

Regulatory Assessment

for the Final Rule

Documents Required for Travel within the Western Hemisphere

The Western Hemisphere Travel Initiative Implemented in the Air Environment

November 2006

**Prepared by U.S. Customs and Border Protection
Office of Regulations and Rulings**

Acronyms

ANPRM	Advance Notice of Proposed Rulemaking
APIS	Advance Passenger Information System
BCC	Border Crossing Card
CBP	Customs and Border Protection
CTC	Canadian Tourism Commission
DHS	Department of Homeland Security
FAA	Federal Aviation Administration
ICAO	International Civil Aviation Organization
IRTPA	Intelligence Reform and Terrorism Prevention Act of 2004
NAICS	North American Industry Classification System
NPRM	Notice of Proposed Rulemaking
OMB	Office of Management and Budget
OTTI	Office of Travel and Tourism Industries
RFA	Regulatory Flexibility Act
TIA	Travel Industry Association
TSA	Transportation Security Administration
TWIC	Transportation Worker Identification Card
USCG	United States Coast Guard
VFF	Visiting Family and Friends
WHTI	Western Hemisphere Travel Initiative
WTTC	World Trade and Tourism Council

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Executive Summary

This final rule is the first phase of a joint DHS and State Department plan to implement the *Western Hemisphere Travel Initiative*, or WHTI. This rule states that, beginning January 8, 2007, United States citizens and nonimmigrant aliens from Canada, Bermuda, and Mexico entering the United States at air ports-of-entry from Western Hemisphere countries will be required to present a valid passport in circumstances where travel was previously permitted without such a document. This rule will not change the requirements for United States citizens and nonimmigrant aliens from Canada, Bermuda, and Mexico entering the United States at land border and sea ports-of-entry, which will be addressed in a future rule.

This rule will affect travelers to the Western Hemisphere countries that do not currently require a US passport for entry (Canada, Mexico, certain Caribbean countries, Micronesia). While American travelers would not need a passport to enter these countries, they would need to produce a passport for inspection upon re-entry to the United States. This analysis considers travelers on commercial flights and using general aviation.

We estimate that approximately 14 million travelers will be covered by the rule. We assume many of these travelers already hold passports and thus will not be affected (they will not need to obtain a passport as a result of this rule). In our “most likely” scenario, we estimate that an additional 4 million passports will be required the first year the rule is in effect at a direct cost to traveling individuals of \$600 million (Table 1, next page). If 20 percent of these passports receive expedited processing (at a cost of \$60 per passport), the fees total \$49 million, for a grand total cost of \$649 million. The “best case” and “worst case” scenarios are also presented in Table 1. These scenarios embody assumptions and calculations that produce what we would consider the “extreme endpoints” of costs we expect to see in the first year as a result of the rule. Neither of these scenarios is at all likely, but they are useful in bounding the potential range of costs.

Following the initial year, costs will decrease, as most US travelers in the air environment will now hold a passport. Because the number of travelers to the affected Western Hemisphere countries has been growing and turnover in the traveling population is not 100 percent on an annual basis, a small number of “new” travelers who did not previously hold passports will now have to obtain them in order to travel. The estimated most likely costs in the second year (undiscounted) are presented in Table 2 (next page). We would expect subsequent years to be similar to the second year.

Table 1. Total Passport Costs of the Rule, First Year Rule is in Effect (all figures in millions)

Travelers to WHTI countries	14.3		
	Best case	Most likely	Worst case
Passports demanded	3.5	4.1	8.4
Total cost of passports demanded	\$518.6	\$600.1	\$1,620.7
Expedited service			
Number of passports	0.4	0.8	2.5
Cost of expedited service	\$21.2	\$49.0	\$151.7
Grand total cost	\$539.8	\$649.1	\$1,772.4

Table 2. Total Passport Costs of the Rule, Second Year Rule is in Effect (all figures in millions)

"New" travelers to WHTI countries	2.0		
	Best case	Most likely	Worst case
Passports demanded	0.3	0.6	2.2
Total cost of passports demanded	\$44.5	\$85.9	\$424.4
Expedited service			
Number of passports	< 0.1	0.1	0.7
Cost of expedited service	\$1.8	\$7.0	\$39.7
Grand total cost	\$46.3	\$92.9	\$464.1

This rule will also impose indirect costs to those industries that support the traveling public. If some travelers do not obtain passports because of the cost or hassle and thus forego some trips to Western Hemisphere destinations, certain industries would incur the indirect consequences of the foregone travel or change in travel plans. These industries include (but are not necessarily limited to)—

- Air carriers
- Airports and their support services
- Traveler accommodations
- Travel agents
- Dining services
- Retail shopping
- Tour operators

- Scenic and sightseeing transportation
- Hired transportation (rental cars, taxis, buses); and,
- Arts, entertainment, and recreation.

We expect these to be primarily foreign businesses whose services are consumed largely outside of the United States (with the exception of US air carriers, travel agents, and airport services). We also expect domestic travel will largely be substituted for international travel in response to this rule; thus domestic industries in these areas could gain. We expect, however, that US travel and tourism could also be indirectly affected by the rule if fewer Canadian, Mexican, and Bermudan travelers visit the United States (these travelers do not currently need a passport for entry to the United States but will require one under the rule). In this case, US businesses in these sectors will be affected. Thus, gains in domestic consumption could be somewhat offset by losses in services provided to the three Western Hemisphere countries affected. In both cases, we expect the gains and losses to be marginal as the vast majority of travelers are expected to already hold or will obtain passports and will continue traveling (96 percent of US travelers and 99 percent of Canadians, Mexicans, and Bermudans). Gains and losses will be spread over wide swaths of the domestic and international travel and tourism industry.

The benefits of the rule are increased security in the air environment attributable to more secure documents. A uniform document standard should also assist CBP officials in processing entries to the United States because an individual's identity will be easier to ascertain.

Because this rule does not directly regulate small entities, we do not believe that this rule has a significant economic impact on a substantial number of small entities.

Although this Regulatory Assessment attempts to mirror the terms and wording of the regulation, no attempt is made to precisely replicate the regulatory language and readers are cautioned that the actual regulatory text, not the text of this assessment, is binding.

In all tables presented in this Regulatory Assessment, detail may not calculate to total due to independent rounding.

1. Introduction

On August 11, 2006, the Department of Homeland Security and the Department of State jointly published a notice of proposed rulemaking (NPRM) in the *Federal Register* proposing to require travelers arriving in the United States at airports and most sea ports-of-entry, with certain limited exceptions, to present a valid passport (71 FR 46155). The NPRM proposed the first phase of a plan, known as the Western Hemisphere Travel Initiative (WHTI), to implement section 7209 of the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA) which required that by January 1, 2008, United States citizens and nonimmigrant aliens may enter the United States only with passports or such alternative documents as the Secretary of Homeland Security may designate as satisfactorily establishing identity and citizenship.

Section 546 of the Department of Homeland Security Appropriations Act of 2007, which the President signed on October 4, 2006, extends the implementation date imposed by section 7209 of IRTPA to June 1, 2009, or earlier if the Secretaries of Homeland Security and State certify to Congress that certain criteria have been met prior to the implementation of new documentation requirements. One of the certifications requires a single implementation date for sea and land borders. As a result of this requirement, this final rule differs from the NPRM published on August 11, 2006, by finalizing new document requirements for travelers arriving in the United States by air only. The portion of the NPRM that proposed changes in documentation requirements for travelers arriving by sea will not be finalized under this rule.

Accordingly, this final rule adopts, with changes, proposed amendments to the regulations regarding documentation requirements for travelers arriving in the United States at air ports-of-entry. As a result of this final rule, beginning January 8, 2007, United States citizens and nonimmigrant aliens from Canada, Bermuda, and Mexico entering the United States at air ports-of-entry will generally be required to present a valid passport. This final rule does not change the requirements for United States citizens and nonimmigrant aliens from Canada, Bermuda, and Mexico entering the United States at sea ports-of-entry and land border ports-of-entry, which will be addressed in a separate, future rulemaking.

Current Requirements

In general, under federal law it is “unlawful for any citizen of the United States to depart from or enter...the United States unless he bears a valid United States passport.”¹ However, United States citizens now are exempt from the statutory passport requirement when coming from the Western Hemisphere other than from Cuba.² Currently, a United States citizen entering the United States from the Western Hemisphere, other than from

Cuba, is inspected at the air port-of-entry by a US Customs and Border Protection (CBP) officer.³ To lawfully enter the United States, the arriving individual need only satisfy the CBP officer of his or her United States citizenship. In addition to examining the documentation the individual submits, the CBP officer may ask for additional identification and proof of citizenship until the CBP officer is satisfied that the entering individual is a US citizen.

As a result of this procedure, United States citizens arriving at air ports-of-entry from within the Western Hemisphere may provide other documents in lieu of a passport to satisfy a CBP officer. A driver's license issued by a state motor vehicle administration or other competent state government authority is the most common form of identity document now accepted at the border. The citizenship documents now accepted at these ports-of-entry include birth certificates issued by a United States jurisdiction, Certificates of Naturalization, and Certificates of Citizenship.

Currently, each nonimmigrant alien arriving in the United States must present to the CBP officer at the port-of-entry a valid, unexpired passport issued by his or her country of citizenship and a valid, unexpired visa issued by a United States embassy or consulate abroad.⁴ For nonimmigrant aliens arriving in the United States, the only current general exceptions to the passport requirement apply to citizens of Canada and Bermuda arriving from anywhere in the Western Hemisphere other than Cuba and Mexican nationals with a Border Crossing Card (BCC) arriving from a contiguous territory.⁵

When entering the United States as nonimmigrant visitors from countries in the Western Hemisphere (other than Cuba), Canadian and Bermudan citizens are not required to present a valid passport and visa.⁶ However, these travelers are required to satisfy the inspecting CBP officer of their identity and citizenship at the time of application for admission. Entering aliens may present any proof of citizenship in their possession. Individuals who initially fail to satisfy the examining CBP officer may then be required to provide further identification and proof of citizenship such as a birth certificate, passport, or citizenship card.

Mexican citizens arriving in the United States at ports-of-entry who possess a Form DSP-150, B-1/B-2 Visa and Border Crossing Card (BCC) are currently not required to present a valid passport when coming from contiguous territory by land.⁷ A BCC is a machine-readable, biometric card issued by the State Department.

Organization of the Document

Chapter 2 presents the direct costs of the final rule and a discussion of the indirect impacts we could see as a result of a passport requirement in the air

environment. Chapter 3 presents a discussion of the benefits. Chapter 4 presents a discussion of impacts to small entities.

Although this Regulatory Assessment attempts to mirror the terms and wording of the final regulation, no attempt is made to precisely replicate the regulatory language and readers are cautioned that the actual regulatory text, not the text of this assessment, is binding.

Chapter Notes

¹ See section 215(b) of the INA, 8 U.S.C. 1185(b).

² See 22 CFR 53.2(b), which waived the passport requirement pursuant to section 215(b) of the INA, 8 U.S.C. 1185(b).

³ United States citizens entering the United States at land border ports-of-entry from the Western Hemisphere are also inspected by a CBP officer. These travelers will be addressed in a separate, future rulemaking.

⁴ See INA § 212(a)(7)(B)(i), 8 U.S.C. 1182(a)(7)(B)(i).

⁵ Mexican citizens arriving in the United States at land border ports-of-entry who possess a Form DSP-150, B-1/B-2 Visa and Border Crossing Card (BCC) are not required to present a valid passport when coming from contiguous territory. Mexican citizens who possess a BCC and arrive at a land border port-of-entry will be addressed in a separate, future rulemaking.

⁶ See 8 CFR §§ 212.1(a)(1) (Canadian citizens) and 212.1(a)(2) (Citizens of Bermuda).

⁷ See 8 CFR 212.1(c)(1)(i).

2. Cost Analysis

This chapter presents an estimation of the direct costs for individuals to obtain passports, a discussion of the challenges of estimating the direct impacts of the rule, and a discussion of the potential other impacts of the rule. Additional detail for the calculations and modeling contained in this chapter can be found in the appendices. Chapter notes begin on page 2-72.

Much of the data needed to conduct a full analysis is limited or does not exist. The potential impacts on tourism in the countries affected by WHTI are based on estimates of demand that should be applied with caution. We note that the methodology and assumptions for this analysis are intended to apply in the air environment and would not necessarily be appropriate or applicable for land-border crossings. As mentioned in Chapter 1, land-border crossings and entries by sea, including cargo vessel, cruise ship, ferry, and pleasure boat will be addressed in a separate, future rulemaking. *This cost analysis does not quantify the impacts of that future rulemaking.*

This analysis contains—

- An estimate of the costs for individuals to obtain passports to travel by air in the Western Hemisphere and Micronesia
- An estimate of the number of travelers that may modify their behavior as a result of the passport requirement
- A summary of results from a Monte Carlo simulation designed to more formally test assumptions and sensitivities
- A short discussion of the reduction in consumer surplus that is expected as a result of this rule
- An overview of the industries that may be indirectly affected by the rule

Framework for Analysis and Data Sources

The framework for the analysis is relatively straightforward—

- Determine the number of US citizens who travel by air to countries in the Western Hemisphere and Micronesia for business and leisure
- Determine the percentage of US citizens who do not currently hold a US passport that travel by air to countries in the Western Hemisphere and Micronesia
- Determine the short-term increase in passport applications as a result of the rule

- Apply a cost-per-passport to the number of US passports expected to be issued as a result of this rule

While the framework for analysis is straightforward, the execution of the calculations is fairly complicated and hampered by very limited data. Because so many assumptions needed to be made with limited data, we present three scenarios: a worst-case cost estimate (relatively large number of US citizens obtain passports), a best-case cost estimate (relatively small number obtain passports), and a most likely cost estimate, which is based on our perception of the most likely values for the assumptions that we make. Our sources for the above elements of the analysis are as follows (additional detail is also provided in the analysis).

US citizens who travel by air to countries in the Western Hemisphere and Micronesia for business and leisure. We used data compiled from the Office of Travel and Tourism Industries (OTTI), part of the International Trade Administration of the Department of Commerce. OTTI reports the number of travelers that file an INS I-92 form (US citizens) or an I-94 form (aliens). OTTI also administers the Survey of International Air Travelers to glean pertinent information from US citizens and aliens departing the United States for international destinations. The survey is administered only on overseas flights and flights to Mexico and does not capture travelers to and from Canada. OTTI also relies on Statistics Canada and Banco de Mexico for information on Canadian and Mexican air travelers, respectively.

US citizens that do not currently hold a US passport who travel by air to countries in the Western Hemisphere and Micronesia. We have reviewed several studies that provide differing estimates of the number of US travelers to the affected WHTI countries that currently hold passports. It is generally believed that air travelers are more likely to hold passports than those that go to Canada and Mexico primarily through land-border crossings. There is also some evidence that business travelers are more likely to hold passports than leisure travelers. Our estimates for air travel come from three sources: 1) an estimate based on the State Department's current number of passports issued, 2) a State Department study conducted to estimate the annual demand for US passports as a result of WHTI, and 3) a Canadian Tourism Commission study conducted to determine the impacts of WHTI on Canada's tourism industry. These sources estimate that approximately three quarters to one third of US air travelers do not hold a passport.

Short-term increase in passport applications as a result of the rule. The direct costs of the rule are driven by the number of new passports that will need to be issued for US citizens that travel in the Western Hemisphere. At the extreme, the direct costs would be the number of travelers estimated above who do not currently hold passports multiplied by the cost of obtaining a passport. There is good reason to believe, however, that in the short term, some proportion of travelers in the Western Hemisphere would forgo obtaining a passport because of the cost and potential paperwork burden.

This would decrease the quantified costs of the rule (the State Department would issue fewer passports) but would increase individuals' non-quantified welfare losses as well as indirect costs (losses to air carriers and other services that support the air travel and tourism sector). The economic effects are expected to be primarily short term, as over the long run obtaining a passport will become a normal element of all international travel and will become a routine part of the travel-planning process.

Cost per passport. Currently, the State Department charges \$97 to process a new passport application for applicants 16 years of age and older. For applicants under 16, the fee is \$82. For renewal applicants, the fee is \$67. Expedited service for an application is an additional \$60. Routine service takes approximately 6 to 8 weeks. Expedited service takes approximately 2 weeks. In addition to the fees the State Department charges, the applicant must submit photos, complete the appropriate forms, and submit the forms for processing.

Population Affected

The population directly affected will be US citizens who travel by air to countries in the Western Hemisphere and Micronesia and non-US citizens traveling to the US from Canada, Mexico, and Bermuda. Most countries in the Western Hemisphere require a valid passport for entry; thus, travelers to these countries already carry a passport and will not be affected by the new requirements for entry into the United States.

The countries and estimated US air arrivals that will be affected by the rule are presented in Exhibit 1 (next page). For comparison, the countries that already require US citizens to carry a passport in the Western Hemisphere and the estimated air arrivals to those countries are presented in Exhibit 2 (page 2-5).

Exhibit 1. Countries and US Air Arrivals Affected by the Rule

Country	US Arrivals (a)			
	2004	2005 (est.)	2006 (est.)	2007 (est.)
Canada (b)	4,328,942	4,545,389	4,772,659	5,011,291
Mexico (c)	5,223,552	5,484,730	5,758,966	6,046,914
Dominican Republic (d)	1,229,605	1,291,085	1,355,640	1,423,421
Jamaica	936,925	983,771	1,032,960	1,084,608
Bahamas	881,316	925,382	971,651	1,020,233
Aruba	316,234	332,046	348,648	366,080
Netherlands Antilles	304,160	319,368	335,336	352,103
Panama	249,750	262,238	275,349	289,117
Bermuda	221,917	233,013	244,663	256,897
British Virgin Islands	81,624	85,705	89,990	94,490
Antigua & Barbuda	80,931	84,978	89,226	93,688
St Kitts-Nevis	57,331	60,198	63,207	66,368
Grenada	22,074	23,178	24,337	25,553
Dominica	13,763	14,451	15,174	15,932
St Vincent & Grenadines	1,942	2,039	2,141	2,248
<i>Caribbean</i>	<i>4,397,572</i>	<i>4,617,451</i>	<i>4,848,323</i>	<i>5,090,739</i>
Micronesia (e)	17,258	18,121	19,027	19,978
Total	13,967,324	14,665,690	15,398,975	16,168,923

Source: OTTI, US citizen air departures for 2004

(a) OTTI estimates an increase in arrivals of approximately 5 percent annually for the years 2005–2007. Estimate is total arrivals, not unique individuals.

(b) Statistics Canada; differs slightly from OTTI 2004 estimate for Canadian arrivals because Statistics Canada has adjusted and updated their 2004 estimate.

(c) OTTI from Banco de Mexico.

(d) OTTI from summary of I-92 forms. Caribbean totals include Bermuda and Panama.

(e) OTTI from summary of I-92 forms.

Exhibit 2. Western Hemisphere Countries and US Air Arrivals Not Affected by the Rule

Country	US Arrivals (a)			
	2004	2005 (est.)	2006 (est.)	2007 (est.)
Haiti	225,559	236,837	248,679	261,113
Cayman Islands	196,708	206,543	216,871	227,714
Trinidad & Tobago	188,120	197,526	207,402	217,772
Barbados	153,150	160,808	168,848	177,290
Turks & Caicos	111,187	116,746	122,584	128,713
St Lucia	63,667	66,850	70,193	73,703
Cuba	54,190	56,900	59,744	62,732
Anguilla	14,151	14,859	15,601	16,382
Guadeloupe	8,867	9,310	9,776	10,265
Martinique	1,620	1,701	1,786	1,875
<i>Caribbean</i>	<i>1,017,219</i>	<i>1,068,080</i>	<i>1,121,484</i>	<i>1,177,558</i>
Costa Rica	595,031	624,783	656,022	688,823
El Salvador	410,060	430,563	452,091	474,696
Guatemala	313,304	328,969	345,418	362,689
Honduras	205,485	215,759	226,547	237,875
Belize	162,508	170,633	179,165	188,123
Nicaragua	162,310	170,426	178,947	187,894
<i>Central America</i>	<i>1,848,698</i>	<i>1,941,133</i>	<i>2,038,190</i>	<i>2,140,099</i>
Brazil	481,501	505,576	530,855	557,398
Colombia	331,939	348,536	365,963	384,261
Peru	294,699	309,434	324,906	341,151
Argentina	219,416	230,387	241,906	254,001
Venezuela	191,760	201,348	211,415	221,986
Ecuador	191,700	201,285	211,349	221,917
Chile	167,398	175,768	184,556	193,784
Guyana	53,223	55,884	58,678	61,612
Bolivia	50,639	53,171	55,829	58,621
Paraguay	1,667	1,750	1,838	1,930
Uruguay	1,417	1,488	1,562	1,640
French Guiana	425	446	469	492
Surinam	114	120	126	132
<i>South America</i>	<i>1,985,898</i>	<i>2,085,193</i>	<i>2,189,453</i>	<i>2,298,925</i>
Total for unaffected	4,788,148	5,027,555	5,278,933	5,542,880
Total for affected	13,967,324	14,665,690	15,398,975	16,168,923
Grand total	18,755,472	19,693,245	20,677,908	21,711,803

Source: OTTI, US citizen air departures for 2004; summary of I-92 forms.

(a) OTTI estimates an increase in arrivals of approximately 5 percent annually for the years 2005–2007. Estimate is total arrivals, not unique individuals.

As shown, we divided air arrivals in the Western Hemisphere into five groups: Canada, Mexico, the Caribbean (which, for our purposes, includes Bermuda and Panama), Central America (excluding Mexico and Panama), South America, and Micronesia (though not in the Western Hemisphere, travelers to this country will be affected by the rule). US air arrivals to

Canada and Mexico constitute the largest groups—65 percent of the affected population and 47 percent of US arrivals to the Western Hemisphere countries overall. Though almost half of the Caribbean nations already require a passport for US citizens to visit, the largest markets for US arrivals are the Dominican Republic, Jamaica, and the Bahamas, which do not have passport requirements for entry. These three countries accounted for more than 3 million of the arrivals in 2004, almost 70 percent of the 2004 arrivals in the Caribbean countries affected by the rule. US air travelers to Canada, Mexico, the Dominican Republic, Jamaica, and the Bahamas account for approximately 90 percent of the population that will be affected by the rule.

It is important to note that the figures presented are *total arrivals* not *unique travelers*; arrivals, in other words, do not represent unique individuals. In the State Department's passport demand study, researchers found that approximately 8 percent of arrivals were repeat travelers.¹ The study analyzed CBP's Advance Passenger Information System (APIS) data for the affected WHTI countries. Researchers analyzed data from the third quarter of 2004 and concluded that complete APIS data for the year was "anticipated to yield similar statistics as the quarterly data."² This assumption may or may not be valid. Travelers may be less likely to travel multiple times a quarter than multiple times a year; thus, quarterly data would have the tendency to understate the number of repeat travelers. While the percentage of repeat travelers estimated in the demand study is low, it is not negligible, and, absent any other data, we use this percentage to adjust the number of arrivals and at least partially account for repeat entries. Thus, the estimates presented in Exhibit 1 are adjusted downward by 8 percent per year.

Non-US citizens affected will be travelers from Canada, Mexico, and Bermuda. The United States already requires valid passports for non-US citizens entering from all other Western Hemisphere countries and Micronesia. The countries and estimated non-US citizen air arrivals that will be affected by the rule are presented in Exhibit 3.

As shown, Canadian citizens comprise the bulk of the air arrivals into the United States (61 percent). As with US arrivals in other countries, we adjust the non-US citizen arrivals downward 8 percent to account for potential double counting of travelers.

Exhibit 3. Non-US Citizen Air Arrivals Affected by the Rule

Country	Non-US Citizen Arrivals (a)			
	2004	2005 (est.)	2006 (est.)	2007 (est.)
Canada (b)	4,640,006	4,872,006	5,115,607	5,371,387
Mexico (c)	2,846,371	2,988,690	3,138,124	3,295,030
Bermuda (d)	32,580	34,209	35,919	37,715
Total	7,518,957	7,894,905	8,289,650	8,704,133

Source: OTTI, alien air arrivals for 2004.

(a) OTTI estimates an increase in arrivals of approximately 5 percent annually for the years 2005–2007. Estimate is total arrivals, not unique individuals.

(b) Statistics Canada; differs slightly from OTTI 2004 estimate for Canadian arrivals to the United States because Statistics Canada has adjusted and updated their 2004 estimate.

(c) OTTI from Banco de Mexico and summary of I-94 forms.

(d) OTTI from summary of I-94 forms.

OTTI's Survey of International Travelers provides interesting insights into US air travelers to Mexico, the Caribbean, and Central America (recalling that the survey is not administered on flights to Canada). While the response rate for travelers to Mexico and the Caribbean is not as high as that for Asian and European travelers, there are enough responses to provide information that can be corrected for potential bias and be considered statistically significant.

More than half of the travelers to the Caribbean make their plans more than 30 days in advance. Approximately 75 percent of them make their plans more than 15 days in advance. This means that few trips are made "spur-of-the-moment," but many (nearly 40 percent) are made within the 6 to 8 week window that would be required to obtain a passport. For Central America (which excludes Mexico but includes Panama), almost 50 percent make their plans more than 30 days in advance and 80 percent make their plans more than 15 days in advance. Approximately 50 percent are made within the 6 to 8 week window required to obtain a passport. For the Caribbean, the mean number of days for advance trip decisions is 88.1 (median 60.0); for Central American the mean is 65.4 days (median 30.0).³ Despite the Caribbean's proximity to the US, these statistics are roughly similar for the mean trip decisions for other parts of the world. Almost three quarters of the air travelers to the Caribbean come from the North and South Atlantic states; two-thirds of the travelers to Central America come from the same regions.⁴

Nearly two-thirds of the Caribbean travelers use a personal computer or a travel agent to book their travel reservations. This is again similar to statistics for the rest of the world, though travel agents are used more to book trips to the Caribbean than in Europe, but not as much as for travel to Africa and the Middle East.⁵ Travel agents and friends and relatives are important sources of information for travel to the Caribbean. Only about 20 percent of travelers to the Caribbean purchase a travel package versus purchasing trip components separately.⁶

The overwhelming majority of travelers to the Caribbean are adults—90 percent. Approximately 66 percent of these adults traveled alone while 30 percent traveled with one other. The statistics are similar for Central America: 88 percent are adults, 76 percent travel alone, and 20 percent travel with one other adult.⁷ This means that in general, air travelers wanting to continue traveling in the Caribbean will be purchasing passports primarily for themselves, not for a “typical family of four.”

For the Caribbean as a whole, most air travelers traveled for leisure (58 percent) or to visit friends and family (27 percent). The remaining 15 percent traveled for business, conventions, and other purposes. For Central America as a whole, 39 percent traveled for leisure, 44 percent traveled to visit friends and family, and 17 percent traveled for business and other purposes.⁸ These statistics shed light onto the previous figures for travelers’ origin; the North and South Atlantic regions have cities (New York City and Miami in particular) with high populations of second- and third-generation Caribbean immigrants. These travelers appear to maintain strong ties to their mother countries, as evidenced by the high percentage that travel to visit family and friends. The reason for travel is an important input to the direct-cost analysis because we believe that it influences whether or not a traveler already owns a passport and whether that traveler will forgo future travel if he is required to obtain a passport.

Most travelers to the Caribbean stay in hotels and motels—71 percent—for approximately 7 days. Another 27 percent stay in private homes for approximately 10 days. Fewer travelers to Central America stay in hotels and motels (53 percent), though stay an average of 8 days, while 51 percent stay in private homes an average of 15 days.⁹ While there, the largest portion (21 percent) of travelers use a private auto for transportation during the trip (most likely belonging to a friend or relative) and a smaller portion (19 percent) rent a car. Another 19 percent travel between cities on local airlines.¹⁰

The vast majority of respondents, 88 percent, to the Caribbean and Central America stated that this was not their first international trip (to the region or otherwise). Over 50 percent had traveled once internationally in the last year. About 30 percent had traveled twice internationally in the last year and 17 percent had traveled internationally in the last 5 years.¹¹ This implies that travelers to these regions are more likely to hold passports than the US population as a whole because they make international trips fairly frequently.

US travelers to the Caribbean and Central America engaged in numerous leisure activities while on travel. The most common (more than 20 percent availed themselves of the activity) were dining, shopping, watersports and sunbathing, nightclubs and dancing, casinos and gambling, visiting small towns, touring the countryside, visiting historical places, and sightseeing in the cities.¹² If fewer people travel to these regions as a result of the new passport requirements, businesses providing and supporting these activities

and services could expect to be affected. These businesses would be almost entirely foreign-owned. Even for those individuals obtaining the passports and continuing to travel, their demand for these services may be lower because of the impact of the passport cost on their travel budgets. This secondary effect on demand is likely somewhat smaller than the impact due to fewer trips taken.

The mean trip expenditure for a trip to the Caribbean was \$1,461 (Central America was almost identical at \$1,507). This is less than half of the mean trip cost for most of the rest of the world. An estimated \$561 is for airfare and \$650 is for expenditures outside the United States.¹³ An estimated 77 percent fly on scheduled US carriers, 21 percent fly on scheduled foreign carriers, and 2 percent fly on charter flights.¹⁴ When choosing airlines, 26 percent of travelers to the Caribbean noted that the airfare was the most important factor; 40 percent of Central American travelers noted that airfare was the most important factor. Also important for travel to the region was a convenient schedule (19 percent), a non-stop flight (18 percent), and frequent flyer bonuses (12 percent). This shows that trip cost, and airfare in particular, is important, but not necessarily dominant, in a traveler's choice to take a trip to the Caribbean. This is mirrored in much of the travel demand literature as well, and will be important in determining the population that will forgo travel as a result of the rule.

Average air travelers to the Caribbean are middle-aged, professional, and relatively well off financially. The male and female traveler's mean age is 45 and 40, respectively. Two thirds are in executive or professional occupations. About half earn between \$40,000 and \$120,000 annually.¹⁵

For Mexico, almost half of the travelers make their plans more than 30 days in advance and three quarters make their plans more than 15 days in advance (about 40 percent are made within the 6 to 8 week window that would be required to obtain a passport). The mean number of days for advance trip decisions is 74.7 (median 30.0).¹⁶ Almost one quarter of the air travelers to Mexico come from California; one fifth come from the mid-Atlantic region.¹⁷

About two-thirds of the travelers to Mexico use a personal computer or a travel agent to book their travel reservations, similar to the percentages for the Caribbean.¹⁸ Only 3 percent of travelers purchase a travel package versus purchasing trip components separately.¹⁹

Again, the overwhelming majority of travelers to Mexico are adults—90 percent. Approximately 65 percent of these adults traveled alone while 30 percent traveled with one other.²⁰ Like travelers to the Caribbean, air travelers that want to continue traveling to Mexico will be purchasing passports primarily for themselves, not children.

Most air travelers go for leisure (56 percent) or to visit friends and family (24 percent). Only 18 percent travel for business or conventions.²¹ Most travelers

stay in hotels and motels—74 percent—for approximately 7 days. Another 27 percent stay in private homes.²² While there, 23 percent of travelers use a private auto for transportation during the trip, and 15 percent rent a car. Another 23 percent travel between cities on local airlines.²³

The vast majority of respondents to Mexico, 86 percent, stated that this was not their first international trip. Almost 50 percent had traveled once internationally in the last year. About 30 percent had traveled twice internationally in the last year and 17 percent had traveled internationally in the last 5 years.²⁴ This again implies that travelers to Mexico are more likely to hold passports than the US population as a whole because they make international trips fairly frequently.

US travelers to Mexico engaged in the same leisure activities while on travel as travelers to the Caribbean (dining, shopping, watersports and sunbathing, nightclubs and dancing, casinos and gambling, visiting small towns, touring the countryside, visiting historical places, and sightseeing in the cities).²⁵

The mean trip expenditure for a business trip to Mexico is \$1,557. An estimated \$710 is for airfare and \$749 is for expenditures outside the United States.²⁶ The mean trip expenditure for a leisure trip to Mexico is \$1,246. Approximately 40 percent of the expenditure is for airfare (\$497) and 50 percent is for expenditures outside the United States (\$624).²⁷ An estimated 62 percent fly on scheduled US carriers, 36 percent fly on scheduled foreign carriers, and 2 percent fly on charter flights.²⁸

Like travelers to the Caribbean, typical air travelers to Mexico are middle-aged, professional, and relatively well off financially. The male and female traveler's mean age is 45 and 40, respectively. Two thirds are in executive or professional occupations. About half earn between \$40,000 and \$120,000 annually.²⁹

SECTUR, Mexico's Office of the Secretary of Tourism conducted a survey early in the decade to determine the international visitors' level of satisfaction with their trip to Mexico. The study found that international visitors primarily traveled alone (29 percent) or with one other person (20 percent). Most came for 1 to 3 nights (56 percent). Hotels and resort packages accounted for 55 percent of the lodging decisions while 15 percent stayed with family and friends. SECTUR reports that 36 percent came to visit beach resorts and 20 percent came to visit friends and family. Approximately 17 percent came for personal or corporate business.³⁰ While the survey was not targeted to US citizens, the statistics are heavily influenced by US visitors, who comprise almost 90 percent of the international visitors to Mexico (Canadians and visitors from five European countries comprise the remaining 10 percent).³¹ The results of the SECTUR survey are fairly consistent with the findings in the OTTI survey.

OTTI data for US travelers to Micronesia, which would be categorized as "Other Oceania," showed similar results as the Caribbean and Mexico, though

it showed that 100 percent of travelers to this region go for leisure or to visit family and friends and paid considerably more for airfare. The average cost per trip (\$5,084) is, not surprisingly, much higher than for Western Hemisphere trips and higher than the world average overall (\$4,170).³²

A profile of the typical US air traveler to Canada—almost one third of the US air-travel population affected—is not available from OTTI, but some data are available from Statistics Canada's report on international travel from 2003.³³ The report finds that 12 percent travel to Canada for business, 19 percent are visiting family and friends, and 60 percent are there on leisure.³⁴ These statistics are for all modes of travel and are heavily weighted by land-border entries. Most of these overnight travelers (again, all modes of travel) stay 2 to 6 nights in Canada (3.7 nights mean).³⁵ The average spending per person per visit is \$470, but as this is an average of both automobile trips and plane trips, it likely understates the cost of airfare.³⁶ As with the Caribbean and Mexico, the average traveler tends to be older—87 percent are over 24 years old.³⁷ The number of children traveling in the air environment to Canada is likely similar as that for the other regions in the Western Hemisphere.

The Canadian Tourism Commission (CTC) study on the impacts of WHTI on Canada's tourism industry provides a few generalizations, but does not provide details. The study predicted that the WHTI requirements would affect US visitors to Canada (land and air) more than Canadian visitors to the United States because more Canadians hold passports than Americans, and Americans spend less money per trip in Canada than Canadians do in America.³⁸

Finally, general aviation will be affected by the rule. There are very few data available on general aviation travelers, and we had to make many assumptions in this analysis to estimate direct costs. Based on data from Statistics Canada, approximately 193,000 US residents entered Canada by private plane in 2004 for a same-day trip. Approximately, 55,000 residents entered for overnight trips (1 night stay or more).³⁹ We assume that 75 percent of the same-day travelers are repeat visitors and 50 percent of the overnight visitors are repeats. Very limited data were available for travelers to Mexico and the Caribbean. CBP estimates that there were approximately 83,000 passenger arrivals into general aviation airports on the Southern Border in 2004 and many of these would be US citizens returning from Mexico, the Caribbean, and other points in the Southern Hemisphere.⁴⁰ For this analysis we assume that travelers to Mexico are 20 percent of the estimate for Canada—22,000 same-day visitors to Mexico; 11,000 overnight visitors. We assume that the annual number of visitors is constant for general aviation travelers.

No profile of general aviation visitors is available. Visitors are either day-trippers who are flying for pleasure or practice who land at Canadian or Mexican airports, eat a meal or refuel, then return to the United States, or

they are business people aboard corporate jets flying for meetings. In either case, there are only a few people in a travel party.

Finally, air travelers enrolled in the joint US and Canadian NEXUS Air program may continue to use their NEXUS documents where the program is supported (currently, only at the CBP pre-clearance station in Vancouver, British Columbia). There are approximately 6,500 Canadian and US citizens enrolled in the program, and an estimated 97 percent use their passports as their proof of citizenship and identification to enroll.⁴¹ Therefore, the inclusion of this relatively tiny number of participants in the NEXUS program does not appreciably change the population or cost estimates of the rule, and they are not analyzed further.

US Citizens that Do Not Hold Passports in the Air Environment

Determining the number of US citizens traveling by air who do not hold passports proved challenging. The few estimates available have serious shortcomings when applied to this analysis. As mentioned previously, this analysis drew primarily from three sources: 1) an estimate based on the State Department's current number of passports issued, 2) a State Department study conducted to estimate the annual demand for US passports as a result of WHTI, and 3) a Canadian Tourism Commission study conducted to determine the impacts of WHTI on Canada's tourism industry. The methodologies used for obtaining the estimates presented in these three sources are as follows.

The State Department estimates that approximately 65–70 million citizens hold passports, an estimated 25 percent of the population.⁴² This estimate may be low because it does not account for the continuing rise in passport holders that is partially attributable to the anticipation of the WHTI regulations and some confusion about whether or not passport requirements are already in effect.⁴³ Additionally, it does not account for the substantial portion of the US population that is not citizens. Once these factors are accounted for, we estimate that a little less than 30 percent of US citizens already hold a passport.

As noted previously, the State Department completed a study in 2005 to determine the demand for passports as a result of WHTI. This study used a combination of data from the Bureau of Transportation Statistics and US Citizenship and Immigration Service to determine the number of US citizen trips to Canada, Mexico, and the Caribbean. The estimate was adjusted using CBP's APIS data to determine unique individuals traveling. The study then applied the percent of leisure travelers who reported not having a passport on the Air Travelers Survey conducted by TNS-Plog. The State Department study estimated that 51.5 percent of US travelers to Canada, 56.2 percent to Mexico, and 73.2 percent to the Caribbean already hold a passport.⁴⁴ It should be noted that the primary objective of the study was to determine the

demand for passports at the Canadian and Mexican land borders, not in the air environment.

Finally, the Canadian Tourism Commission (CTC) commissioned a study in 2005 that estimates that 67 percent of US air travelers to Canada hold passports, 44 percent of same-day travelers hold passports, and 50 percent of overnight auto travelers hold passports.⁴⁵ The Conference Board of Canada, which conducted the study, undertook surveys of households in the United States and Canada and gleaned additional information from its April 2005 Travel Intentions Survey.⁴⁶ The researchers then used a custom-modeling tool (the Tourism Risk Impact Projection Model—TRIP), which was designed to “assess the impact of external and policy shocks on the tourism industry.”⁴⁷ The specific mechanics of the model are proprietary and were not described in the report. The 67 percent estimated for air travelers is higher than previous estimates, the researchers believe, because it accounts only for the population over 18 and that the percentage is derived from household surveys.

In addition to these three sources, there are additional estimates of passport possession that were either anecdotal or were not justified with supporting documentation. These estimates are important to note but because they are not as reliable as the estimates from the State Department and CTC, we do not use them in the analysis. A presentation prepared by WTTC estimates that for individual Caribbean countries the percentage of US visitors holding passports ranges from 100 percent to 20 percent depending on the Caribbean country considered.⁴⁸ Again, no detail or justification was provided for these estimates, and some of them seem suspect (for example, WTTC reports that 100 percent of US travelers to Bermuda hold a passport).

Groups such as the American Society of Travel Agents (ASTA) have long encouraged travelers to the Caribbean to have passports.⁴⁹ Limited data from Mexican Immigration in Cancun (SIOM) find that approximately 65 percent of air travelers present a US passport upon entry.⁵⁰ Notwithstanding this evidence from SIOM, there is no estimate for the percentage of US travelers to Mexico that hold passports besides the State Department’s passport demand study. We did not feel comfortable, however, applying this estimate to all US travelers to Mexico because it was for only one destination, not Mexico as a whole.

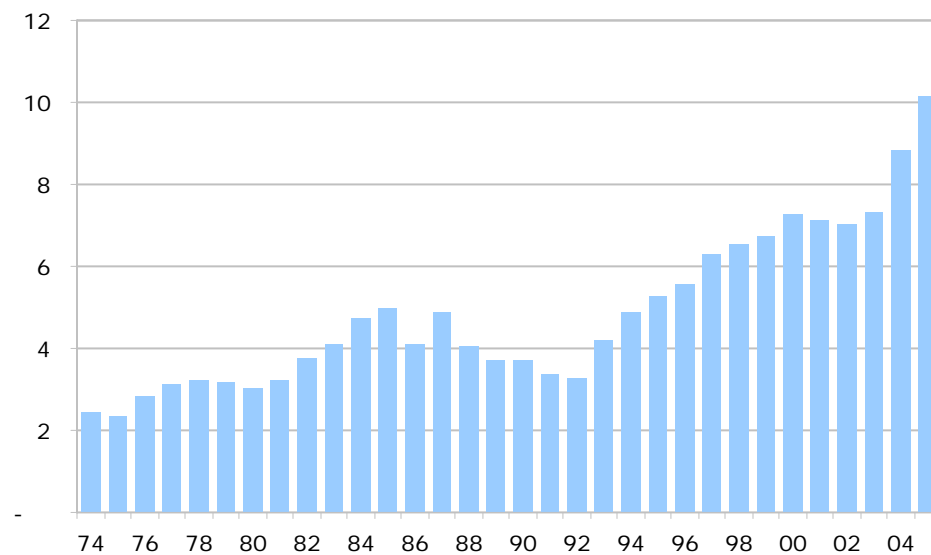
Because the number of US citizens that will require a passport as a result of this rule is a primary variable in our analysis, we asked for public comments that specifically addressed this estimate. We did not receive any additional estimates of passport prevalence in the air environment.

We present here the likely number of passports that will be obtained over the short term as a result of this rule, based on historical data and projections of passport demand. This is intended to be illustrative only, though it is based on the general findings of our analysis.

The number of US passports issued historically is presented in Exhibit 4 (next page). In 1983, the State Department extended the validity of a passport from 5 years to 10 years; thus, it appears as if demand dipped in the late 1980s, though it is largely an artifact of the change in the validity period. This also explains the large increase that occurred from 1992–93, as those passports issued in 1983 expired. Another large increase occurred from 2003–05.

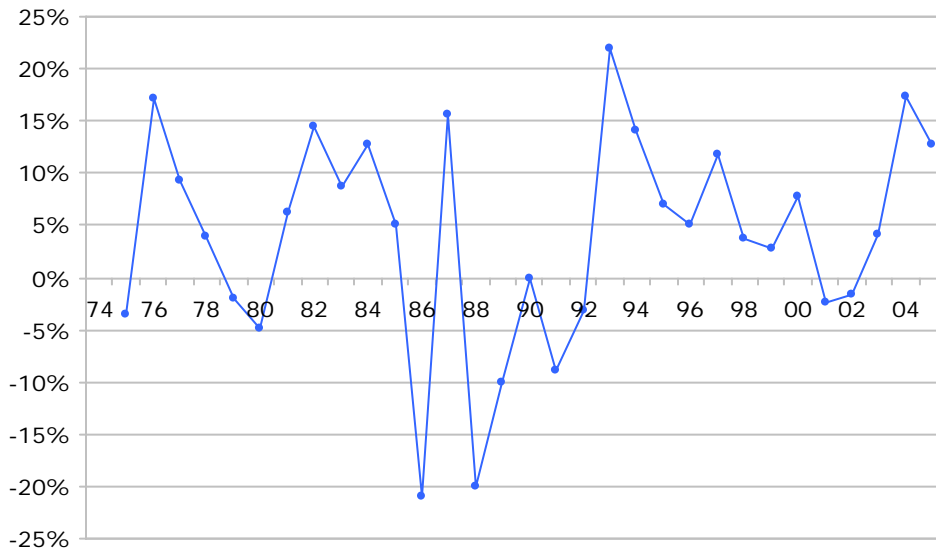
There was a small decrease following 9/11, which also coincided with a recession, though passport demand does not appear to have been diminished by SARS and the Iraq War in early 2003. The large increase in 2004 is not a result of the anticipation of the WHTI requirements; the legislation authorizing WHTI was signed in December 2004 and DHS and the State Department's regulatory plans were not announced until April 2005. Exhibit 5 (next page) illustrates the annual percent change in passports issued over the same time period. The changes fluctuate considerably, and there is not a discernable trend.

Exhibit 4. Number of Passports Issued Annually, 1974–2005 (in millions)



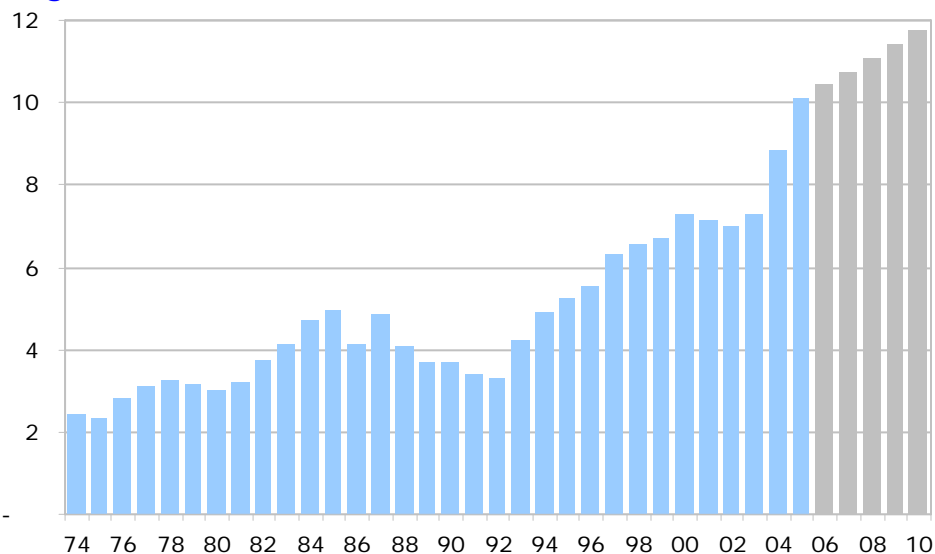
Source: US State Department. http://travel.state.gov/passport/services/stats/stats_890.html

Exhibit 5. Percent Change in Passports Issued Annually, 1974–2005



Based on data since 2002, it appears that there will be “natural” growth in passport demand over the next several years, even in the absence of the WHTI regulations. While annual increases may not be as steep as in 2004, both the State Department and the Department of Commerce believe that overseas travelers, and thus passports issued, will increase over the next several years.⁵¹ Other factors influencing the demand for passport services include increased naturalizations, a growing number of Americans renewing their passports (no longer a “once in a lifetime” document), and the use of passports for personal identification.⁵² Exhibit 6 presents one prediction of the “natural growth” of passports issued in the absence of the WHTI regulations. This is intended to be illustrative only.

Exhibit 6. Predicted Passports Issued Annually in the Absence of WHTI Regulations, 2006–2010 (in millions)



The State Department issued just over 10 million passports in 2005. Unlike 2004 issuances, 2005 was certainly influenced by the anticipated WHTI requirements, and people applied for passports in record numbers.⁵³ Regardless of whether or not the series of WHTI rules goes into effect as proposed, this large increase in 2005 has occurred. If it were not for WHTI, however, we would expect passports issued to continue to increase, but at a much lower rate (on the order of a few percent a year).

Short-Term Increase in Passports Required and Direct Costs

As noted previously, the percentage of US air travelers that currently hold passports and travel to the countries that currently do not have a passport requirement is not known with precision. Additionally, we do not know with any certainty how many travelers will forgo travel to the affected WHTI countries and, consequently, how much demand for passports will decrease as a result. This analysis presents three estimates for the four regions affected: worst case, best case, and most likely for Canada, Mexico, the Caribbean (including Panama and Bermuda), and Micronesia. The worst-case scenarios employ assumptions that we consider least favorable to the traveling public—few travelers already have passports, the costs to obtain passports are higher, and the effects on travel demand are pronounced. The best-case scenarios use assumptions considered most favorable to the traveling public—most travelers already have passports, the passport is less expensive, and the effects on travel demand are less pronounced. The direct costs of the most likely scenario are presented here; the worst-case and best-case scenarios are presented in the appendices.

The framework for the calculations for passports required and the cost for US air travelers is as follows.

- Calculate unique US travelers to the four regions (Canada, Mexico, the Caribbean, Micronesia).
- Apply the percentage of US travelers that are traveling for business versus leisure or visiting family and friends (VFF).
- Apply the percentage of US travelers that hold passports currently and subtract them from the population under consideration because they will not be affected by the rule.
- Apply a measure of likelihood that the remaining US travelers that do not hold passports will go ahead and obtain passports (which assumes that some fraction of US travelers will not obtain passports because of the expense or administrative process). The likelihood is based on the percentage increase in trip cost that a passport represents.

- Multiply the estimated number of passports demanded by the cost to obtain a passport.

In this analysis, we apply an *elasticity of travel demand* to the cost of a trip to determine how travelers are likely to respond given an increase in travel price. For each 1 percent change in price, the price elasticity would represent a corresponding change in quantity demanded. Travel price elasticities vary depending on the purpose of travel and the distance traveled. As described by the Canadian Department of Finance—

The demand for a particular good or service depends on a variety of factors. Key influences include the tastes of consumers, the levels of consumer income, the price and quality of the product in question and the prices of other goods, especially goods that are close substitutes. In order to obtain useful estimates of the price sensitivity of demand for a product, researchers must carefully control for all the factors affecting the demand.

As a general rule, when other influences on demand remain unchanged, a higher price for a product results in a lower quantity demanded. The own-price elasticity of demand...is defined as the percentage change in quantity demanded resulting from a given percentage change in price.⁵⁴

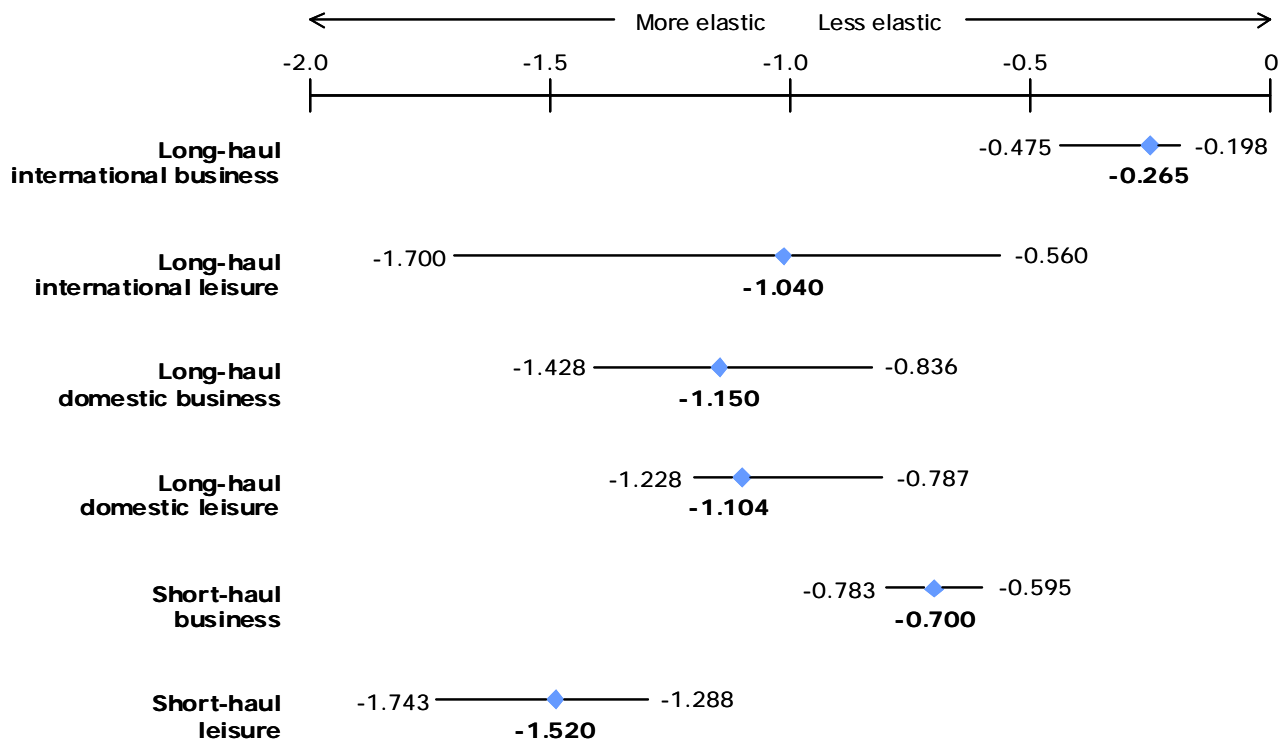
With respect to air travel, the authors note that—

The slope of a demand function, which affects the own-price elasticity of demand, is generally expected to decrease (become shallower) with: the number of available substitutes; the degree of competition in the market or industry; the ease with which consumers can search and compare prices; the homogeneity of the product; [and] the duration of the time period analyzed.⁵⁵

The Canadian Department of Finance conducted a comprehensive review of the travel-demand literature to characterize price elasticities for air travel based on type of traveler and length of haul.⁵⁶ Their findings are used here, with modifications, to estimate the decrease in travel demand as a result of the rule. While the Canadian study was not a meta-analysis of the data available from other studies, researchers presented standardized information on 21 Canadian and international empirical studies of own-price elasticities of demand for air travel. The authors “scored” the analyses to characterize the quality of the study. Studies that differentiated between business and leisure travel, were conducted relatively recently, and took account of income elasticity (where, generally, more travel is demanded the more income increases) were seen as higher quality than those studies that did not.

In Exhibit 7 we present own-price elasticities of demand (the median and first and third quartiles) as summarized by the Canadian Finance Department.

Exhibit 7. Own-Price Elasticities of Air Travel Demand (median, first quartile, and third quartile)



Source: Recreated from the Canada Department of Finance, *Air Travel Demand Elasticities: Concepts, Issues and Measurement*.

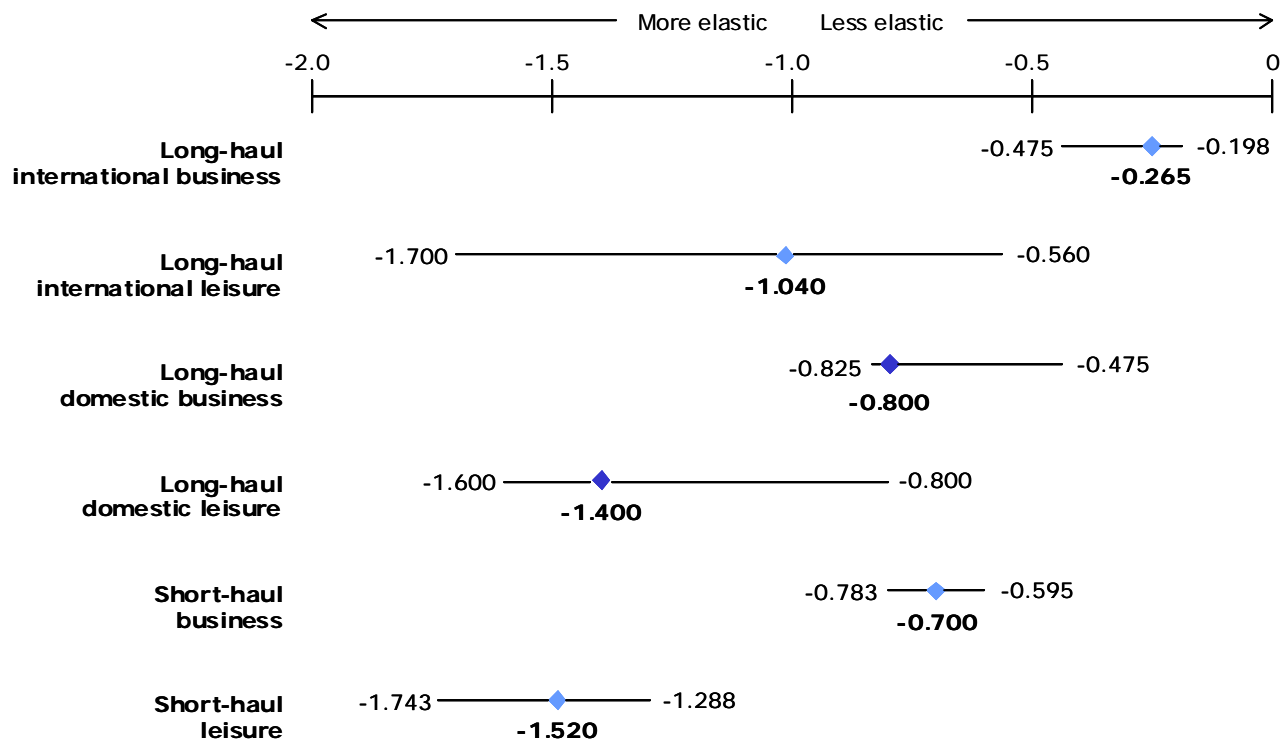
The authors note two caveats in their approach: 1) the median and ranges presented are sometimes based on a small number of estimates and studies, and 2) very few of the estimates use Canadian data to estimate own-price elasticities. For our purposes, the first is of some concern. The second caveat actually gives us confidence that we are not applying estimates of travel demand that are uniquely Canadian to US citizens traveling in the Western Hemisphere.

As shown, the Canadian study verifies what we intuitively sense is true—as price increases, air-travel demand decreases, though it decreases differently for different populations. Long-haul international business is the least elastic, most likely because there are fewer flight options for international travel and there are virtually no modal substitutes. In general, business travel tends to be less elastic than leisure travel because there are few substitutes for business travel (perhaps some email and video conferencing) but many substitutes for leisure travel. Additionally, business travelers may value their time more highly than leisure travelers and be willing to pay more for services.⁵⁷ The elasticities for long-haul international leisure travel show the most variance between the first and third quartiles, while long-haul international business and short-haul business show the least.

