



OFFICE OF
**INSPECTOR
GENERAL**
UNITED STATES POSTAL SERVICE

**21st Century Post Office:
Aligning with the National Broadband
Infrastructure Initiative**

Management Advisory

January 23, 2012

Report Number DA-MA-12-002



OFFICE OF
**INSPECTOR
GENERAL**
UNITED STATES POSTAL SERVICE

HIGHLIGHTS

January 23, 2012

21st Century Post Office: Aligning with the National Broadband Infrastructure Initiative

Report Number DA-MA-12-002

IMPACT ON:

U.S. Post Office Operations and Facilities.

WHY THE OIG DID THE AUDIT:

This is part of a series of reports addressing the 21st Century Post Office. Our objective was to assess the benefits of the U.S. Postal Service's role in the National Broadband Infrastructure Initiative.

WHAT THE OIG FOUND:

Based on our analysis of the technical, engineering, and business planning issues involved, we concluded that for-profit Internet Service Providers (ISPs) have provided thorough broadband coverage in the areas of the U.S. that would garner economic profit. However, there are unserved areas within the U.S. — mostly in rural areas — due, in large part, to the negative financial return involved when entering those markets.

The private sector cannot change this broadband coverage gap alone. The Postal Service can assist the National Broadband Infrastructure Initiative through a public/private partnership with commercial ISPs to provide facilities and land for the expansion of the broadband infrastructure. A public/private venture could make ISP operations more affordable for the underserved.

WHAT THE OIG RECOMMENDED:

We recommend the vice president, Facilities, explore partnerships with commercial ISPs to increase broadband coverage in unserved areas by offering a master lease agreement to Postal Service real estate and installing "Wireless Fidelity Hotspots" in unserved areas.

WHAT MANAGEMENT SAID:

While management generally agreed that a public/private partnership could at some point further the interests of the National Broadband Infrastructure Initiative, management disagreed with both recommendations, citing a need for significant funding to further infrastructure development and incentivize ISPs in rural markets.

AUDITORS' COMMENTS


We do not plan to pursue these recommendations through the formal audit resolution process and we believe that offering a master lease agreement to such providers is preferable to the Postal Service's current national agreement and will be instrumental in developing an economic incentive to attract infrastructure providers to unserved areas.

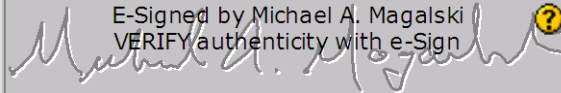
[Link to review the entire report](#)



January 23, 2012

MEMORANDUM FOR: TOM A. SAMRA
VICE PRESIDENT, FACILITIES

E-Signed by Michael A. Magalski
VERIFY authenticity with e-Sign 



FROM: Michael A. Magalski
Deputy Assistant Inspector General
for Support Operations

SUBJECT: Management Advisory – 21st Century Post Office: Aligning
with the National Broadband Infrastructure Initiative
(Report Number DA-MA-12-002)

This management advisory presents our analysis of advantages for the U.S. Postal Service to align with the U.S. National Broadband Infrastructure Initiative (Project Number 11YG027DA000). This self-initiated review addresses strategic risk.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Monique P. Colter, director, Facilities, Environmental and Sustainability, or me at 703-248-2100.

Attachments

cc: David E. Williams
Corporate Audit and Response Management

TABLE OF CONTENTS

Introduction	1
Conclusion	2
Recommendations	3
Management's Comments	3
Evaluation of Management Comments	3
Appendix A: Additional Information	5
Background	5
Objective, Scope, and Methodology	7
Prior Audit Coverage	8
Appendix B: Detailed Information	9
Unserved Communities Mostly Rural	9
Master Contracts for Broadband Expansion	10
Wi-Fi at Post Offices	11
Appendix C: Management's Comments	15

Introduction

To determine whether it is beneficial for the U.S. Postal Service to align with the U.S. National Broadband Infrastructure Initiative, the U.S. Postal Service Office of Inspector General (OIG) reviewed the technical and economic aspects of broadband propagation. This is part of a series of reports addressing the 21st Century Post Office. See [Appendix A](#) for additional information about this self-initiated review that addresses strategic risk.

