Measuring Broadband America:

Fixed & Mobile Broadband Performance Measurement

AIMS 2018

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- **Program Goals**
  - Create national database on mobile broadband performance and characteristics accessible without restriction by the public

  - Protect privacy and maintain consumer confidence

  - Advocate for standardized metrics and data formats

  - Promote sharing of technologies and information with similar programs

  - Open Methodologies, Open Data, Open Source and Collaboration
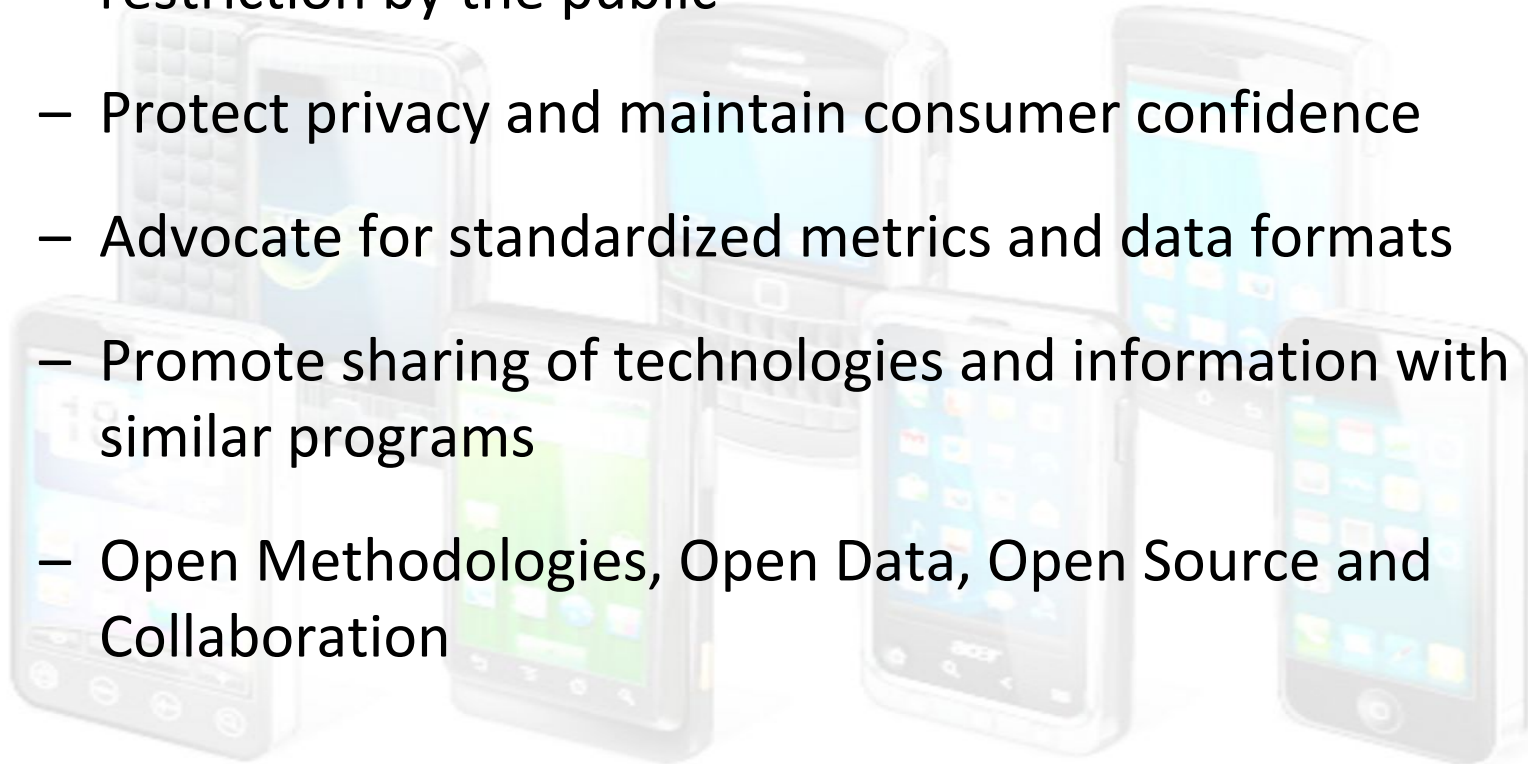
• **Fixed Broadband**

- Commission began gathering data in 2011 and has released six reports on *fixed* broadband performance.

- Strategic goals to ensure accountability, increase transparency, and enhance competition in the market.

