

# Transit and Livability: Results from the National Community Livability Survey Executive Summary

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## Abstract

In this study, a national survey, the National Community Livability Survey, was conducted to understand factors important to livability in both urban and rural areas across the country and to study the role of transportation and public transit. The survey yielded 994 high-quality responses. Respondents ranked the importance of livability factors and the quality of those factors in their communities, as well as perceived community quality of life. An analysis of the survey data shows that livability improves as travel becomes easier, and community livability ultimately has a positive impact on overall life satisfaction.

## Introduction

Community quality of life and livability are synonymous terms used to describe the degree to which communities contribute to an individual's overall quality of life. While many factors influence a community's livability, affordable transportation options, such as transit services, can be an important contributor in both large and small communities. Although the quality of transit service is greater in urban communities with more days and hours of service, public transit in rural areas provides critical lifeline services to transit-dependent people by connecting them to health care, educational institutions, employment, and other important activities. Public transit can be very important for improving the quality of life of transit-dependent populations in both metro and non-metro areas. The objective of this study was to conduct a National Community Livability Survey (NCLS) in both urban and rural communities in the United States to understand the factors that are important for livability and to analyze the role of transportation and public transit toward quality of life.

## Survey Methodology

The NCLS was a national survey conducted in 2017 by mail using a random sample that was stratified by four U.S. regions and nine census divisions. It was also stratified by sex and age to ensure the sample was proportional to the adult population in each area. Further, rural communities were oversampled to ensure a comparable number of responses from rural areas.

Survey questions focused on general community livability, local community livability, community characteristics, transportation, public transit availability and interest, walkability, funding support for public transit, technology, and socio-demographic characteristics. Follow-up questions were also provided for respondents who were transit riders. Among 25,000 surveys distributed, a total of 994 high-quality responses were received.

## Community Livability

The survey listed a number of potential livability factors and asked respondents to rate the importance of each factor to the livability of any community. The top five factors identified for both

**Table 1. Average Survey Response Regarding Importance of Livability Factors and Quality within their Community**

|                                   | Importance <sup>1</sup> | Quality in Community <sup>2</sup> |
|-----------------------------------|-------------------------|-----------------------------------|
| Quality healthcare                | 4.6                     | 3.5                               |
| Available jobs                    | 4.5                     | 2.9                               |
| Quality public schools            | 4.5                     | 3.6                               |
| Low crime                         | 4.5                     | 3.6                               |
| Affordable housing                | 4.4                     | 3.1                               |
| Overall cost of living            | 4.4                     | 3.3                               |
| Clean environment                 | 4.3                     | 3.7                               |
| Traffic safety                    | 4.0                     | 3.6                               |
| Sense of community                | 3.9                     | 3.6                               |
| Affordable transportation options | 3.8                     | 2.7                               |
| Parks and recreation facilities   | 3.7                     | 3.5                               |
| Shopping and entertainment        | 3.5                     | 2.9                               |
| Weather                           | 3.5                     | 3.6                               |
| Cultural institutions             | 3.4                     | 2.9                               |

<sup>1</sup>Scale: 1 = not important, 2 = slightly important, 3 = moderately important, 4 = important, and 5 = very important.

<sup>2</sup>Scale: 1 = very poor, 2 = poor, 3 = acceptable, 4 = good, and 5 = very good.

metro and non-metro residents were quality healthcare, available jobs, quality public schools, low crime, and affordable housing (Table 1).

Respondents were also asked to rate the quality of each livability factor in their community. In metro areas, the five factors with the highest ratings were quality healthcare, parks and recreation facilities, clean environment, quality public schools, and weather. The five factors with the highest ratings in non-metro areas were clean environment, traffic safety, low crime, sense of community, and quality public schools.