In early 2009, Congress directed the Federal Communications Commission (FCC) to develop a National Broadband Plan to ensure that every American has broadband access. Congress also required this plan to include a detailed strategy for achieving affordability and maximum use of broadband.¹

To fulfill Congress's mandate, the national plan, in part, seeks to ensure that the entire broadband ecosystem (networks, devices, content, and applications) is healthy. The plan suggests that government can influence the broadband ecosystem in four ways:

1. Design policies to ensure robust competition and, as a result, maximize consumer welfare, innovation, and investment.
2. Ensure efficient allocation and management of the assets that government controls or influences, such as spectrum, poles, and rights-of-way, to encourage network upgrades and competitive entry.
3. Reform current universal service mechanisms to support deployment of broadband and voice in high-cost areas, ensure that low-income Americans can afford broadband, and support efforts to boost adoption and utilization.
4. Reform laws, policies, standards, and incentives to maximize the benefits of broadband in sectors that government influences significantly, such as public education, health care, and government operations.

The FCC set a 10-year timetable for implementing the plan. Currently, parts of the plan have been implemented, such as those for researching broadband implementation and dispersing grants to state and private entities to further the development of middle-mile broadband infrastructure and broadband education in unserved areas. However, recommendations to expedite placement of wireless towers on federal government property and buildings and to explore public/private partnerships to improve broadband adoption have not yet begun to be implemented.²

¹ Such a strategy would enable the advance of consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, employee training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.

² Recommendations 55 and 89 of the FCC National Broadband Plan.

Conclusion

With a network of over 33,000 facilities nationwide, including rural areas that are currently underserved by broadband providers, the Postal Service could influence the broadband ecosystem by using its expansive footprint of properties to encourage network upgrades and competitive entry, especially in unserved or underserved areas.

Internet Service Providers (ISPs) have provided thorough broadband coverage in the areas of the U.S. that would garner economic profit. However, there are still unserved areas within the U.S., mostly rural. Approximately 3 percent of all post offices nationally lie in wholly unserved areas.³ Lack of broadband access for these post offices can mean a diminished connection with the Postal Service operations network. Lack of access for residents in these areas can create barriers to educational, cultural, medical, and economic resources.

The private sector cannot change this broadband gap alone. The Postal Service could assist the initiative through a public/private partnership with commercial ISPs. The Postal Service is in a position to develop a comprehensive lease agreement to provide Postal Service facilities and land for the expansion of the broadband infrastructure. Offering a comprehensive lease would streamline the leasing process, enabling interested telecommunications carriers to more easily use Postal Service facilities to support their network sites through installation of network equipment.⁴ Such an agreement would lower the cost of entry for ISPs into sparsely populated areas. A public/private venture would bring the Post Office value cost curve down and make ISP operations more affordable. These efforts would also provide the Postal Service a moderate income stream upwards of \$4.2 million annually.⁵ In addition, the Postal Service could provide a community service by designating post offices in unserved areas as Wireless Fidelity (Wi-Fi) hotspots,⁶ providing wireless broadband access to the public to generate additional foot traffic and goodwill.

³ Post offices tend to be in towns and rural towns are far more likely to have some form of broadband than the less populated areas near and around them. As a result, a high percentage of post offices are in areas that are considered served.

⁴ Network equipment includes towers, base stations, and antennas.

⁵ Concentrating solely on rural unserved areas, we calculated a very conservative lease revenue estimate based on representative rural lease rates for the 1,000 post offices in unserved areas.

⁶ Wi-Fi is a technology for wirelessly connecting electronic devices over a relatively short range using the Institute of Electrical and Electronics Engineers (IEEE) 802.11 standard. IEEE 802.11 is a set of standards for implementing wireless LAN computer communication in the 2.4, 3.6, and 5 GHz frequency bands.

Recommendations

We recommend the vice president, Facilities, explore partnerships with commercial Internet service providers to increase broadband coverage in unserved areas by:

1. Offering a master lease agreement to Postal Service real estate.
2. Installing Wireless Fidelity hotspots in unserved areas.

Management's Comments

Management was in general agreement that a public/private partnership could at some point further the interests of the National Broadband Infrastructure Initiative. However, management further clarified in correspondence received January 6, 2012 that they disagreed with the first recommendation to increase broadband coverage in unserved areas by offering a master lease agreement to Postal Service real estate. In addition, they disagreed with the recommendation to install Wi-Fi hotspots in unserved areas.