The Canadian Department of Finance researchers included travel in North America in the long-haul domestic market, not the international market. Travel from the United States to Canada and Mexico is thus considered long-haul domestic travel. It is not clear if the authors would include Caribbean travel as part of North American travel. For this analysis, we consider travel to the Caribbean long-haul international travel except in the best-case cost estimate, where we assume the elasticities for the long-haul domestic markets. It is also possible that for some air travel to Canada and Mexico, short-haul elasticities are more appropriate to use than long-haul domestic elasticities (for example, travel between Southern California and Mexico, Seattle and Vancouver, and Northeastern cities to Toronto and Montreal). We do not have the data to further explore this possibility. For general aviation, we use short-haul leisure elasticities.

Based on what we understand about traveler's choices and demand, it is surprising that the demand for long-haul domestic business is more elastic than long-haul domestic leisure, particularly given the broad difference between business and leisure elasticities in the international and short-haul markets. These anomalies are perhaps due to a small number of estimates for domestic leisure (six estimates from two studies). In a meta-analysis of price elasticities of demand for air travel, Dutch researchers found demand elasticities for business and leisure travel differ substantially, though the Dutch team came to essentially the same conclusions as the Canadian team—demand is less elastic for business travelers and elasticity decreases with the length of haul.⁵⁸ Like the Canadian study, the Dutch study also examined air travel worldwide and did not focus on Dutch or European travel specifically. Based on the distributions of business and leisure travel elasticities presented in this study and our belief that the demand for business travel is less elastic than leisure travel in the long-haul North American market, we use the elasticities for business and leisure travel presented in the Dutch study for long-haul domestic elasticities in the most likely estimate.⁵⁹ The best-case and worst-case estimates use the Canadian study exclusively. The modified elasticities are presented in Exhibit 8 (next page).

Exhibit 8. Own-Price Elasticities of Air Travel Demand, with Modified Estimates for Long-Haul Domestic Travel (median, first quartile, and third quartile)



Source: Recreated from the Canada Department of Finance, *Air Travel Demand Elasticities: Concepts, Issues and Measurement* and modified using data from Brons, et al., 2002.

Ideally, we would want to have elasticities that represent business travelers, leisure travelers, and those visiting family and friends (VFF). There is some evidence that VFF elasticities reside between business and leisure elasticities. The Canadian and Dutch studies do not make the distinction, nor do the OTTI data (where leisure and VFF travelers are lumped together). For this analysis, we also lump leisure and VFF travelers together with the understanding that VFF travelers' demand is likely less elastic than leisure travelers' but more elastic than business travelers'.

We calculate that a small portion of travelers will forgo travel based on the elasticity of demand for air travel. As we describe in a subsequent section on the demand for travel (beginning on page 2-53), the actual effect is more complex—there are many travel and non-travel substitutes that could still satisfy the consumer's preferences given his budget constraints, and the impacts to travel demand are uncertain. In the most likely cost estimate, we have assumed that the full cost of a passport would drive the traveler's decision to obtain a passport and continue traveling in the Western Hemisphere. In fact, consumers may mentally "amortize" the cost of a

passport over the life of its validity or over the number of trips they plan to take over the next 10 years (the period of validity for an adult passport). We did not amortize the cost of the passport over the number of trips because our extensive research did not provide the data to calculate such an amortization. We thus amortize the cost over the 10-year validity of the passport. If the consumer amortizes the cost over the validity period, the effect on per-trip demand would be much less; however, this should not lead to an appreciable overestimation of the impact of this rule. First, the number of unique trips is adjusted downward by 8 percent to account for multiple trips within the first year. In addition, if we adjusted downward the change in passport cost for amortization, we would then have to adjust upward the number of trips across which the passport cost is amortized. The impact of this adjustment is unknown. In the best-case estimate, we present the results using an amortized cost of a passport over 10 years.

A summary of the assumptions used in this analysis is presented in Exhibit 9 (next page). As shown, an estimated 14.2 million US air travelers will be affected by the rule in the first year the rule is in effect—4.4 million to Canada, 5.3 million to Mexico, 4.5 million to the Caribbean, 9,000 to Micronesia, and 66,000 in general aviation. These figures are used for all estimates (most likely, worst case, best case).

We use a cost of \$149 for a first-time, adult passport for the most likely scenario. This assumes a \$97 fee, \$11 for photos, and 1 hour and 25 minutes of time to complete an application at a cost of \$28.60 an hour (\$41 total).⁶⁰ We use a cost of \$134 for a minor passport (\$82 fee, \$11 for photos, \$41 time cost).⁶¹ As the OTTI data show, most travelers to the Western Hemisphere countries affected (upwards of 90 percent) are adults; thus, the costs are driven by adult passport applications.⁶² For the best-case cost scenario, we use an amortized cost of \$21 per year for an adult and \$33 for a minor to estimate the effect on travel demand.⁶³ For the worst-case scenario, we assume that passports will require 3 hours of time to obtain (roughly double that of the estimate used in the most likely scenario) to explore a more burdensome administrative process. This results in a total cost of \$194 per adult passport (\$179 per minor passport). Finally, for each scenario, we assume a certain percentage of applications will require expedited service (at a cost of \$60 per application). This calculation is performed after all other calculations have been made (see Exhibit 16, page 2-43), which assumes that requiring expedited service does not affect demand.

Exhibit 9. Overview of Assumptions Used to Determine the Passport Costs for US Air Travelers

	Assumption	Source	Comment	
Canada				
	Number of US air passengers, first year	4,390,846	Statistics Canada	Assumes 5% annual increase in arrivals beginning in 2005, adjusted downward by 8% to account for travelers taking multiple trips
Most likely estimate	Cost to obtain an adult passport is \$149, minor passport is \$134	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$41 worth of personal time to complete forms; minor: \$82 fee, \$11 for photos, \$41 worth of personal time	
	20% are business travelers, 80% are leisure/VFF travelers	Derived from OTTI data based on proportions from affected Caribbean countries and Mexico	Absent any other information on the proportion of business versus leisure travelers to Canada, the overall proportion for the Western Hemisphere countries seems most likely	
	90% of travelers are adults, 10% are minors	OTTI	Average for Caribbean, Central America, and Mexico used	
	23% of business travelers do not hold a passport, 33% of leisure/VFF travelers do not hold a passport	CTC study of WHTI impacts	CTC study is most current and reliable study to examine passport holders on the Northern Border; study does not differentiate by leisure and business travelers but notes that business travelers are “slightly more” likely to hold passports than other travelers; we adjust the percentage of business travelers holding a passport downward by 10% to account for these passengers	
	Cost per business trip is \$1,557	OTTI	The cost per business trip to Canada is almost certainly below the international average reported by OTTI; we use the mean business trip expenditure for Mexico	
	Reduced demand for a business traveler is 7.6% (median)	Free Amsterdam University study on air travel demand elasticities	Demand elasticity for business travelers used (-0.800)	
	Cost per leisure/VFF trip is \$1,246	OTTI	The cost per leisure trip to Canada is almost certainly below the international average reported by OTTI; we use the mean leisure trip expenditure for Mexico	

	Assumption	Source	Comment
	Reduced demand for a leisure traveler is 16.7% (adult, median) and 15.0% (minor, median)	Free Amsterdam University study on air travel demand elasticities	Demand elasticity for leisure travelers used (-1.400)
	20% of applicants will require expedited service at a fee of \$60	State Department	Based on estimate from the current supporting statement for Paperwork Reduction Act submission "Application for a US Passport," OMB Control Number 1405-0004 (DS-11)
<i>Worst-case estimate</i>	Cost to obtain an adult passport is \$194, minor passport is \$179	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$86 worth of personal time to complete forms; minor: \$82 fee, \$11 for photos, \$86 worth of personal time
	10% are business travelers, 90% are leisure/VFF travelers	CTC study of WHTI impacts	Estimate for business travelers to a major contiguous trading partner seems low; percentage likely heavily influenced by land-border travel
	90% of travelers are adults, 10% are minors	OTTI	Average for Caribbean, Central America, and Mexico used
	70% of all air travelers do not hold a passport	Derived from State Department passport statistics	Percent is for US population as a whole; air travelers to Canada would be more likely to hold a passport than the general population
	Cost per business trip is \$1,348	OTTI	OTTI estimate of mean expenditure outside the US for Caribbean travelers; while Canada and Caribbean are very different destinations, the mean expenditure is heavily influenced by airfare and airfare from the US to Canada is more similar to Caribbean airfares than other international destinations overseas
	Reduced demand for a business traveler is 16.5% (median)	Canadian Department of Finance study on air travel demand elasticities	Demand elasticity for long-haul domestic business used (-1.150)
	Cost per leisure/VFF trip is \$1,246	OTTI	OTTI mean estimate of leisure trip expenditure for Mexico

	Assumption	Source	Comment
<i>Best-case estimate</i>	Reduced demand for a leisure traveler is 15.9% (adult, median) and 14.6% (minor, median)	Canadian Department of Finance study	Demand elasticity for long-haul domestic leisure used (-1.104)
	30% of applicants will require expedited service at a fee of \$60	State Department	Assumes more applicants will require expedited service than the current average
	Amortized cost to obtain an adult passport is \$21, cost to obtain a minor passport is \$33	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$41 worth of personal time to complete forms, total cost of \$149 is amortized over 10 years (period of validity for adult passport) at 7%; minor: \$82 fee, \$11 for photos, \$41 worth of personal time total cost of \$134 is amortized over 5 years (period of validity for minor passport) at 7%
	20% are business travelers, 80% are leisure/VFF travelers	Derived from OTTI data based on proportions from affected Caribbean countries and Mexico	Overall proportion from Western Hemisphere countries
	90% of travelers are adults, 10% are minors	OTTI	Average for Caribbean, Central America, and Mexico used
	17% of business travelers do not hold a passport, 27% of leisure/VFF travelers do not hold a passport	State Department study of passport demand	Percentage for Caribbean used, though this is likely optimistic for travelers to Canada; we adjust the percentage of business travelers holding a passport downward by 10% because these travelers are more likely to hold a passport
	Cost per business trip is \$4,170	OTTI	Mean international business trip expense; cost is heavily influenced by overseas airfare and would greatly overstate airfare to Canada
	Reduced demand for a business traveler is 0.6% (median)	Canadian Department of Finance study	Demand elasticity for long-haul domestic business used (-1.150)
	Cost per leisure/VFF trip is \$2,529	OTTI	Mean international leisure trip expense; cost is heavily influenced by overseas airfare and would greatly overstate airfare to Canada

	Assumption	Source	Comment
	Reduced demand for a leisure traveler is 0.9% (adult, median) and 1.4% (minor, median)	Canadian Department of Finance study	Demand elasticity for long-haul domestic leisure used (-1.104)
	10% of applicants will require expedited service at a fee of \$60	State Department	Assumes fewer applicants will require expedited service than the current average
Mexico			
Number of US air passengers, first year	5,298,249	OTTI	Assumes 5% annual increase in arrivals beginning in 2005, adjusted downward by 8% to account for travelers taking multiple trips
<i>Most likely estimate</i>	Cost to obtain an adult passport is \$149, minor passport is \$134	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$41 worth of personal time to complete forms; minor: \$82 fee, \$11 for photos, \$41 worth of personal time
	20% are business travelers, 80% are leisure/VFF travelers	OTTI	OTTI estimate for US travelers to Mexico
	90% of travelers are adults, 10% are minors	OTTI	OTTI estimate for US travelers to Mexico
	34% of business travelers do not hold a passport, 44% of leisure/VFF travelers do not hold a passport	State Department study of passport demand	Absent any other studies of the percentages of US air travelers to Mexico holding passports, we use the State Department study; proportion was reported for leisure travelers only, and we adjust the percentage of business travelers not holding passports downward by 10% to account for the higher likelihood that these travelers already hold passports
	Cost per business trip is \$1,557	OTTI, adjusted to account for business travelers	OTTI mean estimate of business trip expenditure for Mexico
	Reduced demand for a business traveler is 7.6% (median)	Free Amsterdam University study	Demand elasticity for business travelers used (-0.800)

	Assumption	Source	Comment
	Cost per leisure/VFF trip is \$1,246	OTTI	OTTI mean estimate of leisure trip expenditure for Mexico
	Reduced demand for a leisure traveler is 16.7% (adult, median) and 15.0% (minor, median)	Free Amsterdam University study	Demand elasticity for leisure travelers used (-1.400)
	20% of applicants will require expedited service at a fee of \$60	State Department	Based on estimate from the current supporting statement for Paperwork Reduction Act submission "Application for a US Passport," OMB Control Number 1405-0004 (DS-11)
<i>Worst-case estimate</i>	Cost to obtain an adult passport is \$194, minor passport is \$179	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$86 worth of personal time to complete forms; minor: \$82 fee, \$11 for photos, \$86 worth of personal time
	17% are business travelers, 83% are leisure/VFF travelers	SECTUR study of traveler satisfaction	Estimate for business travelers to a major contiguous trading partner seems low, though many Mexican business trips may be conducted via land-border crossings versus air business trips
	90% of travelers are adults, 10% are minors	OTTI	OTTI estimate for US travelers to Mexico
	70% of all air travelers do not hold a passport	Derived from State Department passport statistics	Percent is for US population as a whole; air travelers to Mexico would be more likely to hold a passport than the general population
	Cost per business trip is \$1,557	OTTI	Mean estimate of business trip expenditure for Mexico
	Reduced demand for a business traveler is 14.3% (median)	Canadian Department of Finance study	Demand elasticity for long-haul domestic business used (-1.150)
	Cost per leisure/VFF trip is \$1,246	OTTI	OTTI mean estimate of leisure trip expenditure for Mexico
	Reduced demand for a leisure traveler is 15.9% (adult, median) and 14.6% (minor, median)	Canadian Department of Finance study	Demand elasticity for long-haul domestic leisure used (-1.104)

	Assumption	Source	Comment
	30% of applicants will require expedited service at a fee of \$60	State Department	Assumes more applicants will require expedited service than the current average
<i>Best-case estimate</i>	Amortized cost to obtain an adult passport is \$21, cost to obtain a minor passport is \$33	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$41 worth of personal time to complete forms, total cost of \$149 is amortized over 10 years (period of validity for adult passport) at 7%; minor: \$82 fee, \$11 for photos, \$41 worth of personal time total cost of \$134 is amortized over 5 years (period of validity for minor passport) at 7%
	20% are business travelers, 80% are leisure/VFF travelers	OTTI	OTTI estimate for US travelers to Mexico
	90% of travelers are adults, 10% are minors	OTTI	OTTI estimate for US travelers to Mexico
	17% of business travelers do not hold a passport, 27% of leisure/VFF travelers do not hold a passport	State Department study of passport demand	Percentage for Caribbean used, though this is likely optimistic for travelers to Mexico; weadjust the percentage of business travelers holding a passport downward by 10% to account for these passengers; assumes US travelers to Mexico mirror travelers to Canada
	Cost per business trip is \$4,170	OTTI	Mean international business trip expense; cost is heavily influenced by overseas airfare and would greatly overstate airfare to Mexico
	Reduced demand for a business traveler is 0.6% (median)	Canadian Department of Finance study	Demand elasticity for long-haul domestic business used (-1.150)
	Cost per leisure/VFF trip is \$2,529	OTTI	Mean international leisure trip expense; cost is heavily influenced by overseas airfare and would greatly overstate airfare to Mexico
	Reduced demand for a leisure traveler is 0.9% (adult, median) and 1.4% (minor, median)	Canadian Department of Finance study	Demand elasticity for long-haul domestic leisure used (-1.104)
	10% of applicants will require expedited service at a fee of \$60	State Department	Assumes fewer applicants will require expedited service than the current average

Assumption		Source	Comment
Caribbean			
Number of US air passengers, first year	4,525,035	OTTI	Assumes 5% annual increase in arrivals beginning in 2005, adjusted downward by 8% to account for travelers taking multiple trips
<i>Most likely estimate</i>	Cost to obtain an adult passport is \$149, minor passport is \$134	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$41 worth of personal time to complete forms; minor: \$82 fee, \$11 for photos, \$41 worth of personal time
	16% are business travelers, 84% are leisure/VFF travelers	Derived from OTTI data based on proportions from affected Caribbean countries	Overall proportion for all affected Caribbean countries presented here; proportions were considered for each country individually in the analysis
	90% of travelers are adults, 10% are minors	OTTI	Average for Caribbean and Central America used
	17% of business travelers do not hold a passport, 27% of leisure/VFF travelers do not hold a passport	State Department study of passport demand	Proportion was reported for leisure travelers only; we adjust the percentage of business travelers not holding passports downward by 10% to account for the higher likelihood that these travelers already hold passports
	Cost per business trip is \$1,961	OTTI, adjusted to account for business travelers	The cost per business trip to the Caribbean is almost certainly below the international average reported by OTTI, but it is also likely higher than the average trip to the region; we adjust the OTTI estimate of mean expenditure outside the US for Caribbean travelers upward by \$500 to account for higher airfare and higher-end accommodations and dining
	Reduced demand for a business traveler is 2.0% (median)	Canadian Department of Finance study	Demand elasticity for long-haul international business used (-0.265)
	Cost per leisure/VFF trip is \$1,461	OTTI	OTTI estimate of mean expenditure outside the US for Caribbean travelers
	Reduced demand for a leisure traveler is 10.6% (adult, median) and 9.5% (minor, median)	Canadian Department of Finance study	Demand elasticity for long-haul international leisure used (-1.040)

	Assumption	Source	Comment
	20% of applicants will require expedited service at a fee of \$60	State Department	Based on estimate from the current supporting statement for Paperwork Reduction Act submission "Application for a US Passport," OMB Control Number 1405-0004 (DS-11)
<i>Worst-case estimate</i>	Cost to obtain an adult passport is \$194, minor passport is \$179	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$86 worth of personal time to complete forms; minor: \$82 fee, \$11 for photos, \$86 worth of personal time
	16% are business travelers, 84% are leisure/VFF travelers	OTTI	Overall proportion for all affected Caribbean countries presented here; proportions were considered for each country individually in the analysis
	90% of travelers are adults, 10% are minors	OTTI	Average for Caribbean and Central America used
	70% of all air travelers do not hold a passport	Derived from State Department passport statistics	Percent is for US population as a whole; air travelers to Caribbean would be more likely to hold a passport than the general population, particularly since many Caribbean nations already require a passport for entry
	Cost per business trip is \$1,461	OTTI	OTTI estimate of mean expenditure outside the US for Caribbean travelers
	Reduced demand for a business traveler is 3.5% (median)	Canadian Department of Finance study	Demand elasticity for long-haul international business used (-0.265)
	Cost per leisure/VFF trip is \$1,461	OTTI	OTTI estimate of mean expenditure outside the US for Caribbean travelers
	Reduced demand for a leisure traveler is 13.8% (adult, median) and 12.7% (minor, median)	Canadian Department of Finance study	Demand elasticity for long-haul international leisure used (-1.040)
	30% of applicants will require expedited service at a fee of \$60	State Department	Assumes more applicants will require expedited service than the current average

	Assumption	Source	Comment
<i>Best-case estimate</i>	Amortized cost to obtain an adult passport is \$21, cost to obtain a minor passport is \$33	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$41 worth of personal time to complete forms, total cost of \$149 is amortized over 10 years (period of validity for adult passport) at 7%; minor: \$82 fee, \$11 for photos, \$41 worth of personal time total cost of \$134 is amortized over 5 years (period of validity for minor passport) at 7%
	16% are business travelers, 84% are leisure/VFF travelers	Derived from OTTI data based on proportions from affected Caribbean WHTI countries	Overall proportion for all affected Caribbean countries presented here; proportions were considered for each country individually in analysis
	90% of travelers are adults, 10% are minors	OTTI	Average for Caribbean and Central America used
	17% of business travelers do not hold a passport, 27% of leisure/VFF travelers do not hold a passport	State Department study of passport demand	Proportion was reported for leisure travelers only; we adjust the percentage of business travelers not holding passports downward by 10% to account for the higher likelihood that these travelers already hold passports
	Cost per business trip is \$4,170	OTTI	Mean international business trip expense; cost is heavily influenced by overseas airfare and would greatly overstate airfare to the Caribbean
	Reduced demand for a business traveler is 0.6% (median)	Canadian Department of Finance study	Demand elasticity for long-haul domestic business used (-1.150)
	Cost per leisure/VFF trip is \$2,529	OTTI	Mean international leisure trip expense; cost is heavily influenced by overseas airfare and would greatly overstate airfare to the Caribbean
	Reduced demand for a leisure traveler is 0.9% (adult, median) and 1.4% (minor, median)	Canadian Department of Finance study	Demand elasticity for long-haul domestic leisure used (-1.104)
	10% of applicants will require expedited service at a fee of \$60	State Department	Assumes fewer applicants will require expedited service than the current average

	Assumption	Source	Comment
Micronesia			
	Number of US air passengers, first year	19,027 OTTI	Assumes 5% annual increase in arrivals beginning in 2005; we do not adjust estimates downward to account for repeat travelers because the likelihood that there are any repeat travelers to this region on an annual basis is small
<i>Most likely estimate</i>	Cost to obtain an adult passport is \$149, minor passport is \$134	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$41 worth of personal time to complete forms; minor: \$82 fee, \$11 for photos, \$41 worth of personal time
	0% are business travelers, 100% are leisure/VFF travelers	OTTI	Percentage estimated for "Other Oceania"
	90% of travelers are adults, 10% are minors	OTTI	Average for Caribbean, Central America, and Mexico used
	5% of leisure/VFF travelers do not hold a passport	Assumed	While the likelihood of traveling to the South Pacific without a passport is low, we account for a small percentage of travelers that may not already have a passport
	Cost per leisure/VFF trip is \$5,084	OTTI	Mean expenditure outside US for Other Oceania
	Reduced demand for a leisure traveler is 3.0% (adult, median) and 2.7% (minor, median)	Canadian Department of Finance study	Demand elasticity for long-haul international leisure used (-1.040)
	20% of applicants will require expedited service at a fee of \$60	State Department	Based on estimate from the current supporting statement for Paperwork Reduction Act submission "Application for a US Passport," OMB Control Number 1405-0004 (DS-11)
<i>Worst-case estimate</i>	Cost to obtain an adult passport is \$194, minor passport is \$179	State Department, FAA Economic Values report	Adult: \$97 fee, \$11 for photos, \$86 worth of personal time to complete forms; minor: \$82 fee, \$11 for photos, \$86 worth of personal time
	0% are business travelers, 100% are leisure/VFF travelers	OTTI	Percentage estimated for "Other Oceania"

	Assumption	Source	Comment
	90% of travelers are adults, 10% are minors	OTTI	Average for Caribbean, Central America, and Mexico used
	70% of all air travelers do not hold a passport	Derived from State Department passport statistics	Percent is for US population as a whole; air travelers to the South Pacific would be more likely to hold a passport than the general population
	Cost per leisure/VFF trip is \$5,084	OTTI	Mean expenditure outside US for Other Oceania; cost is higher than mean expenditure outside US overall
	Reduced demand for a leisure traveler is 4.0% (adult, median) and 3.7% (minor, median)	Canadian Department of Finance study	Demand elasticity for long-haul international leisure used (-1.040)
	30% of applicants will require expedited service at a fee of \$60	State Department	Assumes more applicants will require expedited service than the current average
<i>Best-case estimate</i>	All travelers to Micronesia already hold a passport	Assumed	Assumes travelers to the South Pacific are likely to already hold passports; scenario is a no-cost option for Micronesia

General Aviation

Number of travelers, first year	65,937	Statistics Canada, assumptions for Mexico	Assumes that general aviation travelers for Mexico are half that of Canada; we adjust raw estimates of same-day travelers by 75% to account for repeat travelers; we adjust overnight travelers by 50% to account for repeat travelers; no growth rate applied
<i>Most likely estimate</i>	Cost to obtain an adult passport is \$149	State Department, FAA Economic Values report	Assumes all travelers are adults; \$97 fee, \$11 for photos, \$41 worth of personal time to complete forms
	66% of same-day travelers do not hold a passport, 50% of overnight travelers do not hold a passport	CTC study of WHTI impacts	For same-day general aviation travelers we use the percentage reported for same-day auto travelers; for overnight general aviation travelers we use the percentage reported for overnight auto travelers
	Cost per year for same-day trips is \$1,000	Assumed	Estimated cost per year spent on day trips to Canada and Mexico; intended to capture the cost of fees, food, fuel, and maintenance

	Assumption	Source	Comment
	Reduced demand for a same-day trips is 22.6% (median)	Canadian Department of Finance study	Demand elasticity for short-haul leisure used (-1.520)
	Cost per year for overnight trips is \$3,000	Assumed	Estimated cost per year spent on overnight trips to Canada and Mexico; intended to capture the cost of fees, food, fuel, maintenance, accommodations, and transportation
	Reduced demand for overnight trips is 7.5% (median)	Canadian Department of Finance study	Demand elasticity for short-haul leisure used (-1.520)
	20% of applicants will require expedited service at a fee of \$60	State Department	Based on estimate from the current supporting statement for Paperwork Reduction Act submission "Application for a US Passport," OMB Control Number 1405-0004 (DS-11)
<i>Worst-case estimate</i>	Cost to obtain an adult passport is \$194	State Department, FAA Economic Values report	Assumes all travelers are adults; \$97 fee, \$11 for photos, \$86 worth of personal time to complete forms
	66% of same-day travelers do not hold a passport, 50% of overnight travelers do not hold a passport	CTC study of WHTI impacts	Percentages reported for same-day auto and overnight auto travelers, respectively
	Cost per year for same-day trips is \$2,000	Assumed	Estimated cost per year spent on day trips to Canada and Mexico; intended to capture the cost of fees, food, fuel, and maintenance
	Reduced demand for a same-day trips is 14.7% (median)	Canadian Department of Finance study	Demand elasticity for short-haul leisure used (-1.520)
	Cost per year for overnight trips is \$5,000	Assumed	Estimated cost per year spent on overnight trips to Canada and Mexico; intended to capture the cost of fees, food, fuel, maintenance, accommodations, and transportation
	Reduced demand for overnight trips is 5.9% (median)	Canadian Department of Finance study	Demand elasticity for short-haul leisure used (-1.520)
	30% of applicants will require expedited service at a fee of \$60	State Department	Assumes more applicants will require expedited service than the current average

	Assumption	Source	Comment
<i>Best-case estimate</i>	Amortized cost to obtain an adult passport is \$21	State Department, FAA Economic Values report	Assumes all travelers are adults; \$97 fee, \$11 for photos, \$41 worth of personal time to complete forms, total cost of \$149 is amortized over 10 years (period of validity for adult passport) at 7%
	66% of same-day travelers do not hold a passport, 50% of overnight travelers do not hold a passport	CTC study of WHTI impacts	Percentages reported for same-day auto and overnight auto travelers, respectively
	Cost per year for same-day trips is \$500	Assumed	Estimated cost per year spent on day trips to Canada and Mexico; intended to capture the cost of fees, food, fuel, and maintenance
	Reduced demand for a same-day trips is 6.4% (median)	Canadian Department of Finance study	Demand elasticity for short-haul leisure used (-1.520)
	Cost per year for overnight trips is \$1,000	Assumed	Estimated cost per year spent on overnight trips to Canada and Mexico; intended to capture the cost of fees, food, fuel, maintenance, accommodations, and transportation
	Reduced demand for overnight trips is 3.2% (median)	Canadian Department of Finance study	Demand elasticity for short-haul leisure used (-1.520)
	10% of applicants will require expedited service at a fee of \$60	State Department	Assumes fewer applicants will require expedited service than the current average

A more comprehensive discussion of travel demand, elasticities, and caveats is presented in a subsequent section (see page 2-53). The costs for US citizens to obtain passports for travel to the four regions are described below. Further details on the calculations can be found in the appendices.

US Air Travelers to Canada

Details for the most likely cost estimate for US air travelers to Canada are presented in Exhibit 10 (using the median, first, and third quartiles for elasticity). As shown, costs for passports demanded are an estimated \$170 million in the first year the rule is in effect. Using these assumptions, approximately 206,000 travelers may forgo travel as a result of the passport requirement for air travel in the Western Hemisphere. Costs range from \$166 million to \$183 million. Note that the first and third quartiles are the application of the elasticities presented in the Dutch elasticity study, not our own statistical treatment.

Exhibit 10. Passport Costs for US Air Travelers to Canada as a Result of the Rule, First Year Rule in Effect

Travelers to Canada	4,390,846		
	Business	Leisure	
Percentage	20%	80%	
Travelers	878,169	3,512,677	
Percentage without passports	23%	33%	
Travelers	201,979	1,159,183	
Business travel	1st quartile	Median	3rd quartile
Elasticity	-0.825	-0.800	-0.475
Reduced demand	-7.87%	-7.63%	-4.53%
Reduced travelers	-15,894	-15,413	-9,151
Net passports demanded	186,084	186,566	192,828
Cost of passports demanded	\$27,636,638	\$27,708,171	\$28,638,103
Leisure/VFF travel			
Elasticity	-1.600	-1.400	-0.800
Reduced demand adults	-19.07%	-16.69%	-9.54%
Reduced demand minors	-17.14%	-15.00%	-8.57%
Reduced travelers	-218,279	-190,994	-109,139
Net passports demanded	940,905	968,189	1,050,044
Cost of passports demanded	\$137,939,182	\$141,944,856	\$153,961,877
Total reduced travelers	-234,173	-206,407	-118,290
Total passports demanded	1,126,989	1,154,755	1,242,871
Total cost of passports demanded	\$165,575,820	\$169,653,027	\$182,599,980

US Air Travelers to Mexico

Details for the most likely cost estimate for US air travelers to Mexico are presented in Exhibit 11. Costs for passports demanded are an estimated \$276 million the first year the rule is in effect. Using these assumptions, an estimated 333,000 travelers may forgo travel as a result of rule. Costs range from \$270 million to \$297 million.

Exhibit 11. Passport Costs for US Air Travelers to Mexico as a Result of the Rule, First Year Rule in Effect

Travelers to Mexico	5,298,249		
	Business	Leisure	
Percentage	20%	80%	
Travelers	1,059,650	4,238,599	
Percentage without passports	34%	44%	
Travelers	358,162	1,856,506	
Business travel	1st quartile	Median	3rd quartile
Elasticity	-0.825	-0.800	-0.475
Reduced demand	-7.87%	-7.63%	-4.53%
Reduced travelers	-28,185	-27,331	-16,228
Net passports demanded	329,977	330,831	341,934
Cost of passports demanded	\$49,007,013	\$49,133,860	\$50,782,873
Leisure/VFF travel			
Elasticity	-1.600	-1.400	-0.800
Reduced demand adults	-19.07%	-16.69%	-9.54%
Reduced demand minors	-17.14%	-15.00%	-8.57%
Reduced travelers	-349,587	-305,889	-174,794
Net passports demanded	1,506,919	1,550,617	1,681,713
Cost of passports demanded	\$220,918,442	\$227,333,786	\$246,579,816
Total reduced travelers	-377,773	-333,220	-191,021
Total passports demanded	1,836,895	1,881,448	2,023,647
Total cost of passports demanded	\$269,925,455	\$276,467,646	\$297,362,689

US Air Travelers to the Caribbean

The most likely cost estimate for US air travelers to the Caribbean are presented in Exhibit 12 (next page). Costs for passports demanded are an estimated \$149 million the first year the rule is in effect. Using these assumptions, an estimated 107,000 travelers may forgo travel as a result of rule. Costs range from \$139 million to \$156 million.

Exhibit 12. Passport Costs for US Air Travelers to the Caribbean as a Result of the Rule, First Year Rule in Effect

Travelers to the Caribbean (overall)	4,525,035	
Dominican Republic	1,247,188	
Jamaica	950,323	
Bahamas	893,919	
Aruba	320,756	
Netherlands Antilles	308,509	
Panama	253,321	
Bermuda	225,090	
British Virgin Islands	82,791	
Antigua & Barbuda	82,088	
St Kitts-Nevis	58,151	
Grenada	22,390	
Dominica	13,960	
St Vincent & Grenadines	1,970	
	Business	Leisure
Percentage (overall)	16%	84%
Dominican Republic	16%	84%
Jamaica	12%	88%
Bahamas	25%	75%
Aruba	8%	92%
Netherlands Antilles	10%	90%
Panama	27%	73%
Bermuda	13%	87%
British Virgin Islands	15%	85%
Antigua & Barbuda	23%	77%
St Kitts-Nevis	15%	85%
Grenada	15%	85%
Dominica	15%	85%
St Vincent & Grenadines	15%	85%
Travelers (overall)	746,695	3,778,340
Dominican Republic	199,550	1,047,638
Jamaica	114,039	836,284
Bahamas	223,480	670,439
Aruba	25,660	295,096
Netherlands Antilles	30,851	277,659
Panama	68,397	184,925
Bermuda	29,262	195,829
British Virgin Islands	12,419	70,373
Antigua & Barbuda	18,880	63,208
St Kitts-Nevis	8,723	49,428
Grenada	3,358	19,031
Dominica	2,094	11,866
St Vincent & Grenadines	295	1,674

	Business	Leisure
Percentage without passports (overall)	17%	27%
Dominican Republic	17%	27%
Jamaica	17%	27%
Bahamas	17%	27%
Aruba	17%	27%
Netherlands Antilles	17%	27%
Panama	17%	27%
Bermuda	17%	27%
British Virgin Islands	17%	27%
Antigua & Barbuda	17%	27%
St Kitts-Nevis	17%	27%
Grenada	17%	27%
Dominica	17%	27%
St Vincent & Grenadines	17%	27%
Travelers without passports (overall)	123,817	997,884
Dominican Republic	33,524	280,767
Jamaica	19,159	224,124
Bahamas	37,545	179,678
Aruba	4,311	79,086
Netherlands Antilles	5,183	74,412
Panama	11,491	49,560
Bermuda	4,916	52,482
British Virgin Islands	2,086	18,860
Antigua & Barbuda	3,172	16,940
St Kitts-Nevis	1,465	13,247
Grenada	564	5,100
Dominica	352	3,180
St Vincent & Grenadines	50	449

Business travel	1st quartile	Median	3rd quartile
Elasticity	-0.475	-0.265	-0.198
Reduced demand	-3.60%	-2.01%	-1.50%
Reduced travelers (overall)	-4,454	-2,485	-1,857
Dominican Republic	-1,206	-673	-503
Jamaica	-689	-385	-287
Bahamas	-1,351	-754	-563
Aruba	-155	-87	-65
Netherlands Antilles	-186	-104	-78
Panama	-413	-231	-172
Bermuda	-177	-99	-74
British Virgin Islands	-75	-42	-31
Antigua & Barbuda	-114	-64	-48
St Kitts-Nevis	-53	-29	-22
Grenada	-20	-11	-8
Dominica	-13	-7	-5
St Vincent & Grenadines	-2	-1	-1
Net passports demanded	119,363	121,332	121,961
Cost of passports demanded	\$17,727,414	\$18,019,879	\$18,113,189
Leisure/VFF travel			
Elasticity	-1.700	-1.040	-0.560
Reduced demand adults	-17.28%	-10.57%	-5.69%
Reduced demand minors	-15.54%	-9.50%	-5.12%
Reduced travelers (overall)	-170,360	-104,220	-56,119
Dominican Republic	-47,937	-29,326	-15,791
Jamaica	-38,287	-23,423	-12,612
Bahamas	-30,632	-18,740	-10,091
Aruba	-13,517	-8,269	-4,453
Netherlands Antilles	-12,715	-7,779	-4,188
Panama	-8,446	-5,167	-2,782
Bermuda	-8,964	-5,484	-2,953
British Virgin Islands	-3,220	-1,970	-1,061
Antigua & Barbuda	-2,889	-1,767	-952
St Kitts-Nevis	-2,262	-1,384	-745
Grenada	-871	-533	-287
Dominica	-543	-332	-179
St Vincent & Grenadines	-77	-47	-25
Net passports demanded	827,524	893,664	941,766
Cost of passports demanded	\$121,386,638	\$131,101,341	\$138,166,580
Total reduced travelers	-174,814	-106,705	-57,975
Total passports demanded	946,888	1,014,997	1,063,726
Total cost of passports demanded	\$139,114,052	\$149,121,220	\$156,279,769

US Air Travelers to Micronesia

Details for the most likely cost estimate for US air travelers to Micronesia are presented in Exhibit 13. Costs for passports demanded are an estimated \$136,000 the first year the rule is in effect. Using these assumptions, an estimated 30 travelers may forgo travel as a result of the passport requirement for air travel in the Western Hemisphere. Costs range from \$133,000 to \$138,000.

Exhibit 13. Passport Costs for US Air Travelers to Micronesia as a Result of the Rule, First Year Rule in Effect

Travelers to Micronesia	19,027		
	Business	Leisure	
Percentage	0%	100%	
Travelers	0	19,027	
Percentage without passports	5%	5%	
Travelers	0	951	
Business travel	1st quartile	Median	3rd quartile
Elasticity	-0.475	-0.265	-0.198
Reduced demand	-1.38%	-0.77%	-0.57%
Reduced travelers	0	0	0
Net passports demanded	0	0	0
Cost of passports demanded	\$0	\$0	\$0
Leisure/VFF travel			
Elasticity	-1.700	-1.040	-0.560
Reduced demand adults	-4.97%	-3.04%	-1.64%
Reduced demand minors	-4.46%	-2.73%	-1.47%
Reduced travelers	-47	-29	-15
Net passports demanded	905	923	936
Cost of passports demanded	\$132,982	\$135,654	\$137,597
Total reduced travelers	-47	-29	-15
Total passports demanded	905	923	936
Total cost of passports demanded	\$132,982	\$135,654	\$137,597

US Travelers Using General Aviation

Finally, details for the most likely cost estimate for general aviation travelers to Canada and Mexico are presented in Exhibit 14 (next page). Costs for passports demanded are an estimated \$4.8 million the first year the rule is in effect. Using these assumptions, an estimated 6,000 travelers may forgo travel as a result of the passport requirement for air travel in the Western Hemisphere. Costs range from \$4.6 million to \$4.9 million.

Exhibit 14. Passport Costs for General Aviation Travelers, First Year Rule in Effect

Travelers using general aviation	65,937		
	Same-Day	Overnight	
Travelers	32,733	33,164	
Percentage without passports	66%	50%	
Travelers	21,630	16,582	
Same-day travel	1st quartile	Median	3rd quartile
Elasticity	-1.743	-1.520	-1.288
Reduced demand	-25.89%	-22.57%	-19.13%
Reduced travelers	-5,599	-4,883	-4,138
Net passports demanded	16,031	16,747	17,493
Cost of passports demanded	\$2,380,848	\$2,487,241	\$2,597,928
Overnight travel			
Elasticity	-1.743	-1.520	-1.288
Reduced demand	-8.63%	-7.52%	-6.38%
Reduced travelers	-1,431	-1,248	-1,057
Net passports demanded	15,151	15,334	15,525
Cost of passports demanded	\$2,250,188	\$2,277,375	\$2,305,660
Total reduced travelers	-7,030	-6,131	-5,195
Total passports demanded	31,182	32,081	33,017
Total cost of passports demanded	\$4,631,035	\$4,764,616	\$4,903,588

Results and Discussion

The summary of the costs to obtain passports for US air travelers is presented in Exhibit 15 (next page).

Exhibit 15. Passport Costs for All US Air Travelers of the Rule, First Year Rule in Effect

Travelers to WHTI countries	14,299,093		
<i>Business travel</i>	1st quartile	Median	3rd quartile
Net passports demanded			
Canada	186,084	186,566	192,828
Mexico	329,977	330,831	341,934
Caribbean	119,363	121,332	121,961
Total	635,424	638,729	656,722
Cost of passports demanded			
Canada	\$27,636,638	\$27,708,171	\$28,638,103
Mexico	49,007,013	49,133,860	50,782,873
Caribbean	17,727,414	18,019,879	18,113,189
Total	\$94,371,065	\$94,861,910	\$97,534,165
<i>Leisure/VFF travel</i>			
Net passports demanded			
Canada	940,905	968,189	1,050,044
Mexico	1,506,919	1,550,617	1,681,713
Caribbean	827,524	893,664	941,766
Micronesia	905	923	936
Total	3,276,253	3,413,394	3,674,458
Cost of passports demanded			
Canada	\$137,939,182	\$141,944,856	\$153,961,877
Mexico	220,918,442	227,333,786	246,579,816
Caribbean	121,386,638	131,101,341	138,166,580
Micronesia	132,982	135,654	137,597
Total	\$480,377,244	\$500,515,636	\$538,845,870
<i>General aviation travel</i>			
Net passports demanded	31,182	32,081	33,017
Cost of passports demanded	\$4,631,035	\$4,764,616	\$4,903,588
<i>Grand total</i>			
Total passports demanded			
Canada	1,126,989	1,154,755	1,242,871
Mexico	1,836,895	1,881,448	2,023,647
Caribbean	946,888	1,014,997	1,063,726
Micronesia	905	923	936
General aviation	31,182	32,081	33,017
Total	3,942,859	4,084,204	4,364,197
Total cost of passports demanded			
Canada	\$165,575,820	\$169,653,027	\$182,599,980
Mexico	269,925,455	276,467,646	297,362,689
Caribbean	139,114,052	149,121,220	156,279,769
Micronesia	132,982	135,654	137,597
General aviation	4,631,035	4,764,616	4,903,588
Total	\$579,379,344	\$600,142,162	\$641,283,623

As shown, total costs for US air travelers for all regions are expected to reach \$600 million the first year the rule is in effect, with more than 4 million passports demanded. The costs range from \$579 million to \$641 million. Based on the most likely assumptions, we could see approximately 652,000 US air travelers forgo travel as a result of this rule, approximately 4 percent of the US air-travel population we expect to be covered by the rule.

The total costs for US citizens traveling by air to obtain passports are presented in Exhibit 16. As shown, our most likely assumptions estimate that approximately 652,000 passengers could forgo travel as the result of a passport requirement for air travel, which is 4 percent of the covered population. An estimated 4 million passports will be demanded at a cost of \$600 million. If 20 percent of these passports receive expedited processing (at a cost of \$60 per passport), the fees total \$49 million, for a grand total cost of \$649 million. We expect these costs to be incurred the first year the rule is in effect. We also present the grand total figures for the best- and worst-case estimates. Complete details are included in the appendices.

Exhibit 16. Summary of Impacts to US Air Travelers of the Rule, First Year Rule in Effect

Air travelers to WHTI countries	14,299,093		
	1st quartile	Median	3rd quartile
Air travelers that may forgo travel	-793,837	-652,491	-372,498
Passports demanded	3,942,859	4,084,204	4,364,197
Total cost of passports demanded	\$579,379,344	\$600,142,162	\$641,283,623
Expedited service fees (20% of passports)			
Number of passports	788,572	816,841	872,839
Cost of expedited service	\$47,314,302	\$49,010,449	\$52,370,370
Grand total cost	\$626,693,646	\$649,152,611	\$693,653,992
Best-case estimates			
Travelers that may forgo travel	-34,710	-33,351	-23,873
Passports demanded	3,528,099	3,529,458	3,538,936
Grand total cost	\$539,544,667	\$539,752,790	\$541,194,148
Worst-case estimates			
Travelers that may forgo travel	-1,750,346	-1,528,155	-978,479
Passports demanded	8,205,871	8,428,062	8,977,738
Grand total cost	\$1,725,624,243	\$1,772,395,044	\$1,887,991,233

Again, these estimates should be approached with caution, as they are based on limited data and elasticities of demand that attempt to explain very complex behavior and nearly infinite travel choices. We will discuss travel demand and the implications of this rule in a subsequent section (see page 2-53).

Following the first year, it is unclear what the annual costs of the rule would be. As shown, we calculate the vast majority of travelers will acquire passports initially in order to continue traveling to their desired destinations and 652,000 passengers may forgo getting a passport. In actuality, some of these travelers may delay obtaining the passport until the second year. Presumably, the passengers that do not obtain a passport due to cost would continue to forgo getting a passport beyond the first unless their circumstances changed. Such changes could include an increase in personal income (thus increasing the demand for travel) or a particular business or family trip that would have to be taken (thus reducing the elasticity of their travel demand).

Because the number of travelers is increasing annually (we estimated 5 percent per year), the increased traveling public would likely purchase passports if they have not done so already. Additionally, turnover in the traveling population is not 100 percent annually; the entire population that traveled in 2004 did not travel again in 2005—some travel bi-annually, tri-annually, every 5 years, etc. For the second year, we assume that the “new” population would need passports at the same rate as the affected population in the first year.

Based on data from OTTI and shown in Exhibit 17, 85 to 90 percent of US travelers to the Caribbean make an average of at least 1 international trip per year.⁶⁴ An estimated 85 percent of international travelers to Mexico make an average of at least 1 trip per year.⁶⁵ Thus, the number of “new” travelers is fairly small on an annual basis, as most international travelers affected make at least one trip annually and would thus already hold a passport. We assume that 15 percent of the “new” travelers to Mexico and Canada would need passports (recalling that there are no OTTI data for US travelers to Canada), and 10 percent of the “new” travelers to the Caribbean would need passports at the same rate as the first year.⁶⁶ The total estimated costs for the second year (undiscounted) are presented in Exhibit 18 (next page).

Exhibit 17. Frequency of Visits in Certain Western Hemisphere Countries

	First visit	Repeat visit
Mexico	15%	85%
Dominican Republic	7%	93%
Jamaica	13%	87%
Bahamas	9%	91%
Aruba	14%	86%
Netherlands Antilles	11%	89%
Panama	17%	83%
Bermuda	11%	89%
Antigua & Barbuda	5%	95%
Other Caribbean	6%	94%

Source: OTTI. US Travelers to Overseas Countries 2004, Frequency of Visit, Purpose Of Trip, Package, Hotel/Motel, Transportation, Travel Group; Table 21.
 US Travelers to Mexico 2004, Frequency of Visit, Purpose Of Trip, Package, Hotel/Motel, Transportation, Travel Group; Table 21.

Exhibit 18. Total Passport Costs for US Air Travelers of the Rule, Second Year Rule in Effect

"New" travelers to WHTI countries	1,994,380		
	1st quartile	Median	3rd quartile
Air travelers that may forgo travel	-114,622	-96,608	-55,079
Passports demanded	566,350	584,364	625,893
Total cost of passports demanded	\$83,213,742	\$85,866,599	\$91,966,740
Expedited service fees (20% of passports)			
Number of passports	113,270	116,873	125,179
Cost of expedited service	\$6,796,196	\$7,012,365	\$7,510,711
Grand total cost	\$90,009,938	\$92,878,964	\$99,477,450
Best-case estimates			
Travelers that may forgo travel	-2,953	-2,837	-2,026
Passports demanded	302,557	302,673	303,484
Grand total cost	\$46,271,943	\$46,289,730	\$46,413,088
Worst-case estimates			
Travelers that may forgo travel	-454,160	-396,513	-252,930
Passports demanded	2,149,317	2,206,963	2,350,547
Grand total cost	\$451,975,734	\$464,109,282	\$494,303,692

Further complicating future cost estimates is the upcoming proposal to require passports or other documentation establishing citizenship and identity at the land and sea ports-of-entry. While an increase in passport demand is imminent, it is not at all clear which rule is having the dominant effect on passport demand—this air rule or the anticipated rulemaking addressing land and sea entries.

We saw a large increase in passport applications in 2005 and neither requirement was yet in effect; whether the increase is being driven by the air rule or the anticipated land and sea requirements is unknown. In terms of forgone travel, this will likely be a short-term effect, as "a longer response time [to changes in price] indeed enables consumers to adjust better to changes in fare price...a long-run adjustment time causes the price elasticity to decrease."⁶⁷ Annual costs would likely decrease over time as the international traveling public reaches a passport saturation point, particularly in the air environment where annual travel is prevalent. Because of the uncertainty associated with the land and sea rulemaking and its potential influence on the air environment, we do not forecast costs beyond the second year. In Exhibit 19 (next page), we present 10-year annualized costs for the purposes of the required *Accounting Statement* in the preamble to the rule. We use our cost estimates for the first year for Year 1 and our estimates for the second year for each year afterward until Year 10, when Year 1 costs are repeated (as the majority of passports expire).

Exhibit 19. Annualized Costs of the Rule over 10 Years, in \$millions

Discount Rate	Most-Likely Estimate	Best-Case Estimate	Worst-Case Estimate
7%	\$206	\$147	\$733
3%	\$204	\$145	\$727

Our results are fairly consistent with the State Department's passport demand study even though our study took a completely different approach to estimate the number of passports that will be needed as a result of the rule. The State Department study estimates that 4.4 million passports will be needed in the air environment.⁶⁸ The study differs from this analysis in many important ways—

- An annual demand for passports in the air environment following initial implementation of the rule was not considered
- The number of air travelers that may forgo travel was not estimated
- The study did not estimate how many of these would be adult or minor passports
- The study did not estimate how many passports would require expedited service
- General aviation passengers were not included

If we apply our costs of adult and minor passports in the same ratio as our results to the State Department's demand estimate and add the expedited fees, we calculate a cost of approximately \$706 million, a difference of \$57 million from our first-year estimate.⁶⁹

The State Department study used travel data from 2003 (the latest data available at the time the study was conducted), which greatly underestimates travelers in 2005 and 2006 because international travel has rebounded so dramatically since the slumps in 2003 (SARS, Iraq War). We used more recent data (2004) and applied a growth factor to account for increasing air travelers. The State Department included different countries in their analysis than we do here.⁷⁰ The passport demand study also did not take into consideration different types of travelers. Based on our review of the travel demand literature and the Canadian Department of Finance study, we believed it was important to differentiate between business and leisure travelers because international business travelers are more likely to hold a passport already and are less likely to change their travel behavior given an increase in the price of travel. We believe the State Department's study may underestimate the percentage of travelers that already hold a passport, but in the absence of other reliable data, we used the percentages reported for

portions of our own analysis, recognizing that we, too, could be underestimating current passport holders.

The State's passport demand study assumes that all travelers that travel now without a passport will obtain a passport and continue to travel—there will be no decrease in demand. This assumption would overestimate the demand for passports. Based on our understanding of economic theory and the conclusions reached in the travel demand literature, a decrease in travel demanded is almost certain, though we believe that the impacts will be marginal. In our most likely estimate, travelers who may opt not to obtain a passport due to cost or paperwork burden are only 4 percent of the affected population.

Thus, once we made our adjustments based on different information and newer data, our results were similar, due to the offsetting effects of adjusting the number of travelers upward to account for passenger growth and adjusting the number of travelers downward to account for a decrease in travel demand. This analysis, while providing a different treatment of potential impacts on travel than the State Department's study, carries problems of its own. The worst-case and best-case cost estimates (presented in the appendices) are intended to present the bounds of potential direct impacts, and we can say with certainty that neither of these extremes is likely. That our most-likely estimates are similar to the estimates from the State Department's study, which was conducted for entirely different purposes, is reassuring. Nevertheless, we should view the results of our analysis with several caveats in mind.

Canada

The percentage of business versus leisure travels (20 percent versus 80 percent) is based on our best guess using data from the other countries in the Western Hemisphere. The only study that examined business and leisure travelers in Canada estimated that only about 10 percent of US travelers go to Canada for business (the CTC study of WHTI impacts). This seems too low for a contiguous and large trading partner, particularly in light of the percentages for Mexico and the Caribbean. The Caribbean's primary draw is a sun-and-sand destination and yet about 15 percent of US travelers to the region cite business as the primary purpose for their trip. Canada, which is not a sun-and-sand destination, would seem to be an even more powerful draw for US business travelers. It is possible, however, that we have overestimated the proportion of business travelers in our most likely estimate. This would result in underestimating the direct costs of the rule.

The percentage of travelers not currently holding passports is a more comfortable assumption. Our assumptions are derived from the CTC study, which treats air travelers separately from land-border crossers. However, the CTC study reported only an overall level of those without passports (33 percent) and did not differentiate quantitatively for business travelers, who

"tended to have a slightly higher likelihood of holding a passport than other types of travelers."⁷¹ We assumed that business travelers are 10 percent more likely to hold a passport than leisure travelers (23 percent of business travelers do not hold passports). We may have overestimated the number of business travelers already holding passports. This would result in underestimating the direct costs of the rule.

The costs for travel were based on travel to Mexico absent other data. The international average trip costs reported by OTTI are certainly too high for trips to Canada because airfare is cheaper in North America than overseas. We may be overstating the cost per trip if a trip to Canada is more like a domestic excursion than an international one. This would result in overestimating the direct costs of the rule.

Mexico

The percentage of business versus leisure travels (20 percent versus 80 percent) is based on OTTI data. We are fairly confident in this assumption and believe we have appropriately accounted for business travelers. A second study that examined business and leisure travelers in Mexico estimated that only about 17 percent of US travelers go to Mexico for business (the SECTUR study on traveler satisfaction). This again seems low for a contiguous and large trading partner, but it is close to the OTTI estimate. The SECTUR study also conducted its survey in cities that were more likely to be a draw for tourism, not international business.

The percentage of travelers not currently holding passports is based on the State Department's passport demand study, which reports the results from the American Travelers Survey. This survey covered only leisure travelers, and we adjusted the percentage of business travelers not holding passports downward (from 44 percent for leisure travelers to 34 percent for business travelers). We may have overestimated the number of business travelers already holding passports, and this would result in underestimating the direct costs of the rule.

The costs for travel were based on OTTI data for Mexico. We are fairly confident in these estimates.

The Caribbean

The percentage of business versus leisure travels (16 percent versus 84 percent for the Caribbean overall) is based on the OTTI data. We are fairly confident in this assumption and believe we have appropriately accounted for business travelers.

The percentage of travelers not currently holding passports is less certain, however, because it is based on the State Department's passport demand study. We took the overall percentage of travelers reported to not hold

passports traveling to the Caribbean and adjusted downward for business travelers (from 27 percent for leisure travelers to 17 percent for business travelers). We may have thus overestimated the number of business travelers already holding passports, and this would result in underestimating the direct costs of the rule.

The costs for travel were based on OTTI data. We took the overall per-trip average reported by OTTI for the Caribbean and added some additional cost for a business trip (\$500) to account for higher-end accommodations and dining. We may have overestimated the cost of a business trip, which would result in overestimating the direct costs of the rule.

Micronesia

The annual number of US air travelers to Micronesia is so small (less than 20,000) that any errors carried in our assumptions would make little difference to the overall costs of this rule.

General Aviation

The annual number of US travelers using general aviation is again small, but could carry significant errors given the number of assumptions we had to make on repeat travelers and the costs general aviation travelers face. Unlike other travelers, we assumed general aviation travelers would face a different cost horizon, where these travelers would face a situation more like a land-border crossing than an arrival into a commercial airport or seaport.

When compared to the cost of one general aviation trip (perhaps on the order of a few hundred dollars at the most), obtaining a passport would be cost-prohibitive (the cost of the passport could be more than the cost of the trip). When compared with a longer expenditure horizon, in this case 1 year, the cost of obtaining a passport would still create a disincentive for some travelers, but many “weekend pilots” and business people would still want or need to travel to Canada and Mexico. Additionally, because of data limitations, we have not included minor passports in our estimates; we have treated all general aviation travelers as adults, which would slightly overestimate costs. We are unsure whether we have over- or underestimated direct costs for general aviation travelers.

Other Costs

Finally, there are other direct costs of the rule that we have not been considered here because we have assumed that either travelers will obtain passports, or they may forgo travel (which carries unquantified direct costs in the form of welfare losses, described below). We have not estimated the cost for passengers that arrive at the airport ready to travel and are not permitted to board because they do not have passports. This would result in passengers losing a large part of their trip cost that cannot be recovered (for

example, non-refundable airfare). Similarly, we do not estimate costs for travelers that attempt to enter the United States from the Western Hemisphere without a passport. If travelers are US citizens, they cannot be prevented from entering the country, but they will likely be placed in secondary inspection upon entry and may spend considerable time there convincing CBP officers of citizenship and identity. We have also not considered the costs for losing passports that were not previously required.

Even though we have attempted to make the most realistic assumptions possible given our data limitations, we may have overstated some estimates and understated others. These would likely offset one another, and we believe the results of our analysis are reasonable.

Results of the Monte Carlo Simulation

OMB Circular A-4 requires a formal quantitative treatment of uncertainty for rules expected to have costs or benefits exceeding \$1 billion in any 1 year.⁷² Although we estimate the direct, quantified cost of obtaining a passport is an estimated \$649 million per year, additional non-quantified welfare losses of the 652,000 passengers that may forgo obtaining a passport and indirect costs to the travel and tourism industry may result in costs that exceed \$1 billion in the first year the rule is in effect. In addition to the comprehensive best- and worst-case scenarios described previously, we have also developed a Monte Carlo analysis to specifically address variance and uncertainty in our most likely estimate.

Monte Carlo analysis is used to generate values for uncertain variables by mathematically manipulating distributions, rather than point estimates, of those variables. Because we have so many assumptions and variables in this analysis, we conduct a Monte Carlo analysis to more formally characterize the inherent uncertainty in our resulting estimates. The results of the analysis are presented here. A full description of the variables modeled and the forecasts produced are presented in the appendices.

For the most likely estimate we constructed distributions of own-price elasticities of demand based on the data presented in the Canadian Department of Finance study and the Dutch study.⁷³ For the time cost to obtain a passport, we used a triangular distribution to capture a high, low, and most likely value, as recommended.⁷⁴ For the cost of trips in the Western Hemisphere and the percent of US citizens that do not hold passports in the air environment, we used normal distributions. We conducted 50,000 trials in all simulations.