- Reports have spurred investment, helped consumers make informed decisions about the marketplace, and helped the Commission make fact-based decisions.

- Developed infrastructure for nationwide testing and data collection
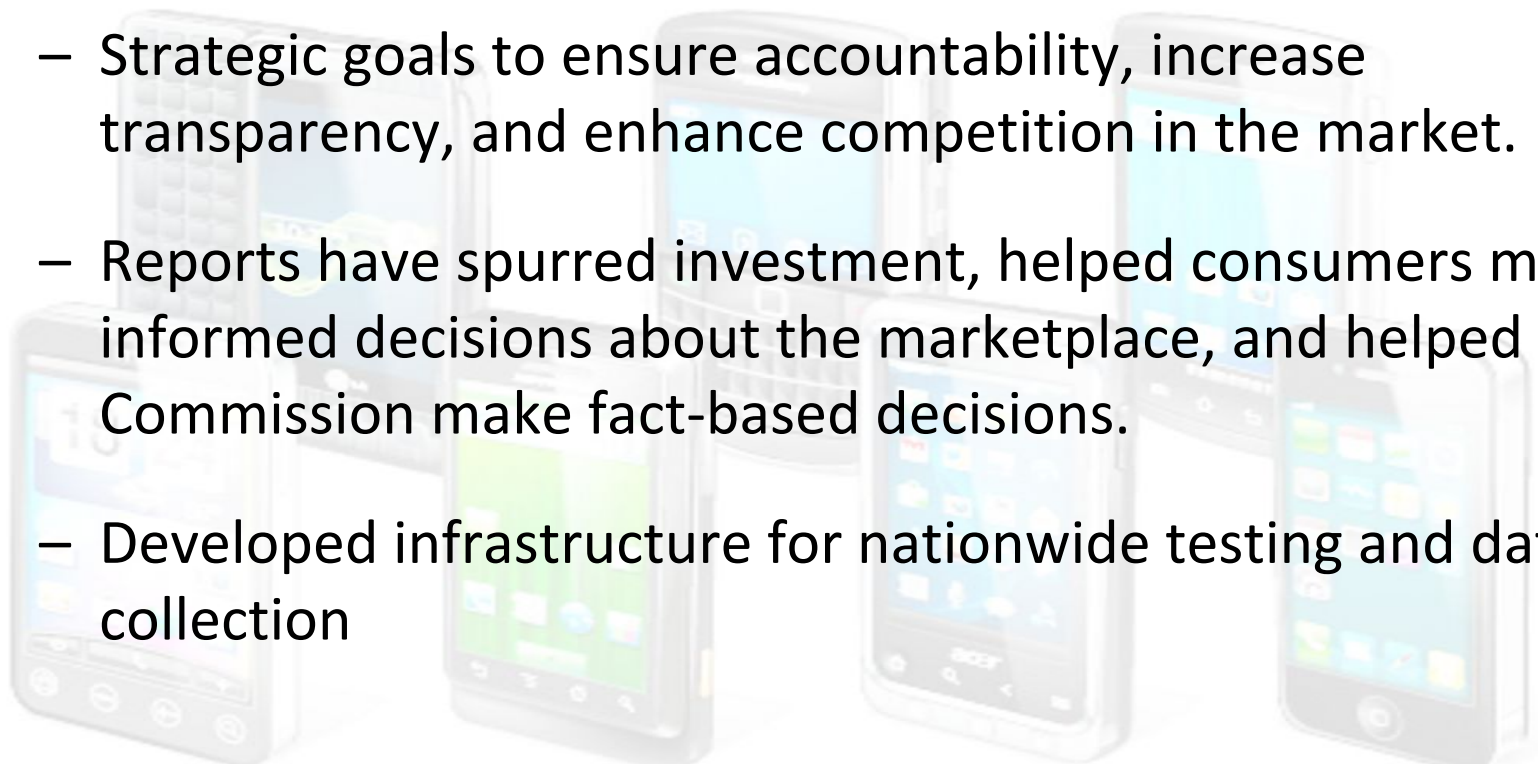
- **Opportunities for Collaboration**
  - Use of shared datasets
  - FCC Speed Test App and "WhiteBox" source code
  - Ability to support other data collections
    - JSON conversion tools and local panels https://github.com/FCC/mmba_JSON_bulkimporter
  - Leverage collaborative and privacy-centric best practices

Recent Fixed Methodology Changes

- Weighting of tiers using carrier supplied and 477 info

- New test schedule to provide more peak period data and reduce the overall volume of tests

