An Empirical Analysis of
the State’s Monopolization of the Legitimate Means of Movement:
Evaluating the Effects of Required Passport use on International Travel

by

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Abstract

The increased demand for travel coupled with increasing varieties in the types of travelers over the past hundred years has lead to nations around the world increasing the identification requirements for travelers crossing over their borders. One method for reducing the amount of unnecessary movement is to require all travelers, foreign or domestic, to use a passport for legal entrance. On January 23, 2007, the United States government began requiring U.S. citizens returning from abroad in the Western Hemisphere to use a passport. This is a large shift in identification requirements from a driver’s license and a birth certificate. The purpose of this research is to determine whether requiring a passport for the purpose of returning from abroad where one had previously not been required before has had an impact on the number of air travelers to countries affected by the Western Hemisphere Travel Initiative.

The research hypothesis states that the Western Hemisphere Travel Initiative will have a negative effect on the number of air travelers going to affected countries. This hypothesis was tested using an interrupted time-series regression analysis. To test the hypothesis, monthly data points are employed for the number of air travelers traveling from affected countries before and after the passport requirement was implemented. The number of traveler’s data is provided by the United States Department of Transportation’s – Bureau of Transportation Statistics. Quantitative analysis is used to determine the impact of requiring a passport for identification on international travel. Ultimately, results of the time-series regression analysis did not support the hypothesis. The Western Hemisphere Travel Initiative was policy neutral.
About the Author

Traveling has always been important throughout my life. At age eight, I traveled abroad for the first time to Cancun, Quintana Roo, Mexico. A requirement for this travel experience was a letter from my mother given to my father, stating that she was allowing my father to take me out of the country with the intent on returning, in addition to my birth certificate. Since then, I have traveled to 15 countries on five continents. Throughout those travels I have grown to have a passion for travel and aviation. These passions have lead to my current employment at the McAllen-Miller International Airport (MFE) as an Operations Specialist, and to this very study. I would like to thank my parents, Betty and Will, my sister Lauren and several other coworkers, fellow travelers, friends, and relatives who have made what my life is today; one completely surrounded by the people and planes I love and care deeply about. I am available at floydagator@yahoo.com or 713-398-0015.
Chapter I
Introduction

Reasons for air travel have changed significantly since the Wright Brother’s first powered flight on December 17, 1903. Since then, air travel has transferred from an once-in-a-lifetime activity into abilities and rights that are almost synonymous to the freedoms guaranteed by the First Amendment of the U.S. Constitution. Each day millions of people cross borders around the globe for business, pleasure, and an assortment of other reasons. Typically, when travelling internationally, a passport is required to traverse the border. Prior to January of 2007, a passport was not required for a few select destinations. Examples of a passport not being required in the United States prior to January of 2007 included travel to the Bahamas, Canada, select Caribbean Nations and Mexico. Before January of 2007, United States citizens, when traveling to the above stated destinations were only required to obtain a ticket, a birth certificate, and a variety of state-issued identification documents to exit and reenter the country. After the events of September 11, 2001 in the U.S. Eastern Seaboard, a desire spread throughout the country for increased security measures at the nation’s borders. In response, the Intelligence Reform and Terrorism Prevention Act of 2004, which included the Western Hemisphere Travel Initiative, was passed by Congress increasing the identification requirements for border crossings to mandate the use of passports. In January of 2007, all border crossings by air began requiring the use of a passport in areas affected by the Western Hemisphere Travel Initiative.
Research Purpose

Public policies place restrictions on the behavior of individuals. Action by the United States Federal Government in the Western Hemisphere Travel Initiative places restrictions on the acceptable forms of identification that can be used by American citizens to return from abroad, limiting the acceptable identification requirement to a passport. This restriction ultimately leads to a federal control over movement. The purpose of this study is to evaluate the impact of required passport use on the number of air passengers traveling to affected countries.

Chapter Summaries

In chapter two, a review of the literature relating to air travel and required passport use is presented. First, the history of the passport and the formulation of its current usage are explained. The chapter then examines how required passport use may restrict movement as developed by The State’s Legal Monopolization over the Legitimate Means of Movement Theory; advantages and disadvantages of required passport use are discussed. Further, a hypothesis specifying the relationship between air travel and required passport use is developed.

Next, chapter three will discuss the roles of the United States State and Homeland Security Departments, how to obtain a passport and passport statistics related to this study. Then, chapter four will operationalize the hypothesis and describe the methodology developed to address the research question. The research method used is an interrupted time series regression analysis. Existing data from the Bureau of Transportation Statistics is utilized to test the hypothesis and measure the impact of
requiring a passport on air travel. Chapter five then discusses the results of the study and statistical procedures used. Results are presented in tabular form and then interpreted in the text. Finally, chapter six summarizes the results of chapter five. In addition, chapter six includes topics for future research as well as how this paper will provide a foundation for future studies.
Chapter II
Literature Review

Purpose

This chapter examines the scholarly literature related to the required use of passports in international travel. U.S. federal government reports are also consulted due to the high involvement of the federal government in the distribution, functioning and monitoring of passports. Passports “have received increasing interests in recent years and there have emerged systematic investigations into the passport and visa issues” (Wang 2004, 353). The purpose of this chapter is to review the literature on required passport use in international travel with the intention of signifying the need for an evaluation of passport usage and its effect on air travel.

Passport Definition

Throughout scholarly literature there exists no common definition of the passport document; however, extensive work has been done to define the passport’s intended uses, purposes, and formatting. In dictionaries, however, passports are commonly defined as:

*Originally*: an official document authorizing a person to travel to, from, or through a foreign country, usually under defined restrictions of time and purpose (cf. *VISA* n.).

*In later use*: an official document issued by a government certifying the holder’s identity and citizenship, and entitling him or her to travel under its protection to and from foreign countries, (Oxford English Dictionary 2009).

Aside from defining the passport, two distinct periods in passport use are identified from the dictionary definition. In the first section, the passport is referred to as an official document used by travelers to pass through an area as basic identification with no specific format or country of origin. In the second period, passports are shown to have
evolved into a connection between a person and a defined nation-state, namely, how the required use of the passport places a monopoly on the legitimate means of movement. This concept will be discussed in depth later. As a result of the evolved connection between the state and an individual, three norms are associated with modern passports:

- One person per passport
- Biometric information (face, eyes, voice, hand, fingers, and signature) that allows for identification of the bearer
- Similar global format: name, nationality, date of birth, place of birth, signature, and security features, space for visas, permits, and so on. (ICAO June 2001)

These norms have led to uniform formatting of the document so that no matter where passports are presented for use there is a commonality to them. This is especially prudent “in aiding movement, [as] passports must be consistent throughout international society to facilitate inspection at borders and to minimize the potential for forgery” (Salter 2003, 93). Multiple formats would lead to confusion for border agents inspecting each nation’s passport format.