The results of our Monte Carlo analysis are similar, but not identical, to the analysis presented above. The median value of our total first-year costs is \$658 million, a difference of \$9 million from the median estimate calculated above (Exhibit 16, page 2-43). This is most likely the result of the

distribution of price elasticities. Both the Canadian and Dutch studies reported results that are not well characterized by traditional distribution curves (such as normal, lognormal, or Poisson). While we used the median estimate from these studies, the median may not have been particularly representative of the population (mean values are not presented in either study). Our simulation resulted in output cost distributions that were approximately normal (where the mean and median are very similar), and a cost of \$601 million at the 10th percentile, and a cost of \$717 million at the 90th percentile.

The results of the simulation for the first year are presented in Exhibit 20 (next page; second-year results are presented in the appendices). Because we obtained higher costs in the simulation than in our primary analysis, we also see an increase in the number of travelers expected to obtain a passport and a corresponding decrease in the number of individuals who may forgo travel. This also leads to a corresponding decrease in individual welfare losses (described below).

It is important to note that the 10th percentile is not as low as the median best-case estimate of \$540 million (presented in Exhibit 16), and the 90th percentile is not as high as the worst-case estimate of \$1.8 billion. Again, the best- and worst-case estimates are intended to embody assumptions reflective of the extreme endpoints of possible costs. The Monte Carlo analysis is intended to test the assumptions and characterize the uncertainties inherent in the most likely estimate. The Monte Carlo analysis confirms that the best- and worst-case estimates are unlikely, and we can say with relative confidence that the first-year passport costs will lie in the \$601 million to \$717 million range.

Exhibit 20. Results of the Monte Carlo Simulation to Estimate Total First-Year Passport Costs of the Rule

Travelers that may forgo travel		
Point estimates	-652,491	Median
Monte Carlo analysis	-621,418	Median
	-618,204	Mean
	195,219	Std. deviation
	-864,950	10 th percentile
	-374,741	90 th percentile
Passports demanded		
Point estimates	4,084,204	Median
Monte Carlo analysis	4,115,309	Median
	4,113,495	Mean
	274,951	Std. deviation
	3,765,767	10 th percentile
	4,469,550	90 th percentile
Total costs (w/expedited service)		
Point estimates	\$649,152,611	Median
Monte Carlo analysis	\$658,337,818	Median
	\$657,532,872	Mean
	\$45,252,747	Std. deviation
	\$601,066,483	10 th percentile
	\$717,032,772	90 th percentile

Foreign Travelers to the United States

As previously shown (Exhibit 3, page 2-7), there were an estimated 7.5 million air arrivals (not travelers) into the United States from Canada, Mexico, and Bermuda in 2004. The United States already requires passports from all other visitors from countries in the Western Hemisphere and Micronesia. While this analysis is not concerned primarily with the costs to foreign visitors as a result of a new passport requirement, we are concerned with the potential loss of visitors to the United States as a result of the passport requirement in the air environment. We use a methodology identical to that for US citizens and adjust for conditions that are representative of Canadian, Mexican, and Bermudan visitors (passport cost, trip cost, likelihood of holding a passport, purpose of trip). The assumptions and calculations are presented in the appendices (including the results of the Monte Carlo simulation). The results of the analysis are presented in Exhibit 21 (next page).

Exhibit 21. Total Passport Costs of the Rule for Canadian, Mexican, and Bermudan Travelers, First Year Rule in Effect

Alien travelers to the US	7,681,225		
	1st quartile	Median	3rd quartile
Travelers that may forgo travel			
Commercial air travelers	-133,325	-117,291	-67,184
Canadians	-114,370	-100,712	-57,696
Mexicans	-18,601	-16,363	-9,370
Bermudans	-436	-266	-145
General aviation	-1,682	-1,467	-1,243
Total	-135,007	-118,758	-68,427
Total cost of passports demanded	\$196,974,473	\$199,632,678	\$207,877,937

Based on our assumptions, approximately 119,000 foreign visitors (1 percent) may forgo travel to the US as a result of the rule. Most of these, about 86 percent, are expected to be Canadians, and 14 percent are expected to be Mexicans. The costs for the foreign citizens that acquire a passport are not included in our total rule costs because they are incurred by entities outside this country, and foreign governments collect the revenues from passport fees. However, forgone travel is of interest to us in this analysis because this leads to potential indirect costs to the US travel and tourism sector and may indirectly affect small US businesses.

Price Elasticities for Travel Demand and Indirect Costs of the Rule

This analysis has considered thus far only the direct costs of obtaining passports for travel in the Western Hemisphere. In addition to these quantified direct costs, we must also consider direct but unquantified costs to US travelers (individual welfare losses or losses in consumer surplus), and indirect costs (losses to the travel and tourism industry). It is important to realize that direct and indirect costs move inversely—if direct costs are quite high, this indicates that more individuals obtain passports and industries that are indirectly affected see fewer indirect impacts from reduced travel.

In this analysis, we have anticipated that the vast majority (96 percent) of US travelers to Western Hemisphere destinations already have or will obtain a passport and will continue traveling in the Western Hemisphere. If all travelers in the Western Hemisphere currently without a passport obtained one in response to this rule, then we would see costs increase beyond the \$649 million estimated above.⁷⁵ Our understanding of economic theory (a change in price will lead to a change in demand given that the demand for travel is not perfectly inelastic) belies this possibility, but were it to happen, direct costs would increase from what we have estimated. Presumably, indirect costs (losses to the travel and tourism industry) would decrease; all

travelers would continue to take their trips and thus the travel industry as a whole would not lose customers. While individual welfare losses attributable to forgone travel and indirect costs would likely decrease, however, they would never equal zero. This is because all travelers have certain preferences for travel that they attempt to fulfill given their budget constraints. Thus, if the relative price of travel increases and a person still wants to travel to his chosen destination, he must reconsider his expenditure choices—and thus lose utility—because his budget constraints have not changed.

How passengers reconsider their expenditure choices given a change in price is at the heart of the price elasticity for travel demand. Because many travelers (those without passports) *would* face an increased travel price as a result of the rule, these travelers would need to reconsider their trip expenditures. How travelers change their behavior is what drives the unquantified direct costs (welfare losses) and the indirect costs of the rule. In the analysis above, we have estimated that some portion of travelers will not take trips that they would have made in the absence of a passport requirement. In fact, travelers may just forgo the *particular trips* they would have taken but not forgo travel—passengers could choose from a myriad of substitutes that still maximize their utility given their budget constraints. This is not meant to be an exhaustive list, but some possibilities include—

- A traveler could forgo travel completely. This would represent a loss for the individual traveler because he had a preference for travel that he is no longer consuming and is thus made unambiguously worse off. This would also represent an indirect loss for the travel industry that would no longer be supporting the individual's trip.
- A traveler could delay travel to the country affected and “save” to obtain the passport or wait for his budget constraint to be “pushed out” through, as examples, an increase in income or a beneficial change in exchange rates. This is a short-term loss for both the travel industry and the individual that could be made up in subsequent time periods.
- A traveler could substitute travel from one Western Hemisphere country to another destination in the Western Hemisphere that is less expensive. The traveler could substitute travel to Bermuda, for example, with travel to the Dominican Republic. This is a loss to the individual (he would prefer to go to Bermuda), though not as much as not traveling at all. This is also a loss to the travel industry that would have supported the Bermuda trip but is a gain to the portion of the industry that supports the Dominican Republic trip.
- A traveler could still travel to his first-choice destination but consume lower-cost goods and services (flights, accommodations, dining, activities) or stay for a shorter period of time. This is a loss

for the individual, who now cannot consume his first-preference goods and services, though again not as much as not traveling at all. It is a loss to the industries that would have supported his first choices and a gain for those that support his substitutes.

- A traveler could forgo international travel and instead travel to domestic destinations (including Puerto Rico and the US Virgin Islands). This is a loss for the individual because domestic destinations are not perfect substitutes for international destinations, but the loss is again not as much as if he were to forgo travel completely. It is a gain to the domestic travel industry and the substituted destination.
- A traveler could forgo travel and consume non-travel goods and services. This is a loss to the individual because he is not consuming his first-choice goods, but he still maximizes his utility given his budget constraints. This is a loss to the travel industry but a gain to other sectors of the economy where the traveler now chooses to consume.

These situations would all be plausible for the leisure traveler, but not necessarily for the business traveler. The business traveler, for example, would be unlikely to substitute a cheaper Western Hemisphere country for a more expensive one, and he would not be able to substitute domestic for international travel. He could, however, travel for a shorter period of time or consume lower-cost goods and services. His employer could also substitute technology for travel and invest in web or video conferencing capabilities that could decrease the need for some international trips.

All these situations are captured to some extent in the price elasticity of demand, and it is why we expect leisure travelers to have a more elastic demand for travel (they have many possible substitutes) and business travelers to have a less elastic demand for travel (they have some, but not as many, possible substitutes).

The decision to travel is complex, and a price elasticity is an imperfect measure to try to capture all the inputs that go into an individual's decision to travel. We have applied elasticities of demand to future travel in this analysis to attempt to capture as many of the potential impacts of the rule as we can. We cannot, however, look at the number of travelers who choose to forgo travel as a result of the rule and determine what the welfare losses to travelers or gains and losses to different players in different economies will be—we simply cannot determine adequately what each individual traveler (or even bloc of travelers) will do to express his preferences for goods and services given a change in price in one portion of his travel cost.

Travel and tourism literature has attempted to capture traveler behavior using numerous models, data sets, and variables. As described by Woodside and Dubelaar—

Decisions and behaviors by travelers and tourists represent a rich mosaic of relationships among multiple sets of variables. These variables include the following:

- Background variables (demographic, psychographic, and social)
- Destination marketing and related service marketing influences—for example, destination advertising Websites and offers to provide inquirers with free visitor information guides (VIGs) and the information and persuasiveness of these VIGs; related service marketing influences include event and attraction marketing and advertising by car rental firms, restaurants, and accommodations
- Prior trip behavior, information search, and current trip planning
- Choices and behaviors regarding destinations, transportation modes, travel routes, accommodations, visiting attractions, restaurants and foods, durable purchases, and local-area destinations
- Micro and macro evaluations and satisfactions (i.e., regarding individual and global consumption events occurring during the trip)
- Conations (e.g., willingness and intentions to repeat the tourism-related consumption events, such as visiting the same destination in the future).⁷⁶

They go on to state: “The discretionary traveler’s thoughts, actions, and attitudes are likely to be influenced by seemingly minor events that often trigger substantial investments in time and money.”⁷⁷ Thus, the authors argue, complexity and nuance need to be captured in analytic models and empirical work examining trip choices.

Jeng and Fesenmaier find serious shortcomings with the travel research that has emphasized the importance of destination choice. “These efforts, in large part, follow a static and singular perspective and commonly equate travel decision behavior with a destination decision, thereby assuming travel decision behavior as a trade-off process among destination attributes.”⁷⁸ The authors believe that travel planning and decision-making should be examined instead as a hierarchy—

Traditional travel decision and choice models often equate travel behavior with the choice of a travel destination. Recent research evidence seems to indicate that travel decision-making behavior is not a singular concept; rather, it is a multifaceted behavioral phenomenon involving various subdecisions...Research also suggests that decision-making and choice behavior is a dynamic, successive, and temporal process rather than a static decision/choice action...In addition, the complex travel decision hierarchy is influenced, directly or indirectly, by three components, including psychological/cognitive components, behavioral components, and decision contexts...The psychological/cognitive component, including value, knowledge, involvement, risk, attitude, and intention, establishes the travel needs and demand...The second component defines the behavioral decision process, which includes information retrieval process and information integration process (i.e., decision heuristics). Both the information retrieval and information integration processes are used to derive trip decisions and choices...The third component, the decision context, defines a task environment where a decision behavior

takes place and includes macroenvironments, such as ethnicity, cultural background, and sociodemographics, and microenvironments or contexts, such as type of trip, information environment offered in the marketplace, and marketing/advertising practices.⁷⁹

Numerous studies reinforce our belief that the demand for travel is not perfectly inelastic—a change in price will result in a change in the quantity consumed. Lim's findings in a meta-analysis, for example, "...support the proposition that international tourism demand is positively related to income and negatively related to tourism prices." The Dutch study used elsewhere in this analysis echoed these results, as did Maloney and Montes Rojas, and Crouch.⁸⁰ Lim, interestingly, notes "...the results for transportation costs do not entirely support the view that international tourism demand is inversely related to this explanatory variable, especially those studies that have used travel exports/imports as the dependent variable."⁸¹ Thus, while we have attached the cost of a passport to air transportation demand, the relationship between demand and transportation cost may not be as closely related as we have implied in our analysis.

Alegre and Pou emphasize the importance of studying households to model travel demand, not simply aggregate data, for several reasons—

[micro-economic models] are closer to theoretical economic consumer models... for commodities like tourism, for which the best option for some households is not to consume them... [A]nalyzes based on aggregate data introduce a participation bias that can be controlled only with microeconomic data...[and] microeconomic models include the diversity and heterogeneity of consumer behavior that is cancelled out when aggregate information is used.⁸²

In their study of Spanish households, Alegre and Pou find that the age of the household head, education, and income all contribute significantly to the probability that a household will travel. They conclude that households in the OECD countries—

are characterized by an increase in one-person households and childless couples, an increase in the overall level of education, a higher proportion of older people and an increase in the number of retired people. This paper has demonstrated that these variables will significantly increase the propensity to travel, to the extent that they may be more important than economic growth.⁸³

Our data for air passengers matched these characteristics almost exactly. This implies, therefore, that aggregate demand elasticities, such as those used in this analysis, do not adequately capture the true intent of individuals and households and their propensity to travel. Based on household characteristics, travelers affected by the rule are likely to keep traveling to their desired destinations, perhaps more likely than we have estimated.

Kulendran and Witt compared two models that forecast the international demand for business travel.⁸⁴ In their comparison, they found that trade openness, origin country income, and volume of holiday tourism were important explanatory variables in the demand for travel. Interestingly, the

authors found that both of their modeling approaches placed little importance on price. The elasticities we used for business travel in this analysis certainly translated into price being a factor in travel demand, but it again demonstrates that business travel is likely to be less affected by new passport requirements than leisure and VFF travel.

Collins and Tisdell examined gender in their study of travel life cycles.⁸⁵ The authors concluded that gender has an important influence on travel demand and that life cycle travel patterns vary significantly according to the purpose of travel. Generally, men travel more for business purposes and women are younger when they travel for business or education. Women travel more for leisure and VFF purposes. The authors also concluded that age-related travel functions will shift in the future as women continue to enter the workforce.

Oppermann considered destination loyalty in his exploratory study to characterize future destination choice.⁸⁶ Using a "loyalty scale" to characterize repeat trips to a destination, the author suggested that the "behavior measure of loyalty by itself can be a reasonable or even good predictor of future tourism destination choice. It certainly purports the notion that past experience has an influence on future behavior in a tourism destination choice context."⁸⁷ Thus, travelers who make periodic treks to destinations in the Western Hemisphere appear likely to continue doing so. As shown previously in Exhibit 17 (page 2-44), repeat international visits are dominant in Mexico and destinations in the Caribbean (and they are likely then dominant for all countries in the Western Hemisphere). Barbados, the Cayman Islands, and Trinidad and Tobago also show relatively high proportions of repeat international visitors (94, 87, and 97 percent, respectively), and these countries require passports for entry.

Kashyap and Bojanic in their study of business and leisure travelers rating hotels also found that "value plays a pivotal role in travelers' decision schema."⁸⁸ Thus, a travelers' perception of value and quality of a trip can be a good predictor of future behavior.

The Travel Industry Association (TIA) conducted a study of 5,000 consumers that had taken at least one overnight trip in the past year.⁸⁹ TIA found that "the trip occasion, rather than available finances or travel prices, generally has the strongest influence on the overall leisure travel decision-making process."⁹⁰ It also found that "airline choice is not necessarily all about price, although when price influences airline choice, it takes priority over other influences."⁹¹ Furthermore, "Few travelers (14 percent) stick to an exact budget on leisure trips. Travelers are more likely to have an approximate budget, but will stay flexible with their spending (55 percent). Three in ten (31 percent) leisure trips do not have a budget."⁹² Finally, the TIA study found that a safe location, available activities, friends and family and attractions are the most important factors cited when choosing a trip destination.⁹³ Almost half of the respondents cited safety as the most important factor.

It is also possible to view out-of-country travel in the context of international trade. When US travelers go to Canada, Mexico, and the Caribbean, US citizens are importing the services of those nations. What makes travel unusual is the countries' exported services do not leave their countries to be consumed. This seemingly strange relationship makes estimates of demand even more confounding. As Crouch described the principal characteristics of international tourism—

- It involves *complex buying behavior* in which the transaction is primarily between consumers from one country and suppliers in another country...
- The *tourism product is an amalgam* of a wide diversity of services and goods...
- Tourism exports require the *transportation of the consumer*. Transporting the consumers to the product rather than the product to the consumers is not unique to tourism, but in no situation is it of greater significance...
- Purchases involve *foreign currency transactions*. Rarely do consumers need to purchase a product in a foreign currency...⁹⁴

Thus, based on empirical work done in the travel and tourism literature, we can assemble a (partial) list of variables that is important to consider when estimating the elasticity of demand—

- Income
- Purpose of visit (business, leisure, VFF, and other)
- Price of trip
- Length of trip
- Distance of trip
- Destination choices
- Transportation choices
- Whether or not the trip is a first-time visit to the destination
- Potential substitutes within the travel and tourism realm
- Potential non-travel substitutes
- Age and gender
- Household characteristics (marital status, number of children, education, household income)
- Current terms of trade with the exporting country

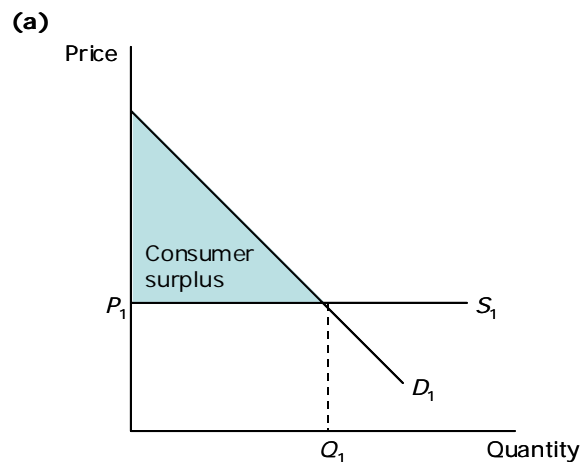
- Marketing efforts in the exporting country
- Safety and security in the exporting country
- Pre-travel requirements (visas, passports, inoculations)
- Foreign exchange rates

The elasticities used to estimate changes in travel behavior have likely not captured (or considered) all of these variables. Elasticities, therefore, should not be viewed as deterministic—but they are a good hint.

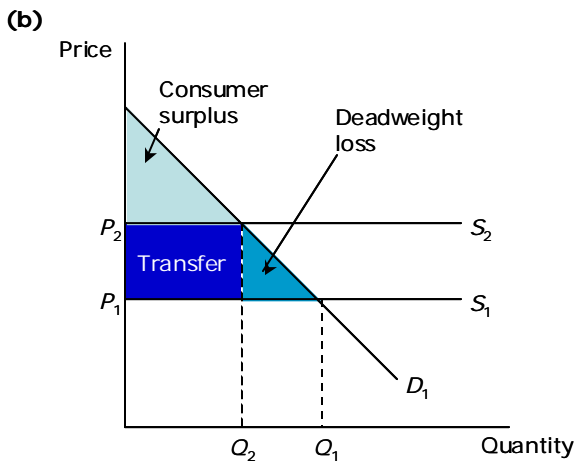
The “bottom theoretical line” underpinning the previous arguments is that the cost of obtaining a passport results in real costs for some consumers. For these consumers, the costs of obtaining passports are equivalent to an increased price for their trips. As with any other normal good or service, a price increase will result in changes to consumer behavior. As previously noted, we believe price increases will result in fewer or modified trips. This is especially so for leisure travelers who currently do not hold a passport. Given that this represents a change from consumers’ currently revealed preferred activity, consumers substituting to a less preferred alternative are unambiguously worse off.

From a social welfare standpoint, we can represent this as a loss in consumer and producer surplus taking into account any mitigating effects of potential substitutes.⁹⁵ Consumer surplus is the difference between what a consumer pays for a unit of a good and the maximum amount they would be willing to pay for that good. We measure consumer surplus by taking the area between the price and the demand curve for that unit. Similarly, producer surplus is the difference between actual price paid and the minimum amount a producer would accept for that unit. We measure producer surplus by taking the area between price and the supply curve for that unit.

We illustrate these concepts in the following graphs. Figure (a) represents a competitive industry with many producers who, individually, are not able to influence price. This is represented with horizontal supply curve, S_1 . There is no producer surplus with this supply; thus, the example focuses solely on changes in consumer surplus. Consumer demand is curve D_1 and represents how much consumers are willing to buy at any given price. Given D_1 and S_1 , price is P_1 and quantity demanded (sales of travel) is Q_1 .



In order to fund security measures, the government introduces a per unit "tax." As seen in Figure (b), a per-unit government tax effectively shifts the



supply curve to S_2 . With the new supply curve, price increases to P_2 and quantity demanded (sales) go down to Q_2 . The action reduces consumer surplus. Part of the lost consumer surplus is a transfer to the government in the form of the passport fee; however, part of the lost consumer surplus is not transferred to anyone and is a true loss to society. This net loss is a loss in individual welfare and is cumulatively a "deadweight loss" to society. The direct cost to

consumers is the tax paid from remaining sales; this is the product of $(P_2 - P_1) * Q_2$. The deadweight loss cannot exceed the product of the number of travelers that forgo travel and the cost per individual passport. This is because for any individual, if his deadweight loss of not obtaining a passport exceeds the cost of the passport, he is better off obtaining the passport. Based on our passport cost calculations presented above, the deadweight loss would not exceed \$104 million.⁹⁶

The travel demand studies cited above focused exclusively on demand-side effects of changes in trip costs—how travelers respond to changes in the price of travel. Some research has been conducted, however, that implies that supply-side factors may be at least as important as the choice paradigm of the consumer. In international trade theory, *competitive advantage* is the notion that it is more advantageous for countries to produce goods where they have a clear advantage and import those where they do not. For most goods, the marginal costs of the inputs to production, namely labor and indigenous resources, help determine which countries will trade with one another and what goods they will trade. In the case of travel and tourism, the competitive advantage of Western Hemisphere countries is not cheap labor but sun, sand, cultural richness, natural wonder, unique experience, and price competition among potential destinations.⁹⁷

The potential effects of this rule could be to raise the opportunity costs to travel to destinations where passports are required. Canada, Mexico, the affected Caribbean nations, and Micronesia could then lose a measure of their competitive advantage over US destinations. In some cases, suppliers of US imports of travel could reexamine their "production methods" to make their exports more competitive with American substitutes.⁹⁸ If successful, efficiency gains could offset the opportunity costs.

If US travelers forgo international travel as a result of the rule, we would expect these industries to be indirectly affected—

- Air carriers (trips on foreign carriers would be considered imports on the US balance of payments; domestic flights are not considered imports)
- Airports and their support services
- Traveler accommodations
- Travel agents
- Dining services
- Retail shopping
- Tour operators
- Scenic and sightseeing transportation
- Hired transportation (rental cars, taxis, buses)
- Arts, entertainment, and recreation

We expect these to be primarily foreign businesses whose services are consumed largely outside of the United States, with the exception of US air carriers, travel agents, airports and airport services. If domestic travel is substituted for international travel, domestic industries in these areas will gain.⁹⁹ We expect, however, that US exports of travel and tourism could also be indirectly affected by the rule if fewer Canadian, Mexican, and Bermudan travelers visit the United States. In this case, US businesses in these sectors will be affected. Thus, gains in domestic consumption will be offset by losses in exports to the three Western Hemisphere countries affected. In both cases, we expect the gains and losses to be small as the vast majority of travelers are expected to obtain passports and continue traveling.

It is extremely difficult to estimate the indirect costs with any certainty. We have made many assumptions regarding direct costs that may carry errors or over- or underestimate indirect costs. In applying own-price elasticities of travel demand, we have presented a binary choice for a traveler based solely on price—"go" or "do not go." In reality, travelers are faced with complex decisions and myriad substitutes for particular trips that could still maximize their utility. There is evidence in the travel literature cited above that price may not be a very big determinant of destination selection. We have chosen to estimate direct costs using demand elasticities to avoid deliberately misrepresenting direct costs (we would not want to assume that travelers' decisions will be completely unaffected by the passport requirement), knowing that we may then be overstating the simplicity of the traveler's decision-making process. In doing this, we have likely overstated indirect costs.

Because such a small percentage of the covered traveling population is likely to forgo travel (even with our application of the binary choice for the traveler), the macro-economic impacts of the rule are likely small as well. Ideally, we could model the indirect impacts of the rule with an input-output model (either static or dynamic) that could give us a reasonable estimation of the level of the impact, the sectors affected, and regional impacts. Unfortunately, given the dearth of data and the assumptions we have made thus far, using such a model would not likely produce meaningful results. We have only rough estimates of how many people travel, where they come from, and where they go. We know even less about how they will alter their behavior if they do, in fact, forgo obtaining a passport.

Comments to the Proposed Rule

We received numerous comments to the Notice of Proposed Rulemaking (NPRM) published August 11, 2006 (71 FR 46155).

Several commenters stated that the indirect costs to industry as a result of this rule were not sufficiently addressed.

According to Office of Management and Budget (OMB) Circular A-4, an economic analysis should “look beyond the direct benefits and direct costs and consider any important ancillary benefits and countervailing risks.”¹⁰⁰ This Circular notes, however, “some important benefits and costs...may be inherently too difficult to quantify or monetize given current data and methods.”¹⁰¹ Given the data available for this analysis and the limitations of using these data to assess indirect costs of the rule, we concentrated on the direct impacts to US citizens who will need to obtain a passport in order to continue traveling by air in the Western Hemisphere, including the costs to the traveler of opting to forgo travel. As stated previously, we cannot look at the number of travelers who choose to forgo travel as a result of the rule and determine what the welfare losses to travelers or gains and losses to different players in different economies will be—we simply cannot determine adequately what each individual traveler (or even bloc of travelers) will do to express his preferences for goods and services given a change in price in one portion of his travel cost. Thus, again per Circular A-4, we presented the relevant quantitative information available, its strengths and weaknesses, and a description of the non-quantified effects. Furthermore, we conducted the formal probabilistic modeling in the form of a Monte Carlo analysis to measure the uncertainty and variance of the estimates presented (see page 2-50). We discussed the industries we expect to be affected by this rule and noted that any impacts will be spread over wide swaths of the domestic and foreign economies.

One commenter to the NPRM stated that the economic analysis cannot be considered reliable because it examines a program that is not yet in place.

Per Executive Order 12866, an economic analysis is required for all major rulemakings prior to final implementation. This analysis must contain an identification of the regulatory “baseline” as well as the anticipated costs and benefits of the rule on relevant stakeholders. The analysis prepared for the proposed rule was reviewed by OMB in accordance with Executive Order 12866 and OMB Circular A-4.

One commenter stated that the assertion that primarily foreign businesses will be affected by the rule is false because Canadians spend more money in the United States than Americans spend in Canada.

As discussed above, travelers that opt to forgo their preferred trips will choose among many available substitutes, including domestic trips or other types of non-travel consumption. In these circumstances, estimating the relative impact on the foreign travel industry versus domestic travel industry is exceptionally difficult, and the sophisticated modeling necessary to inform these impacts is well beyond what the data available to us would support. Additionally, this commenter appears to have incorrectly focused exclusively on travel between the US and Canada. It is important to remember that US travelers to Mexico, the Caribbean, Central America, and Micronesia will also be affected by this rule. As estimated, almost twice as many US citizens will be covered by this rule as non-US citizens (14.2 million versus 7.7 million, of which 4.4 million are Canadian). Thus, foreign businesses in these regions are most likely to experience adverse impacts as a result of this rule because more US travelers are covered by the rule than non-US travelers, and a very small percentage of these travelers (an estimated 4 percent) may choose to forgo travel by air to these regions given the passport requirement.

One commenter argued that the cost to obtain a passport is significantly underestimated because the time estimated to obtain a passport is too low.

We appreciate this comment and the detail that accompanied the estimate provided in the comment. The commenter, however, presented an estimate that was overly pessimistic and represented an absolute “worst-case” scenario that would rarely, if ever, be realized. The time estimate presented in this analysis is from the State Department’s Supporting Statement for the Paperwork Reduction Act Submission for DS-11—Application for a U.S. Passport (OMB Control #1405-0004). The estimated number of minutes required per response is based on a recent sampling of the time required to search existing data sources, gather the necessary information, provide the information required, review the final collection, and submit the collection to Passport Services for processing. The sampling was completed through consultation with a small group of actual respondents. Passport Services found that the overall average for the estimated time required for this information collection was 1 hour and 25 minutes per response. This Collection of Information was reviewed and approved by OMB in September 2005.

One commenter argued that many passports are never used, but are needed: people obtain them in order to be able to travel whenever it may be necessary. These costs were not included in the analysis.

The commenter is correct that we did not include these costs in this analysis. The purpose of an economic analysis is to estimate the costs and benefits of a rulemaking based on an identified baseline and the anticipated change from that baseline that is directly attributable to the regulation under consideration. Individuals that choose to obtain a passport “just to have one” should not be considered in this analysis because they are not obtaining a passport specifically for air travel in the Western Hemisphere, but worldwide as circumstances arise.

One commenter argued that the assumption that gains in domestic travel would be offset by losses from reduced travelers from Canada, Mexico, and Bermuda trivialized the impact of Canadian visitors who spent \$10 billion in the United States in 2005.

It is important to note that this analysis does not assert that domestic gains will equal losses from reduced foreign travelers; it simply states that while the US economy may gain slightly if a small percentage of US citizens travel domestically rather than in the rest of the Western Hemisphere, the US economy will also likely lose slightly if a small percentage of non-US citizens forgo travel to the United States. The net impacts are not known. Furthermore, it is important to note that the majority of the \$10 billion spent by Canadians in this country in 2005 is through cross-border trade and tourism conducted via land-border ports-of-entry. Economic impacts for land-border entries will be addressed a future rulemaking for land and sea entries.

One commenter stated that the only alternative to the proposed rule considered was the current practice of accepting existing documents (driver’s licenses and birth certificates).

Executive Order 12866 and OMB Circular A-4 require the full analysis of regulatory alternatives as part of the rulemaking development process. As presented in the Regulatory Assessment published with the proposed rule and as presented below, we considered and analyzed multiple alternatives. The analysis prepared for the proposed rule was reviewed by the Office of Management and Budget (OMB) in accordance with Executive Order 12866.

Alternatives to the Rule

CBP considered five alternatives to the rule—

- The No Action alternative (status quo, not analyzed further)

- Require that US travelers present a state-issued photo ID and proof of citizenship upon return to the United States from countries in the Western Hemisphere
- Allow US citizens that hold a Transportation Worker Identification Card (TWIC) to use the card as a travel document in the air environment
- Allow Mexican citizens to present their Border Crossing Cards (BCCs) in the air environment in lieu of a passport
- Allow the use of a low-cost “passport card” in the air environment.

Calculations of costs (if any) for the alternatives can be found in the appendices.

The second alternative would require US citizens to present a state-issued photo identification in combination with a birth certificate to establish citizenship and identity. This alternative is similar to the status quo. The birth certificate shows the citizenship of a traveler in most cases. There are, however, circumstances where the birth certificate does not provide definitive proof of citizenship (for example, dual-nationals, foreign birth to US-citizen parents, naturalized citizens). The state-issued ID provides positive identification with name, address, and photograph but does not provide proof of citizenship.

Currently, all adult travelers in the air environments must present a photo ID (usually a driver license) along with proof of citizenship (usually a birth certificate) when they check in for their flights. Additionally, all countries in the Western Hemisphere (and Micronesia) require a passport or these documents for entry into their countries. The exception, however, is minor travelers. Currently, parents may orally vouch for their children upon exit and entry into the United States to and from the Western Hemisphere, and some Western Hemisphere countries allow children to present a school ID as sufficient proof of identity. Minors that would obtain state-issued photo IDs, therefore, drive the costs of this alternative. There may also be costs, however, in the form of lost efficiency upon entry to US ports-of-entry. If CBP officers must spend more time examining documents to determine what they are and if they are fraudulent, this could have time-delay impacts at airports and seaports. We are unable to quantify this loss of efficiency.

Based on data from OTTI, the states with the highest number of international travelers (to the Western Hemisphere or otherwise) are California, New York, New Jersey, Florida, Texas, Illinois, Virginia, Pennsylvania, Washington, Massachusetts, and Ohio, accounting for almost three-quarters of international air travelers.¹⁰² Most requirements for obtaining a photo ID are similar across these states: completion of a DMV form, submission of a form or declaration attesting that the applicant is the parent or legal guardian of the minor receiving the ID, presentation of a birth certificate and social

security card, and the minor and applicant must appear in person. Fees for these states range from \$3 (Florida) to \$21 (California), and IDs are valid for an average of 5 years.¹⁰³

We estimate that there are 496,597 minors that will be covered by the rule, 416,858 of whom do not currently hold a passport. We use the average of the photo ID fees from the 11 states above (\$15) and add the cost of the time it takes to complete the forms and submit them to the DMV (\$41, the same time cost we estimated to obtain the passport) for a total of approximately \$55 per minor. Thus, assuming that a birth certificate is readily available, the cost of this alternative would be \$27.4 million.

This alternative was rejected because birth certificates and driver's licenses are issued by numerous organizations and there is no standard format for either document. Some states only issue photocopies of birth certificates, and some states will not issue photo IDs to minors.¹⁰⁴ Both documents lack security features and are susceptible to counterfeiting or alteration. While most states require that driver's licenses contain correct address information, it is not uncommon for the address information to be outdated. Neither the birth certificate nor the state-issued ID was designed to be a travel document.

Because these documents are not standardized, CBP officers may require additional time to locate the necessary information on the documents. This may result in delays at air ports-of-entry. If the information is not current, then travelers may need to be referred to secondary inspection for additional processing. CBP, DHS, and the State Department believe that the risk of counterfeiting and fraud associated with these documents does not make them acceptable documents for travel under IRTPA.

Because neither document has a machine-readable zone that can be read with a passport scanner, CBP will not be able to front-load information on the traveler to expedite the initial inspection processing, including running queries on terrorist watchlists and other lookouts. Birth certificates are issued by thousands of authorities, which are impossible to validate or vet sufficiently. Both documents are readily available for purchase to assume a false identity. Because the birth certificate and state-issued photo ID have limited or non-existent security features, they are more susceptible to alteration. Therefore, the identity and citizenship of the traveler cannot always be reasonably assumed using these documents.

The third alternative would allow US transportation workers to use their TWICs in lieu of a passport. Section 102 of the Maritime Transportation Security Act of 2002 requires the Secretary of Homeland Security to issue a biometric transportation security card to individuals with unescorted access to secure areas of vessels and facilities.¹⁰⁵ In addition, these individuals must undergo a security threat assessment to determine that they do not pose a security threat prior to receiving the biometric card and access to the secure

areas. The security threat assessment must include a review of criminal, immigration, and pertinent intelligence records in determining whether the individual poses a threat, and individuals must have the opportunity to appeal an adverse determination or apply for a waiver of the standards. The regulations to implement the TWIC in the maritime environment are in the proposed rule stage and are pending finalization subject to public comment and revision.¹⁰⁶ For the sake of comparison, we assume that TWICs are available to all transportation workers covered by the rule. In actuality, the TWIC will not be available by the implementation date of this rule, and the technology required for CBP to read the TWICs at air ports-of-entry will certainly not be installed. Additionally, this analysis of this alternative assumes that CBP would accept the TWIC for any travel.

The Transportation Security Administration (TSA) and US Coast Guard (USCG) estimate that the initial population of cards holders will be approximately 750,000.¹⁰⁷ This population includes such individuals as US Merchant Mariner Document holders, port truck drivers, contractors, longshoremen, and rail workers. These TWIC holders would not likely leave the country via air for the purposes of work-related activities. Again, for the purposes of this economic analysis only, we estimate the cost savings to these individuals of using TWICs in the air environment for non-work-related travel.

We have no way of knowing how TWIC holders overlap the US population traveling to the affected WHTI countries. As calculated previously, we estimate there are approximately 14 million unique travelers covered by the rule, and approximately 4 million (29 percent) of them will require passports. For the purposes of this analysis of alternatives, we assume that the population requiring passports fully encompasses TWIC holders. This is an extreme best-case assumption, as most of the TWIC holders will not be traveling internationally in the air environment as part of their work. Thus, in the best case, 29 percent of the 750,000 TWIC holders (approximately 227,000 individuals) would now not need passports. At a cost of \$149 per passport, this would result in a savings of, at best, \$21.9 million. This is approximately 3 percent of the total rule cost. The savings are likely to be lower than that because the TWIC-holding population in the maritime environment is unlikely to be encompassed by the US air-traveling population covered by the rule.

Additionally, the TWIC cannot be read by current CBP technology installed in air ports-of-entry. While there is information embedded in the chip on the TWIC, only the name of the individual and a photo ID are apparent to a CBP officer upon presentation. DHS would have to install chip readers in all air ports-of-entry to access other information and verify the validity of the document. TSA estimates that this cost could be \$7,200 per card reader.¹⁰⁸ Additionally, CBP believes that it would cost \$500,000 to develop databases, cross-reference information and coordinate with TSA and USCG, and test equipment installed in airports and seaports.¹⁰⁹

For this analysis we assume that a card reader would need to be installed in each CBP booth in airports. CBP estimates that there are approximately 2,000 air “lanes” nationwide that would need a TWIC reader.¹¹⁰ The cost for readers is thus \$14.4 million and with the additional cost for reprogramming and adapting existing systems, the total cost is \$14.9 million in the first year. Following the first year, CBP would expect to pay approximately 25 percent of the initial cost for operations and maintenance. The net first-year savings would be, again at best, \$15.3 million. This is a 2 percent difference from the costs of the chosen alternative.

This alternative was rejected because the TWIC does not yet exist, it is not compatible with CBP systems, and it has not been designed as a travel document (it has been designed as an access control mechanism). TSA and USCG are currently only addressing seaport workers in their proposed regulations. The TWIC does not denote citizenship or preserve travel history. Because the TWIC does not provide information regarding citizenship, the holder would need to present at least one other document that proves citizenship. CBP would need to take additional time at primary inspection to establish citizenship, or the traveler would have to be referred to secondary inspections for further processing. The overall result could be increased delays at ports-of-entry. CBP would not allow the TWIC to be used unless presented in a work-related capacity; the number of holders that would be able to use the TWIC in lieu of a passport, therefore, is very small—smaller than what we have analyzed above—because few holders travel internationally as part of their work.

Another alternative would allow Mexican citizens to present their BCCs upon entry to this country. This alternative would have no impact on the cost of the rule to US citizens. The BCC is a laminated, credit card-style document with many security features and 10-year validity. Also called a “laser visa,” the card is both a BCC and a B1/B2 visitor's visa. This alternative could be less expensive for a small percentage of Mexican citizens. The vast majority of BCC holders also hold a valid Mexican passport, as a passport is required to obtain a BCC. There are a few Mexican citizens that hold a BCC without a passport who were grandfathered in under the new passport requirement that became effective in September 2001. The BCC is currently limited to use on the southern land border and the traveler is required to remain within 25 miles of the border unless the traveler obtains an I-94 prior to traveling further into the United States.¹¹¹ Newer BCCs are radio-frequency compatible.

This alternative was rejected because the BCC cannot be used with CBP's Advance Passenger Information System (APIS), which collects data from travelers prior to their arrival in and departure from the United States.¹¹² The passport requirement for Mexican citizens who hold BCCs in the air environments is consistent with the requirement for passports for most US citizens and foreign nationals.

Finally, the State Department, in consultation with DHS, has begun developing an alternative travel document, a card-format passport. Like a traditional passport book, the passport card will be a secure travel document that establishes the identity and citizenship of the bearer. The passport card is being designed to primarily benefit those citizens in border communities who regularly cross the northern and southern borders every day where such travel is an integral part of their daily lives. As currently envisioned, it will be the size of a credit card and will have a fee structure that is lower than for a traditional passport book. The application process for the passport card will be identical to that for the passport book in that each applicant will have to establish United States citizenship, personal identity, and entitlement to obtain the document. In order to use the passport card as a travel document in the land-border environment, CBP may need to develop, install, and test the infrastructure that will be required order to read and process this new document.

The State Department published a proposed rule on October 17, 2006, that addresses the passport card (71 FR 60928). The cost of the passport card has yet to be finalized. Strictly for the purposes of this analysis of alternatives, we assume the fee for a first-time adult passport card would be \$45 and for a minor would be \$35. The cost for photos is \$11 (as estimated previously). Because the application process would be comparable to that for a traditional passport, the time cost would continue to be \$41, as estimated previously for the primary analysis of the cost of the rule. Using the same methodology as used for the primary analysis (most likely scenario) but assuming that all travelers who do not currently hold a passport obtain a passport card rather than the traditional passport book, we estimate that the first-year cost would be \$463 million. At this lower cost, approximately 4.3 million passport cards would be demanded, approximately 230,000 more than under the rule, an increase of 5 percent.

Use of this passport card was rejected for the air environment for a number of reasons. DHS and the State Department believe that accepting the passport card in the air environment for air travel within the Western Hemisphere could potentially lead to confusion for air travelers who may attempt to use the passport card, rather than a traditional passport book, to fly outside of the Western Hemisphere. As developed by the Department of State, the passport card is intended to be a limited-use passport designed to address the needs of border communities, but not the operational needs of inspectors at airports. Because the passport card is not designed to be a globally interoperable document as defined by the International Civil Aviation Organization (ICAO), it does not meet all the international standards for passports and other official travel documents. For example, the size of the passport card does not comport with ICAO 9303 travel document standards. The State Department's passport card NPRM explained: "designing a card format passport for wide use, including by air travelers, would inadvertently undercut the broad based international effort to strengthen civil aviation security and travel document specifications to address the post 9/11 threat

environment.”¹¹³ Therefore, excluding the passport card for air travel within the Western Hemisphere would reduce the possibility that travelers would attempt to fly outside of the Western Hemisphere to countries where the passport card may not be accepted. Finally, as stated previously in this analysis, most air travelers already possess a passport book for ease of use, because air carriers require it, or because the countries they are visiting require it.

Exhibit 22 presents a comparison of the costs of the rule and the alternatives considered.

Exhibit 22. Comparison of Regulatory Alternatives in First Year (costs in \$millions)

Alternative	First-year cost	Cost compared to status quo	Cost compared to rule	Reason rejected
Final rule	\$649	+649	n/a	
Status quo	\$0	\$0	-\$649	Status quo does not meet requirements of IRTPA
State-issued photo ID + birth certificate in lieu of US passport	\$27	+\$27	-\$622	Identity and citizenship of the traveler cannot always be reasonably assumed or ascertained using these documents; minors may not be able to obtain IDs in all states; delays in processing entries because neither document is standardized
TWICs in lieu of US passport	\$642	+\$642	-\$7	TWIC not designed as a travel document; citizenship not included; CBP would have to install card readers and modify their own systems to accept TWICs
BCCs in lieu of Mexican passport	No direct costs for US citizens	\$0	May be slightly less expensive for BCC holders	Cannot be used in conjunction with APIS in the air environment
Passport card in lieu of traditional passport book	\$463	+463	-\$186	Could lead to traveler confusion, not designed to be a globally interoperable document

Conclusions

In summary, we expect the rule to cost an estimated \$649 million in the first year the rule is in effect attributable to travelers obtaining passports. We further estimate that approximately 652,000 passengers may forgo travel in lieu of obtaining a passport. This is based on assumptions that carry a great deal of uncertainty, including the percentages assumed to already hold US

passports, the cost for business and leisure trips to the affected countries in the Western Hemisphere, own-price elasticities for travel demand, and the cost of a passport in relation to overall trip cost. In our Monte Carlo analysis, which formally characterizes variance and uncertainty, we estimate that mean first-year costs would be an estimated \$658 million (\$601 million at the 10th percentile, \$717 million at the 90th percentile).

In the second year, we expect the rule to cost \$93 million. Following the second year, the costs are ambiguous because of the unknown effects of a future land and sea rulemaking. The direct costs will be incurred by US travelers visiting countries in the Western Hemisphere that do not currently require a passport for entry. Additionally, we anticipate a marginal drop in the level of international travelers who choose not to obtain passports because of the time or cost involved (about 4 percent). Theory suggests that losses suffered by passengers forgoing international travel (for example, by substituting toward domestic travel) will not be as high as the direct passport cost. We also expect a small drop in travelers (about 1 percent) from Canada, Mexico, and Bermuda. The indirect costs to industry are not known precisely but are expected to be spread over wide swaths of domestic and foreign economies.

Chapter Notes

¹ US State Department. 2005. *A Study to Determine the Inaugural and Annual Demand for US Passports by US Citizens Living In and Traveling to Canada, Mexico and the Caribbean*. Prepared by BearingPoint, Inc. October 5, 2005.

² US State Department. 2005. *A Study to Determine the Inaugural and Annual Demand for US Passports by US Citizens Living In and Traveling to Canada, Mexico and the Caribbean*. Prepared by BearingPoint, Inc. October 5, 2005. Page 10.

³ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Tables 2 and 3.

⁴ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Table 1.

⁵ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Tables 4 and 5.

⁶ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Table 6.

⁷ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Table 9.

⁸ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Table 10.

⁹ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Table 12.

¹⁰ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Table 19.

¹¹ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Tables 14, 15, and 16.

¹² OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Table 23.

¹³ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Table 24. The airfare and expenditures do not sum to trip total due to averages for all three estimates.

¹⁴ OTTI. 2005. US Departures Annual 2004, Passenger Travel Between US and Foreign Countries, Table 1d.

¹⁵ OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Tables 30, 31, and 32.

¹⁶ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Tables 2 and 3.

¹⁷ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Table 1.

¹⁸ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Tables 4 and 5.

¹⁹ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Table 6.

²⁰ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Table 9.

²¹ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Table 10.

²² OTTI. 2005. US Travelers to Mexico, Mexico Destinations Visited, Table 12.

²³ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Table 19.

- ²⁴ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Tables 14, 15, and 16.
- ²⁵ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Table 23.
- ²⁶ OTTI. 2005. US Travelers to Mexico 2004, Frequency of Visit, Purpose of Trip, Package, Hotel/Motel, Transportation, Travel Group, Table 24. The airfare and expenditures do not sum to trip total due to averages for all three estimates.
- ²⁷ OTTI. 2005. US Travelers to Mexico 2004, Frequency of Visit, Purpose of Trip, Package, Hotel/Motel, Transportation, Travel Group, Table 24.
- ²⁸ OTTI. 2005. US Departures Annual 2004, Passenger Travel Between US and Foreign Countries, Table 1d.
- ²⁹ OTTI. 2005. US Travelers to Mexico 2004, Mexico Destinations Visited, Tables 30, 31, and 32.
- ³⁰ SECTUR. Undated. *Level of Satisfaction and Profile of International Tourists*. Pages 33–38. Available at <http://www.sectur.gob.mx/work/resources/LocalContent/8978/2/LevelofSatisfaction.pdf>
- ³¹ SECTUR. Undated. *National Tourism Program 2001–2006*. Page 17. Available at http://www.sectur.gob.mx/work/resources/LocalContent/9969/1/PNT_ingles.pdf s
- ³² OTTI. 2005. US Travelers to Overseas Countries 2004, World Regions/Countries Visited, Table 21.
- ³³ Statistics Canada. 2003. *International Travel*. Catalogue no. 66-201-XIE.
- ³⁴ Statistics Canada. 2003. *International Travel*. Catalogue no. 66-201-XIE. Page 25.
- ³⁵ Statistics Canada. 2003. *International Travel*. Catalogue no. 66-201-XIE. Page 25.
- ³⁶ Statistics Canada. 2003. *International Travel*. Catalogue no. 66-201-XIE. Page 25.
- ³⁷ Statistics Canada. 2003. *International Travel*. Catalogue no. 66-201-XIE. Page 27.
- ³⁸ Canadian Tourism Commission. 2005. *The Potential Impact of a Western Hemisphere Travel Initiative Passport Requirement on Canada's Tourism Industry*. Prepared by the Conference Board of Canada. July 29, 2005. Page 15.
- ³⁹ Statistics Canada. 2005. Traveller Characteristics for 2004. US Residents Entering Canada by Plane.
- ⁴⁰ Personal communication with John Wagner, Office of Field Operations, US Customs and Border Protection. January 11, 2006.

⁴¹ Personal communication with Robert Rawls, Office of Field Operations, US Customs and Border Protection. May 5, 2006.

⁴² Personal communication with Alcy Frelick, Bureau of Consular Affairs, US State Department. April 5, 2006.

⁴³ Frank Moss, US State Department. Security and Prosperity Partnership Meeting with US-VISIT, CBP, and the State Department. October 26, 2005.

⁴⁴ US State Department. 2005. *A Study to Determine the Inaugural and Annual Demand for US Passports by US Citizens Living In and Traveling to Canada, Mexico and the Caribbean*. Prepared by BearingPoint, Inc. October 5, 2005. Pages 9–13.

⁴⁵ Canadian Tourism Commission. 2005. *The Potential Impact of a Western Hemisphere Travel Initiative Passport Requirement on Canada's Tourism Industry*. Prepared by the Conference Board of Canada. July 29, 2005. Page 4.

⁴⁶ Canadian Tourism Commission. 2005. *The Potential Impact of a Western Hemisphere Travel Initiative Passport Requirement on Canada's Tourism Industry*. Prepared by the Conference Board of Canada. July 29, 2005. Page 9.

⁴⁷ Canadian Tourism Commission. 2005. *The Potential Impact of a Western Hemisphere Travel Initiative Passport Requirement on Canada's Tourism Industry*. Prepared by the Conference Board of Canada. July 29, 2005. Page 9.

⁴⁸ World Travel and Tourism Council. 2005. Presentation for the Caribbean Hotel Association. Available at <http://www.caribbeanhotels.org/Select/advocacy.htm> and <http://www.caribbeanhotels.org/CaribPassports.ppt>

⁴⁹ See, for example, ATSA's website at <http://www.travelsense.org/tips/cruising.asp>

⁵⁰ Fax communication from US State Department of data received from SIOM (Mexican Immigration). April 3, 2006.

⁵¹ The New York Times. 2005. "New US Passport Rules Worry Industry." May 1, 2005. and

see also OTTI's website at http://www.tinet.ita.doc.gov/view/f-2004-99-001/intlforecast_volume.html and

Kuhbach, Peter and Bradlee A. Herauf. 2005. *US Travel and Tourism Satellite Accounts for 2001–2004*. Bureau of Economic Analysis, June 2005. and

World Tourism Council. 2005. *Tourism Highlights*. Page 11. Available at <http://www.world-tourism.org>

⁵² Personal communication with Alcy Frelick, Bureau of Consular Affairs, US State Department. April 5, 2006.

⁵³ Frank Moss, US State Department. Security and Prosperity Partnership Meeting with US-VISIT, CBP, and the State Department. October 26, 2005.

⁵⁴ Gillen, David W., William G. Morrison, and Christopher Stewart. 2004. *Air Travel Demand Elasticities: Concepts, Issues and Measurement*. Canada Department of Finance. May 13, 2004. Executive Summary (no page number). Available at http://www.fin.gc.ca/consultresp/Airtravel/airtravStdy_e.html

⁵⁵ Gillen, David W., William G. Morrison, and Christopher Stewart. 2004. *Air Travel Demand Elasticities: Concepts, Issues and Measurement*. Canada Department of Finance. May 13, 2004. Chapter 2: Elasticity in the context of air travel demand (no page number).

⁵⁶ Gillen, David W., William G. Morrison, and Christopher Stewart. 2004. *Air Travel Demand Elasticities: Concepts, Issues and Measurement*. Canada Department of Finance. May 13, 2004.

⁵⁷ Brons, Martijn, Eric Pels, Peter Nijkamp, and Piet Rietveld. 2002. "Price Elasticities of Demand of Passenger Air Travel: A Meta-Analysis." *Journal of Air Transport Management*. Volume 8, 2002. Page 173.

⁵⁸ Brons, Martijn, Eric Pels, Peter Nijkamp, and Piet Rietveld. 2002. "Price Elasticities of Demand of Passenger Air Travel: A Meta-Analysis." *Journal of Air Transport Management*. Volume 8. 2002. Pages 165–175.

⁵⁹ Brons, Martijn, Eric Pels, Peter Nijkamp, and Piet Rietveld. 2002. "Price Elasticities of Demand of Passenger Air Travel: A Meta-Analysis." *Journal of Air Transport Management*. Volume 8, 2002. Page 171.

⁶⁰ This is based on the State Department's supporting statement for their paperwork reduction act submission "Application for a U.S. Passport." OMB Control Number 1405-0004 (DS-11). The State Department does not calculate the value of time required to complete and submit the application; it only calculates the burden, and

Federal Aviation Administration. 2005. *Economic Values for FAA Investment and Regulatory Decisions, A Guide*. Prepared by GRA, Inc. December 31, 2004. Table ES-1. We use the recommended combined hourly values (business and leisure) of travel timesavings for a traveling individual (\$28.60). We do not adjust this estimate for inflation.

⁶¹ While minors may not have the same value of time as an adult, we use the same opportunity cost for a minor passport as for an adult because an adult must, at a minimum, be present during the application process to sign the form and appear with the minor. For small children, adults will complete and submit forms just as they would for adult applications.

⁶² Recall that a minor passport is issued to children under 16 and is valid for 5 years. Travelers 16 and older obtain an adult passport, which is valid for 10 years. In the OTTI data, children are defined as under the age of 18, not under the age of 16.

Thus, our percentage of children travelers does not map perfectly with the State's definition of minor travelers. Because the number of children traveling is small, however (10 percent in the air environment), the discrepancy should not greatly affect our cost estimates. Additionally, most air carriers do not charge the same fare for children under a certain age as for adults. However, because we do not have data to support using a lower trip cost for minors, we use the adult trip cost to estimate impacts on demand for travel. Because children are a small portion of the traveling public in the air environment, the discrepancy should again not greatly affect our cost estimates.

⁶³ For an adult passport, we amortize \$149 at a 7 percent rate over 10 years to estimate an average annual cost of \$21. For a minor passport, we amortize \$134 at a 7 percent rate over 5 years to estimate an average annual cost of \$33.

⁶⁴ OTTI. US Travelers to Overseas Countries 2004, Frequency of Visit, Purpose Of Trip, Package, Hotel/Motel, Transportation, Travel Group.

⁶⁵ US Travelers to Mexico 2004, Frequency of Visit, Purpose Of Trip, Package, Hotel/Motel, Transportation, Travel Group; Table 21.

⁶⁶ We do not assume a cost for travelers to Micronesia and general aviation travelers following the first year because we assume they will all have passports.

⁶⁷ Brons, Martijn, Eric Pels, Peter Nijkamp, and Piet Rietveld. 2002. "Price Elasticities of Demand of Passenger Air Travel: A Meta-Analysis." *Journal of Air Transport Management*. Volume 8, 2002. Page 173.

⁶⁸ US State Department. 2005. *A Study to Determine the Inaugural and Annual Demand for US Passports by US Citizens Living In and Traveling to Canada, Mexico and the Caribbean*. Prepared by BearingPoint, Inc. October 5, 2005. Page 11.

⁶⁹ The State Department did not estimate costs in their study; they estimated only the number of passports that would need to be issued as a result of WHTI.

⁷⁰ The State Department analyzed data for the Dominican Republic, Bahamas, Jamaica, Costa Rica, Netherlands Antilles, Panama, Bermuda, Aruba, Barbados, Virgins Islands, St Lucia, Antigua and Barbuda, St Kitts and Nevis, Grenada, Micronesia, Anguilla, Micronesia, St Vincent and the Grenadines. We did not include Costa Rica, Barbados, Anguilla, and St Lucia in our analysis of travelers to affected countries because these countries already require an American traveler to carry a US passport for entry. Both analyses included the Dominican Republic, Jamaica, and the Bahamas, which are the Caribbean nations receiving the most American visitors on an annual basis.

⁷¹ Canadian Tourism Commission. 2005. *The Potential Impact of a Western Hemisphere Travel Initiative Passport Requirement on Canada's Tourism Industry*. Prepared by the Conference Board of Canada. July 29, 2005. Page 10.

⁷² For a discussion of appropriate statistical techniques to determine probability distributions of relevant outcomes see Office of Management and Budget. 2003. "Circular A-4" (Guidance to Federal agencies on the development of regulatory analysis). September 17, 2003. Page 41.

⁷³ Gillen, David W., William G. Morrison, and Christopher Stewart. 2004. *Air Travel Demand Elasticities: Concepts, Issues and Measurement*. Canada Department of Finance. May 13, 2004. Executive Summary (no page number). and

Brons, Martijn, Eric Pels, Peter Nijkamp, and Piet Rietveld. 2002. "Price Elasticities of Demand of Passenger Air Travel: A Meta-Analysis." *Journal of Air Transport Management*. Volume 8, 2002.

⁷⁴ Federal Aviation Administration. 2005. *Economic Values for FAA Investment and Regulatory Decisions, A Guide*. Prepared by GRA, Inc. December 31, 2004. Table ES-1.

⁷⁵ In such an instance using the most likely scenario, travelers that may forgo travel (652,491) would be added to the net passports demanded (4,084,204) for a total of 4,736,695 passports. At a cost of \$149 for an adult passport, \$134 for a minor passport, and an assumption that 20 percent of the travelers required expedited service, the direct costs would then total \$753 million. This is a cost difference of \$104 million from the estimate presented in Exhibit 16.

