

The Impact of New Technologies on Government Bureaucracy

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Abstract

The United States Postal Service is a government agency created with the foundation of the United States of America. Today, the Internet has become its biggest competition, taking significant revenue away from the Postal Service and sending it on a path towards bankruptcy. This research seeks to answer the question, “How can the United States Postal Service adapt as a bureaucratic agency to the increasing use of the Internet in today’s information age?” Extensive analysis of the four traditional rationales for the existence of the USPS—universal service/access, economies of scale and scope, monopoly, and networks/positive externalities—shines light on efficiency and political issues that, if addressed, would require both a change in mission and cost structure for the United States Postal Service.

While virtually all citizens have access to the USPS, two thirds of Americans have Internet access. By providing the remaining third of the American population with Internet access and offering subsidies for online story creation, the Internet will function as Postmaster. After addressing package delivery and other retail/service opportunities within the USPS, along with negotiating fair wage terms and fringe benefits for employees, the United States Postal Service will remain a successful bureaucratic agency with a new direction. The following research supports the notion that bureaucratic agencies can survive the Information Age by focusing on what citizens need, seeking advantages in the trusted relationships built between citizens and the government, harnessing the power of strategic alliances, and accepting constantly evolving technologies as an agent for change not only in society but in the bureaucracy itself.

Chapter 1

Introduction

The United States Postal Service system dates back to the origins of the United States. Article 1, Section 8 of the United States Constitution includes the Postal Clause, which gives Congress the right to “establish Post Offices and post Roads.” According to Article IX of the Articles of Confederation, our founding fathers recognized Congress’ “sole and exclusive right and power of ...establishing or regulating post offices.” Since then, American citizens have relied on the USPS to deliver everything from business and personal letters to bank checks and gifts. With 712,000 workers, it is currently the second largest employer in the United States¹. Its 221,000 vehicles deliver 667 million pieces of mail daily².

Now, more than 200 years since its establishment, the United States Postal Service is in jeopardy; the advent of the Internet is threatening its existence. Since the arrival of the Internet, more people are relying on email to communicate and online sites to conduct business, such as electronically paying bills. Looking back on just this past year, total mail volume has declined by an unprecedented 13 percent (or 26 billion pieces), with a subsequent revenue decrease of \$6,842 million, or 9.1 percent³. In July 2009, the United States Government Accountability Office added the U.S. Postal Service to its “High Risk List,” calling for the restructuring of the bureaucracy in order to address its current and long-term financial viability⁴. This research will assess the efforts of the United States

¹ "USPS - Postal Facts." *USPS - The United States Postal Service (U.S. Postal Service)*. 30 Jan. 2010.

² Ibid.

³ United States Postal Service. *The Annual Report of the United States Postal Service*. Washington, DC: United States Postal Service Corporate Communications, 2009.

⁴ US Government Accountability Office. Physical Infrastructure Issues. *US Government Accountability Office*. By Phillip Herr. GAO's Intellectual Property Team, 6 Aug. 2009.

Postal Service to adapt to the increasing use of the Internet to communicate in today's information age.

Research Question

Considering the traditional rationales for its existence, how can the United States Postal Service adapt as a bureaucratic agency to the increasing use of the Internet in today's information age?

The United States Post Office was created with the birth of the nation. It began at a time when the most advanced technology known to citizens was the printing press. Telephones, radios, televisions, cameras, cell phones, and computers were non-existent. The Post Office was the sole means of communication between individuals across cities, countries, and continents. Its existence was imperative to the citizens it served in providing them with both news information, in the form of newspapers, and communication, in the form of written correspondence.

In 2010, the world is very different. No longer is it necessary to wait seven weeks to receive a letter from overseas. No longer must one find out who won yesterday's elections through today's newspaper. With the advent of phones, communication is immediate and unrestricted by boundaries. With radios and televisions, information about events from any part of the world is available. Digital cameras record moments in time and save them forever. And everything can be shared instantaneously thanks to the advent of the Internet, which not only provides easy access but also mass distribution.

The Internet is a vital source of communication for society. Emails allow constant communication between people all over the world. Websites provide instantaneous news and information on virtually any topic. Search engines, such as

Google and Yahoo!, allow individuals to locate exactly what they want to know in just seconds. Individuals use the Internet to do everything from online shopping to paying bills. Some economists are predicting that print media may soon be obsolete. So where does this leave the Postal Service?

Theory Development

In 1782, the Articles of Confederation gave Congress “sole and exclusive power” to both “establish and regulate post offices.” Just ten years later, the Post Office Act of 1792 stated that Congress’ only right was to “establish Post Offices and post roads.” Originally a part of the United States Cabinet as the Post Office Department, it was not until 1970 that the United States Postal Service became an independent agency within the government⁵. From the official legislation for the creation of the Post Office to today, there have been various historical, economic, and political science arguments regarding the true purpose of the delivery service.

Anuj Desai, assistant professor at the University of Wisconsin Law School, cites Benjamin Rush, a signer of the United States Declaration of Independence and a member of the Pennsylvania Convention that ratified the United States Constitution. According to Rush, the purpose of the United States Postal Service was “fostering, in the new citizens of a young country, the republican values that would prove to be necessary. Thus, key to the proposal to provide free distribution of newspapers through the USPS was a belief in the importance of that medium of communication in promoting republican ideals.”⁶

⁵ Kennedy, Thomas R. "The Postal Reorganization Act of 1970: Heading Off Future Postal Strikes?" *Georgetown Law Journal* 59 (1971): 305-34. *HeinOnline*.

⁶ Desai, Anuj C. *The Transformation of Statutes into Constitutional Law: How Early Post Office Policy Shaped Modern First Amendment Doctrine*. 684.

Desai argues for the importance of the Post Office in long distance communication to distribute information that would provide for a cohesive republic.

He also discusses a second important purpose for a nationalized postal service—as a tool for publicizing political information in order to maintain a democracy over such a geographically dispersed area. Citing George Washington, he emphasizes its ability as not just a communication medium but as a means of publicizing political information “to the furthest reaches of the nation, notwithstanding the costs of transmission.”⁷

While historical perspectives provide insight into the rationale for the USPS at the time, theoretical perspectives allow for application to the present. This literature revolves around four traditional rationales for the existence of the United States Postal Service—universal service/access, economies of scale and scope, monopoly, and networks/positive externalities related to the spread of political information.

Universal Access and Service

Haldi and Merewitz define universal access and service as the post office’s obligation to provide the country with “(i) universal access to the postal network, [and] (2) universal free delivery.”⁸ The argument of universal service/access can be approached from many angles. Cremer, Rycke, and Grimaud give an extensive analysis of the universal service obligation as essentially a redistributive pricing policy, stating that one should “think of the surcharge paid by low cost individuals as a tax used to finance the subsidized service

⁷ Desai, Anuj C. *The Transformation of Statutes into Constitutional Law: How Early Post Office Policy Shaped Modern First Amendment Doctrine*. 685.

⁸ Crew, Michael A., and Paul R. Kleindorfer. " Cost and Returns from Delivery to Sparsely Settled Rural Areas." *Managing Change in the Postal and Delivery Industries*. Boston: Kluwer Academic, 1997. 237.

to high-cost customers.”⁹ Haldi says that universal service is a requirement of the Post Office, and proceeds to explain that without the existence of the Post Office, universal service would not be preserved; private profit-seeking firms would ultimately cause a spiral effect with the end result of annual service fees for rural delivery, the abandonment of uniform rates, and the need for government subsidies.¹⁰ According to this perspective, the private market would not provide universal service because some areas would become too costly to serve; costs would either become too prohibitive because of remote location or sparse population, or the citizens living in these areas would not be able to afford mail service due to lower incomes.

Nicole Biggart, professor of Management and Sociology at the University of California, argues that the USPS’s ideology centers around universal service. She writes that the “fact that the [Post Office Department] was not in business for profit elevated the workers' positions in the minds of many employees.”¹¹ Mailmen were given the nickname “patrons” and “civil servants,” emphasizing their service role to the citizens of the United States. It was this ideology of “good mail service uncompromised by considerations such as cost, competition, and even market demand” that Biggart says made the Post Office such a vital government bureaucracy for American citizens¹².

Economies of Scale and Scope

A second rationale for the existence of the USPS is that economies of scale and scope exist. Bradley, Colvin, and Perkins’s 1995 study provides empirical proof that both exist

⁹ Crew, Michael A., and Paul R. Kleindorfer. "Costs and Benefits of Universal Service Obligations in the Postal Sector." *Managing Change in the Postal and Delivery Industries*. Boston: Kluwer Academic, 1997. 27.

¹⁰ Crew and Kleindorfer. "Cost and Returns from Delivery to Sparsely Settled Rural Areas."

¹¹ Biggart, Nicole. "The Creative-Destructive Process of Organizational Change: The Case of the Post Office." *Administrative Science Quarterly* 22.3 (1977): 418.

¹² *Ibid*, 418.

within the mail delivery system. Their research proves that the “Postal Service’s large and relatively fixed delivery network provides substantial benefits to the U.S. economy in the form of material reductions in delivery cost relative to multi-provider alternatives.”¹³ One large network that connects the citizens of the United States in the same system, utilizing one organizational structure and one set of rules and regulations, is much cheaper than utilizing several private companies to carry out similar functions.¹⁴ Haldi and Merewitz suggest that additional economies of scope might result if rural delivery could be combined with other activities (such as the sale of drugs, grocery, or department store products) or provided in other ways than the traditional rural route¹⁵. Economies of scope also exist with the utilization of letters, packages, express mail, and other services that the Post Office can provide¹⁶.

Natural Monopoly

Economies of scale and scope connect to a third argument for the existence of the Postal Service—delivery requires a natural monopoly. A single firm in a specific market is classified as a “natural monopoly” when “it is less costly to produce any level of output of this product within a single firm than with two or more firms. In addition, this ‘cost dominance’ relationship must hold over the full range of market demand for this product $Q=D(p)$.”¹⁷ Cohen and Chu emphasize that legal protection of the Post Office is necessary in order to prevent “cream skimming” and thus maximize the benefits of the

¹³ Crew, Michael A., and Paul R. Kleindorfer. "Measuring Scale and Scope Economies With a Structural Model of Postal Delivery." *Liberalization of the Postal and Delivery Sector*. Cheltenham, UK: Edward Elgar, 2006. 117.

¹⁴ Crew, Michael A., and Paul R. Kleindorfer. "10: Is Postal Service a Natural Monopoly?" *Competition and Innovation in Postal Services*. Boston: Kluwer, 1991. 219-28.

¹⁵ Crew and Kleindorfer. "Cost and Returns from Delivery to Sparsely Settled Rural Areas."

¹⁶ Crew and Kleindorfer. "10: Is Postal Service a Natural Monopoly?"

¹⁷ Joskow, Paul L. "Chapter 16 Regulation of Natural Monopoly." *Handbook of Law and Economics*. Amsterdam: Elsevier North-Holland, 2007. 1232.

universal delivery system.¹⁸ Haldi and Merewitz's argument for the necessity of the United States Postal Service also applies here, as their research also discusses cream-skimming; a spiral effect of competitive price cutting and abandonment of uniform rates would occur without the monopoly.¹⁹ This economic argument assumes that the Postal Service as a monopolist is an efficient mail provider.

If a regulated natural monopoly were required to price at average cost and entry were allowed, another firm could come in and undercut its price. Joskow notes that, "if we assume that the entrant supplied the consumers with the highest willingness to pay, there would not be any consumers willing to pay a price high enough for the incumbent to cover its average costs. Thus, the zero profit 'natural monopoly' equilibrium is unstable."²⁰ But oftentimes, a monopoly declared by law, with lack of competition, results in a lack of incentive for the monopoly to remain efficient. Regulation of a monopoly can force it to sell at prices equal to marginal cost, allowing for government subsidies to account for the difference in revenues and total cost. Thus, the government's direct ownership of the Postal Service means that it must confront the problems associated with subsidization (failing incentives to remain efficient) and regulation (how much regulation is required).

Networks and Positive Externalities

The need for an efficient network system is another argument for the United States Post Office. Reay defines the postal service as necessary for providing an "integrated,

¹⁸ Crew, Michael A., and Paul R. Kleindorfer. "A Measure of Scale Economies for Postal Systems." *Managing Change in the Postal and Delivery Industries*. Boston: Kluwer Academic, 1997. 115-132.

¹⁹ Crew and Kleindorfer. "Cost and Returns from Delivery to Sparsely Settled Rural Areas."

²⁰ Joskow, 1243.

end to end, people and service based network.”²¹ Paul Starr gives the Postal Service the role of “facilitator” amongst all of the American people, connecting them with information and communication.²² This connection creates various network externalities, as discussed by Nicholas Economides, who discusses the sources of network externalities and their effects on market structure and pricing. The idea is that the “value of a unit of the good increases with the *expected* number of units to be sold.”²³ Each additional customer served by the Postal Service provides direct externalities to the other customers that are a part of the network; they “add new goods through the provision of a complimentary link to the existing links.”²⁴ Thus, the demand for the good ultimately depends on how many others purchase the good.

The network system provides another positive externality as well—the spread of political information. Starr notes that the Post Office’s original role was to subsidize the press, contributing to “the extension of communication—in particular, the distribution of political news—beyond earlier boundaries.”²⁵ This spread of political news creates a positive externality, described by Hamilton; the more details that an individual learns about policies, the more informed voting decisions he or she can make. With more informed voters follows more informed election decisions²⁶. The U. S. postal network, originally much larger than any postal network in any other country, spreads political information daily. Starr states that the government had mostly political objectives in its

²¹ Crew, Michael A., and Paul R. Kleindorfer. "The Structure of Postal Markets." *Managing Change in the Postal and Delivery Industries*. Boston: Kluwer Academic, 1997. 368.

²² Starr, Paul. *The Creation of the Media: Political Origins of Modern Communications*. New York: Basic, 2004. 16.

²³ Economides, Nicholas. "The Economics of Networks." *International Journal of Industrial Organization* 14.6 (1996): 673-99. ScienceDirect. 678.