- Switch from using 3 to 8 concurrent TCP threads
  - speeds for service tiers above 100 Mbps by a small amount (less than 2 percent with satellite upload tests showing larger number of failed tests)

- Certification of whitebox v8.0 capable of measuring upto 1 Gbps and full 802.11ac compatibility
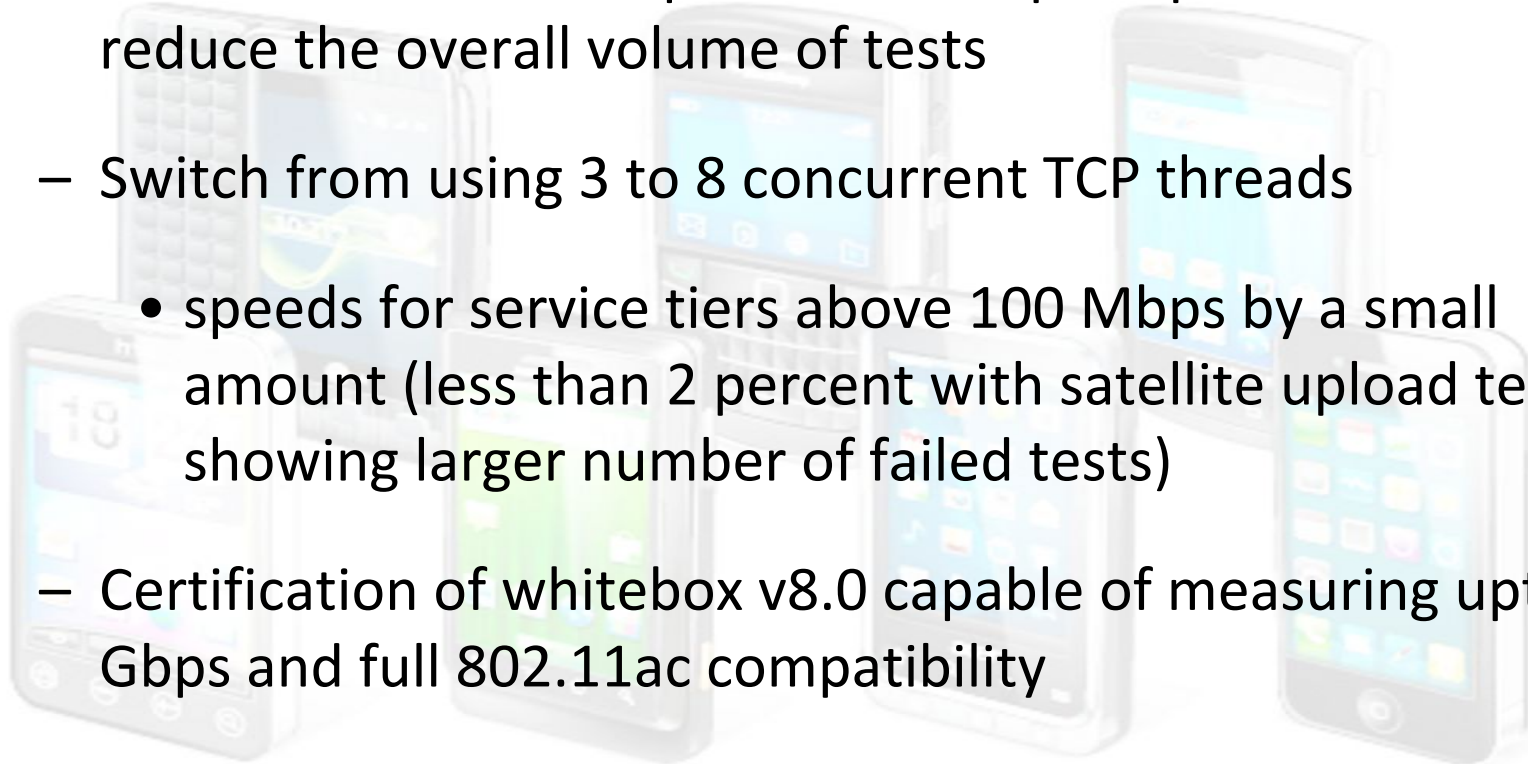
- **Transparency Rule 2018**