⁷⁶ Woodside, Arch G. and Chris Dubelaar. 2002. "A General Theory of Tourism Consumption Systems: A Conceptual Framework and an Empirical Exploration." *Journal of Travel Research*. Volume 41, November 2002. Page 120.

⁷⁷ Woodside, Arch G. and Chris Dubelaar. 2002. "A General Theory of Tourism Consumption Systems: A Conceptual Framework and an Empirical Exploration." *Journal of Travel Research*. Volume 41, November 2002. Page 121.

⁷⁸ Jeng, James and Daniel R. Fesenmaier. 2002. "Conceptualizing the Travel Decision-Making Hierarchy: A Review of Recent Developments." *Tourism Analysis*. Volume 7, 2002. Page 28.

⁷⁹ Jeng, James and Daniel R. Fesenmaier. 2002. "Conceptualizing the Travel Decision-Making Hierarchy: A Review of Recent Developments." *Tourism Analysis*. Volume 7, 2002. Pages 25–26.

⁸⁰ Brons, Martijn, Eric Pels, Peter Nijkamp, and Piet Rietveld. 2002. "Price Elasticities of Demand of Passenger Air Travel: A Meta-Analysis." *Journal of Air Transport Management*. Volume 8, 2002. Page 172. and

Maloney, William F. and Gabriel V. Montes Rojas. 2005. "How Elastic Are Sea, Sand, and Sun? Dynamic Panel Estimates of the Demand for Tourism." *Applied Economic Letters*. Volume 12, 2005. Pages 277–280. and

Crouch, Geoffrey I. 1992. "Effects of Income and Price on International Tourist Demand." *Annals of Tourism*. Volume 19 (4), 1992. Pages 643–664.

⁸¹ Lim, Christine. 1999. "A Meta-Analytic Review of International Tourism Demand." *Journal of Travel Research*. Volume 37, February 1999. Page 282.

⁸² Alegre, Joaquin and I. Lorenc Pou. 2004. "Micro-economic Determinants of the Probability of Tourism Consumption." *Tourism Economics*. Volume 10 (2), 2004. Pages 125 and 126.

⁸³ Alegre, Joaquin and I. Lorenc Pou. 2004. "Micro-economic Determinants of the Probability of Tourism Consumption." *Tourism Economics*. Volume 10 (2), 2004. Page 142.

⁸⁴ Kulendran, Nada and Stephen F. Witt. 2003. "Forecasting the Demand for International Business Tourism." *Journal of Travel Research*. Volume 41, February 2003. Page 269.

⁸⁵ Collins, Darrian and Clem Tisdell. 2002. "Gender and Difference in Travel Life Cycles." *Journal of Travel Research*. Volume 41, November 2002. Pages 133–143.

⁸⁶ Oppermann, Martin. 2000. "Tourism Destination Loyalty." *Journal of Travel Research*. Volume 39, August 2000. Pages 78–84.

⁸⁷ Oppermann, Martin. 2000. "Tourism Destination Loyalty." *Journal of Travel Research*. Volume 39, August 2000. Page 83.

⁸⁸ Kashyap, Rajiv and David C. Bojanic. 2000. "A Structural Analysis of Value, Quality, and Price Perceptions of Business and Leisure Travelers." *Journal of Travel Research*. Volume 39, August 2000. Page 45.

⁸⁹ Travel Industry Association of America. 2005. "Leisure Travel Planning: How Consumers Make Travel Decisions." Available at www.tia.org.

⁹⁰ Travel Industry Association of America. 2005. "Leisure Travel Planning: How Consumers Make Travel Decisions." Page 4.

⁹¹ Travel Industry Association of America. 2005. "Leisure Travel Planning: How Consumers Make Travel Decisions." Pages 5–7.

⁹² Travel Industry Association of America. 2005. "Leisure Travel Planning: How Consumers Make Travel Decisions." Page 27.

⁹³ Travel Industry Association of America. 2005. "Leisure Travel Planning: How Consumers Make Travel Decisions." Page 36.

⁹⁴ Crouch, Geoffrey I. 1996. "Demand Elasticities in International Marketing: A Meta-Analytical Application to Tourism." *Journal of Business Research*. Volume 36, 2002. Pages 117 and 118.

⁹⁵ For a discussion of consumer and producer surplus see Office of Management and Budget. 2003. "Circular A-4" (Guidance to Federal agencies on the development of regulatory analysis). September 17, 2003. Page 19.

⁹⁶ Recall the previous calculation where we estimated costs if all travelers obtained passports: travelers that may forgo travel (652,491) would be added to the net passports demanded (4,084,204) for a total of 4,736,695 passports. At a cost of \$149 for an adult passport, \$134 for a minor passport, and an assumption that 20 percent of the travelers required expedited service, the direct costs would then total \$753 million. This is a cost difference of \$104 million from the estimate presented in Exhibit 16.

⁹⁷ Zhang, Jie and Camilla Jensen. 2005. "Comparative Advantage in Tourism: A Supply-Side Analysis of Tourism Flows." Amternes og Kommunernes Forskningsinstitut working paper, April 3, 2005. Available at www.akf.dk

⁹⁸ See for example, Pratt, Godfrey. 2003. "Terrorism and tourism: Bahamas and Jamaica fight back." *International Journal of Contemporary Hospitality Management*. 15/3 [2003].

⁹⁹ There are some indications that domestic substitutions for foreign travel are likely. The CTC study, for example, estimates domestic gains for Canada as a result of WHTI. Canadian Tourism Commission. 2005. *The Potential Impact of a Western Hemisphere Travel Initiative Passport Requirement on Canada's Tourism Industry*. Prepared by the Conference Board of Canada. July 29, 2005. Pages 17 and 18.

¹⁰⁰ Office of Management and Budget. 2003. "Circular A-4" (Guidance to Federal agencies on the development of regulatory analysis). September 17, 2003. Page 26.

¹⁰¹ Office of Management and Budget. 2003. "Circular A-4" (Guidance to Federal agencies on the development of regulatory analysis). September 17, 2003. Pages 26 and 27.

¹⁰² OTTI. 2005. US Travelers to Overseas Countries 2004, State of Residence of Travelers, Table 22.

¹⁰³ See the nationwide DMV guide at www.dmv.org.

¹⁰⁴ Of the 11 states examined in the analysis of this alternative, Florida, Massachusetts, New Jersey, and Pennsylvania have a minimum age requirement for obtaining a photo ID. The minimum age to obtain a photo ID in Florida is 12, in Massachusetts is 16, in New Jersey is 17, and in Pennsylvania is 16.

¹⁰⁵ Pub. L. 107-295, November 25, 2002, 116 Stat. 2064.

¹⁰⁶ Department of Homeland Security, Transportation Security Administration, and US Coast Guard. 2006. "Regulatory Evaluation for the Notice of Proposed Rulemaking Transportation Worker Identification Credential (TWIC) Implementation in the

Maritime Sector." May 22, 2006. See 71 *FR* 29396 for the proposed rulemaking and see dockets TSA-2006-24191 or USCG-2006-24196 for the regulatory evaluation.

¹⁰⁷ Department of Homeland Security, Transportation Security Administration, and US Coast Guard. 2006. "Regulatory Evaluation for the Notice of Proposed Rulemaking Transportation Worker Identification Credential (TWIC) Implementation in the Maritime Sector." May 22, 2006. Page 49. See 71 *FR* 29396 for the proposed rulemaking and see dockets TSA-2006-24191 or USCG-2006-24196 for the regulatory evaluation.

¹⁰⁸ An estimated cost verified and accepted as reasonable in a personal communication with Valerie Isbell, US Customs and Border Protection, Office of Information Technology. May 8, 2006.

¹⁰⁹ Personal communication with Valerie Isbell, US Customs and Border Protection, Office of Information Technology. May 8, 2006.

¹¹⁰ Personal communication with Valerie Isbell, US Customs and Border Protection, Office of Information Technology. May 8, 2006.

¹¹¹ With the exception of Tucson, Arizona, where travel is limited to 70 miles.

¹¹² Information for aircraft to be submitted includes: full name, date of birth, gender, citizenship, country of residence, status on board the aircraft, travel document type, passport information if passport is required (number, country of issuance, expiration date), alien registration number where applicable, address while in the United States (unless a US citizen, lawful permanent resident, or person in transit to a location outside the United States), Passenger Name Record locator if available, foreign code of foreign port/place where transportation to the United States began, code of port/place of first arrival, code of final foreign port/place of destination for in-transit passengers, airline carrier code, flight number, and date of aircraft arrival. Information for vessels is comparable, with requirements appropriate to vessels: vessel name, vessel country of registry/flag, vessel number, and voyage number (for multiple arrivals on the same calendar day).

¹¹³ 71 *FR* 60928. Department of State. Card Format Passport; Changes to Passport Fee Schedule. October 17, 2006.

3. Benefits Analysis

As noted in a recent issue brief for Congress:

In their desire to combat terrorism in a modern political context, democratic countries often face conflicting goals and courses of action: (1) providing security from terrorist acts, that is, limiting the freedom of individual terrorists, terrorist groups, and support networks to operate unimpeded in a relatively unregulated environment, versus (2) maximizing individual freedoms, democracy, and human rights. Efforts to combat terrorism are complicated by a global trend towards deregulation, open borders, and expanded commerce. In democracies such as the United States, the constitutional limits within which policy must operate are seen by some to conflict directly with a desire to secure the lives of citizens against terrorist activity more effectively.¹

While enhanced security is the primary impetus of this rule, that enhancement must be made against the backdrop of a desire for *legitimate* trade and travel that as is as unrestricted as possible throughout the Western Hemisphere. This rule attempts to balance the desire for a more secure travel document while affecting legitimate trade and travel as minimally as possible.

Ideally, the quantification and monetization of the beneficial effects of this regulation would involve two steps. First, we would estimate the reduction in the probability of a successful terrorist attack resulting from implementation of the rule and the consequences of the avoided event (collectively, the risk associated with a potential terrorist attack). Then we would identify individuals' willingness to pay for this incremental risk reduction and multiply it by the population experiencing the benefit. However both of these steps rely on key data that are not available for this rule.

Typically, reductions in the probability of a terrorist attack resulting from a regulation are measured against the baseline probability of occurrence (the current likelihood that a terrorist attack involving an individual arriving in the United States in the air environment will be attempted and be successful) and combined with information about the consequences of the attack. The difference between the baseline probability of occurrence and the probability of occurrence after the regulation is implemented would represent the incremental probability reduction attributable to the rule.

We cannot use historical data on the frequency of terrorist attacks to estimate the current baseline probability of attack within the United States for several reasons. Most importantly, existing data do not provide information about whether documented attacks were attributable to the lack of a passport requirement. In addition, the data on international events occurring within the United States in the last decade are limited, and little information is available describing the consequences of most of these events. Finally, use of these data to project future probability of attack requires an understanding of the socioeconomic and political conditions motivating and

facilitating these events historically and foresight with regard to how these factors may change in the future. Therefore, for this benefits analysis, we do not use these data to estimate the baseline probability of a terrorist attack in the United States resulting from entering the country without a valid passport. As a result, and in the absence of more detailed data, we are unable to quantitatively estimate the incremental reduction in the probability of terrorist attack that will result from this rule.

For ongoing CBP regulations, we have conducted reviews of the economic literature to identify existing studies of individuals' willingness to pay to reduce the risk of a terrorist attack. Several articles discuss characteristics of terrorist attacks that might influence willingness to pay to reduce these risks.² Given publicly available data, however, we are unable to identify specific estimates of willingness to pay to reduce the risk of terrorist attack in the United States. Although we are unable to identify estimates of willingness to pay for the risk reductions potentially achieved by this regulation, academic literature provides information about how the public's perception of terrorist risks might influence their desire for policy action, and ultimately, their willingness to pay for such regulation. A substantial body of psychometric literature attempts to measure how the perception of risk affects attitudes towards risk reduction.

For example, the work of Slovic, et al., clarifies dimensions of risk that influence individual rankings of the importance of reducing these risks.³ The authors find that the most important determinant of how the public ranks risk is the degree of "dread" associated with the risk. The authors define dreaded risks as a "perceived lack of control,...catastrophic potential, fatal consequences, and the inequitable distribution of risks and benefits."⁴ In other words, the public is less willing to tolerate risks related to incidents they dread, such as nuclear accidents or terrorist attacks, than incidents that are not dreaded but that pose similar or higher risks, such as riding a motorcycle. Slovic, et al., state that the more dreaded an activity, "(a) the higher its perceived risk, (b) the more people want its risk reduced, and (c) the more they want to see strict regulation employed to achieve the desired reduction in risk."⁵ Based on existing risk perception literature, it is reasonable to hypothesize that people would be willing to pay more to reduce risks associated with a terrorist attack than similar risks associated with hazards that are familiar, controllable, and that do not have catastrophic consequences.

When is not possible to obtain a single value estimate that comprises the bundle of benefits derived from the regulation in question, analysts estimate separately the value of individual effects resulting from the regulation and sum them to estimate total benefits. Certain effects are more easily measured than others. Substantial literature exists estimating the value of changes in fatal and nonfatal risks. In addition, the value of lost property and opportunity costs associated with supply chain effects can be determined from market data. Other effects may be more difficult to quantify or

monetize—a regulatory action may result in citizens feeling safer or having less fear. Several researchers argue that reductions in fear result in a social good that should be quantified, though “the problem of quantifying and monetizing fear and its consequences...has yet to be seriously engaged in the relevant literature.”⁶ In addition, people’s willingness to pay to protect national historic treasures or sites of cultural importance may exceed the simple costs of repairing or rebuilding these sites. Effects that are not easily monetized using readily available information may be discussed qualitatively. However, lacking information about the incremental decrease in the probability of a successful terrorist attack or reliable information about the consequences of such an attack, we are unable to quantify individual categories of benefits. Without quantifying these benefits, we cannot estimate their value.

This rule is being promulgated to implement the requirements of the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA) and in order to increase security in the air environment attributable to more secure documents. The rule addresses a vulnerability of the United States to entry by terrorists or other persons by false documents or fraud under the current documentary exemptions for travel within the Western Hemisphere. These vulnerabilities have been noted extensively by Congress and others.

- In May 2003, a subcommittee of the House Judiciary Committee held a hearing focused on a fraudulent US document ring in the Caribbean, the exploitation of which allowed the notorious Washington, DC “sniper” John Allen Muhammad to support himself while living in Antigua. A Government Accountability Office investigator at that hearing testified as to the ease of entering the United States with fraudulent birth certificates and drivers’ licenses.⁷
- During the debate on IRTPA, several members of Congress, including the Chairman of the House Judiciary Committee commented on the need for more secure documents for travelers.⁸
- The 9/11 Commission recommendations, on which much of IRTPA was based, specifically included a recommendation to address travel documents in the Western Hemisphere:

Americans should not be exempt from carrying biometric passports or otherwise enabling their identities to be securely verified when they enter the United States; nor should Canadians or Mexicans. Currently US persons are exempt from carrying passports when returning from Canada, Mexico, and the Caribbean. The current system enables non-US citizens to gain entry by showing minimal identification. The 9/11 experience shows that terrorists study and exploit America’s vulnerabilities.⁹
- A uniform document requirement would assist CBP officers in verifying the identity and citizenship of travelers who enter the

United States and improve their ability to detect fraudulent documents or false claims to citizenship. Further, such standardized documents will enable more rapid processing of travelers who enter the United States because an individual's identity will be easier to identify and he or she can be processed through CBP more efficiently.

This rule will require a traveler to produce a passport for entry into the United States at all air ports-of-entry. The scrutiny of the passport booklet is one of the tools CBP officers use to review travel patterns and to determine prior entry and departure dates and stamps from the United States and other countries. Officers use this historical information to guide their questions with particular travelers as appropriate.

The implementation of standardized travel documents for citizens of the US, Canada, Bermuda, and Mexico for air travel would also reduce confusion for these industries and improve the process for CBP officers. A single travel document eliminates the need to review a host of distinct, and sometimes illegible, birth certificates and other identity documents.

As the report of the 9/11 Commission observed, travel documents today are as valuable to terrorists as weapons, and the passport is arguably the most valuable travel and identity document in the world. DHS and the State Department believe that the passport is still the travel document that best ensures reliability of identity and citizenship documents, as well as the safety and efficiency of entry in the air environment.

The 9/11 Commission noted that the current exemptions to the passport requirement are a weak link in our layered approach to security that we can no longer be ignore. By standardizing documentation requirements for all air travelers entering the United States, we are securing and streamlining the entry process into the United States. This will allow border security officials to review documentation and determine eligibility for entry in a manner that does not disrupt the movement of people through our ports-of-entry.

Requiring passports for air travel would allow CBP officers to more efficiently process these travelers because there is a standard document to review that contains features allowing for quick reading of relevant information. Reducing the number of acceptable travel documents would eliminate the need to examine a host of documents—over 8,000 types may be presented today—that are sometimes illegible or questionable. CBP officers would reduce the time and effort used to manually enter passenger information into the computer system because the officer can quickly scan the machine-readable zone of the passport to process the information using standard passport readers used for all machine readable passports worldwide. It is difficult for CBP to precisely determine the improved efficiencies resulting from limiting the acceptable documents to a passport in the air environment. Based on information from CBP field operations, CBP estimates that presenting secure

and machine-readable documentation may result in typical timesavings on the order of 5 to 30 seconds per air passenger processed.¹⁰ This could result in an annual cost savings of \$1.7 million to \$10.4 million.¹¹

The security benefits to phasing in WHTI are clear, as several potential scenarios described above demonstrate. Phasing in air travel will provide border security benefits for a significant number of arriving passengers with minimal investment in new port-of-entry infrastructure. Initiating the first phase for air travelers will close one vulnerability identified by the 9/11 Commission with the existing operational capability of both Departments and with minimal negative impact on the traveling public.

Chapter Notes

¹ Perl, Raphael. 2006. "Terrorism and National Security: Issues and Trends." Congressional Research Service Issue Brief for Congress. IB10119. February 6, 2006. Page CRS-6.

² See Sunstein, Cass. 2003. "Terrorism and Probability Neglect." *Journal of Risk and Uncertainty*. Volume 26, Numbers 2-3. 2003. Pages 121–136. and

Fischhoff, Baruch, Roxana M. Gonzalez, Deborah A. Small, and Jennifer S. Lerner. 2003. "Judged Terror Risk and Proximity to the World Trade Center." *Journal of Risk and Uncertainty*. Volume 26, Numbers 2-3. 2003, Pages 137–151.

³ Slovic, Paul, Baruch Fischhoff, and Sarah Lichtenstein. 1981. "Perceived Risk: Psychological Factors and Social Implications." *Proceedings of the Royal Society of London. Series A: Mathematical and Physical Sciences*. Volume 430, Number 1878. Pages 17–34. and

Slovic, Paul. 1987. "Perception of Risk." *Science*. Volume 236, April 1987. Pages 280–285.

⁴ Slovic, Paul. 1987. "Perception of Risk." *Science*. Volume 236, April 1987. Page 283.

⁵ Slovic, Paul, Baruch Fischhoff, and Sarah Lichtenstein. 1981. "Perceived Risk: Psychological Factors and Social Implications." *Proceedings of the Royal Society of London. Series A: Mathematical and Physical Sciences*. Volume 430, Number 1878. Page 29.

⁶ See Sunstein, Cass. 2003. "Terrorism and Probability Neglect." *Journal of Risk and Uncertainty*. Volume 26, Numbers 2-3. 2003. Pages 132 and 133.

⁷ Government Accountability Office. 2003. "Counterfeit Documents Used To Enter the United States from Certain Western Hemisphere Countries Not Detected." Testimony before the Subcommittee on Immigration, Border Security, and Claims, House

Committee on the Judiciary. Statement of Robert J. Cramer, Managing Director Office of Special Investigations. May 13, 2003. GAO-03-713T.

⁸ "As the 9/11 staff report on terrorist travel declared, 'The challenge for national security in an age of terrorism is to prevent the people who may pose overwhelming risk from entering the United States undetected.' The Judiciary sections of title III require Americans returning from most parts of the Western Hemisphere to possess passports; require Canadians seeking entry into the United States to present a passport or other secure identification; authorize additional immigration agents and investigators; reduce the risk of identity and document fraud; provide for the expedited removal of illegal aliens; limit asylum abuse by terrorists; and streamline the removal of terrorists and other criminal aliens. These provisions reflect both commission recommendations and legislation that was pending in the House." Congressional Record, October 7, 2004, H8685.

⁹ *The 9-11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States*. July 22, 2004. Page 388.

¹⁰ Personal communication with Robert Rawls, Office of Field Operations, US Customs and Border Protection. May 25, 2006.

¹¹ This is based on the estimated timesavings (5 to 30 seconds) multiplied by the number of new passengers with a passport (4,084,204; from Chapter 2) multiplied by the hourly cost of a CBP officer. The annual base salary for a GS-11/1 (in 2005) is \$45,239. This is multiplied by a load factor of 1.4 to account for fringe benefits and locality pay, for an annual salary of \$63,335. This is divided by 2,080 hours to reach an hourly rate of \$30.45.

(4,084,204 travelers)(5 seconds)(\$30.45/hour) = \$1,727,240

(4,084,204 travelers)(30 seconds)(\$30.45/hour) = \$10,363,439

4. Impacts to Small Entities

We have prepared this chapter to examine the impacts of the rule on small entities as required by the Regulatory Flexibility Act (RFA).¹ A small entity may be a small business (defined as any independently owned and operated business not dominant in its field that qualifies as a small business per the Small Business Act); a small not-for-profit organization; or a small governmental jurisdiction (locality with fewer than 50,000 people).

When considering the impacts on small entities for the purpose of complying with the RFA, we consulted the Small Business Administration's guidance document for conducting regulatory flexibility analysis.² Per this guidance, a regulatory flexibility analysis is required when an agency determines that the rule will have a significant economic impact on a substantial number of small entities that are *subject to the requirements of the rule*.³ This guidance document also includes a good discussion describing how direct and indirect costs of a regulation are considered differently for the purposes of the RFA. We do not believe that small entities are subject to the requirements of the rule; individuals are subject to the requirements, and individuals are not considered small entities.⁴ To wit, "The courts have held that the RFA requires an agency to perform a regulatory flexibility analysis of small entity impacts only when a rule directly regulates them."⁵

Small businesses could be indirectly affected by the rule if international travelers forgo travel to affected Western Hemisphere countries (see Chapter 2). However, as was first held in *Mid-Tex Electric Cooperative, Inc. v. Federal Energy Regulatory Commission* the court reasoned "Congress did not intend to require that every agency consider every indirect effect that any regulation might have on small businesses in any stratum of the national economy."⁶ The same court later held that an agency is under no obligation to conduct a small entity impact analysis of effects on entities it does not regulate.⁷ Finally, the courts further bolstered the notion that indirect impacts should be disregarded by noting that the Regulatory Flexibility Act is not intended to apply to every entity that may be targeted by the regulation. The fact that the rule will have economic impacts in many sectors of the economy does not change this. The court reasoned that "requiring an agency to assess the impact on all of the nation's small businesses possibly affected by a rule would be to convert every rulemaking process into a massive exercise in economic modeling, an approach we have already rejected."⁸

As described in Chapter 2, we could not quantify the indirect impacts of the rule with any degree of certainty; we instead focused our analysis on the direct costs to individuals recognizing that some small entities will face indirect impacts.

Many of the small entities indirectly affected will be foreign owned and will be located outside the United States. Additionally, reductions in international travel that result from the rule could lead to gains for the domestic travel and

tourism industry. Most travelers, an estimated 96 percent of US travelers and 99 percent of Canadian, Mexican, and Bermudan travelers are expected to obtain passports and continue traveling. Consequently, indirect effects are expected to be spread over wide swaths of domestic and foreign economies.

Reason for Agency Action

The Western Hemisphere Travel Initiative (WHTI) will reduce the vulnerabilities identified in the final report of the National Commission on Terrorist Attacks Upon the United States (9/11 Commission). WHTI is intended to not only enhance security efforts at our Nation's borders, but also to expedite the movement of legitimate travel within the Western Hemisphere.

As required by the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA), both the Department of Homeland Security and the Department of State reviewed a variety of options for implementing the WHTI requirements, and jointly decided to phase-in the documentation requirement based upon risk management and operational considerations. As discussed in the preamble to this rule, this phased approach is essential because it starts implementation at air ports-of-entry before the statutory deadline. This will enhance security requirements using existing infrastructure while allowing the Departments time to acquire and develop resources to meet the increased workload demand for the largest sector, the land-border crossings. More detail is provided in the preamble to this rule.

Objectives of and Legal Basis for the Rule

The President signed IRTPA on December 17, 2004. Section 7209 of IRTPA requires that the Secretary of Homeland Security, in consultation with the Secretary of State, develop and implement a plan as expeditiously as possible to require travelers entering the United States to present a passport, other document, or combination of documents, that are "deemed by the Secretary of Homeland Security to be sufficient to denote identity and citizenship." Section 7209 expressly provides that United States citizens and nationals and categories of individuals for whom documentation requirements have previously been waived under section 212(d)(4)(B) of the Immigration and Nationality Act (8 U.S.C 1182(d)(4)(B)) will be required to comply. The Secretary of Homeland Security, in consultation with the Secretary of State, must develop and implement the plan by January 1, 2008.

Number and Types of Small Entities to which the Rule Will Apply

As stated previously, the rule will not apply to small entities; it will apply to individuals who travel in the Western Hemisphere who are currently not required to carry a valid passport for entry into the United States. Individuals are not considered small entities.

Numerous small entities could be indirectly affected by the rule. In all industries, some American small businesses could be negatively affected if Canadian, Mexican, and Bermudan travelers forgo travel to the United States. American small businesses would gain if US travelers substitute domestic travel for international travel. Which businesses would be positively and negatively affected cannot be determined, but the impacts are expected to be spread out over a large population of businesses.

Exhibit 25 (next page) presents the most popular activities reported in OTTI's survey of overseas travelers for US travelers to the Caribbean and Mexico (recalling that the OTTI survey does not include US travelers to Canada).⁹ As shown, travelers engage in similar activities in both regions. Activities would be different for Canada, which is not a sun and sand destination, but would be similar for Micronesia.

Exhibit 26 (Page 4-5) presents the most popular activities for Caribbean and Mexican visitors to the United States (recalling that only Bermudans would be affected by the rule).¹⁰ Canadians would likely engage in the same activities (recalling that the OTTI survey does not include Canadian travelers to the United States).

Based on the affected number of US and alien travelers, we expect businesses supporting travel to Canada, Mexico, the Dominican Republic, Jamaica, and the Bahamas are the most likely to incur indirect costs as a result of the rule, as US travelers to these Western Hemisphere countries comprise the bulk of affected US travelers.

Exhibit 23. Activities Consumed in the Caribbean and Mexico by US Travelers

Activity	Percent of Respondents Engaging in Activity in Country (multiple responses allowed)	
	Caribbean	Mexico
Dining in restaurants	75.9	81.9
Shopping	66.9	70.1
Water sports/sunbathing	65.9	51.4
Nightclubs/dancing	36.6	30.2
Casinos/gambling	28.5	3.1
Visit small towns	27.8	34.5
Touring countryside	26.0	19.1
Visit historical places	23.5	39.4
Sightseeing in cities	22.7	31.4
Golfing/tennis	14.0	9.2
Guided tours	13.4	13.7
Cultural heritage sites	12.7	24.7
Amusement/theme parks	9.8	9.7
Concert/play/musical	8.5	5.8
Ethnic heritage sites	7.9	13.0
Hunting/fishing	6.8	8.9
Art gallery/museum	5.2	13.0
Environmental/ecological excursions	5.2	6.4
Cruises, 1 night +	4.6	1.8
Visit national parks	4.3	5.9
Attend sports event	2.5	2.1
Camping/hiking	2.5	2.2
Ranch vacations	1.2	4.3
Visit American Indian communities	0.0	1.2
Snow skiing	0.0	0.3

Source: OTTI, US citizen air departures for 2004.

The industries indirectly affected (and North American Industry Classification System codes—NAICS) include, but are not necessarily limited to—

Air carriers (NAICS 481111, 481211). Small carriers that operate overseas flights within the Western Hemisphere are predominantly charter carriers running point-to-point operations. In 2004, for travelers to the Caribbean, 77 percent flew on scheduled US carriers, 21 percent flew on scheduled foreign carriers, and 2 percent flew on charter flights. For travelers to Mexico, 62 percent flew on scheduled US carriers, 36 percent flew on scheduled foreign carriers, and 2 percent flew on charter flights.¹¹ The percentages are likely similar for travelers to Canada. Charter flights are a tiny fraction of air travel to all countries in the Caribbean except Cuba (where charter flights carry 60 percent of passengers), Martinique (20 percent), and Trinidad and Tobago (20 percent). These countries all currently require a passport for entry; thus, American travelers to these countries will face no new requirements as a result of the rule and the charter carriers to these countries will not be affected.

Exhibit 24. Activities Consumed in the United States by Caribbean and Mexican Travelers

Activity	Percent of Respondents Engaging in Activity from Country (multiple responses allowed)	
	Caribbean	Mexico
Shopping	83.8	81.2
Dining in restaurants	68.8	66.4
Sightseeing in cities	15.3	22.5
Amusement/theme parks	14.3	27.5
Visit historical places	14.2	31.1
Visit small towns	12.1	26.7
Nightclubs/dancing	11.9	12.1
Art gallery/museum	9.9	18.9
Cultural heritage sites	8.9	10.8
Touring countryside	8.7	8.3
Visit national parks	8.3	13.6
Concert/play/musical	7.9	14.3
Golfing/tennis	4.6	2.5
Water sports/sunbathing	3.5	7.0
Guided tours	3.0	7.6
Attend sports event	2.9	6.8
Casinos/gambling	2.6	8.8
Ethnic heritage sites	2.4	1.7
Visit American Indian communities	2.2	0.2
Cruises	1.4	5.3
Ranch vacations	0.9	1.3
Snow skiing	0.8	3.6
Hunting/fishing	0.4	0.6
Camping/hiking	0.2	0.5
Environmental/ecological excursions	0.2	2.3

Source: OTTI, alien air arrivals for 2004.

Cruise ship companies (NAICS 483112). Major cruise lines are all large and many are foreign owned. Small cruise companies that take passengers on coastal excursions will not be affected if they do not touch a foreign port during their voyages. The same is true for fishing boats and offshore supply vessels.

Airports, cruise terminals, plus their support services (NAICS 488119, 48819). Most airports receiving international traffic are large businesses or public entities. General aviation airports are likely to be small businesses or public entities.

Traveler accommodations (NAICS 7211). As shown in Chapter 2, 71 percent of US travelers to the Caribbean, 74 percent to Mexico, and 51 percent to Central America stay in hotels for an average of a week while traveling. US travelers would consume these services largely outside the United States. Some travel parties may have an overnight stay at a US business before or following an international trip.

Travel agents (NAICS 56151). As shown in Chapter 2, some 45 percent of travelers to the Caribbean, and 32 percent of travelers to Mexico use a travel agent to book their air travel. Travel agents are overwhelmingly small businesses.

Dining services (NAICS 722). While traveling outside the US, dining is the number one activity for visitors (and would be consumed outside the US at non-US businesses). The same is true for foreign citizens traveling in the United States. Most dining services are likely to be small businesses.

Retail shopping (NAICS 44–45). While traveling outside the US, shopping is a close second to dining for visitor activities (and again would be consumed outside the US). It is the favorite activity for foreign citizens traveling in America. The retail-shopping sector is diverse and large, and it is unlikely that any one segment would be noticeably affected by the rule.

Tour operators (NAICS 56152). Touring is a popular activity when traveling outside the US and when visiting. US travelers would consume touring activities outside the country at non-American businesses. Most tour operators are likely to be small businesses.

Scenic and sightseeing transportation (NAICS 487). Again, Americans traveling to the affected Western Hemisphere countries would consume these services outside the country. Canadians, Mexicans, and Bermudans would consume these services here. Businesses providing these services are likely to be small.

Hired or rented transportation (NAICS 485, 532111). This would include taxis, buses, other transit, and rental cars. Numerous American companies rent automobiles in the Western Hemisphere countries affected, but these are almost all large businesses.

Arts, entertainment, and recreation (NAICS 71). Recreational activities are popular for all travelers. Like retail shopping, the sector is diverse and large and no one segment is likely to be noticeably affected.

Exhibit 27 (next page) presents the industries likely to be indirectly affected (both positively and negatively) by the rule. Not all businesses in these industry sectors will be affected because not all serve international travelers. Some sectors (retail trade, for example) are so large that any effects of a passport requirement will be undetectable. The breakout of firms gives a sense of how many businesses are likely to be small in each industry segment based solely on the number of employees (above and below 500). Businesses are classified as large or small depending on the number of employees or annual revenue, and thus this table is not intended to definitively state the number of small businesses in each sector, but to give an idea of how small businesses overwhelmingly outnumber large businesses in the affected industries.

Exhibit 25. Industries Indirectly Affected by the Rule and Their NAICS Codes

NAICS	Description	Total US Firms	< 500 employees	500+ employees
481111	Scheduled passenger air transportation	450	399	51
481211	Nonscheduled chartered passenger air transportation	1,344	1,279	65
488119	Other airport operations	1,198	1,156	42
48819	Other support activities for air transportation	2,403	2,348	55
7211	Traveler accommodation	41,551	41,107	444
56151	Travel agencies	14,838	14,758	80
722	Food services & drinking places	376,637	375,367	1,270
44-45	Retail trade	na	na	na
56152	Tour operators	14,838	14,758	80
487	Scenic & sightseeing transportation	2,429	2,413	16
485	Transit & ground passenger transportation	14,770	14,662	108
532111	Passenger car rental	2,328	2,304	24
71	Arts, entertainment, & recreation	na	na	na

Source: Small Business Administration, Office of Advocacy. 2002. Available at www.sba.gov/advo/research/us_rec02.txt.

Reporting and Recordkeeping

This rule imposes no new reporting or recordkeeping requirements on small businesses.

Other Federal Rules

This final rule does not duplicate, overlap, or conflict with other Federal regulations.

Regulatory Alternatives

As discussed in Chapter 2, CBP considered five alternatives to the rule—

- The No Action alternative (status quo)
- Require that US travelers present a state-issued photo ID and proof of citizenship upon return to the United States from countries in the Western Hemisphere

- Allow US citizens that hold a Transportation Worker Identification Card (TWIC) to use the card as a travel document in the air environment
- Allow Mexican citizens to present their Border Crossing Cards (BCCs) in the air environment in lieu of a passport
- Allow the use of a low-cost “passport card” in the air environment

Discussion of these alternatives can be found in Chapter 2, and calculations of costs (if any) for the alternatives can be found in the Appendices. None of these alternatives would directly affect small entities.

Comments to the Proposed Rule on Impacts to Small Entities

We received numerous comments to the proposed rule published August 11, 2006 (71 FR 46155).

Three commenters stated that WHTI will have a disproportionate effect on small entities.

As described above, we consulted the Small Business Administration’s guidance document for conducting regulatory flexibility analysis. Per this guidance, a regulatory flexibility analysis is required when an agency determines that the rule will have a significant economic impact on a substantial number of small entities that are subject to the requirements of the rule. This guidance document also includes a good discussion describing how direct and indirect costs of a regulation are considered differently for the purposes of the RFA. With the possible exception of certain “sole proprietors,” we do not believe that small entities are subject to the requirements of the proposed rule; individuals are subject to the requirements, and individuals are not considered small entities. As stated in the Small Business Administration’s guidance document, “The courts have held that the RFA requires an agency to perform a regulatory flexibility analysis of small entity impacts only when a rule directly regulates them.”¹² Consequently, CBP prepared an extensive analysis of the direct economic impacts of this rule and believes that it adequately considered the economic impacts of this rule on small businesses for the purposes of the RFA. Additionally, our analysis did not reveal any “disproportionate effect” of the rule on small entities.

One commenter noted several examples of individuals who would be considered small businesses, including a freelance graphic artist, a self-employed provider of business training services, and a sole proprietor soliciting bids for fabrication or assembly of a new product, that would be directly impacted by the proposed rule.

We agree that certain “sole proprietors” would be considered small businesses and could be directly affected by the rule if their occupations require travel within the Western Hemisphere where a passport was not previously required. As estimated previously, however, the cost to such businesses would be only \$149 for a first-time passport applicant, or \$209 if expedited service were requested, and would only be incurred if the individual needed a passport. We believe such an expense would not rise to the level of being a “significant economic impact.”

Conclusions

In the NPRM, we asked specifically for comments on direct impacts to small entities. No comments were received that addressed direct impacts to small entities with the exception of certain “sole proprietors.” Notwithstanding this exception for certain “sole proprietors,” this rule does not directly regulate small entities. Based on our extensive analysis of the direct economic effects of this rule and the consideration of comments to the proposed rule, we certify that this rule will not have a significant economic impact on a substantial number of small entities.

Chapter Notes

¹ Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164 (codified at 5 U.S.C. § 601).

² Small Business Administration, Office of Advocacy. 2003. *A Guide for Government Agencies: How to Comply with the Regulatory Flexibility Act*. May 2003.

³ Small Business Administration, Office of Advocacy. 2003. *A Guide for Government Agencies: How to Comply with the Regulatory Flexibility Act*. May 2003. Page 69.

⁴ In the State Department’s supporting statement for their paperwork reduction act submission, states: “the collection of information does not involve small businesses or other small entities.” See “Application for a U.S. Passport.” OMB Control Number 1405-0004 (DS-11), Section A.5. The approved collection is valid through September 30, 2008.

⁵ Small Business Administration, Office of Advocacy. 2003. *A Guide for Government Agencies: How to Comply with the Regulatory Flexibility Act*. May 2003. Page 20.

⁶ *Mid-Tex Elec. Coop v. FERC*, 773 F.2d 327, 342 (D.C. Cir. 1985).

⁷ *United Dist. Cos. v. FERC*, 88 F.3d 1105, 1170 (D.C. Cir. 1996).

⁸ *Cement Kiln*, 255 F.3d at 868.

⁹ OTTI. 2005. US Travelers to Overseas Countries, 2004. World Regions/Countries Visited, Table 23. and

OTTI. 2005 US Travelers to Mexico, 2004. Mexico Destinations Visited, Table 23.

¹⁰ OTTI. 2005. Overseas Travelers to the United States, 2004. Area of Residence of Travelers—South America, Central America, Caribbean, Africa, Table 25. and

OTTI. 2005. Mexican Travelers to the United States, 2004. Table 25.

¹¹ OTTI. 2005. US Departures Annual 2004, Passenger Travel Between US and Foreign Countries, Table 1d.

¹² Small Business Administration, Office of Advocacy. 2003. *A Guide for Government Agencies: How to Comply with the Regulatory Flexibility Act*. May 2003. Page 20.

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All Monte Carlo simulations were conducted with Crystal Ball 7.

Appendix A
Passport Costs, First Year
Most Likely Estimate

Passport Costs of the Rule, First Year
US Travelers to Canada, Most Likely Estimate

Travelers	4,390,846			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	878,169	3,512,677	3,073,592	439,085
Percentage w/o passports	23%	33%	33%	33%
Travelers	201,979	1,159,183	1,014,285	144,898
Cost of trip	\$1,557	\$1,246	\$1,246	\$1,246
Cost of passport	\$149	\$149	\$149	\$134
Cost of passport as % of trip	9.54%	11.92%	11.92%	10.72%
Business Adults				
Elasticity business, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-0.825	-0.800	-0.475	
Reduced demand	-7.87%	-7.63%	-4.53%	
Reduced travelers	-15,894	-15,413	-9,151	
Passports demanded	186,084	186,566	192,828	
Cost of passports demanded	\$27,636,638	\$27,708,171	\$28,638,103	
Leisure Adults				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-19.07%	-16.69%	-9.54%	
Reduced travelers	-193,436	-169,257	-96,718	
Passports demanded	820,849	845,029	917,567	
Cost of passports demanded	\$121,909,816	\$125,500,875	\$136,274,051	
Leisure Minors				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-17.14%	-15.00%	-8.57%	
Reduced travelers	-24,843	-21,737	-12,421	
Passports demanded	120,055	123,161	132,477	
Cost of passports demanded	\$16,029,366	\$16,443,981	\$17,687,826	
Leisure reduced travelers	-218,279	-190,994	-109,139	
Leisure passports demanded	940,905	968,189	1,050,044	
Cost of passports demanded	\$137,939,182	\$141,944,856	\$153,961,877	
Total reduced travelers	-234,173	-206,407	-118,291	
Total passports demanded	1,126,989	1,154,755	1,242,871	
Total passport costs	\$165,575,820	\$169,653,027	\$182,599,980	

Passport Costs of the Rule, First Year
US Travelers to Mexico, Most Likely Estimate

Travelers	5,298,249			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	1,059,650	4,238,599	3,708,774	529,825
Percentage w/o passports	34%	44%	44%	44%
Travelers	358,162	1,856,506	1,624,443	232,063
Cost of trip	\$1,557	\$1,246	\$1,246	\$1,246
Cost of passport	\$149	\$149	\$149	\$134
Cost of passport as % of trip	9.54%	11.92%	11.92%	10.72%
Business Adults				
Elasticity business, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-0.825	-0.800	-0.475	
Reduced demand	-7.87%	-7.63%	-4.53%	
Reduced travelers	-28,185	-27,331	-16,228	
Passports demanded	329,977	330,831	341,934	
Cost of passports demanded	\$49,007,013	\$49,133,860	\$50,782,873	
Leisure Adults				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-19.07%	-16.69%	-9.54%	
Reduced travelers	-309,800	-271,075	-154,900	
Passports demanded	1,314,643	1,353,368	1,469,543	
Cost of passports demanded	\$195,246,385	\$200,997,696	\$218,251,628	
Leisure Minors				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-17.14%	-15.00%	-8.57%	
Reduced travelers	-39,787	-34,814	-19,894	
Passports demanded	192,276	197,249	212,170	
Cost of passports demanded	\$25,672,057	\$26,336,090	\$28,328,188	
Leisure reduced travelers	-349,587	-305,889	-174,794	
Leisure passports demanded	1,506,919	1,550,617	1,681,713	
Cost of passports demanded	\$220,918,442	\$227,333,786	\$246,579,816	
Total reduced travelers	-377,773	-333,220	-191,021	
Total passports demanded	1,836,895	1,881,448	2,023,647	
Total passport costs	\$269,925,455	\$276,467,646	\$297,362,689	

Passport Costs of the Rule, First Year
US Travelers to the Caribbean, Most Likely Estimate

Travelers	4,460,457
Dominican Republic	1,247,188
Jamaica	950,323
Bahamas	893,919
Aruba	320,756
Netherland Antilles	308,509
Panama	253,321
Bermuda	225,090
British Virgin Islands	82,791
Antigua-Barbuda	82,088
St. Kitts-Nevis	58,151
Grenada	22,390
Dominica	13,960
St. Vincent-Grenadines	1,970

	Business	Leisure	Leisure Adults	Leisure Minors
Percentage (average)	16%	84%	90%	10%
Dominican Republic	16%	84%	90%	10%
Jamaica	12%	88%	90%	10%
Bahamas	25%	75%	90%	10%
Aruba	8%	92%	90%	10%
Netherland Antilles	10%	90%	90%	10%
Panama	27%	73%	90%	10%
Bermuda	13%	87%	90%	10%
British Virgin Islands	15%	85%	90%	10%
Antigua-Barbuda	23%	77%	90%	10%
St. Kitts-Nevis	15%	85%	90%	10%
Grenada	15%	85%	90%	10%
Dominica	15%	85%	90%	10%
St. Vincent-Grenadines	15%	85%	90%	10%

Travelers	737,008	3,723,449	3,277,403	446,046
Dominican Republic	199,550	1,047,638	922,919	124,719
Jamaica	114,039	836,284	741,252	95,032
Bahamas	223,480	670,439	581,047	89,392
Aruba	25,660	295,096	263,020	32,076
Netherland Antilles	30,851	277,659	246,808	30,851
Panama	68,397	184,925	159,592	25,332
Bermuda	29,262	195,829	173,320	22,509
British Virgin Islands	12,419	70,373	62,093	8,279
Antigua-Barbuda	18,880	63,208	54,999	8,209
St. Kitts-Nevis	8,723	49,428	43,613	5,815
Grenada	3,358	19,031	16,792	2,239
Dominica	2,094	11,866	10,470	1,396
St. Vincent-Grenadines	295	1,674	1,477	197

Percentage w/o passports	17%	27%	27%	27%
Dominican Republic	17%	27%	27%	27%
Jamaica	17%	27%	27%	27%
Bahamas	17%	27%	27%	27%
Aruba	17%	27%	27%	27%
Netherland Antilles	17%	27%	27%	27%
Panama	17%	27%	27%	27%
Bermuda	17%	27%	27%	27%
British Virgin Islands	17%	27%	27%	27%
Antigua-Barbuda	17%	27%	27%	27%
St. Kitts-Nevis	17%	27%	27%	27%
Grenada	17%	27%	27%	27%
Dominica	17%	27%	27%	27%
St. Vincent-Grenadines	17%	27%	27%	27%

Travelers	123,817	997,884	878,344	119,540
Dominican Republic	33,524	280,767	247,342	33,425
Jamaica	19,159	224,124	198,656	25,469
Bahamas	37,545	179,678	155,721	23,957
Aruba	4,311	79,086	70,489	8,596
Netherland Antilles	5,183	74,412	66,144	8,268
Panama	11,491	49,560	42,771	6,789
Bermuda	4,916	52,482	46,450	6,032
British Virgin Islands	2,086	18,860	16,641	2,219
Antigua-Barbuda	3,172	16,940	14,740	2,200
St. Kitts-Nevis	1,465	13,247	11,688	1,558
Grenada	564	5,100	4,500	600
Dominica	352	3,180	2,806	374
St. Vincent-Grenadines	50	449	396	53
Cost of trip	\$1,961	\$1,461	\$1,461	\$1,461
Cost of passport	\$149	\$149	\$149	\$134
Cost of passport as % of trip	7.57%	10.17%	10.17%	9.14%
Business Adults				
Elasticity business, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-3.60%	-2.01%	-1.50%	
Reduced travelers	-4,454	-2,485	-1,857	
Dominican Republic	-1,206	-673	-503	
Jamaica	-689	-385	-287	
Bahamas	-1,351	-754	-563	
Aruba	-155	-87	-65	
Netherland Antilles	-186	-104	-78	
Panama	-413	-231	-172	
Bermuda	-177	-99	-74	
British Virgin Islands	-75	-42	-31	
Antigua-Barbuda	-114	-64	-48	
St. Kitts-Nevis	-53	-29	-22	
Grenada	-20	-11	-8	
Dominica	-13	-7	-5	
St. Vincent-Grenadines	-2	-1	-1	
Passports demanded	119,363	121,332	121,961	
Cost of passports demanded	\$17,727,414	\$18,019,879	\$18,113,189	
Leisure Adults				
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-17.28%	-10.57%	-5.69%	
Reduced travelers	-151,788	-92,859	-50,001	
Dominican Republic	-42,744	-26,149	-14,080	
Jamaica	-34,330	-21,002	-11,309	
Bahamas	-26,910	-16,463	-8,865	
Aruba	-12,181	-7,452	-4,013	
Netherland Antilles	-11,431	-6,993	-3,765	
Panama	-7,391	-4,522	-2,435	
Bermuda	-8,027	-4,911	-2,644	
British Virgin Islands	-2,876	-1,759	-947	
Antigua-Barbuda	-2,547	-1,558	-839	
St. Kitts-Nevis	-2,020	-1,236	-665	
Grenada	-778	-476	-256	
Dominica	-485	-297	-160	
St. Vincent-Grenadines	-68	-42	-23	
Passports demanded	726,556	785,485	828,343	
Cost of passports demanded	\$107,905,634	\$116,657,664	\$123,022,777	

Leisure Minors			
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile
Use long-haul international leisure	-1.700	-1.040	-0.560
Reduced demand	-15.54%	-9.50%	-5.12%
Reduced travelers	-18,572	-11,361	-6,118
Dominican Republic	-5,193	-3,177	-1,711
Jamaica	-3,957	-2,421	-1,303
Bahamas	-3,722	-2,277	-1,226
Aruba	-1,336	-817	-440
Netherland Antilles	-1,285	-786	-423
Panama	-1,055	-645	-347
Bermuda	-937	-573	-309
British Virgin Islands	-345	-211	-114
Antigua-Barbuda	-342	-209	-113
St. Kitts-Nevis	-242	-148	-80
Grenada	-93	-57	-31
Dominica	-58	-36	-19
St. Vincent-Grenadines	-8	-5	-3
Passports demanded	100,969	108,179	113,423
Cost of passports demanded	\$13,481,004	\$14,443,677	\$15,143,803
Leisure reduced travelers	-170,360	-104,220	-56,119
Leisure passports demanded	827,524	893,664	941,766
Cost of passports demanded	\$121,386,638	\$131,101,341	\$138,166,580
Total reduced travelers	-174,814	-106,705	-57,975
Total passports demanded	946,888	1,014,997	1,063,726
Total passport costs	\$139,114,052	\$149,121,220	\$156,279,769

Passport Costs of the Rule, First Year
US Travelers to Micronesia, Most Likely Estimate

Travelers	19,027			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	0%	100%	90%	10%
Travelers	-	19,027	17,124	1,903
Percentage w/o passports	0%	5%	5%	5%
Travelers	-	951	856	95
Cost of trip	\$5,084	\$5,084	\$5,084	\$5,084
Cost of passport	\$149	\$149	\$149	\$134
Cost of passport as % of trip	2.92%	2.92%	2.92%	2.63%
Business Adults				
Elasticity business, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-1.39%	-0.77%	-0.58%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Adults				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-4.97%	-3.04%	-1.64%	
Reduced travelers	-43	-26	-14	
Passports demanded	814	830	842	
Cost of passports demanded	\$120,847	\$123,299	\$125,082	
Leisure Minors				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-4.46%	-2.73%	-1.47%	
Reduced travelers	-4	-3	-1	
Passports demanded	91	93	94	
Cost of passports demanded	\$12,135	\$12,355	\$12,515	
Leisure reduced travelers	-47	-29	-15	
Leisure passports demanded	905	923	936	
Cost of passports demanded	\$132,982	\$135,654	\$137,597	
Total reduced travelers	-47	-29	-15	
Total passports demanded	905	923	936	
Total passport costs	\$132,982	\$135,654	\$137,597	

Passport Costs of the Rule, First Year
US General Aviation Travelers, Most Likely Estimate

Travelers	65,937				
	Same Day	Overnight	Adults	Minors	
Percentage			100%	0%	
Travelers	32,773	33,164	65,937	-	
Percentage w/o passports	66%	50%			
Travelers	21,630	16,582	38,212	-	
Cost of trip	\$1,000	\$3,000			
Cost of passport	\$149	\$149	\$149	\$134	
Cost of passport as % of trip	14.85%	4.95%			
Elasticity for same day	1st quartile	Median	3rd quartile		
Use short-haul leisure	-1.743	-1.520	-1.288		
Reduced demand	-25.89%	-22.57%	-19.13%		
Reduced travelers	-5,599	-4,883	-4,138		
Passports demanded	16,031	16,747	17,493		
Cost of passports demanded	\$2,380,848	\$2,487,241	\$2,597,928		
Elasticity for overnight	1st quartile	Median	3rd quartile		
Use short-haul leisure	-1.743	-1.520	-1.288		
Reduced demand	-8.63%	-7.52%	-6.38%		
Reduced travelers	-1,431	-1,248	-1,057		
Passports demanded	15,151	15,334	15,525		
Cost of passports demanded	\$2,250,188	\$2,277,375	\$2,305,660		
Total reduced travelers	-7,030	-6,131	-5,195		
Total passports demanded	31,182	32,081	33,017		
Total passport costs	\$4,631,035	\$4,764,616	\$4,903,588		

**Summary of Passport Costs for US Air Travelers to Destinations in the Western Hemisphere, First Year
Most Likely Estimate**

Passports Demanded	1st quartile	Median	3rd quartile
Canada	1,126,989	1,154,755	1,242,871
Mexico	1,836,895	1,881,448	2,023,647
Caribbean	946,888	1,014,997	1,063,726
Micronesia	905	923	936
General Aviation	31,182	32,081	33,017
Total	3,942,859	4,084,204	4,364,197
Reduced Travelers	1st quartile	Median	3rd quartile
Canada	-234,173	-206,407	-118,291
Mexico	-377,773	-333,220	-191,021
Caribbean	-174,814	-106,705	-57,975
Micronesia	-47	-29	-15
General Aviation	-7,030	-6,131	-5,195
Total	-793,837	-652,491	-372,498
Cost of Passports Demanded	1st quartile	Median	3rd quartile
Canada	\$165,575,820	\$169,653,027	\$182,599,980
Mexico	269,925,455	276,467,646	297,362,689
Caribbean	139,114,052	149,121,220	156,279,769
Micronesia	132,982	135,654	137,597
General Aviation	4,631,035	4,764,616	4,903,588
Total	\$579,379,344	\$600,142,162	\$641,283,623
Expedites (20% of passports)	788,572	816,841	872,839
Extra cost of expedites	\$47,314,302	\$49,010,449	\$52,370,370
Total costs	\$626,693,646	\$649,152,611	\$693,653,992

Monte Carlo Analysis - First-Year, Most Likely Estimates

Run preferences:

Number of trials run	50,000
Extreme speed	
Monte Carlo	
Random seed	
Precision control on	
Confidence level	95.00%

Note: For all forecasts, frequency is shown on the y-axis

Forecasts

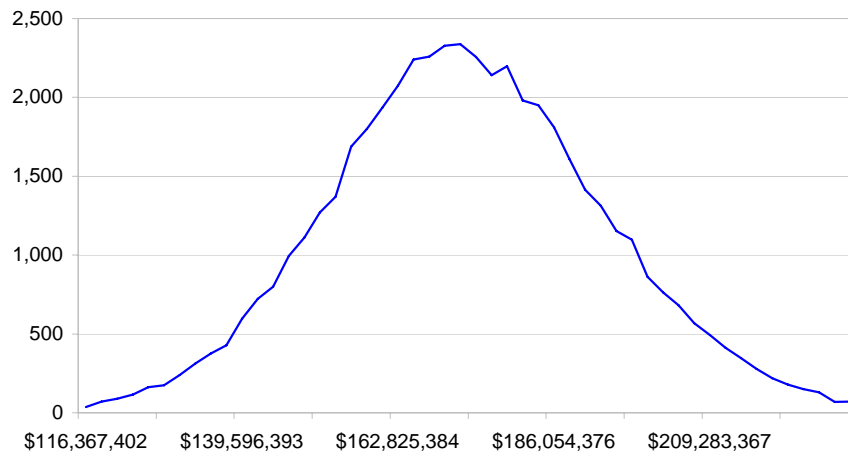
Forecast: Canada Total Passport Costs

Summary:

Entire range is from \$89,948,968 to \$265,800,020

Base case is \$169,653,027

After 50,000 trials, the std. error of the mean is \$92,753



Statistics:

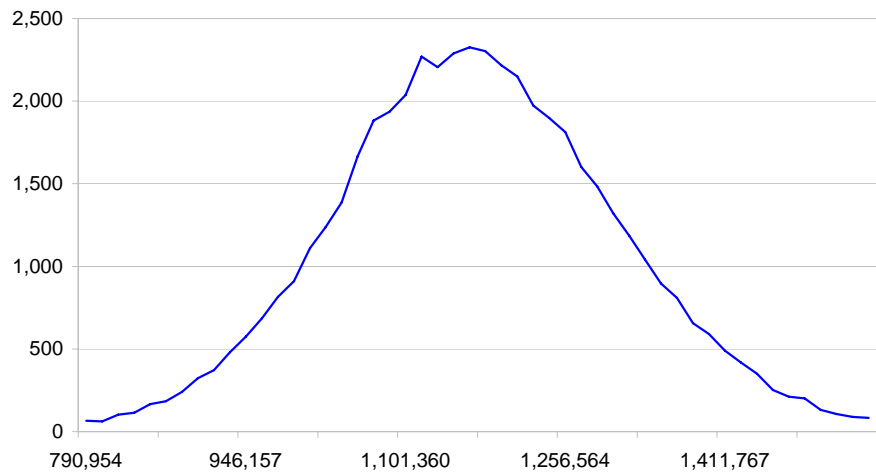
Forecast values	
Trials	50,000
Mean	\$173,278,430
Median	\$172,675,074
Mode	---
Standard Deviation	\$20,740,171
Variance	\$430,154,684,694,808
Skewness	0.1489
Kurtosis	3.16
Coeff. of Variability	0.1197
Minimum	\$89,948,968
Maximum	\$265,800,020
Range Width	\$175,851,051
Mean Std. Error	\$92,753

Percentiles:

Forecast values	
0%	\$89,948,968
10%	\$147,246,344
20%	\$156,151,802
30%	\$162,374,415
40%	\$167,623,620
50%	\$172,675,074
60%	\$177,903,460
70%	\$183,523,289
80%	\$190,239,163
90%	\$200,061,903
100%	\$265,800,020

Forecast: Canada Total Passports Demanded

Summary:
Entire range is from 614,722 to 1,755,822
Base case is 1,154,755
After 50,000 trials, the std. error of the mean is 620