An analysis of survey responses regarding the importance of different livability factors and the quality of those factors in the respondents' communities provides insight on how livability could be improved. In metro areas, livability could be improved the most by improving the availability of jobs, affordable housing, affordable transportation options, and reducing crime. Similarly, livability could be improved in non-metro areas by improving the availability of jobs, affordable housing, quality healthcare, and affordable transportation options. Further, when compared with metro communities, non-

metro communities have a greater need to improve the identified livability factors, as there is a large gap for improvement.

### Transportation and Livability

Survey respondents were asked to rate the importance and the quality in their community of the following aspects of transportation: affordable transportation options, public transit services, bikeability, walkability/accessibility, traffic congestion, road conditions, and traffic safety. Table 2 shows how respondents rated the importance of each factor, on average, and Table 3 shows the average rating regarding the quality of each factor. The tables show overall responses and differences in responses between survey participants from non-metro counties and those from metro counties. Responses were given on a 1-5 scale, with a higher number indicating greater importance or higher quality, as perceived by the respondent.

Respondents rated road conditions, traffic safety, and affordable transportation options as being the most important. Metro residents rated transit as more important than did non-metro residents, but non-metro residents still rated transit as at least moderately important, overall.

In both metro and non-metro areas, the highest quality ratings were given for traffic safety and low congestion, and the lowest quality ratings were given for affordable transportation options and public transit. Some differences between metro and non-metro residents were observed. Non-metro respondents, compared to their metro counterparts, gave higher quality ratings for traffic safety and congestion and lower ratings for affordable transportation options and public transit quality.

**Table 2. Average Survey Respondent Ratings for Importance of Transportation Factors for Livability**

|                                   | Metro Residents | Non-Metro Residents | Overall |
|-----------------------------------|-----------------|---------------------|---------|
| Roads in good condition           | 4.2             | 4.3                 | 4.3     |
| Traffic safety                    | 4.0             | 4.0                 | 4.0     |
| Affordable transportation options | 4.0             | 3.7                 | 3.8     |
| Low traffic congestion            | 3.7             | 3.7                 | 3.7     |
| Walkability/accessibility         | 3.7             | 3.5                 | 3.6     |
| Public transit services           | 3.6             | 3.2                 | 3.4     |
| Bikeability                       | 3.1             | 2.9                 | 3.0     |

Scale: 1 = not important, 2 = slightly important, 3 = moderately important, 4 = important, and 5 = very important.

**Table 3. Average Survey Respondent Ratings for Quality of Transportation Factors in their Communities**

|                                   | Metro Residents | Non-Metro Residents | Overall |
|-----------------------------------|-----------------|---------------------|---------|
| Traffic safety                    | 3.5             | 3.8                 | 3.6     |
| Low traffic congestion            | 3.2             | 3.7                 | 3.5     |
| Walkability/accessibility         | 3.2             | 3.2                 | 3.2     |
| Bikeability                       | 3.1             | 2.9                 | 3.0     |
| Roads in good condition           | 3.0             | 3.0                 | 3.0     |
| Affordable transportation options | 3.0             | 2.5                 | 2.7     |
| Public transit services           | 2.8             | 2.2                 | 2.5     |

*Scale: 1 = very poor, 2 = poor, 3 = acceptable, 4 = good, and 5 = very good.*

Respondents were also asked the degree to which they agree with the following statement, using a 5-point Likert scale: “I can easily travel to places I need to go in my community using my current travel options.” Overall, most respondents either agreed or strongly agreed with this statement, though about 8% of non-metro residents and 5% of metro residents either disagreed or strongly disagreed.

Findings show that improvements in transportation conditions would improve community livability. In both metro and non-metro areas, this includes improvements to road conditions, public transit services, and walkability/accessibility. Reducing congestion would also have a positive impact in metro areas.

A majority of respondents from both metro and non-metro communities agreed or strongly agreed that it is important for public transit to be available in their community. Metro residents were found to use public transit three times more than non-metro respondents. However, among respondents currently lacking access to transit, non-metro residents were two times more likely to say they would use it if it were available. Less public transit usage in non-metro areas could be attributed to lack of quality service. Public transit was found to be accessible to more than half of metro residents to make trips from their residences to various types of destinations, while transit accessibility was significantly lower for non-metro residents.

