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"DriFi" Drive-In Wifi Hotspots Project

Statewide Public Access To "DriFi" Drive-In WiFi Hotspots for Telehealth, Remote Learning, Telework, Unemployment Filing, and Census Participation.

1 Background

During this critical time of need for broadband connectivity across the state of Washington we now have access to a rapid response solution to address connectivity concerns.

The genesis of this model was initiated by André-Denis Wright, Dean, College of Agricultural, Human and Natural Resource Sciences, Washington State University, and has expanded to a collaboration with the Washington State Broadband Office (WSBO), Washington State University Extension (WSU), Washington Library Association (WLA), Washington Technology Solutions (WaTech), Washington Independent Telecommunications Association (WITA), and is currently seeking funding through the Public Works Board (PWB).

2 Objectives

To set up open access Drive-In WiFi Hotspots (DriFi) in areas of need for students and community access across the state of Washington.

Phase I
Initial installations at 40 Washington State University Extension offices statewide, which include one office in each county and one tribal location.

Phase 2
Once the first model is proven, this solution can be rolled out to 60 additional educational facilities and libraries across the state in areas of concern and tribal reservations, leveraging substantial broadband connectivity currently underused during the Covid-19 crisis, utilizing existing networks already funded by state and federal dollars.

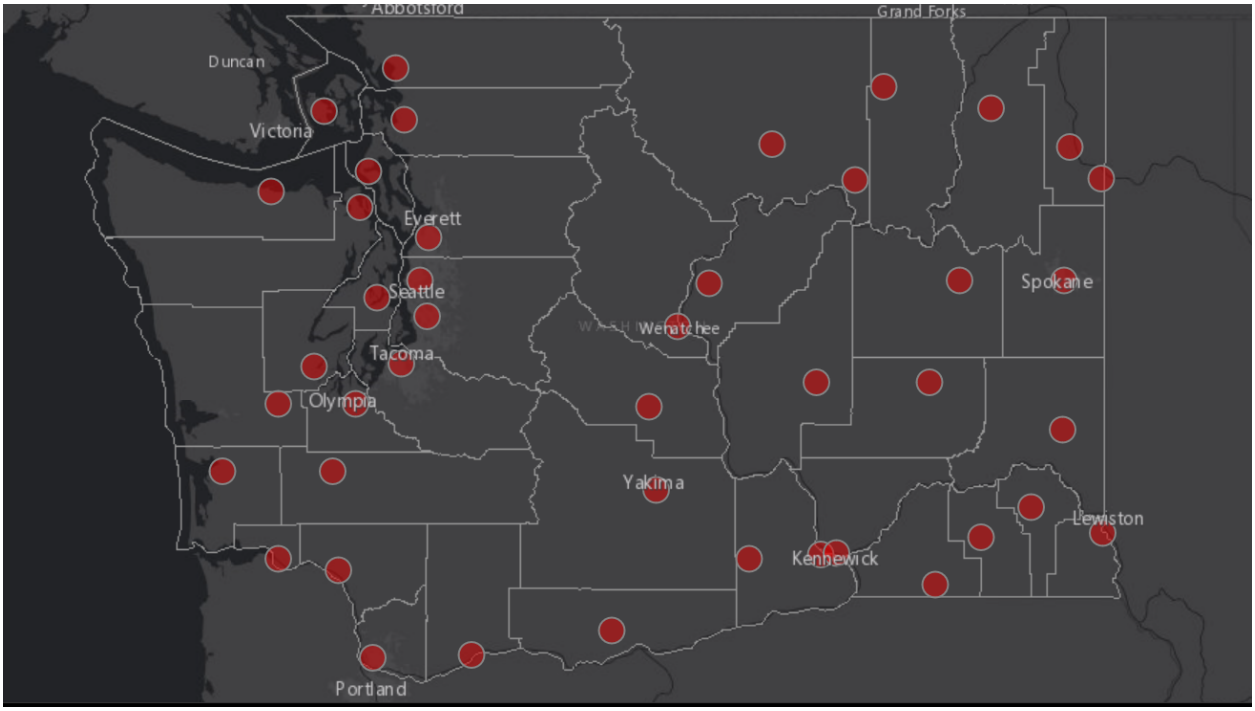
Though this does not expand networks to the home, it does offer immediate supply of internet in convenient locations for Washington state citizens, students, and workers.