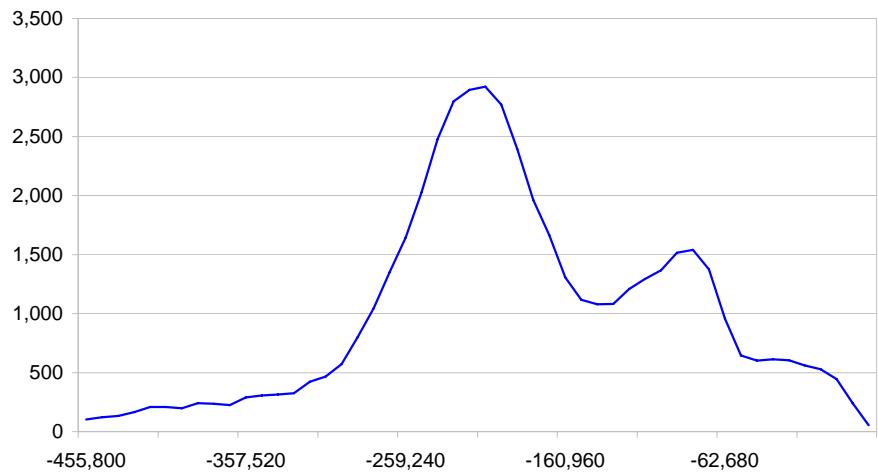


Statistics:	Forecast values
Trials	50,000
Mean	1,171,202
Median	1,167,681
Mode	---
Standard Deviation	138,574
Variance	19,202,839,454
Skewness	0.1208
Kurtosis	3.13
Coeff. of Variability	0.1183
Minimum	614,722
Maximum	1,755,822
Range Width	1,141,100
Mean Std. Error	620

Percentiles:	Forecast values
0%	614,722
10%	997,527
20%	1,057,189
30%	1,098,275
40%	1,133,799
50%	1,167,681
60%	1,201,925
70%	1,240,066
80%	1,285,490
90%	1,350,391
100%	1,755,822

Forecast: Canada Total Reduced Travelers

Summary:
Entire range is from -714,798 to 30,686
Base case is -206,407
After 50,000 trials, the std. error of the mean is 433

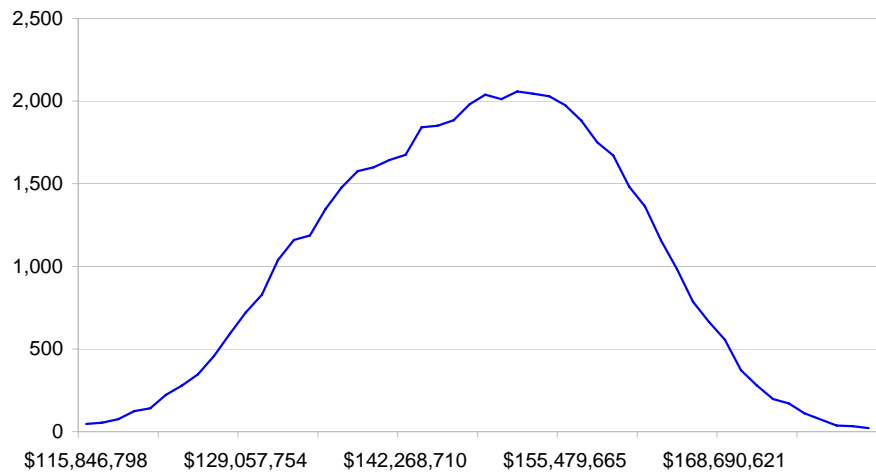


Statistics:	Forecast values
Trials	50,000
Mean	-189,683
Median	-198,536
Mode	---
Standard Deviation	96,796
Variance	9,369,559,585
Skewness	-0.3705
Kurtosis	3.68
Coeff. of Variability	-0.5103
Minimum	-714,798
Maximum	30,686
Range Width	745,484
Mean Std. Error	433

Percentiles:	Forecast values
0%	-714,798
10%	-295,462
20%	-254,045
30%	-232,681
40%	-215,505
50%	-198,536
60%	-176,799
70%	-139,708
80%	-99,244
90%	-65,394
100%	30,686

Forecast: Caribbean Total Direct Costs

Summary:
Entire range is from \$106,595,143 to \$186,763,364
Base case is \$149,121,220
After 50,000 trials, the std. error of the mean is \$52,751

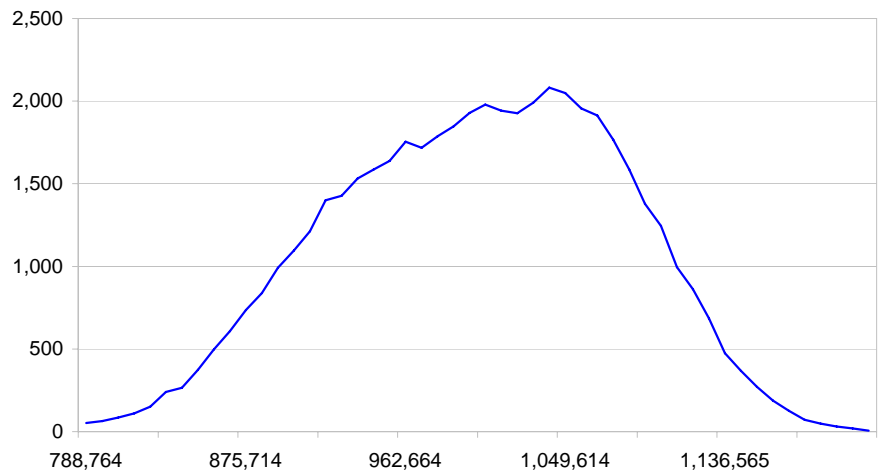


Statistics:		Forecast values
Trials		50,000
Mean		\$148,213,640
Median		\$148,719,128
Mode		---
Standard Deviation		\$11,795,496
Variance		\$139,133,731,881,298
Skewness		-0.1209
Kurtosis		2.55
Coeff. of Variability		0.0796
Minimum		\$106,595,143
Maximum		\$186,763,364
Range Width		\$80,168,220
Mean Std. Error		\$52,751

Percentiles:		Forecast values
0%		\$106,595,143
10%		\$132,360,661
20%		\$137,484,953
30%		\$141,609,516
40%		\$145,305,326
50%		\$148,719,128
60%		\$151,968,153
70%		\$155,223,607
80%		\$158,771,849
90%		\$163,242,307
100%		\$186,763,364

Forecast: Caribbean Total Passports Demanded

Summary:
Entire range is from 724,180 to 1,250,367
Base case is 1,014,997
After 50,000 trials, the std. error of the mean is 347

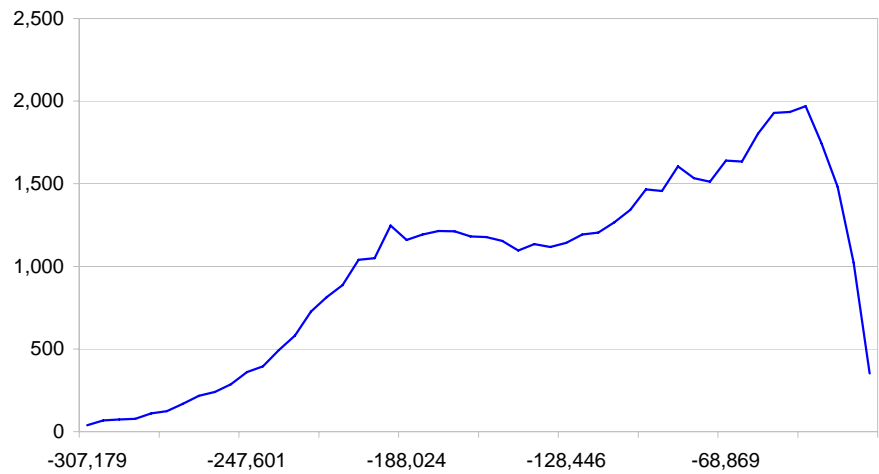


Statistics:	Forecast values
Trials	50,000
Mean	1,001,792
Median	1,005,996
Mode	---
Standard Deviation	77,634
Variance	6,027,061,564
Skewness	-0.1853
Kurtosis	2.50
Coeff. of Variability	0.0775
Minimum	724,180
Maximum	1,250,367
Range Width	526,187
Mean Std. Error	347

Percentiles:	Forecast values
0%	724,180
10%	896,729
20%	930,851
30%	958,334
40%	983,131
50%	1,005,996
60%	1,028,336
70%	1,049,675
80%	1,072,007
90%	1,100,089
100%	1,250,367

Forecast: Caribbean Total Reduced Travelers

Summary:
Entire range is from -403,453 to -12,270
Base case is -106,705
After 50,000 trials, the std. error of the mean is 303

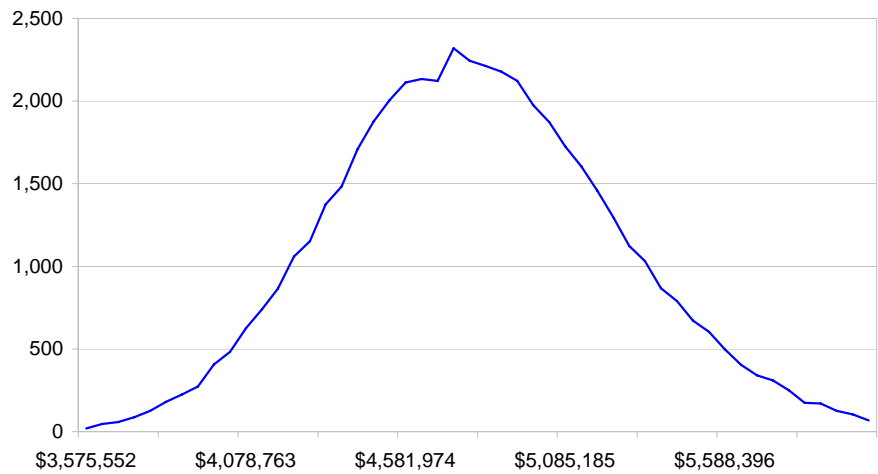


Statistics:	Forecast values
Trials	50,000
Mean	-120,172
Median	-110,316
Mode	---
Standard Deviation	67,852
Variance	4,603,898,419
Skewness	-0.4341
Kurtosis	2.29
Coeff. of Variability	-0.5646
Minimum	-403,453
Maximum	-12,270
Range Width	391,184
Mean Std. Error	303

Percentiles:	Forecast values
0%	-403,453
10%	-214,109
20%	-186,492
30%	-161,721
40%	-135,449
50%	-110,316
60%	-89,132
70%	-69,929
80%	-52,490
90%	-37,281
100%	-12,270

Forecast: General Aviation Total Passport Costs

Summary:
Entire range is from \$3,148,323 to \$6,739,738
Base case is \$4,764,616
After 50,000 trials, the std. error of the mean is \$2,009

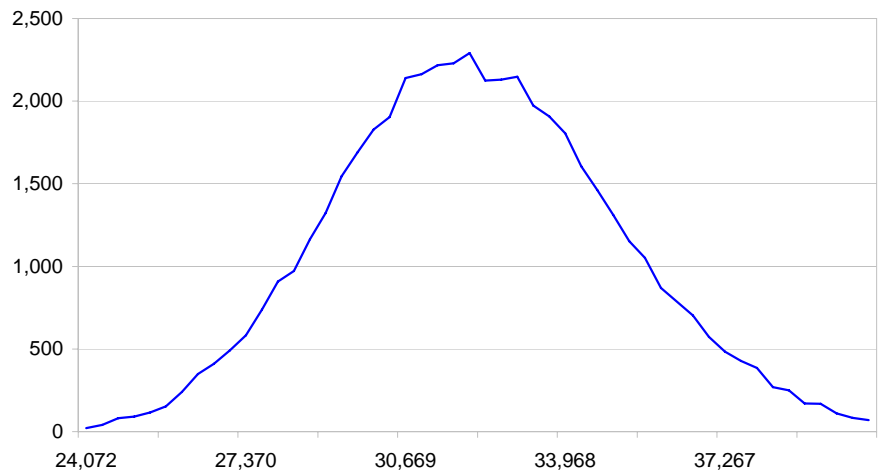


Statistics:	Forecast values
Trials	50,000
Mean	\$4,808,419
Median	\$4,791,688
Mode	---
Standard Deviation	\$449,296
Variance	\$201,866,468,772
Skewness	0.2262
Kurtosis	3.05
Coeff. of Variability	0.0934
Minimum	\$3,148,323
Maximum	\$6,739,738
Range Width	\$3,591,415
Mean Std. Error	\$2,009

Percentiles:	Forecast values
0%	\$3,148,323
10%	\$4,244,126
20%	\$4,428,637
30%	\$4,560,925
40%	\$4,678,460
50%	\$4,791,688
60%	\$4,905,330
70%	\$5,029,072
80%	\$5,178,713
90%	\$5,398,626
100%	\$6,739,738

Forecast: General Aviation Total Passports Demanded

Summary:
Entire range is from 20,930 to 44,404
Base case is 32,081
After 50,000 trials, the std. error of the mean is 13

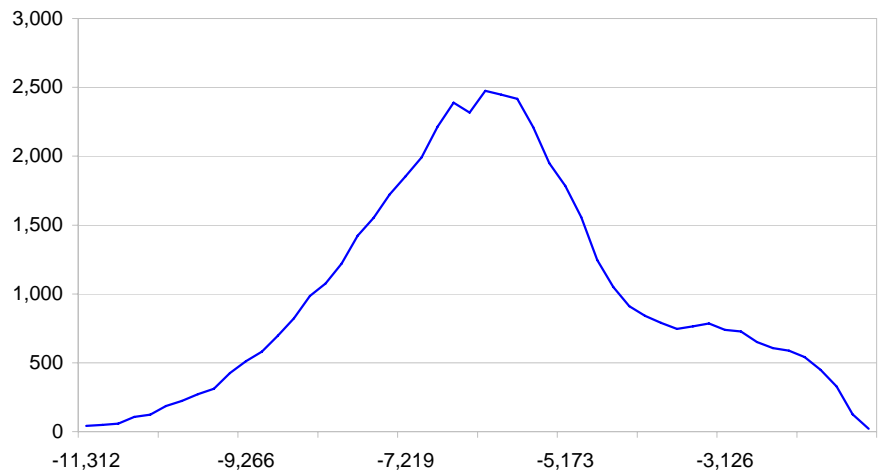


Statistics:	Forecast values
Trials	50,000
Mean	32,154
Median	32,050
Mode	---
Standard Deviation	2,945
Variance	8,674,934
Skewness	0.1940
Kurtosis	3.03
Coeff. of Variability	0.0916
Minimum	20,930
Maximum	44,404
Range Width	23,474
Mean Std. Error	13

Percentiles:	Forecast values
0%	20,930
10%	28,444
20%	29,654
30%	30,553
40%	31,314
50%	32,050
60%	32,814
70%	33,623
80%	34,585
90%	35,995
100%	44,404

Forecast: General Aviation Total Reduced Travelers

Summary:
Entire range is from -14,128 to -1,182
Base case is -6,131
After 50,000 trials, the std. error of the mean is 9

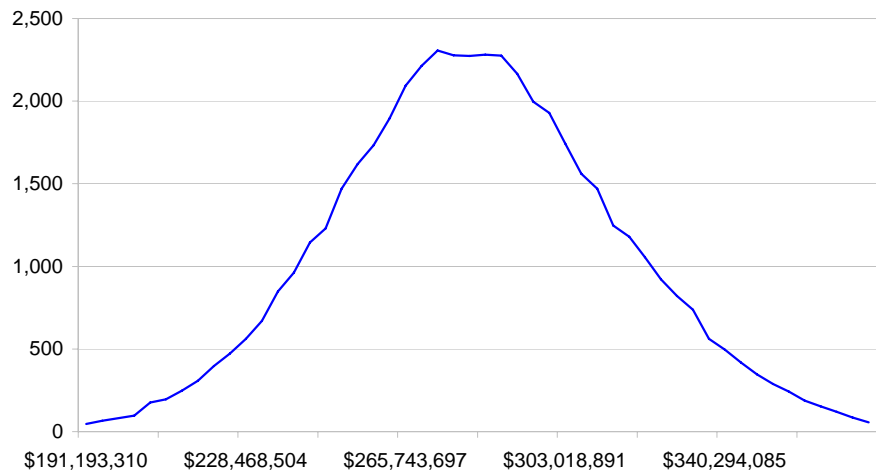


Statistics:	Forecast values
Trials	50,000
Mean	-6,065
Median	-6,156
Mode	---
Standard Deviation	1,910
Variance	3,649,822
Skewness	0.1230
Kurtosis	2.88
Coeff. of Variability	-0.3150
Minimum	-14,128
Maximum	-1,182
Range Width	12,946
Mean Std. Error	9

Percentiles:	Forecast values
0%	-14,128
10%	-8,445
20%	-7,623
30%	-7,050
40%	-6,583
50%	-6,156
60%	-5,736
70%	-5,251
80%	-4,534
90%	-3,283
100%	-1,182

Forecast: Mexico Total Passport Costs

Summary:
Entire range is from \$151,721,121 to \$419,926,928
Base case is \$276,467,646
After 50,000 trials, the std. error of the mean is \$148,839

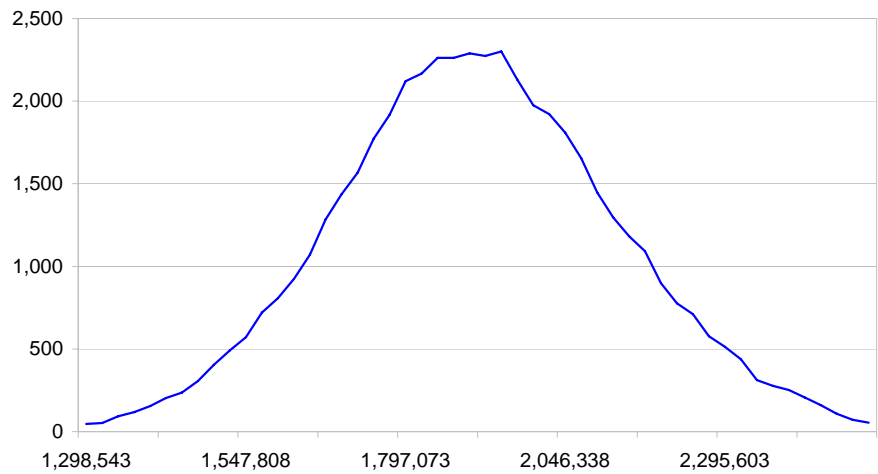


Statistics:	Forecast values
Trials	50,000
Mean	\$282,517,535
Median	\$281,751,970
Mode	---
Standard Deviation	\$33,281,423
Variance	\$1,107,653,118,136,900
Skewness	0.1073
Kurtosis	3.08
Coeff. of Variability	0.1178
Minimum	\$151,721,121
Maximum	\$419,926,928
Range Width	\$268,205,807
Mean Std. Error	\$148,839

Percentiles:	Forecast values
0%	\$151,721,121
10%	\$240,577,752
20%	\$254,851,242
30%	\$265,147,156
40%	\$273,496,269
50%	\$281,751,970
60%	\$289,883,628
70%	\$298,944,451
80%	\$309,987,216
90%	\$325,888,714
100%	\$419,926,928

Forecast: Mexico Total Passports Demanded

Summary:
Entire range is from 1,036,241 to 2,863,435
Base case is 1,881,448
After 50,000 trials, the std. error of the mean is 995

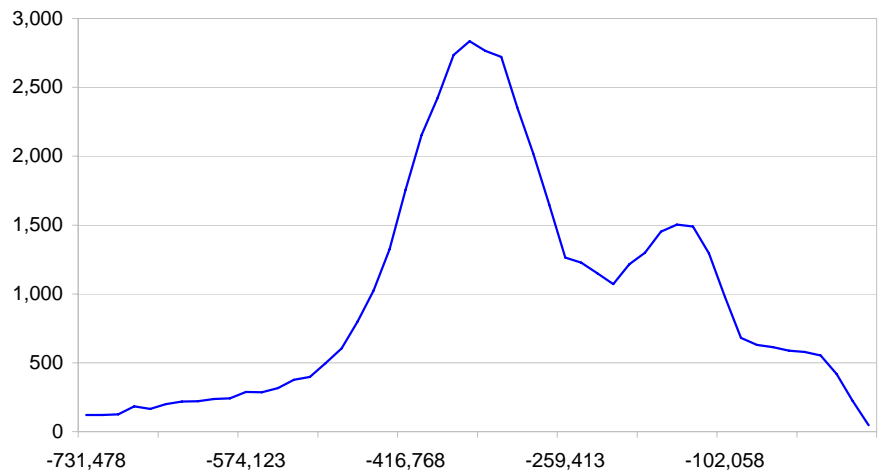


Statistics:	Forecast values
Trials	50,000
Mean	1,909,242
Median	1,904,970
Mode	---
Standard Deviation	222,558
Variance	49,532,030,320
Skewness	0.0834
Kurtosis	3.08
Coeff. of Variability	0.1166
Minimum	1,036,241
Maximum	2,863,435
Range Width	1,827,195
Mean Std. Error	995

Percentiles:	Forecast values
0%	1,036,241
10%	1,629,262
20%	1,725,230
30%	1,792,889
40%	1,849,981
50%	1,904,970
60%	1,959,440
70%	2,020,745
80%	2,093,212
90%	2,197,528
100%	2,863,435

Forecast: Mexico Total Reduced Travelers

Summary:
Entire range is from -1,091,052 to 47,429
Base case is -333,220
After 50,000 trials, the std. error of the mean is 693

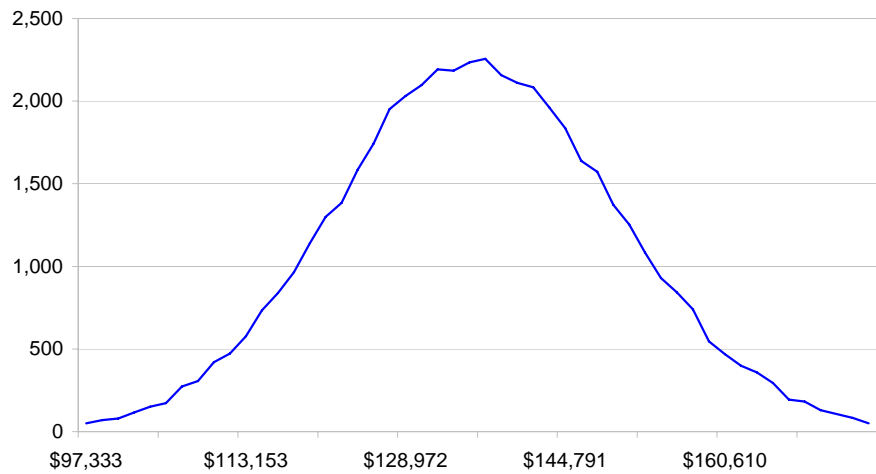


Statistics:	Forecast values
Trials	50,000
Mean	-305,466
Median	-318,828
Mode	---
Standard Deviation	154,957
Variance	24,011,680,862
Skewness	-0.3716
Kurtosis	3.66
Coeff. of Variability	-0.5073
Minimum	-1,091,052
Maximum	47,429
Range Width	1,138,481
Mean Std. Error	693

Percentiles:	Forecast values
0%	-1,091,052
10%	-475,716
20%	-409,408
30%	-375,372
40%	-347,306
50%	-318,828
60%	-283,848
70%	-225,204
80%	-161,519
90%	-105,619
100%	47,429

Forecast: Micronesia Total Passport Costs

Summary:
Entire range is from \$80,610 to \$189,887
Base case is \$135,654
After 50,000 trials, the std. error of the mean is \$63

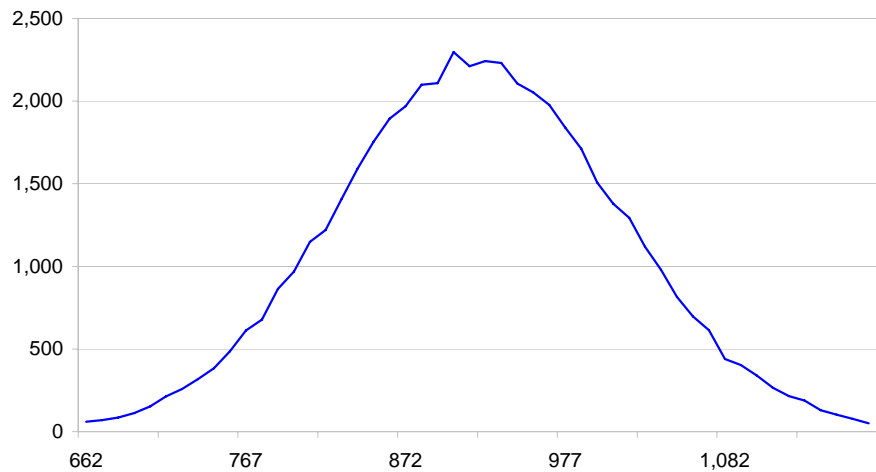


Statistics:	Forecast values
Trials	50,000
Mean	\$136,090
Median	\$135,958
Mode	---
Standard Deviation	\$14,124
Variance	\$199,492,809
Skewness	0.0411
Kurtosis	3.02
Coeff. of Variability	0.1038
Minimum	\$80,610
Maximum	\$189,887
Range Width	\$109,277
Mean Std. Error	\$63

Percentiles:	Forecast values
0%	\$80,610
10%	\$118,163
20%	\$124,253
30%	\$128,602
40%	\$132,381
50%	\$135,958
60%	\$139,539
70%	\$143,375
80%	\$147,908
90%	\$154,257
100%	\$189,887

Forecast: Micronesia Total Passports Demanded

Summary:
Entire range is from 538 to 1,283
Base case is 923
After 50,000 trials, the std. error of the mean is 0

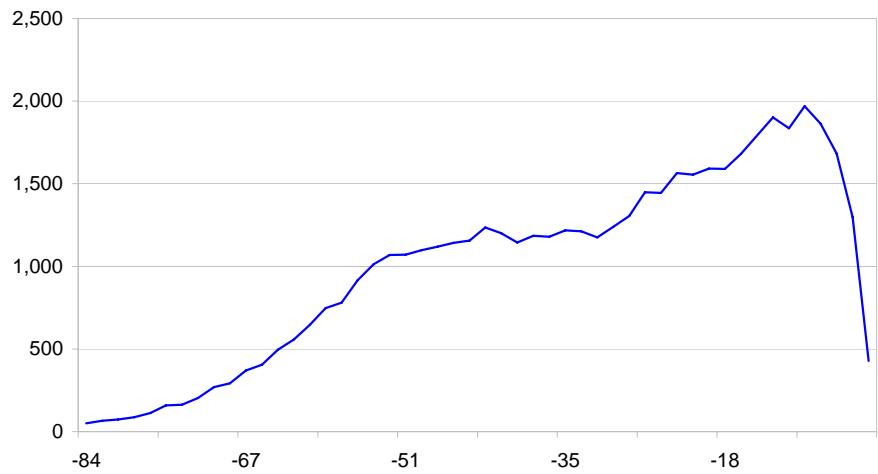


Statistics:	Forecast values
Trials	50,000
Mean	919
Median	919
Mode	---
Standard Deviation	94
Variance	8,769
Skewness	0.0148
Kurtosis	3.02
Coeff. of Variability	0.1019
Minimum	538
Maximum	1,283
Range Width	745
Mean Std. Error	0

Percentiles:	Forecast values
0%	538
10%	800
20%	841
30%	870
40%	895
50%	919
60%	942
70%	968
80%	998
90%	1,039
100%	1,283

Forecast: Micronesia Total Reduced Travelers

Summary:
Entire range is from -123 to -3
Base case is -29
After 50,000 trials, the std. error of the mean is 0

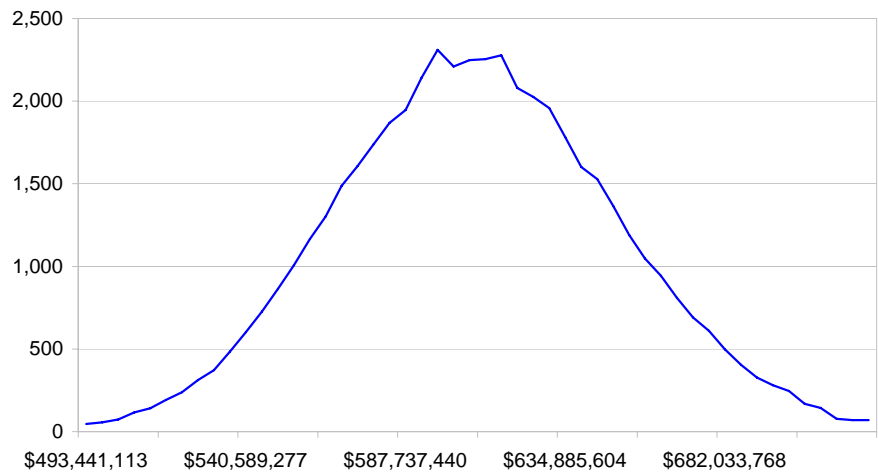


Statistics:	Forecast values
Trials	50,000
Mean	-32
Median	-29
Mode	---
Standard Deviation	19
Variance	353
Skewness	-0.5047
Kurtosis	2.45
Coeff. of Variability	-0.5925
Minimum	-123
Maximum	-3
Range Width	121
Mean Std. Error	0

Percentiles:	Forecast values
0%	-123
10%	-58
20%	-50
30%	-43
40%	-36
50%	-29
60%	-23
70%	-18
80%	-13
90%	-9
100%	-3

Forecast: Total Cost of Passports Demanded

Summary:
Entire range is from \$459,966,385 to \$803,373,115
Base case is \$600,142,162
After 50,000 trials, the std. error of the mean is \$188,262

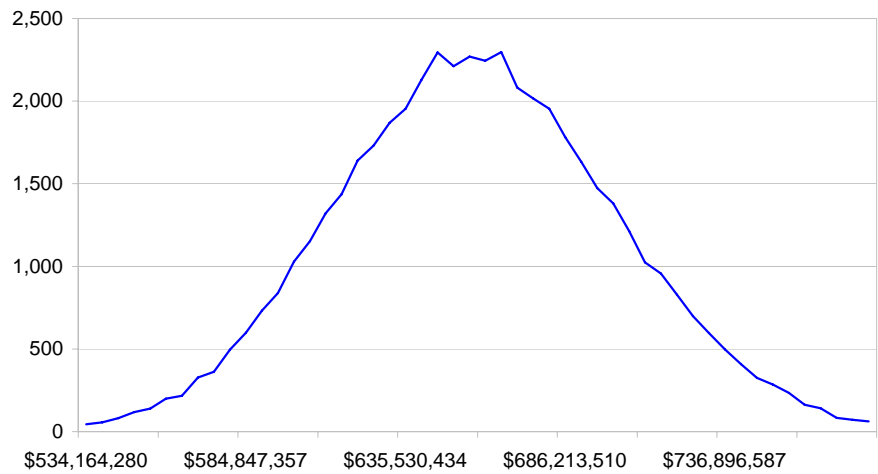


Statistics:		Forecast values
Trials		50,000
Mean		\$608,954,114
Median		\$608,176,661
Mode		---
Standard Deviation		\$42,096,575
Variance	\$1,772,121,594,563,500	
Skewness		0.1139
Kurtosis		3.07
Coeff. of Variability		0.0691
Minimum		\$459,966,385
Maximum		\$803,373,115
Range Width		\$343,406,730
Mean Std. Error		\$188,262

Percentiles:		Forecast values
0%		\$459,966,385
10%		\$555,666,484
20%		\$573,501,254
30%		\$586,691,602
40%		\$597,697,008
50%		\$608,176,661
60%		\$618,647,612
70%		\$630,214,035
80%		\$644,025,866
90%		\$663,386,972
100%		\$803,373,115

Forecast: Total Costs of Passports w/Expedited Service

Summary:
Entire range is from \$497,671,794 to \$866,616,502
Base case is \$649,152,611
After 50,000 trials, the std. error of the mean is \$202,376

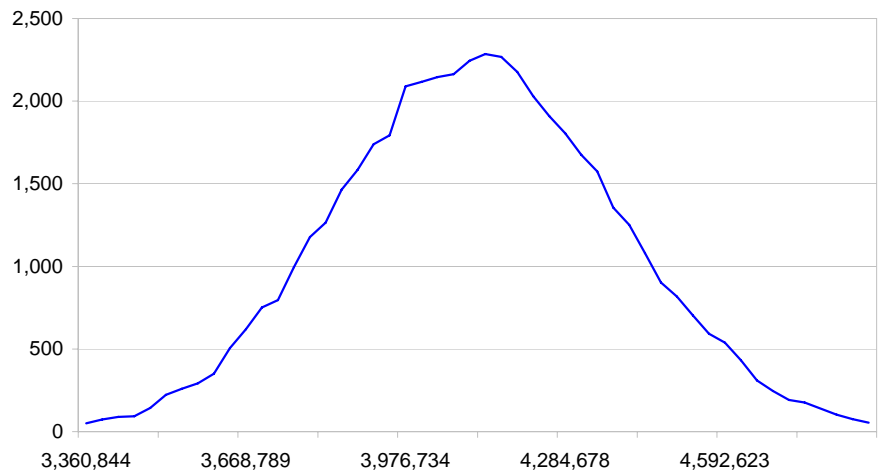


Statistics:	Forecast values
Trials	50,000
Mean	\$658,337,818
Median	\$657,532,872
Mode	---
Standard Deviation	\$45,252,747
Variance	\$2,047,811,134,752,400
Skewness	0.1087
Kurtosis	3.07
Coeff. of Variability	0.0687
Minimum	\$497,671,794
Maximum	\$866,616,502
Range Width	\$368,944,707
Mean Std. Error	\$202,376

Percentiles:	Forecast values
0%	\$497,671,794
10%	\$601,066,483
20%	\$620,135,334
30%	\$634,490,491
40%	\$646,275,829
50%	\$657,532,872
60%	\$668,727,225
70%	\$681,245,145
80%	\$695,971,192
90%	\$717,032,772
100%	\$866,616,502

Forecast: Total Passports Demanded

Summary:
Entire range is from 3,070,962 to 5,316,054
Base case is 4,084,204
After 50,000 trials, the std. error of the mean is 1,230

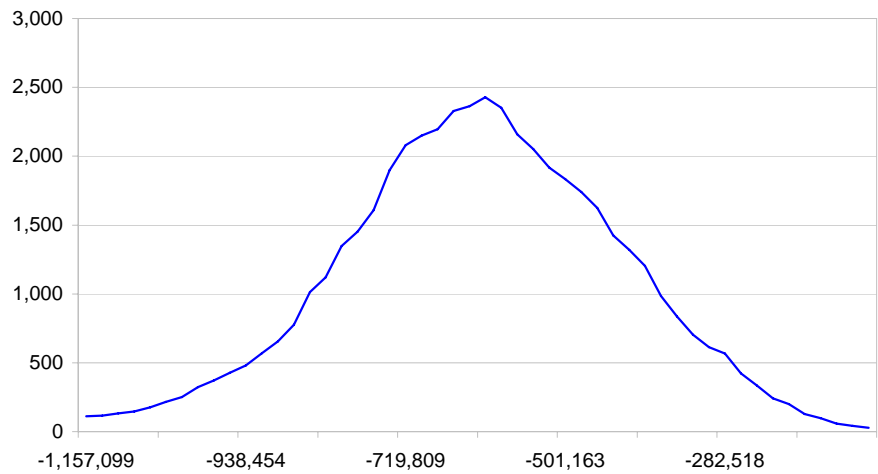


Statistics:	Forecast values
Trials	50,000
Mean	4,115,309
Median	4,113,495
Mode	---
Standard Deviation	274,951
Variance	75,597,881,673
Skewness	0.0655
Kurtosis	3.05
Coeff. of Variability	0.0668
Minimum	3,070,962
Maximum	5,316,054
Range Width	2,245,092
Mean Std. Error	1,230

Percentiles:	Forecast values
0%	3,070,962
10%	3,765,767
20%	3,883,578
30%	3,970,245
40%	4,043,391
50%	4,113,495
60%	4,181,105
70%	4,255,725
80%	4,344,756
90%	4,469,550
100%	5,316,054

Forecast: Total Reduced Travelers

Summary:
Entire range is from -1,505,123 to -14,248
Base case is -652,491
After 50,000 trials, the std. error of the mean is 873



Statistics:	Forecast values
Trials	50,000
Mean	-621,418
Median	-618,204
Mode	---
Standard Deviation	195,219
Variance	38,110,459,484
Skewness	-0.2584
Kurtosis	3.31
Coeff. of Variability	-0.3142
Minimum	-1,505,123
Maximum	-14,248
Range Width	1,490,876
Mean Std. Error	873

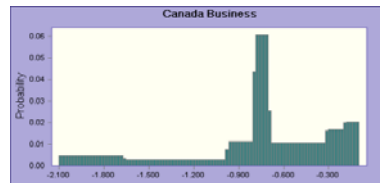
Percentiles:	Forecast values
0%	-1,505,123
10%	-864,950
20%	-774,868
30%	-715,280
40%	-664,767
50%	-618,204
60%	-571,958
70%	-519,284
80%	-456,528
90%	-374,741
100%	-14,248

Assumptions

Assumption: Canada Business

Custom distribution with parameters:

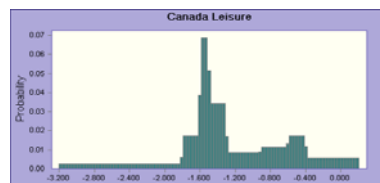
Minimum	Maximum	Probability
-2.100	-1.670	10.00
-1.670	-0.980	10.00
-0.980	-0.800	10.00
-0.800	-0.700	30.00
-0.700	-0.320	20.00
-0.320	-0.200	10.00
-0.200	-0.100	10.00



Assumption: Canada Leisure

Custom distribution with parameters:

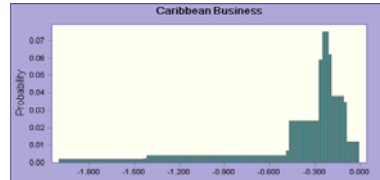
Minimum	Maximum	Probability
-3.200	-1.800	10.00
-1.800	-1.600	10.00
-1.600	-1.500	20.00
-1.500	-1.400	10.00
-1.400	-1.300	10.00
-1.300	-0.900	10.00
-0.900	-0.600	10.00
-0.600	-0.400	10.00
-0.400	0.200	10.00



Assumption: Caribbean Business

Custom distribution with parameters:

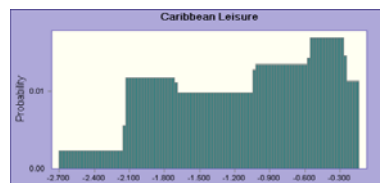
Minimum	Maximum	Probability
-2.000	-1.423	5.00
-1.423	-0.475	20.00
-0.475	-0.265	25.00
-0.265	-0.198	25.00
-0.198	-0.093	20.00
-0.093	-0.010	5.00



Assumption: Caribbean Leisure

Custom distribution with parameters:

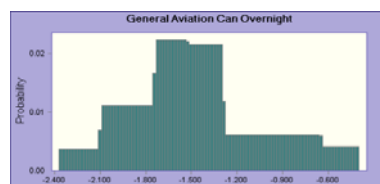
Minimum	Maximum	Probability
-2.700	-2.140	5.00
-2.140	-1.700	20.00
-1.700	-1.040	25.00
-1.040	-0.560	25.00
-0.560	-0.254	20.00
-0.254	-0.140	5.00



Assumption: General Aviation Can Overnight

Custom distribution with parameters:

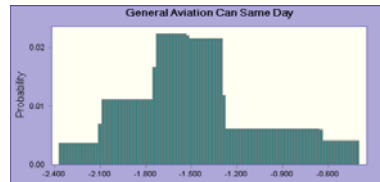
Minimum	Maximum	Probability
-2.370	-2.100	5.00
-2.100	-1.743	20.00
-1.743	-1.520	25.00
-1.520	-1.288	25.00
-1.288	-0.640	20.00
-0.640	-0.400	5.00



Assumption: General Aviation Can Same Day

Custom distribution with parameters:

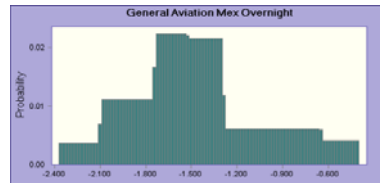
Minimum	Maximum	Probability
-2.370	-2.100	5.00
-2.100	-1.743	20.00
-1.743	-1.520	25.00
-1.520	-1.288	25.00
-1.288	-0.640	20.00
-0.640	-0.400	5.00



Assumption: General Aviation Mex Overnight

Custom distribution with parameters:

Minimum	Maximum	Probability
-2.370	-2.100	5.00
-2.100	-1.743	20.00
-1.743	-1.520	25.00
-1.520	-1.288	25.00
-1.288	-0.640	20.00
-0.640	-0.400	5.00



Assumption: General Aviation Mex Same Day

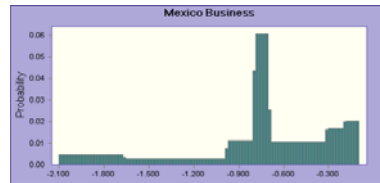
Custom distribution with parameters:

Minimum	Maximum	Probability
-2.370	-2.100	5.00
-2.100	-1.743	20.00
-1.743	-1.520	25.00
-1.520	-1.288	25.00
-1.288	-0.640	20.00
-0.640	-0.400	5.00

Assumption: Mexico Business

Custom distribution with parameters:

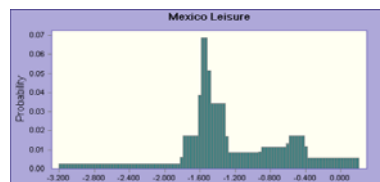
Minimum	Maximum	Probability
-2.100	-1.670	10.00
-1.670	-0.980	10.00
-0.980	-0.800	10.00
-0.800	-0.700	30.00
-0.700	-0.320	20.00
-0.320	-0.200	10.00
-0.200	-0.100	10.00



Assumption: Mexico Leisure

Custom distribution with parameters:

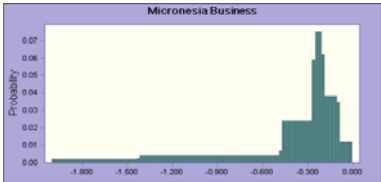
Minimum	Maximum	Probability
-3.200	-1.800	10.00
-1.800	-1.600	10.00
-1.600	-1.500	20.00
-1.500	-1.400	10.00
-1.400	-1.300	10.00
-1.300	-0.900	10.00
-0.900	-0.600	10.00
-0.600	-0.400	10.00
-0.400	0.200	10.00



Assumption: Micronesia Business

Custom distribution with parameters:

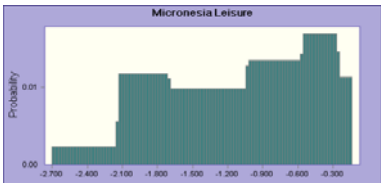
Minimum	Maximum	Probability
-2.000	-1.423	5.00
-1.423	-0.475	20.00
-0.475	-0.265	25.00
-0.265	-0.198	25.00
-0.198	-0.093	20.00
-0.093	-0.010	5.00



Assumption: Micronesia Leisure

Custom distribution with parameters:

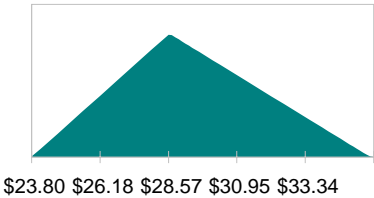
Minimum	Maximum	Probability
-2.700	-2.140	5.00
-2.140	-1.700	20.00
-1.700	-1.040	25.00
-1.040	-0.560	25.00
-0.560	-0.254	20.00
-0.254	-0.140	5.00



Assumption: Cost per hour (personal time)

Triangular distribution with parameters:

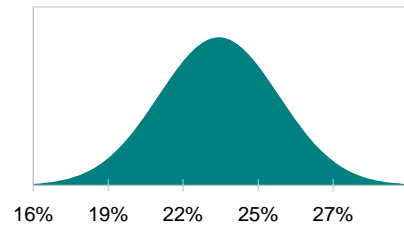
Minimum	\$23.80
Likeliest	\$28.60
Maximum	\$35.60



Assumption: Canada Business w/o Passports

Normal distribution with parameters:

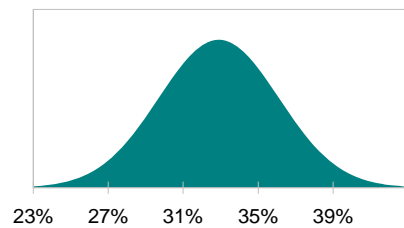
Mean	23%
Std. Dev.	2%



Assumption: Canada Leisure Adults w/o Passports

Normal distribution with parameters:

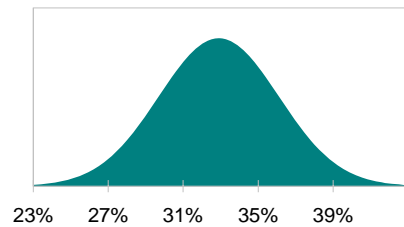
Mean	33%
Std. Dev.	3%



Assumption: Canada Leisure Minors w/o Passports

Normal distribution with parameters:

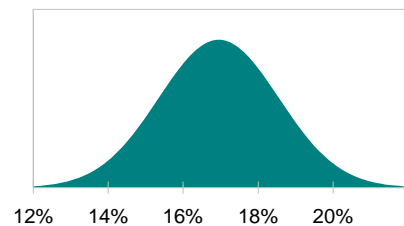
Mean	33%
Std. Dev.	3%



Assumption: Caribbean Business w/o Passports

Normal distribution with parameters:

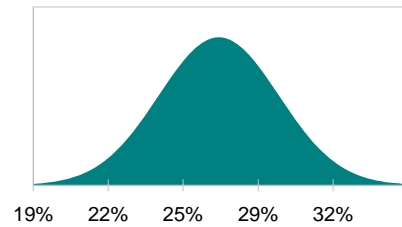
Mean	17%
Std. Dev.	2%



Assumption: Caribbean Leisure Adults w/o Passports

Normal distribution with parameters:

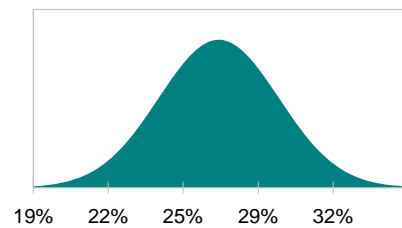
Mean	27%
Std. Dev.	3%



Assumption: Caribbean Leisure Minors w/o Passports

Normal distribution with parameters:

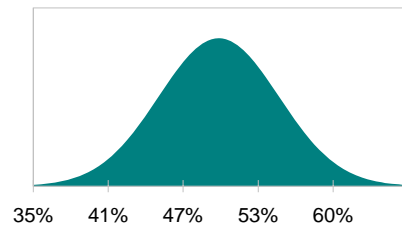
Mean	27%
Std. Dev.	3%



Assumption: General Aviation Canada Overnight

Normal distribution with parameters:

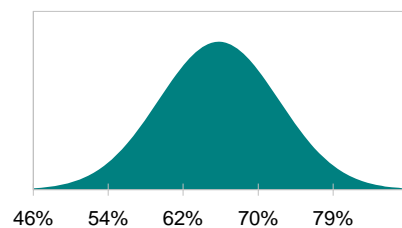
Mean	50%
Std. Dev.	5%



Assumption: General Aviation Canada Same Day

Normal distribution with parameters:

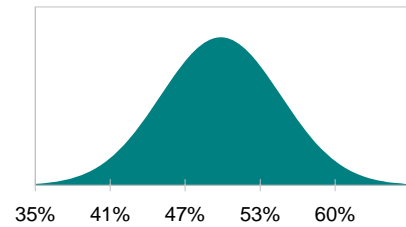
Mean	66%
Std. Dev.	7%



Assumption: General Aviation Mexico Overnight

Normal distribution with parameters:

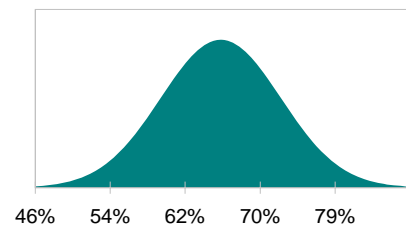
Mean	50%
Std. Dev.	5%



Assumption: General Aviation Mexico Same Day

Normal distribution with parameters:

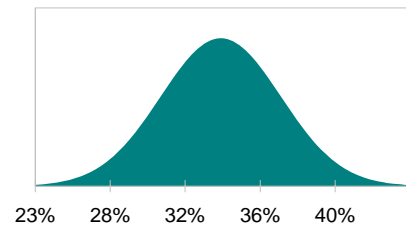
Mean	66%
Std. Dev.	7%



Assumption: Mexico Business w/o Passports

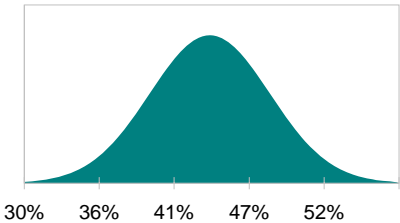
Normal distribution with parameters:

Mean	34%
Std. Dev.	3%



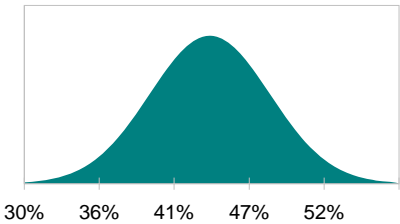
Assumption: Mexico Leisure Adults w/o Passports

Normal distribution with parameters:
Mean 44%
Std. Dev. 4%



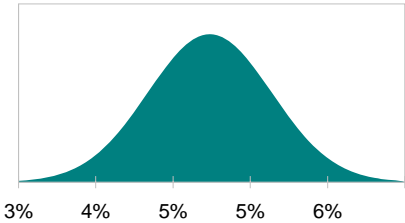
Assumption: Mexico Leisure Minors w/o Passports

Normal distribution with parameters:
Mean 44%
Std. Dev. 4%



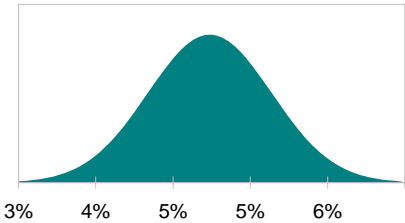
Assumption: Micronesia Leisure Adults w/o Passports

Normal distribution with parameters:
Mean 5%
Std. Dev. 1%



Assumption: Micronesia Leisure Minors w/o Passports

Normal distribution with parameters:
Mean 5%
Std. Dev. 1%

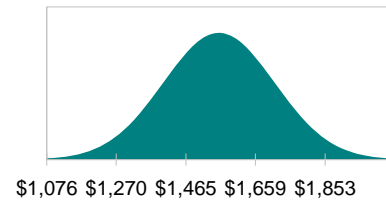


Assumption: Canada Business Trip Cost

Normal distribution with parameters:

Mean \$1,557
Std. Dev. \$156

Selected range is from \$250 to Infinity

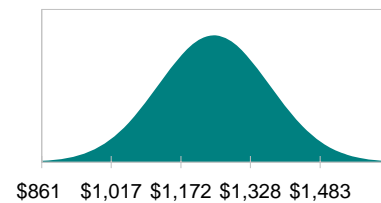


Assumption: Canada Leisure Trip Cost

Normal distribution with parameters:

Mean \$1,246
Std. Dev. \$125

Selected range is from \$250 to Infinity

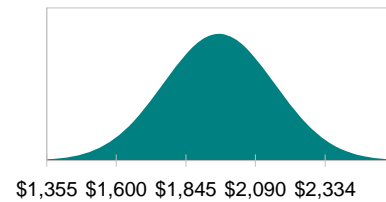


Assumption: Caribbean Business Trip Cost

Normal distribution with parameters:

Mean \$1,961
Std. Dev. \$196

Selected range is from \$250 to Infinity

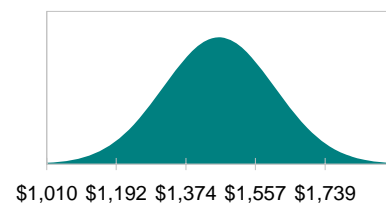


Assumption: Caribbean Leisure Trip Cost

Normal distribution with parameters:

Mean \$1,461
Std. Dev. \$146

Selected range is from \$250 to Infinity

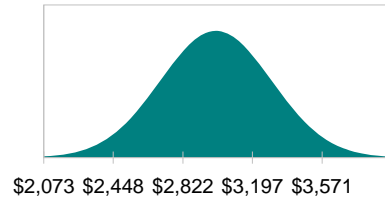


Assumption: General Aviation Can Overnight Trip Cost

Normal distribution with parameters:

Mean	\$3,000
Std. Dev.	\$300

Selected range is from \$1,000 to Infinity

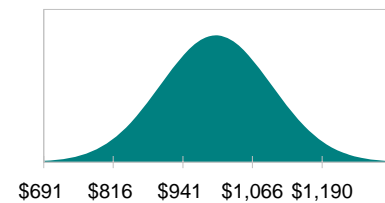


Assumption: General Aviation Can Same Day Trip Cost

Normal distribution with parameters:

Mean	\$1,000
Std. Dev.	\$100

Selected range is from \$500 to Infinity

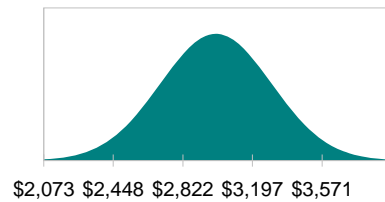


Assumption: General Aviation Mex Overnight Trip Cost

Normal distribution with parameters:

Mean	\$3,000
Std. Dev.	\$300

Selected range is from \$500 to Infinity

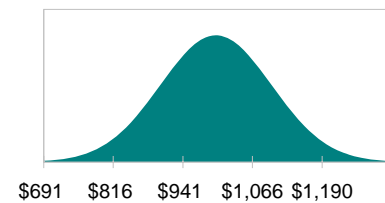


Assumption: General Aviation Mex Same Day Trip Cost

Normal distribution with parameters:

Mean	\$1,000
Std. Dev.	\$100

Selected range is from \$500 to Infinity

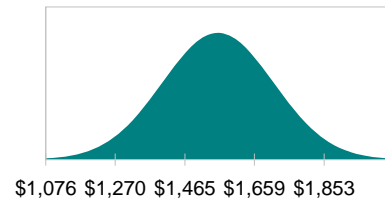


Assumption: Mexico Business Trip Cost

Normal distribution with parameters:

Mean \$1,557
Std. Dev. \$156

Selected range is from \$250 to Infinity

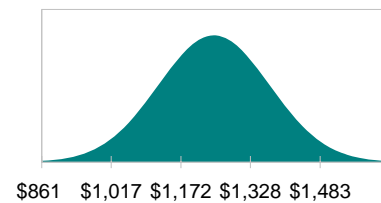


Assumption: Mexico Leisure Trip Cost

Normal distribution with parameters:

Mean \$1,246
Std. Dev. \$125

Selected range is from \$250 to Infinity

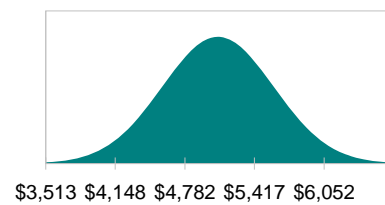


Assumption: Micronesia Business Trip Cost

Normal distribution with parameters:

Mean \$5,084
Std. Dev. \$508

Selected range is from \$1,000 to Infinity

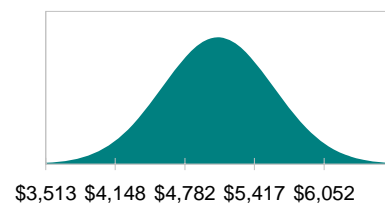


Assumption: Micronesia Leisure Trip Cost

Normal distribution with parameters:

Mean \$5,084
Std. Dev. \$508

Selected range is from \$1,000 to Infinity



Appendix B
Passport Costs, First Year
Worst-Case Estimate

Passport Costs of the Rule, First Year
US Travelers to Canada, Worst-Case Estimate

Travelers	4,390,846			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	10%	90%	90%	10%
Travelers	439,085	3,951,761	3,512,677	439,085
Percentage w/o passports	70%	70%	70%	70%
Travelers	307,359	2,766,233	2,458,874	307,359
Cost of trip	\$1,348	\$1,246	\$1,246	\$1,246
Cost of passport	\$194	\$194	\$194	\$179
Cost of passport as % of trip	14.38%	15.55%	15.55%	14.35%
Business Adults				
Elasticity business, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-20.53%	-16.53%	-12.02%	
Reduced travelers	-63,101	-50,817	-36,942	
Passports demanded	244,258	256,542	270,418	
Cost of passports demanded	\$47,337,183	\$49,717,905	\$52,406,922	
Leisure Adults				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-17.54%	-17.17%	-12.24%	
Reduced travelers	-431,401	-422,222	-300,986	
Passports demanded	2,027,473	2,036,652	2,157,887	
Cost of passports demanded	\$392,924,226	\$394,703,066	\$418,198,582	
Leisure Minors				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-16.19%	-15.84%	-11.29%	
Reduced travelers	-49,751	-48,693	-34,711	
Passports demanded	257,608	258,666	272,648	
Cost of passports demanded	\$46,060,287	\$46,249,554	\$48,749,453	
Leisure reduced travelers	-481,152	-470,915	-335,698	
Leisure passports demanded	2,285,081	2,295,318	2,430,535	
Cost of passports demanded	\$438,984,513	\$440,952,620	\$466,948,035	
Total reduced travelers	-544,254	-521,732	-372,639	
Total passports demanded	2,529,339	2,551,860	2,700,953	
Total passport costs	\$486,321,695	\$490,670,524	\$519,354,956	

Passport Costs of the Rule, First Year
US Travelers to Mexico, Worst-Case Estimate

