

## Stress Associated with Transportation

### What Were We Trying to Learn?

Stress can impact a person's ability to complete a task. Previous research demonstrates that transportation can be a challenge for individuals with BVI, potentially causing an increase in stress.

**We wanted to learn more about transportation-related stress among persons with BVI.** This study evaluated walking stress and public transportation stress, the impact of stress on activities, and if specific factors could predict stress among adults with BVI.

### What Are the Most Important Things We Learned?

- **People experienced more stress in unfamiliar or changing areas, and less stress when using a taxi or asking someone for help.** Walking in urban areas without sidewalks, walking in unfamiliar places, and navigating unfamiliar bus routes were reported as the most stressful tasks. The level of uncertainty combined with the need for higher focus and effort may lead to higher stress.
- **Entertainment or leisure activities and visiting family or friends were most frequently limited or avoided due to transportation-related stress.** These activities usually help reduce stress, so it is important that people who are BVI have the opportunity to participate in these activities.
- **Transportation stress is not a major factor in employment.** Most survey participants (over 75%) reported that transportation stress did not limit their participation in employment.
- **Walking stress is associated with age, years since vision loss, dog guide use, physical limitations, and frequency of public transportation use.**
  - o Walking stress increases with age, and persons with physical limitations tend to have higher stress than persons without physical limitations.
  - o Walking stress decreases with each year since vision loss, dog guide use, and more frequent use of public transportation.
- **Public transportation stress is associated with age, O&M training, physical limitations, and frequency of public transportation use.**
  - o Public transportation stress increases with age, and persons with physical limitations tend to have higher stress than persons without physical limitations.
  - o Public transportation stress decreases with O&M training and more frequent use of public transportation.

### Research Takeaway

Some individuals with blindness and visual impairments (BVI) experience stress when walking and using public transportation. Greater stress was connected with unfamiliar situations or frequently changing settings. Levels of walking stress and public transportation stress in persons with BVI were associated with age, having a physical limitation, public transportation use, years since vision loss (for walking stress), and receipt of orientation and mobility (O&M) training (for public transportation stress) or dog guide use (for walking stress).

### What Does This Mean For Me as A Person with Blindness or Low Vision?

If you experience stress when traveling or using transportation, consider these suggestions:

- **Use public transportation regularly.** More frequent use of public transportation is related to lower stress levels. Regular practice of travel skills is important to maintaining independence.
- **Seek additional O&M training.** O&M training is related to lower public transportation stress, and O&M training gives you a chance to learn and practice your transportation skills.

- **Try to get out and participate in recreational activities and visit friends and family.** Many people avoided these activities due to stress, but these activities are important for reducing stress overall.

## What Does This Mean For Me as a Service Provider?

When working with consumers who are BVI, it is important to discuss transportation and consider any transportation-related stress they may be experiencing. Consumers may benefit from the following:

- **Discussing transportation stress** – Talk to your consumers about the travel-related stress they face and help them find solutions. You may refer them to support groups, additional training, or other services available in the area. Also, discuss activities that may reduce stress, such as spending time with family and friends or taking part in leisure and entertainment activities, and determine the best options for each individual.
- **Additional O&M training** – O&M training is related to lower public transportation stress, and O&M training gives consumers a chance to learn and practice travel and transportation skills. Consumers who experience stress associated with transportation may benefit from O&M training.
- **Regular use of public transportation** – More frequent use of public transportation per month is related to lower stress levels. Encourage consumers to practice their travel skills and use public transportation regularly.

## How Was This Project Carried Out?

Individuals who are BVI responded to an online transportation survey conducted in 2013 and 2014. This study included 368 survey respondents who do not drive.

## Learn More

Crudden, A., Cmar, J. L., & McDonnall, M. C. (2017). Stress associated with transportation: A survey of persons with visual impairments. *Journal of Visual Impairment & Blindness*, 111(3), 219-230.

For more information about the Transportation project, including links to an online short course and a variety of transportation resources, see the project overview page: [A Customized Transportation Intervention](#).

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