Management further stated that the Postal Service already has a national agreement in place with a wireless infrastructure company that has standard lease agreements in place for wireless and ISPs. Management expressed the opinion that it is unrealistic to expect rural communication tower development and subsequent coverage to be enhanced by Postal Service-owned properties any further than its current and regular course of dealings allows. Specifically, a recent review by the Postal Service determined that, at this time, less than 100 facilities would be viable for communication tower development. The locations identified would not enhance coverage in currently unserved or rural markets. Because the return on investment for private companies is typically unachievable in a rural market, the challenge is not making Postal Service properties available; it is developing an economic model that is attractive to both the infrastructure provider and the carrier end-user.

Consequently, it is management's opinion that rural "Wi-Fi Hotspots," tower development, and carrier co-location thereon can be furthered only with significant alternative funding sources, including significant government subsidies. See [Appendix C](#) for management's comments in their entirety.

Evaluation of Management Comments

Management disagreed with our recommendations. We do not plan to pursue these recommendations through the formal audit resolution process.

We understand that the Postal Service is currently offering Postal Service-owned property for telecommunication leasing and we agree that further development of broadband coverage in rural regions would require incentives to attract infrastructure providers. However, we believe that offering a master lease agreement to providers could be beneficial in developing such an economic incentive. Furthermore, we

disagree that the Postal Service national agreement is equal to the master lease agreement we recommended.

We examined the Postal Service review mentioned in management's comments. This review determined that less than 100 facilities would be viable for communication tower development based on anticipated return on investment. This document further supports the need for incentives to increase broadband propagation in unserved areas.

Using the master lease we recommended, an ISP can avoid the cost and effort of negotiating individual leases for numerous sites, and could possibly receive preferred lease rates. While reducing the prices for leases on government property may reduce fees paid to the Postal Service, the decline in prices may also increase the number of companies that acquire leases on government property. Also, our recommendation to offer a master lease directly to ISPs would eliminate the need to work through a third party to access the Postal Service properties or construct towers and thus, could expand the potential pool of investors.

We agree that government funding would benefit the National Broadband Infrastructure Initiative through tower development and Wi-Fi hotspot installation. Postal Service comprehensive leasing can operate in conjunction with federal broadband infrastructure integration programs such as the U.S. Department of Agriculture's Rural Broadband Loan Program. This program is designed to provide loans for funding the cost of construction, improvement, and acquisition of facilities and equipment to provide broadband service to eligible rural communities. We believe the Postal Service should pursue discussions with the U.S. Department of Agriculture, the National Telecommunications and Information Administration, and related government agencies to determine whether such funding could be made available.

Appendix A: Additional Information

Background

The American Recovery and Reinvestment Act (ARRA) of 2009⁷ directed the FCC to develop a national broadband plan “to ensure that all people of the United States have access to broadband capability and establish benchmarks for meeting that goal.” The National Telecommunications and Information Administration (NTIA), in conjunction with the FCC, defines “unserved” by broadband as any community in which speeds of 3 megabits per second (mbps)/768 kilobits per second (kbps) are unavailable.⁸

President Obama set the goal of enabling businesses to provide high-speed wireless services to at least 98 percent of all Americans within 5 years. The rollout of the next generation of high-speed wireless, the fourth-generation or “4G” technology leading carriers are now deploying in the U.S., promises considerable benefits to our economy and society. More than 10 times faster than current high-speed wireless services, this technology promises to benefit all Americans; bolster public safety; and spur innovation in wireless services, equipment, and applications. Private investments are extending 4G to most of the nation, but are leaving some rural areas behind.

The Postal Service has a network of over 33,000 facilities nationwide. Due to declining mail volume and the resulting financial condition of the Postal Service, facility optimization has become a widely discussed topic. Through various optimization and consolidation programs, the Postal Service is working to generate revenue and reduce rent obligations and operational costs. To further the facility optimization goal, the Postal Service is in a position to use its large facility footprint to support the expansion of broadband networks.⁹ Broadband networks require land sufficient for housing the tower, antenna, and installation of necessary backhaul¹⁰ for carrier-grade wireless technologies.¹¹ Illustration 1 demonstrates a broadband architecture with antennas and a base station on a self-supporting mast located either on the building rooftop or alongside the building.

⁷ ARRA, Pub. L. No. 111-5, 123 Stat. 115, 516 (February 19, 2009).