In addition to the dictionary definition and norms, the literature of O’Byrne 2001; Salter 2004; and Torpey 2000 identifies many uses of a passport to include:

- A request by one sovereign to another sovereign to aid and protect a nationally identified bearer.
- Proof of citizenship.
- Proof of identity in general.
- Some assurance that the bearer is entitled to the use of the diplomatic services of his or her own country while abroad.
- A request or indeed expectation that the bearer swear loyalty to the sovereign;
- Means of returning to one’s home country.
- Permission to travel abroad

Of all these purposes from the literature, the “means of returning to one’s country,” is most relevant to this study. Without a passport, legal international travel is
impossible outside of a distinct few circumstances such as Europe’s Schengen Zone. The required use of a passport creates an impediment to one’s ability to move as the absence of a passport will trip the system when attempting to travel, ultimately denying movement going home or abroad. While no single comprehensive definition of a passport exists, the uses listed above helps give it a defined role in our pursuits as the one necessity to travel. From its dictionary definition to the intended purposes, uses, and contemporary norms, the passport has a profound impact on our ability to travel.

**History of the Passport**

Modern passports are the products of a long evolutionary process. The history of the passport’s evolution can be divided into three distinct eras leading to today’s successful monopolization of the legitimate means of movement.

The first era of passport use and formulation occurred in the years prior to 1900. More specifically, passport use goes back to 12\textsuperscript{th} Century Europe and the continents issuances of a Guidaticum, the times safe-conduct pass (Burns 1995, 52). The Guidaticum actd as a medium that introduced its holder to local inspectors as a friend. This period of passport use is congruent with that of the first section of the above dictionary definition, with its varieties of formats issued from separate institutions and no link to an origin state. Later during this period, “developments occurred … when many (mainly neutral) states issued ‘passport letters’ to grant safe passage to travelers during wartime” (O’Byrne 2001, 400). These issuances were simple documents to inform the would-be captors that those holding them were not involved in the conflict at hand. During the 19\textsuperscript{th} century, formal state regulation of the document began as several
countries in Europe began to issuing them to all and requiring visas for many to visit their countries during times of war (O’Byrne 2001, 400). This is evidenced by the fact that, “the [US] federal government further strengthened its jurisdiction over migration matters in 1856, when Congress asserted the exclusive right to issue passports and mandated that they should be issued only to American citizens” (Torpey 2000, 95). From this short history one should note a foundation of controlling movement by nation-states.

The second era in the history of the passport revolves around the British Empire and the League of Nations in the early 1900s. Events of the “First World War forced the ‘major’ countries and the United States in particular, to tighten their security measures and develop a stricter system of passport control” (Davis 1992, 61) as cited in (O’Byrne 2001, 401). Many of these increased restrictions were made in the hopes that they “would be made unnecessary after world politics returned to normal” (Salter 2003, 77). Sadly, “the ‘temporary’ measures implemented to control access to and departure from the territories of European states persisted into the shallow, fragile peace that was the interwar period” (Torpey 2000, 116). This point in time marks an end to the human ability to move freely without any documentation. In order to reduce issues with the increased usage of the document, “the League of Nations convened the first international passport conference,” in which “the League of Nations committee recommended a single, ideal passport form: the international form of passport following the British model. This included a photograph, a limited physical description, employment, and destination” (Salter 2003, 93). British formulation of the document is such that “the passport and the visa are institutional devices that link the state to individuals, behind which state
sovereignty and individual citizenship are signified, respectively” (Wang 2004, 354). Ultimately “this was a necessary outcome of the desire to control borders against unwanted entrants” (Torpey 2000, 120). This is the beginning of the modern passport usage “as an entrance to this border security complex of policies precisely because the passport serves as the primary document of national identification” (Salter 2004, 72). These newfound developments of continued monopolization of movement were echoed across the Atlantic when “in 1918 Congress adopted legislation making it unlawful in time of war and upon a Presidential finding of necessity for any citizen of the United States to depart from or enter . . . the United States unless he has a valid passport” (Ehrlich 1966, 130). “At the end of 1919, congress passed a revised version of the 1918 law that addressed only the issue of entry into the US and dropped any mention of the proviso that the country finds itself ‘in time of war’” (Torpey 2000, 117). Ultimately, this era of increased passport control saw the formulation of today’s modern passport regime cementing the state’s place of holding a monopoly over movement by requiring a passport.

The final major era of change in the history of passport use is its readability. This era lead to the state being better able to embrace and enforce their control over movement. Prior to the 1980s, “[the] passport … remained largely unchanged in its form and function since its inception in the 1920’s,” (Salter 2003, 85). Beginning in 1985, two major changes occurred with the use of the passport: the addition of a machine readability feature and micro-chipping. These were implemented to become compliant with standards adopted by the ICAO in 1980 and United States legislation in 2002,
respectively. First, passports “became machine-readable through the employment of optical character recognition technology similar to that used in banking to scan personal checks” (Bronk 2007, 24). Figure 2.1 is an example of how this feature looks on a passport today.

Figure 2.1 – Machine-Readable Passport Text

Source: U.S. Dept of State

This feature “was introduced by the ICAO in 1985, and allowed governments to quickly correlate the unique identity of the individual with other records” (Abeyratne 1992) as cited in (Salter 2004, 74). While minor, it was a massive step to control movement as it became a supporting element to the main text of the document to ensure its validity. The second development of this era is the formulation of the Electronic Passport. This new development “calls for incorporation of RFID chips, microchips capable of storing data and transmitting it in a wireless manner, into passports” (ICAO, Document 9303 2004). Originally, this technology was implemented by Malaysia in 1998, which when in use at the airport provides that “a Malaysian citizen passes through an automated gate that reads the thumbprint from the chip and compares it to the thumb pressed on a scanner,” (Juels 2005, 1). Malaysia was attempting to improve their documentation efforts, so they “deployed a system embracing efficiency that is able to clear a passenger in 15 seconds without direct permission from an immigration agent” (Kandi 2004, 11). This further increased the validity of the document. These
developments should be considered important with regard to bolstering control over movement as they make the monopoly more easily enforceable.

Throughout the history of the passport, efforts have shifted the document to a single common format used by all jurisdictions. These enhancements are derived through increased joint efforts of nations and the use of technology leading to a greater ability to control human movement. Ultimately, passports have become the single necessary tool for travel, only issuable by a government, formulating a state-sanctioned monopoly over the ability to move freely. Next, the Monopolization of the Legitimate Means of Movement will be discussed as it is the closest field of study from the literature to the required use of passports, the main goal of the Western Hemisphere Travel Initiative.

**Monopolizing the Legitimate Means of Movement**

Overall, literature on passports evaluates four main issues. These issues are the state’s legal monopolization of the legitimate means of movement, the implementation of E-Passports, the document’s role as an integral part of the building of nation-states, and the construction of passport-free zones between neighboring countries.

Of the above topics, the state’s legal monopolization of the legitimate means of movement parallels the most that of the main hypothesis of this study. This hypothesis refers to the requiring of American citizens to present a passport to re-enter the country, where previously a birth certificate and a driver’s license would have sufficed when returning from Mexico, Canada and the Caribbean. In essence, a control function has been placed upon the traveler, and this control is issued only by the United States Federal Government, effectively capping a monopoly of the legitimate means of movement.
What exactly is the state’s legal monopolization of the legitimate means of movement? First, it should be noted that states “have monopolized the authority to restrict movement” (Torpey 1998, 243) while private means still provide the actual transit, (i.e. airlines, cruise lines, etc.) and act as ‘sheriff deputies’ who participate in the regulation of movement at the behest of states” (Torpey 1998, 243). Presently, five reciprocally augmenting aspects comprise the concept. These are:

- The (gradual) definition of states everywhere – at least from the point of view of the international system – as “national” (i.e., as “nation-states” comprising members understood as nationals);
- The codification of laws establishing which types of persons may move within or across their borders, and determining how, when, and where they may do so;
- The stimulation of the worldwide developments of techniques for uniquely and unambiguously identifying each and every person on the face of the globe, from birth to death;
- The construction of bureaucracies designed to implement this regime of identification and to scrutinize persons and documents in order to verify identities;
- The creation of a body of legal norms designed to adjudicate claims by individuals to entry into particular spaces and territories (Torpey 2000, 7)

With the five above aspects implemented, a web of circumstances was built that has “the power to forbid our citizens to leave the country for travel” (L. Jaffe 1956, 18) in which the state regulates movement via an integrated system of checks and balances that restricts travel. The state monopoly over the legitimate means of movement can inhibit travel in one of three ways.

