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## Public Perceptions on Transportation Characteristics of Livable Communities: The 2009 Omnibus Household Survey

by Jenny Guarino and Pheny Weidman, Ph.D.

The Omnibus Household Survey (OHS) is a national survey on attitudes about transportation that is administered annually by the Bureau of Transportation Statistics (BTS) to a sample of approximately 1,000 households (see box B). The 2009 OHS included a series of questions to gauge public perceptions on transportation-related characteristics of livable communities. Survey participants were asked to rate how important<sup>1</sup> several transportation options or features were to have in their community, such as highway access, transit service, and bike lanes (see table 1).

Responses to the 2009 OHS suggest that a majority of the public considered it important to have a wide range of transportation alternatives. The majority also strongly

<sup>1</sup> A four-point Likert response scale was used with the options “very important,” “somewhat important,” “somewhat unimportant,” and “not important.” Respondents were asked to pick the category that best fit their viewpoint.

supported the provision of facilities that permit continued reliance on the personal automobile in the community in which they live. This is illustrated by the following key findings from the OHS:

- 75 percent stated that reliable local bus, rail, or ferry transportation that could be reached without driving was important;
- 70 percent found importance in bike lanes or paths to shopping, work, or school;
- 94 percent said that major roads or highways that served their community were important; and
- 89 percent felt that adequate parking in the downtown or central business district was important.

### Box A: Livability Initiative at the USDOT

Livability is a key initiative and strategic goal at the U.S. Department of Transportation (USDOT). USDOT, the U.S. Department of Housing and Urban Development, and the Environmental Protection Agency have joined together to form the Partnership for Sustainable Communities to coordinate transportation, Federal housing, and environmental investments, protect public health and the environment, promote equitable development, and help address the challenges of climate change. USDOT’s six principles of livability are:

- **Provide more transportation choices** to decrease household transportation costs, reduce our dependence on oil, improve air quality, and promote public health.
- **Expand location- and energy-efficient housing choices** for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

- **Improve economic competitiveness of neighborhoods** by giving people reliable access to employment centers, educational opportunities, services, and other basic needs.
- **Target Federal funding toward existing communities** – through transit-oriented and land recycling – to revitalize communities, reduce public works costs, and safeguard rural landscapes.
- **Align Federal policies and funding** to remove barriers to collaboration, leverage funding, and increase the effectiveness of programs to plan for future growth.
- **Enhance the unique characteristics of all communities** by investing in healthy, safe and walkable neighborhoods, whether rural, urban, or suburban.

For more information on the Livability Initiative at USDOT, please see <http://www.dot.gov/livability/101.html>.

## 2009 OHS Livability Analysis

Table 1 depicts the eight transportation-related livability characteristics included in the 2009 OHS.<sup>2</sup> As seen in table 1, respondents found major roads or highways serving their community and adequate parking in the downtown or central business district to be the most important characteristics.<sup>3</sup> While the presence of reliable long-distance bus or rail transportation, bike lanes, and local transit were rated important by the fewest people, these characteristics were still found to be important by over two-thirds of respondents. This report examines public opinion on these characteristics by community type as well as by age, gender, and income.

<sup>2</sup> Labels in italics in Table 1 will be used in all subsequent graphics/text to define each livability characteristic.

<sup>3</sup> The data in table 1 is based on combining survey responses of “somewhat important” or “very important” for each characteristic shown.

## Community Type

To better understand how public perceptions varied by community type, respondents were asked to identify whether they resided in a rural, urban, or suburban community. Overall, 33 percent of respondents stated they lived in an urban setting, 39 percent resided in suburban areas, and 29 percent in a rural setting.<sup>4</sup> Figure 1 shows the level of importance, in percent, that respondents associated with each of the eight livability characteristics. Nearly all (94 percent of respondents) felt that having major roads was important. It is notable that for most livability characteristics, the rural and suburban responses track very closely to one another—particularly bike lanes, long-distance transportation, and pedestrian-friendly streets.

<sup>4</sup> Totals do not add to 100 percent due to rounding. In 2000, the US Census Bureau estimated 21 percent of the population lived in rural settings; compared to 79 percent in urban settings. See <http://factfinder.census.gov> for more information. Data from the 2010 Census are pending.