²⁴ *Ibid*, 679.

²⁵ Starr, 3.

²⁶ Hamilton, James. *All the News That's Fit to Sell: How the Market Transforms Information into News*. Princeton, N.J.: Princeton UP, 2004.

creation of the Postal Service system. He quotes Rush in the 1787 “Address to the People of the United States,” where he asserts that “‘knowledge of every kind’ had to be circulated ‘through every part of the United States’ in order to adapt the ‘principles, morals, and manners of our citizens to our republican form of government.’”²⁷

These views, which focus on group benefits, are in contrast to the recent publication of the USPS’s “Vision 2013,” which focuses on the individual—the customer—and reports their main objective of maintaining “a solid foundation of service and operational excellence.”²⁸ The new focus emphasizes a core foundation of a unique mission, strong brand name, source of economic growth, and a service that binds the nation together. The document focuses on the core values of service, efficiency, and trust. Further, it discusses the plans for the future of the USPS—focusing on what matters most to customers, leveraging on the business’s strengths, and embracing change.

However, as of April 12, 2010, the GAO released a new document stating that the USPS current business model is “not viable,” and that it must take immediate action to cut employee salaries, close facilities, modify its retiree health benefit cost structure, and utilize other means of cutting costs in order to prevent it from bankruptcy²⁹. Throughout the formulation of this thesis, new reports from the GAO and the USPS itself were published and continued to impact the direction the paper.

The following research analyzes the four aforementioned rationales for the existence of the United States Postal Service, aligning them with the current role of the Post Office

²⁷ Starr, 88.

²⁸ United States. United States Postal Service. *Five Year Strategic Plan 2009-2013*. 2008.

²⁹ US Postal Service: Strategies and Options to Facilitate Progress toward Financial Viability. *US Government Accountability Office*. By Phillip Herr. GAO’s Intellectual Property Team.

and its plans for the future. Each issue area presents the original arguments for the USPS's existence, considers the Internet's impact on these arguments, and ultimately provides an explanation as to which arguments are still applicable. Ultimately, the research seeks to determine whether the United States Postal Service requires a change in its mission, a change in its cost structure, or both.

Methods

My primary research technique is an in-depth case study of the USPS. My research will consist of both qualitative and quantitative research. The case is important not only because of its roots in the United States Constitution, but because the USPS serves as the ideal model of a government organization that has been severely impacted by technological advances over time. I will utilize document analysis, uncovering various historical and scholarly articles rooted in political and economic research, in order to clarify the purposes and functions of the United States Postal Service.

Data-gathering questions:

- What is the current state of the USPS? What is currently anticipated for its future, assuming no drastic changes to the agency?
- What is the current business plan for the USPS?
- What has the Internet allowed the consumer to accomplish?
- What are the traditional rationales for the existence of the United States Postal Service?
 - How were the arguments relevant when the Post Office was created?

- How/are these arguments relevant now in relation to coming of the information age?
- How does this affect the purpose of the USPS?
 - What functions are now obsolete?
 - What functions of the USPS are still advantageous?
- Where is change needed most—in the mission of the Postal Service, or in the cost of serving the mission?
 - In what ways can the United States Postal Service restructure itself?

Type of data used:

The data is presented in various forms. Law articles, such as Anuj Desai's "The Transformation of Statutes into Constitutional Law," reference the historical use of the Post Office. The United States Government Accountability Office offers in depth analyses on the current state of the USPS, as found in its 2009 "Physical Infrastructure Issues" report. In addition, various USPS publications on its current financial position, organizational structure, and plans for the future provide a basis for understanding the current and possible future state of the Postal Service. Scholarly articles provide the bulk of the data, presenting both economic and political science arguments for the USPS's existence and organization; Michael Crew and Paul Kleindorfer published several books on the subject, as will be discussed in depth in Chapter 3. Reports on the USPS by various consulting firms, such as BCG's "Projecting US Mail Volumes to 2020" display the predicted future of the government agency and its various options for change. Finally, Google News provides valuable sources who present new strategies for the

USPS, such as Congressman Jason Chaffetz's article, "Census Should Partner With Post Office, Not ACORN."

General Research Plan:

I will begin by discussing the GAO's reasons for adding the United States Postal Service to their "High Risk List" as of August 2009.³⁰ Here, I will delve into analyses of the USPS by BCG, McKinsey, and Accenture Consulting. BCG's analysis currently projects a decline of real revenue per delivery point of 50% by 2020 if no changes are made.³¹ McKinsey discusses the driving forces that are currently destroying the Post Office and suggests various solutions with in-depth analyses.³² Accenture analyzes the international postal market in order to draw inferences for the USPS.³³ These consulting firm presentations will be useful as a starting point to provide background on the current state of the USPS and implications for its future. After a thorough description of the current state of the USPS, my methodology will uncover a path to reverse its current financial crisis.

The analysis is based around the traditional rationales for the existence of the USPS. I will analyze qualitatively what areas of the current Postal Service structure still uphold its original purpose based on theoretical discussions. I will compare this viewpoint with what the USPS's current "Vision 2013" emphasizes as its core foundation.³⁴ I will

³⁰ US Government Accountability Office. Physical Infrastructure Issues. *US Government Accountability Office*. By Phillip Herr. GAO's Intellectual Property Team.

³¹ Wolfgang, Mel. "BCG-Projecting US Mail Volumes to 2020." *Envisioning America's Future Postal Service*. 2 Mar. 2010. Lecture.

³² "McKinsey-USPS Future Business Model: Options for a Changing Environment." *Envisioning America's Future Postal Service*. 2 Mar. 2010. Lecture.

³³ "Accenture-Is Diversification the Answer to Mail Woes? The Experience of International Posts." *Envisioning America's Future Postal Service*. 2 Mar. 2010. Lecture.

³⁴ United States Postal Service. *Five Year Strategic Plan 2009-2013*.

examine what the “Vision” states the USPS will remove, improve upon, and maintain in their business structure; in doing so, it will become clear what areas relate directly to its traditional purpose of existence.

Next, I will analyze what the Internet has specifically allowed American consumers to do, and what functions of the Post Office it renders obsolete. Ware points out that the advantages of online shopping, communication, and more will cause competitors to seek new forms of direct marketing by promoting high-capacity, faster on-line services; the result is a substitution away from direct mail marketing and towards electronic media.³⁵ How has technology changed the traditional rationales for the USPS’s existence? Has the USPS shifted its core foundation due to the effects of the Information Age? Is there a market failure that must be considered, or does it radically change the cost of government action? In effect, I hope to discover where change is needed most—in the mission of the United States Postal Service, or in the cost of serving the mission?

In examining its unique role, I will look at the organization as a whole and see what areas/functions of the Post Office are most advantageous given its original purpose and its most profitable functions. Can the USPS adapt to the increasing use of the Internet? Or should it change its product mix? What other directions could the Postal Service take? Predictions I have center around the USPS’ ability to connect everyone in one network; this factor, for example, would make it possible to utilize Post Office trucks to conduct the Census.³⁶ The consulting reports will be particularly useful, since they have provided suggestions based on calculations and previous steps taken by other postal

³⁵ Crew, Michael A., and Paul R. Kleindorfer. "Competition and Rate Restructuring for Postal Services." *Managing Change in the Postal and Delivery Industries*. Boston: Kluwer Academic, 1997. 370-386.

³⁶ "Census Should Partner With Post Office, Not ACORN." Congressman Jason Chaffetz, Representing the 3rd District of Utah. Congressman Jason Chaffetz, Representing the 3rd District of Utah, 24 June 2009.

services worldwide. I will review those functions that would pull the USPS out of its financial crisis, yet still fall under the original purpose for the foundation of the Postal Service.

Chapter 2

Current State

In order to analyze the traditional rationales for the existence of the United States Postal Service, it is first necessary to understand the current and predicted states of the USPS today. The Postal Act of 2006 declared two distinct categories of USPS products and services—market dominant (mailing services) and competitive (shipping services). Mailing services account for 88 percent of USPS revenue; this includes “First-Class Mail, Periodicals, Standard Mail, single-piece Parcel Post, Bound Printed Matter, Media Mail, Library Mail, single-piece International Mail, and Special Services such as Delivery Confirmation, Certified Mail, and Post Office Box service.”³⁷ Shipping services account for the remaining 12 percent of USPS revenue and are comprised of “Express Mail, Priority Mail, Parcel Select, Parcel Return Service, Global Express Guaranteed, Premium Forwarding Service, Express Mail International, Priority Mail International, and M-bags.”³⁸ With 712,000 employees, the USPS delivers mail to over 150 million residences, businesses and PO Boxes daily.

In addition, current retail products and services include a full line of ReadyPost shipping materials in Post Offices to offer various packaging options, providing over \$110 million in revenue. As recent as 2008, several post offices have started offering passport services as well; there currently are over 6,300 Postal Service locations for

³⁷ United States. United States Postal Service. *2009 Comprehensive Statement on Postal Operations*. 2009. 13.

³⁸ *2009 Comprehensive Statement on Postal Operations*. 13.

passport book and card applications and photo services, providing over \$232 million in passport-related revenue.³⁹

Ponemon Institute's national privacy trust study reported that for the fifth year in a row, the American public rated the USPS as "the most trusted government agency to safeguard personal information."⁴⁰ It was also included among the top six most trusted public *and* private organizations. As the USPS adjusts to current technologic advances, customers are increasing their use of Intelligent Mail (IM) barcodes to track the status of mail in transit. The award-winning Web site, usps.com, receives 1.2 million visitors daily; customers utilize Click-N-Ship and PC postage, locate and pay for a Post Office Box, apply for Business Reply Mail permits, and schedule package pickups online. Furthermore, field testing of the Flats Sequencing System continues, which the USPS hopes will be able to "automatically sort and sequence large envelopes, magazines, catalogs, and circulars into the order that they are delivered by carriers" in order to increase efficiency, lower costs, and provide consistent service.⁴¹ FSS is expected to deploy after testing is completed in 2010.

But on August 6, 2009, the Government Accountability Office released a statement that the United States Postal Service urgently needed to restructure their business model in order to achieve financial viability. According to the USPS 2009 Comprehensive Statement, despite work-hour reductions and more than \$6 billion in spending cuts, the USPS mail volume declined by 25.6 billion pieces by the end of the year, to a total of 177.1 billion pieces—a decline of 12.7 percent (triple the 4.5 percent

³⁹ 2009 *Comprehensive Statement on Postal Operations*. 13.

⁴⁰ *Ibid*, 5.

⁴¹ *Ibid*, 6.

decline in 2008).⁴² Notably, first class and standard mail make up 94 percent of mail volume, decreasing by 24.3 billion pieces in 2009. During that same year, the USPS saw a net loss of \$7 billion, an increase of outstanding debt to \$10.2 billion dollars, and a \$1 billion cash shortfall. The projections for the year 2010 are still worse (see Table 1).

Table 1: USPS's Financial Results and Projections, Fiscal Years 2006 through 2010

Dollars in billions

Fiscal year	Net income (loss)	Year-end cash	Year-end debt
2006	\$0.9	1.0	2.1
2007	(5.1)	0.9	4.2
2008	(2.8)	1.4	7.2
2009 (projected)	(7.0)	(1.0)	10.2
2010 (projected)	(7.0)	(4.5)	13.2

Source: USPS.

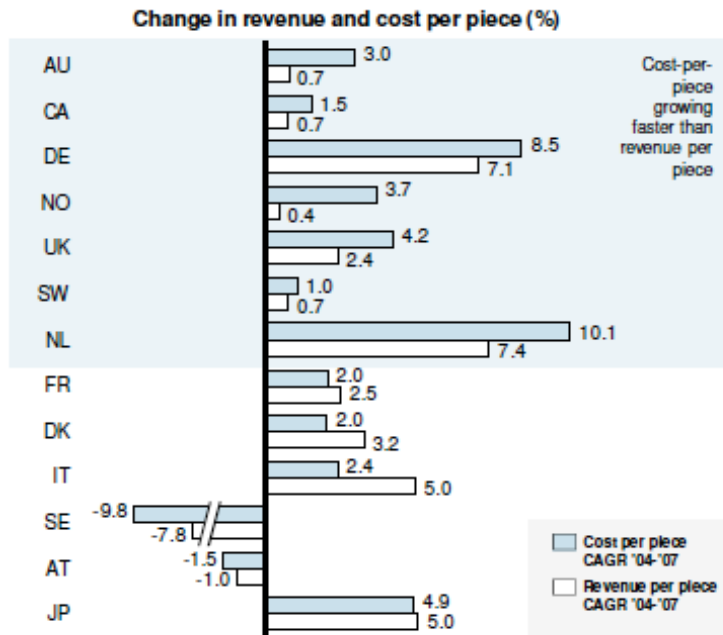
Note: Cash projections assume cost savings of \$5.9 billion in 2009 and \$8 billion in 2010 and no relief from retiree health benefits payments.

(Physical Infrastructure Issues. *US Government Accountability Office*. By Phillip Herr. 2)

The financial crisis of the Postal Service is not unique to the United States. Across Europe, declining mail volumes similarly affect the various Postal Services, making them increasingly more costly, and less profitable, to maintain (see Graph 1).

⁴² 2009 *Comprehensive Statement on Postal Operations*.