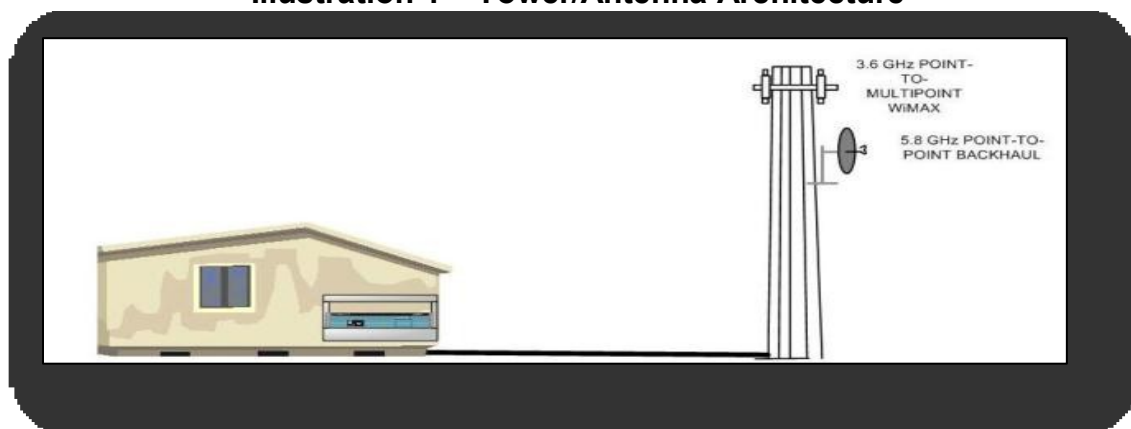
⁸ Refers to data transmission stream of 3 mbps per second downstream (from the Internet to the user’s computer) and 768 kbps per second upstream (from the user’s computer to the Internet).

⁹ Real estate that the Postal Service rents rather than owns may not be eligible if construction of towers and subleasing is limited by lease agreement.

¹⁰ The portion of a communications network that transmits data between end points (such as tower locations) and a public Internet connection point or another dedicated network location.

¹¹ A network capable of providing service at a level that consumers expect from commercial carriers. A typical carrier grade technology is Worldwide Interoperability for Microwave Access (WiMAX), a 4G wireless broadband technology. It supports higher data rates than 3G technologies. In technical terms, WiMAX refers to IEEE standard 802.16, which dictates the wireless delivery rate of 40 Mbit/s and 1GB using the newest IEEE 802.16M standard.

Illustration 1 – Tower/Antenna Architecture



The concept of providing Postal Service facility space for installation of telecommunications equipment is not new. The Postal Service currently has a master contract with American Tower to sublease antenna space to wireless service providers. Through this contract, the Postal Service is leasing to wireless providers such as AT&T, Sprint, Verizon, Cingular, and T-Mobile. The Postal Service is using 58 of its facilities nationwide to house 98 antennas, providing annual rent revenue of \$726,376. In addition, the Postal Service is currently in discussions with a communication technology company to explore the possibility of leasing Postal Service property to telecommunications providers for antenna usage.

The idea of Wi-Fi signal propagation is well-established. In 2007, Meraki, a cloud networking company, set up indoor and outdoor wireless routers to offer public Wi-Fi for homes, parks, and local businesses in San Francisco. To further propagate the wireless signal, Meraki offered an inexpensive repeater¹² to allow consumers and communities to start creating their own networks.

Currently, 86 percent of public libraries nationwide provide Internet access to their patrons. In addition, many coffee shops and fast food restaurant chains provide Wi-Fi access to customers. Hotspots are considered a valuable productivity tool for students, business people, and other frequent users of network services. A Wi-Fi hotspot can supplement and/or substitute for a broadband internet connection at home or work. Hotspots are especially valuable in providing broadband access to users who otherwise would not have access to Internet connections due to location or cost. Unfortunately, Wi-Fi network coverage is rarely found in rural areas. Consequently, wireless hotspots are in demand.

Wi-Fi networks require a broadband high-speed Internet connection (cable or DSL¹³), a router/access point/gateway device,¹⁴ and access to a computer (for configuring the broadcast device). Some broadcast devices allow for the cable broadband to be plugged directly into the back of the device. Others will require a modem. In this case,

¹² A network repeater is a device used to expand the boundaries of a Wi-Fi local area network (LAN). Meraki's repeater was offered at \$49. An outdoor version with a range of up to 700 feet was also available for \$99.

