

PAgCASA Methodology and Offerings for State and County Governments

PAgCASA is a non-profit organization that provides state and county governments with best-in-class industry-grade broadband network quality of service verification data, which is challenge and litigation-ready. We accomplish this work in the following ways:

- **Industry-Standard Devices.** We utilize the same multi-gigabyte network monitoring devices/equipment that the major ISPs (e.g., Verizon/AT&T/Comcast) use to monitor their networks.
- **Industry-Standard Speed Testing Software.** We program the equipment using the most reputable speed testing applications, e.g., M-Lab and Ookla. Our tests run autonomously at regular intervals, while allowing citizen and local business testing participants to continue to do their normal online activities -- unaffected.
- **Premier Location Service Partners.** We work with local stakeholder groups and premier geographical and geophysical firms such as GeoPartners and LightBox to identify locations where we need to validate crowdsourced or bulk unserved and underserved data for challenge or litigation purposes.
- **Highest Level of Security.** We use an industry-leading Onclave Networks Edge solution to provide the highest level of cybersecurity to ensure customer data privacy protection.
- **Latency-Free Testing.** Our Onclave Networks Edge solution importantly does NOT add latency to the speed testing.
- **Available Service Testing.** We only attach the devices to the modems of the *premium* customers of the ISPs in a given community to obtain accurate FCC-specified "available service" speeds and quality of service over time.
- **Ethernet Testing.** We attach the devices directly (via ethernet cable) to a citizen's modem to ensure that the highest quality and speeds are tested at a given location.

PAgCASA's service offerings to state and county governments include the following:

- **Citizen Education/Survey/Data Collection.** Working with the government partner, we develop a survey strategy and drive the survey process, as needed. This includes an educational mail campaign, door knocking, online ads, business/civic outreach, website development, and graphic design.
- **Stakeholder Education and Outreach.** We reach out to the stakeholders in target areas to enlist input and cooperation. This includes local ISPs, governmental agencies and officials, businesses, non-profits, and others.
- **Data Mapping and Analysis.** Utilizing our data generated from our industry-standard monitoring devices, we create a map specific for each government client. This data is easily visualized for presentations to stakeholders, decision-makers, and staff. We also overlay various third-party maps (e.g., FCC, state maps, 911 maps, etc) and provide our analysis of the resulting data.
- **Government Facility and Anchor Institution Testing.** Our industry standard network monitoring equipment can also be used to validate network performance for state and county facilities, such as: water treatment, fire and first responder buildings; government agency buildings; schools; libraries; healthcare centers, etc. to ensure adequate speeds and quality of service commensurate with government and taxpayer investment.
- **Data Preparation for Challenges and Litigation.** Data generated from our field tests are made available in compelling and understandable formats that can be used by state or county governments to successfully stand up to scrutiny, legal challenges, or litigation.
- **Benchmarking, Auditing and Contract Compliance.** Data generated from our field tests can also provide state and county officials with an important performance audit and benchmarking function to ensure compliance by ISPs with infrastructure awardee contracts. These audits and accountability measures are critical to obtain public trust and to ensure there is no overbuilding that has plagued investments in network building in the past.
- **Broadband Metering Capability.** PAgCASA's device-driven testing can also provide state or county governments with an independent broadband metering function to ensure that speeds delivered by an ISP to a customer actually meet the advertised speeds -- much like how electricity, water, and natural gas services are metered for the consumer's protection. It will also ensure trust in the data listed on the ISPs' new FCC-mandated broadband labels.

Please visit our website at www.pagcasa.org to learn more about PAgCASA and its focus on rural prosperity, including the latest article by the largest Ag publication in the Pacific Northwest about our work in rural Polk County, Oregon, other recent articles, technical filings at the FCC, and presentations at USDA, Purdue University, etc.