

Data Science Clinic: Winter 2024 Internet Equity Initiative

The DSI's Internet Equity Initiative is working to produce accurate broadband maps to reduce inequities in broadband access. In 2022, the FCC initiated an expanded Broadband Data Collection project to document existing internet access across the US. This project allows stakeholders to challenge geo-locations where broadband access is reportedly available ('Broadband Serviceable Locations' (BSLs)). The challenge data is used to allocate state funding for broadband improvement, so analyzing the data through geographic and demographic lenses is crucial to uncovering equity issues.

This quarter, our team expanded an existing data processing pipeline to analyze Fixed Challenges, which represent challenges to broadband speed/quality and provider service standards. The pipeline cleans and processes challenge data, then aggregates it with demographic indicators for different geographic levels and outputs combined datasets.



Our analysis shows that out of 3,690,776 fixed challenges, about 70% are upheld, 15% are overturned, and 15% are withdrawn. Although challenge counts vary across states, Nebraska and Virginia report higher volumes. When normalized by BSL counts, only Nebraska shows a notably higher rate of challenges. Challenge upheld rates vary further by category code and technology type. All categories have over 50% of challenges upheld, while technology types vary between 17-100% challenges upheld.