Graph 1:

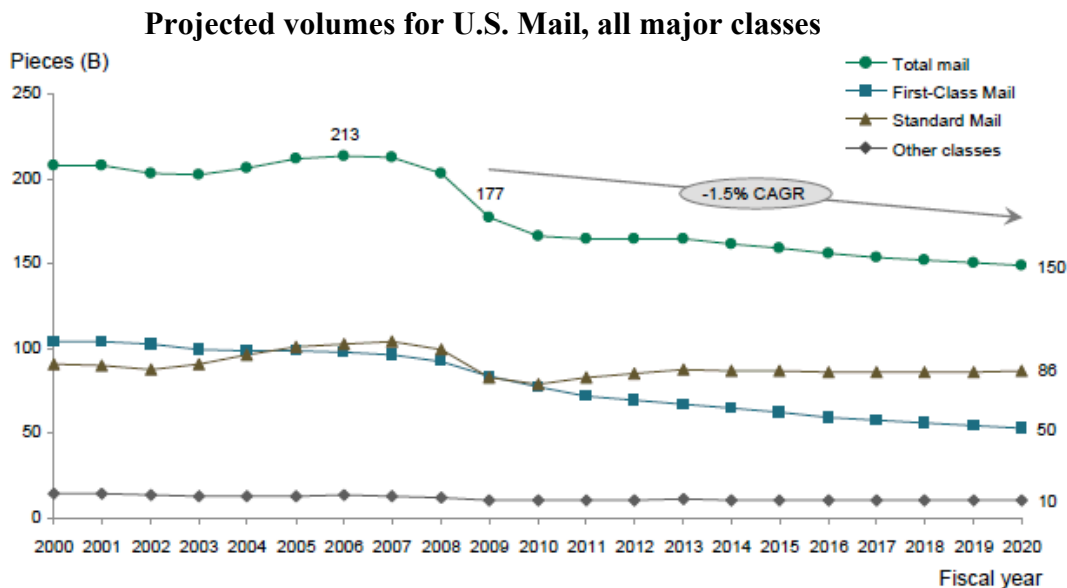


(“Accenture-Is Diversification the Answer to Mail Woes? The Experience of International Posts.” Envisioning America's Future Postal Service. 15)

Predicted Future State

Predictions for the future of the United States Postal Service shed light on the urgency of the issue at hand. In their March 2, 2010 presentation, The Boston Consulting Group forecast that by 2020, postal volumes will decrease another 15.3 percent. Increasing annual losses starting in 2009 will culminate in a \$15 billion loss in the year 2020; this is assuming that the economic recession subsides. BCG’s analysis predicts that First-Class Mail will be hit the hardest, with about a 35 percent fall by 2020; Standard Mail volume will increase slightly, as demonstrated in Graphs 2 and 3.

Graph 2:



(Wolfgang, Mel. "BCG-Projecting US Mail Volumes to 2020." Envisioning America's Future Postal Service. 8)

Graph 3:

Declines Focused in Higher Contribution First-Class Mail



(“McKinsey-March 2 Presentation 2.” Envisioning America’s Future Postal Service. 6)

While the number of delivery points is predicted to be about 10% higher, this increase actually represents a per-household decline in volume. These figures foreshadow the extent of the crisis (see Table 2).

Table 2:

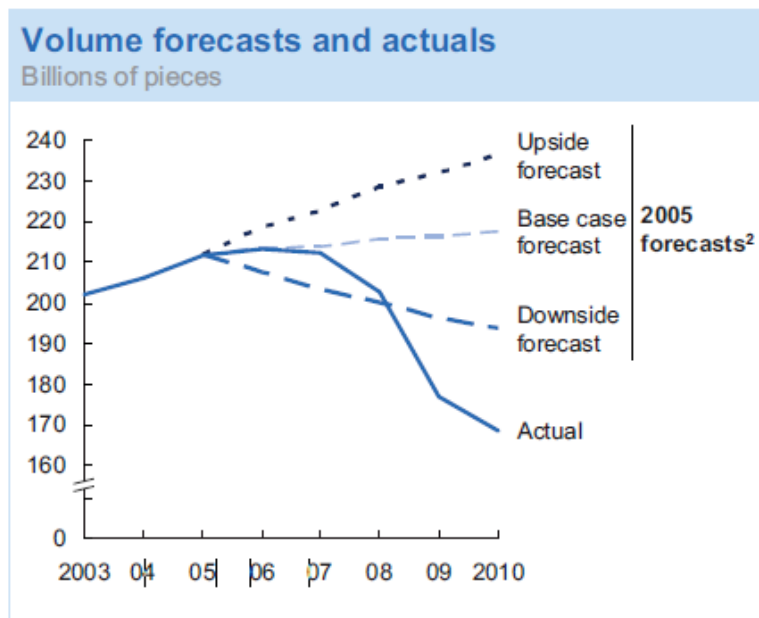
Base case projection of pieces per delivery point and revenue per delivery point per delivery day

	Year			'09-'20 change (%)	
	2000	2009	2020		
Average pieces per delivery point per delivery day	Total Mail	4.9	3.8	2.8	-26
	First-Class Mail	2.5	1.8	1.0	-44
	Standard Mail	2.1	1.8	1.6	-11
Real (inflation-adjusted) revenue per delivery point per delivery day (current \$)	Total Mail	1.8	1.4	1.0	-29
	First-Class Mail	1.0	0.7	0.4	-43
	Standard Mail	0.4	0.4	0.3	-25

(Wolfgang, Mel. "BCG-Projecting US Mail Volumes to 2020." Envisioning America's Future Postal Service. 12)

The analysis also predicts that if the United States finds itself in a period of stagnant economic growth, postal volumes will decrease an *additional* 12 percent in 2020. Even still, these projections may be *too* ambitious, as was the case in the 2005 forecast for the subsequent 5 years (see Graph 4).

Graph 4:

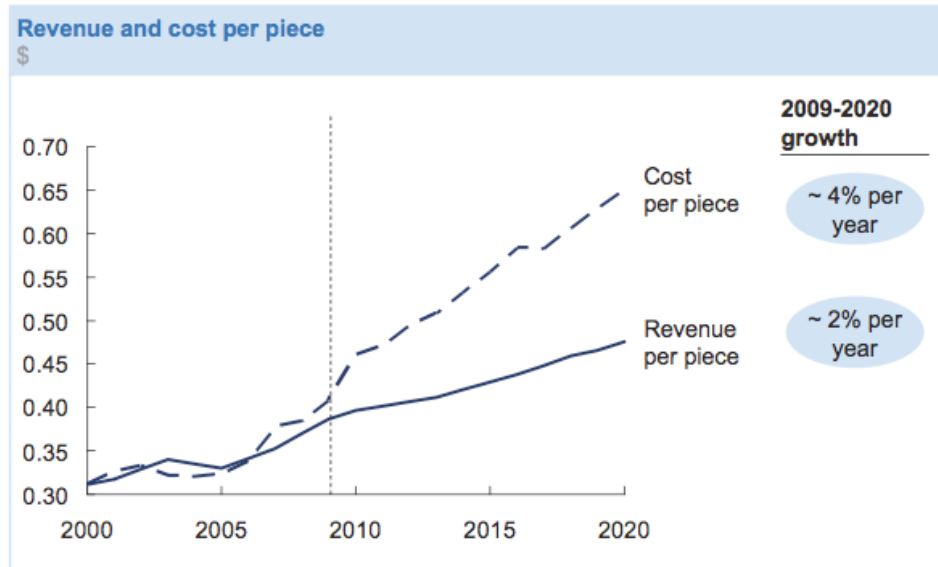


("McKinsey-USPS Future Business Model: Options for a Changing Environment." 5)

Based on the reliability of their projections to date, in the best case scenario,

McKinsey's analysis predicts that over the next ten years, cost per piece will grow about 4 percent per year, while revenue will only grow about 2 percent per year (see Graph 5).

Graph 5:



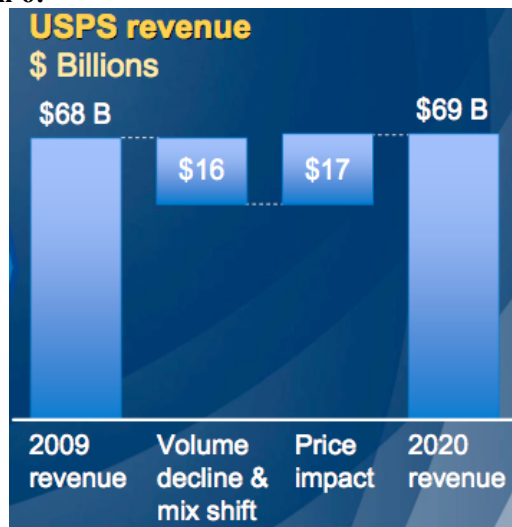
("McKinsey-USPS Future Business Model: Options for a Changing Environment." 18)

The USPS tried to alleviate some of these costs with a stamp rate increase of 2 cents in July of 2010, but Congress denied their request. This highlights the fact that certain policy changes are within the USPS's power, while others require Congressional approval. In terms of products and services, the USPS has control over hybrid mail and advertising products, but Congress controls the flexibility of the products and services. Exigent price increases are under the control of the USPS, but price cap modifications and the ability to cover costs of unprofitable products require legislation. Service standards and delivery locations are up to the USPS, but delivery frequency and access are set by legislation. Furthermore, the USPS controls workforce flexibility, but benefits requirements, Retiree Health Benefits, and universal service obligations, and any streamlined oversights are controlled by Congress.⁴³

⁴³ "McKinsey-March 2 Presentation 2." Envisioning America's Future Postal Service. 2 Mar. 2010.

Assuming price increases of 1.9 percent per year from 2009-2020 due to inflation, and volume declining at a constant 1.5% per year, revenue through 2020 will be virtually flat (see Graph 6).

Graph 6:



(“McKinsey-March 2 Presentation 2.” Envisioning America’s Future Postal Service. 5)

Predicting numbers even higher than BCG, McKinsey asserts that the USPS will see losses of \$33 billion by 2020, with cumulative losses reaching \$238 billion. Even if mail volume remained flat over the next 10 years, instead of continuing its 1.5% annual decrease, losses would still be \$21 billion by 2020. The evidence strongly suggests that the future of the USPS is bleak. Significant measures must be taken to prevent inevitable bankruptcy.

Chapter 3

The Four Traditional Rationales

The USPS's "Vision 2013," created in October 2008, documents the steps that the USPS plans to take in order to preserve its core values of service, efficiency, and trust, despite the financial struggles it faces.⁴⁴ The vision emphasizes its core pillars of a unique mission, strong brand name, source of economic growth, and service that binds the nation together. The document maintains that the USPS must make three major changes to its operations by 2013.

First, the plan emphasizes a new strategy—concentrate on the individual, the "customer." Its strongest focus is on determining customer needs, communicating more effectively, and building on the Postal Service's trusted customer relationships in order to provide outstanding customer experiences. In order to reach these goals, the USPS plans to tailor customized products to various customer segments, gather information on customer preferences from multiple data systems, provide consistent customer experiences across all methods and locations, increase marketing and promotional tools, and leverage personal contact with customers.

Second, "Vision 2013" plans to leverage the Postal Service's strengths and use them to its advantage. With such a vast network, the USPS expects to operate using more specialized retail management and less bureaucratic processes; this includes expanded standardization of a more positive customer experience, and efforts towards new options for small business and better support for non-English speakers. As "the only entity that makes 'house calls' at every address, every day," the Postal Service will focus on

⁴⁴ United States Postal Service. *Five Year Strategic Plan 2009-2013*.

eliminating unnecessary customer trips; providing better tracking and notification services will save time and thus cut back on both sender and receiver opportunity costs.⁴⁵ Finally, the USPS will leverage its trusted employees to build customer loyalty; employees will be provided with better information about capabilities, products, and market performance, training will teach new skills, and innovation will be encouraged.

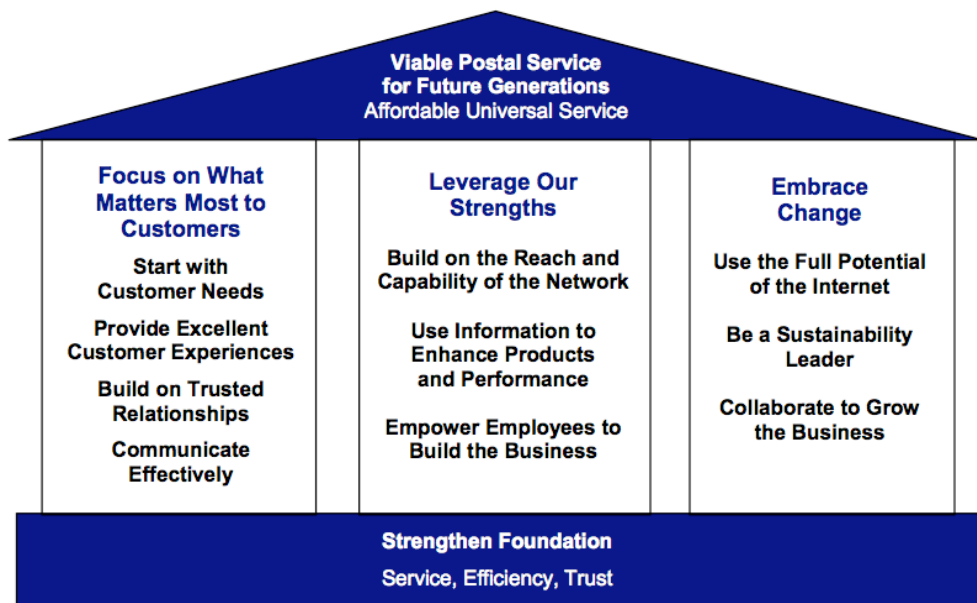
The third piece to the vision is embracing change. These efforts include a focus on corporate social responsibility and strategic alliances to complement and extend services. The vision suggests government agency partnerships, including a passport processing agreement with the State Department. Additionally, the Postal Service is directing attention to the advantages of the Internet; this includes redesigning usps.com, urging sites to include “send me more information” options through the mail, emphasizing the ability to track packages online, and providing URLs on paper mail for customers to find customized online sites. Blogs, webinars, tutorials, and “tell me more” microsites will expand access and create new applications for mail services.

Each of the three areas summarized are portrayed in Figure 1.

⁴⁵ United States Postal Service. *Five Year Strategic Plan 2009-2013*. 9.