Travelers	5,298,249			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	17%	83%	90%	10%
Travelers	900,702	4,397,546	3,867,722	529,825
Percentage w/o passports	70%	70%	70%	70%
Travelers	630,492	3,078,283	2,707,405	370,877
Cost of trip	\$1,557	\$1,246	\$1,246	\$1,246
Cost of passport	\$194	\$194	\$194	\$179
Cost of passport as % of trip	12.45%	15.55%	15.55%	14.35%
Business Adults				
Elasticity business, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-17.77%	-14.31%	-10.41%	
Reduced travelers	-112,066	-90,249	-65,607	
Passports demanded	518,426	540,243	564,885	
Cost of passports demanded	\$100,470,942	\$104,699,021	\$109,474,620	
Leisure Adults				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-17.54%	-17.17%	-12.24%	
Reduced travelers	-475,005	-464,898	-331,409	
Passports demanded	2,232,400	2,242,507	2,375,997	
Cost of passports demanded	\$432,639,168	\$434,597,805	\$460,468,138	
Leisure Minors				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-16.19%	-15.84%	-11.29%	
Reduced travelers	-60,033	-58,756	-41,885	
Passports demanded	310,845	312,122	328,993	
Cost of passports demanded	\$55,579,008	\$55,807,389	\$58,823,912	
Leisure reduced travelers	-535,038	-523,654	-373,293	
Leisure passports demanded	2,543,245	2,554,629	2,704,989	
Cost of passports demanded	\$488,218,176	\$490,405,194	\$519,292,049	
Total reduced travelers	-647,103	-613,903	-438,900	
Total passports demanded	3,061,671	3,094,871	3,269,874	
Total passport costs	\$588,689,118	\$595,104,214	\$628,766,669	

Passport Costs of the Rule, First Year
US Travelers to the Caribbean, Worst-Case Estimate

Travelers	4,460,457
Dominican Republic	1,247,188
Jamaica	950,323
Bahamas	893,919
Aruba	320,756
Netherland Antilles	308,509
Panama	253,321
Bermuda	225,090
British Virgin Islands	82,791
Antigua-Barbuda	82,088
St. Kitts-Nevis	58,151
Grenada	22,390
Dominica	13,960
St. Vincent-Grenadines	1,970

	Business	Leisure	Leisure Adults	Leisure Minors
Percentage (average)	16%	84%	90%	10%
Dominican Republic	16%	84%	90%	10%
Jamaica	12%	88%	90%	10%
Bahamas	25%	75%	90%	10%
Aruba	8%	92%	90%	10%
Netherland Antilles	10%	90%	90%	10%
Panama	27%	73%	90%	10%
Bermuda	13%	87%	90%	10%
British Virgin Islands	15%	85%	90%	10%
Antigua-Barbuda	23%	77%	90%	10%
St. Kitts-Nevis	15%	85%	90%	10%
Grenada	15%	85%	90%	10%
Dominica	15%	85%	90%	10%
St. Vincent-Grenadines	15%	85%	90%	10%

Travelers	737,008	3,723,449	3,277,403	446,046
Dominican Republic	199,550	1,047,638	922,919	124,719
Jamaica	114,039	836,284	741,252	95,032
Bahamas	223,480	670,439	581,047	89,392
Aruba	25,660	295,096	263,020	32,076
Netherland Antilles	30,851	277,659	246,808	30,851
Panama	68,397	184,925	159,592	25,332
Bermuda	29,262	195,829	173,320	22,509
British Virgin Islands	12,419	70,373	62,093	8,279
Antigua-Barbuda	18,880	63,208	54,999	8,209
St. Kitts-Nevis	8,723	49,428	43,613	5,815
Grenada	3,358	19,031	16,792	2,239
Dominica	2,094	11,866	10,470	1,396
St. Vincent-Grenadines	295	1,674	1,477	197

Percentage w/o passports	70%	70%	70%	70%
Dominican Republic	70%	70%	70%	70%
Jamaica	70%	70%	70%	70%
Bahamas	70%	70%	70%	70%
Aruba	70%	70%	70%	70%
Netherland Antilles	70%	70%	70%	70%
Panama	70%	70%	70%	70%
Bermuda	70%	70%	70%	70%
British Virgin Islands	70%	70%	70%	70%
Antigua-Barbuda	70%	70%	70%	70%
St. Kitts-Nevis	70%	70%	70%	70%
Grenada	70%	70%	70%	70%
Dominica	70%	70%	70%	70%
St. Vincent-Grenadines	70%	70%	70%	70%

Travelers	515,906	2,606,414	2,294,182	312,232
Dominican Republic	139,685	733,347	646,044	87,303
Jamaica	79,827	585,399	518,876	66,523
Bahamas	156,436	469,307	406,733	62,574
Aruba	17,962	206,567	184,114	22,453
Netherland Antilles	21,596	194,361	172,765	21,596
Panama	47,878	129,447	111,715	17,732
Bermuda	20,483	137,080	121,324	15,756
British Virgin Islands	8,693	49,261	43,465	5,795
Antigua-Barbuda	13,216	44,246	38,499	5,746
St. Kitts-Nevis	6,106	34,600	30,529	4,071
Grenada	2,351	13,322	11,755	1,567
Dominica	1,466	8,306	7,329	977
St. Vincent-Grenadines	207	1,172	1,034	138
Cost of trip	\$1,461	\$1,461	\$1,461	\$1,461
Cost of passport	\$194	\$194	\$194	\$179
Cost of passport as % of trip	13.26%	13.26%	13.26%	12.24%
Business Adults				
Elasticity business, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-6.30%	-3.52%	-2.63%	
Reduced travelers	-32,506	-18,135	-13,550	
Dominican Republic	-8,801	-4,910	-3,669	
Jamaica	-5,030	-2,806	-2,097	
Bahamas	-9,857	-5,499	-4,109	
Aruba	-1,132	-631	-472	
Netherland Antilles	-1,361	-759	-567	
Panama	-3,017	-1,683	-1,257	
Bermuda	-1,291	-720	-538	
British Virgin Islands	-548	-306	-228	
Antigua-Barbuda	-833	-465	-347	
St. Kitts-Nevis	-385	-215	-160	
Grenada	-148	-83	-62	
Dominica	-92	-52	-38	
St. Vincent-Grenadines	-13	-7	-5	
Passports demanded	483,399	497,771	502,356	
Cost of passports demanded	\$93,682,798	\$96,467,937	\$97,356,529	
Leisure Adults				
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-22.55%	-13.80%	-7.43%	
Reduced travelers	-517,345	-316,494	-170,420	
Dominican Republic	-145,685	-89,125	-47,990	
Jamaica	-117,008	-71,581	-38,544	
Bahamas	-91,720	-56,111	-30,214	
Aruba	-41,518	-25,399	-13,677	
Netherland Antilles	-38,959	-23,834	-12,834	
Panama	-25,192	-15,412	-8,299	
Bermuda	-27,359	-16,737	-9,012	
British Virgin Islands	-9,802	-5,996	-3,229	
Antigua-Barbuda	-8,682	-5,311	-2,860	
St. Kitts-Nevis	-6,884	-4,212	-2,268	
Grenada	-2,651	-1,622	-873	
Dominica	-1,653	-1,011	-544	
St. Vincent-Grenadines	-233	-143	-77	
Passports demanded	1,776,837	1,977,689	2,123,763	
Cost of passports demanded	\$344,351,053	\$383,276,106	\$411,585,236	

Leisure Minors			
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile
Use long-haul international leisure	-1.700	-1.040	-0.560
Reduced demand	-20.80%	-12.73%	-6.85%
Reduced travelers	-64,960	-39,740	-21,398
Dominican Republic	-18,163	-11,112	-5,983
Jamaica	-13,840	-8,467	-4,559
Bahamas	-13,019	-7,964	-4,288
Aruba	-4,671	-2,858	-1,539
Netherland Antilles	-4,493	-2,749	-1,480
Panama	-3,689	-2,257	-1,215
Bermuda	-3,278	-2,005	-1,080
British Virgin Islands	-1,206	-738	-397
Antigua-Barbuda	-1,195	-731	-394
St. Kitts-Nevis	-847	-518	-279
Grenada	-326	-199	-107
Dominica	-203	-124	-67
St. Vincent-Grenadines	-29	-18	-9
Passports demanded	247,272	272,492	290,834
Cost of passports demanded	\$44,212,299	\$48,721,568	\$52,001,037
Leisure reduced travelers	-582,305	-356,234	-191,818
Leisure passports demanded	2,024,110	2,250,181	2,414,596
Cost of passports demanded	\$388,563,352	\$431,997,674	\$463,586,273
Total reduced travelers	-614,811	-374,369	-205,368
Total passports demanded	2,507,509	2,747,951	2,916,952
Total passport costs	\$482,246,150	\$528,465,611	\$560,942,802

Passport Costs of the Rule, First Year
US Travelers to Micronesia, Worst-Case Estimate

Travelers	19,027			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	0%	100%	90%	10%
Travelers	-	19,027	17,124	1,903
Percentage w/o passports	70%	70%	70%	70%
Travelers	-	13,319	11,987	1,332
Cost of trip	\$5,084	\$5,084	\$5,084	\$5,084
Cost of passport	\$194	\$194	\$194	\$179
Cost of passport as % of trip	3.81%	3.81%	3.81%	3.52%
Business Adults				
Elasticity business, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-1.81%	-1.01%	-0.75%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Adults				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-6.48%	-3.96%	-2.13%	
Reduced travelers	-777	-475	-256	
Passports demanded	11,210	11,512	11,731	
Cost of passports demanded	\$2,172,533	\$2,230,979	\$2,273,485	
Leisure Minors				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-5.98%	-3.66%	-1.97%	
Reduced travelers	-80	-49	-26	
Passports demanded	1,252	1,283	1,306	
Cost of passports demanded	\$223,903	\$229,431	\$233,451	
Leisure reduced travelers	-856	-524	-282	
Leisure passports demanded	12,462	12,795	13,037	
Cost of passports demanded	\$2,396,436	\$2,460,410	\$2,506,936	
Total reduced travelers	-856	-524	-282	
Total passports demanded	12,462	12,795	13,037	
Total passport costs	\$2,396,436	\$2,460,410	\$2,506,936	

Passport Costs of the Rule, First Year
US General Aviation Travelers, Worst-Case Estimate

Travelers	65,937				
	Same Day	Overnight	Adults	Minors	
Percentage			100%	0%	
Travelers	32,773	33,164	65,937	-	
Percentage w/o passports	66%	50%			
Travelers	21,630	16,582	38,212	-	
Cost of trip	\$500	\$1,000			
Cost of passport	\$194	\$194	\$194	\$179	
Cost of passport as % of trip	38.76%	19.38%			
Elasticity for same day	1st quartile	Median	3rd quartile		
Use short-haul leisure	-1.743	-1.520	-1.288		
Reduced demand	-67.56%	-58.92%	-49.92%		
Reduced travelers	-14,613	-12,743	-10,798		
Passports demanded	7,017	8,887	10,832		
Cost of passports demanded	\$1,359,913	\$1,722,240	\$2,099,191		
Elasticity for overnight	1st quartile	Median	3rd quartile		
Use short-haul leisure	-1.743	-1.520	-1.288		
Reduced demand	-33.78%	-29.46%	-24.96%		
Reduced travelers	-5,601	-4,885	-4,139		
Passports demanded	10,981	11,697	12,443		
Cost of passports demanded	\$2,128,049	\$2,266,931	\$2,411,418		
Total reduced travelers	-20,214	-17,628	-14,937		
Total passports demanded	17,998	20,584	23,275		
Total passport costs	\$3,487,962	\$3,989,171	\$4,510,609		

Summary of Passport Costs for US Air Travelers to Destinations in the Western Hemisphere, First Year Worst Case Estimate

Passports Demanded	1st quartile	Median	3rd quartile
Canada	2,529,339	2,551,860	2,700,953
Mexico	3,061,671	3,094,871	3,269,874
Caribbean	2,507,509	2,747,951	2,916,952
Micronesia	12,462	12,795	13,037
General Aviation	17,998	20,584	23,275
Total	8,128,978	8,428,062	8,924,090
Reduced Travelers	1st quartile	Median	3rd quartile
Canada	-544,254	-521,732	-372,639
Mexico	-647,103	-613,903	-438,900
Caribbean	-614,811	-374,369	-205,368
Micronesia	-856	-524	-282
General Aviation	-20,214	-17,628	-14,937
Total	-1,827,239	-1,528,155	-1,032,127
Cost of Passports Demanded	1st quartile	Median	3rd quartile
Canada	\$486,321,695	\$490,670,524	\$519,354,956
Mexico	588,689,118	595,104,214	628,766,669
Caribbean	482,246,150	528,465,611	560,942,802
Micronesia	2,396,436	2,460,410	2,506,936
General Aviation	3,487,962	3,989,171	4,510,609
Total	\$1,563,141,361	\$1,620,689,931	\$1,716,081,973
Expedites (30% of passports)	2,438,694	2,528,419	2,677,227
Extra cost of expedites	\$146,321,611	\$151,705,113	\$160,633,623
Total costs	\$1,709,462,973	\$1,772,395,044	\$1,876,715,595

Appendix C
Passport Costs, First Year
Best-Case Estimate

Passport Costs of the Rule, First Year
US Travelers to Canada, Best-Case Estimate

Travelers	4,390,846			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	878,169	3,512,677	3,073,592	439,085
Percentage w/o passports	17%	27%	27%	27%
Travelers	147,532	941,397	823,723	117,675
Cost of trip	\$4,170	\$2,529	\$2,529	\$2,529
Cost of passport	\$149	\$149	\$149	\$134
Amortized cost of passport	\$21	\$21	\$21	\$33
Cost of passport as % of trip	0.51%	0.84%	0.84%	1.29%
Business Adults				
Elasticity business, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-0.72%	-0.58%	-0.42%	
Reduced travelers	-1,068	-860	-625	
Passports demanded	146,464	146,672	146,907	
Cost of passports demanded	\$21,752,362	\$21,783,250	\$21,818,138	
Leisure Adults				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-0.94%	-0.92%	-0.66%	
Reduced travelers	-7,769	-7,604	-5,420	
Passports demanded	815,954	816,119	818,302	
Cost of passports demanded	\$121,182,741	\$121,207,290	\$121,531,542	
Leisure Minors				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-1.45%	-1.42%	-1.01%	
Reduced travelers	-1,709	-1,673	-1,192	
Passports demanded	115,966	116,002	116,482	
Cost of passports demanded	\$15,483,333	\$15,488,188	\$15,552,318	
Leisure reduced travelers	-9,478	-9,276	-6,613	
Leisure passports demanded	931,919	932,121	934,785	
Cost of passports demanded	\$136,666,074	\$136,695,478	\$137,083,860	
Total reduced travelers	-10,546	-10,137	-7,238	
Total passports demanded	1,078,383	1,078,793	1,081,692	
Total passport costs	\$158,418,436	\$158,478,728	\$158,901,998	

Passport Costs of the Rule, First Year
US Travelers to Mexico, Best-Case Estimate

Travelers	5,298,249			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	1,059,650	4,238,599	3,708,774	529,825
Percentage w/o passports	17%	27%	27%	27%
Travelers	178,021	1,135,945	993,951	141,993
Cost of trip	\$4,170	\$2,529	\$2,529	\$2,529
Cost of passport	\$149	\$149	\$149	\$134
Amortized cost of passport	\$21	\$21	\$21	\$33
Cost of passport as % of trip	0.51%	0.84%	0.84%	1.29%
Business Adults				
Elasticity business, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-0.72%	-0.58%	-0.42%	
Reduced travelers	-1,289	-1,038	-755	
Passports demanded	176,732	176,983	177,266	
Cost of passports demanded	\$26,247,659	\$26,284,930	\$26,327,028	
Leisure Adults				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-0.94%	-0.92%	-0.66%	
Reduced travelers	-9,374	-9,175	-6,540	
Passports demanded	984,577	984,777	987,411	
Cost of passports demanded	\$146,226,110	\$146,255,732	\$146,646,994	
Leisure Minors				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-1.45%	-1.42%	-1.01%	
Reduced travelers	-2,062	-2,018	-1,439	
Passports demanded	139,931	139,975	140,554	
Cost of passports demanded	\$18,683,086	\$18,688,944	\$18,766,327	
Leisure reduced travelers	-11,437	-11,193	-7,979	
Leisure passports demanded	1,124,508	1,124,751	1,127,965	
Cost of passports demanded	\$164,909,195	\$164,944,676	\$165,413,321	
Total reduced travelers	-12,726	-12,231	-8,734	
Total passports demanded	1,301,240	1,301,734	1,305,232	
Total passport costs	\$191,156,855	\$191,229,607	\$191,740,349	

Passport Costs of the Rule, First Year
US Travelers to the Caribbean, Best-Case Estimate

Travelers	4,460,457
Dominican Republic	1,247,188
Jamaica	950,323
Bahamas	893,919
Aruba	320,756
Netherland Antilles	308,509
Panama	253,321
Bermuda	225,090
British Virgin Islands	82,791
Antigua-Barbuda	82,088
St. Kitts-Nevis	58,151
Grenada	22,390
Dominica	13,960
St. Vincent-Grenadines	1,970

	Business	Leisure	Leisure Adults	Leisure Minors
Percentage (average)	16%	84%	90%	10%
Dominican Republic	16%	84%	90%	10%
Jamaica	12%	88%	90%	10%
Bahamas	25%	75%	90%	10%
Aruba	8%	92%	90%	10%
Netherland Antilles	10%	90%	90%	10%
Panama	27%	73%	90%	10%
Bermuda	13%	87%	90%	10%
British Virgin Islands	15%	85%	90%	10%
Antigua-Barbuda	23%	77%	90%	10%
St. Kitts-Nevis	15%	85%	90%	10%
Grenada	15%	85%	90%	10%
Dominica	15%	85%	90%	10%
St. Vincent-Grenadines	15%	85%	90%	10%

Travelers	737,008	3,723,449	3,277,403	446,046
Dominican Republic	199,550	1,047,638	922,919	124,719
Jamaica	114,039	836,284	741,252	95,032
Bahamas	223,480	670,439	581,047	89,392
Aruba	25,660	295,096	263,020	32,076
Netherland Antilles	30,851	277,659	246,808	30,851
Panama	68,397	184,925	159,592	25,332
Bermuda	29,262	195,829	173,320	22,509
British Virgin Islands	12,419	70,373	62,093	8,279
Antigua-Barbuda	18,880	63,208	54,999	8,209
St. Kitts-Nevis	8,723	49,428	43,613	5,815
Grenada	3,358	19,031	16,792	2,239
Dominica	2,094	11,866	10,470	1,396
St. Vincent-Grenadines	295	1,674	1,477	197

Percentage w/o passports	17%	27%	27%	27%
Dominican Republic	17%	27%	27%	27%
Jamaica	17%	27%	27%	27%
Bahamas	17%	27%	27%	27%
Aruba	17%	27%	27%	27%
Netherland Antilles	17%	27%	27%	27%
Panama	17%	27%	27%	27%
Bermuda	17%	27%	27%	27%
British Virgin Islands	17%	27%	27%	27%
Antigua-Barbuda	17%	27%	27%	27%
St. Kitts-Nevis	17%	27%	27%	27%
Grenada	17%	27%	27%	27%
Dominica	17%	27%	27%	27%
St. Vincent-Grenadines	17%	27%	27%	27%

Travelers	123,817	997,884	878,344	119,540
Dominican Republic	33,524	280,767	247,342	33,425
Jamaica	19,159	224,124	198,656	25,469
Bahamas	37,545	179,678	155,721	23,957
Aruba	4,311	79,086	70,489	8,596
Netherland Antilles	5,183	74,412	66,144	8,268
Panama	11,491	49,560	42,771	6,789
Bermuda	4,916	52,482	46,450	6,032
British Virgin Islands	2,086	18,860	16,641	2,219
Antigua-Barbuda	3,172	16,940	14,740	2,200
St. Kitts-Nevis	1,465	13,247	11,688	1,558
Grenada	564	5,100	4,500	600
Dominica	352	3,180	2,806	374
St. Vincent-Grenadines	50	449	396	53
Cost of trip	\$4,170	\$2,529	\$2,529	\$2,529
Cost of passport	\$149	\$149	\$149	\$134
Amortized cost of passport	\$21	\$21	\$21	\$33
Cost of passport as % of trip	0.51%	0.84%	0.84%	1.29%
Business Adults				
Elasticity business, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-0.72%	-0.58%	-0.42%	
Reduced travelers	-897	-722	-525	
Dominican Republic	-243	-195	-142	
Jamaica	-139	-112	-81	
Bahamas	-272	-219	-159	
Aruba	-31	-25	-18	
Netherland Antilles	-38	-30	-22	
Panama	-83	-67	-49	
Bermuda	-36	-29	-21	
British Virgin Islands	-15	-12	-9	
Antigua-Barbuda	-23	-18	-13	
St. Kitts-Nevis	-11	-9	-6	
Grenada	-4	-3	-2	
Dominica	-3	-2	-1	
St. Vincent-Grenadines	0	0	0	
Passports demanded	122,921	123,095	123,292	
Cost of passports demanded	\$18,255,784	\$18,281,707	\$18,310,987	
Leisure Adults				
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-0.94%	-0.92%	-0.66%	
Reduced travelers	-8,284	-8,108	-5,780	
Dominican Republic	-2,333	-2,283	-1,628	
Jamaica	-1,874	-1,834	-1,307	
Bahamas	-1,469	-1,437	-1,025	
Aruba	-665	-651	-464	
Netherland Antilles	-624	-611	-435	
Panama	-403	-395	-281	
Bermuda	-438	-429	-306	
British Virgin Islands	-157	-154	-110	
Antigua-Barbuda	-139	-136	-97	
St. Kitts-Nevis	-110	-108	-77	
Grenada	-42	-42	-30	
Dominica	-26	-26	-18	
St. Vincent-Grenadines	-4	-4	-3	
Passports demanded	870,060	870,236	872,564	
Cost of passports demanded	\$129,218,426	\$129,244,603	\$129,590,357	

Leisure Minors			
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile
Use long-haul domestic leisure	-1.128	-1.104	-0.787
Reduced demand	-1.45%	-1.42%	-1.01%
Reduced travelers	-1,736	-1,699	-1,211
Dominican Republic	-485	-475	-339
Jamaica	-370	-362	-258
Bahamas	-348	-341	-243
Aruba	-125	-122	-87
Netherland Antilles	-120	-118	-84
Panama	-99	-97	-69
Bermuda	-88	-86	-61
British Virgin Islands	-32	-32	-22
Antigua-Barbuda	-32	-31	-22
St. Kitts-Nevis	-23	-22	-16
Grenada	-9	-9	-6
Dominica	-5	-5	-4
St. Vincent-Grenadines	-1	-1	-1
Passports demanded	117,804	117,841	118,329
Cost of passports demanded	\$15,728,802	\$15,733,734	\$15,798,881
Leisure reduced travelers	-10,020	-9,807	-6,991
Leisure passports demanded	987,864	988,077	990,893
Cost of passports demanded	\$144,947,228	\$144,978,337	\$145,389,237
Total reduced travelers	-10,917	-10,529	-7,516
Total passports demanded	1,110,785	1,111,173	1,114,186
Total passport costs	\$163,203,012	\$163,260,044	\$163,700,224

Passport Costs of the Rule, First Year
US Travelers to Micronesia, Best-Case Estimate

Travelers	19,027			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	0%	100%	90%	10%
Travelers	-	19,027	17,124	1,903
Percentage w/o passports	0%	0%	0%	0%
Travelers	-	-	-	-
Cost of trip	\$5,084	\$5,084	\$5,084	\$5,084
Cost of passport	\$149	\$149	\$149	\$134
Amortized cost of passport	\$21	\$21	\$21	\$33
Cost of passport as % of trip	0.42%	0.42%	0.42%	0.64%
Business Adults				
Elasticity business, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-0.20%	-0.11%	-0.08%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Adults				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-0.71%	-0.43%	-0.23%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Minors				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-1.09%	-0.67%	-0.36%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure reduced travelers	0	0	0	
Leisure passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Total reduced travelers	0	0	0	
Total passports demanded	-	-	-	
Total passport costs	\$ -	\$ -	\$ -	

Passport Costs of the Rule, First Year
US General Aviation Travelers, Best-Case Estimate

Travelers	65,937			
	Same Day	Overnight	Adults	Minors
Percentage			100%	0%
Travelers	32,773	33,164	65,937	-
Percentage w/o passports	66%	50%		
Travelers	21,630	16,582	38,212	-
Cost of trip	\$2,000	\$5,000		
Cost of passport	\$149	\$149	\$149	\$134
Amortized cost of passport	\$21	\$21	\$21	\$33
Cost of passport as % of trip	1.06%	0.42%		
Elasticity for same day	1st quartile	Median	3rd quartile	
Use short-haul leisure	-1.743	-1.520	-1.288	
Reduced demand	-1.84%	-1.61%	-1.36%	
Reduced travelers	-399	-348	-295	
Passports demanded	21,232	21,283	21,336	
Cost of passports demanded	\$3,153,233	\$3,160,807	\$3,168,687	
Elasticity for overnight	1st quartile	Median	3rd quartile	
Use short-haul leisure	-1.743	-1.520	-1.288	
Reduced demand	-0.74%	-0.64%	-0.54%	
Reduced travelers	-122	-107	-90	
Passports demanded	16,460	16,475	16,492	
Cost of passports demanded	\$2,444,535	\$2,446,858	\$2,449,274	
Total reduced travelers	-521	-454	-385	
Total passports demanded	37,691	37,758	37,827	
Total passport costs	\$5,597,768	\$5,607,665	\$5,617,961	

**Summary of Passport Costs for US Air Travelers to Destinations in the Western Hemisphere, First Year
Best Case Estimate**

Passports Demanded	1st quartile	Median	3rd quartile
Canada	1,078,383	1,078,793	1,081,692
Mexico	1,301,240	1,301,734	1,305,232
Caribbean	1,110,785	1,111,173	1,114,186
Micronesia	-	-	-
General Aviation	37,691	37,758	37,827
Total	3,528,099	3,529,458	3,538,936
Reduced Travelers	1st quartile	Median	3rd quartile
Canada	-10,546	-10,137	-7,238
Mexico	-12,726	-12,231	-8,734
Caribbean	-10,917	-10,529	-7,516
Micronesia	0	0	0
General Aviation	-521	-454	-385
Total	-34,710	-33,351	-23,873
Cost of Passports Demanded	1st quartile	Median	3rd quartile
Canada	\$158,418,436	\$158,478,728	\$158,901,998
Mexico	191,156,855	191,229,607	191,740,349
Caribbean	163,203,012	163,260,044	163,700,224
Micronesia	-	-	-
General Aviation	5,597,768	5,607,665	5,617,961
Total	\$518,376,070	\$518,576,043	\$519,960,531
Expedites (10% of passports)	352,810	352,946	353,894
Extra cost of expedites	\$21,168,597	\$21,176,747	\$21,233,617
Total costs	\$539,544,667	\$539,752,790	\$541,194,148

Appendix D
Passport Costs, Second Year
Most Likely Estimate

Passport Costs of the Rule, Second Year
US Travelers to Canada, Most Likely Estimate

"New" travelers	691,558			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	138,312	553,247	484,091	69,156
Percentage w/o passports	23%	33%	33%	33%
Travelers	31,812	182,571	159,750	22,821
Cost of trip	\$1,557	\$1,246	\$1,246	\$1,246
Cost of passport	\$149	\$149	\$149	\$134
Cost of passport as % of trip	9.54%	11.92%	11.92%	10.72%
Business Adults				
Elasticity business, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-0.825	-0.800	-0.475	
Reduced demand	-7.87%	-7.63%	-4.53%	
Reduced travelers	-2,503	-2,428	-1,441	
Passports demanded	29,308	29,384	30,370	
Cost of passports demanded	\$4,352,770	\$4,364,037	\$4,510,501	
Leisure Adults				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-19.07%	-16.69%	-9.54%	
Reduced travelers	-30,466	-26,658	-15,233	
Passports demanded	129,284	133,092	144,517	
Cost of passports demanded	\$19,200,796	\$19,766,388	\$21,463,163	
Leisure Minors				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-17.14%	-15.00%	-8.57%	
Reduced travelers	-3,913	-3,424	-1,956	
Passports demanded	18,909	19,398	20,865	
Cost of passports demanded	\$2,524,625	\$2,589,927	\$2,785,833	
Leisure reduced travelers	-34,379	-30,082	-17,189	
Leisure passports demanded	148,192	152,490	165,382	
Cost of passports demanded	\$21,725,421	\$22,356,315	\$24,248,996	
Total reduced travelers	-36,882	-32,509	-18,631	
Total passports demanded	177,501	181,874	195,752	
Total passport costs	\$26,078,192	\$26,720,352	\$28,759,497	

Passport Costs of the Rule, Second Year
US Travelers to Mexico, Most Likely Estimate

"New" travelers	834,474			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	166,895	667,579	584,132	83,447
Percentage w/o passports	34%	44%	44%	44%
Travelers	56,410	292,400	255,850	36,550
Cost of trip	\$1,557	\$1,246	\$1,246	\$1,246
Cost of passport	\$149	\$149	\$149	\$134
Cost of passport as % of trip	9.54%	11.92%	11.92%	10.72%
Business Adults				
Elasticity business, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-0.825	-0.800	-0.475	
Reduced demand	-7.87%	-7.63%	-4.53%	
Reduced travelers	-4,439	-4,305	-2,556	
Passports demanded	51,971	52,106	53,855	
Cost of passports demanded	\$7,718,604	\$7,738,583	\$7,998,303	
Leisure Adults				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-19.07%	-16.69%	-9.54%	
Reduced travelers	-48,794	-42,694	-24,397	
Passports demanded	207,056	213,155	231,453	
Cost of passports demanded	\$30,751,306	\$31,657,137	\$34,374,631	
Leisure Minors				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-17.14%	-15.00%	-8.57%	
Reduced travelers	-6,266	-5,483	-3,133	
Passports demanded	30,283	31,067	33,417	
Cost of passports demanded	\$4,043,349	\$4,147,934	\$4,461,690	
Leisure reduced travelers	-55,060	-48,178	-27,530	
Leisure passports demanded	237,340	244,222	264,870	
Cost of passports demanded	\$34,794,655	\$35,805,071	\$38,836,321	
Total reduced travelers	-59,499	-52,482	-30,086	
Total passports demanded	289,311	296,328	318,724	
Total passport costs	\$42,513,259	\$43,543,654	\$46,834,624	

Passport Costs of the Rule, Second Year
US Travelers to the Caribbean, Most Likely Estimate

"New" travelers	468,348
Dominican Republic	130,955
Jamaica	99,784
Bahamas	93,861
Aruba	33,679
Netherland Antilles	32,393
Panama	26,599
Bermuda	23,634
British Virgin Islands	8,693
Antigua-Barbuda	8,619
St. Kitts-Nevis	6,106
Grenada	2,351
Dominica	1,466
St. Vincent-Grenadines	207

	Business	Leisure	Leisure Adults	Leisure Minors
Percentage (average)	16%	84%	90%	10%
Dominican Republic	16%	84%	90%	10%
Jamaica	12%	88%	90%	10%
Bahamas	25%	75%	90%	10%
Aruba	8%	92%	90%	10%
Netherland Antilles	10%	90%	90%	10%
Panama	27%	73%	90%	10%
Bermuda	13%	87%	90%	10%
British Virgin Islands	15%	85%	90%	10%
Antigua-Barbuda	23%	77%	90%	10%
St. Kitts-Nevis	15%	85%	90%	10%
Grenada	15%	85%	90%	10%
Dominica	15%	85%	90%	10%
St. Vincent-Grenadines	15%	85%	90%	10%
Travelers	77,386	390,962	344,127	46,835
Dominican Republic	20,953	110,002	96,907	13,095
Jamaica	11,974	87,810	77,831	9,978
Bahamas	23,465	70,396	61,010	9,386
Aruba	2,694	30,985	27,617	3,368
Netherland Antilles	3,239	29,154	25,915	3,239
Panama	7,182	19,417	16,757	2,660
Bermuda	3,072	20,562	18,199	2,363
British Virgin Islands	1,304	7,389	6,520	869
Antigua-Barbuda	1,982	6,637	5,775	862
St. Kitts-Nevis	916	5,190	4,579	611
Grenada	353	1,998	1,763	235
Dominica	220	1,246	1,099	147
St. Vincent-Grenadines	31	176	155	21
Percentage w/o passports	17%	27%	27%	27%
Dominican Republic	17%	27%	27%	27%
Jamaica	17%	27%	27%	27%
Bahamas	17%	27%	27%	27%
Aruba	17%	27%	27%	27%
Netherland Antilles	17%	27%	27%	27%
Panama	17%	27%	27%	27%
Bermuda	17%	27%	27%	27%
British Virgin Islands	17%	27%	27%	27%
Antigua-Barbuda	17%	27%	27%	27%
St. Kitts-Nevis	17%	27%	27%	27%
Grenada	17%	27%	27%	27%
Dominica	17%	27%	27%	27%
St. Vincent-Grenadines	17%	27%	27%	27%

Travelers	13,001	104,778	92,226	12,552
Dominican Republic	3,520	29,481	25,971	3,510
Jamaica	2,012	23,533	20,859	2,674
Bahamas	3,942	18,866	16,351	2,515
Aruba	453	8,304	7,401	903
Netherland Antilles	544	7,813	6,945	868
Panama	1,207	5,204	4,491	713
Bermuda	516	5,511	4,877	633
British Virgin Islands	219	1,980	1,747	233
Antigua-Barbuda	333	1,779	1,548	231
St. Kitts-Nevis	154	1,391	1,227	164
Grenada	59	536	473	63
Dominica	37	334	295	39
St. Vincent-Grenadines	5	47	42	6
Cost of trip	\$1,961	\$1,461	\$1,461	\$1,461
Cost of passport	\$149	\$149	\$149	\$134
Cost of passport as % of trip	7.57%	10.17%	10.17%	9.14%
Business Adults				
Elasticity business, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-3.60%	-2.01%	-1.50%	
Reduced travelers	-468	-261	-195	
Dominican Republic	-127	-71	-53	
Jamaica	-72	-40	-30	
Bahamas	-142	-79	-59	
Aruba	-16	-9	-7	
Netherland Antilles	-20	-11	-8	
Panama	-43	-24	-18	
Bermuda	-19	-10	-8	
British Virgin Islands	-8	-4	-3	
Antigua-Barbuda	-12	-7	-5	
St. Kitts-Nevis	-6	-3	-2	
Grenada	-2	-1	-1	
Dominica	-1	-1	-1	
St. Vincent-Grenadines	0	0	0	
Passports demanded	12,533	12,740	12,806	
Cost of passports demanded	\$1,861,378	\$1,892,087	\$1,901,885	
Leisure Adults				
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-17.28%	-10.57%	-5.69%	
Reduced travelers	-15,938	-9,750	-5,250	
Dominican Republic	-4,488	-2,746	-1,478	
Jamaica	-3,605	-2,205	-1,187	
Bahamas	-2,826	-1,729	-931	
Aruba	-1,279	-782	-421	
Netherland Antilles	-1,200	-734	-395	
Panama	-776	-475	-256	
Bermuda	-843	-516	-278	
British Virgin Islands	-302	-185	-99	
Antigua-Barbuda	-267	-164	-88	
St. Kitts-Nevis	-212	-130	-70	
Grenada	-82	-50	-27	
Dominica	-51	-31	-17	
St. Vincent-Grenadines	-7	-4	-2	
Passports demanded	76,288	82,476	86,976	
Cost of passports demanded	\$11,330,092	\$12,249,055	\$12,917,392	

Leisure Minors			
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile
Use long-haul international leisure	-1.600	-1.400	-0.800
Reduced demand	-14.62%	-12.79%	-7.31%
Reduced travelers	-1,835	-1,606	-918
Dominican Republic	-513	-449	-257
Jamaica	-391	-342	-196
Bahamas	-368	-322	-184
Aruba	-132	-115	-66
Netherland Antilles	-127	-111	-63
Panama	-104	-91	-52
Bermuda	-93	-81	-46
British Virgin Islands	-34	-30	-17
Antigua-Barbuda	-34	-30	-17
St. Kitts-Nevis	-24	-21	-12
Grenada	-9	-8	-5
Dominica	-6	-5	-3
St. Vincent-Grenadines	-1	-1	0
Passports demanded	10,716	10,946	11,634
Cost of passports demanded	\$1,430,821	\$1,461,451	\$1,553,343
Leisure reduced travelers	-17,773	-11,356	-6,168
Leisure passports demanded	87,005	93,422	98,610
Cost of passports demanded	\$12,760,912	\$13,710,506	\$14,470,734
Total reduced travelers	-18,241	-11,617	-6,363
Total passports demanded	99,538	106,162	111,416
Total passport costs	\$14,622,291	\$15,602,593	\$16,372,619

Passport Costs of the Rule, Second Year
US Travelers to Micronesia, Most Likely Estimate

"New" travelers	0			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	0%	100%	90%	10%
Travelers	-	-	-	-
Percentage w/o passports	0%	5%	5%	5%
Travelers	-	-	-	-
Cost of trip	\$5,084	\$5,084	\$5,084	\$5,084
Cost of passport	\$149	\$149	\$149	\$134
Cost of passport as % of trip	2.92%	2.92%	2.92%	2.63%
Business Adults				
Elasticity business, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-1.39%	-0.77%	-0.58%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Adults				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-4.97%	-3.04%	-1.64%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Minors				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-4.46%	-2.73%	-1.47%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure reduced travelers	0	0	0	
Leisure passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Total reduced travelers	0	0	0	
Total passports demanded	-	-	-	
Total passport costs	\$ -	\$ -	\$ -	

Passport Costs of the Rule, Second Year
US General Aviation Travelers, Most Likely Estimate

Travelers	65,937				
	Same Day		Overnight	Adults	Minors
Percentage				100%	0%
Travelers	32,773		33,164	65,937	-
Percentage w/o passports	0%		0%		
Travelers	-		-	-	-
Cost of trip	\$1,000		\$3,000		
Cost of passport	\$149		\$149	\$149	\$134
Cost of passport as % of trip	14.85%		4.95%		
Elasticity for same day	1st quartile		Median	3rd quartile	
Use short-haul leisure	-1.743		-1.520	-1.288	
Reduced demand	-25.89%		-22.57%	-19.13%	
Reduced travelers	0		0	0	
Passports demanded	-		-	-	
Cost of passports demanded	\$	-	\$	-	\$
Elasticity for overnight	1st quartile		Median	3rd quartile	
Use short-haul leisure	-1.743		-1.520	-1.288	
Reduced demand	-8.63%		-7.52%	-6.38%	
Reduced travelers	0		0	0	
Passports demanded	-		-	-	
Cost of passports demanded	\$	-	\$	-	\$
Total reduced travelers	0		0	0	
Total passports demanded	-		-	-	
Total passport costs	\$	-	\$	-	\$

**Summary of Passport Costs for US Air Travelers to Destinations in the Western Hemisphere, Second Year
Most Likely Estimate**

Passports Demanded	1st quartile	Median	3rd quartile
Canada	177,501	181,874	195,752
Mexico	289,311	296,328	318,724
Caribbean	99,538	106,162	111,416
Micronesia	-	-	-
General Aviation	-	-	-
Total	566,350	584,364	625,893
Reduced Travelers	1st quartile	Median	3rd quartile
Canada	-36,882	-32,509	-18,631
Mexico	-59,499	-52,482	-30,086
Caribbean	-18,241	-11,617	-6,363
Micronesia	0	0	0
General Aviation	0	0	0
Total	-114,622	-96,608	-55,079
Cost of Passports Demanded	1st quartile	Median	3rd quartile
Canada	\$26,078,192	\$26,720,352	\$28,759,497
Mexico	42,513,259	43,543,654	46,834,624
Caribbean	14,622,291	15,602,593	16,372,619
Micronesia	-	-	-
General Aviation	-	-	-
Total	\$83,213,742	\$85,866,599	\$91,966,740
Expedites (20% of passports)	113,270	116,873	125,179
Extra cost of expedites	\$6,796,196	\$7,012,365	\$7,510,711
Total costs	\$90,009,938	\$92,878,964	\$99,477,450

Monte Carlo Analysis - Second-Year, Most Likely Estimates

Run preferences:

Number of trials run	50,000
Extreme speed	
Monte Carlo	
Random seed	
Precision control on	
Confidence level	95.00%

Note: For all forecasts, frequency is shown on the y-axis

Forecasts

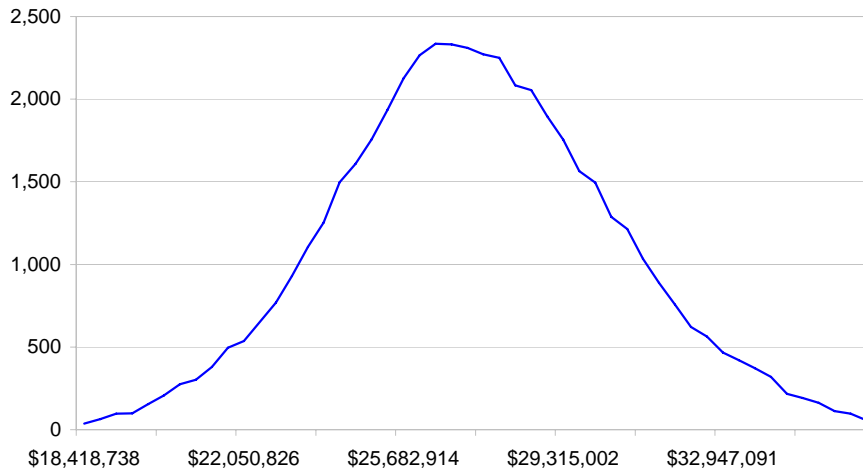
Forecast: Canada Total Passport Costs

Summary:

Entire range is from \$15,134,900 to \$40,505,201

Base case is \$26,720,352

After 50,000 trials, the std. error of the mean is \$14,503



Statistics:

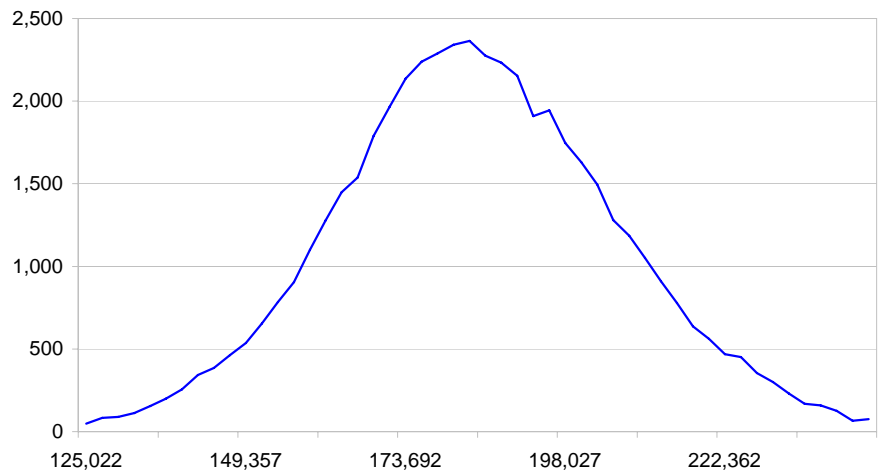
Forecast values	
Trials	50,000
Mean	\$27,317,354
Median	\$27,217,467
Mode	---
Standard Deviation	\$3,242,936
Variance	\$10,516,633,651,056
Skewness	0.1345
Kurtosis	3.16
Coeff. of Variability	0.1187
Minimum	\$15,134,900
Maximum	\$40,505,201
Range Width	\$25,370,301
Mean Std. Error	\$14,503

Percentiles:

Forecast values	
0%	\$15,134,900
10%	\$23,287,095
20%	\$24,646,355
30%	\$25,627,945
40%	\$26,433,301
50%	\$27,217,467
60%	\$28,017,588
70%	\$28,901,823
80%	\$29,974,412
90%	\$31,504,431
100%	\$40,505,201

Forecast: Canada Total Passports Demanded

Summary:
Entire range is from 100,384 to 276,045
Base case is 181,874
After 50,000 trials, the std. error of the mean is 97

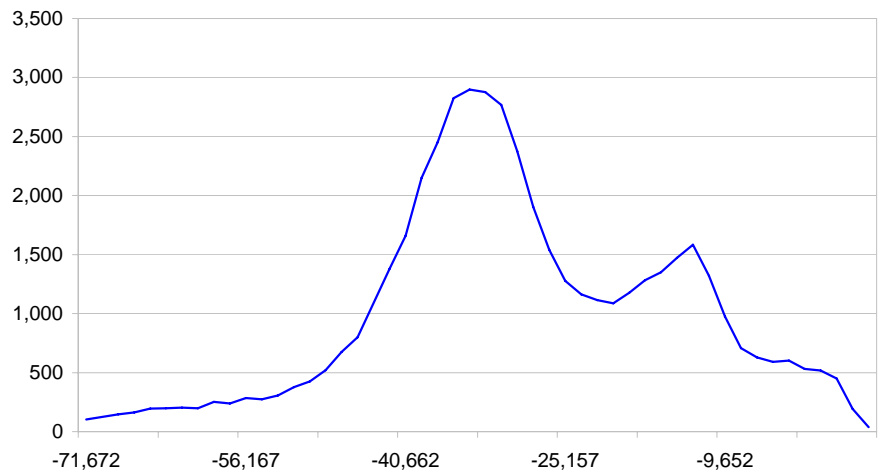


Statistics:	Forecast values
Trials	50,000
Mean	184,643
Median	184,001
Mode	---
Standard Deviation	21,728
Variance	472,100,770
Skewness	0.1137
Kurtosis	3.16
Coeff. of Variability	0.1177
Minimum	100,384
Maximum	276,045
Range Width	175,661
Mean Std. Error	97

Percentiles:	Forecast values
0%	100,384
10%	157,553
20%	166,879
30%	173,361
40%	178,830
50%	184,001
60%	189,375
70%	195,404
80%	202,434
90%	212,690
100%	276,045

Forecast: Canada Total Reduced Travelers

Summary:
Entire range is from -103,710 to 5,077
Base case is -32,509
After 50,000 trials, the std. error of the mean is 68

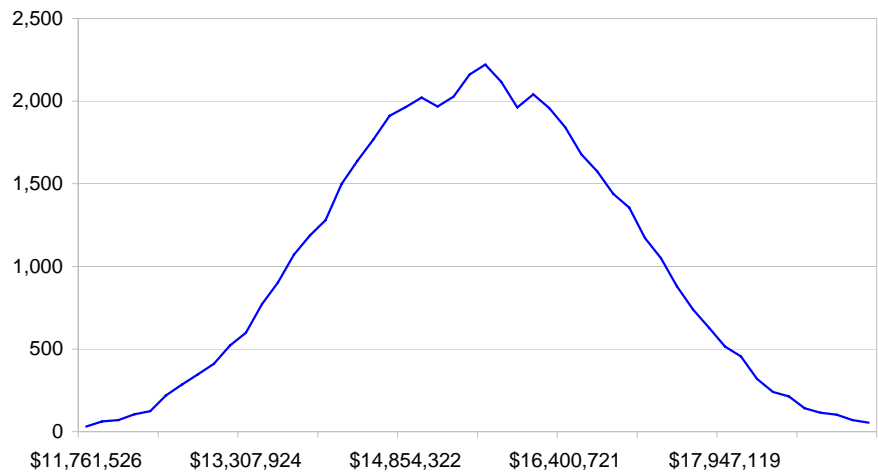


Statistics:	Forecast values
Trials	50,000
Mean	-29,817
Median	-31,234
Mode	---
Standard Deviation	15,225
Variance	231,795,436
Skewness	-0.3609
Kurtosis	3.68
Coeff. of Variability	-0.5106
Minimum	-103,710
Maximum	5,077
Range Width	108,787
Mean Std. Error	68

Percentiles:	Forecast values
0%	-103,710
10%	-46,590
20%	-40,007
30%	-36,640
40%	-33,947
50%	-31,234
60%	-27,849
70%	-21,965
80%	-15,542
90%	-10,101
100%	5,077

Forecast: Caribbean Total Passport Costs

Summary:
Entire range is from \$10,115,343 to \$20,973,953
Base case is \$15,602,593
After 50,000 trials, the std. error of the mean is \$6,175

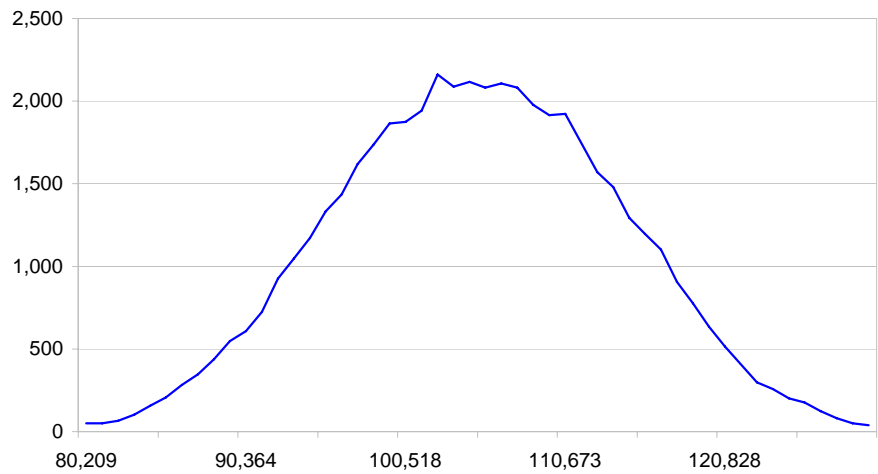


Statistics:	Forecast values
Trials	50,000
Mean	\$15,550,202
Median	\$15,548,538
Mode	---
Standard Deviation	\$1,380,713
Variance	\$1,906,367,486,965
Skewness	0.0283
Kurtosis	2.79
Coeff. of Variability	0.0888
Minimum	\$10,115,343
Maximum	\$20,973,953
Range Width	\$10,858,611
Mean Std. Error	\$6,175

Percentiles:	Forecast values
0%	\$10,115,343
10%	\$13,770,443
20%	\$14,356,046
30%	\$14,786,077
40%	\$15,175,005
50%	\$15,548,538
60%	\$15,908,599
70%	\$16,297,037
80%	\$16,747,493
90%	\$17,338,133
100%	\$20,973,953

Forecast: Caribbean Total Passports Demanded

Summary:
Entire range is from 69,767 to 140,143
Base case is 106,162
After 50,000 trials, the std. error of the mean is 41

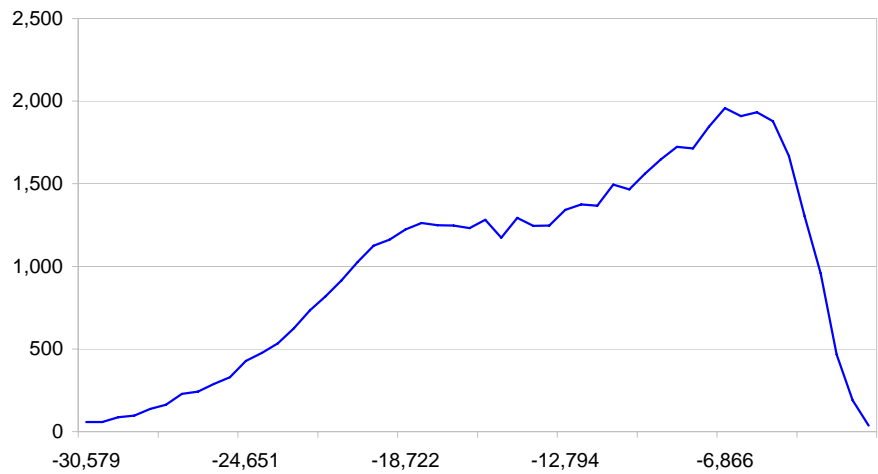


Statistics:	Forecast values
Trials	50,000
Mean	105,088
Median	105,096
Mode	---
Standard Deviation	9,067
Variance	82,206,940
Skewness	-0.0094
Kurtosis	2.77
Coeff. of Variability	0.0863
Minimum	69,767
Maximum	140,143
Range Width	70,377
Mean Std. Error	41

Percentiles:	Forecast values
0%	69,767
10%	93,304
20%	97,227
30%	100,116
40%	102,682
50%	105,096
60%	107,524
70%	110,087
80%	112,974
90%	116,854
100%	140,143

Forecast: Caribbean Total Reduced Travelers

Summary:
Entire range is from -42,129 to -1,234
Base case is -11,617
After 50,000 trials, the std. error of the mean is 29

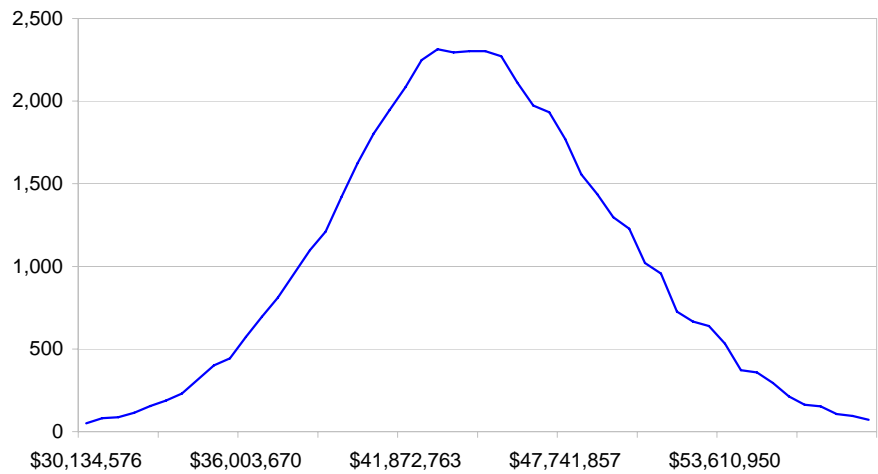


Statistics:	Forecast values
Trials	50,000
Mean	-12,749
Median	-11,846
Mode	---
Standard Deviation	6,474
Variance	41,908,528
Skewness	-0.4756
Kurtosis	2.44
Coeff. of Variability	-0.5078
Minimum	-42,129
Maximum	-1,234
Range Width	40,895
Mean Std. Error	29

Percentiles:	Forecast values
0%	-42,129
10%	-21,730
20%	-18,873
30%	-16,498
40%	-14,116
50%	-11,846
60%	-9,833
70%	-8,062
80%	-6,455
90%	-4,907
100%	-1,234

Forecast: Mexico Total Passport Costs

Summary:
Entire range is from \$25,746,595 to \$68,571,313
Base case is \$43,543,654
After 50,000 trials, the std. error of the mean is \$23,435

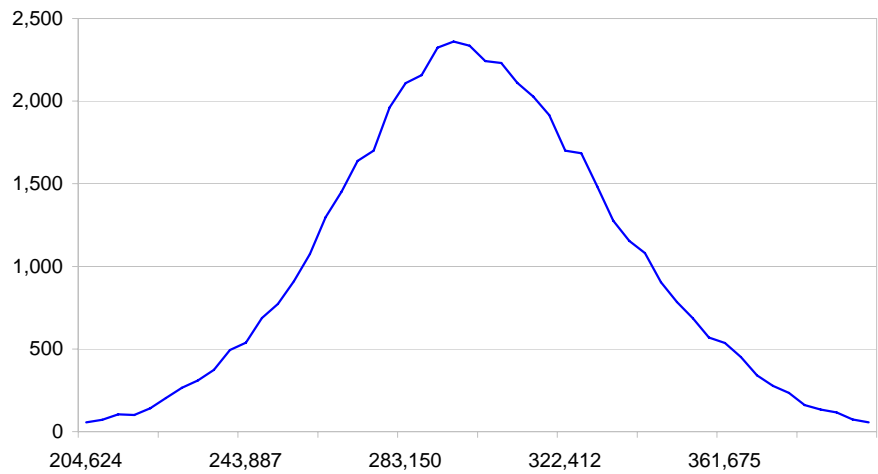


Statistics:	Forecast values
Trials	50,000
Mean	\$44,513,855
Median	\$44,374,796
Mode	---
Standard Deviation	\$5,240,262
Variance	\$27,460,346,390,822
Skewness	0.1209
Kurtosis	3.14
Coeff. of Variability	0.1177
Minimum	\$25,746,595
Maximum	\$68,571,313
Range Width	\$42,824,718
Mean Std. Error	\$23,435

Percentiles:	Forecast values
0%	\$25,746,595
10%	\$37,937,260
20%	\$40,219,895
30%	\$41,774,207
40%	\$43,103,522
50%	\$44,374,796
60%	\$45,654,291
70%	\$47,094,006
80%	\$48,842,710
90%	\$51,296,034
100%	\$68,571,313

Forecast: Mexico Total Passports Demanded

Summary:
Entire range is from 170,762 to 458,774
Base case is 296,328
After 50,000 trials, the std. error of the mean is 157

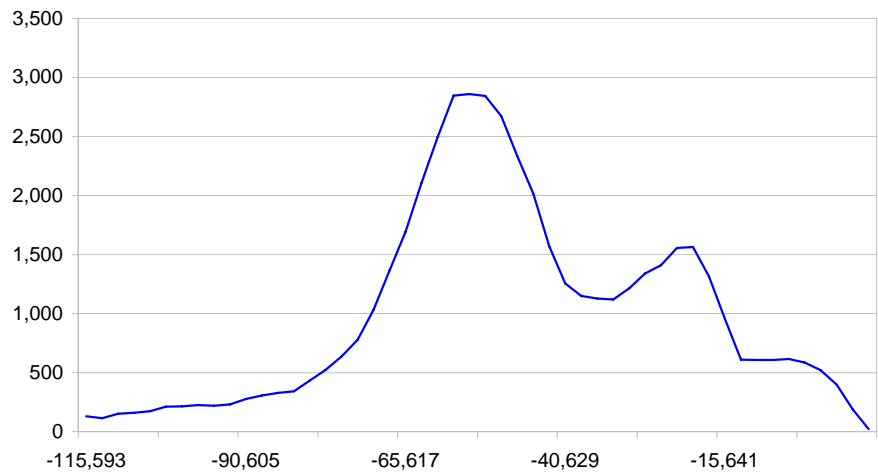


Statistics:	Forecast values
Trials	50,000
Mean	300,818
Median	299,813
Mode	---
Standard Deviation	35,056
Variance	1,228,925,244
Skewness	0.0957
Kurtosis	3.13
Coeff. of Variability	0.1165
Minimum	170,762
Maximum	458,774
Range Width	288,012
Mean Std. Error	157