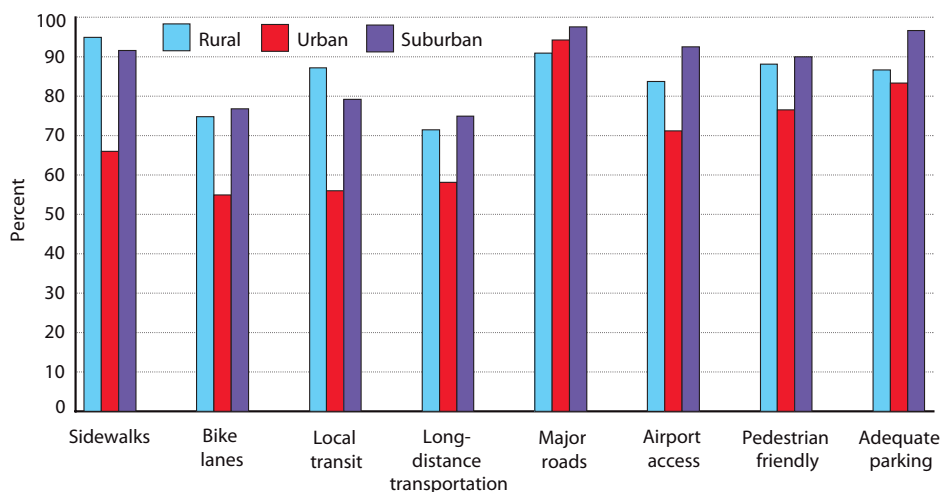
**Table 1: Percent of Respondents Who Identified Each Transportation-Related Livability Characteristic as Important—October 2009**

Livability characteristic	Percent
Sidewalks, paths, or other safe walking routes to shopping, work, or school ( <i>Sidewalks</i> )	85.0
Bike lanes or paths to shopping, work, or school ( <i>Bike lanes</i> )	69.8
Reliable local bus, rail, or ferry transportation that can be reached without driving ( <i>Local transit</i> )	75.3
Reliable long-distance bus or train transportation to and from major metropolitan areas ( <i>Long-distance transportation</i> )	68.4
Major roads or highways that access and serve your community ( <i>Major roads</i> )	94.4
Easy access to airport ( <i>Airport access</i> )	83.2
Pedestrian-friendly streets or boulevards in the downtown or central business district ( <i>Pedestrian friendly</i> )	85.2
Adequate parking in the downtown or central business district ( <i>Adequate parking</i> )	89.2

**NOTE:** The data in this table is based on combining survey responses of “somewhat important” or “very important” for each characteristic shown.

**SOURCE:** U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Omnibus Household Survey, at [http://www.bts.gov/programs/omnibus\\_surveys/household\\_survey/](http://www.bts.gov/programs/omnibus_surveys/household_survey/)

**Figure 1: Percent of Respondents Finding Importance in the Eight Transportation-Related Livability Characteristics, by Community Type—October 2009**



**NOTE:** The data in this figure is based on combining survey responses of “somewhat important” or “very important” for each characteristic shown. A statistically significant difference was found in public perceptions for all eight transportation-related livability characteristics; based on chi-square analysis with a p-value < 0.05.

**SOURCE:** U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Omnibus Household Survey, at [http://www.bts.gov/programs/omnibus\\_surveys/household\\_survey/](http://www.bts.gov/programs/omnibus_surveys/household_survey/)

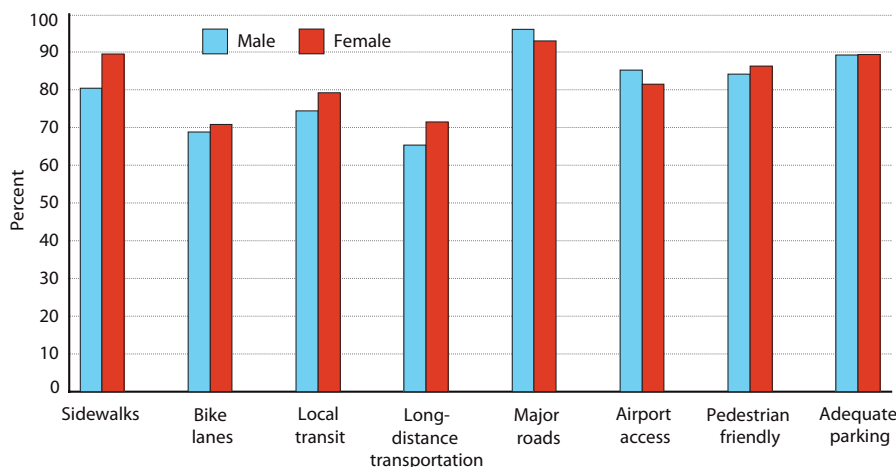
**Table 2: Percent of Respondents Finding Importance in the Eight Characteristics, by Age – October 2009**