Figure 1:

USPS Vision 2013



(United States Postal Service. *Five Year Strategic Plan 2009-2013*. 4)

The Internet's Impact

Internet initiatives encourage added customer interaction with the Postal Service, but the damage that the Internet has done to the USPS revenue stream over the past decade must be fully recognized before a plan for the future can be implemented, particularly a plan that exploits the Internet as a source of revenue. As Nicholas Carr emphasizes, the Internet is “becoming our typewriter and our printing press, our map and our clock, our calculator and our telephone, *our post office* and our library...”⁴⁶ And with its seemingly omniscient capabilities, it is more popular than ever before. In 2005, the average adult in North America spent 6 hours online each week; by 2009, that number doubled to 12 hours. However, if only adults with Internet access are included, the

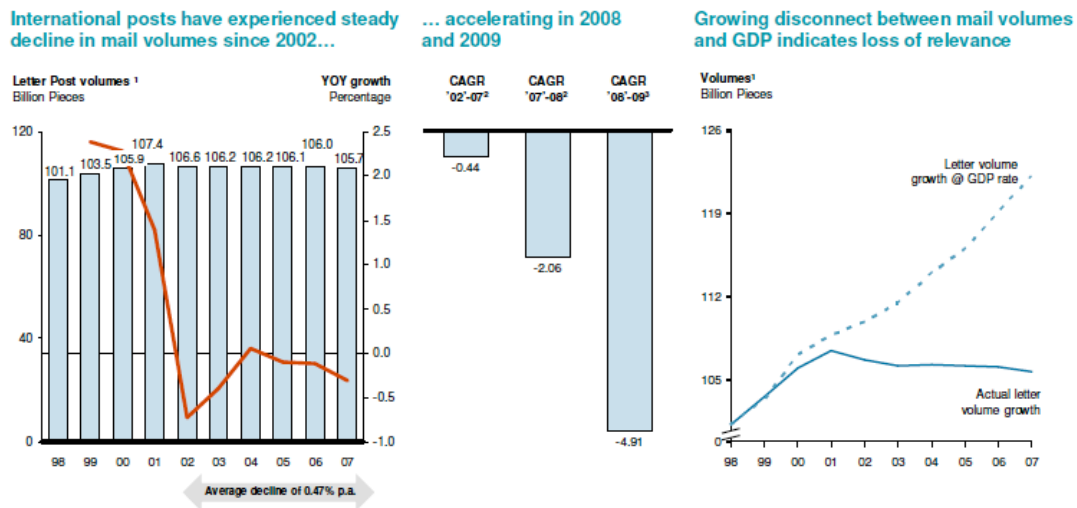
⁴⁶ Carr, Nicholas G. *The shallows: what the Internet is doing to our brains*. New York: W.W. Norton, 2010. 82.

average amount of time spent online per week rises to over 17 hours. In 2009, people in their twenties spent 19 hours online per week, and children between two and eleven years old spent 11 hours online per week (a 60 percent increase since 2004).⁴⁷ Americans are hooked on the Internet. And as its presence grows, so does its impact. Carr notes that, “by changing the economics of production and distribution, the Net has cut into the profitability of many news, information, and entertainment businesses, particularly those that have traditionally sold physical products.”⁴⁸ The United States Postal Service serves as a prime example.

There appears to be a growing loss of relevance for the mail business; mail volume growth is becoming increasingly disconnected from GDP growth, as demonstrated by Graph 7.

Graph 7:

The decline of mail volumes is accelerating and increasingly disconnected from economic growth



YOY – Year Over Year; CAGR – Compound Annual Growth Rate
 1 Based on Australia, Czech Republic, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Portugal, Spain, Sweden, and United Kingdom
 2 Based on the following countries: France, Germany, Italy, Japan, Netherlands, Sweden, and United Kingdom as only those operators' 2008 mail volume data was available
 3 Based on Australia, Singapore, New Zealand, and United Kingdom as only those operators' 2009 mail volume data was available
 Note: The USPS' mail volume increased 4.64% from 2002 to 2007 (but decreased 4.2% from 2007 to 2008 and 10% from 2008 to 2009)
 Sources: Country Fiches of the EC study on 'The evolution of the European Postal Market since 1997'; DG Internal Market and Services, August 2008; operators' website; USPS 2002 and 2007 annual reports for U.S. mail volumes; USPS Household Diary; Accenture analysis

(“Accenture-Is Diversification the Answer to Mail Woes? The Experience of International Posts.” Envisioning America's Future Postal Service. 11)

⁴⁷ Carr, 87.

⁴⁸ Carr, 92.

Not only have first class mail and standard mail been declining in volume, but direct-mail advertising has diminished as well. Even in the early stages of the Internet, marketers had already latched onto this new medium and began pulling away from paper deliveries. In Harold Ware's analysis of rate restructuring for Postal Services, he notes, "marketers' desires to gain competitive advantage, test new distribution channels, reach new customers, and increase demand among the affluent consumers, who use electronic media, are driving the move toward electronic media."⁴⁹ Ware also emphasizes the "gold rush" effect at work; "as interest in the Internet has snowballed in the United States and around the world, numerous firms are seeking new profit opportunities, and are concerned about missing an opportunity their competitors may capture."⁵⁰ This was true in 1997, and is still true today. Facebook, Twitter, and Flickr are just a few of the various social networks utilized by millions around the world every day. And the advertising opportunities are endless.

Marketers understand the economics of alternative media and realize that the costs of creating a World Wide Web page are small compared to the benefits it provides them. By avoiding the costs related to paper, postage, and printing, alternative media has much smaller variable costs. In addition, the Internet is a viable medium for testing new customers; individuals interested in a product or company can seek out information online at their own convenience, depending on how they value the opportunity cost of time. The instant access aspect of the Internet is a clear benefit over the time delay inherent in the mail system. Ware also notes that electronic media allow for more exact order entries and thus can lower the costs of returned merchandise; "consumers can type

⁴⁹ Crew and Kleindorfer. "Competition and Rate Restructuring for Postal Services." 371.

⁵⁰ Ibid, 371.

in their credit card number and address and receive their orders through the mail.”⁵¹ The cost of employees providing 24 hour phone service is greatly diminished as well, since firms can provide much of this information on-line.

Focusing on customers, leveraging strength, and embracing change are viable business tools for a company focused on increasing profitability. But the USPS is not a “company” and its main focus is not “profitability.” The Internet has hit the United States Postal Service hard. The USPS Vision 2013 assesses the next steps for the agency based on its “core foundation” as a unique mission, strong brand name, source of economic growth, and service that binds the nation together. But the USPS must look beyond its business-categorized qualities into the theories behind its foundation. In order to assess the next steps of the bureaucratic agency, one must analyze the four traditional rationales for its existence in the first place—universal access/service, economies of scale and scope, monopoly, and network and positive externalities—and the effect that the Internet has had on each.

Universal Access/Service

Haldi and Merewitz define universal access and service as the Post Office’s obligation to provide the country with “(i) universal access to the postal network, [and] (ii) universal free delivery.”⁵² According to Haldi and Merewitz, there are limits to USPS universal service. For example, the USPS delivers mail to every road within the “postal route.” In order to classify as within this postal route, a road must meet the following requirements:

⁵¹ Crew and Kleindorfer. "Competition and Rate Restructuring for Postal Services." 372.

⁵² Crew and Kleindorfer. "Cost and Returns from Delivery to Sparsely Settled Rural Areas." 237.

1. It must be serviceable throughout the entire year.
2. If the road is a dead-end, it must contain a safe turn-around.
3. Its smallest density must be one household per mile, including retrace.

If a road does not meet these requirements, residents can receive mail by installing their own mailbox at an intersection of the closest postal route; renting a mailbox at the closest post office; or having mail sent to the closest post office to be picked up by the resident (this accounts for as many as 5 million people in the United States). Thus, the term “universal service” does not mean that mail will be delivered to every individual house in the country, or even to every property line. Haldi and Merewitz prove that universal service simply means, “that the USPS provides everyone with a means of receiving mail that has been addressed to them.”⁵³

Nicole Biggart, professor of Management and Sociology at the University of California, takes a more revering approach to the USO (universal service obligation), arguing that the USPS’s *ideology* centers around universal service. She writes that the “fact that the [Post Office Department] was not in business for profit elevated the workers' positions in the minds of many employees.”⁵⁴ Given the nicknames “patrons” and “civil servants,” a postman worked as a civil servant. It was this ideology of “good mail service uncompromised by considerations such as cost, competition, and even market demand” that Biggart says made the Post Office such a vital government bureaucracy for American citizens.⁵⁵ Thus, even with today’s 36.5 thousand retail locations—*five* times the number of Walgreens stores—but only *1/10* the number of

⁵³ Crew and Kleindorfer. “Cost and Returns from Delivery to Sparsely Settled Rural Areas.” 241.

⁵⁴ Biggart, 418.

⁵⁵ Ibid, 418.

weekly customers compared to a Walgreens, Biggart's supporters would argue that the universal service obligation prevents the closing of *any* Post Office.⁵⁶

Cremer, Rycke, and Grimaud (CRG) see the universal service obligation more as a means of a binding constraint and less as a means of upholding an ideology. The authors give an extensive analysis of the universal service obligation as essentially a redistributive pricing policy, stating that the rationale for the USO is its implied pricing policy restrictions. If the USPS were allowed to set prices to cover its costs, as any private business would, it would provide service to everyone at varying costs; but with uniform "affordable" pricing, "prices are likely to be below cost for some consumer types, and the USO constitutes a binding constraint."⁵⁷ Thus, since distortionary taxes are a component of the government's budget, CRG argue that distorted prices may be an effective redistribution policy. One should "think of the surcharge paid by low cost individuals as a tax used to finance the subsidized service to high-cost customers."⁵⁸ And the subsidy is quite large; according to the Federal Trade Commission in 2008, the Postal Service subsidies include exemptions from various state and local taxes, along with licensing requirements for its competitive products operations. Subsidies are ultimately worth between \$39 and \$117 million a year for the agency.⁵⁹ They account for 25 percent of the cost of mailing and allow the USPS to mask some of its higher costs from consumers, keeping product prices at a competitive edge in comparison to its private competitors in certain sectors, such as packages.

⁵⁶ "McKinsey-March 2 Presentation 2." *Envisioning America's Future Postal Service*. 2 Mar. 2010.

⁵⁷ Crew and Kleindorfer. "Costs and Benefits of Universal service obligations in the postal sector." 11.

⁵⁸ *Ibid*, 25.

⁵⁹ Federal Trade Commission. *Federal Trade Commission: Protecting America's Consumers*. Federal Trade Commission, Dec. 2007.

Haldi and Merewitz take their USO argument one step further and argue that without the existence of the Post Office, universal service would not be preserved; private profit-seeking firms would ultimately cause a spiral effect with the end result of annual service fees for rural delivery, the abandonment of uniform rates, and the need for government subsidies.⁶⁰ According to this perspective, the private market would not provide universal service because some areas would become too costly to serve; costs would either become too expensive because of remote location or sparse population, or the citizens living in these areas would not be able to afford mail service due to lower incomes.

The argument for the existence of the Postal Service as a means of upholding the universal service obligation is thus based on three key factors: the need for a good mail service uncompromised by cost, competition, or demand; the binding constraint USO sets on pricing policies; and the protection it gives to rural areas at risk of not receiving mail without it. Yet, the merits of this logic collapse with the advent of the Internet.

If a “good mail service” exists that *can* be cheaper, without any major substitutes, and has just as high a demand, why not choose that service? The Internet meets these qualifications. Research by Litan and Rivlin demonstrates the large transactions-cost savings that occur by transitioning to Internet use. The two cite the health-care sector as an industry that requires lots of paperwork, stating that Electronic Data Interchange “alleges that [with the Internet] it can reduce the cost of processing from \$10-15 per paper claim to \$2-4 per EDI claim.”⁶¹ The transaction costs are much lower when a business transfers from paper communication to online communication, as are the costs

⁶⁰ Crew and Kleindorfer. “Cost and Returns from Delivery to Sparsely Settled Rural Areas.”

⁶¹ Litan, Robert E., and Alice M. Rivlin. “Projecting the Economic Impact of the Internet.” *The American Economic Review* 91.2 (2001). 314.

to the sender and receiver. Considering that the same information can be transmitted utilizing a less costly format, the Internet still allows individuals to receive “good mail service,” whether through e-mail or online billing. Further, when an individual files tax returns or applies for permits and licenses online, costs are ultimately cut for both the government and for taxpayers. The asynchronous communication benefits of Internet usage allow senders and receivers of e-mail to access it at any time, even in the middle of the night; Borenstein and Saloner emphasize the advantages of asynchronous communication “when widely differing time zones are involved, as is increasingly common in the global economy.”⁶² For these reasons, the Internet qualifies as an even *better* mail service than physical delivery.

The universal service obligation’s ability to limit pricing policies becomes irrelevant as well. According to the FCC’s National Broadband Plan, 200 million people, or 2/3 of Americans, have access to broadband in their homes.⁶³ For these individuals, sending e-mails or filing billing information are free to both the sender and receiver. And finally, fear of the inaccessibility of rural areas is no longer an issue; comScore Inc. reports that rural broadband penetration was up to 81 percent in 2009 (13 percent higher than the year 2008).⁶⁴ The remaining third of Americans without Internet access will be addressed further under Recommendations.

Economies of Scale and Scope

A second argument for the existence of the Postal Service is that economies of scale

⁶² Borenstein, Severin, and Garth Saloner. "Economics and Electronic Commerce." *The Journal of Economic Perspectives* 15.1 (2001). 5.

⁶³ "National Broadband Plan - Executive Summary." *The National Broadband Plan: Connecting America*. The Federal Trade Commission, 17 Mar. 2010.

⁶⁴ "Regional ISPs Drive Broadband Growth in Rural Markets." *ComScore, Inc.* 11 May 2010.

and scope exist. According to Panzar, the standard definition of economies of scale is “that if inputs are all increased by the small factor λ , then output increases by a factor larger than λ .”⁶⁵ In terms of the Postal Service, the wider the scale of the bureaucratic agency, the more the unit costs fall for the USPS. Economies of scope are said to exist “when for all outputs y_1 and y_2 , the cost of joint production is less than the cost of producing each output separately.”⁶⁶ Economies of scope in the Postal Service would mean that the combined production of two different goods by the USPS is less costly than the collective costs of production of two private mail service companies, each offering one of these products.