¹³ Digital subscriber line.

¹⁴ The hardware device that broadcasts the connection via radio waves to wireless enabled devices.

the broadcast signal cable plugs into the modem and an ethernet cable connects the modem to the broadcast device (see Illustration 2).

Illustration 2 – Wireless LAN



Objective, Scope, and Methodology

Our objective was to determine whether it is beneficial for the Postal Service to align with the U.S. National Broadband Infrastructure Initiative. The scope of the review is Postal Service involvement in broadband propagation within the U.S. This is part of a series of reports addressing the 21st Century Post Office.

We initially considered two approaches to the Postal Service assisting in the National Broadband Infrastructure Initiative: 1) serving as an ISP, providing broadband service to customers in unserved areas and 2) partnering with an ISP to provide space for broadband tower placement in exchange for bandwidth usage for Postal Service functions.

The Postal Accountability and Enhancement Act¹⁵ specifically states that the Postal Service may only provide “non-postal” services offered as of January 1, 2006. Providing Internet service would qualify as a prohibited non-postal service, as the Postal Service did not provide Internet service as of 2006. However, there is no law or postal policy that would preclude partnering with an ISP to provide non-postal services to the public. The Postal Service would facilitate the ISP's provision of services. The Postal Service regularly enters into "strategic alliances" with private entities. A partnership with an ISP could fall under this umbrella as long as the contract allows competition between ISPs and does not provide the Postal Service with an unfair competitive advantage. Consequently, we focused our review on the latter approach of a public/private partnership.

¹⁵ Postal Accountability and Enhancement Act, Public Law No. 109–435 (December 20, 2006).

To answer our objective, we researched the National Broadband Infrastructure Initiative, broadband technology, and broadband implementation nationwide. The OIG employed a third-party contractor, a management and technology consulting firm with specialized technical expertise, to assess the feasibility and benefits of the Postal Service aligning with the initiative. Specifically, we requested the subject matter expert to:

- Identify geographic demand for broadband Internet.
- Determine technical needs for the Postal Service's involvement in the National Broadband Infrastructure Initiative.
- Analyze the economic and operational feasibility of the Postal Service's involvement in the National Broadband Infrastructure Initiative.

We conducted this review from April 2011 through January 2012 in accordance with the Council of the Inspectors General on Integrity and Efficiency, *Quality Standards for Inspection and Evaluation*. As part of this review, we relied upon the work of a management and technology consulting firm to provide technical data and analysis. We discussed our observations and conclusions with management on November 8, 2011, and included their comments where appropriate.

We assessed the reliability of Postal Service facility data by comparing a sample of data from the electronic Facilities Management System database and the Facility Database to verify accuracy. We obtained evidence of the qualifications and independence of the consulting firm's members. In addition, we assessed the reliability of the consulting firm's data by reviewing their research report and examining support documentation. We determined that the data from the aforementioned sources were sufficiently reliable for the purposes of this report.

[Prior Audit Coverage](#)

We did not identify any prior work that directly relates to the review objective.

States with the greatest discrepancy in urban and rural area broadband availability are shown in Table 1 below.

Table 1 – States with Largest Discrepancy in Broadband Availability Between Urban and Rural Areas

Percentage of Discrepancy in Urban and Rural Broadband Availability	States
Greater than 31%	California, Alaska, Idaho, Indiana, and West Virginia
Between 17 and 30%	New Mexico, Oklahoma, Arkansas, Alabama, Kentucky, Virginia, and Wisconsin

To determine how many Postal Service facilities are in areas defined as unserved by broadband under NTIA's and the FCC's definition, we tasked the contracted subject matter experts with sampling and analyzing the following representative states:

- Idaho and Wyoming: representative of largely rural northwestern states.
- Utah: representative of largely rural southwestern states.
- Maine: representative of largely rural eastern states.
- Maryland: representative of more densely populated eastern states.
- Alaska: representative of rural areas overall.

Using NTIA and Census Bureau data, along with a data set of all Postal Service locations in the U.S., the contracted team was able to estimate the number of Postal Service facilities in the unserved areas of those states. Extrapolation of the data provided us with a nationwide estimate that approximately 3 percent of all Postal Service facilities are located in unserved areas.

