

DAY ONE PROJECT

Creating a Broadband Data Dashboard to Support Federal Communications Commission Decision-Making

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October 2020

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Summary

The next administration should launch a concerted broadband data-collection and analysis effort to support smart, timely, and informed decision-making by the Federal Communications Commission (FCC) and other agencies that work on broadband, such as the Rural Utilities Service. Specifically, the FCC should collect (or work with others to collect) comprehensive data on the following eight indicators:

- (1) Broadband deployment
- (2) Broadband adoption
- (3) Broadband performance
- (4) Competition
- (5) Pricing
- (6) Anchor institutions
- (7) Specialized networks
- (8) International benchmarks

These data should be centralized on a “broadband data dashboard” to support informed decision-making by the FCC as well as analysis and application by stakeholders in government and industry as well as the general public. The dashboard would also support the FCC in developing and assessing progress towards clear, quantifiable goals for each indicator.

Challenge and Opportunity

Policymakers need reliable data to assess the benefits and tradeoffs of different policy options and act effectively in response. The data that the FCC currently collects, such as Form 477 data on broadband deployment, has well-known issues with reliability and usefulness.

We hope that the new FCC efforts on data collection are implemented effectively.¹ The FCC, along with other agencies, should focus on collecting comprehensive data on the eight key indicators presented below. Data should be sourced from service providers, consumers, and third parties, and updated regularly. Data should then be aggregated, anonymized, and made freely available on a public “data dashboard”. The dashboard would enable the FCC—as well as others in government, industry, and among the general public—to quickly and easily assess the state of the U.S. broadband ecosystem and identify important trends. The FCC should also set clear, quantifiable goals for each indicator, assessing the expected costs and benefits of achieving these goals to help the FCC craft a successful and cost-effective policy agenda.

¹ FCC adopts new rules for more granular broadband map data collection. Fierce Telecom. June 16, 2020. <https://www.fiercetelecom.com/telecom/fcc-adopts-new-rules-for-more-granular-broadband-map-data-collection>.

Plan of Action

- (1) Broadband deployment: The FCC should require every broadband company in the United States to report the number of homes it serves with access to various broadband-speed tiers. Because mobile coverage is affected by so many variables, the FCC should use multiple third parties to measure wireless broadband coverage, perhaps assigning probabilities of some minimum level of coverage in questionable areas.
- (2) Broadband adoption: Not all households in areas with access subscribe to broadband services. The FCC should work with the Bureau of Labor Statistics (BLS) to conduct surveys aimed at understanding reasons for differential levels of adoption. The BLS has the skills necessary to do such surveys properly and has some institutional broadband knowledge given that it has been tracking internet use for many years. BLS surveys can also assess a large range of household and person-level issues, such as digital skills. In addition, data collected on broadband as part of the American Community Survey (ACS) and Current Population Survey (CPS) can be combined with demographic, geographic, and other data to answer important policy-relevant questions. Such additional data could also be combined with deployment data to identify the percentage of homes in low-income areas with access to affordable service.
- (3) Broadband performance: Broadband performance depends on numerous factors, including download and upload bits per second, latency, packet loss, and other factors. The FCC should measure them all. Because many methods exist to measure aspects of broadband performance, the FCC should work with multiple third parties to assemble the most comprehensive dataset on broadband performance that is possible.
- (4) Competition: The FCC should task its Office of Economics and Analytics (OEA) with ongoing collection and analysis of data related to competition in broadband markets. Analyses should take into account changing market definitions, cross-elasticities, and other factors that affect competition. We expect that the OEA could perform some data-collection and analysis efforts in house but would benefit from contracting out others.
- (5) Pricing: The FCC should work with the BLS to track broadband prices. Prices are complex in any industry or market, and BLS has the expertise and knowledge to properly evaluate prices. BLS already has several relevant price indices, including on wireless telecommunications, wireline telecommunications, and internet services. With input from the FCC, BLS could add an additional index on broadband prices. Such an index would be highly salient to consumers and policymakers.
- (6) Anchor institutions: The FCC should collect data on connectivity of classrooms, libraries, health-care facilities, and other community facilities that need reliable broadband access

to provide essential services. The specific data collected should be tailored to the institution type.

- (7) Specialized networks: As the uses and users of public data networks change, the data the FCC collects should change, as well. A number of specialized networks, such as the public safety network, the 911 and other X11 networks, and the emerging Internet of Things networks already exist. Assessing such networks for policy purposes may require different types of data. For example, data on location accuracy may be more important than data on bandwidth when it comes to assessing 911 networks. The FCC should determine what data is needed to understand specialized networks, and then partner with appropriate parties on collection.
- (8) International benchmarks: Maintaining U.S. competitiveness and technological leadership requires data on how the United States compares with other countries on various metrics of broadband strength. For example, one bipartisan policy goal is for the United States to lead the world on 5G. Yet the FCC has not established what would constitute such leadership. Better international benchmark data would help policymakers focus on goals that matter instead of those that are easier to achieve but do little to improve the nation's global position.

Though comprehensive data on the above eight indicators cannot be collected without industry participation, the FCC should not rely solely on industry for (or force industry to bear all the costs of) data collection. Crowdsourced data and government-sponsored surveys can yield valuable information on many aspects of the U.S. broadband ecosystem. The FCC should use creative strategies to alleviate concerns that data collection may impose cost burdens and/or involve proprietary, business-sensitive information.

In addition, the FCC should establish short- and long-term goals for each of the above eight indicators (with the exception of price indices). The FCC can use information from the broadband data dashboard to set priorities and use existing research and case studies to develop actionable strategies for achieving goals. For example, natural and FCC-sponsored experiments offer valuable lessons for expanding broadband adoption among low-income households. The goal-setting effort should emphasize robust collaboration and information exchange with other policymakers at the local, state, and federal levels.

The existing federal broadband data-collection efforts are outdated, based on a format developed for a census of telephones in the late 19th century. The FCC needs to move broadband data collection into the information age. Through its own efforts and through collaboration with federal agencies like the BLS, the FCC can serve as a shared, reliable, relevant, and clear source of data and information that the private market does not have an incentive to create. The FCC should apply that information to craft policies that will drive economic growth and social progress in the United States—and work with partners at all levels of government to do so as well.

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About the Authors



Blair Levin has worked at a high level at the intersection of broadband policy and capital markets for the past 25 years. From 1993–1997, Levin served as Chief of Staff to FCC Chairman Reed Hundt. In 2009, Levin co-led the technology transition team for President-elect Obama. He returned to government service from 2009–2010 to oversee the development of the National Broadband Plan for the United States. Levin is currently an equity analyst at New Street Research and a non-resident Senior Fellow of the Metropolitan Policy Project of the Brookings Institution.



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The **Day One Project** is dedicated to democratizing the policymaking process by working with new and expert voices across the science and technology community, helping to develop actionable policies that can improve the lives of all Americans, and readying them for Day One of a future presidential term. For more about the Day One Project, visit dayoneproject.org.