One way to inhibit travel with the required use of a passport is by requiring payment for the document. Quite often the need to travel internationally is one that requires going at a moment’s notice. As “passport and visas used to play merely a
marginal role in daily routines of ordinary people” (Wang 2004, 353), it can be assumed that the average citizen may not have one readily available. When the need to obtain a passport arises, one will pay a series of costs that may inhibit the ability to travel. For instance, monetarily speaking, “the total cost of applying for a U.S. passport for those over 16 is $100 — a $75 application fee and $25 execution fee” (Epstein 2008, 2) as of February 8, 2008. These fees to an infrequent traveler will come as a one-time cost that may cause them not to travel. Additionally, these costs do not include “expedition requests, passport picture charges, or the time and bother to gather proper documentation and file forms” (Bond 2006, 1), which can add up to or nearly double the price of obtaining a passport. In relation to shortening the time it takes to obtain a passport one must actually go to a passport office rather than mailing in the request packet. This is an inhibitor due to the fact that depending upon the location of the traveler, he or she may be at a disadvantage, as “there are many passport offices on the East and West Coasts, [but there] are much fewer in number with much more distance between in the middle of the country” (Epstein 2008, 4). Also, as the power to issue a passport is a monopoly controlled by the government, costs may be raised and access to the passport reduced as the government sees fit leaving few, if any, other options for the traveler. This inhibitor of high costs to obtain a passport will ultimately put some in a position to not be able to travel, providing the effects of a monopoly.

Secondly, once a passport has been obtained, the use of it, as with many things in life, entails some restrictions furthering the monopoly. One such restriction is an area restriction, a travel ban “prohibiting [passport holders] from [traveling] in certain areas”
(Torpey 2001, 258) abroad. Those ignoring the area restriction forfeit protection guarantees typically provided by a passport. Official power to enact these restrictions came in “1938, [when] the president specifically authorized the Secretary of State to impose such limitations” (Ehrlich 1966, 144). One of the most notable examples of area restrictions in use today come when “the State Department, acting under the Passport Act of 1926, had in 1961 made Cuba a restricted area and had declared all United States passports invalid for travel to or in Cuba” (Salans 1968, 843). First put into place during times of war, the restrictions were later strengthened by “the [Supreme] Court’s decision in Zemel vs. Rusk, [upholding] the Secretary of State’s refusal to issue passports valid for travel to Cuba” (Ehrlich 1966, 132). This case and others like it represent how the issuance of a passport does not always lead to full freedom of movement. Originally enacted as “prohibitive warnings that the usual protections may not be available to citizens traveling to certain areas” (Wilson 1967, 1374), these restrictions are “prohibiting use of a passport for travel” (Laursen 1981, 903). Supporting arguments for these restrictions include “(1) such travel would endanger national security, (2) it would endanger the traveler, or (3) it would conflict with the objectives and administration of American foreign policy” (Wilson 1967, 1377). Overall, area restrictions on passports are designed to help protect travelers, but ultimately the restrictions specifically state that they are designed to restrict movement.

Lastly, requiring a visa is another way of restricting movement. A visa is “the authorization given by a consul to enter or to pass through a country” (Salter 2006, 175). Today “in modern usage, it refers to the prescreening of travelers and represents a prima
When in use, “nation-states employ visa restrictions to manage the complex trade-off between facilitating the entrance to their territory by passport holders from certain countries for economic and political reasons and deterring individuals from other countries for reasons of perceived security and immigration control” (Neumayer 2006, 72). In order to obtain a visa, “a passport and proof of sufficient funds” (Salter 2003, 4) are typically required. A visa is a requirement, in addition to a passport, for certain groups of travelers from various countries. Requiring a visa can restrict travel in one of two ways: “First, there is the additional cost and hassle of applying for the visa either via post, which can take weeks or months, or in person, which implies traveling to the embassy or one of the few consulates and waiting in the queue, possibly for hours. Second, the issuing consulate or embassy can, of course, deny the application without giving any reason” (Neumayer 2006, 74). In reference to the monopoly, “they are often employed either to restrict or facilitate travel and commerce between countries depending upon the current climate of interstate relations” (Stringer 2004, 6). This visa requirement is simply a formalized process that is there to legally restrict human movement. A visa places an additional restriction on travel by placing one more hurdle in the traveler’s path.

Ultimately, the state’s monopoly over the legitimate means of movement is a series of circumstances designed to place a restriction on travel. This monopoly restricts travel by increasing the costs of traveling, placing limitations on where passport holders can use a passport to travel, and requiring the passport holder to additionally obtain a visa in order to travel. Each restriction plays into a necessity of a monopoly; such as
permission to leave one’s country by receiving a passport or dependency on a foreign state’s visa for permission to enter another nation, furthering the state’s legal monopoly over travel.

**Forms of the Passport**

Not all passports are created equal. Presently, there are two forms of passports available: the book and the card. A book passport can come in a variety of formats. When issued, “diplomats, businesspersons, travelers, and refugees all move between states, but they do so with different passports” (Salter 2003, 4). For example, in Canada,

Diplomats and government officials are issued a special type of passport that is green and signifies immunity under international law; businesspersons hold a blue passport with forty-eight pages; regular passengers carry a blue passport with twenty-four pages; and refugees carry passports that bear the person’s identity but not their place of repatriation (Salter 2003, 4).

When in use, each version of the passport book signifies a different level of status in the country by “identifying who is ‘in’ and who is ‘out’ in membership terms, and thus help distinguish who may make legitimate claims to the rights and benefits of membership,” (Torpey 2000, 158). While the passport book can be made to better fit the traveler more easily segregating him or her, its latest offshoot provides an unbiased format.

Another form of a passport is the Passport Card. This is, “a card that can be used by frequent cross-border travelers in order to secure for themselves fast track border-crossings based upon pre-clearance” (Sparke 2004, 253). In the United States a, “passport card … can be used to enter the United States… at land border crossings or sea ports-of-entry, [but] cannot be used for international air travel” (U.S. Department of State n.d.).
Presently, there is no different form for each type of traveler. Different forms of the passport are designed to fill a niche for the traveler, whether it is to show place or to provide easier access. Pictured below in Figure 2.2, is an example of the passport book and card.

Figure 2.2 – Types of Passport Examples

Source: U.S. Dept of State

Advantages of Requiring a Passport for Travel

As shown above, requiring a passport is a monopoly on the legitimate means of movement that will ultimately affect the numbers of people traveling, and passports are issued in varying formats depending upon the reason for travel or status of person to whom they are being issued. Scholarly literature has noted three advantages requiring the use of passports for international travel.