Age	Sidewalks	Bike lanes	Local transit	Long-distance transportation	Major roads	Airport access	Pedestrian friendly	Adequate parking
18-34	91.5	73.8	80.5	71.6	95.9	83.2	88.4	89.1
35-49	88.0	76.6	76.2	67.0	95.4	87.1	89.4	92.6
50-64	84.1	72.4	75.4	75.4	94.0	83.1	85.9	89.0
65+	73.0	51.9	66.2	56.7	91.5	78.2	74.1	85.4

**NOTE:** The data in this table is based on combining survey responses of “somewhat important” or “very important” for each characteristic shown. A statistically significant difference was found in public perceptions on the importance of sidewalks, bike lanes, local transit, long-distance transportation and pedestrian friendly streets; based on chi-square analysis with a p-value < 0.05.

**SOURCE:** U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Omnibus Household Survey, at [http://www.bts.gov/programs/omnibus\\_surveys/household\\_survey/](http://www.bts.gov/programs/omnibus_surveys/household_survey/)

**Figure 2: Percent of Respondents Finding Importance in the Eight Livability Characteristics, by Gender—October 2009**



**NOTE:** The data in this figure is based on combining survey responses of “somewhat important” or “very important” for each characteristic shown. A statistically significant difference was found in public perceptions on the importance of sidewalks; based on chi-square analysis with a p-value < 0.05.

**SOURCE:** U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Omnibus Household Survey, at [http://www.bts.gov/programs/omnibus\\_surveys/household\\_survey/](http://www.bts.gov/programs/omnibus_surveys/household_survey/)

The importance placed on the various transportation characteristics by community type seems to reflect what residents of those communities perceive are needed, but that may not be available. For example, rural and suburban residents were more concerned about having “sidewalks, paths, or other safe walking routes to shopping, work, or school” than those living in an urban<sup>5</sup> setting. This may reflect the fact that urban areas are more likely to already have ample pedestrian walkways, but these are less available in suburban and rural areas. Similarly, in regard to bike lanes, local transit, and long-distance transportation, less than 60 percent of urban respondents said that these categories were important, although this type of infrastructure and service is much more likely to exist in urban areas. By comparison, 70 and 90 percent of rural and suburban residents said these features are an impor-

tant aspect of a community, although they are less likely to exist in rural and suburban areas than in urban settings.

### Age

Those in older age groups tended to rank a majority of the transportation-related livability characteristics as less important than did younger respondents. For example, 92 percent of individuals 18 to 34 consider sidewalks to be important characteristics of the community in which they live compared to 73 percent of persons 65 or older. On average, 88 percent of respondents between 18 and 64 stated that pedestrian friendly streets were important to have in their community centers compared to only 74 percent of individuals over 65<sup>6</sup> (see table 2).

<sup>5</sup> In the Omnibus Household Survey, the number of persons living in an urban setting is dependent on self-reporting and includes those living in the city center (e.g., downtown ) as well as those residing outside the city center.

<sup>6</sup> With regard to age, a statistically significant difference was found in public perceptions on the importance of sidewalks, bike lanes, local transit, long-distance transportation and pedestrian friendly streets; based on chi-square analysis with a p-value < 0.05.

**Table 3: Percent of Respondents Finding Importance in the Eight Transportation-Related Livability Characteristics, by Income – October 2009**

Income	Sidewalks	Bike lanes	Local transit	Long distance transportation	Major roads	Airport access	Pedestrian friendly	Adequate parking
Under \$30k	85.6	75.0	84.9	72.8	93.6	77.4	82.7	85.4
\$30k–\$75k	83.8	64.9	71.6	65.9	94.1	78.0	83.7	88.2
\$75k–\$125k	85.0	75.8	75.3	67.8	94.2	92.6	89.0	92.6
\$125k+	89.0	69.4	66.7	69.8	98.3	93.3	91.1	94.3
Not reported	84.3	65.6	73.6	67.4	94.2	86.2	83.8	89.8

**NOTE:** The data in this table is based on combining survey responses of “somewhat important” or “very important” for each characteristic shown. Income ranges in this table are inclusive of the bottom income level and exclusive of the top income level. A statistically significant difference was found in public perceptions on the importance of local transit and airport access; based on a chi-square analysis with a p-value < 0.05.

**SOURCE:** U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Omnibus Household Survey, at [http://www.bts.gov/programs/omnibus\\_surveys/household\\_survey/](http://www.bts.gov/programs/omnibus_surveys/household_survey/)

## Gender

Figure 2 shows a general similarity in the proportion of males versus females that find each of the various transportation livability characteristics to be important. The largest difference in responses by gender was in regard to sidewalks. Almost 90 percent of females say sidewalks are an important aspect of the community compared to about 80 percent of males.<sup>7</sup> In regard to adequate parking, about 89 percent of both males and females ranked it as important. Overall, 49 percent of respondents were male and 51 percent were female.