Master Contracts for Broadband Expansion

The Postal Service has the opportunity to offer a comprehensive lease agreement to ISPs in the form of a master lease.¹⁷ Such an agreement would allow the lessee, under the same terms and conditions as the original acquisition, to acquire any additional Postal Service real estate for the installation of network equipment.

An ISP can avoid the cost and effort of negotiating individual leases for potentially hundreds of sites, and would possibly receive preferred lease rates. A master leasing process would have significant benefits beyond reducing ISP transaction costs. While reducing the prices for leases on government property may reduce fees paid to the Postal Service, the decline in prices may also greatly increase the number of companies that acquire leases on government property. Postal Service comprehensive leasing can operate in conjunction with federal broadband infrastructure integration programs such

¹⁷ Agreement that allows a company to acquire equipment or real estate in multiple locations without having to execute a new lease each time.

as the U.S. Department of Agriculture's Rural Broadband Loan Program. This program is designed to provide loans for funding the costs of construction, improvement, and acquisition of facilities and equipment to provide broadband service to eligible rural communities.¹⁸ Such a loan program can increase the incentive for ISPs to enter rural markets. In any case, the increased deployment of broadband should stimulate investment and benefit society.

Establishing master leases directly addresses a recommendation made by both the telecommunications industry and the FCC to reduce the complexity and shorten the timeframe for federal facility licensing. In addition, it aligns with the National Broadband Plan's goal that the federal government ensures efficient management of assets by developing contracts to expedite the placement of wireless towers on federal property and buildings.

This comprehensive leasing scenario would demonstrate that the Postal Service is responsive to the FCC's goals to facilitate private sector investment and streamline the process for expansion into previously cost-prohibitive rural areas. These efforts could also provide the Postal Service a moderate income stream upwards of \$4.2 million annually.¹⁹

Wi-Fi at Post Offices

Because each Post Office facility is different, a Wi-Fi network would need to be individually engineered for each site. A public Wi-Fi signal would cover the interior of the facility and varying distances surrounding the building. Wi-Fi is a line-of-sight technology, so obstructions such as buildings, hills, and trees would limit the signal propagation. Signal reception is also influenced by the end user's device. In areas with no visual obstructions, a Wi-Fi signal could reach a mobile device .5 miles away, and reach a fixed wireless device as far as 1.5 miles away.

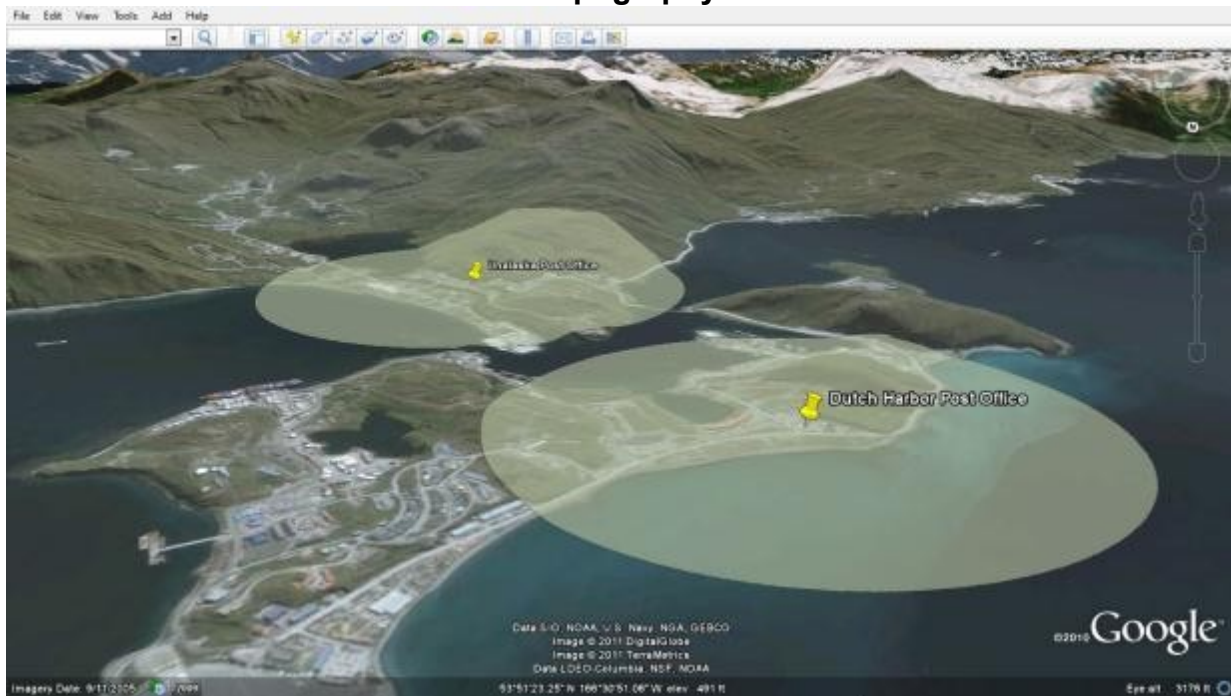
¹⁸ In addition, the Rural Broadband Loan can be used for the cost of leasing facilities required to provide service at the broadband lending speed if such lease qualifies as a capital lease under Generally Accepted Accounting Principles.