Among the survey respondents, 152 indicated that they use transit. The top reasons transit riders started using transit were for convenience and to save money. Another main

motivator in metro areas was to avoid congestion, and in non-metro areas, many transit riders started using the service because they no longer had access to a vehicle. A majority of transit riders from both metro and non-metro areas agreed that public transit is very important to their quality of life.

### Community Quality of Life and Life Satisfaction

To assess the overall subjective quality of life in the community, respondents were asked the following question: “How satisfied are you with the quality of life in your community?” Responses were coded on a 1-5 scale (1=very dissatisfied and 5=very satisfied), and the average response was 3.9 overall, 4.0 for metro respondents, and 3.8 for non-metro respondents.

To determine overall quality of life, or life satisfaction, survey participants were asked the following question: “All things considered, how satisfied are you with your life as a whole these days?” Respondents answered using a 0-10 scale, with a higher number indicating greater satisfaction. The average response was 7.71 overall, 7.79 for metro respondents, and 7.65 for non-metro respondents.

### Data Analysis

The survey data were further analyzed to estimate the following:

- Impacts of transportation factors on ease of travel within a community;
- Impacts of livability factors, including ease of travel, on community quality of life; and
- Impacts of community quality of life on overall life satisfaction.

Ease of travel within a community depends on both individual and community characteristics. If an individual has the ability to drive and has access to a vehicle, it is expected that travel within the community will be relatively easier, compared to someone who cannot drive or who does not have access to a vehicle. Furthermore, if an individual has mobility limitations that makes it difficult to walk, travel within the community will likely be more difficult. A number of community characteristics also determine how easy it is to travel. These include the quality of the transit service, the quality of roads, congestion, traffic safety, and bicycle facilities.

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Ease of travel is one of many livability factors that could impact community quality of life. Other factors include those identified in Table 1.

Transit quality, the conditions of roads, congestion, and traffic safety were all found to have significant impacts on ease of travel. Respondents who rated the quality of these attributes higher were more likely to believe that it is easy to travel within their community. With the exception of congestion, these results held for both the overall sample and the non-metro sample, showing that the quality of transit service is important not just in urban areas but also in smaller communities.

Ease of travel was found have a significant positive impact on community quality of life. Many of the other variables also had significant impacts. Sense of community, street type, walkability, weather, availability of jobs, quality healthcare, quality public schools, and shopping and entertainment options all had significant impacts on community quality of life, as perceived by the survey respondents. Sense of community was found to have the largest impact in terms of magnitude.

Results from the final model show that community quality of life has a significant positive effect on overall life satisfaction. Respondents who rated their community quality of life as higher were significantly more likely to rate their overall life satisfaction as higher. Life satisfaction was also found to be affected by health, age, gender, employment status, and living arrangement.

## Conclusion

The survey provides information about what factors individuals in both urban and rural areas believe are important for community livability, as well as how they rate the quality of those factors in their communities. This information provides insight on how livability could be improved.

Results from the data analysis ultimately show the relationships between transportation and quality of life. If residents have more positive perceptions about the quality of transit service, road conditions, and traffic safety, they are more likely to believe that it is easy to travel within their community, which positively impacts their perception of community quality of life. This ultimately impacts overall life satisfaction as results show the positive impact of community quality of life on life satisfaction, or subjective well-being. These relationships were found to exist in both metro and non-metro communities.

Walkability and characteristics of the street were also found to impact community quality of life. Those who rated the walkability of the community higher were more likely to rate the community quality of life higher. This result was true for both the overall model and the non-metro model.

Results from this study support efforts to improve community livability and subjective well-being through improvements in public transit services, traffic safety, and walkability.