Bradley, Colvin, and Perkins’s 1995 study provides empirical proof that both economies of scale and scope exist within the mail delivery system. The two researchers built a structural model to determine the Postal Service street time process. The model consists of two steps. First, a model for the number of routes per Zip code incorporates the volumes delivered, the number of delivery points, and the delivery area’s geography. Second, a separate model calculates the time per route in a Zip code, where the line of travel and the specific delivery points reached in a route are incorporated. Bradley, Colvin, and Perkins discovered through their calculations that as more routes are added, street time per route falls. Their research also demonstrated that as the amount of *cased* mail in a Zip code (defined as “mail that is non-machinable and residual letters, flats, and the small amount of walk sequenced mail that must be cased and small parcels”)

⁶⁵ Panzar, John C., and Robert D. Willig. "Economies of Scale in Multi-Output Production." *The Quarterly Journal of Economics* 91.3 (1977). 483.

⁶⁶ *Ibid*, 483.

increases, average street time per route decreases⁶⁷. With an estimated value for scale economies equal to 2.327 (output elasticity of 42.9 percent), large economies of scale in street time exist. With an estimated value for scope economies equal to 1.662, street time would increase by about 166 percent if the USPS were to separate the delivery of individual products and the collection of mail. Bradley, Colvin, and Perkins's research supports the argument that the "Postal Service's large and relatively fixed delivery network provides substantial benefits to the U.S. economy in the form of material reductions in delivery cost relative to multi-provider alternatives."⁶⁸

Panzar argues similarly, stating that one large network that connects the citizens of the United States in the same system, utilizing one organizational structure and one set of rules and regulations, is much cheaper than utilizing several private companies to carry out similar functions. Panzar assumes that economies of scale exist since it would be wasteful if two or more carriers made daily stops at all the neighborhoods, or two or more local post offices completed route-level sorting chores. In addition, he notes that economies of scope exist if "the total costs of providing local and national mail services over two separate networks is greater than the costs of providing them together."⁶⁹ Based on his empirical formula, Panzar proves that economies of scale in delivery produce further economies of scale and scope in any postal network cost function. With only one carrier, delivery costs, sorting costs, and transportation costs are minimized; competition would only inflate industry costs.

⁶⁷ Crew and Kleindorfer. "Measuring Scale and Scope Economies With a Structural Model of Postal Delivery." 109.

⁶⁸ Ibid, 117.

⁶⁹ Crew, Michael A., and Paul R. Kleindorfer. "Is Postal Service a Natural Monopoly?" 223.

According to Haldi and Merewitz, economies of scope “refers to economic benefits that arise from a propitious combination of otherwise independent economic activities.”⁷⁰ Currently, the USPS utilizes a consignment program, where local grocery stores sell stamps, eliminating the need for individuals to make a separate trip to the post office to get stamps. As Haldi and Merewitz note, “this program benefits consumers through increased convenience, stores gain the use of cash float, and the USPS is able to reduce its retail costs far more than it loses from interest on the float.”⁷¹ But the economies of scope of the USPS can be expanded further in several aspects.

Economies of scope also exist with the utilization of letters, packages, express mail, and advertising matter all delivered by one carrier. Traditionally, “it is assumed that economies of scope are maximized, or exhausted, when...carriers deliver every class of mail that is available for their routes.”⁷² But Haldi and Merewitz point out that just as postal retail services could be combined with other activities to enhance economic benefits, so too could postal delivery services be combined with other activities, particularly in rural areas. This idea has already been utilized in both the UK and Switzerland, where rural delivery and passenger transport have been combined into one activity; as mail is off-loaded from a bus, people are allowed to board the bus and get off at a later stop along the mail route. Though these countries have lower rates of automobile ownership than that of the United States, a similar approach could be utilized in the US. Haldi and Merewitz suggest a system where school bus drivers sort and deliver mail while school is in session, or even deliver the mail in conjunction with dropping children off at the end of the day.

⁷⁰ Crew and Kleindorfer. “Cost and Returns from Delivery to Sparsely Settled Rural Areas.” 245.

⁷¹ Ibid, 246.

⁷² Ibid, 247.

Wider economies of scope could also open up in cases where the USPS has contracted out transportation of mail to independent operators. In fact, this idea existed as far back as 1785, when certain intercity transportation post roads and less desirable routes were deemed “star routes,” and “farmed out” to independent contractors. Haldi and Merewitz emphasize the opportunities for expanding economies of scope utilizing these independent contractors; mail delivery could be combined with delivery for local merchants, and independent operators could “contract with government agencies to provide limited rural social services.”⁷³ The possibilities for expansion of economies of scope through independent contractors are endless. Haldi and Merewitz note that “were USPS to rely on [more] independent contractors, its own data indicate that the cost of service on those routes could be reduced by as much as 45 percent.”⁷⁴

The USPS supports economies of scale and scope through two major factors: the material reductions in delivery costs relative to multiple providers, and the increased customer convenience associated with the scale and scope of the system. But the advent of the Internet has these same effects. Economies of scale exist in the network of 200 million people connected through broadband in the United States; and when these individuals are connected with not only one another but Internet users all over the world, Borenstein and Saloner note that “the extreme scale economies in providing such content to many consumers separate it from almost all other information transmission, and become more important with the size of the potential market to be served.”⁷⁵ Furthermore, significant volume declines in the Postal Service are rapidly shrinking the economies of scale of the USPS. It is free to send and receive email online. In addition,

⁷³ Crew and Kleindorfer. “Cost and Returns from Delivery to Sparsely Settled Rural Areas.” 249.

⁷⁴ Ibid, 256.

⁷⁵ Borenstein and Saloner, 5.

as Litan and Rivlin state, “there is considerable scope [with the Internet] for management efficiencies in product development, supply-chain management, and a variety of other aspects of business performance.”⁷⁶ Also, customer convenience is higher than ever before with the ability for customers to send, receive, purchase, and sell items without ever leaving the comforts of their own homes. This convenience is maximized with the Internet’s ability to customize the user experience, as many companies, including the USPS, are focusing on incorporating now; the Internet “allows considerable flexibility in dealing with information, with far greater interactivity and search capability than, say, catalogs or menu-driven telephone information.”⁷⁷

The advent of the Internet weakens the argument for the existence of the USPS because of its vast economies of scale and scope in relation to first-class and second class-mail. But there is one major shortcoming of the Internet’s scale and scope capabilities, and thus its ability to effectively supplant the Postal Service—the Internet cannot transport a physical package from one location to another. It may improve convenience in the shipping process, but ultimately, a consumer must still assemble the package, transfer it to the USPS, and the package must be transported to its desired location. Economies of scale and scope are embedded in the USPS package delivery service. But private package delivery companies, such as UPS and FedEx, have been competing with the USPS in this arena for decades. The strongest competitive edge that the United States Postal Service held was its history as America’s most trusted mail delivery system. The Internet’s impact on the delivery of letters, bills, bank statements, and advertisements is clear. The Internet’s vast economies of scale and scope leave

⁷⁶ Litan and Rivlin, 38.

⁷⁷ Borenstein and Saloner, 5.

package delivery to the USPS, placing them directly in line with highly competitive parcel shipment companies. Without first-class and second-class mail, the USPS has no significant edge over UPS or FedEx.

Monopoly

Economies of scale and scope connect to a third argument for the existence of the Postal Service—delivery requires a natural monopoly. Under a natural monopoly, one provider can most efficiently control the entire mail delivery system. This concept is not upheld outside of the United States; Finland, Japan, Germany, New Zealand, and the United Kingdom have privatized their postal services, as competitors with lower costs take large shares of the liberalized markets. For example, in October 2005, it was decided that the Japan Post be privatized and that its postal market be deregulated gradually between 2007 and 2017. The Japan Post is also in control of the nation's largest bank and largest insurance company. Thus, privatization has resulted in the creation of five separate Japanese private businesses: “a postal delivery corporation, an over-the-counter services corporation, a postal savings corporation, a postal insurance corporation, and an independent agency to deal with old accounts.”⁷⁸ While the liberalization of the other European countries is predicted to occur by 2013, the status of the USPS monopoly in future years is yet to be determined.⁷⁹ Several empirical perspectives argue both for and against it.

⁷⁸ “Privatization of National Postal Networks.” *The National Association of Letter Carriers, AFL-CIO*. NALC, 29 Jan. 2008.

⁷⁹ “Accenture-Is Diversification the Answer to Mail Woes? The Experience of International Posts.”

Cohen and Chu analyze the economic argument that legal protection of the Post Office is necessary in order to maximize the benefits of the universal delivery system.⁸⁰ This argument of maximum benefits in a monopoly assumes that a monopolist postal service is an efficient provider of delivery. If a monopoly is in some way protecting inefficient behavior and allowing the extraction of economic rents, this would not be maximizing benefits for the customer. Cohen and Chu note that the original idea of a post was an inter-city letter service, where letters were deposited at post offices and recipients picked them up by calling for it. It was not until the mid-1800s that a delivery function of the post was adopted as the norm for the United States Postal Service. As the research from Bradley, Colvin, and Perkins previously demonstrated, economies of scale exist in the USPS delivery function. Cohen and Chu measure these returns to scale and compare them with the cost imposed on consumers by a monopoly. Their research attempts to answer the question, “does the monopoly increase or decrease the price of postal services to postal customers?”⁸¹

The two researchers first focused on the carrier street time, which makes up 21 percent of the USPS’s total costs. Carrier street time can be broken down into three components (see Table 3): route time (time needed to walk or drive to a particular route), access time (time needed to deviate from a route to make a delivery), and load time (time needed to place mail in mailbox). Route time is basically fixed, and load time varies 100 percent with volume. Access time is partially fixed and partially variable, and thus is the focus for Cohen and Chu. A regression analysis determined that access cost variability is

⁸⁰ Crew and Kleindorfer. “A Measure of Scale Economies for Postal Systems.”

⁸¹ Ibid, 116.

around 6 percent; “a 10 percent increase in volume will yield a 0.6 percent increase in the number of accesses.”⁸²

Table 3:

Carrier Street Time (1993)		
Function	Cost (thousand)	Percentage of Total
Route time	2,950	29.3
Access time	5,205	51.7
Elemental load time	1,912	19.0

(Crew and Kleindorfer. “A Measure of Scale Economies for Postal Systems.” 118)

Next, they focused on a measure of scale economies, comparing the cost of delivery of a single delivery service with that of two identical delivery services, each delivering a random half of the day’s mail volume. Their analytical results demonstrated that with two delivery services, route time would double, load time would remain constant, and access costs would grow by 61 percent. Total street time costs would rise from \$10 billion (under a monopoly) to \$16 billion (under the duopoly). The benefits from scale economies in delivery would thus be \$6 billion. The evidence that one provider operates at a lower cost than two providers for a system of universal delivery supports the assumption that the universal delivery system is a natural monopoly.

Two problems arise under this assumption. The first is the lack of competition for the USPS and thus the difficulty of pricing policy decisions. The package delivery sector of the Postal Service does not operate under this supposition; it is in competition with private package delivery companies, such as FedEx and UPS. Furthermore, with the advent of the Internet, virtually “free” e-mails serve as strong competition for letter

⁸² Crew and Kleindorfer. “A Measure of Scale Economies for Postal Systems.” 119.

delivery. Pricing power is an issue with any natural monopoly, though these substitutes may help to keep prices down in parts of the delivery system.

The second problem with lack of competition is the possibility of waste and rent-seeking by workers—the possibility of inefficiency. Without competition, there is a real threat of lack of motivation and innovation within the United States Postal Service. A monopolist does not risk losing customers due to poor service or quality if no other supplier exists. Also, the high wages of the average postal worker exacerbate the issue. As Cohen and Chu note in their 1993 study, the average postal worker’s annual salary was \$35,001 with \$7,713 in fringe benefits, while all full-time workers in the United States averaged \$24,076.⁸³ University of Pennsylvania’s Michael B. Wachter concluded that wage- and fringe-benefit premiums for the USPS labor force were 29.5 percent higher than those of the private sector labor force. In 1993, this 29.5 percent amounted to \$9 billion in monopoly rents, which exceeds the benefits of scale in the multiple delivery system (\$6 billion) by \$3 billion⁸⁴. And salaries have risen since; in 2008, the USPS employee salary was estimated at \$48,000.⁸⁵

USPS employees are also provided greater job security as public sector workers. Wachter, Hirsch, and Gillula note, “the large difference in job security between the private sector and the Postal Service is well known.”⁸⁶ Their research demonstrates that while Postal Service employment displacement has been virtually zero in past years, two-

⁸³ Crew and Kleindorfer. “A Measure of Scale Economies for Postal Systems.”

⁸⁴ Wachter, Michael L., Barry T. Hirsch, and James W. Gillula. *Wage and Benefit Comparability of U.S. Postal Service Clerks to the Private Sector*. Thesis. United States Department of the Treasury, 2001.

⁸⁵ “U.S. Postal Service Productivity and the Postal Business.” *The National Association of Letter Carriers, AFL-CIO*. NACL, 29 Jan. 2008.

⁸⁶ Wachter, Hirsch, and Gillula, 86.

year private sector displacement rates during times of recession have been quite high (see Table 4).

Table 4:

Probability of Permanent Job Loss Over a Two-Year Period

	1982-83	1990-91	1996-97	1998-99
Private Sector	8.9	8.3	5.7	5.2
Mining	24.2	16.1	5.5	14.4
Construction	15.2	22.5	10.0	9.0
Manufacturing	12.9	9.6	6.1	6.4
Transportation	10.1	7.8	5.3	3.0
Communication & Utilities	3.4	3.0	5.3	4.2
Other Private	5.7	6.5	5.2	4.5
Bargaining Unit Postal Clerks	0.0	0.0	0.0	0.0

Note: Displacement rates are for full-time workers ages 20-64. The rates represent permanent job losses due to a plant or company closing or move, slack work, or a worker's position or shift being abolished. The rates represent the probability of losing a job at least once over a two-year time period. Calculations are by the authors using data from the CPS Displaced Worker Surveys for January 1984 and 1992 and February 1998 and 2000 and the methodology outlined in Henry S. Farber, "The Incidence and Costs of Job Loss: 1982-91," *Brookings Papers on Economic Activity: Microeconomics*, 1:1993. Postal clerk displacement rates: U.S. Postal Service, Human Resources Information Systems. (Wachter, Hirsch, and Gillula, 85.)