3 Locations and Coverage

A DriFi locations map created in collaboration with the Department of Commerce, WSBO, and WaTech, will be available at broadband.wa.gov, featuring WSU locations (see below), with additional locations listed as they become available. This map also has the potential to include other WiFi locations throughout the state.

Anticipated WiFi coverage area is 1000-2000 feet diameter around each deployed access point.

As all public WiFi is either in 2.4Ghz or 5Ghz, related interference is inevitable. We will work at locations to ensure minimal concern around outside interference.



Washington State University Extension Office Locations

4 Funding

WSBO is requesting funding to support the initial build out by WSU Extension to their 40 offices and proposes funding another 60 locations in primarily rural areas of concern to leverage build outs at schools, libraries, and other locations to be determined.

Estimated individual site costs are $10K per site, at a total of 100 sites.

Our objective is to secure funds under an emergency allocation from the Public Works Board (PWB), with the Department of Commerce (DOC) and Washington State Broadband Office (WSBO) to manage program logistics. If not successful, we will seek alternative funding.

5 Family Education Rights and Private Act (FURPA) Compliance

WSU Extension Sites

- Hot Spot splash pages will feature Governor Inslee's social distancing requirements and site access terms of use. Each location will include network security protocol to be determined by WSU, WaTech, and WSBO.

- This proposal is for the expansion of an existing, robust system, rather than a new system. In essence, this proposal will simply add access points to the current WSU system now in place at our campuses, our Research and Extension Centers, and many of our County Extension Offices. WSU is keenly aware of the cybersecurity issues and will be attentive to those as we move this project forward.

- Students will use standard WSU systems – which require log-in with User ID and Password, and two-factor identification for accessing any protected documents or information (grades, finances, etc.).

- Students from other institutions will be virtually connected via our secure connection to their home institutions' secure systems. Only those accessing through "guest access" will be on any lesser security than is currently the case for wireless access on any of our campuses.

- People using guest access will be protected by many industry's moves to securing web traffic in the browser by default.

- Personal privacy protections will be the responsibility of the user. Users will be required to accept a "terms of use" prior to accessing the service including guidance related to personal or financial transactions and HIPPA non-compliance.

- Hot Spot sites will feature unique signage at each location.

6 Equipment Ownership

All equipment required is awaiting funding announcement. Purchased equipment will be considered an asset of the state of Washington and, with written agreements, will remain in place for its useful life.

Washington state plans to repurpose, resell, transfer, or remove this equipment beyond end of need, or leave in place as a state broadband contingency network.

7 Implementation

First successful installations will provide best practices and video support. See attached WSU Extension proposal containing deployment plan and cost estimates.

8 Timeline

Implementation
Installations would begin effective immediately. At this point in time we expect a half-day process.

Build Out
WSU is currently developing a draft implementation plan, with timelines, which will be shared shortly. Availability of components for purchase has been verified for 40 sites and processes for installation will commence once the necessary equipment has been delivered.

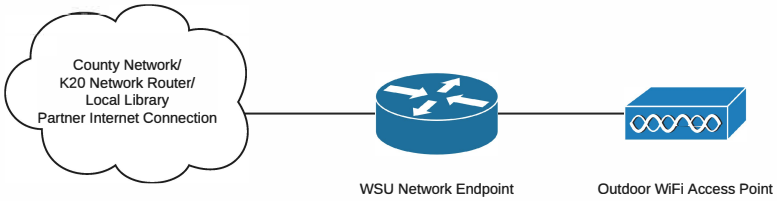
Att.
Washington State University Extension - Rapid Rural Wireless Network Deployment

WASHINGTON STATE UNIVERSITY EXTENSION | CAHNRS Information Technology, Washington State University

Rapid Rural Wireless

Network Deployment

Operational Deployment Project
Developed 3/26/20



Item	Est. Price	Qty	Est. Cost
Meraki MX (Router)	$3400	1	$3400
Meraki MR (Access Point)	$2050	1	$2050
Cabling	$50	1	$50
Mounting Equipment	$200	1	$200
Local Installation & Admin.	Allowance: $4,300		
Total estimated costs per deployed site			$10,000

Install Timeline:

All durations are relative from the time of equipment purchase.

<1 Week: Meraki Equipment arrives onsite. Stock levels and availability may change delivery dates.
On delivery: CAHNRS IT works with local staff to get equipment connected.

Installation: We will work with identified partners to implement the equipment in a secure and safe manor.