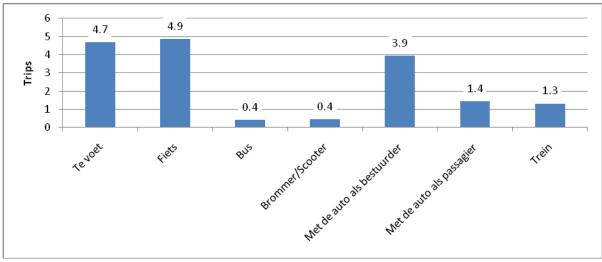


Figure 8: Average Distance per Trip

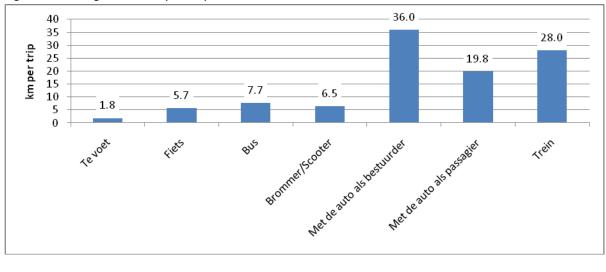


Figure 9: Percent of All Trips by Mode of Travel