The authors conclude that, "given the low unemployment rates in these years, the risk of permanent job loss is very much a factor in private sector industries."⁸⁷ This is clearly not as big of an issue in the public sector. Their research also supports the claim that a large compensation premium is evidence of low quit rates by postal clerks, along with "the ease with which the Postal Service can hire new employees, even in high wage labor markets."⁸⁸ Ultimately, the wage and fringe benefits of the labor force can result in waste and rent-seeking of postal employees; this inefficiency does not benefit society as a whole.

A second argument for the existence of a monopoly is that without it, "private profit-seeking firms would undercut, or 'cream-skim,' the post office's profitable urban

⁸⁷ Wachter, Hirsch, and Gillula, 86.

⁸⁸ *Ibid*, 88.

delivery routes, while altogether avoiding service to money-losing rural areas of the country”.⁸⁹ The Private Express Statutes (PES) prevent any private companies from taking over the service of postal delivery. Implemented under 39 Code of Federal Regulations Parts 310 and 201, the PES forbid any private company from carrying or delivering letter mail (given a small list of exceptions)⁹⁰. In 1973, the USPS Board of Governors emphasized the consequences of abolishing a monopoly and opening postal delivery to private companies, stating,

“the Postal Service must [by statute] serve those areas and customers for which operating costs are not recoverable under a uniform pricing policy. If the Private Express Statutes were repealed, private enterprise, unlike the Postal Service, would be free to move into the most economically attractive markets while avoiding markets that are less attractive from a business standpoint” (242).⁹¹

Haldi and Merewitz argue a contrasting perspective for the existence of a monopoly. Assuming that the Postal Service as a monopolist is an efficient mail provider, their research reexamines the assumption that a monopoly is necessary to prevent the spiral effect of competitive price cutting and ultimate abandonment of uniform rates. They point out that even without a monopoly, the rural routes would continue to exist; but they also indicate that the extent of profitability of these rural routes is still unknown, and thus other alternatives to privatization must be examined.

Haldi and Merewitz review the research conducted by Cohen, Ferguson, and Xenakis (CFX) in 1993, which studied 46,197 “rural” delivery routes, consisting of 21 percent of all deliveries in the United States. This data revealed that many routes classified as “rural” are in fact high-density suburban areas. Haldi and Merewitz emphasize that “many of these routes, especially those in more upscale neighborhoods, probably

⁸⁹ Crew and Kleindorfer. “Cost and Returns from Delivery to Sparsely Settled Rural Areas.”

⁹⁰ “Understanding the Private Express Statutes.” *USPS.com*. United States Postal Service, June 1998.

⁹¹ *Ibid.*

represent some of the ‘cream’ that competitors would attempt to ‘skim’ if the statutory monopoly were repealed and alternate delivery were allowed to compete.”⁹² In addition, they argue that despite the results of CFX, further analysis is needed to determine what might happen if no monopoly for postal service existed; though CFX assert that the value of larger networks would allow universal service to continue, they further emphasize the “*extent to which the USPS could afford to maintain universal service on rural routes without the monopoly* has not been tested.”⁹³ For this reason, Haldi and Merewitz suggest that actions must be taken to make delivery in these less populated areas profitable for the USPS.

There are two key factors in the argument for the United States Postal Service as a monopoly: the affordability of the postal service to customers and the fact that without a monopoly, the less “attractive” markets would not be as profitable and thus the USPS might not be able to afford them delivery. The advent of the Internet, as discussed in reference to universal service, eliminates the cost and less attractive market issues.

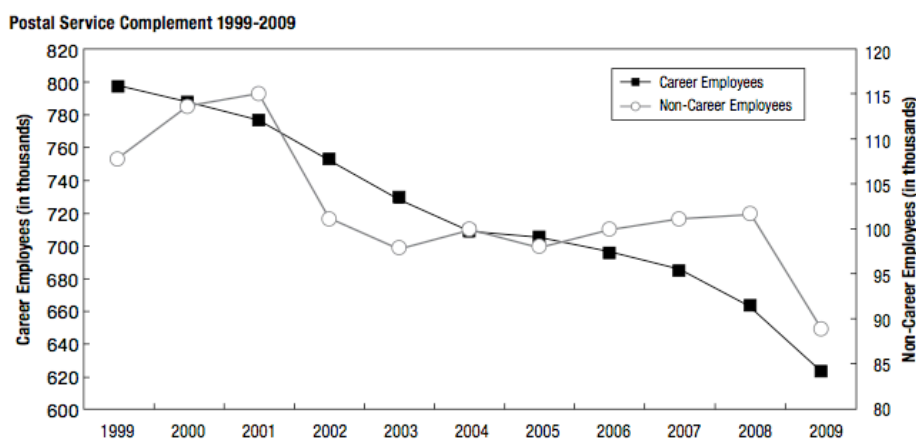
In addition, higher wages and increased job security must be re-evaluated in the Internet era. Higher wages resulted in rent-seeking in the past, and there is no evidence to suggest otherwise today. This can slow change, as workers know that they may not receive such a deal elsewhere. Additionally, the inefficiencies connected with higher wages are now coupled with a new possibility of job loss. The online capabilities of providing first-class and standard mail service imply that the 712,000 employees delivering letters, bills, and advertisements to the doorsteps of American citizens may no longer be needed (parcel delivery is a separate issue, as will be discussed under

⁹² Crew and Kleindorfer. “Cost and Returns from Delivery to Sparsely Settled Rural Areas.” 242.

⁹³ Ibid, 244.

Recommendations). Wachter, Hirsch, and Gillula’s study did not consider the Internet’s impact on jobs, as their most recent data point was at the beginning of the Internet’s existence (1998-1999). In fact, the impact has been large. Through various early retirement and resignation incentives, the United States Postal Service cut 115 million work hours in 2009—the equivalent of 65,000 positions.⁹⁴ And the number of employees continues to decline (see Graph 8).

Graph 8:



(United States Postal Service. *The Annual Report of the United States Postal Service*. 32)

Table 4 shows the probability of job loss at 0% between 1998 and 1999 for “Bargaining Unit Postal Clerks,” and yet the USPS Annual Report demonstrates the significant number of employees that lost jobs beginning in 1999—around the same time that use of the Internet began to grow significantly. Though no causation can be concluded from this information, it can be inferred that the advent of the Internet had a significant impact on the demand for USPS employees. In order for the USPS to function most efficiently today, it is time to renegotiate the terms for wage and fringe benefits.

⁹⁴ United States Postal Service. *The Annual Report of the United States Postal Service*. Washington, DC: United States Postal Service Corporate Communications, 2009.

Networks and Positive Externalities

The need for an efficient network system is another argument for the United States Postal Service. Raey defines the postal service as necessary for providing an “integrated, end to end, people and service based network.”⁹⁵ He sites paragraph 5.1 of Europe’s draft Notice (*on the application of the competition rules to the postal sector and in particular on the assessment of certain state measures relating to the postal services*), which states that the postal service is important because it is a “genuinely integrated public network, allowing efficient circulation of information.”⁹⁶ Raey discusses two additional network externalities associated with the postal service.

First, in developing a nation-wide policy for postal service, the quality of the service itself improves. Raey cites the United Kingdom’s postal service as a prime example. “It was after the introduction of an end-to-end quality measurement system that the quality of the postal service improved dramatically.”⁹⁷ Thus, a key responsibility of any postal administration is preserving a high end-to-end quality of service.

Second, uniform pricing across the country can only exist when collection, sorting, transport, and delivery are all connected in one nation-wide network. Raey emphasizes that without a nationally integrated postal structure, “prices based on the local costs would be more appropriate than a uniform national price.”⁹⁸ With the vast postal network comes uniform pricing, a fundamental value of the United States Postal Service.

⁹⁵ Crew and Kleindorfer. “The Structure of Postal Markets.” 368.

⁹⁶ Ibid, 365.

⁹⁷ Ibid, 365.

⁹⁸ Ibid, 365.

Paul Starr gives the Post Office the role of “facilitator” for all Americans, connecting them with information and communication.⁹⁹ This connection creates various network externalities; Nicholas Economides discusses the sources of network externalities and their effects on market structure and pricing. The idea is that the “value of a unit of the good increases with the *expected* number of units to be sold.”¹⁰⁰ Each additional customer served by the Postal Service provides direct externalities to the other customers that are a part of the network; they “add new goods through the provision of a complimentary link to the existing links.”¹⁰¹

The network system provides another positive externality as well—the spread of political information. As explained by Starr, the Post Office’s original role was to subsidize the press, contributing to “the extension of communication—in particular, the distribution of political news—beyond earlier boundaries.”¹⁰² This spread of political news creates a positive externality, described by Hamilton; the more details that an individual learns about policies, the more informed of a voting decision he or she can make at election time.¹⁰³ With more informed voters follows more informed election decisions. Rush’s 1787 “Address to the People of the United States” emphasized that the spread of knowledge to every individual in the United States will help facilitate a republican government.¹⁰⁴ The U. S. postal network, originally much larger than any postal network in any other country, continues to spread political information daily.

⁹⁹ Starr, 16.

¹⁰⁰ Economides, 678.

¹⁰¹ *Ibid.*, 679.

¹⁰² Starr, 3.

¹⁰³ Hamilton, James. All the News That’s Fit to Sell: How the Market Transforms Information Into News.

¹⁰⁴ Starr, 88.

The argument for network externalities and positive externalities associated with the USPS centers around four factors: it establishes an integrated public network, its network size allows better quality and uniform pricing, the value of each mail unit increases with the size of the network, and it allows for an efficient means of spreading political information. However, the scale of the Internet's network is large, connecting 200 million Americans; while the USPS is an integrated public network, for a vast 2/3 of the US, the Internet is a 24 hour, 7-days-a-week integrator. The vast size of the Internet network has created a standard for quality, as demonstrated by online newspapers such as *The New York Times* and *The Wall Street Journal*. Beyond the purchase price of a computer and the monthly fee for broadband access, uniform pricing is no longer an issue; sending and receiving emails is virtually free to the consumer, as is reading news (though newspapers are beginning to discuss the concept of charging for online access) or paying bills. Borenstein and Saloner state that "in cases where the product itself is information, the potential for value creation is enormous...the cost of moving the physical goods is low compared to the value of the good, the reach of the Internet is far greater than historical alternatives."¹⁰⁵

Furthermore, there is no more efficient means of spreading political information than the Internet; whether through online newspapers, news aggregators, blogs, or forums, the amount of political information on the Internet is infinite, as distribution costs are low. However, it *is* necessary to consider the fixed costs of information creation for the Internet; when consumers have no motive to contribute to the creation of political information and free-riding occurs, the public good is often underprovided. Thus, if not enough readers are interested in a particular political topic to cover the initial costs of

¹⁰⁵ Borenstein and Saloner, 4.

creation, the story will not be written. So where does this leave the United States Postal Service?

Table 5 displays the efficiency and equity arguments for the existence of the USPS.

A “ ✓ ” represents an argument that is still valid today for either the USPS or the

Internet. A “ ✗ ” represents an argument that is no longer true in today’s Information

Age.

Table 5:

Traditional Rationales for the Existence of the USPS

	USPS	Internet
Universal Service/Access		
1. Good mail service uncompromised by cost, competition, demand	✓	✓
2. Redistributive pricing policy	✓	✓
3. Prevents private market from under-serving costly areas	✓	✗
Economies of Scale and Scope		
1. Increased customer convenience	✓	✓
2. Material reductions in delivery and retail costs relative to multiple providers	✗	✗
Monopoly		
1. Decreases price of postal service to customers	✓	✓
2. Without it, less attractive markets would not be as profitable, and the USPS may not be able to afford maintenance	✓	✓
Networks and Positive Externalities		
1. Integrated public network, efficient information circulation	✓	✓
2. Larger network=better quality, uniform pricing	✓	✗
3. Value of good increases with more units sold	✓	✓
4. Spreads political information	✓	✓

Chapter 4

Conclusion

Extensive analysis of the four traditional rationales for the existence of the United States Postal Service highlights arguments that remain valid today for both the Postal network and Internet network. The following presents a summary of each issue area and its failures.

Table 6:

Universal Service/Access

	USPS	Internet
Universal Service/Access		
1. Good mail service uncompromised by cost, competition, demand	✓	✓
2. Redistributive pricing policy	✓	✓
3. Prevents private market from under-serving costly areas	✓	✗

The argument for the existence of the Postal Service as a means of upholding the universal service obligation centers around three key factors: (1) the need for a good mail service uncompromised by cost, competition, or demand, (2) the binding constraint the USO sets on pricing policies, and (3) the protection it gives to rural areas at risk of not receiving mail.

As discussed in Chapter 3, the Internet meets and exceeds the “good mail service” qualifications through cheaper, instant communication 24 hours a day. The pricing policy limits of the USPS become irrelevant with the advent of the Internet, as sending e-mails, electronic bills, or reading the news is virtually free; these daily benefits exceed

the costs of buying a computer and monthly broadband fees for 2/3 of Americans with access.

But instead of issues of delivery route capabilities for USPS trucks, a new issue arises for those without the capacity to “receive” mail—those who do not have access to the Internet. 100 million American citizens are without Internet access. Congress is already working to alleviate this issue, regardless of the existence of the USPS. The FCC’s 2009 Congressional Mandate directed the creation of a National Broadband Plan that would ultimately ensure that every individual in America “has access to broadband capability.”¹⁰⁶ Congress realizes that a plan for universal broadband access will ultimately advance “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.”¹⁰⁷ The detailed 4-step plan of action predicts significant changes by the year 2020. With initiatives like the National Broadband Plan, the Internet will ultimately achieve universal service for *every* individual in the United States.