    Any person providing broadband Internet access service shall publicly disclose *accurate information* **regarding the network management practices, performance, and commercial terms** of its broadband Internet access services sufficient to enable consumers to make informed choices regarding the purchase and use of such services and entrepreneurs and other small businesses to develop, market, and maintain Internet offerings. Such disclosure shall be made via a publicly available, easily accessible website or through transmittal to the Commission.
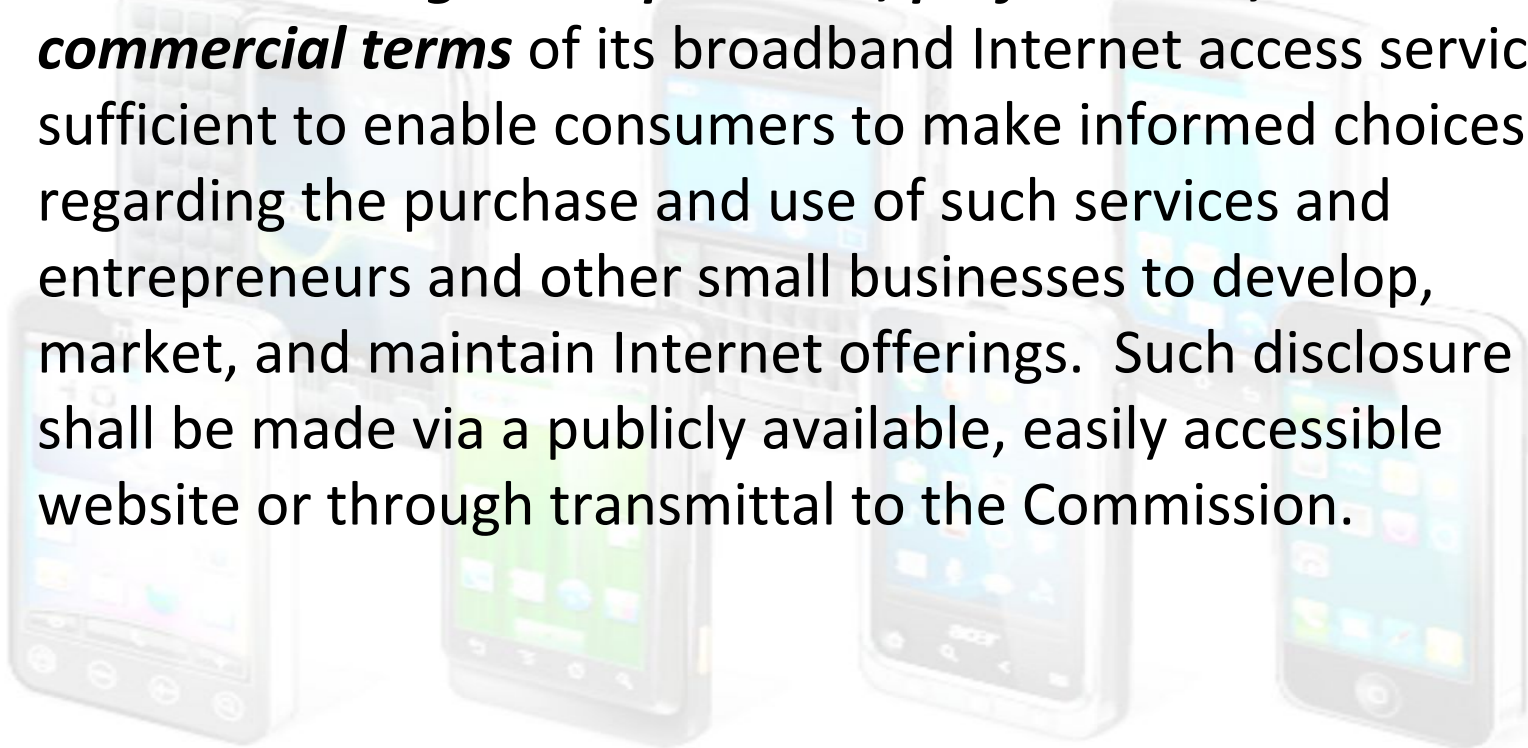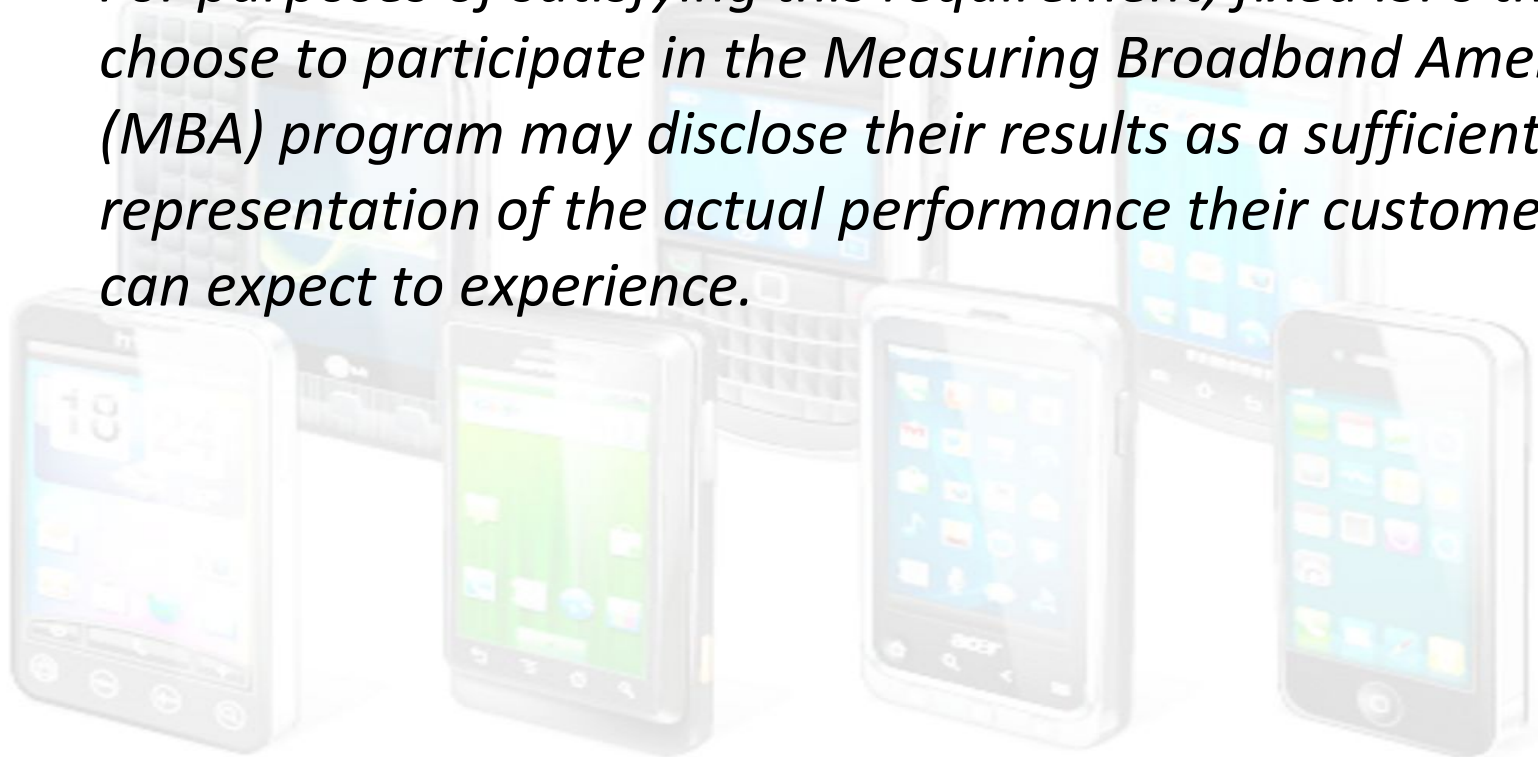
- **Restoring Internet Freedom**

  – *Service Description footnote 818:*

    For purposes of satisfying this requirement, fixed ISPs that choose to participate in the Measuring Broadband America (MBA) program may disclose their results as a sufficient representation of the actual performance their customers can expect to experience.

- **Restoring Internet Freedom**

  - Fixed ISPs that do not participate may use the methodology from the MBA program to measure actual performance, or may disclose actual performance based on internal testing, consumer speed test data, or other data regarding network performance, including reliable, relevant data from third-party sources.

  - Mobile ISPs that have access to reliable information on network performance may disclose the results of their own or third-party testing. Those mobile ISPs that do not have reasonable access to such network performance data may disclose a Typical Speed Range (TSR) representing the range of speeds and latency that can be expected by most of their customers, for each technology/service tier offered, along with a statement that such information is the best approximation available to the broadband provider of the actual speeds and latency experienced by its subscribers.

Network Management Practices

- Blocking
- Throttling
- Affiliated Prioritization
- Paid Prioritization
- Congestion Management
- Application-Specific Behavior
- Device Attachment Rules
- Security

Performance

- Service Description
- Impact of Non-Broadband Internet Access Service Data Services

Commercial Terms

- Price

- Privacy Policies

- Redress Options

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