## Income

The final demographic characteristic considered in this analysis was income. As seen in table 3, the transportation livability characteristics, such as major roads or sidewalks, are viewed as important by all income groups at a very

similar rate. The greatest variation by income group was found in the importance placed on airport access, local transit, and bike lanes. Persons earning less than \$30,000 are most likely to say that local transit is an important aspect in their community, with 85 percent finding importance. With regard to airport access, individuals earning more than \$75,000 are more likely to find importance in this livability characteristic than those earning less, with over 90 percent in this income group finding airport access important.<sup>8</sup>

<sup>7</sup> A statistically significant difference was found in public perceptions on the importance of sidewalks with regards to gender, based on chi-square analysis with a p-value < 0.05.

<sup>8</sup> With regard to income, a statistically significant difference was found in public perceptions on the importance of local transit and airport access; based on a chi-square analysis with a p-value < 0.05.

## Box B: Technical Notes

Data presented in this report are taken from the October 2009 Omnibus Household Survey conducted by the Bureau of Transportation Statistics. The target population is the U.S. noninstitutionalized adult population (18 years or older). Results are based on 1,081 cases; these persons were randomly selected from households using a list-assisted random digit dialing (RDD) methodology.

The findings summarized in this report are based on the sample of households who voluntarily responded to the survey. Respondents were randomly identified for selection as survey respondents among those who had a landline phone; approximately 44 percent of those contacted agreed to participate. As a result, the sample estimates may differ somewhat from the 100-percent figures that would have been obtained if all housing units in the United States and people within those housing units had been interviewed using the same questionnaires, instructions, interviewer, and so forth. The sample estimates also likely differ from the values that would have been obtained from different samples of housing units and people within those housing units.

In addition to the variability that arises from the sampling procedures, both sample data and complete enumeration data are subject to nonsampling error. Nonsampling error may be introduced during any of the various complex operations

used to collect and process data. Such errors may include: not enumerating every household or every person in the population, failing to obtain all required information from the respondents, obtaining incorrect or inconsistent information, and recording information incorrectly. In addition, errors can occur during the field review of the interviewers' work, during clerical handling of the Omnibus questionnaires, or during the electronic processing of the questionnaires.

Nonsampling error may affect the data in two ways:

1. errors that are introduced randomly will increase the variability of data and, therefore, should be reflected in the standard errors; and
2. errors that tend to be consistent in one direction will bias both sample and complete enumeration data in that direction. For example, if respondents consistently tend to underreport their incomes, then the resulting estimates of households or families by income category will tend to be understated for the higher income categories and overstated for the lower income categories.

All estimates in this report and tables are weighted to adjust for the fact that the demographic characteristics of the respondents (e.g., gender, race, age group, and region of residence) do not reflect their known proportions of the U.S. population.

## About This Report

This report was prepared by Jenny Guarino, a Mathematical Statistician in the Bureau of Transportation Statistics (BTS) and Pheny Weidman, Ph.D., a former Survey Statistician in BTS. BTS is a component of the U.S. Department of Transportation's Research and Innovative Technology Administration (RITA).

This special report presents some of the key findings from the BTS Omnibus Household Survey (OHS) conducted in October 2009. The OHS is conducted annually to obtain information on how American's use and view the transportation system in this country. In the 2009 OHS, questions about transportation related livability characteristics and distracted driving were introduced to the survey. A follow up report will examine public opinions on a series of distracted driving questions.

For questions about this fact sheet or other BTS reports, call 1-800-853-1351, e-mail [ritainfo@dot.gov](mailto:ritainfo@dot.gov), or visit <http://www.bts.gov>.

### Data —

This special report is based on the October 2009 Omnibus Household Survey results:

- [http://www.bts.gov/programs/omnibus\\_surveys/household\\_survey/2009/October](http://www.bts.gov/programs/omnibus_surveys/household_survey/2009/October)

### Publications —

- *OmniStats* — November 2001 - October 2005.
- *Making Connections: Intermodal Links Available at 70 Percent of all Stations Served by Commuter Rail, 2010, Bureau of Transportation Statistics, January 2010*
- *Making Connections: Intermodal Links Between Scheduled Passenger Ferries and Other Public Transportation Modes, Bureau of Transportation Statistics, February 2009*
- **Making Connections: Intermodal Links in the Public Transportation System, Bureau of Transportation Statistics, September 2007.**