Table 7:

Economies of Scale and Scope

	USPS	Internet
Economies of Scale and Scope		
1. Increased customer convenience	✓	✓
2. Material reductions in delivery and retail costs relative to multiple providers	✗	✗

¹⁰⁶ "National Broadband Plan - Executive Summary." *The National Broadband Plan: Connecting America*. The Federal Trade Commission, 17 Mar. 2010.

¹⁰⁷ Ibid.

The USPS supports economies of scale and scope through two major factors: (1) the increased customer convenience, and (2) the material reductions in delivery costs relative to multiple providers.

The United States Postal Service boasts about customer convenience, as the only organization in the United States to make house calls to every American citizen 6 days a week. But the Internet's customer convenience is arguably even higher; not only can customers send, receive, purchase, and sell items from their home computers, but the online "user experience" itself includes personal log-ins, search engines, and interactions that catalogs and telephone conversations cannot provide.

The argument for cost reductions relative to multiple providers is a problem in both arenas. Currently, Postal Service volume is significantly declining and rapidly shrinking the economies of scale of the USPS, making it more costly than ever before to deliver mail door-to-door 6 days a week. The various mailing and shipping services, ranging from Periodicals and Library Mail to Priority Mail and Global Express Guaranteed, attest to the scope of services within the USPS. On the other hand, delivery costs for unlimited e-mails, bills, and news online are not measured per item and so appear marginal, measured by the purchase price of a computer and monthly fees for broadband access. Also, scope on the Internet is vast, including areas of product development and supply-chain management. But even with vast economies of scale and scope in relation to first-class and second-class mail online, the Internet cannot deliver packages; online order processing and tracking may improve convenience in the shipping process, but a package cannot be delivered "virtually." The need and structure of the package delivery system must be assessed in order for either the USPS or the Internet to support the economies of

scale and scope argument. In addition, it would be beneficial to explore opportunities to further expand or redirect the scope of the USPS and Internet in the future.

Table 8:

Monopoly

	USPS	Internet
Monopoly**		
1. Decreases price of postal service to customers	✓	✓
2. Without it, less attractive markets would not be as profitable, and the USPS may not be able to afford maintenance	✓	✓

***Wage and fringe benefits of government employees high*

There are two key factors in the argument for the United States Postal Service as a monopoly: (1) the decrease in price of the postal service to customers and (2) the fact that without a monopoly, the less “attractive” markets would not be as profitable and thus the USPS might not be able to afford them delivery.

The monopoly decreases the price of the postal service to customers since it functions more efficiently than two or more providers would. But the Internet, as discussed, provides instantaneous communication 24 hours a day at virtually no marginal cost to the user with the exception of packages. Additionally, the monopoly arguably protects less attractive markets against elimination from the network; however, these more rural areas are not an issue for the Internet age, as *anyone* with access, no matter their location, can utilize the system unless access is not available.

It should be noted that the wage and fringe benefits of the 712,000 employees and the diminishing job security associated with a position at the USPS can lead to major inefficiencies within the agency. Higher wages can cause rent-seeking behavior amongst

employees. And today, with the combination of the worst recession since the Great Depression and the impact of the Internet, jobs in the USPS, as in all areas, are anything but secure. The Internet does not require 712,000 employees to deliver emails or bills. The postman in today's Internet age may be reduced to merely delivering packages, thereby effectively assuming the role of a UPS or FedEx package deliverer. It may be time to renegotiate employee wage and benefits terms.

Table 9:

Network and Positive Externalities

	USPS	Internet
Networks and Positive Externalities		
1. Integrated public network, efficient information circulation	✓	✓
2. Larger network=better quality and uniform pricing	✓	✗
3. Value of good increases with more units sold	✓	✓
4. Spreads political information**	✓	✓

***High fixed costs of story creation*

The argument for network externalities and positive externalities associated with the USPS centers around four factors: (1) it establishes an integrated public network, (2) its network size allows better quality and uniform pricing, (3) the value of each mail unit increases with the size of the network, and (4) it allows for an efficient means of spreading political information.

The USPS is a nation-wide integrated public network, but for a vast 2/3 of the US, the Internet is a 24 hour, 7-days-a-week integrator. Although uniform pricing is attainable due to the size of the USPS network, beyond the price one pays for a computer and Internet access, uniform pricing is not an issue for Internet users; sending and receiving emails or paying bills is unlimited and free to the consumer. The value of mail is high in the postal network due to the size of the system, but the scope of the Internet brings enormous value to the information sent through its network.

The vast size of the Postal Service network has created a standard for quality; but the growing Internet has created a standard for quality as well, for example, in online newspapers such as *The New York Times*. However, with the instantaneous ability for anyone to publish anything online also comes *poor* quality websites; this issue must be addressed.

Additionally, the USPS delivery of newspapers allows for the mass spread of political information across the nation. But there is no more efficient means of spreading up-to-date news than through the Internet. Whether utilizing online newspapers, news aggregators, blogs, or forums, the amount of political information on the Internet is infinite, and distribution costs are significantly lower than physical delivery.

However, it *is* necessary to consider the fixed costs of information creation. When sites can easily take a story from one another for free, the initial costs of story creation become a burden to whomever chooses to write the original piece. In both paper news and online news, if there are not enough readers interested in a particular political topic to cover the initial costs of creation, the story will not be written. Free-riding ultimately

causes the public good to be underprovided, an issue that then hinders distribution of political information.

Thus, the evidence presents three key issues that, if clearly addressed, would require both a change in mission and cost structure in order for the United States Postal Service to adapt to today's information age:

- 1. The FCC and the USPS must work together to provide the remaining third of the American population with Internet access.*
- 2. The USPS must address the package delivery system in the Internet age, along with additional opportunities for delivery systems within the USPS.*
- 3. The USPS must negotiate fair terms for wage and fringe benefits with respect to the current recession and widespread use of technology.*

The following recommendations seek to alleviate these problems, ultimately establishing the Internet as Postmaster and providing the United States Postal Service with a new mission entirely.

Recommendations

In conjunction with recommendations made by BCG, McKinsey, and Accenture, the Government Accountability Office calls for Congress and other stakeholders to:

“realign postal services, such as delivery frequency, delivery standards, and access to retail services, with changes in the use of mail by consumers and businesses; better align costs and revenues, including compensation and benefit costs; optimize its operations, networks, and workforce; increase mail volumes and revenues; and retain earnings, so that it can finance needed capital investments and repay its growing debt.”¹⁰⁸

Any suggested changes to the mission and cost structure of the USPS will still maintain its Vision 2013 goals—focusing on customer needs, building on its trusted relationships and vast network, and embracing change. Based on extensive analysis, three major actions must be taken so the United States Postal Service can adapt as a bureaucratic agency to the increasing use of the Internet.

1. *The FCC and the USPS must work together to provide the remaining third of the American population with Internet access.*

- *Convert Post Offices to Internet Access Offices as follows:*
 - o Currently, Americans living on roads outside the postal delivery route can receive mail by placing a box on an intersection of a designated delivery route, renting a box at the post office, or having mail sent to the post office to be picked up. These 5 million individuals without direct access to the Postal Service adjusted to the idea of travelling to a

¹⁰⁸ United States. US Government Accountability Office. Physical Infrastructure Issues. *US Government Accountability Office*. By Phillip Herr. GAO's Intellectual Property Team, 6 Aug. 2009.

separate location to receive mail¹⁰⁹. Similarly, those without Internet access should be given this opportunity. Local Post Offices should provide free Internet access to the community, just as public libraries provide this service to citizens. Providing a business lounge setting, the experience will be both pleasurable and productive for individuals without at-home Internet access—individuals who cannot send or receive e-mails, pay bills, or read the news in the confines of their own homes. In addition, alternative channels for those without home access include kiosks, mobile phone services, and private sector partnerships.

- *In the transition from USPS delivery to Internet use, consolidate the USPS field structure as follows:*
 - o Assess the necessity of 74 existing district offices and 9 area offices and consider the possibility of adapting these offices for other uses (to be discussed under Recommendation 2).
 - o Restructure route delivery, including adjusting delivery locations to curbside and cluster mailboxes. In addition, reduce delivery to either three or five days per week. Haldi and Merewitz discuss in depth the concept of reducing delivery to three days per week.¹¹⁰
 - o The network currently has 37,000 retail facilities, many of which are underfunded and deteriorating. Instead of mere reduction of these

¹⁰⁹ Crew and Kleindorfer. " Cost and Returns from Delivery to Sparsely Settled Rural Areas."

¹¹⁰ Ibid, 251.

facilities, adapt a portion for more profitable use (to be further discussed under Recommendation 2).

- *Consolidate the retail and processing networks as follows:*
 - o Remove excess mail processing capacity, such as the 50 percent excess in First-Class Mail.¹¹¹ In addition, as suggested by McKinsey, change service levels for First-Class Mail from 1-3 days to 2-5 days, allowing for simplified and standardized mail flows with marginal effects on consumers/businesses.¹¹²
- *Form strategic alliance with the FCC to work towards broadband access for the remaining 100 million Americans.*
 - o The FCC, the National Telecommunications and Information Administration, the Rural Utilities Service, the Institute of Museum and Library Services, and various other agencies are already working together to meet the goals of the National Broadband Plan.
 - o Whether conducting conversations with citizens in areas without broadband access, or physically helping to build the infrastructure, the large network already present within the USPS and the trusted relationship the agency has with American citizens will be advantageous for implementation of the National Broadband Plan.

¹¹¹ US Government Accountability Office. Physical Infrastructure Issues. *US Government Accountability Office*. By Phillip Herr. GAO's Intellectual Property Team.

¹¹² "McKinsey-USPS Future Business Model: Options for a Changing Environment." *Envisioning America's Future Postal Service*.

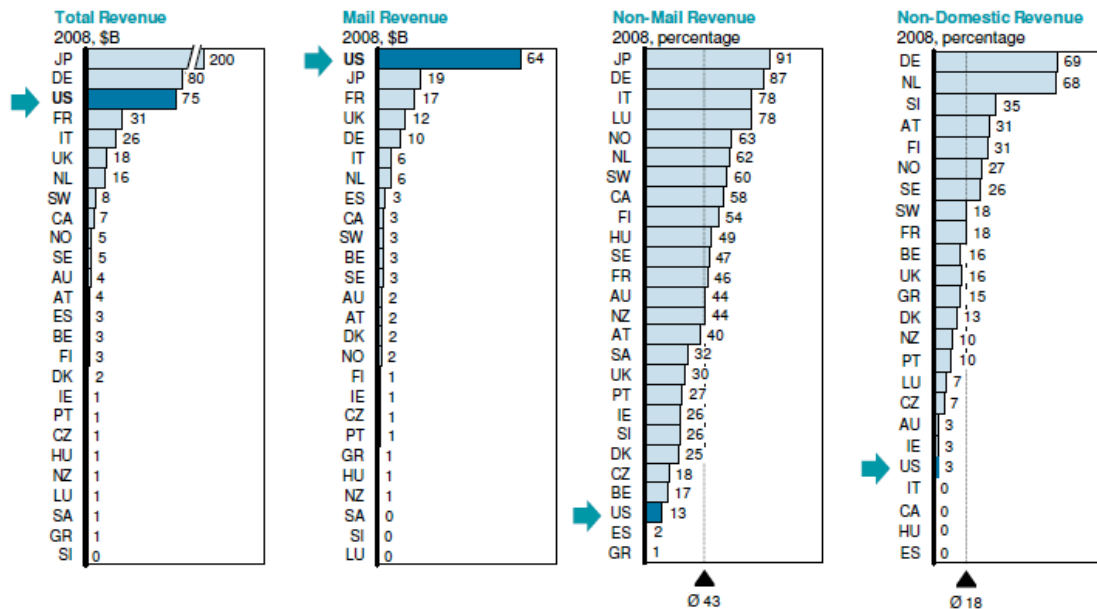
Consolidation of the USPS will result in about \$10 billion dollar net annual income benefit by 2020.¹¹³

2. The USPS must address the package delivery system in the Internet age, along with additional opportunities for delivery systems within the USPS.

- Eliminate the package delivery service of the USPS.
 - o Package delivery accounts for only 12% of the agency's revenue—the remaining 88% comes from mail services. With mail services losing relevance, the USPS will hold no competitive edge over other highly successful private parcel shipment companies, such as UPS and FedEx. It is time for the United States Postal Service to look towards other scope-expanding and profitable opportunities.
- Create new products to generate revenue; eliminating the delivery of packages and allowing the Internet to take over the role as Postmaster, new opportunities for products emerge. These include passport book and card applications and photo services, stamp sales on the Internet and in grocery stores, asset commercialization, and the sale of retail goods such as grocery, drug, and department store products.
 - o In comparison to international posts, the USPS is one of the largest yet least diversified. In 2008, it was the third *largest* revenue-generator of all posts internationally, yet it was the third *smallest* non-mail revenue generator (see Graph 9).

¹¹³ "McKinsey-USPS Future Business Model: Options for a Changing Environment." Envisioning America's Future Postal Service.

Graph 9: USPS is one of largest, yet least diversified posts

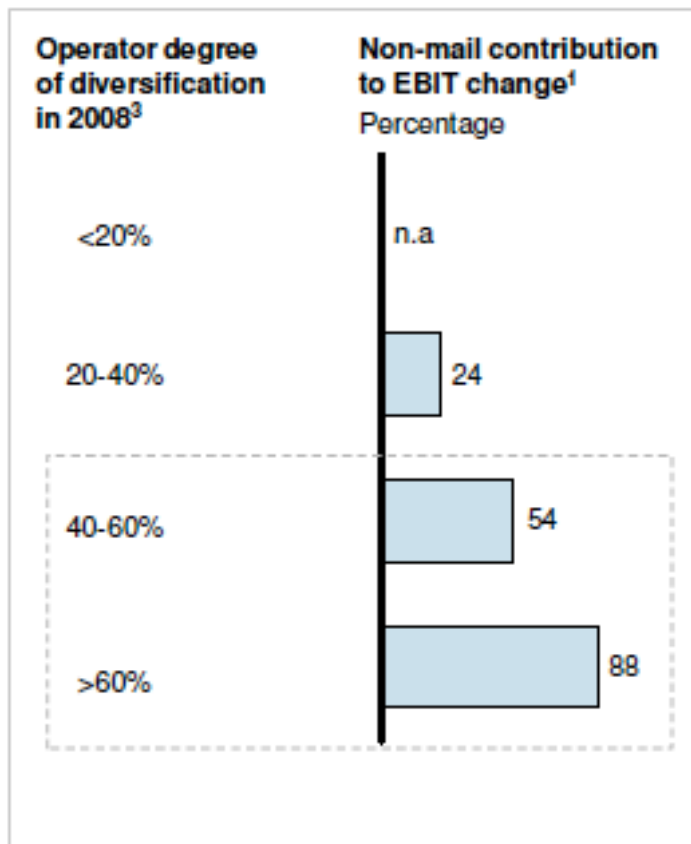


(“Accenture-Is Diversification the Answer to Mail Woes? The Experience of International Posts.” Envisioning America's Future Postal Service. 45.)