One advantage of requiring a passport is to help increase security. One way to represent this is how the passport can be used as “a signal between states regarding the character and safety of the bearer” (Salter 2003, 5). In the United States, when a person is involved in a criminal case, a judge can revoke that individual’s passport privileges to help ensure that he or she will not flee the country to avoid prosecution and increased
security threats elsewhere. Security is increased in that if said person approaches a border without a passport, he or she can be denied travel more easily. Travel is affected because the individual simply did not attempt to procure a passport or another issue negates the need or ability to travel as it is the one simple requirement for travel. Thus, having the passport provides an assurance of one’s suitability to travel. Another way to represent this advantage is that it is a way to more efficiently secure the border. Prior to passport use, a border official would have to rely upon what was said by a traveler or to individually look at items that were being brought across. This expended valuable time and resources resulting in delays to the flow of the people and trade crossing borders. It made the inspection process rely more upon inspecting the document rather than the person.

Overall, by replacing the questioning of travelers with a document, authorities are simply furthering a practice where “governments have long relied on two key means of identity protection… (I.e. Identity cards and passwords)” (Chertoff 2009, 138). This documentation procedure makes the official processing more secured as they are universally accepted. In essence, it will “provide a way for immigration and customs officials to abridge their examination at the national frontier; examination of the document replaces the examination of the individual and his belongings” (Salter 2003, 6). Overall this advantage is one that provides better service with increased security.

Another advantage of requiring a passport for travel is the easement of traveling. In many cases, especially with visas, passports are only “required because other states demand them in order to regulate the activities of foreign citizens within their territory, and, if necessary, to know where to send them back” (O’Byrne 2001, 406). This
advantage overcomes obstacles put in place by other governments to prevent travel by simply requiring the same of them here. Another aspect of this is how travel will be easier with a standardized identification. As noted above, prior to the Western Hemisphere Travel Initiative, a plethora of identification combinations could be used to facilitate crossing. Accepting only the passport will help prevent people from traveling with a potentially inadequate set of identification avoiding delay or disappointment. This is furthered by the fact that “government does not want to close the border, but rather make the border function more discerning” (Salter 2004, 71). One single form of identification will simply speed up the process and make it less troublesome. International travel will be made easier with the use of the passport as it avoids problems with other countries and eases the inspection process.

An additional advantage of having a passport is its ability to be used in circumstances other than facilitating travel. One situation is in meeting qualifications to obtain work. For instance, “in this light, passports and visas, by signifying one’s legal status in an official document, provide the institutional foundation of trust” (Wang 2004, 359). More specifically is the acceptance of the passport as a form of identification when filling out an I-9 employment verification form. Another situation is tourism. The passport can be used as a substitute trinket, a postcard, or a pin in cases where in the ability to garnish such souvenirs are limited. Many travelers “consider it to be a souvenir [in and of itself], complete with stamps which boast of just how much the tourist has consumed. As with postcards or photographs, these stamps often serve as icons through
which one can recapture a touristic experience” (O’Byrne 2001, 406). These two arenas outside of facilitating travel help to show the passport’s usefulness in other lights.

Requiring a passport for travel may not resolve all possible issues associated with travel; however, it is the one document that is universally accepted. Its advantages of increased security, easement of travel, a form of personal identification and other uses outside that of border crossing are paramount of a good policy. All of these advantages can be traced to the many uses and significance of the passport.

**Disadvantages of Requiring a Passport for Travel**

While requiring a passport for traveling has its advantages such as increased security and easement of international travel, it is no exception to the rule that every policy has its downsides. Identity theft when a passport is stolen, being monitored by “Big Brother” and the easing of discrimination have been identified by the literature as the biggest disadvantages of requiring the use of passports.

One disadvantage of required passport use is that requiring it will increase the ability of criminals to commit identity theft. The identity theft can occur when a traveler loses the passport and someone else take it, or if the new electronic passport microchips are illegally “skimmed” by someone other than an immigration official. As the information on the passport includes a “Picture of Document Holder, Travel document/Passport Issuance Country, Travel document/Passport Number, Name of Traveler, i.e. passport holder, Date of Birth and the Nationality of the Traveler” (Wagner 2006, 3), to name a few, this collection of data can, “give a head start to a criminal seeking to commit identity theft” (Juels 2005, 77), as it is all conveniently located in a
single document. Further increasing the ability to commit identity theft, beyond one losing the actual document, is the addition of RFID chips to passports. The identity theft occurs here “as contactless chips are activated when they come into contact with radio energy at the proper frequency” (Bronk 2007, 32). This identity theft does not occur when the immigration officer scans it, but through “surreptitious reading of their contents” (Juels 2005, 77). At the heart of this issue is that “while the chips were only designed to be read within 4 inches, some technology does exist that captures from further distances” (Bronk 2007, 33). The new technology would allow the person standing in line two or three lines over to steal a person’s identity. At this point only one method has been derived as prudent to fighting this identity theft threat, which is “to add RF blocking material to the cover of an e-passport” (Juels 2005, 83). Increased technologies and ineptitude of the traveler to misplace his or her passport provide easy access to a criminal trying to steal an identity from a document with so much information in a compact place providing a disadvantage of using a passport.

A second disadvantage of using a passport is the reduction of privacy for an individual. Requiring the use of passports allows an easily accessible movement record to be built about an individual. With so much information available, it is very easy for trends of a person to be tracked and used against them in other situations. Monitoring a person’s history requires tools of the trade available to ‘big brother,’ and “the passport is one such tool, giving the government precise information about the individual citizen, including her [or his] entry into and exit from the national territory” (Salter 2003, 101). Furthering this disadvantage is the fact that “the information will be cross-referenced
with data maintained in Customs and Border Controls (CBP’s) other enforcement databases, notably the Treasury Enforcement Communications System (TECS), and its screening and targeting systems, notably the Automated Targeting System (ATS), to ensure the admissibility of travelers,…and kept for forty years” (Wagner 2006, 4).

Having so much data stored in one place allows for a person to be monitored and traced, compiling a movement history of said person. Data collected at a border screening and the fear of “big brother” arises “when combined with other information … [as] it can yield insight into a particular person’s movements” (Juels 2005, 77-78). The cross-referencing helps make the passport more than a tool to cross borders, but a link to everything there is to know about a person, invading their privacy. This disadvantage is the result of people in the past taking advantage of a situation, causing travelers today to worry that data gathered when using their passport would be unlawfully acquired and possibly used against them.

A final disadvantage of using a passport is the increased ability to discriminate. Discrimination occurs often on the basis of a person’s affiliation with some large mass of the population by such factors as race or religion. In the case of the passport, a variety of information is available to be used from the document in a discriminatory effort. One such case is the country of Israel. Since the establishment of Israel in 1948, the country has had unstable relationships with its Arab neighbors. To this day, all Arab countries excluding Egypt and Jordan do not officially recognize the existence of the country. In choosing not to recognize Israel, these countries use the passport to discriminate and restrict travel to their countries since it is the only document certified for use in
international travel. First, an Israeli passport cannot be used to enter an Arab country, and second, any passport with a stamp from an Israeli check point is barred entrance to the country attempted to be entered. The passport system in this sense acts as “surveillance systems [that] were used to not so much curb immigration but to detect (politically) unwanted aliens,” (Lucassen 2001, 253) This discrimination is based upon a person’s perceived political affiliation with a country and a well-documented record of a person’s travel history is used against them. This causes the use of the passport to “indicate the immense importance of citizenship in a world of nation-states” (Fahrmeir 2001, 218). As many people from around the world, especially in the oil industry, must interact with Israel and Arab Countries, two methods of avoiding discrimination have been embarked upon. In attempting to avoid this restriction, many people choose to immediately replace their passports, clearing the travel log before going to an Arab nation. Another method travelers often use to avoid travel restriction of movement is to ask an Israeli passport inspection agent to stamp on a separate sheet of paper kept in the passport while in Israel but that can be removed prior to other travels. With a vast quantity of information found on a traveler in one place, a passport can be used to restrict travel by discriminating against a person for their prior places of travel.

