Current Broadband Measures Have Limitations, and New Measures Are Promising but Need Improvement

Why GAO Did This Study

The Broadband Data Improvement Act, enacted in 2008, established a variety of initiatives intended to improve the quality of state and federal data on broadband (i.e., high-speed Internet) services and promote the deployment (the building of infrastructure over which broadband services can be provided) of affordable broadband services to all parts of the nation. The act required GAO to conduct a study to consider and evaluate additional broadband metrics or standards. This mandated report addresses (1) the measures generally available to consumers, industry, government and others, and (2) the limitations, if any, of the measures and how they could be supplemented or improved. To identify and evaluate the measures, GAO conducted a review of literature and related laws and interviewed and reviewed related documentation from stakeholder groups.

What GAO Found

Multiple measures are generally available to consumers, industry, and government to assess broadband performance. Consumers can generally access measures of availability, price, advertised speed, and actual delivered speed from providers and third parties to compare services. Industry and government also have access to some measures that enable comparisons across segments of the United States to inform policy and guide investment. For example, the Federal Communications Commission’s (FCC) data from its semiannual reporting requirement for providers are the primary source for comparing the availability of and subscribers to broadband. Through a literature review and interviews with stakeholders, GAO focused on 10 measures that can be used to make international comparisons of broadband service to inform policy. Eight were composite indexes that are generally used to account for factors such as demographic and economic differences among countries, which, according to stakeholders, can affect broadband deployment and penetration (the number or percentage of subscribers per capita or per household).

Through available documentation and discussions with stakeholders, GAO found that current measures have limitations, views were mixed on potential alternatives, and ongoing efforts need improvement:

- According to some stakeholders, the lack of comprehensive measures from the government to compare price, actual delivered speeds, and service reliability data from providers is a limitation for consumers. FCC has open proceedings on requiring providers to report such information, but there was no consensus among stakeholders on the need for additional reporting requirements and measures.
- Stakeholders told GAO that FCC’s semiannual data collection from providers does not include information on availability, price, or actual delivered speeds, which limits the ability to make comparisons across the country and inform policy or investment decisions. Stakeholders generally agreed that the Department of Commerce’s effort to develop a national broadband inventory map through its State Broadband Data and Development Grant Program would address some gaps and provide detailed data on availability, subscribership, and actual delivered speeds, but the department did not provide guidance to grantees on calculating actual delivered speeds or specific standards to verify the data collected. This could result in inconsistent data and limit the effectiveness of the effort. GAO has previously reported that consistency and data verification are important for reducing the risk of producing inaccurate data.
- Finally, the measures used for international broadband comparisons have limitations for a variety of reasons, including socioeconomic differences that make the comparisons difficult. Despite the concerns, stakeholders found the measures useful to help inform policy. Stakeholders generally supported FCC’s efforts to develop international comparisons because the comparisons will be at a local level within each country, and could provide more relevant information.

What GAO Recommends

To increase the data quality and subsequent results from the State Broadband Data and Development Grant Program, GAO recommends that the Secretary of Commerce examine the results of data collection and determine whether to develop specific guidance for grantees to improve the consistency and accuracy of the data collected under the program. The Department of Commerce generally agreed with GAO’s recommendation and stated it had begun taking actions to address the recommendation.