

Research Participant Information and Consent Form

You are being asked to participate in a research project that will help to improve broadband access in Michigan. This project is a collaboration between Michigan State University's Quello Center and Merit Network. Merit Network is a non-profit provider of Internet access to over 700 of Michigan's schools, libraries and government.

This consent form explains benefits and potential risks so that you can make an informed decision about participation. Please feel free to ask the researchers any questions you may have, by email, bauerj@msu.edu, or phone (517) 432-8005.

STUDY TITLE: CITIZEN-ENABLED ADVANCES IN BROADBAND AVAILABILITY DATA

1. PURPOSE OF RESEARCH

The purpose of this study is to better understand broadband access in Michigan. The data collected will help improve the quality of Internet access in Michigan.

2. WHAT YOU WILL DO

Participation in this study should take about 5 minutes. You will need to fill out a short survey related to your Internet access and use. Once you complete the survey you will be asked to click a button to test the speed and quality of your Internet connection.

3. POTENTIAL BENEFITS AND RISKS

You may benefit personally from participation by getting more accurate information about the speed of your broadband. Moreover, the study will benefit the citizens of Michigan and across the United States by better information about Internet access. Eventually, this will lead to better and cheaper access for all.

The study has only very minimal risks for participants. This speed uses an open source test provided by Measurement Lab (M-Lab), a consortium of public interest groups, academic institutions and industry partners, providing an open platform dedicated to Internet performance. Aggregated data will possibly be mirrored in the MLab database. See the Mlab data policy [here](#).

No personal information will be made available publicly. Personally identifiable information such as address or contact information will be kept confidential and stored in a separate and secured database that is only be accessible to researchers at the MSU Quello Center and Merit Network. Any address or location data, such as IP address will be and aggregated for analysis meaning your individual address or location is protected. Please read the FAQ below for more details about data storage, use and access.

4. PRIVACY AND CONFIDENTIALITY

Protecting your privacy is of utmost importance to the researchers. The speed test does not collect information about your personal communication or Internet history, such as emails, phone calls, social media use, web searches. Any location data, such as IP address, will be aggregated to assure confidentiality.

Before you take the speed test, you will be asked for your location and information about your connection. Questions about your address and contact information are optional. Michigan State University and Merit Network will preserve any address, location data or contact information in a private and secure repository in an aggregated form.

5. YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

Participation is voluntary and you can decide to stop at any time. There will be no consequences if you stop.

6. COSTS AND COMPENSATION FOR BEING IN THE STUDY

There are no foreseeable costs or compensations for participating.

7. CONTACT INFORMATION

If you have questions or concerns about this study please contact: Johannes M. Bauer, Director of the James H. and Mary B. Quello Center at Michigan State University, 404 Wilson Road, Room 405, East Lansing, MI 48824. By email, bauerj@msu.edu, or phone (517) 432-8005.

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Road, Suite 136, Lansing, MI 48910.

8. DOCUMENTATION OF INFORMED CONSENT

[opt-in] By checking this box, I voluntarily agree to participate in this study.

FAQ

How does the speed test work?

To begin the test, your browser opens a connection and exchanges a synthetic stream of data, generated solely for the purpose of measuring your connection at that time. Your speed test results show the actual upload and download speeds you are experiencing at the time you take the test. As such, you can assess the performance of your connection from different devices and locations. This information can help you identify the most efficient options for Internet access based on performance measures, and allows you to compare actual performance with advertised broadband speeds.

What do these results mean?

Your speed test results show the actual upload and download speeds at the time of the test. Results can vary due to:

- the device you are using
- your operating system
- the browser you use
- the time of day you take the test
- whether you are using WiFi or a wired connection
- the number of devices connected to the same signal at once

You can take this test as many times as you like, from as many devices and locations as you like. If the speeds you are receiving do not match up to your expectations, you can contact your Internet Service Provider directly and ask them to fix any issues. If you believe your ISP is violating federal Open Internet rules, you can file a complaint with the Federal Communications Commission (FCC).

What data will be collected?

Before you take the test, you will be asked to take brief survey which includes questions about Internet use, price, household size and income and your contact information. Personally identifiable data such as address and location are stored in a separate and secure database accessible in an aggregated form only to researchers. Data with potential sensitive or personally identifiable are not made public.

This study does not collect any personal communication or browsing history data. The speed test data it sent across your network is synthetic - meaning it does not come from your device or other applications you are

operating - and will be used for measurement only. The speed test data is submitted in aggregated form to assure confidentiality.

During the test, the server collects:

- your Internet Protocol (IP) address
- the date and time of the test.

We may collect descriptive information such as:

- the name and version of your web browser software
- software application
- or operating system used to take the test.

Performance variables will be collected describing the state of connection during the test, such as:

- average download speed
- average upload speed
- the time it takes for a message to travel from user to server
- whether the application or protocol is delayed, or changed, in transit.

How will the data be used?

The purpose of this study is to better understand broadband access and quality in Michigan. Speed test data will be aggregated for publication and visualizations. We may produce visualizations that display performance patterns for a particular region or ISP.

Scholarly research may result from a combination of the speed data with survey responses. The data collected will help those of us who are interested in digital equity to assess the state of broadband access in Michigan. Address, location and contact information will not be published and will be accessible only to researchers at the MSU Quello Center and Merit Network. While researchers have access to address and location data, these data will be aggregated. Data with potential sensitive or personally identifiable are not made public.

How will my data be stored and accessed?

After the initial collection, data are aggregated storage and analysis. There will be two distinct repositories for these data, one that is publically accessible and the other that is archived in a secure and password-protected repository at servers at Michigan State University and Merit Network, Ann Arbor. To allow research on Internet performance trends over time, all data are stored indefinitely. Speed test data are published publicly to support Internet performance research. Merit Network will host address and location data, however, this information will be kept confidential in an aggregated form and will not be accessible to the public, only to the researchers.

No personally identifiable data such as address or location data will be linked with the public facing performance data. No information will be stored in a publicly accessible way that would allow associating your personally identifiable information, history of tests or devices or content of communications, such as emails or Internet searches.