Required passport use has been shown to contend with three main disadvantages. Identity theft and privacy issues are raised as the document and person are cross-checked against other databases creating a profile enabled to be used against the traveler at a later date employing new technologies. Finally, a passport can be used to discriminate against a traveler, restricting movement. As “worldwide travel without a passport is impossible”
these disadvantages are unavoidably faced thousands of times a day.

**Reasons for Selecting Air Travel as the Transportation Mode**

Complicating the issue of required passport use in international travel is deciding the appropriate mode of transit. Affecting this decision are two main factors, the cost of air travel itself and the distance needed to be covered in transit, each of which is further complicated by additional stipulations.

As discussed in a prior section, the additional costs of international travel from obtaining a passport and visa may restrict persons from traveling. However, the actual cost of air travel will either allow or disallow a traveler the ability to fly. Cost of air travel, or the value of money that has been used up to produce something, comes in the form of the ticket price, food and beverages, baggage fees; and miscellaneous taxes. For example, for a round-trip JetBlue ticket from Los Angeles to New York City, the ticket itself is $397.54, the second checked bag is $30, the 9/11 fee is $5, and taxes are $49.66, making a grand total of $482.22. This ticket price for many may simply be too high to allow travel by air. In his 2001 book, Gottdiener writes about the effect of cost on travel by saying “that ticket prices are reasonable for popular long-haul routes, although they have now been increasing, but exorbitant for travel between less popular, marginalized destinations [in addition to], a confusing array of restrictions and time limit on fares afflicts consumers” (3). This quote provides evidence that the cost of air travel is an important factor in choosing a mode of transportation in that it is very expensive. Cost of
air travel combined with the cost of obtaining a passport and a visa, if needed, will force
a person to make a difficult decision in selecting a mode of travel.

The other main factor affecting the decision to travel by air is the distance needed
to be covered in transit. In most cases a person will choose to travel by air if the traveler
needs to travel a long distance. The speed of an airliner in most cases is well in excess of
600 mph, enabling a flight from Los Angeles to New York to travel the distance in under
six hours. This is in comparison to a train voyage time of 63 hours\(^1\) and car travel of 42
hours\(^2\). In her 2001 article, Harrison-Hill writes that travel distance and time “were cited
as being influential within the destination decision making” (8). This affects mode of
transit choice because the “overestimation of distance by tourists can lead to a perception
of inflated costs, extended travel time and increased risk, all of which decrease the
likelihood of travel” (Harrison-Hill 2001, 3). Distance will have an effect on the mode of
transit chosen for travel as the ability of the available modes will allow. However, if a
large geographic obstacle, such as a body of water or mountain range, is between the two
points adding significant travel time, air travel is more desirable due to its ability to avoid
the obstruction no matter the distance. Distance is an incredibly large factor in choosing
to travel by air as travel here reduces the time needed to travel and avoids obstruction to
travel faced by other forms of transit.

Complicating the effectiveness of cost of air travel and distance needed to be
covered to decide whether or not to travel by air are conditions such as the reason for
travel and the availability of other modes of transit for transport. For instance, the need to

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\(^{1}\) http://tickets.amtrak.com/
\(^{2}\) http://www.mapquest.com/maps?1c=Los+Angeles&1s=ca&2c=New+York+City&2s=ny
arrive in New York City from Los Angeles in two days for a funeral may persuade a person to travel by air no matter the cost, since air travel will help a traveler arrive much sooner. A highly significant reason for the journey will cause a traveler to travel by air no matter the cost. Also complicating cost effectiveness is the availability and abilities of other modes of transit. For example, the uses of high-speed rail travel in Europe and Japan where trains reach over 320 kph has greatly detracted from the attractiveness of air travel in favor of rail-travel. The high-speed of the trains will increase the distance that people will travel in other forms of travel than air. These two complications of a travel adventure are the outlying factors that are used to sway a decision when no clear-cut decision on the surface is available.

Ultimately, the reason to travel by air is different for each individual traveler. Cost of air travel itself and the distance/time needed to be covered while in transit are the two most significant factors people use when deciding to travel by air. However, conditions such as the reason for travel and the availability of other modes of travel may force a traveler to travel by air no matter the cost or distance.

**Hypothesis / Argument**

Literature on the subject of requiring the use of a passport to facilitate international travel produces one topic similar to that of the Western Hemisphere Travel Initiative, the State Monopolization on the Legitimate Means of Movement. Work on this subject is a recent topic, but its roots are found in law reviews of the 1950s and 1960s. These original studies bring up one common thread, “another aim – to restrict travel – has become increasingly significant since World War I” (Ehrlich 1966, 130). Furthered by
the fact that “the latter-day problem has to do with the citizens power to leave his country, however welcome he may be elsewhere” (Jaffe 1956, 18). These studies introduce the topic of how requiring the use of a passport can restrict travel.

More recent studies have formalized the study of the restrictiveness of travel by requiring the use of a passport for travel and fully classify it as a “monopoly.” As noted in Salter’s study, “passports are the primary document that states use to regulate the permeability of their borders” (Salter 2003, 2). With the implementation of the Western Hemisphere Travel Initiative, “the result of this process has been to deprive people of the freedom to move across certain spaces and to render them dependent on states and the state system for the authorization to do so,” (Torpey 1998, 239). In essence, “a passport can serve as a means of both opening up barriers and restricting them,” (O’Byrne 2001, 410). Overall, “passports and visas form … ‘a regime of mobility’ that has been designed by the state to control the movement of people” (Wang 2004, 352-3).

Connecting the theme gathered from the literature to this study is a comparison of goals. The “monopolization” is a field of study that focuses on how the required use of a passport has the possibility to restrict movement as it is a required condition for movement in all but a few select cases. While the Western Hemisphere Travel Initiative is a real-world example of a country increasing the identification requirements to mandate the use of a passport that will in essence increase the “monopoly.” When evaluating the data, this study will look to see whether or not requiring the use of a passport to areas where it was previously not required has had an effect on the number of
travelers. Ultimately, seeing whether or not this monopoly has enforceability is the main goal of this study.

According to the literature, it can be deduced that the implementation of a program requiring the use of a passport for international travel would reduce the number of travelers going to and from countries affected by the Western Hemisphere Travel Initiative. The frequent allegation by those opposed to required passport usage is that more restrictions on travel will lead to fewer travelers. Overall this hypothesis has merit on the surface, but is unsubstantiated due to no prior empirical analysis of the passport. Previous studies claim that requirements for passport usage prevent more people from traveling and as a result, establish a monopoly on the legitimate means of movement. Previous research on required passport usage often has a more exploratory than explanatory purpose and “the research conducted in this vein is rarely empirical” (Bolton 2006, 21). This hypothesis will help to address whether the extra “restriction” of having a passport has an actual effect on air travel. Table 2.1 illustrates the hypothesis and gives the references used for its formation.