¹⁹ If we concentrate solely on rural unserved areas, we can calculate a very conservative lease revenue estimate based on representative rural lease rates for the 1,000 post offices in unserved areas.

Examples of the effects of terrain on signal propagation are illustrated by the following post offices located in unserved areas:

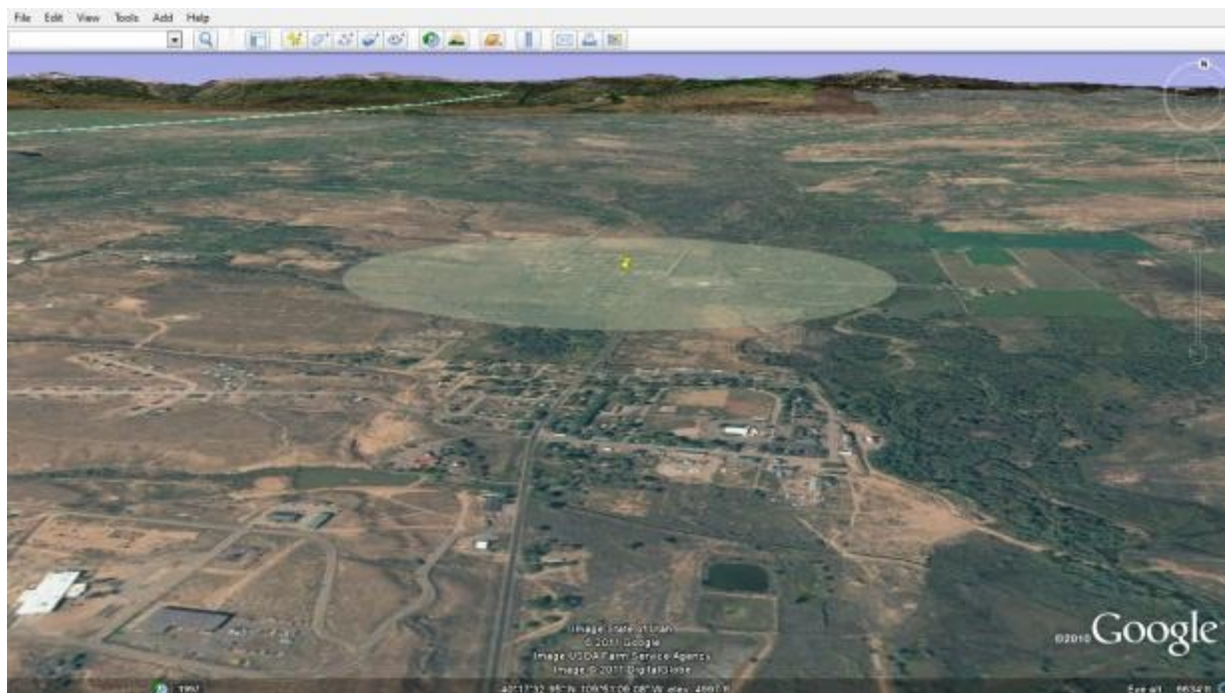
- The Unalaska Post Office located at 82 Airport Beach Road, Unalaska, AK 99685; and the Dutch Harbor Post Office located at 1745 Airport Beach Road, Dutch Harbor, AK 99692 are just over 1 mile apart and are close to many of the town's community anchor institutions. The hilly terrain diminishes the Wi-Fi signals to less than .5 miles. Illustration 4 provides a visual demonstration.