Percentiles:	Forecast values
0%	170,762
10%	256,954
20%	271,898
30%	282,583
40%	291,486
50%	299,813
60%	308,619
70%	318,152
80%	329,702
90%	346,255
100%	458,774

Forecast: Mexico Total Reduced Travelers

Summary:
Entire range is from -178,408 to 8,098
Base case is -52,482
After 50,000 trials, the std. error of the mean is 110

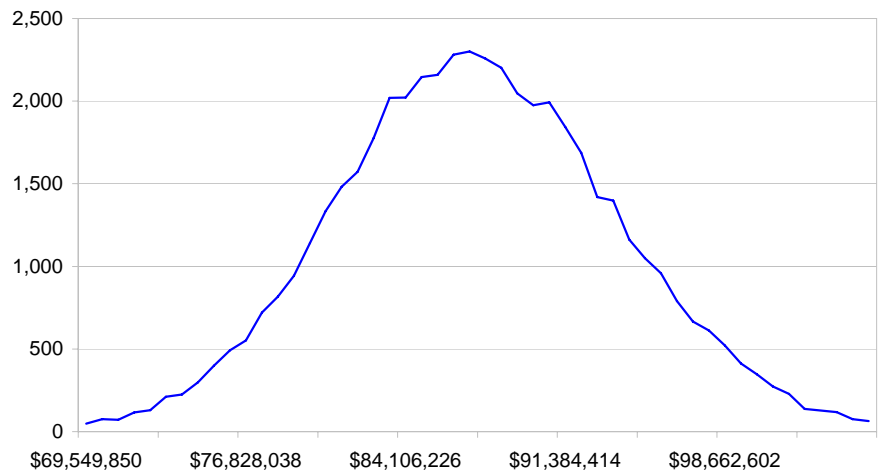


Statistics:	Forecast values
Trials	50,000
Mean	-48,118
Median	-50,299
Mode	---
Standard Deviation	24,544
Variance	602,414,911
Skewness	-0.3939
Kurtosis	3.75
Coeff. of Variability	-0.5101
Minimum	-178,408
Maximum	8,098
Range Width	186,506
Mean Std. Error	110

Percentiles:	Forecast values
0%	-178,408
10%	-75,144
20%	-64,487
30%	-59,088
40%	-54,738
50%	-50,299
60%	-44,731
70%	-35,232
80%	-25,186
90%	-16,683
100%	8,098

Forecast: Total Cost of Passports Demanded

Summary:
Entire range is from \$61,071,404 to \$116,767,607
Base case is \$85,866,599
After 50,000 trials, the std. error of the mean is \$29,062

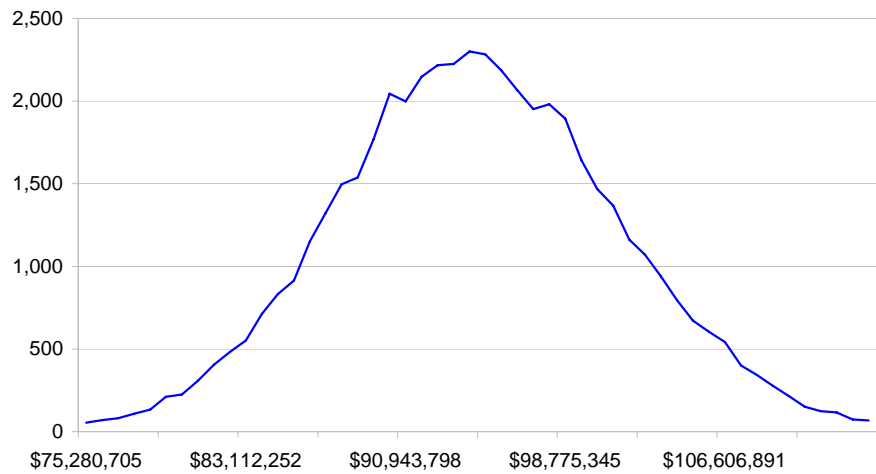


Statistics:	Forecast values
Trials	50,000
Mean	\$87,381,411
Median	\$87,250,891
Mode	---
Standard Deviation	\$6,498,382
Variance	\$42,228,971,191,158
Skewness	0.1005
Kurtosis	3.10
Coeff. of Variability	0.0744
Minimum	\$61,071,404
Maximum	\$116,767,607
Range Width	\$55,696,204
Mean Std. Error	\$29,062

Percentiles:	Forecast values
0%	\$61,071,404
10%	\$79,213,388
20%	\$81,945,398
30%	\$83,910,121
40%	\$85,626,821
50%	\$87,250,891
60%	\$88,871,676
70%	\$90,692,670
80%	\$92,761,266
90%	\$95,768,939
100%	\$116,767,607

Forecast: Total Costs w/Expedited Service

Summary:
Entire range is from \$65,930,807 to \$126,168,120
Base case is \$92,878,964
After 50,000 trials, the std. error of the mean is \$31,271

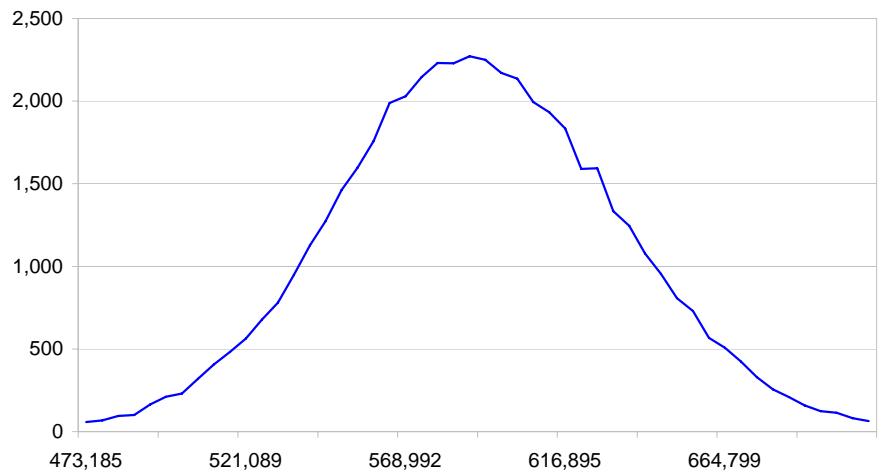


Statistics:	Forecast values
Trials	50,000
Mean	\$94,467,994
Median	\$94,325,710
Mode	---
Standard Deviation	\$6,992,452
Variance	\$48,894,386,531,824
Skewness	0.0958
Kurtosis	3.10
Coeff. of Variability	0.0740
Minimum	\$65,930,807
Maximum	\$126,168,120
Range Width	\$60,237,313
Mean Std. Error	\$31,271

Percentiles:	Forecast values
0%	\$65,930,807
10%	\$85,680,934
20%	\$88,626,786
30%	\$90,750,026
40%	\$92,589,337
50%	\$94,325,710
60%	\$96,081,770
70%	\$98,043,478
80%	\$100,251,127
90%	\$103,499,408
100%	\$126,168,120

Forecast: Total Passports Demanded

Summary:
Entire range is from 404,950 to 783,376
Base case is 584,364
After 50,000 trials, the std. error of the mean is 191

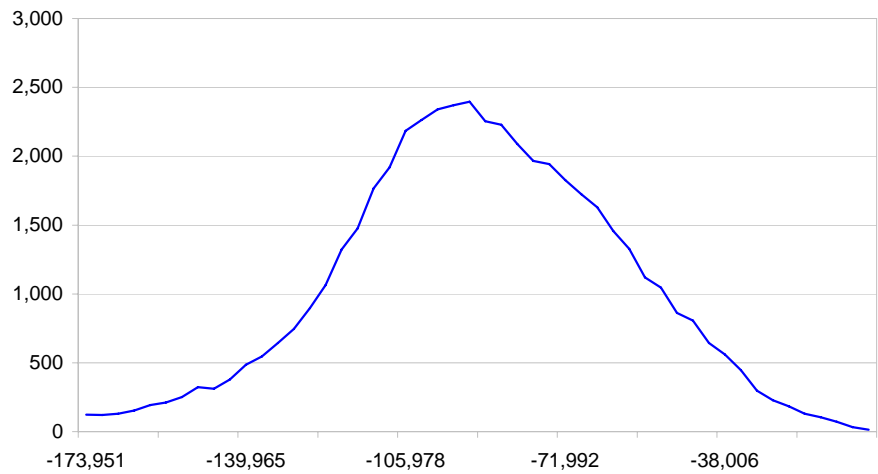


Statistics:	Forecast values
Trials	50,000
Mean	590,549
Median	589,859
Mode	---
Standard Deviation	42,771
Variance	1,829,343,247
Skewness	0.0594
Kurtosis	3.09
Coeff. of Variability	0.0724
Minimum	404,950
Maximum	783,376
Range Width	378,426
Mean Std. Error	191

Percentiles:	Forecast values
0%	404,950
10%	536,722
20%	555,095
30%	567,976
40%	579,083
50%	589,859
60%	600,621
70%	612,403
80%	626,253
90%	645,751
100%	783,376

Forecast: Total Reduced Travelers

Summary:
Entire range is from -248,673 to 2,937
Base case is -96,608
After 50,000 trials, the std. error of the mean is 136



Statistics:	Forecast values
Trials	50,000
Mean	-90,685
Median	-90,672
Mode	---
Standard Deviation	30,345
Variance	920,811,702
Skewness	-0.2851
Kurtosis	3.36
Coeff. of Variability	-0.3346
Minimum	-248,673
Maximum	2,937
Range Width	251,609
Mean Std. Error	136

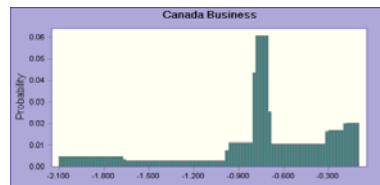
Percentiles:	Forecast values
0%	-248,673
10%	-128,037
20%	-113,987
30%	-105,209
40%	-97,829
50%	-90,672
60%	-83,071
70%	-74,570
80%	-64,924
90%	-51,934
100%	2,937

Assumptions

Assumption: Canada Business

Custom distribution with parameters:

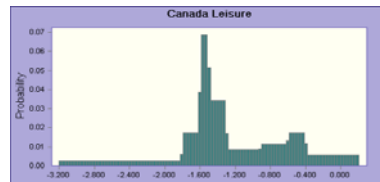
Minimum	Maximum	Probability
-2.100	-1.670	10.00
-1.670	-0.980	10.00
-0.980	-0.800	10.00
-0.800	-0.700	30.00
-0.700	-0.320	20.00
-0.320	-0.200	10.00
-0.200	-0.100	10.00



Assumption: Canada Leisure

Custom distribution with parameters:

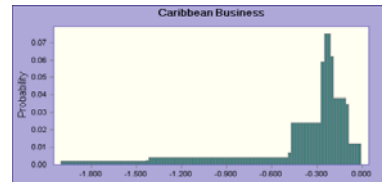
Minimum	Maximum	Probability
-3.200	-1.800	10.00
-1.800	-1.600	10.00
-1.600	-1.500	20.00
-1.500	-1.400	10.00
-1.400	-1.300	10.00
-1.300	-0.900	10.00
-0.900	-0.600	10.00
-0.600	-0.400	10.00
-0.400	0.200	10.00



Assumption: Caribbean Business

Custom distribution with parameters:

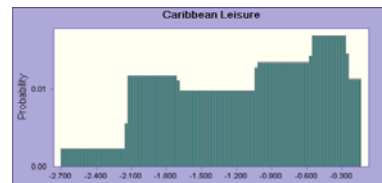
Minimum	Maximum	Probability
-2.000	-1.423	5.00
-1.423	-0.475	20.00
-0.475	-0.265	25.00
-0.265	-0.198	25.00
-0.198	-0.093	20.00
-0.093	-0.010	5.00



Assumption: Caribbean Leisure

Custom distribution with parameters:

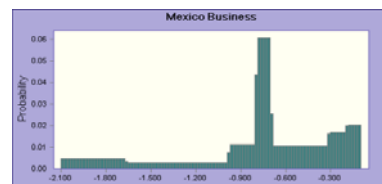
Minimum	Maximum	Probability
-2.700	-2.140	5.00
-2.140	-1.700	20.00
-1.700	-1.040	25.00
-1.040	-0.560	25.00
-0.560	-0.254	20.00
-0.254	-0.140	5.00



Assumption: Mexico Business

Custom distribution with parameters:

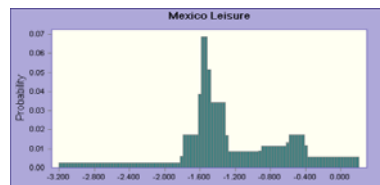
Minimum	Maximum	Probability
-2.100	-1.670	10.00
-1.670	-0.980	10.00
-0.980	-0.800	10.00
-0.800	-0.700	30.00
-0.700	-0.320	20.00
-0.320	-0.200	10.00
-0.200	-0.100	10.00



Assumption: Mexico Leisure

Custom distribution with parameters:

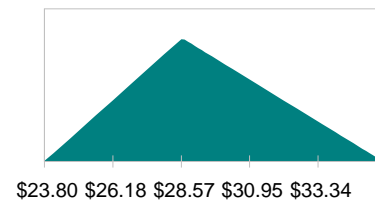
Minimum	Maximum	Probability
-3.200	-1.800	10.00
-1.800	-1.600	10.00
-1.600	-1.500	20.00
-1.500	-1.400	10.00
-1.400	-1.300	10.00
-1.300	-0.900	10.00
-0.900	-0.600	10.00
-0.600	-0.400	10.00
-0.400	0.200	10.00



Assumption: Cost per hour (personal time)

Triangular distribution with parameters:

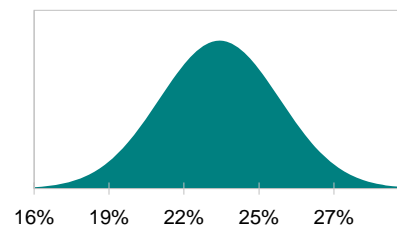
Minimum	\$23.80
Likeliest	\$28.60
Maximum	\$35.60



Assumption: Canada Business w/o Passports

Normal distribution with parameters:

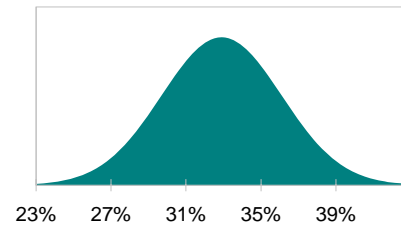
Mean	23%
Std. Dev.	2%



Assumption: Canada Leisure w/o passports

Normal distribution with parameters:

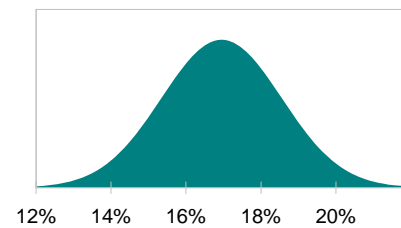
Mean	33%
Std. Dev.	3%



Assumption: Caribbean Business w/o Passports

Normal distribution with parameters:

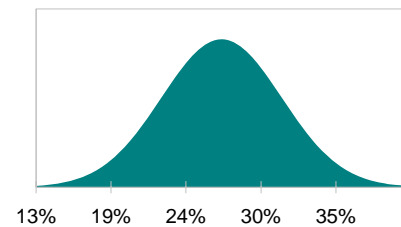
Mean	17%
Std. Dev.	2%



Assumption: Caribbean Leisure w/o passports

Normal distribution with parameters:

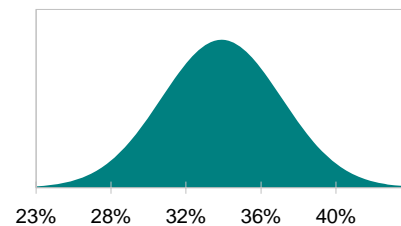
Mean	27%
Std. Dev.	4%



Assumption: Mexico Business w/o Passports

Normal distribution with parameters:

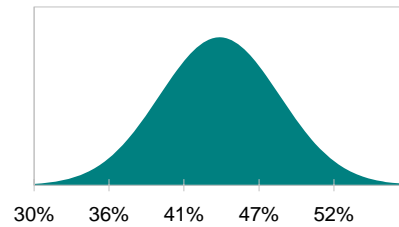
Mean	34%
Std. Dev.	3%



Assumption: Mexico Leisure w/o passports

Normal distribution with parameters:

Mean	44%
Std. Dev.	4%

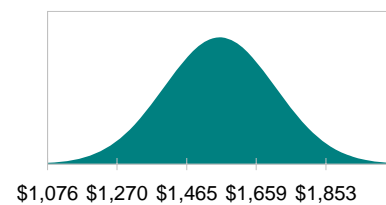


Assumption: Canada Business Trip Cost

Normal distribution with parameters:

Mean	\$1,557
Std. Dev.	\$156

Selected range is from \$250 to Infinity

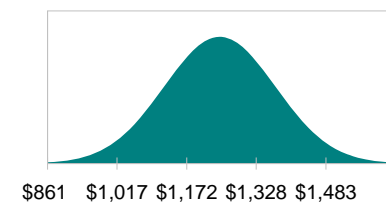


Assumption: Canada Leisure Trip Cost

Normal distribution with parameters:

Mean	\$1,246
Std. Dev.	\$125

Selected range is from \$250 to Infinity

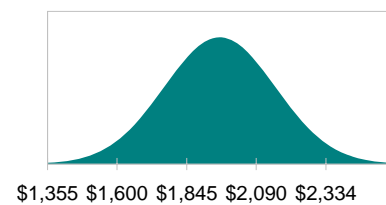


Assumption: Caribbean Business Trip Cost

Normal distribution with parameters:

Mean	\$1,961
Std. Dev.	\$196

Selected range is from \$250 to Infinity

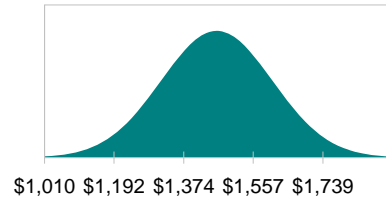


Assumption: Caribbean Leisure Trip Cost

Normal distribution with parameters:

Mean \$1,461
Std. Dev. \$146

Selected range is from \$250 to Infinity

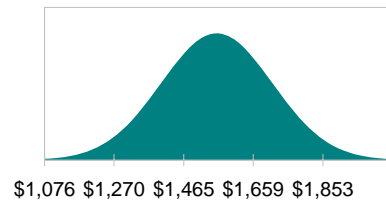


Assumption: Mexico Business Trip Cost

Normal distribution with parameters:

Mean \$1,557
Std. Dev. \$156

Selected range is from \$250 to Infinity

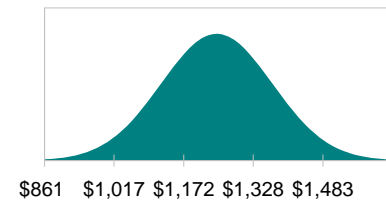


Assumption: Mexico Leisure Trip Cost

Normal distribution with parameters:

Mean \$1,246
Std. Dev. \$125

Selected range is from \$250 to Infinity



Appendix E
Passport Costs, Second Year
Worst-Cast Estimate

Passport Costs of the Rule, Second Year
US Travelers to Canada, Worst-Case Estimate

"New" travelers	1,152,597			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	10%	90%	90%	10%
Travelers	115,260	1,037,337	922,078	115,260
Percentage w/o passports	70%	70%	70%	70%
Travelers	80,682	726,136	645,454	80,682
Cost of trip	\$1,348	\$1,246	\$1,246	\$1,246
Cost of passport	\$194	\$194	\$194	\$179
Cost of passport as % of trip	14.38%	15.55%	15.55%	14.35%
Business Adults				
Elasticity business, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-20.53%	-16.53%	-12.02%	
Reduced travelers	-16,564	-13,339	-9,697	
Passports demanded	64,118	67,342	70,985	
Cost of passports demanded	\$12,426,010	\$13,050,950	\$13,756,817	
Leisure Adults				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-17.54%	-17.17%	-12.24%	
Reduced travelers	-113,243	-110,833	-79,009	
Passports demanded	532,212	534,621	566,445	
Cost of passports demanded	\$103,142,609	\$103,609,555	\$109,777,128	
Leisure Minors				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-16.19%	-15.84%	-11.29%	
Reduced travelers	-13,060	-12,782	-9,112	
Passports demanded	67,622	67,900	71,570	
Cost of passports demanded	\$12,090,825	\$12,140,508	\$12,796,731	
Leisure reduced travelers	-126,302	-123,615	-88,121	
Leisure passports demanded	599,834	602,521	638,016	
Cost of passports demanded	\$115,233,435	\$115,750,063	\$122,573,859	
Total reduced travelers	-142,867	-136,955	-97,818	
Total passports demanded	663,951	669,863	709,000	
Total passport costs	\$127,659,445	\$128,801,013	\$136,330,676	

Passport Costs of the Rule, Second Year
US Travelers to Mexico, Worst-Case Estimate

"New" travelers	1,390,790			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	17%	83%	90%	10%
Travelers	236,434	1,154,356	1,015,277	139,079
Percentage w/o passports	70%	70%	70%	70%
Travelers	165,504	808,049	710,694	97,355
Cost of trip	\$1,557	\$1,246	\$1,246	\$1,246
Cost of passport	\$194	\$194	\$194	\$179
Cost of passport as % of trip	12.45%	15.55%	15.55%	14.35%
Business Adults				
Elasticity business, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-17.77%	-14.31%	-10.41%	
Reduced travelers	-29,417	-23,690	-17,222	
Passports demanded	136,087	141,814	148,282	
Cost of passports demanded	\$26,373,622	\$27,483,493	\$28,737,088	
Leisure Adults				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-17.54%	-17.17%	-12.24%	
Reduced travelers	-124,689	-122,036	-86,995	
Passports demanded	586,005	588,658	623,699	
Cost of passports demanded	\$113,567,782	\$114,081,924	\$120,872,886	
Leisure Minors				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-16.19%	-15.84%	-11.29%	
Reduced travelers	-15,759	-15,423	-10,995	
Passports demanded	81,597	81,932	86,361	
Cost of passports demanded	\$14,589,490	\$14,649,440	\$15,441,277	
Leisure reduced travelers	-140,447	-137,459	-97,989	
Leisure passports demanded	667,602	670,590	710,060	
Cost of passports demanded	\$128,157,271	\$128,731,363	\$136,314,163	
Total reduced travelers	-169,865	-161,150	-115,211	
Total passports demanded	803,689	812,404	858,342	
Total passport costs	\$154,530,894	\$156,214,856	\$165,051,251	

Passport Costs of the Rule, Second Year
US Travelers to the Caribbean, Worst-Case Estimate

"New" travelers	1,170,870
Dominican Republic	327,387
Jamaica	249,460
Bahamas	234,654
Aruba	84,198
Netherland Antilles	80,984
Panama	66,497
Bermuda	59,086
British Virgin Islands	21,733
Antigua-Barbuda	21,548
St. Kitts-Nevis	15,265
Grenada	5,877
Dominica	3,664
St. Vincent-Grenadines	517

	Business	Leisure	Leisure Adults	Leisure Minors
Percentage (average)	16%	84%	90%	10%
Dominican Republic	16%	84%	90%	10%
Jamaica	12%	88%	90%	10%
Bahamas	25%	75%	90%	10%
Aruba	8%	92%	90%	10%
Netherland Antilles	10%	90%	90%	10%
Panama	27%	73%	90%	10%
Bermuda	13%	87%	90%	10%
British Virgin Islands	15%	85%	90%	10%
Antigua-Barbuda	23%	77%	90%	10%
St. Kitts-Nevis	15%	85%	90%	10%
Grenada	15%	85%	90%	10%
Dominica	15%	85%	90%	10%
St. Vincent-Grenadines	15%	85%	90%	10%

Travelers	193,465	977,405	860,318	117,087
Dominican Republic	52,382	275,005	242,266	32,739
Jamaica	29,935	219,525	194,579	24,946
Bahamas	58,663	175,990	152,525	23,465
Aruba	6,736	77,463	69,043	8,420
Netherland Antilles	8,098	72,885	64,787	8,098
Panama	17,954	48,543	41,893	6,650
Bermuda	7,681	51,405	45,496	5,909
British Virgin Islands	3,260	18,473	16,300	2,173
Antigua-Barbuda	4,956	16,592	14,437	2,155
St. Kitts-Nevis	2,290	12,975	11,448	1,526
Grenada	882	4,996	4,408	588
Dominica	550	3,115	2,748	366
St. Vincent-Grenadines	78	440	388	52

Percentage w/o passports	70%	70%	70%	70%
Dominican Republic	70%	70%	70%	70%
Jamaica	70%	70%	70%	70%
Bahamas	70%	70%	70%	70%
Aruba	70%	70%	70%	70%
Netherland Antilles	70%	70%	70%	70%
Panama	70%	70%	70%	70%
Bermuda	70%	70%	70%	70%
British Virgin Islands	70%	70%	70%	70%
Antigua-Barbuda	70%	70%	70%	70%
St. Kitts-Nevis	70%	70%	70%	70%
Grenada	70%	70%	70%	70%
Dominica	70%	70%	70%	70%
St. Vincent-Grenadines	70%	70%	70%	70%

Travelers	135,425	684,184	602,223	81,961
Dominican Republic	36,667	192,504	169,586	22,917
Jamaica	20,955	153,667	136,205	17,462
Bahamas	41,064	123,193	106,767	16,426
Aruba	4,715	54,224	48,330	5,894
Netherland Antilles	5,669	51,020	45,351	5,669
Panama	12,568	33,980	29,325	4,655
Bermuda	5,377	35,984	31,847	4,136
British Virgin Islands	2,282	12,931	11,410	1,521
Antigua-Barbuda	3,469	11,614	10,106	1,508
St. Kitts-Nevis	1,603	9,082	8,014	1,069
Grenada	617	3,497	3,086	411
Dominica	385	2,180	1,924	257
St. Vincent-Grenadines	54	308	271	36
Cost of trip	\$1,461	\$1,461	\$1,461	\$1,461
Cost of passport	\$194	\$194	\$194	\$179
Cost of passport as % of trip	13.26%	13.26%	13.26%	12.24%
Business Adults				
Elasticity business, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-6.30%	-3.52%	-2.63%	
Reduced travelers	-8,533	-4,760	-3,557	
Dominican Republic	-2,310	-1,289	-963	
Jamaica	-1,320	-737	-550	
Bahamas	-2,587	-1,443	-1,079	
Aruba	-297	-166	-124	
Netherland Antilles	-357	-199	-149	
Panama	-792	-442	-330	
Bermuda	-339	-189	-141	
British Virgin Islands	-144	-80	-60	
Antigua-Barbuda	-219	-122	-91	
St. Kitts-Nevis	-101	-56	-42	
Grenada	-39	-22	-16	
Dominica	-24	-14	-10	
St. Vincent-Grenadines	-3	-2	-1	
Passports demanded	126,892	130,665	131,868	
Cost of passports demanded	\$24,591,734	\$25,322,833	\$25,556,089	
Leisure Adults				
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-22.55%	-13.80%	-7.43%	
Reduced travelers	-135,803	-83,080	-44,735	
Dominican Republic	-38,242	-23,395	-12,597	
Jamaica	-30,715	-18,790	-10,118	
Bahamas	-24,076	-14,729	-7,931	
Aruba	-10,899	-6,667	-3,590	
Netherland Antilles	-10,227	-6,256	-3,369	
Panama	-6,613	-4,046	-2,178	
Bermuda	-7,182	-4,394	-2,366	
British Virgin Islands	-2,573	-1,574	-848	
Antigua-Barbuda	-2,279	-1,394	-751	
St. Kitts-Nevis	-1,807	-1,106	-595	
Grenada	-696	-426	-229	
Dominica	-434	-265	-143	
St. Vincent-Grenadines	-61	-37	-20	
Passports demanded	466,420	519,143	557,488	
Cost of passports demanded	\$90,392,152	\$100,609,978	\$108,041,124	

Leisure Minors			
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile
Use long-haul international leisure	-1.700	-1.040	-0.560
Reduced demand	-20.80%	-12.73%	-6.85%
Reduced travelers	-17,052	-10,432	-5,617
Dominican Republic	-4,768	-2,917	-1,571
Jamaica	-3,633	-2,223	-1,197
Bahamas	-3,417	-2,091	-1,126
Aruba	-1,226	-750	-404
Netherland Antilles	-1,179	-722	-389
Panama	-968	-592	-319
Bermuda	-860	-526	-283
British Virgin Islands	-317	-194	-104
Antigua-Barbuda	-314	-192	-103
St. Kitts-Nevis	-222	-136	-73
Grenada	-86	-52	-28
Dominica	-53	-33	-18
St. Vincent-Grenadines	-8	-5	-2
Passports demanded	64,909	71,529	76,344
Cost of passports demanded	\$11,605,728	\$12,789,412	\$13,650,272
Leisure reduced travelers	-152,855	-93,511	-50,352
Leisure passports demanded	531,329	590,672	633,832
Cost of passports demanded	\$101,997,880	\$113,399,390	\$121,691,397
Total reduced travelers	-161,388	-98,272	-53,909
Total passports demanded	658,221	721,337	765,700
Total passport costs	\$126,589,614	\$138,722,223	\$147,247,485

Passport Costs of the Rule, Second Year
US Travelers to Micronesia, Worst-Case Estimate

"New" travelers	4,995			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	0%	100%	90%	10%
Travelers	-	4,995	4,495	499
Percentage w/o passports	0%	70%	70%	70%
Travelers	-	3,496	3,147	350
Cost of trip	\$5,084	\$5,084	\$5,084	\$5,084
Cost of passport	\$194	\$194	\$194	\$179
Cost of passport as % of trip	3.81%	3.81%	3.81%	3.52%
Business Adults				
Elasticity business, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-1.81%	-1.01%	-0.75%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Adults				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-6.48%	-3.96%	-2.13%	
Reduced travelers	-204	-125	-67	
Passports demanded	2,943	3,022	3,079	
Cost of passports demanded	\$570,290	\$585,632	\$596,790	
Leisure Minors				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-5.98%	-3.66%	-1.97%	
Reduced travelers	-21	-13	-7	
Passports demanded	329	337	343	
Cost of passports demanded	\$58,775	\$60,226	\$61,281	
Leisure reduced travelers	-225	-138	-74	
Leisure passports demanded	3,271	3,359	3,422	
Cost of passports demanded	\$629,065	\$645,858	\$658,071	
Total reduced travelers	-225	-138	-74	
Total passports demanded	3,271	3,359	3,422	
Total passport costs	\$629,065	\$645,858	\$658,071	

Passport Costs of the Rule, Second Year
US General Aviation Travelers, Worst-Case Estimate

Travelers	65,937				
	Same Day		Overnight	Adults	Minors
Percentage				100%	0%
Travelers	32,773		33,164	65,937	-
Percentage w/o passports	0%		0%		
Travelers	-		-	-	-
Cost of trip	\$500		\$1,000		
Cost of passport	\$194		\$194	\$194	\$179
Cost of passport as % of trip	38.76%		19.38%		
Elasticity for same day	1st quartile		Median	3rd quartile	
Use short-haul leisure	-1.743		-1.520	-1.288	
Reduced demand	-67.56%		-58.92%	-49.92%	
Reduced travelers	0		0	0	
Passports demanded	-		-	-	
Cost of passports demanded	\$	-	\$	-	\$
Elasticity for overnight	1st quartile		Median	3rd quartile	
Use short-haul leisure	-1.743		-1.520	-1.288	
Reduced demand	-33.78%		-29.46%	-24.96%	
Reduced travelers	0		0	0	
Passports demanded	-		-	-	
Cost of passports demanded	\$	-	\$	-	\$
Total reduced travelers	0		0	0	
Total passports demanded	-		-	-	
Total passport costs	\$	-	\$	-	\$

Summary of Passport Costs for US Air Travelers to Destinations in the Western Hemisphere, Second Year Worst Case Estimate

Passports Demanded	1st quartile	Median	3rd quartile
Canada	663,951	669,863	709,000
Mexico	803,689	812,404	858,342
Caribbean	658,221	721,337	765,700
Micronesia	3,271	3,359	3,422
General Aviation	-	-	-
Total	2,129,132	2,206,963	2,336,464
Reduced Travelers	1st quartile	Median	3rd quartile
Canada	-142,867	-136,955	-97,818
Mexico	-169,865	-161,150	-115,211
Caribbean	-161,388	-98,272	-53,909
Micronesia	-225	-138	-74
General Aviation	0	0	0
Total	-474,344	-396,513	-267,012
Cost of Passports Demanded	1st quartile	Median	3rd quartile
Canada	\$127,659,445	\$128,801,013	\$136,330,676
Mexico	154,530,894	156,214,856	165,051,251
Caribbean	126,589,614	138,722,223	147,247,485
Micronesia	629,065	645,858	658,071
General Aviation	-	-	-
Total	\$409,409,017	\$424,383,949	\$449,287,483
Expedites (30% of passports)	638,740	662,089	700,939
Extra cost of expedites	\$38,324,384	\$39,725,333	\$42,056,354
Total costs	\$447,733,401	\$464,109,282	\$491,343,837

Appendix F
Passport Costs, Second Year
Best-Case Estimate

Passport Costs of the Rule, Second Year
US Travelers to Canada, Best-Case Estimate

"New" travelers	230,519			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	46,104	184,416	161,364	23,052
Percentage w/o passports	23%	33%	33%	33%
Travelers	10,604	60,857	53,250	7,607
Cost of trip	\$4,170	\$2,529	\$2,529	\$2,529
Cost of passport	\$149	\$149	\$149	\$134
Amortized cost of passport	\$21	\$21	\$21	\$33
Cost of passport as % of trip	0.51%	0.84%	0.84%	1.29%
Business Adults				
Elasticity business, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-0.72%	-0.58%	-0.42%	
Reduced travelers	-77	-62	-45	
Passports demanded	10,527	10,542	10,559	
Cost of passports demanded	\$1,563,451	\$1,565,671	\$1,568,179	
Leisure Adults				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-0.94%	-0.92%	-0.66%	
Reduced travelers	-502	-492	-350	
Passports demanded	52,748	52,758	52,900	
Cost of passports demanded	\$7,833,922	\$7,835,509	\$7,856,470	
Leisure Minors				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-1.45%	-1.42%	-1.01%	
Reduced travelers	-110	-108	-77	
Passports demanded	7,497	7,499	7,530	
Cost of passports demanded	\$1,000,928	\$1,001,242	\$1,005,388	
Leisure reduced travelers	-613	-600	-427	
Leisure passports demanded	60,244	60,257	60,430	
Cost of passports demanded	\$8,834,850	\$8,836,751	\$8,861,858	
Total reduced travelers	-689	-662	-472	
Total passports demanded	70,772	70,800	70,989	
Total passport costs	\$10,398,301	\$10,402,422	\$10,430,036	

Passport Costs of the Rule, Second Year
US Travelers to Mexico, Best-Case Estimate

"New" travelers	278,158			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	55,632	222,526	194,711	27,816
Percentage w/o passports	34%	44%	44%	44%
Travelers	18,803	97,467	85,283	12,183
Cost of trip	\$4,170	\$2,529	\$2,529	\$2,529
Cost of passport	\$149	\$149	\$149	\$134
Amortized cost of passport	\$21	\$21	\$21	\$33
Cost of passport as % of trip	0.51%	0.84%	0.84%	1.29%
Business Adults				
Elasticity business, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-0.72%	-0.58%	-0.42%	
Reduced travelers	-136	-110	-80	
Passports demanded	18,667	18,694	18,724	
Cost of passports demanded	\$2,772,409	\$2,776,346	\$2,780,792	
Leisure Adults				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-0.94%	-0.92%	-0.66%	
Reduced travelers	-804	-787	-561	
Passports demanded	84,479	84,496	84,722	
Cost of passports demanded	\$12,546,528	\$12,549,069	\$12,582,640	
Leisure Minors				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-1.45%	-1.42%	-1.01%	
Reduced travelers	-177	-173	-123	
Passports demanded	12,006	12,010	12,060	
Cost of passports demanded	\$1,603,051	\$1,603,553	\$1,610,193	
Leisure reduced travelers	-981	-960	-685	
Leisure passports demanded	96,485	96,506	96,782	
Cost of passports demanded	\$14,149,578	\$14,152,623	\$14,192,833	
Total reduced travelers	-1,117	-1,070	-764	
Total passports demanded	115,153	115,200	115,506	
Total passport costs	\$16,921,987	\$16,928,968	\$16,973,626	

Passport Costs of the Rule, Second Year
US Travelers to the Caribbean, Best-Case Estimate

"New" travelers	468,348
Dominican Republic	130,955
Jamaica	99,784
Bahamas	93,861
Aruba	33,679
Netherland Antilles	32,393
Panama	26,599
Bermuda	23,634
British Virgin Islands	8,693
Antigua-Barbuda	8,619
St. Kitts-Nevis	6,106
Grenada	2,351
Dominica	1,466
St. Vincent-Grenadines	207

	Business	Leisure	Leisure Adults	Leisure Minors
Percentage (average)	16%	84%	90%	10%
Dominican Republic	16%	84%	90%	10%
Jamaica	12%	88%	90%	10%
Bahamas	25%	75%	90%	10%
Aruba	8%	92%	90%	10%
Netherland Antilles	10%	90%	90%	10%
Panama	27%	73%	90%	10%
Bermuda	13%	87%	90%	10%
British Virgin Islands	15%	85%	90%	10%
Antigua-Barbuda	23%	77%	90%	10%
St. Kitts-Nevis	15%	85%	90%	10%
Grenada	15%	85%	90%	10%
Dominica	15%	85%	90%	10%
St. Vincent-Grenadines	15%	85%	90%	10%
Travelers	77,386	390,962	344,127	46,835
Dominican Republic	20,953	110,002	96,907	13,095
Jamaica	11,974	87,810	77,831	9,978
Bahamas	23,465	70,396	61,010	9,386
Aruba	2,694	30,985	27,617	3,368
Netherland Antilles	3,239	29,154	25,915	3,239
Panama	7,182	19,417	16,757	2,660
Bermuda	3,072	20,562	18,199	2,363
British Virgin Islands	1,304	7,389	6,520	869
Antigua-Barbuda	1,982	6,637	5,775	862
St. Kitts-Nevis	916	5,190	4,579	611
Grenada	353	1,998	1,763	235
Dominica	220	1,246	1,099	147
St. Vincent-Grenadines	31	176	155	21
Percentage w/o passports	17%	27%	27%	27%
Dominican Republic	17%	27%	27%	27%
Jamaica	17%	27%	27%	27%
Bahamas	17%	27%	27%	27%
Aruba	17%	27%	27%	27%
Netherland Antilles	17%	27%	27%	27%
Panama	17%	27%	27%	27%
Bermuda	17%	27%	27%	27%
British Virgin Islands	17%	27%	27%	27%
Antigua-Barbuda	17%	27%	27%	27%
St. Kitts-Nevis	17%	27%	27%	27%
Grenada	17%	27%	27%	27%
Dominica	17%	27%	27%	27%
St. Vincent-Grenadines	17%	27%	27%	27%

Travelers	13,001	104,778	92,226	12,552
Dominican Republic	3,520	29,481	25,971	3,510
Jamaica	2,012	23,533	20,859	2,674
Bahamas	3,942	18,866	16,351	2,515
Aruba	453	8,304	7,401	903
Netherland Antilles	544	7,813	6,945	868
Panama	1,207	5,204	4,491	713
Bermuda	516	5,511	4,877	633
British Virgin Islands	219	1,980	1,747	233
Antigua-Barbuda	333	1,779	1,548	231
St. Kitts-Nevis	154	1,391	1,227	164
Grenada	59	536	473	63
Dominica	37	334	295	39
St. Vincent-Grenadines	5	47	42	6
Cost of trip	\$4,170	\$2,529	\$2,529	\$2,529
Cost of passport	\$149	\$149	\$149	\$134
Amortized cost of passport	\$21	\$21	\$21	\$33
Cost of passport as % of trip	0.51%	0.84%	0.84%	1.29%
Business Adults				
Elasticity business, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-1.428	-1.150	-0.836	
Reduced demand	-0.72%	-0.58%	-0.42%	
Reduced travelers	-94	-76	-55	
Dominican Republic	-25	-21	-15	
Jamaica	-15	-12	-9	
Bahamas	-29	-23	-17	
Aruba	-3	-3	-2	
Netherland Antilles	-4	-3	-2	
Panama	-9	-7	-5	
Bermuda	-4	-3	-2	
British Virgin Islands	-2	-1	-1	
Antigua-Barbuda	-2	-2	-1	
St. Kitts-Nevis	-1	-1	-1	
Grenada	0	0	0	
Dominica	0	0	0	
St. Vincent-Grenadines	0	0	0	
Passports demanded	12,907	12,925	12,946	
Cost of passports demanded	\$1,916,857	\$1,919,579	\$1,922,654	
Leisure Adults				
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.128	-1.104	-0.787	
Reduced demand	-0.94%	-0.92%	-0.66%	
Reduced travelers	-870	-851	-607	
Dominican Republic	-245	-240	-171	
Jamaica	-197	-193	-137	
Bahamas	-154	-151	-108	
Aruba	-70	-68	-49	
Netherland Antilles	-66	-64	-46	
Panama	-42	-41	-30	
Bermuda	-46	-45	-32	
British Virgin Islands	-16	-16	-11	
Antigua-Barbuda	-15	-14	-10	
St. Kitts-Nevis	-12	-11	-8	
Grenada	-4	-4	-3	
Dominica	-3	-3	-2	
St. Vincent-Grenadines	0	0	0	
Passports demanded	91,356	91,375	91,619	
Cost of passports demanded	\$13,567,935	\$13,570,683	\$13,606,987	

Leisure Minors			
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile
Use long-haul domestic leisure	-1.128	-1.104	-0.787
Reduced demand	-1.45%	-1.42%	-1.01%
Reduced travelers	-182	-178	-127
Dominican Republic	-51	-50	-36
Jamaica	-39	-38	-27
Bahamas	-37	-36	-25
Aruba	-13	-13	-9
Netherland Antilles	-13	-12	-9
Panama	-10	-10	-7
Bermuda	-9	-9	-6
British Virgin Islands	-3	-3	-2
Antigua-Barbuda	-3	-3	-2
St. Kitts-Nevis	-2	-2	-2
Grenada	-1	-1	-1
Dominica	-1	-1	0
St. Vincent-Grenadines	0	0	0
Passports demanded	12,369	12,373	12,425
Cost of passports demanded	\$1,651,524	\$1,652,042	\$1,658,882
Leisure reduced travelers	-1,052	-1,030	-734
Leisure passports demanded	103,726	103,748	104,044
Cost of passports demanded	\$15,219,459	\$15,222,725	\$15,265,870
Total reduced travelers	-1,146	-1,106	-789
Total passports demanded	116,632	116,673	116,990
Total passport costs	\$17,136,316	\$17,142,305	\$17,188,523

Passport Costs of the Rule, Second Year
US Travelers to Micronesia, Best-Case Estimate

"New" travelers	0			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage Travelers	0%	100%	90%	10%
Percentage w/o passports Travelers	-	-	-	-
	0%	5%	5%	5%
	-	-	-	-
Cost of trip	\$5,084	\$5,084	\$5,084	\$5,084
Cost of passport	\$149	\$149	\$149	\$134
Amortized cost of passport	\$21	\$21	\$21	\$33
Cost of passport as % of trip	0.42%	0.42%	0.42%	0.64%
Business Adults				
Elasticity business, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-0.20%	-0.11%	-0.08%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Adults				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-0.71%	-0.43%	-0.23%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Minors				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-1.09%	-0.67%	-0.36%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure reduced travelers	0	0	0	
Leisure passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Total reduced travelers	0	0	0	
Total passports demanded	-	-	-	
Total passport costs	\$ -	\$ -	\$ -	

Passport Costs of the Rule, Second Year
US General Aviation Travelers, Best-Case Estimate

Travelers	65,937				
	Same Day		Overnight	Adults	Minors
Percentage				100%	0%
Travelers	32,773		33,164	65,937	-
Percentage w/o passports	0%		0%		
Travelers	-		-	-	-
Cost of trip	\$2,000		\$5,000		
Cost of passport	\$149		\$149	\$149	\$134
Amortized cost of passport	\$21		\$21	\$21	\$33
Cost of passport as % of trip	1.06%		0.42%		
Elasticity for same day	1st quartile		Median	3rd quartile	
Use short-haul leisure	-1.743		-1.520	-1.288	
Reduced demand	-1.84%		-1.61%	-1.36%	
Reduced travelers	0		0	0	
Passports demanded	-		-	-	
Cost of passports demanded	\$	-	\$	-	\$
Elasticity for overnight	1st quartile		Median	3rd quartile	
Use short-haul leisure	-1.743		-1.520	-1.288	
Reduced demand	-0.74%		-0.64%	-0.54%	
Reduced travelers	0		0	0	
Passports demanded	-		-	-	
Cost of passports demanded	\$	-	\$	-	\$
Total reduced travelers	0		0	0	
Total passports demanded	-		-	-	
Total passport costs	\$	-	\$	-	\$

**Summary of Passport Costs for US Air Travelers to Destinations in the Western Hemisphere, Second Year
Best Case Estimate**

Passports Demanded	1st quartile	Median	3rd quartile
Canada	70,772	70,800	70,989
Mexico	115,153	115,200	115,506
Caribbean	116,632	116,673	116,990
Micronesia	-	-	-
General Aviation	-	-	-
Total	302,557	302,673	303,484
Reduced Travelers	1st quartile	Median	3rd quartile
Canada	-689	-662	-472
Mexico	-1,117	-1,070	-764
Caribbean	-1,146	-1,106	-789
Micronesia	0	0	0
General Aviation	0	0	0
Total	-2,953	-2,837	-2,026
Cost of Passports Demanded	1st quartile	Median	3rd quartile
Canada	\$10,398,301	\$10,402,422	\$10,430,036
Mexico	16,921,987	16,928,968	16,973,626
Caribbean	17,136,316	17,142,305	17,188,523
Micronesia	-	-	-
General Aviation	-	-	-
Total	\$44,456,604	\$44,473,695	\$44,592,185
Expedites (10% of passports)	30,256	30,267	30,348
Extra cost of expedites	\$1,815,339	\$1,816,036	\$1,820,903
Total costs	\$46,271,943	\$46,289,730	\$46,413,088

Appendix G
Passport Costs for Foreign Travelers to the United
States, First Year
Most Likely Estimate

**Reduced Travelers, First Year
Canadian Travelers to the US**

Travelers	4,706,358	4,700,000	
	Business	Leisure	
Percentage	20%	80%	
Travelers	941,272	3,765,086	
Percentage w/o passports	15%	25%	
Travelers	141,191	941,272	
Cost of trip	\$2,968	\$2,404	
Cost of passport	\$172	\$172	
Cost of passport as % of trip	5.79%	7.15%	
Business			
Elasticity business	1st quartile	Median	3rd quartile
Use long-haul domestic business	-0.825	-0.800	-0.475
Reduced demand	-4.78%	-4.63%	-2.75%
Reduced travelers	-6,742	-6,538	-3,882
Passports demanded	134,448	134,653	137,309
Cost of passports demanded	\$23,098,212	\$23,133,314	\$23,589,637
Leisure			
Elasticity leisure	1st quartile	Median	3rd quartile
Use long-haul domestic leisure	-1.600	-1.400	-0.800
Reduced demand	-11.43%	-10.00%	-5.72%
Reduced travelers	-107,628	-94,174	-53,814
Passports demanded	833,644	847,097	887,458
Cost of passports demanded	\$143,220,043	\$145,531,345	\$152,465,253
Total reduced travelers	-114,370	-100,712	-57,696
Total passports demanded	968,092	981,750	1,024,767
Total passport costs	\$166,318,255	\$168,664,659	\$176,054,890

**Reduced Travelers, First Year
Mexican Travelers to the US**

Travelers	2,887,074		
	Business	Leisure	
Percentage	20%	80%	
Travelers	577,415	2,309,659	
Percentage w/o passports	5%	10%	
Travelers	28,871	230,966	
Cost of trip	\$2,968	\$2,404	
Cost of passport	\$115	\$115	
Cost of passport as % of trip	3.87%	4.78%	
Business			
Elasticity business	1st quartile	Median	3rd quartile
Use long-haul domestic business	-0.825	-0.800	-0.475
Reduced demand	-3.20%	-3.10%	-1.84%
Reduced travelers	-923	-895	-531
Passports demanded	27,948	27,976	28,339
Cost of passports demanded	\$3,214,004	\$3,217,220	\$3,259,029
Leisure			
Elasticity leisure	1st quartile	Median	3rd quartile
Use long-haul domestic leisure	-1.600	-1.400	-0.800
Reduced demand	-7.65%	-6.70%	-3.83%
Reduced travelers	-17,678	-15,468	-8,839
Passports demanded	213,288	215,498	222,127
Cost of passports demanded	\$24,528,120	\$24,782,241	\$25,544,601
Total reduced travelers	-18,601	-16,363	-9,370
Total passports demanded	241,236	243,474	250,466
Total passport costs	\$27,742,124	\$27,999,461	\$28,803,630

**Reduced Travelers, First Year
Bermudan Travelers to the US**

Travelers	33,046		
	Business	Leisure	
Percentage	13%	87%	
Travelers	4,296	28,750	
Percentage w/o passports	10%	10%	
Travelers	430	2,875	
Cost of trip	\$1,818	\$1,818	
Cost of passport	\$127	\$127	
Cost of passport as % of trip	6.96%	6.96%	
Business			
Elasticity business	1st quartile	Median	3rd quartile
Use long-haul international business	-0.475	-0.265	-0.198
Reduced demand	-3.31%	-1.84%	-1.38%
Reduced travelers	-14	-8	-6
Passports demanded	415	422	424
Cost of passports demanded	\$52,555	\$53,349	\$53,602
Leisure			
Elasticity leisure	1st quartile	Median	3rd quartile
Use long-haul international leisure	-1.700	-1.040	-0.560
Reduced demand	-11.83%	-7.24%	-3.90%
Reduced travelers	-340	-208	-112
Passports demanded	2,535	2,667	2,763
Cost of passports demanded	\$320,703	\$337,409	\$349,559
Total reduced travelers	-354	-216	-118
Total passports demanded	2,950	3,089	3,187
Total passport costs	\$373,257	\$390,758	\$403,162

Reduced Travelers, First Year
Canadian and Mexican General Aviation Travelers to the US, Most Likely Estimate

Travelers	54,747		
	Same Day	Overnight	
Percentage			
Travelers	471	54,276	
Percentage w/o passports	40%	30%	
Travelers	188	16,283	
Cost of trip	\$1,000	\$3,000	
Cost of passport	\$172	\$172	
Cost of passport as % of trip	17.18%	5.73%	
Elasticity for same day	1st quartile	Median	3rd quartile
Use short-haul leisure	-1.743	-1.520	-1.288
Reduced demand	-29.94%	-26.11%	-22.13%
Reduced travelers	-56	-49	-42
Passports demanded	132	139	147
Cost of passports demanded	\$22,665	\$23,905	\$25,194
Elasticity for overnight	1st quartile	Median	3rd quartile
Use short-haul leisure	-1.743	-1.520	-1.288
Reduced demand	-9.98%	-8.70%	-7.38%
Reduced travelers	-1,625	-1,417	-1,201
Passports demanded	14,658	14,866	15,082
Cost of passports demanded	\$2,518,171	\$2,553,895	\$2,591,061
Total reduced travelers	-1,682	-1,467	-1,243
Total passports demanded	14,790	15,005	15,228
Total passport costs	\$2,540,836	\$2,577,800	\$2,616,255

**Summary of Reduced Travelers for Foreign Air Travelers to the US, First Year
Most Likely Estimate**

Passports Demanded	1st quartile	Median	3rd quartile
Canada	968,092	981,750	1,024,767
Mexico	241,236	243,474	250,466
Bermuda	2,950	3,089	3,187
General Aviation	14,790	15,005	15,228
Total	1,227,068	1,243,317	1,293,648
Reduced Travelers	1st quartile	Median	3rd quartile
Canada	-114,370	-100,712	-57,696
Mexico	-18,601	-16,363	-9,370
Bermuda	-354	-216	-118
General Aviation	-1,682	-1,467	-1,243
Total	-135,007	-118,758	-68,427
Cost of Passports Demanded	1st quartile	Median	3rd quartile
Canada	\$166,318,255	\$168,664,659	\$176,054,890
Mexico	27,742,124	27,999,461	28,803,630
Bermuda	373,257	390,758	403,162
General Aviation	2,540,836	2,577,800	2,616,255
Total	\$196,974,473	\$199,632,678	\$207,877,937

Monte Carlo Analysis - Foreign Travelers, First-Year Estimates

Run preferences:

Number of trials run	50,000
Extreme speed	
Monte Carlo	
Random seed	
Precision control on	
Confidence level	95.00%

Note: For all forecasts, frequency is shown on the y-axis

Forecasts

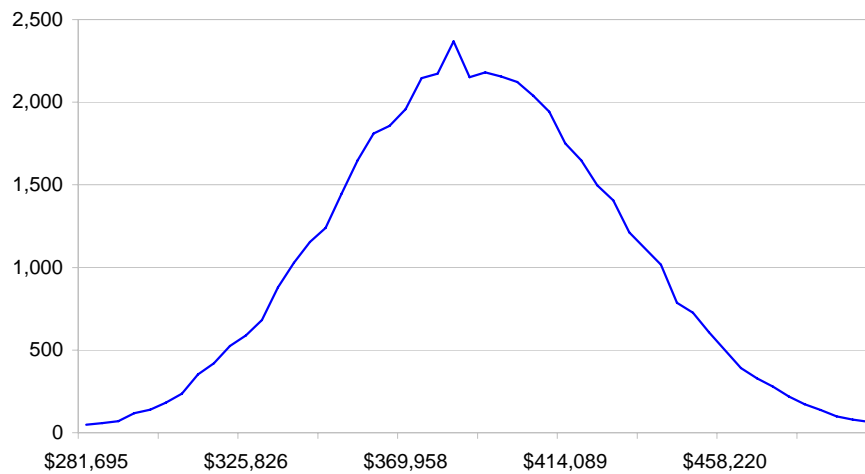
Forecast: Bermuda Passport Costs

Summary:

Entire range is from \$241,841 to \$574,317

Base case is \$390,758

After 50,000 trials, the std. error of the mean is \$176



Statistics:

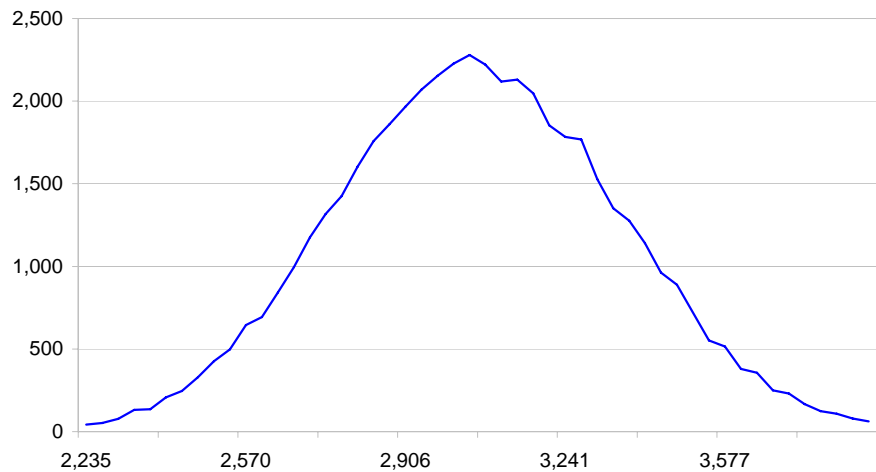
Forecast values	
Trials	50,000
Mean	\$389,817
Median	\$389,040
Mode	---
Standard Deviation	\$39,403
Variance	\$1,552,599,401
Skewness	0.0904
Kurtosis	2.98
Coeff. of Variability	0.1011
Minimum	\$241,841
Maximum	\$574,317
Range Width	\$332,476
Mean Std. Error	\$176

Percentiles:

Forecast values	
0%	\$241,841
10%	\$339,477
20%	\$356,597
30%	\$368,732
40%	\$379,306
50%	\$389,040
60%	\$399,288
70%	\$410,024
80%	\$423,117
90%	\$440,652
100%	\$574,317

Forecast: Bermuda Passports Demanded

Summary:
Entire range is from 1,956 to 4,333
Base case is 3,089
After 50,000 trials, the std. error of the mean is 1