**Table 2.1 - Hypothesis**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supporting Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>The implementation of the Western Hemisphere Travel Initiative will have a negative effect on the number of air travelers going to affected countries.</td>
<td>Jaffe 1956</td>
</tr>
<tr>
<td></td>
<td>Ehrlich 1966</td>
</tr>
<tr>
<td></td>
<td>O’Byrne 2001</td>
</tr>
<tr>
<td></td>
<td>Wang 2004</td>
</tr>
</tbody>
</table>

Increasingly, countries are placing more requirements on travelers to enter their territories. With the passport requirement in place it is generally assumed that this
requirement will help secure the country, but to what extent will these burdens affect the tourist industries of these countries? Will the requirements actually reduce the number of people who were previously entertaining thoughts of traveling abroad?

The Customs and Border Protection Service (CBP) for the United States Department of Homeland Security implemented passport requirements for all travelers on January 23, 2007 for air travel, and began to require them on June 1, 2009, for all land and sea border crossings. The hypothesis should aid in the evaluation of the relationship between required passport usage and international travel. Additionally, it may help in establishing the appropriate balance of public safety and travel ability. Ways in which travelers have traveled internationally have been in place for nearly a century, but additional requirements such as obtaining a passport and not using local forms of identification are shifts that shape the way the nation-states control movement.
Chapter III
Setting

Purpose

The purpose of this chapter is to provide a brief overview of roles of the State and Homeland Security Departments of the United States in the passport process. In addition, the methods for obtaining a passport and current passport statistics related to this study are discussed.

Roles the Department of State and Department of Homeland Security Play in the Passport Process

In the United States, two separate departments play major roles in the use of a passport. First, since 1856, the Department of State has maintained the authority to issue passports, a right further strengthened by the Passport Act of 1926. When choosing to issue a passport, the State Department can decide whether or not a potential traveler is fit to receive a passport, and the department may refuse a passport if they feel that the person’s activities abroad would: (a) violate the laws of the United States; (b) be prejudicial to the orderly conduct of foreign relations; or (c) otherwise be prejudicial to the interests of the United States.\(^3\) In cases where these circumstances are not met, a passport is then issued by the department. When using the passport at a border crossing, passport inspection responsibilities fall to the Department of Homeland Security Customs and Border Protection. During the crossing the passport is scanned and checked against several databases; if a discrepancy arises the traveler is then detained for further questioning and possible deportation. The passport is then checked visually against the

\(^{3}\) 22 C.F.R. § 51.136
traveler’s appearance. Ultimately, the State Department acts as the distributor while the Homeland Security Department acts as the enforcement agency determining validity of the passport.

**Passport Obtainment Method**

Obtaining a passport requires the coordination of the applicant and the government. To obtain a passport in the United States, the State Department requires the applicant to go through a six-step process. First, an applicant must complete Form DS-11: *Application for a U.S. Passport*. Second, supply evidence of United State citizenship, typically done in the form of a birth certificate or Naturalization Certificate and a Social Security number. Third, the applicant must show and provide a photocopy of a valid identification in the form of an old passport, Naturalization Certificate, driver’s license or standard government ID. Fourth, the applicant must pay a varying application fee dependent upon the type of passport requested and the processing time requested. Fifth, an applicant is required to provide two photos for the passport, and finally, the applicant must schedule a meeting with a local passport office to submit the application and aforementioned documents before taking the oath. This process must be followed if an applicant is applying for their first U.S. passport, if under age 16, if the traveler’s previous U.S. passport was issued when under age 16, lost, stolen, or damaged, issued more than 15 years ago, or if there has been a name change since the applicant’s last U.S. passport was issued and he or she is unable to legally document the name change. If simply renewing a passport, or if none of the above conditions is met, the process can be
completed by mailing in the passport, at which point in either case the passport will be distributed in two to six weeks depending upon the individual application.

**Passport Statistics and the Implementation**

Since the implementation of the Western Hemisphere Travel Initiative in January of 2007 until the end of 2008, there have been 34,590,801 Passport Books and Cards issued in the United States. Figure 3.1 below shows the effects of the Western Hemisphere Travel Initiative approval in 2004 on passport issuance rates. An increase in the issuance rate is noticeable after the announcement of the initiative, and even higher after the implementation where there was a consistent level of issuance in the years prior, indicating that those who travel by air may be affected by the new identification requirement.

**Figure 3.1 - U.S. Passport Issuance by Fiscal Year**

[Graph showing passport issuance rates from 1996 to 2008]

Source: U.S. Dept of State
Chapter IV
Methodology

Purpose

The purpose of this chapter is to explain the data and study techniques used in this study. The hypothesis is operationalized by defining dependent and independent variables. Data sources are also described in the chapter.

Operationalization

In determining whether the implementation of the Western Hemisphere Travel Initiative has had an effect on the number of travelers to affected countries, data must be gathered that takes several items into consideration. The dependent variable is the number of travelers going to affected countries both before and after the program is implemented and “is always an outcome measure” (Shields 2005, 35). This data, taken from reports of number of travelers to the affected countries over time, is supplied by the Bureau of Transportation Statistics in the United States Department of Transportation. The original source of data is the Air Carriers: T-100 International Market (US Carriers Only), which is summarized and modified to reflect On-Flight Market Passengers Enplaned by DestWac by Month for January 2005 through December 2008. As the data is preexisting, “researchers can focus study to a specific region, area, or population by simply eliminating the data they do not wish to use,” (Doehrman 2007, 52). For the purposes of this study, all data for countries outside of the area affected by the Western Hemisphere Travel Initiative were deleted. This data is the source of the dependent variable as well as an independent variable measuring changes in trends resulting from
the travel identification program, since the data can be traced over a particular time period.

In addition to the dependent variable, two co-variants are used to investigate whether or not the changes seen in the analysis of the dependent variable are solely to blame on the program implementation or other outside factors. The first co-variant in this study is Population. This is used because increases or decreases in populations can have an effect on the number of travelers going abroad. The estimated general United States population will function as this co-variant to control for general population growth in the states as well as shifts in the number of travelers. Since there are no limitations on the population as a whole and the population is typically ever-increasing, this may ultimately lead to more travelers, serving this function well by indicating that more citizens equal more travelers.

The second co-variant in this study is economic climate. The overall economic climate may have an effect upon the number of people traveling to countries affected by the Western Hemisphere Travel Initiative as reasons for traveling to these countries is often tourism and business related. The official United States Unemployment Rate will be used in this study as this measure for this co-variant as the economy is ever changing, this may lead to different rates of travelers.

Data is collected for twenty-four (24) months, January 2005 to December 2006, prior to the Western Hemisphere Travel Initiative implementation and twenty-four (24) months, January 2007 to December 2008, after the program implementation. Data collected is the representation of, “when an event or intervention occurs that may affect
our dependent measure, we refer to the resultant as an interrupted time-series” (Harrop 1985, 27). Independent variables, dependent variables, and the covariant are defined in Table 4.1, while Appendix A displays the actual data.