Illustration 4 – Unalaska-Dutch Harbor Wi-Fi Maximum Signal Reach with Topography



- The Fort Duchesne Post Office located at 7299 U.S. 40, Fort Duchesne, UT 84026, is in one of the residential developments, 1 mile north of the area's larger residential development. The Post Office is on a flat terrain. A Wi-Fi device would provide signal coverage for the smaller residential area and the supermarket, approximately a .5 mile-range. However, moderate tree cover would block the signal to the larger residential development and tribal offices. Illustration 5 provides a visual demonstration.

Illustration 5 – Fort Duchesne Wi-Fi Maximum Signal Reach with Topography



The Postal Service may be able to provide a vital public service to residents who lack broadband access and generate substantial goodwill. Particularly in unserved areas, the Postal Service could provide Wi-Fi connections, allowing residents to access a basic level of Internet connectivity similar to what is offered at coffee shops and public libraries. The Postal Service could further expand this Wi-Fi hotspot model by partnering with local community groups to expand the wireless coverage provided. The community could purchase inexpensive, off-the-shelf equipment to extend the Postal Service's wireless signal into a community-wide network.

The goodwill created by this endeavor has the potential to attract partnerships with local or national commercial ISPs. Such partnerships could be in the form of the aforementioned master lease, with a donation of bandwidth for the community Wi-Fi or, more simply, a donation of Internet service. Additional revenue for the Postal Service could be generated through advertising as a part of the service provided. In terms of economic feasibility, this model would require limited Postal Service investment to

provide each participating Postal Service site with the necessary connectivity to accommodate bandwidth demands.

Appendix C: Management's Comments

TOM A. SAMRA
VICE PRESIDENT, FACILITIES



December 22, 2011

SHIRIAN B. HOLLAND
ACTING DIRECTOR, AUDIT OPERATIONS
U.S. POSTAL SERVICE OFFICE OF INSPECTOR GENERAL

SUBJECT: Draft Management Advisory - 21st Century Post Office: Aligning with the
National Broadband Infrastructure Initiative (Report Number DA-MA-12-Draft)

Thank you for the opportunity to review and comment on the Draft Management Advisory report DA-MA-12-Draft. A public/private partnership is beneficial to the USPS, the general public and could at some point further the interests of the National Broadband Infrastructure Initiative.

This report and management's response do not contain information that may be exempt from disclosure under the FOIA.

Recommendation:

The Draft Management Advisory report recommended that the USPS explore partnerships with commercial ISPs to increase broadband coverage in unserved areas by offering a master lease agreement to Postal Service real estate and installing "Wi-Fi Hotspots" in unserved areas.

Management Response/Action Plan:

A public/private partnership is beneficial to the USPS, the general public and could at some point further the interests of the National Broadband Infrastructure Initiative. The USPS has for many years made its property holdings and interests available for wireless communication use and to date has rooftop installations and communication towers on select properties. A recent review by the USPS of over six thousand USPS-owned facilities throughout the United States using various filters including cell carrier demand and zoning barriers determined that at this time less than one hundred facilities would be viable for communication tower development. The locations identified would not enhance coverage in currently unserved or rural markets. Because the costs of both communication tower development and the subsequent costs incurred by a wireless service provider deploying its equipment at a communication facility are substantial, the return on investment for private companies is typically unachievable in a rural market considering consumer voice and data traffic are negligible. For that reason alone, the challenge is not making USPS properties available - which they already are - it is developing an economic model that is attractive to both the infrastructure provider and the carrier end-user. Both a tower developer and each carrier deploying at a tower facility will often spend in excess of \$150,000 in zoning, permitting, construction, and hardware and electronics costs to build and then utilize a communication facility. Following development and deployment of such a facility each will incur ongoing operating costs including rental use fees and repairs and maintenance expenses. The economics required to achieve even nominal returns would require that voice and data use be in excess of what a rural community can deliver.

475 L'ENFANT PLAZA SW
WASHINGTON, DC 20260-1861
TEL: 202-268-3389
FAX: 202-268-6038
www.usps.com

- 2 -

The USPS believes it is unreasonable and unrealistic to expect rural communication tower development and subsequent coverage to be enhanced by USPS-owned properties any further than our current and regular course of dealings allows. It is our opinion that rural tower development and carrier collocation thereon can be furthered only with significant alternative funding sources, including significant government subsidies.

Target Implementation Date:

None

Responsible Official:

None



Tom A. Samra

cc David E. Williams
Sally K. Haring