



Introduction

The SIPA testing app powered by Mobile Pulse provides mobile performance measurement results that empower governments to execute cost-effective and productive mobile broadband strategies. By installing a simple client on smart phones, tablets and cellular laptops, performance tests are periodically run in the background and the results are collected on a secure site. Mobile Pulse provides you access to and analysis of this anonymous data through a web dashboard to understand, identify and solve performance issues in your mobile network. This actionable data will help you make better decisions about which carrier to use and what devices to buy, as well as giving you insights about how your mobile applications will perform.

How Mobile Pulse Can Benefit Governments

State and local governments depend on commercially available mobile networks. At the same time, critical services such as fire, police and emergency response all rely on the same commercially available systems. With tight budgets and a need for reliability, value in these networks depends on both cost and performance. By widely distributing this testing app, governments can compare a region's local networks and compare the performance of each provider. Better still, governments can pinpoint problem areas and work with providers to develop solutions. Governments can continuously monitor coverage and work to negotiate cost reductions based on service quality, or seek agreements to improve coverage in problem areas.

Emergency services can benefit tremendously as first responders will understand the dynamics of coverage in their area. Further, the data can help reduce transaction and operating costs for local governments by shortening the decision time when selecting new providers and enabling performance-based rate adjustments.

Importantly, following initiatives from the National Broadband Plan and FirstNet, cities and states increasingly need to take inventory and map the quality of local broadband. Mobile Pulse's monitoring, mapping and analytical services allow state and local governments to lift the shroud over mobile network performance and drive progress in wireless communication.

In addition to network quality, Mobile Pulse can be used to improve device decisions. If you are considering upgrading to LTE or new device classes, Mobile Pulse can provide detailed reports on the performance of various devices on different networks. Governments can make decisions based on minimum requirements and proven performance, ensuring value throughout mobile IT.



How this Testing Benefit Consumers

There are several important reasons consumers may want to participate in the service. The results will be available to the state broadband mapping program to produce detailed coverage maps for the public. When discrepancies are found between the vendor maps and the state maps, the vendors are notified so they are aware of the problem. Ultimately the information may go all the way up to the Federal Communications Commission (FCC) for national consumer advocacy on broadband issues.

Frequently Asked Questions

How does this app help me, the resident?

While the app can be run manually to give the resident the performance of a specific location, the real benefit comes from the on-going, automated testing on many phones across the community. By volunteering to join the effort, residents help map the connectivity and performance of wireless networks. Governments can produce detailed maps for communication with wireless vendors, evaluating where new cell towers are needed and implementing public safety communication strategies. Better communication and data access by public safety and first responders may ultimately help make the community safer. When discrepancies are found between the wireless vendor maps and the government maps, the vendors are notified so they are aware of the problem. Ultimately the information may go all the way up to the Federal Communications Commission (FCC) for national consumer advocacy on broadband issues.

In what ways have organizations used this service?

Mobile Pulse provides a rich set of tools that will allow governments to:

- Understand current performance of mobile wireless networks
- Negotiate improved cellular agreements
- Assist in troubleshooting mobile application performance issues
- Develop better mobile device policies and strategies
- Understand geographic areas with poor or insufficient performance
- Utilize real data to assist in evaluating new cellular tower locations
- Participation in state, national and public safety broadband mapping efforts

What is the battery impact on devices running Mobile Pulse?

The app uses very little resources on the phone. The software wakes up periodically (every few days), takes a GPS reading, performs a quick test, and then goes back to sleep, utilizing very



little battery power. In addition, the service has a built in battery protection that turns the service off if the device's battery gets too low.

What data plan is required and will the service cause extra data charges?

The app will stop testing if testing results in 100 MB of data consumption in a month. This results in a very low percentage of today's typical data plans in the 1-4GB/month range. Residents with no data plan or very small data plans should not install the app.

Are there privacy concerns?

The Colorado SIPA testing app collects no personal information and never asks for identifiable information. The app tests the mobile network once every few days and only associates the results to the location of the test, not to a person. Because the app doesn't collect any identifiable information during the test, there is no way for anyone to know who was at the test location. You can read the full [privacy policy](#) on Mobile Pulse's website.

Will my phone be spammed or filled with advertisements?

No. Volunteers running the testing app will never receive any ads, marketing, or solicitations. The app does not display advertisements and the company will not add them in the future. The company does not ask for, nor collect your email, phone number or any other way to contact you. The purpose of this app is to study mobile wireless connectivity and speeds, so you will not be spammed as a result of running this app.

Can someone find me or track my location if I install this app?

Absolutely not. Neither SIPA, your local government, nor any other entity will be able to track a phone's location as a result of installing the Colorado SIPA testing app. The app wakes up every few days to test and it doesn't record your location between tests. The results of your app testing will be anonymous among the hundreds of thousands of other anonymous test results in the state. Governments cannot see individual test results. Governments receive reports on the average performance results for geographic areas like a 1 kilometer block, census block, city or county.

Are there other services like this?

The Mobile Pulse service tests and shows results a lot like Google Maps does on a phone. If you are running the Google Maps app while driving, it records your car's speed and location and



then combines the anonymous test results with other Google Map users to show traffic congestion. Mobile Pulse uses this same concept but for wireless network performance.

How secure is the service?

Colorado SIPA and your local government are working with a Colorado-based analytics firm, Mobile Pulse, to ensure privacy and security of this service. They use encryption and two-factor authentication to protect the app and test results.

Is there a cost?

There is no cost for residents to download and install the free app from the app stores. For local and state government to run reports and analyze the data, SIPA purchased a statewide license. Participating local governments pay a small fee each year to fund the program.

What if I still have questions?

The Colorado SIPA testing app is on a volunteer basis. You can uninstall the app at any time. If you have more questions, please contact the Chief Privacy Officer at Mobile Pulse, Kevin Capp, at kevin.capp@mobilepulse.com.