**Table 4.1: Operationalization of the Hypothesis**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definition</th>
<th>Unit of Measurement</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travelers Going to Affected Countries</td>
<td>Number of monthly passengers going to affected countries</td>
<td>Number of passengers monthly as measured by BTS statistics</td>
<td>Bureau of Transportation Statistics</td>
</tr>
<tr>
<td><strong>Independent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passport Requirement Initiative</td>
<td>Enactment of a program requiring a passport to enter the country</td>
<td>0 before the program, 1, 2, 3 … after the program. This variable measures changes in the trends resulting from the program</td>
<td>Manually Created</td>
</tr>
<tr>
<td>Dummy</td>
<td>Short term change resulting from the implementation of the WHTI</td>
<td>0 = before the program 1 = after the program</td>
<td>Manually Created</td>
</tr>
<tr>
<td>Month</td>
<td>The months, before and after the implementation of this program</td>
<td>1-48</td>
<td>Manually Created</td>
</tr>
<tr>
<td><strong>Covariant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economy</td>
<td>Unemployment rate data</td>
<td>Monthly Unemployment Data.</td>
<td>U.S. Dept. of Labor</td>
</tr>
</tbody>
</table>

**Design**

An interrupted time series regression is employed to test the presence of the relationship between the Western Hemisphere Travel Initiative and the number of
travelers going abroad to the affected countries. Table 4.2 displays the countries affected by the Western Hemisphere Travel Initiative.

Table 4.2: Countries Affected by the Western Hemisphere Travel Initiative

<table>
<thead>
<tr>
<th>Country</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anguilla</td>
<td>Grenada</td>
</tr>
<tr>
<td>Antigua and Barbuda</td>
<td>Jamaica</td>
</tr>
<tr>
<td>Aruba</td>
<td>Mexico</td>
</tr>
<tr>
<td>Bahamas</td>
<td>Montserrat</td>
</tr>
<tr>
<td>Bermuda</td>
<td>Netherlands Antilles</td>
</tr>
<tr>
<td>British Virgin Islands</td>
<td>St. Kitts and Nevis</td>
</tr>
<tr>
<td>Canada</td>
<td>St. Lucia</td>
</tr>
<tr>
<td>Cayman Islands</td>
<td>St. Vincent and the Grenadines</td>
</tr>
<tr>
<td>Dominica</td>
<td>Turks and Caicos</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td></td>
</tr>
</tbody>
</table>

Source: U.S. Department of Homeland Security

The interrupted time series design is “a statistical method for analyzing temporarily ordered scores to determine if an experimental manipulation, a clinical intervention, or even a serendipitous intrusion has produced a reliable change in the scores” (Hartman 1980, 543), more clearly stated as a quasi-experimental design that examines whether and how an interruption (of treatment, program, etc.) affects a common practice.

This quasi-experimental design is considered strong because data is collected and “scores are plotted on a time line running through the baseline and intervention phases” (Jones 1977, 151), as opposed to the smaller numbers of data points associated with simple pre-test post-test analysis. Thusly, “the subjects scores are displayed over time, with interruptions in the time series designated as the change points from one to another phase of the design” (Jones 1977, 151). Also, this regression formatting helps to
eliminate any bias that may occur with few observations. This hypothesis testing format was chosen because data was available prior to and following the implementation of the program and other typical data collection instruments would not provide the greatest significant amount of data for analysis. In the end, “this procedure involves the empirical construction of a complex mathematical model that is subsequently validated against the very data from which it was constructed,” (Tryon 1982, 423). There has been much speculation about the effectiveness of the Western Hemisphere Travel Initiative as it relates to travel rates and the monopolization of the legitimate means of movement, but empirical research on the subject is non-existent.

**Weaknesses of the Design**

When using an interrupted time series, two main weaknesses are confronted. Although the interrupted time series design helps to ensure a high level of validity through specific data over time, it commonly does not measure a broad range of effects on the dependent variable. It is designed to specifically focus on one effect and takes several different variables into account when examining that consequence. The other weakness is that there is rarely ever a valid control group with which to compare the data against. Even the prospect of a comparison group for this study is impossible since there has been no other mass change in passport requirements that has occurred where data was collected, other than the mass implementation of today’s modern passport regime in the early 20th century. As there is no perfect match to the group being evaluated, this form of design is ineligible to be considered a true experimental design. Rarely can one actually obtain a true control group in social research due to a variety of obstructions such as the
availability of data, inability to randomize, or fairness of treatment issues inherent in the field. This type of research, however, is crucial to future study because it provides a foundation for further research, such as, stage two of the Western Hemisphere Travel Initiative, which beginning in June of 2009 will require Americans traveling abroad by land and sea will use passports instead of a driver’s license and birth certificate. One cannot begin to address other questions regarding the effectiveness of the passport requirement program overall without first looking at fundamental factors such as its impact on the number of travelers.

A regression analysis is used to help describe the nature of the relationship between the dependent and independent variables and explain the direction of the relationship. This will help determine whether there has been a change in the number of travelers going to affected countries and whether or not that change can be attributed to the implementation of Western Hemisphere Travel Initiative in the international travel process or other changes like that of the economy or total population.

**Human Subject Issues**

Data gathered for use in this study is garnished from public records and is only able to be traced to individual travelers if compared to confidential Department of Homeland Security records. No sensitive information is revealed, and the analysis only focuses on the effect of the Western Hemisphere Travel Initiative program and the number of travelers going to affected countries. The purpose of this research study is to look at the effects that required use of a passport has on the number of travelers abroad to countries where a passport had previously not been required. This study is done with an
exemption by the Texas State University – San Marcos’s Institutional Review Board; please refer to case # 2009G4990 for further information.
Chapter V
Results

Purpose

The purpose of this chapter is to test the research hypothesis and present the results of the regression analysis for the interrupted time series regression. Results in this section will show whether the implementation of passport initiative in the initial border crossing process has had an effect on the number of air travelers to countries affected by the Western Hemisphere Travel Initiative.

Descriptive Statistics

Data displayed in Figures 5.1 through 5.3 indicate the monthly number of travelers to affected countries, monthly unemployment rates, and monthly population of the United States during the forty-eight months observed during the study, respectively. The actual data is presented in Appendix A. In chart 5.2 there are season peaks and valleys. Represented by the peaks and valleys are the busy summer and winter travel times. Evidenced by the chart is no significant decline in the number of travelers at the time the passport initiative was implemented in month 25, but a noticeable drop-off is seen at month 44 in the analysis period. The regression analysis provides the most insight into whether the number of air travelers was truly affected by the implementation of the passport requirement initiative.
Figure 5.1: Total Number of Air Travelers by Month

Source: U.S. Department of Transportation – Bureau of Transportation Statistics
Figure 5.2: United States Unemployment Rate by Month

Source: U.S. Department of Labor
Figure 5.3: Estimated United States Population by Month

Source: U.S. Census Bureau

Regression Analysis

Regression analysis results are offered in tabular and narrative forms. The analysis will yield “unstandardized coefficients that will measure the change in the dependent variable for every unit of change in the independent variable,” (Good 2007, 38). Table 5.1 below presents the analysis results. The results of regression model for the interrupted time series model are not significant. The regression analysis has shown that no significant relationship exists between the independent variable Passport Initiative and the dependent variable, Number of Air Travelers.
Findings of the analysis indicate that the regression model in its entirety was not significant. Ultimately, the hypothesis that required use of a passport in international travel will result in the number of air travelers decreasing is not supported by this study. The regression analysis found no difference in the travel trend before or after the implementation. This study has found that there is no relationship between the independent variables and the number of air travelers. However, there are implications from this study that may be helpful for future research and policy-makers. The final chapter will highlight limitations of the study in addition to how it may be used for forthcoming research.