Accenture emphasizes the immense profitability that diversification of products can have for the USPS. Though non-mail represents only about half of mail profitability, it has accounted for more than half of profit growth of international posts. With more diversification of products comes more sustainability of profit growth due to non-mail operations (see Graph 10).

Graph 10:

The more diversified the post, the more sustained is its profit growth, fueled by non-mail operations



(“Accenture-Is Diversification the Answer to Mail Woes? The Experience of International Posts.” *Envisioning America's Future Postal Service*. 22)

In its 2010 presentation, Accenture explained that, “had the USPS been [diversifying its products, as European posts have been doing] since 2003, it could have added \$74B non-mail revenue to an existing \$43B base.”¹¹⁴

¹¹⁴ “Accenture-Is Diversification the Answer to Mail Woes? The Experience of International Posts.” *Envisioning America's Future Postal Service*. 21.

- The American public trusts the USPS more than any other government agency to protect personal information¹¹⁵. This core competency must be used to its full advantage in expanding products.
- Accenture notes that the parcel services sector (already mature, concentrated, and unnecessary) and the banking sector (never introduced into the US Post) are not likely to successfully diversify the post; instead, integrated marketing, document management, and logistics have high potential to successfully diversify the USPS. Integrated marketing and document management are mail-related services; mail-related services are most successful when they expand upstream, into data, media, listing, and production, and/or downstream, into archiving, data processing, mailroom management, and digitization.¹¹⁶ McKinsey suggests, “growing under-penetrated segments and accessing latent demand through increasing Small Business direct mail and introducing First Class/Standard mail promotions.”¹¹⁷ Document management can be improved through Priority Mail Flat Rate Box expansion and commercial contracts. In order for logistics—a transportation service—to be successful, a post must build their transportation sector on a regional or global scale.¹¹⁸

¹¹⁵ *2009 Comprehensive Statement on Postal Operations*. 13.

¹¹⁶ “Accenture-Is Diversification the Answer to Mail Woes? The Experience of International Posts.” *Envisioning America's Future Postal Service*.

¹¹⁷ “McKinsey-USPS Future Business Model: Options for a Changing Environment.” *Envisioning America's Future Postal Service*. 24.

¹¹⁸ “Accenture-Is Diversification the Answer to Mail Woes? The Experience of International Posts.” *Envisioning America's Future Postal Service*.

- With over 6,300 USPS locations for passport book and card applications and photo services (currently bringing in over \$232 million in revenue), marketing needs to further emphasize these benefits to customers.
- The USPS should maximize alternative channels of lower-cost retail, such as selling stamps on the Internet and at grocery stores.
- Additional product expansion could include asset commercialization (McKinsey suggests truck advertising), and the sale of a broader range of retail products, including grocery, drug, or department store products.¹¹⁹ The selling of retail products not only increases revenue but decreases costs as well; when clerks are not providing retail postal services, they can be valuable elsewhere in the store. “Customers typically gain added convenience, while the store gains foot traffic which may increase the sale of other products.”¹²⁰ The Canada Post and Great Britain Post have already contracted retail stores in both rural and city areas. In Great Britain, the stores still operated by The Post Office alone offer various retail items, including greeting cards, post cards, and stationary. Post Office trucks could also be utilized for conducting the Census¹²¹, for working in conjunction with companies like Google to provide updated digital street recordings, and for the

¹¹⁹ Crew and Kleindorfer. “Cost and Returns from Delivery to Sparsely Settled Rural Areas.”

¹²⁰ Ibid, 245.

¹²¹ “Census Should Partner With Post Office, Not ACORN.” *Congressman Jason Chaffetz, Representing the 3rd District of Utah.*

delivery of required hard copy items such as marriage certificates, death certificates, and birth certificates.

Product diversification will result in about \$2 billion dollar net annual income benefit by 2020.¹²²

3. In order for the bureaucratic agency to survive, the USPS must negotiate fair terms for wage and fringe benefits with respect to the current recession and widespread use of technology.

- Reduce Compensation and Benefits Costs
 - o Within four years, about 300,000 employees will be eligible for retirement. Voluntary early retirements were recently offered to 150,000 employees; less than three percent chose to retire. Retirement alone will not solve the wage and compensation cost issues.
 - o The USPS must lower benefits payments to match the private sector. Not only does the Postal Service pay an elevated percentage of employee health benefit premiums than other government agencies, it also pays for 100 percent of its employees' life insurance premiums; in contrast, other federal agencies pay 33 percent. McKinsey suggests shifting the Retiree Health Benefits to a "pay as you go" system, as many other federal agencies and private sector companies have implemented. This may be politically controversial, and must be addressed in order to become a feasible option.

¹²² "McKinsey-USPS Future Business Model: Options for a Changing Environment." Envisioning America's Future Postal Service.

- The GAO reports that in order to allocate a change in health funding benefits, the USPS will have to negotiate with the organization's four largest unions on agreements that cover 85 percent of all USPS employees; these agreements expire in 2010 and 2011, and include but are not limited to cost-of-living adjustments, layoff protections, and work rules. The other 15 percent of employees have management associations that the USPS must work with to allocate changes in benefits.
- Negotiating fair wage and benefits terms will allow the USPS to cut costs in the short-term, and only in the short term; in the long-term, the decline in mail volume, mail use, and revenue require more drastic measures if the USPS plans to remain a profitable government agency.

McKinsey predicts that renegotiating compensation and benefits will result in about \$.5 billion dollar net annual income benefit by 2020.¹²³

Additional Considerations:

1. Increased government funding would help to control the quality of online sites and incentivize them to publish original works amidst the high costs of story creation. Current subsidies account for 25 percent of the cost of mailing and allow the United States Postal Service's products (such as packages) to remain competitive in the market. The redirection of the Postal Service's mission and cost structure will allow for the

¹²³ "McKinsey-USPS Future Business Model: Options for a Changing Environment." Envisioning America's Future Postal Service.

reallocation of a portion of these subsidies. The Chairman of the Postal Rate Commission notes that it would be appropriate,

“for both the periodical community and the Postal community to approach Congress with the notion that there is a symbiotic relationship and support for both parts of this communications network that supports democracy are necessary, and I think if the Congress understands this unique relationship, arguments can be made for finding financial support...” (20)¹²⁴

Government funding should be directed towards content providers. Michael Schudson and Leonard Downie, Jr. recognize the high costs of story creation compared to the low revenue that news organizations gain from the Internet’s free information and low-cost advertising. The two call for these government subsidies to be placed in a national “Fund for Local News.” This fund would “make grants through state Local News Fund Councils to news organizations—nonprofit and commercial, new media and old—that propose worthy initiatives in local news reporting. They would fund categories and methods of reporting and ways to support them, rather than individual stories or reporting projects, for durations of several years or more, with periodic progress reviews.”¹²⁵ Grants would be awarded based on journalistic quality, news reporting innovation, relevance, and the capacity of the news organization to cover a story. Government funding of news organizations would promote both improved quality and the publication of more costly news stories.

2. The argument that the United States Postal Service should be privatized has been a popular topic of discussion, and thus must be addressed when considering the future of

¹²⁴ Federal Trade Commission. *Federal Trade Commission: Protecting America's Consumers*. Federal Trade Commission, Dec. 2007.

¹²⁵ Downie, Jr., Leonard, and Michael Schudson. "The Reconstruction of American Journalism." *Columbia Journalism Review*. 19 Oct. 2009.

the government agency. As demonstrated by McKinsey, privatization is not the answer for three main reasons: (1) Investors must see a straightforward and obvious path to profitability before they acquire the company; the current scale and thus risk associated with acquiring the USPS significantly limits investor attraction, (2) the USPS would need to make extensive changes to appeal to investors; these changes would have to significantly exceed the changes necessary for the USPS to remain under government control, and (3) If privatization *did* occur, the US government would have to maintain support for the Postal Service.¹²⁶

3. It should be noted that extensive analyses of the Postal Service are not abundant, and thus some articles used within this thesis are outdated by 15 years. Though this could impact finding, this thesis attempts to rely on relevant research that remains applicable.

Assuming the existing postal structure is consolidated in conjunction with an initiative for universal broadband access, opportunities for product expansion are explored, and fair wage and fringe benefits are negotiated, McKinsey predicts a total of \$5 billion dollars in net annual income benefit for the USPS by the year 2020 due to interest avoided through reduced debt. The cumulative total for the year 2020 will thus be about \$18 billion dollars in net annual income benefit. McKinsey's predicted cumulative impact over the next ten years is about \$123 billion dollars. And with technologies constantly evolving, the possibilities for future product expansion are

¹²⁶ McKinsey-USPS Future Business Model: Options for a Changing Environment." Envisioning America's Future Postal Service.

endless. It is time that United States Postal Service adjusts to the world it inhabits today, one that is drastically different from when the USPS was created 234 years ago. The new direction of the Postal Service will allow it to succeed as a bureaucratic agency in a society dominated by technology and the Internet.

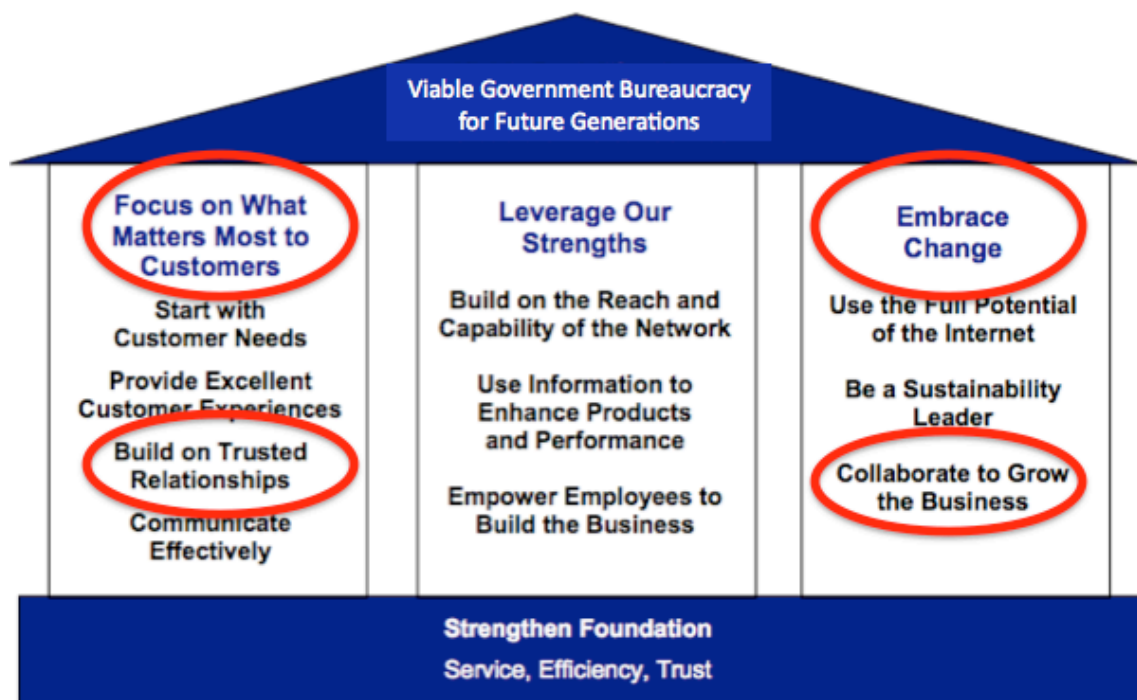
No longer will the four traditional rationales be an effective means of evaluation for the new Postal Service. The Internet will take on the role of providing universal service/access. The Internet eliminates the need for a monopoly in the postal delivery service, and the new direction of the USPS does not mandate Congressional legislation as in the past. The network and positive externalities associated with the delivery of paper mail also exist within the realm of the Internet; and there is no more efficient means of communicating up-to-date information than through the Internet. The only rationale that still holds within this new USPS is the concept of economies of scale and scope, which will still exist within the new Postal Service. Its network will remain connected to all citizens of the United States, and its products and services will transition to capitalize on this core competency; new sources of revenue will range from passport book and card applications to asset commercialization, retail, and strategic partnerships with companies including Google and the Census.

In effect, the new direction of the United States Postal Service will still uphold the original USPS's core values of service, efficiency, and trust. In addition, it will still meet the goals stated in the USPS "Vision 2013," but the goals will be reached through a different approach. Citizens *need* the Internet. A strategic alliance with the FCC will help put broadband in every home in the United States. Citizens also *need* a government-run agency that provides them with a trusted, nation-wide retail and service network.

Alliances with companies such as Google will improve the accuracy and efficiency of data gathering; the transformation of various post offices into Internet access offices and the sale of retail goods within these offices will allow the government to maintain and grow its trusted relationship with Americans.

Figure 2:

Government Bureaucracy Vision



As Figure 2 demonstrates, lessons from the in-depth analysis of the United States Postal Service can be applied to various sectors in government bureaucracy, ranging from the IRS to the armed forces, to the Department of Labor and the Department of State: focus on what the citizen needs, seek advantages in the relationships built between citizens and the government, and do not underestimate the power of strategic alliances. Most importantly, accept and leverage constantly evolving technologies as an agent for change not only in society, but also in the bureaucracy itself.

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