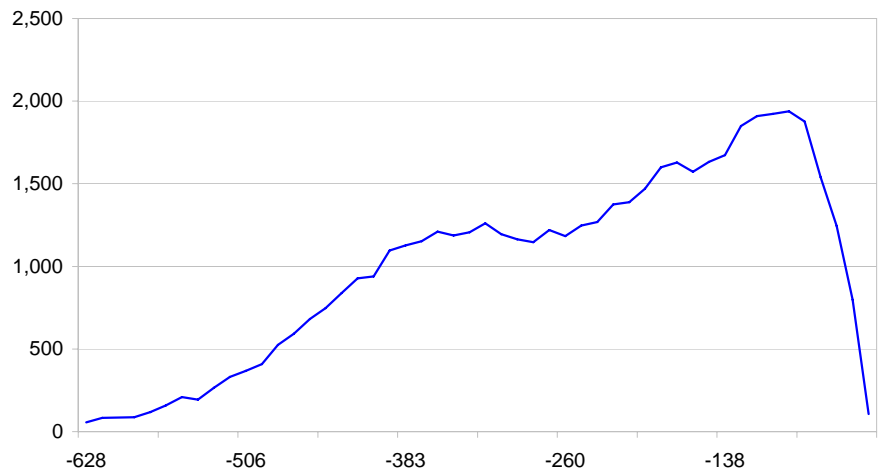


Statistics:	Forecast values
Trials	50,000
Mean	3,057
Median	3,053
Mode	---
Standard Deviation	300
Variance	89,772
Skewness	0.0598
Kurtosis	2.95
Coeff. of Variability	0.0980
Minimum	1,956
Maximum	4,333
Range Width	2,377
Mean Std. Error	1

Percentiles:	Forecast values
0%	1,956
10%	2,673
20%	2,803
30%	2,897
40%	2,977
50%	3,053
60%	3,130
70%	3,214
80%	3,308
90%	3,444
100%	4,333

Forecast: Bermuda Reduced Travelers

Summary:
Entire range is from -841 to -21
Base case is -216
After 50,000 trials, the std. error of the mean is 1

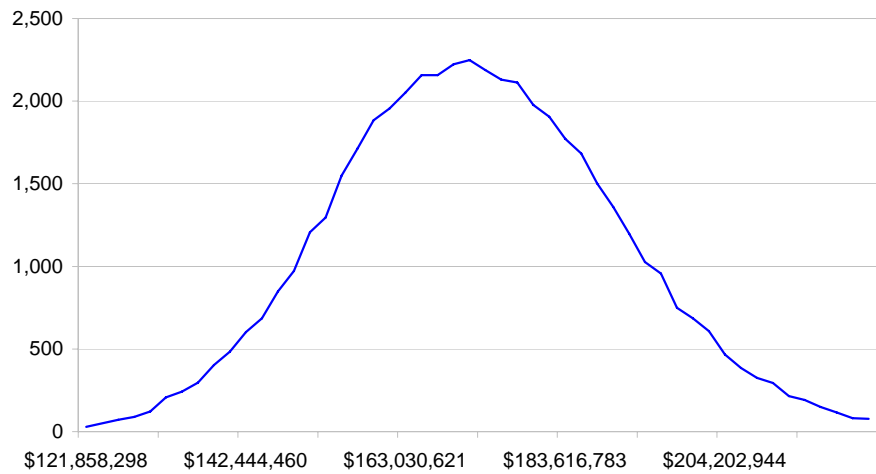


Statistics:	Forecast values
Trials	50,000
Mean	-246
Median	-225
Mode	---
Standard Deviation	139
Variance	19,248
Skewness	-0.5078
Kurtosis	2.47
Coeff. of Variability	-0.5638
Minimum	-841
Maximum	-21
Range Width	820
Mean Std. Error	1

Percentiles:	Forecast values
0%	-841
10%	-440
20%	-377
30%	-326
40%	-274
50%	-225
60%	-183
70%	-145
80%	-111
90%	-79
100%	-21

Forecast: Canada Passport Costs

Summary:
Entire range is from \$102,064,468 to \$252,261,135
Base case is \$168,664,659
After 50,000 trials, the std. error of the mean is \$82,200

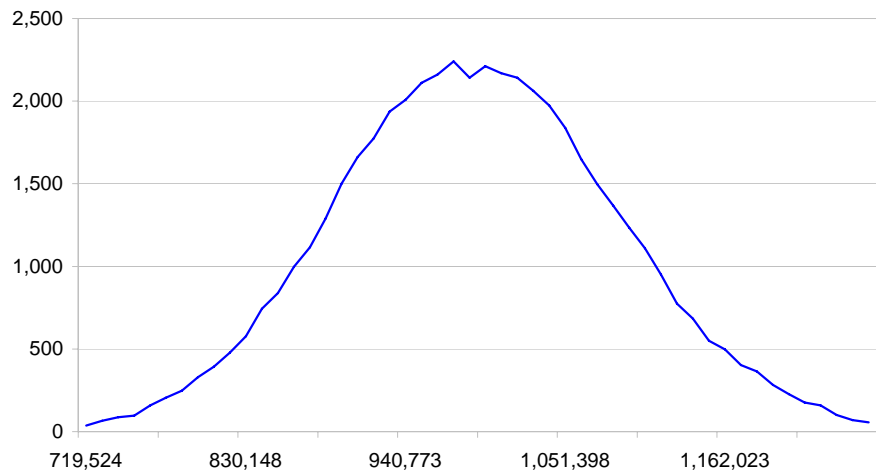


Statistics:	Forecast values
Trials	50,000
Mean	\$172,294,394
Median	\$171,741,136
Mode	---
Standard Deviation	\$18,380,501
Variance	\$337,842,827,814,938
Skewness	0.1817
Kurtosis	3.08
Coeff. of Variability	0.1067
Minimum	\$102,064,468
Maximum	\$252,261,135
Range Width	\$150,196,667
Mean Std. Error	\$82,200

Percentiles:	Forecast values
0%	\$102,064,468
10%	\$149,316,972
20%	\$156,788,890
30%	\$162,213,012
40%	\$167,072,292
50%	\$171,741,136
60%	\$176,475,553
70%	\$181,555,379
80%	\$187,511,681
90%	\$196,007,528
100%	\$252,261,135

Forecast: Canada Total Passports Demanded

Summary:
Entire range is from 605,161 to 1,401,499
Base case is 981,750
After 50,000 trials, the std. error of the mean is 442

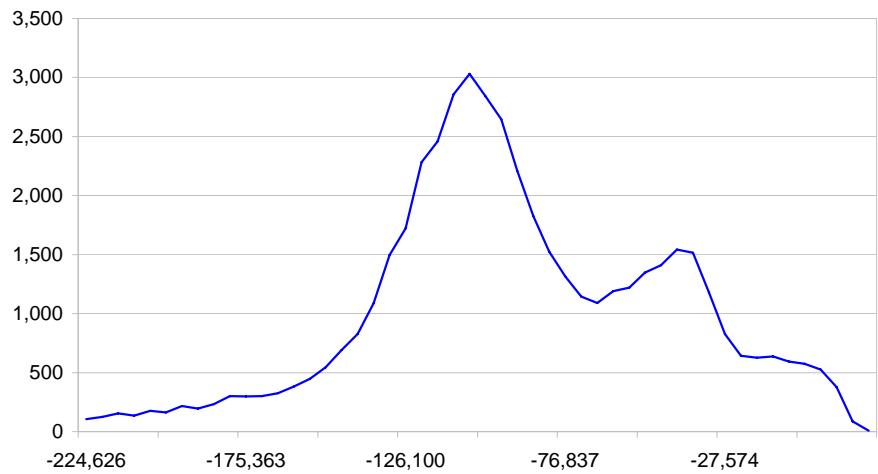


Statistics:	Forecast values
Trials	50,000
Mean	990,554
Median	989,016
Mode	---
Standard Deviation	98,772
Variance	9,755,918,089
Skewness	0.0970
Kurtosis	3.03
Coeff. of Variability	0.0997
Minimum	605,161
Maximum	1,401,499
Range Width	796,338
Mean Std. Error	442

Percentiles:	Forecast values
0%	605,161
10%	865,365
20%	907,221
30%	937,165
40%	963,803
50%	989,016
60%	1,014,634
70%	1,041,045
80%	1,072,983
90%	1,117,540
100%	1,401,499

Forecast: Canada Total Reduced Travelers

Summary:
Entire range is from -410,375 to 19,225
Base case is -100,712
After 50,000 trials, the std. error of the mean is 215

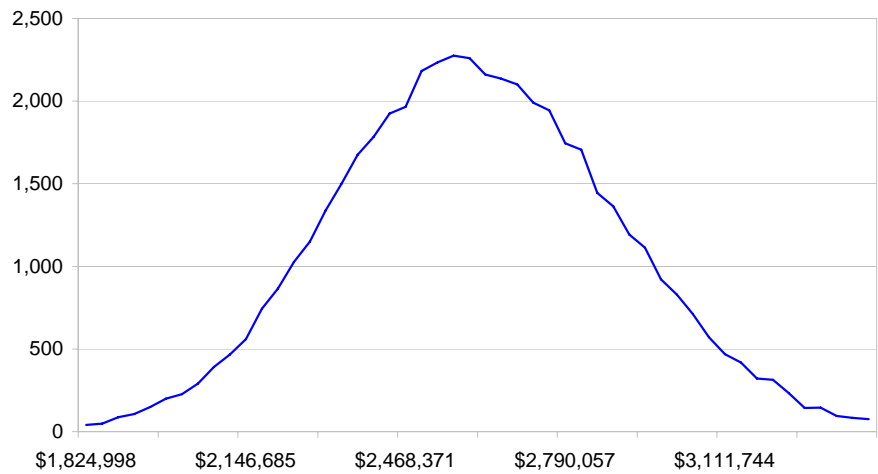


Statistics:	Forecast values
Trials	50,000
Mean	-92,629
Median	-97,101
Mode	---
Standard Deviation	48,022
Variance	2,306,068,509
Skewness	-0.3738
Kurtosis	3.76
Coeff. of Variability	-0.5184
Minimum	-410,375
Maximum	19,225
Range Width	429,601
Mean Std. Error	215

Percentiles:	Forecast values
0%	-410,375
10%	-145,514
20%	-124,824
30%	-114,160
40%	-105,782
50%	-97,101
60%	-86,089
70%	-67,656
80%	-47,891
90%	-30,613
100%	19,225

Forecast: General Aviation Passport Costs

Summary:
Entire range is from \$1,553,610 to \$3,935,696
Base case is \$2,577,800
After 50,000 trials, the std. error of the mean is \$1,284

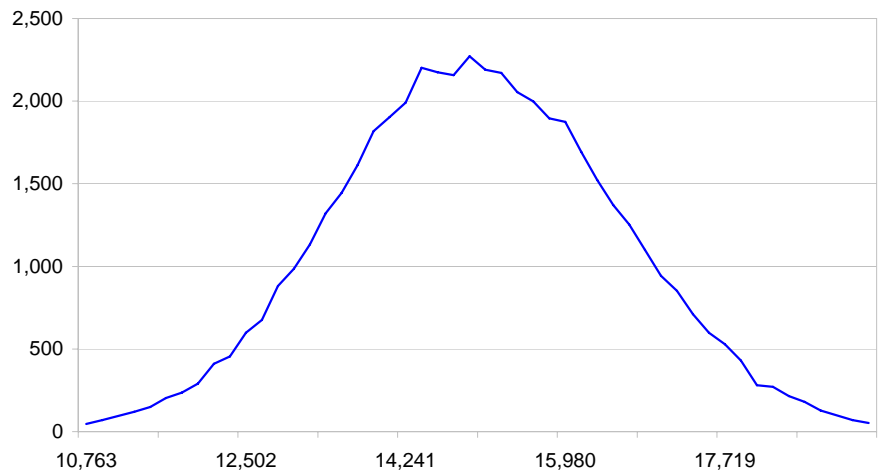


Statistics:	Forecast values
Trials	50,000
Mean	\$2,613,130
Median	\$2,605,057
Mode	---
Standard Deviation	\$287,220
Variance	\$82,495,330,614
Skewness	0.1374
Kurtosis	3.05
Coeff. of Variability	0.1099
Minimum	\$1,553,610
Maximum	\$3,935,696
Range Width	\$2,382,086
Mean Std. Error	\$1,284

Percentiles:	Forecast values
0%	\$1,553,610
10%	\$2,250,751
20%	\$2,369,489
30%	\$2,458,783
40%	\$2,533,993
50%	\$2,605,057
60%	\$2,679,391
70%	\$2,759,410
80%	\$2,851,697
90%	\$2,984,676
100%	\$3,935,696

Forecast: General Aviation Passports Demanded

Summary:
Entire range is from 9,033 to 21,383
Base case is 15,005
After 50,000 trials, the std. error of the mean is 7

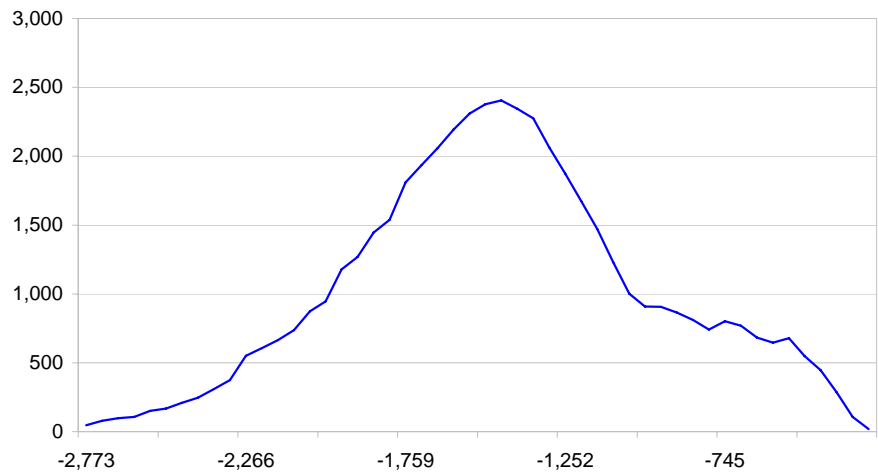


Statistics:	Forecast values
Trials	50,000
Mean	15,024
Median	14,994
Mode	---
Standard Deviation	1,553
Variance	2,410,297
Skewness	0.0674
Kurtosis	3.02
Coeff. of Variability	0.1033
Minimum	9,033
Maximum	21,383
Range Width	12,351
Mean Std. Error	7

Percentiles:	Forecast values
0%	9,033
10%	13,056
20%	13,715
30%	14,193
40%	14,601
50%	14,994
60%	15,396
70%	15,832
80%	16,323
90%	17,027
100%	21,383

Forecast: General Aviation Reduced Travelers

Summary:
Entire range is from -3,746 to -263
Base case is -1,467
After 50,000 trials, the std. error of the mean is 2

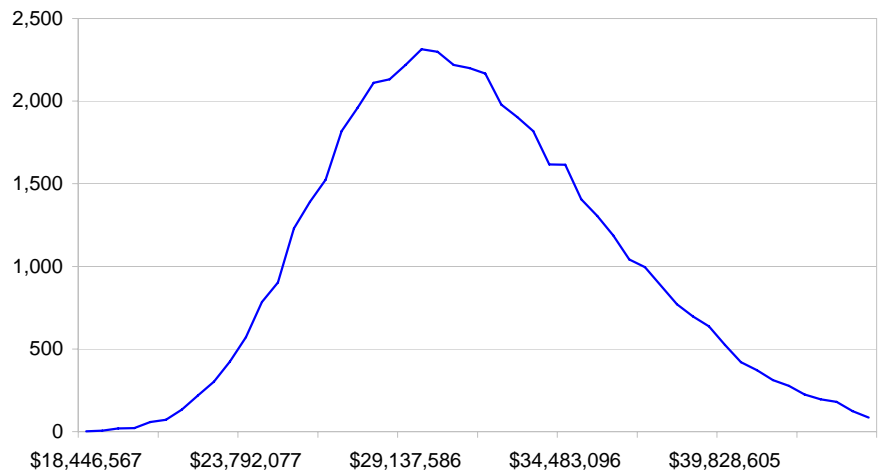


Statistics:	Forecast values
Trials	50,000
Mean	-1,455
Median	-1,468
Mode	---
Standard Deviation	480
Variance	230,034
Skewness	-0.0163
Kurtosis	2.95
Coeff. of Variability	-0.3295
Minimum	-3,746
Maximum	-263
Range Width	3,483
Mean Std. Error	2

Percentiles:	Forecast values
0%	-3,746
10%	-2,059
20%	-1,843
30%	-1,696
40%	-1,576
50%	-1,468
60%	-1,362
70%	-1,239
80%	-1,064
90%	-771
100%	-263

Forecast: Mexico Total Passport Costs

Summary:
Entire range is from \$17,659,412 to \$53,637,553
Base case is \$27,999,461
After 50,000 trials, the std. error of the mean is \$21,345

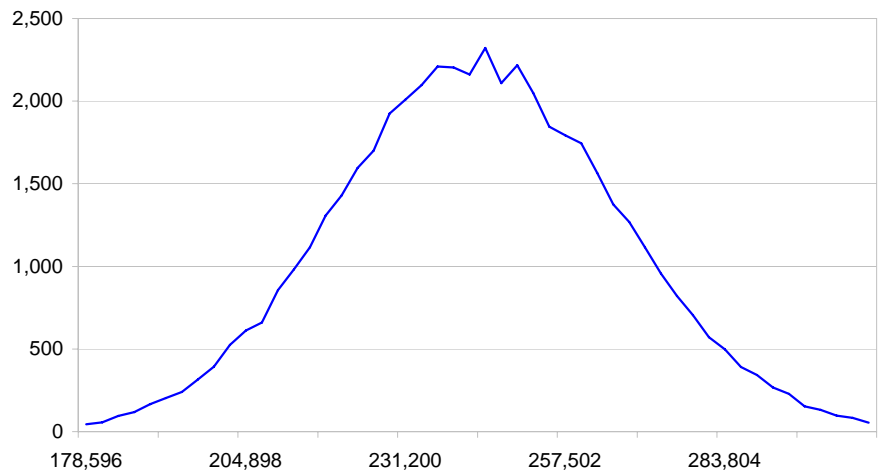


Statistics:	Forecast values
Trials	50,000
Mean	\$31,543,066
Median	\$31,070,657
Mode	---
Standard Deviation	\$4,772,776
Variance	\$22,779,394,377,217
Skewness	0.4754
Kurtosis	3.08
Coeff. of Variability	0.1513
Minimum	\$17,659,412
Maximum	\$53,637,553
Range Width	\$35,978,142
Mean Std. Error	\$21,345

Percentiles:	Forecast values
0%	\$17,659,412
10%	\$25,755,631
20%	\$27,407,983
30%	\$28,699,331
40%	\$29,890,847
50%	\$31,070,657
60%	\$32,317,305
70%	\$33,738,834
80%	\$35,501,877
90%	\$38,057,721
100%	\$53,637,553

Forecast: Mexico Total Passports Demanded

Summary:
Entire range is from 150,849 to 349,120
Base case is 243,474
After 50,000 trials, the std. error of the mean is 105

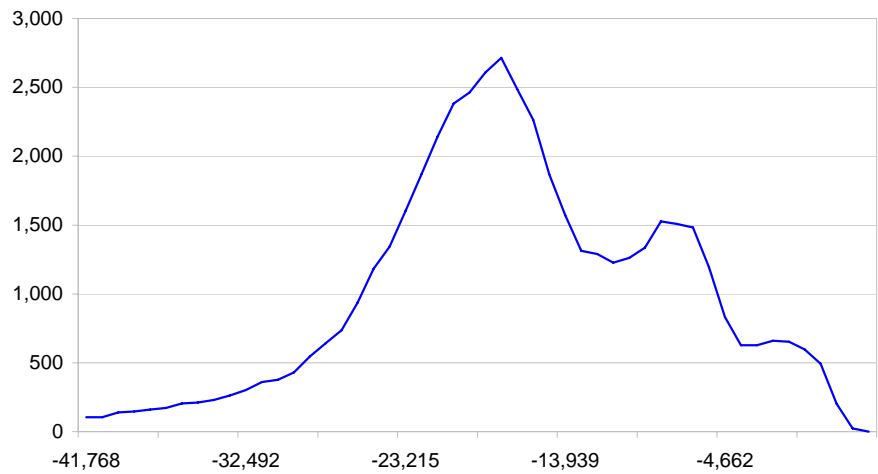


Statistics:	Forecast values
Trials	50,000
Mean	243,036
Median	242,898
Mode	---
Standard Deviation	23,484
Variance	551,492,702
Skewness	0.0444
Kurtosis	3.00
Coeff. of Variability	0.0966
Minimum	150,849
Maximum	349,120
Range Width	198,271
Mean Std. Error	105

Percentiles:	Forecast values
0%	150,849
10%	213,123
20%	223,266
30%	230,656
40%	236,850
50%	242,898
60%	248,770
70%	255,156
80%	262,763
90%	273,239
100%	349,120

Forecast: Mexico Total Reduced Travlers

Summary:
Entire range is from -72,347 to 4,150
Base case is -16,363
After 50,000 trials, the std. error of the mean is 41

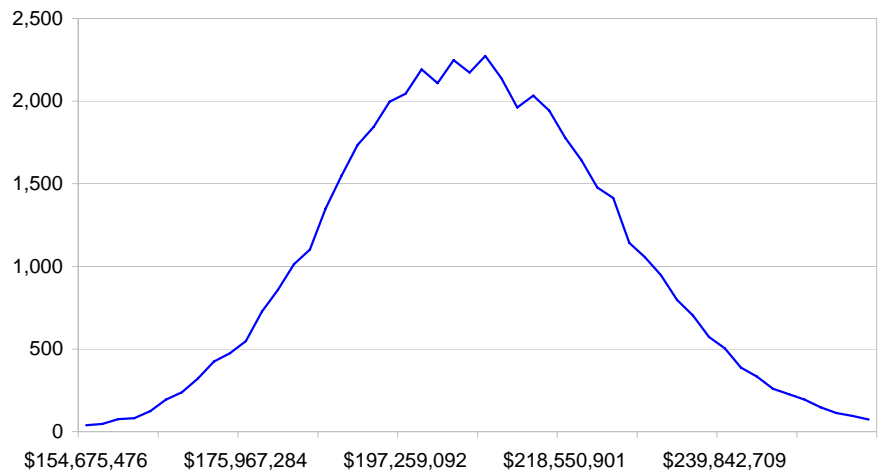


Statistics:	Forecast values
Trials	50,000
Mean	-16,853
Median	-17,171
Mode	---
Standard Deviation	9,064
Variance	82,159,231
Skewness	-0.5105
Kurtosis	4.01
Coeff. of Variability	-0.5379
Minimum	-72,347
Maximum	4,150
Range Width	76,497
Mean Std. Error	41

Percentiles:	Forecast values
0%	-72,347
10%	-27,341
20%	-23,167
30%	-20,803
40%	-18,908
50%	-17,171
60%	-15,191
70%	-12,165
80%	-8,579
90%	-5,402
100%	4,150

Forecast: Total Passport Costs

Summary:
Entire range is from \$133,058,935 to \$293,194,813
Base case is \$199,632,678
After 50,000 trials, the std. error of the mean is \$85,018

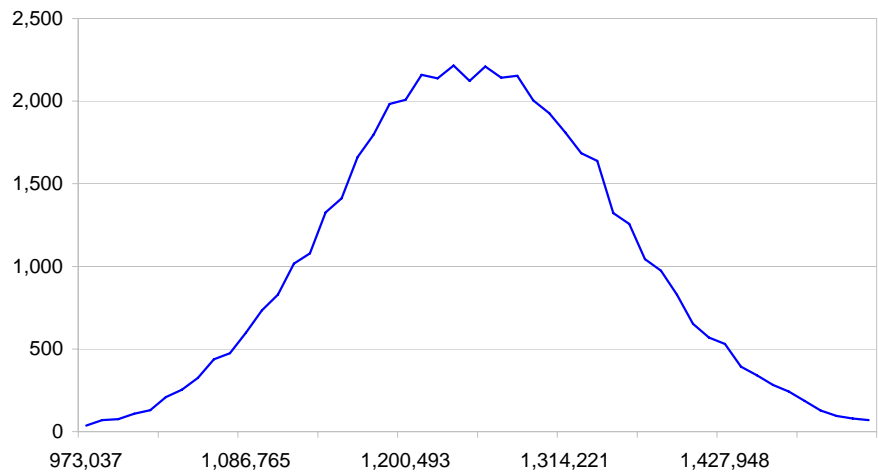


Statistics:	Forecast values
Trials	50,000
Mean	\$206,840,406
Median	\$206,284,567
Mode	---
Standard Deviation	\$19,010,543
Variance	\$361,400,749,583,344
Skewness	0.1744
Kurtosis	3.06
Coeff. of Variability	0.0919
Minimum	\$133,058,935
Maximum	\$293,194,813
Range Width	\$160,135,878
Mean Std. Error	\$85,018

Percentiles:	Forecast values
0%	\$133,058,935
10%	\$182,968,304
20%	\$190,747,041
30%	\$196,390,264
40%	\$201,440,231
50%	\$206,284,567
60%	\$211,114,527
70%	\$216,448,509
80%	\$222,691,362
90%	\$231,473,907
100%	\$293,194,813

Forecast: Total Passports Demanded

Summary:
Entire range is from 851,035 to 1,668,493
Base case is 1,243,317
After 50,000 trials, the std. error of the mean is 454

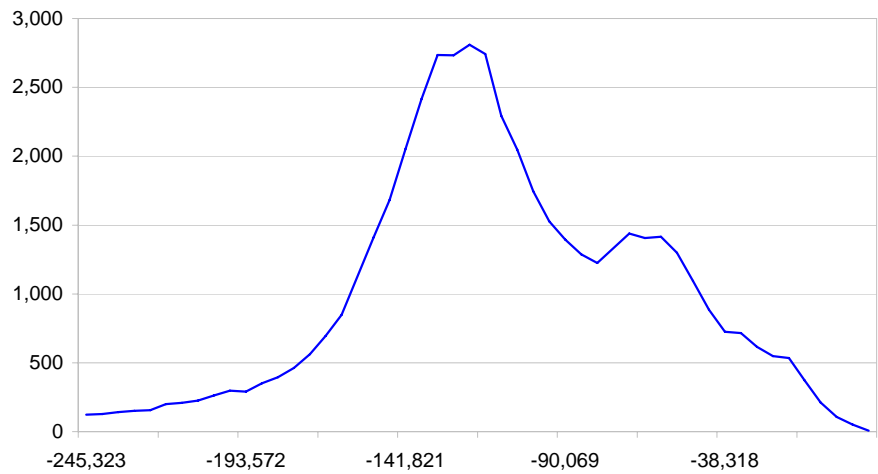


Statistics:	Forecast values
Trials	50,000
Mean	1,251,670
Median	1,250,065
Mode	---
Standard Deviation	101,543
Variance	10,310,902,887
Skewness	0.0855
Kurtosis	2.99
Coeff. of Variability	0.0811
Minimum	851,035
Maximum	1,668,493
Range Width	817,458
Mean Std. Error	454

Percentiles:	Forecast values
0%	851,035
10%	1,122,313
20%	1,166,252
30%	1,196,932
40%	1,223,962
50%	1,250,065
60%	1,276,458
70%	1,304,097
80%	1,336,546
90%	1,382,590
100%	1,668,493

Forecast: Total Reduced Travelers

Summary:
Entire range is from -435,357 to 10,846
Base case is -118,758
After 50,000 trials, the std. error of the mean is 218



Statistics:	Forecast values
Trials	50,000
Mean	-111,183
Median	-114,631
Mode	---
Standard Deviation	48,831
Variance	2,384,486,253
Skewness	-0.3573
Kurtosis	3.71
Coeff. of Variability	-0.4392
Minimum	-435,357
Maximum	10,846
Range Width	446,203
Mean Std. Error	218

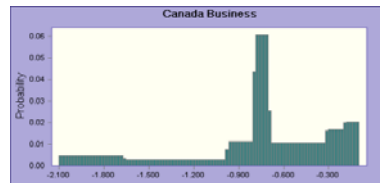
Percentiles:	Forecast values
0%	-435,357
10%	-166,103
20%	-145,043
30%	-133,542
40%	-124,002
50%	-114,631
60%	-103,183
70%	-86,482
80%	-66,838
90%	-47,309
100%	10,846

Assumptions

Assumption: Canada Business

Custom distribution with parameters:

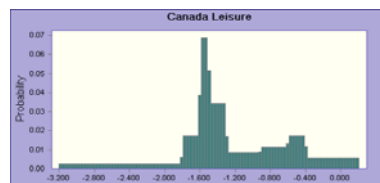
Minimum	Maximum	Probability
-2.100	-1.670	10.00
-1.670	-0.980	10.00
-0.980	-0.800	10.00
-0.800	-0.700	30.00
-0.700	-0.320	20.00
-0.320	-0.200	10.00
-0.200	-0.100	10.00



Assumption: Canada Leisure

Custom distribution with parameters:

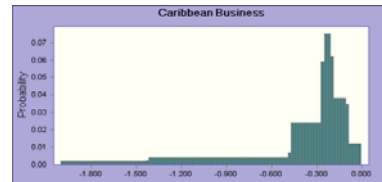
Minimum	Maximum	Probability
-3.200	-1.800	10.00
-1.800	-1.600	10.00
-1.600	-1.500	20.00
-1.500	-1.400	10.00
-1.400	-1.300	10.00
-1.300	-0.900	10.00
-0.900	-0.600	10.00
-0.600	-0.400	10.00
-0.400	0.200	10.00



Assumption: Caribbean Business

Custom distribution with parameters:

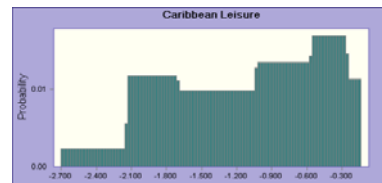
Minimum	Maximum	Probability
-2.000	-1.423	5.00
-1.423	-0.475	20.00
-0.475	-0.265	25.00
-0.265	-0.198	25.00
-0.198	-0.093	20.00
-0.093	-0.010	5.00



Assumption: Caribbean Leisure

Custom distribution with parameters:

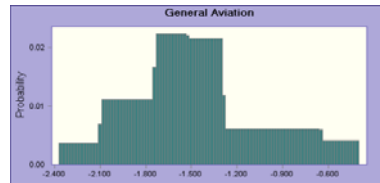
Minimum	Maximum	Probability
-2.700	-2.140	5.00
-2.140	-1.700	20.00
-1.700	-1.040	25.00
-1.040	-0.560	25.00
-0.560	-0.254	20.00
-0.254	-0.140	5.00



Assumption: General Aviation

Custom distribution with parameters:

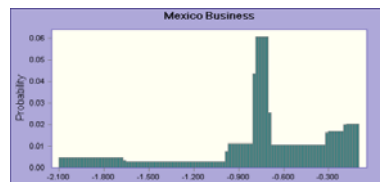
Minimum	Maximum	Probability
-2.370	-2.100	5.00
-2.100	-1.743	20.00
-1.743	-1.520	25.00
-1.520	-1.288	25.00
-1.288	-0.640	20.00
-0.640	-0.400	5.00



Assumption: Mexico Business

Custom distribution with parameters:

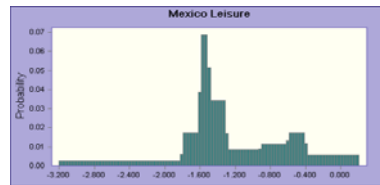
Minimum	Maximum	Probability
-2.100	-1.670	10.00
-1.670	-0.980	10.00
-0.980	-0.800	10.00
-0.800	-0.700	30.00
-0.700	-0.320	20.00
-0.320	-0.200	10.00
-0.200	-0.100	10.00



Assumption: Mexico Leisure

Custom distribution with parameters:

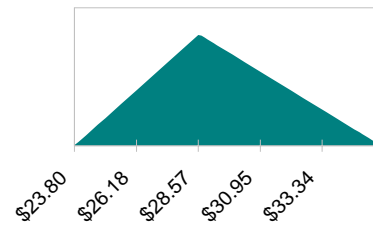
Minimum	Maximum	Probability
-3.200	-1.800	10.00
-1.800	-1.600	10.00
-1.600	-1.500	20.00
-1.500	-1.400	10.00
-1.400	-1.300	10.00
-1.300	-0.900	10.00
-0.900	-0.600	10.00
-0.600	-0.400	10.00
-0.400	0.200	10.00



Assumption: Cost per hour (personal time) Bermuda

Triangular distribution with parameters:

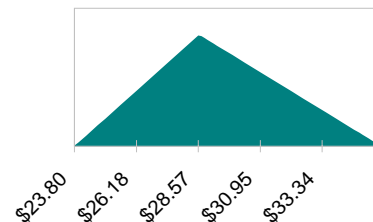
Minimum	\$23.80
Likeliest	\$28.60
Maximum	\$35.60



Assumption: Cost per hour (personal time) Canada

Triangular distribution with parameters:

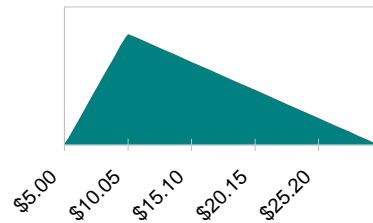
Minimum	\$23.80
Likeliest	\$28.60
Maximum	\$35.60



Assumption: Cost per hour (personal time) Mexico

Triangular distribution with parameters:

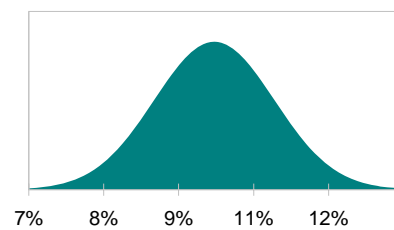
Minimum	\$5.00
Likeliest	\$10.00
Maximum	\$30.00



Assumption: Bermudan business travelers w/o passports

Normal distribution with parameters:

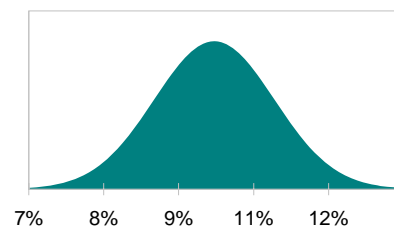
Mean	10%
Std. Dev.	1%



Assumption: Bermudan leisure travelers w/o passports

Normal distribution with parameters:

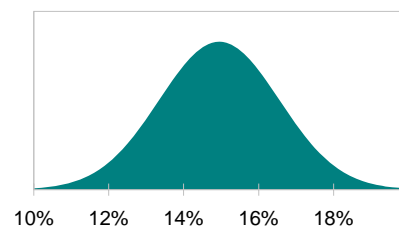
Mean	10%
Std. Dev.	1%



Assumption: Canadian business travelers w/o passports

Normal distribution with parameters:

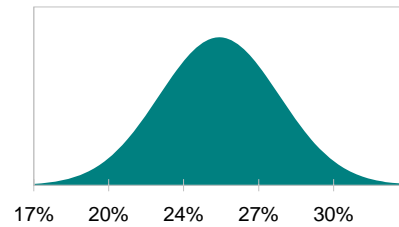
Mean	15%
Std. Dev.	2%



Assumption: Canadian leisure travelers w/o passports

Normal distribution with parameters:

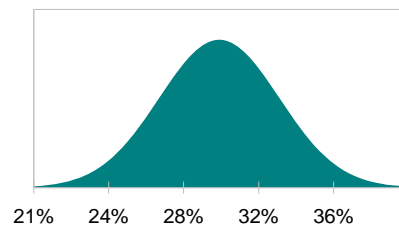
Mean	25%
Std. Dev.	3%



Assumption: General Aviation Canada Overnight

Normal distribution with parameters:

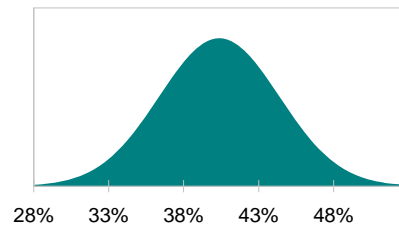
Mean	30%
Std. Dev.	3%



Assumption: General Aviation Canada Same Day

Normal distribution with parameters:

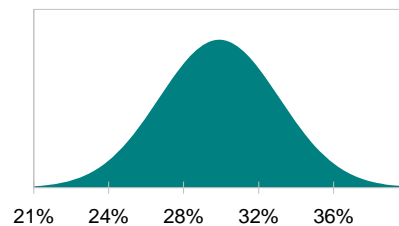
Mean	40%
Std. Dev.	4%



Assumption: General Aviation Mexico Overnight

Normal distribution with parameters:

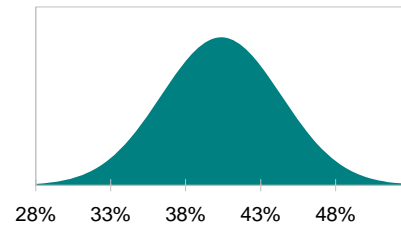
Mean	30%
Std. Dev.	3%



Assumption: General Aviation Mexico Same Day

Normal distribution with parameters:

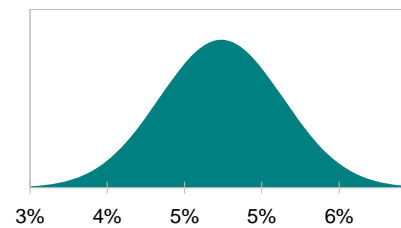
Mean	40%
Std. Dev.	4%



Assumption: Mexican business travelers w/o passports

Normal distribution with parameters:

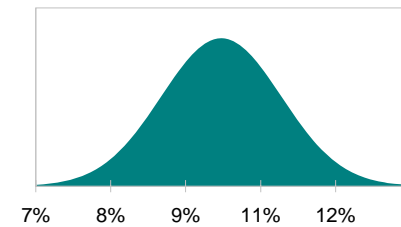
Mean	5%
Std. Dev.	1%



Assumption: Mexican leisure travelers w/o passports

Normal distribution with parameters:

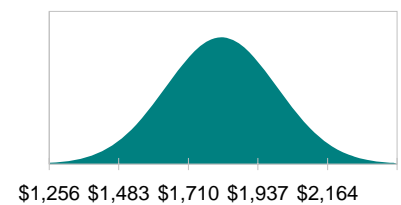
Mean	10%
Std. Dev.	1%



Assumption: Bermuda Business Trip Cost

Normal distribution with parameters:

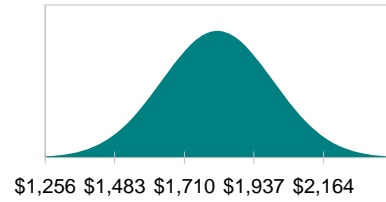
Mean	\$1,818
Std. Dev.	\$182



Assumption: Bermuda Leisure Trip Cost

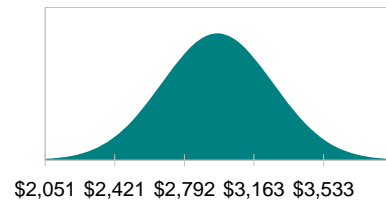
Normal distribution with parameters:

Mean \$1,818
Std. Dev. \$182

**Assumption: Canada Business Trip Cost**

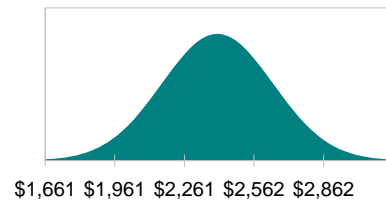
Normal distribution with parameters:

Mean \$2,968
Std. Dev. \$297

**Assumption: Canada Leisure Trip Cost**

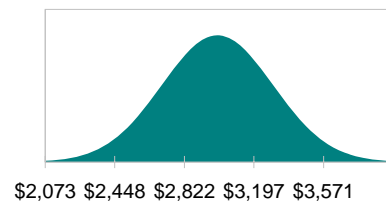
Normal distribution with parameters:

Mean \$2,404
Std. Dev. \$240

**Assumption: General Aviation Overnight Cost**

Normal distribution with parameters:

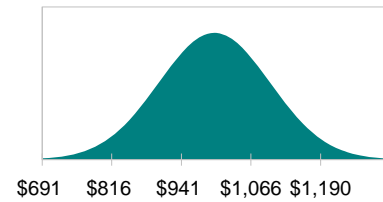
Mean \$3,000
Std. Dev. \$300



Assumption: General Aviation Same Day Cost

Normal distribution with parameters:

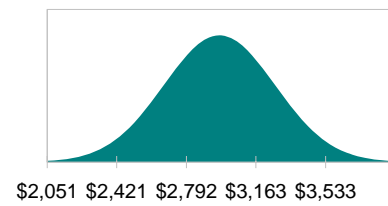
Mean	\$1,000
Std. Dev.	\$100



Assumption: Mexico Business Trip Cost

Normal distribution with parameters:

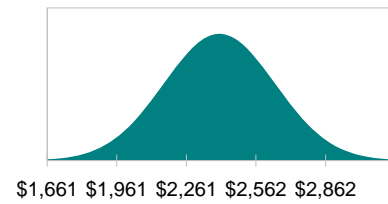
Mean	\$2,968
Std. Dev.	\$297



Assumption: Mexico Leisure Trip Cost

Normal distribution with parameters:

Mean	\$2,404
Std. Dev.	\$240



Appendix H
Costs of Regulatory Alternatives, First Year
Most Likely Estimate

Summary of Alternative 2 for US Travelers in the Western Hemisphere
State-issued photo ID + birth certificate
First Year, Most Likely Estimate

State	Fee	Minimum Age
NY	\$14.00	none
CA	21.00	none
FL	3.00	12
IL	20.00	none
MA	15.00	16
NJ	24.00	17
OH	8.50	none
PA	10.00	16
TX	15.00	none
VA	10.00	none
WA	20.00	none

Average fee	\$14.59
Time cost	\$40.52
Total cost	\$55.11

Destination	All minors	Minors w/o passports
Canada	439,085	144,898
Mexico	529,825	232,063
Caribbean	446,046	119,540
Micronesia	1,903	95
Total	1,416,858	496,597

Total cost	\$27,366,235
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Summary of Alternative 3 for US Travelers in the Western Hemisphere

TWICs

First Year, Most Likely Estimate

US Travelers	
Canada	4,390,846
Mexico	5,298,249
Caribbean	4,460,457
Micronesia	19,027
Gen av	65,937
Total	14,234,516

Total passports	4,312,788
Total costs (without expedites)	\$411,730,074
Total costs with expedites	\$463,483,535

TWICs	750,000
Percent needing passports	30%
TWICs needing passports	227,236
Costs of passports	\$21,932,040

Difference	\$389,798,034
Percent of total (without expedites)	5%
Percent of total (with expedites)	5%
Cost with expedites	\$441,551,495

Equipment	
Air and sea lanes	2,000
Readers per lane	1
Total readers, air	2,000

Cost per reader	\$7,200
Total reader cost	\$14,400,000

CBP database and development costs	\$500,000
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Total costs	\$14,900,000
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Net cost savings	\$7,032,040
Percent of total (with expedites)	2%

Alternative 5 for US Travelers in the Western Hemisphere
Passport Cards
US Travelers to Canada, First Year, Most Likely Estimate

Travelers	4,390,846			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	878,169	3,512,677	3,073,592	439,085
Percentage w/o passports	23%	33%	33%	33%
Travelers	201,979	1,159,183	1,014,285	144,898
Cost of trip	\$1,557	\$1,246	\$1,246	\$1,246
Cost of passport	\$97	\$97	\$97	\$87
Cost of passport as % of trip	6.20%	7.75%	7.75%	6.94%
Business Adults				
Elasticity business, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-0.825	-0.800	-0.475	
Reduced demand	-5.11%	-4.96%	-2.94%	
Reduced travelers	-10,329	-10,016	-5,947	
Passports demanded	191,650	191,963	196,032	
Cost of passports demanded	\$18,497,375	\$18,527,586	\$18,920,326	
Leisure Adults				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-12.39%	-10.84%	-6.20%	
Reduced travelers	-125,708	-109,995	-62,854	
Passports demanded	888,577	904,291	951,431	
Cost of passports demanded	\$85,762,486	\$87,279,106	\$91,828,966	
Leisure Minors				
Elasticity leisure, Canada	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-11.11%	-9.72%	-5.55%	
Reduced travelers	-16,098	-14,085	-8,049	
Passports demanded	128,800	130,812	136,849	
Cost of passports demanded	\$11,143,365	\$11,317,455	\$11,839,725	
Leisure reduced travelers	-141,806	-124,080	-70,903	
Leisure passports demanded	1,017,377	1,035,103	1,088,280	
Cost of passports demanded	\$96,905,851	\$98,596,561	\$103,668,691	
Total reduced travelers	-152,136	-134,097	-76,850	
Total passports demanded	1,209,027	1,227,065	1,284,312	
Total passport costs	\$115,403,226	\$117,124,147	\$122,589,017	

Alternative 5 for US Travelers in the Western Hemisphere
Passport Cards
US Travelers to Mexico, First Year, Most Likely Estimate

Travelers	5,298,249			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	20%	80%	90%	10%
Travelers	1,059,650	4,238,599	3,708,774	529,825
Percentage w/o passports	34%	44%	44%	44%
Travelers	358,162	1,856,506	1,624,443	232,063
Cost of trip	\$1,557	\$1,246	\$1,246	\$1,246
Cost of passport	\$97	\$97	\$97	\$87
Cost of passport as % of trip	6.20%	7.75%	7.75%	6.94%
Business Adults				
Elasticity business, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic business	-0.825	-0.800	-0.475	
Reduced demand	-5.11%	-4.96%	-2.94%	
Reduced travelers	-18,317	-17,762	-10,546	
Passports demanded	339,845	340,400	347,616	
Cost of passports demanded	\$32,800,701	\$32,854,273	\$33,550,704	
Leisure Adults				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-12.39%	-10.84%	-6.20%	
Reduced travelers	-201,330	-176,164	-100,665	
Passports demanded	1,423,113	1,448,279	1,523,778	
Cost of passports demanded	\$137,354,119	\$139,783,083	\$147,069,975	
Leisure Minors				
Elasticity leisure, Mexico	1st quartile	Median	3rd quartile	
Use long-haul domestic leisure	-1.600	-1.400	-0.800	
Reduced demand	-11.11%	-9.72%	-5.55%	
Reduced travelers	-25,781	-22,559	-12,891	
Passports demanded	206,282	209,504	219,173	
Cost of passports demanded	\$17,846,814	\$18,125,630	\$18,962,078	
Leisure reduced travelers	-227,112	-198,723	-113,556	
Leisure passports demanded	1,629,395	1,657,784	1,742,951	
Cost of passports demanded	\$155,200,933	\$157,908,713	\$166,032,053	
Total reduced travelers	-245,428	-216,484	-124,102	
Total passports demanded	1,969,240	1,998,184	2,090,566	
Total passport costs	\$188,001,634	\$190,762,985	\$199,582,758	

Alternative 5 for US Travelers in the Western Hemisphere
Passport Cards
US Travelers to the Caribbean, First Year, Most Likely Estimate

Travelers	4,460,457
Dominican Republic	1,247,188
Jamaica	950,323
Bahamas	893,919
Aruba	320,756
Netherland Antilles	308,509
Panama	253,321
Bermuda	225,090
British Virgin Islands	82,791
Antigua-Barbuda	82,088
St. Kitts-Nevis	58,151
Grenada	22,390
Dominica	13,960
St. Vincent-Grenadines	1,970

	Business	Leisure	Leisure Adults	Leisure Minors
Percentage (average)	16%	84%	90%	10%
Dominican Republic	16%	84%	90%	10%
Jamaica	12%	88%	90%	10%
Bahamas	25%	75%	90%	10%
Aruba	8%	92%	90%	10%
Netherland Antilles	10%	90%	90%	10%
Panama	27%	73%	90%	10%
Bermuda	13%	87%	90%	10%
British Virgin Islands	15%	85%	90%	10%
Antigua-Barbuda	23%	77%	90%	10%
St. Kitts-Nevis	15%	85%	90%	10%
Grenada	15%	85%	90%	10%
Dominica	15%	85%	90%	10%
St. Vincent-Grenadines	15%	85%	90%	10%

Travelers	737,008	3,723,449	3,277,403	446,046
Dominican Republic	199,550	1,047,638	922,919	124,719
Jamaica	114,039	836,284	741,252	95,032
Bahamas	223,480	670,439	581,047	89,392
Aruba	25,660	295,096	263,020	32,076
Netherland Antilles	30,851	277,659	246,808	30,851
Panama	68,397	184,925	159,592	25,332
Bermuda	29,262	195,829	173,320	22,509
British Virgin Islands	12,419	70,373	62,093	8,279
Antigua-Barbuda	18,880	63,208	54,999	8,209
St. Kitts-Nevis	8,723	49,428	43,613	5,815
Grenada	3,358	19,031	16,792	2,239
Dominica	2,094	11,866	10,470	1,396
St. Vincent-Grenadines	295	1,674	1,477	197

Percentage w/o passports	17%	27%	27%	27%
Dominican Republic	17%	27%	27%	27%
Jamaica	17%	27%	27%	27%
Bahamas	17%	27%	27%	27%
Aruba	17%	27%	27%	27%
Netherland Antilles	17%	27%	27%	27%
Panama	17%	27%	27%	27%
Bermuda	17%	27%	27%	27%
British Virgin Islands	17%	27%	27%	27%
Antigua-Barbuda	17%	27%	27%	27%
St. Kitts-Nevis	17%	27%	27%	27%
Grenada	17%	27%	27%	27%
Dominica	17%	27%	27%	27%
St. Vincent-Grenadines	17%	27%	27%	27%

Travelers	123,817	997,884	878,344	119,540
Dominican Republic	33,524	280,767	247,342	33,425
Jamaica	19,159	224,124	198,656	25,469
Bahamas	37,545	179,678	155,721	23,957
Aruba	4,311	79,086	70,489	8,596
Netherland Antilles	5,183	74,412	66,144	8,268
Panama	11,491	49,560	42,771	6,789
Bermuda	4,916	52,482	46,450	6,032
British Virgin Islands	2,086	18,860	16,641	2,219
Antigua-Barbuda	3,172	16,940	14,740	2,200
St. Kitts-Nevis	1,465	13,247	11,688	1,558
Grenada	564	5,100	4,500	600
Dominica	352	3,180	2,806	374
St. Vincent-Grenadines	50	449	396	53
Cost of trip	\$1,961	\$1,461	\$1,461	\$1,461
Cost of passport	\$97	\$97	\$97	\$87
Cost of passport as % of trip	4.92%	6.61%	6.61%	5.92%
Business Adults				
Elasticity business, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-2.34%	-1.30%	-0.97%	
Reduced travelers	-2,895	-1,615	-1,207	
Dominican Republic	-784	-437	-327	
Jamaica	-448	-250	-187	
Bahamas	-878	-490	-366	
Aruba	-101	-56	-42	
Netherland Antilles	-121	-68	-51	
Panama	-269	-150	-112	
Bermuda	-115	-64	-48	
British Virgin Islands	-49	-27	-20	
Antigua-Barbuda	-74	-41	-31	
St. Kitts-Nevis	-34	-19	-14	
Grenada	-13	-7	-5	
Dominica	-8	-5	-3	
St. Vincent-Grenadines	-1	-1	0	
Passports demanded	120,923	122,202	122,611	
Cost of passports demanded	\$11,671,054	\$11,794,572	\$11,833,980	
Leisure Adults				
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-11.23%	-6.87%	-3.70%	
Reduced travelers	-98,643	-60,346	-32,494	
Dominican Republic	-27,778	-16,994	-9,150	
Jamaica	-22,310	-13,649	-7,349	
Bahamas	-17,488	-10,699	-5,761	
Aruba	-7,916	-4,843	-2,608	
Netherland Antilles	-7,428	-4,544	-2,447	
Panama	-4,803	-2,939	-1,582	
Bermuda	-5,217	-3,191	-1,718	
British Virgin Islands	-1,869	-1,143	-616	
Antigua-Barbuda	-1,655	-1,013	-545	
St. Kitts-Nevis	-1,313	-803	-432	
Grenada	-505	-309	-166	
Dominica	-315	-193	-104	
St. Vincent-Grenadines	-44	-27	-15	
Passports demanded	779,701	817,998	845,850	
Cost of passports demanded	\$75,254,166	\$78,950,430	\$81,638,623	

Leisure Minors			
Elasticity leisure, Caribbean	1st quartile	Median	3rd quartile
Use long-haul international leisure	-1.700	-1.040	-0.560
Reduced demand	-10.07%	-6.16%	-3.32%
Reduced travelers	-12,034	-7,362	-3,964
Dominican Republic	-3,365	-2,058	-1,108
Jamaica	-2,564	-1,569	-845
Bahamas	-2,412	-1,475	-794
Aruba	-865	-529	-285
Netherland Antilles	-832	-509	-274
Panama	-683	-418	-225
Bermuda	-607	-372	-200
British Virgin Islands	-223	-137	-74
Antigua-Barbuda	-221	-135	-73
St. Kitts-Nevis	-157	-96	-52
Grenada	-60	-37	-20
Dominica	-38	-23	-12
St. Vincent-Grenadines	-5	-3	-2
Passports demanded	107,506	112,178	115,576
Cost of passports demanded	\$9,301,076	\$9,705,287	\$9,999,258
Leisure reduced travelers	-110,677	-67,708	-36,458
Leisure passports demanded	887,207	930,176	961,426
Cost of passports demanded	\$84,555,242	\$88,655,717	\$91,637,881
Total reduced travelers	-113,572	-69,323	-37,665
Total passports demanded	1,008,130	1,052,379	1,084,037
Total passport costs	\$96,226,297	\$100,450,289	\$103,471,861

Alternative 5 for US Travelers in the Western Hemisphere
Passport Cards
US Travelers to Micronesia, First Year, Most Likely Estimate

Travelers	19,027			
	Business	Leisure	Leisure Adults	Leisure Minors
Percentage	0%	100%	90%	10%
Travelers	-	19,027	17,124	1,903
Percentage w/o passports	0%	5%	5%	5%
Travelers	-	951	856	95
Cost of trip	\$5,084	\$5,084	\$5,084	\$5,084
Cost of passport	\$97	\$97	\$97	\$87
Cost of passport as % of trip	1.90%	1.90%	1.90%	1.70%
Business Adults				
Elasticity business, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international business	-0.475	-0.265	-0.198	
Reduced demand	-0.90%	-0.50%	-0.38%	
Reduced travelers	0	0	0	
Passports demanded	-	-	-	
Cost of passports demanded	\$ -	\$ -	\$ -	
Leisure Adults				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-3.23%	-1.97%	-1.06%	
Reduced travelers	-28	-17	-9	
Passports demanded	829	839	847	
Cost of passports demanded	\$79,972	\$81,007	\$81,760	
Leisure Minors				
Elasticity leisure, Micronesia	1st quartile	Median	3rd quartile	
Use long-haul international leisure	-1.700	-1.040	-0.560	
Reduced demand	-2.89%	-1.77%	-0.95%	
Reduced travelers	-3	-2	-1	
Passports demanded	92	93	94	
Cost of passports demanded	\$7,993	\$8,085	\$8,152	
Leisure reduced travelers	-30	-19	-10	
Leisure passports demanded	921	933	941	
Cost of passports demanded	\$87,964	\$89,092	\$89,913	
Total reduced travelers	-30	-19	-10	
Total passports demanded	921	933	941	
Total passport costs	\$87,964	\$89,092	\$89,913	

Alternative 5 for US Travelers in the Western Hemisphere
Passport Cards
US General Aviation Travelers, First Year, Most Likely Estimate

Travelers	65,937			
	Same Day	Overnight	Adults	Minors
Percentage			100%	0%
Travelers	32,773	33,164	65,937	-
Percentage w/o passports	66%	50%		
Travelers	21,630	16,582	38,212	-
Cost of trip	\$1,000	\$3,000		
Cost of passport	\$97	\$97	\$97	\$87
Cost of passport as % of trip	9.65%	3.22%		
Elasticity for same day	1st quartile	Median	3rd quartile	
Use short-haul leisure	-1.743	-1.520	-1.288	
Reduced demand	-16.82%	-14.67%	-12.43%	
Reduced travelers	-3,639	-3,173	-2,689	
Passports demanded	17,991	18,457	18,941	
Cost of passports demanded	\$1,736,461	\$1,781,395	\$1,828,141	
Elasticity for overnight	1st quartile	Median	3rd quartile	
Use short-haul leisure	-1.743	-1.520	-1.288	
Reduced demand	-5.61%	-4.89%	-4.14%	
Reduced travelers	-930	-811	-687	
Passports demanded	15,652	15,771	15,895	
Cost of passports demanded	\$1,510,684	\$1,522,166	\$1,534,111	
Total reduced travelers	-4,569	-3,984	-3,376	
Total passports demanded	33,643	34,228	34,836	
Total passport costs	\$3,247,145	\$3,303,561	\$3,362,253	

Alternative 5 for US Travelers in the Western Hemisphere
Summary of Passport Card Costs for US Air Travelers
First Year, Most Likely Estimate

Passports Demanded	1st quartile	Median	3rd quartile
Canada	1,209,027	1,227,065	1,284,312
Mexico	1,969,240	1,998,184	2,090,566
Caribbean	1,008,130	1,052,379	1,084,037
Micronesia	921	933	941
General Aviation	33,643	34,228	34,836
Total	4,220,961	4,312,788	4,494,692
Reduced Travelers	1st quartile	Median	3rd quartile
Canada	-152,136	-134,097	-76,850
Mexico	-245,428	-216,484	-124,102
Caribbean	-113,572	-69,323	-37,665
Micronesia	-30	-19	-10
General Aviation	-4,569	-3,984	-3,376
Total	-515,734	-423,907	-242,003
Cost of Passports Demanded	1st quartile	Median	3rd quartile
Canada	\$115,403,226	\$117,124,147	\$122,589,017
Mexico	188,001,634	190,762,985	199,582,758
Caribbean	96,226,297	100,450,289	103,471,861
Micronesia	87,964	89,092	89,913
General Aviation	3,247,145	3,303,561	3,362,253
Total	\$402,966,266	\$411,730,074	\$429,095,800
Expedites (20% of passports)	844,192	862,558	898,938
Extra cost of expedites	\$50,651,530	\$51,753,461	\$53,936,308
Total costs	\$453,617,796	\$463,483,535	\$483,032,108