<table>
<thead>
<tr>
<th></th>
<th>Coefficient B</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month in Time-Series</td>
<td>556606.563</td>
<td>3.873**</td>
</tr>
<tr>
<td>Period Before or After WHTI Implemented (Dummy)</td>
<td>252787.024</td>
<td>1.803</td>
</tr>
<tr>
<td>Month of Initiative</td>
<td>18828.555</td>
<td>.982</td>
</tr>
<tr>
<td>United States Monthly Unemployment Rate</td>
<td>-208640.677</td>
<td>-1.734</td>
</tr>
<tr>
<td>United States Monthly Estimated Population</td>
<td>-2.400</td>
<td>-3.929**</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
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<tr>
<td>R Square</td>
<td>.334</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4.219**</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>7.082E8</td>
<td>3.944**</td>
</tr>
</tbody>
</table>

* Significant at α<.05
** Significant at α <.01
Chapter VI
Conclusion

Research Summary

The purpose of this research was to evaluate the impact of required passport use on air travel to countries affected by the Western Hemisphere Travel Initiative. The first chapter introduced the issue and the research purpose. The second chapter reviewed the literature and helped to establish a hypothesis. Chapter Three discussed the setting for the research—required passport use in the United States. First, the history of the United States State and Homeland Security Departments and their roles in the passport process were reviewed. Then, passport obtainment procedures, recent U.S. passport statistics, and finally, the implementation of the Western Hemisphere Travel Initiative were discussed. The fourth chapter operationalized the hypothesis and provided information on how the data was collected and the methodology used in the evaluation.

Finally, the fifth chapter presented the results of the research. The results of the statistical methods employed were explained and interpreted in this chapter. Moreover, the results did not support the hypothesis that the passport initiative has a negative impact on the number of air travelers. There is no relationship between the implementation of the passport requirement initiative and international air travel.

Limitations of the Study

One limitation of this study is that the month-to-month air-travel tracking may not provide enough stability in data to evaluate effectively. This limitation occurs as 48 data points for an interrupted time-series analysis is the recommended minimum for this type
of analysis. Another limitation is that there is no plausible way for foreign travelers to be removed from the database. This limitation is prudent because the Western Hemisphere Travel initiative is aimed more at American citizens, not foreigners. Next, there is not an available manner for the purpose of travel to be identified and studied separately. Separating the reason for travel may impact the number of air travelers since a businessperson may already have his or her passport at-hand, compared to the occasional recreational traveler. A final limitation is that there was no control group available to be able to measure changes against. Although this was partially covered by the two co-variants, any program evaluation is much stronger with a control group.

These data limitation are similarly faced in other studies. For example, in Kevin Bailey’s 2009 Applied Research Project on the impact of Hurricane Katrina on crime rates in New Orleans, “reliable monthly crime data for the last half of 2005 [was] nonexistent. This lack of data, coupled with uncertain population estimates, makes it impossible to test crime rates during the emergency stage of this disaster,” (52). While enough data was available for his study, data from the period right after the disaster would have helped to better analyze his subjects, while more specific data had it been available would have helped to more thoroughly examine the effect of required passport use in international travel evaluated in this study.

Because this study lacked a control group in which to compare the results against, it is in similar company regarding the issue with other studies using time-series analysis. For Example in Oak’s 2005 Applied Research Project, Evaluating the Effect of Maine’s Snack Tax on the State’s Obesity Rate, “the findings did not provide any significant
results for independent variables that could help identify and interpret a relationship between the snack tax and obesity rates for Maine” (40). This similar constraint between the studies, which is critical to a more in-depth analysis of any data set while not required, helps to reduce the validity of them. As similarly revealed in Oak’s study, the policies in each study was intended to have an effect on a specific group, and was found to have a neutral affect on the action intended to be altered, leading to the conclusion that several factors may often affect an action.

**Suggestions for Future Research**

Five possible suggestions for future research can be made. First, in January of 2011, once the second phase of the Western Hemisphere Travel Initiative has been in effect for two years requiring a passport for all land and sea border crossings, an identical study should be done. This possibility for future research is important as travelers may make border crossings to affected countries by land and sea more frequently. Second, a study to investigate if the first phase of the Western Hemisphere Travel Initiative has caused an increase in land and sea crossings during the years of observation in this study should also be completed. This possibility for future research is important, as travelers may be able to find a less expensive travel option if traveling by land or sea. Third, since a visa is an important part of the current passport regime, a study of air travel rates after the implementation of the United States Visa Waiver Program in 1986 would be interesting. This study would be important as it is the most recent program aimed at impacting international air travel and as it was aimed at reducing restriction of movement.
This research only looked at the number of air travelers to all countries affected by the Western Hemisphere Travel Initiative; it would be insightful to see whether the numbers of air travelers are different for each individual country affected. Finally, due to the cyclical nature of travel (spring break, summer travel season, etc.), only looking at business travelers may help to provide more depth to the study as their travels are more spread throughout the year.

**Suggestions for Policy-Makers**

Study into the required use of passports was first explored in the middle of the 20th century. As the world around us becomes smaller and smaller, the study of required passport use will likely grow. The call for the study of passports will continue as countries around the world constantly change their requirements for passports as did the Schengen Zone in Europe (which is slowly expanding since its inception), where no passport is needed to cross member country borders since March 25, 1995. Even though these changes in identification requirements indicate that some hurdles to free movement are necessary, it may as well show that reasons for the passport initiative are not working as originally expected. These issues should be taken seriously as a multitude of agencies handle passports during their issuance and use. In some cases, requirements for a single type of identification have had successes, such as workplace badging and store discount plans; at times, however, requirements for a single form of acceptable identification have led to accusations of discrimination and preferential treatment.

Institutions who produce official identification documents must take the necessary actions to make their documents as official and tamper-proof as possible. Technologies
should be designed to make counterfeit-proof passports or to prevent the alteration or theft of information from current passports. Other alternatives to requiring a passport should be implemented when possible since many travels are more spur-of-the-moment than prepared for far in advance. When a passport is used to cross a border, a minimal amount of data collection should be used to reduce the amount of penetration into the privacy of a traveler. Before a new program is implemented, the maximum amount of information must be gathered to ensure that a minimal amount of disruption will be felt by those affected. In this case, a government program increasing a major obstacle to movement, programs that offer quick processing of applications, grants to help pay for costs of obtaining a passport quickly, and centralized processing centers should be established. With the ability to freely move about at stake, any effort to educate the public on increased requirements or to further the initiative must face scrutiny to reduce the effects of the misinformation on the traveler and should be implemented as soon as possible.

Although this research found that there was no change in the number of air travelers after the implementation of the passport requirement initiative, this study should be used to preface any other initiative to alter identification requirements if the main goal of the new program is to restrict users. The idea of requiring a passport is a delicate issue that is worth examining further as it ventures into grey areas of privacy. The passport initiative provides several advantages to international air travel. It helps to more easily facilitate and determine the eligibility for travel, and this research proposes that the
passport requirement initiative has no impact on air travel. Ultimately though, requiring a passport has no effect on air travel.
Bibliography


Gottdiener, M. (2001). Life in the air: Surviving the new culture of air travel. Lanham, MD: Rowan & Littlefield Publisher's, INC.


### Appendix A: Data

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