

**INITIAL REGULATORY IMPACT ANALYSIS**  
**FOR**  
**PROPOSED CONSUMER RULEMAKING REGARDING**  
***TRANSPARENCY OF AIRLINE ANCILLARY FEES***  
***AND OTHER CONSUMER PROTECTION ISSUES***

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**Prepared by**

**HDR**

**For**

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## TABLE OF CONTENTS

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Acronyms and Abbreviations.....	vii
Executive Summary.....	1
1. Introduction.....	8
1.1 Stated Need for Regulation .....	9
1.2 Proposed Regulation.....	12
1.3 Report Organization.....	13
2. An Overview of The Air Transportation Sector .....	14
2.1 U.S. and Foreign Air Carriers.....	14
2.2 Travel Agencies, Tour Operators and GDSs .....	23
2.3 Ancillary Service Fees.....	27
2.4 Complaints .....	29
2.4.1 Carrier Complaints .....	29
2.4.2 Travel Agency Complaints.....	30
3. Benefit-Cost Analysis Approach .....	32
3.1 Analytical Framework .....	32
3.2 General Assumptions Used in Estimating Benefits and Costs .....	33
3.3 Cost Estimation .....	34
3.4 Benefits Estimation .....	34
3.4.1 Value of Time .....	35
4. Regulatory Evaluation of Specific requirements .....	36
4.1 Provision 1: Definition of Ticket Agent .....	37
4.1.1 Current Requirements, Industry Practices, and Need for Additional Regulation .....	37
4.1.2 Estimated Benefits and Costs for Provision 1 .....	37
4.2 Provision 2: Transparency in Basic Ancillary Service Fees (Including Availability on OTAs and GDSs) .....	37
4.2.1 Current Requirements, Industry Practices, and Need for Additional Regulation .....	37

4.2.2	New Requirements to Address Identified Needs .....	39
4.2.3	Estimated Benefits for Provision 2.....	43
4.2.4	Estimated Costs for Provision 2 .....	48
4.2.6	Prohibition of Ticket Agent Charges for Distribution of Ancillary Service Fee Information .....	50
4.3	Provision 3: Expand “Reporting Carrier” Pool and Provision 4: Expand Reporting Requirements for Reporting Carriers .....	51
4.3.1	Current Requirements, Industry Practices, and Need for Additional Regulation.....	51
4.3.2	New Requirements to Address Identified Needs .....	52
4.3.3	Qualitative Benefits for Provision 3 & 4 and their alternatives.....	56
4.3.4	Estimated Costs for Provision 3 & 4 and their alternatives.....	57
4.4	Provision 5: Minimum Customer Service Standards for Ticket Agents.....	61
4.4.1	Current Requirements, Industry Practices, and Need for Additional Regulation .....	61
4.4.2	New Requirements to Address Identified Needs .....	62
4.4.3	Benefits for Provision 5 Not Quantified.....	62
4.4.4	Estimated Costs for Provision 5 .....	64
4.5	Provision 6: Disclosure of Code-Share Segments in Schedules, Advertisements and Communications with Consumers.....	65
4.6	Provision 7: Disclosure of Carriers Marketed by Ticket Agents.....	65
4.7	Provision 8: Prohibition on Undisclosed Biasing .....	66
4.8	Provision 9: Prohibition of Post-Purchase Price Increases for Ancillary Service Fees.....	66
4.8.1	Current Requirements, Industry Practices, and Need for Additional Regulation .....	66
5.	SUMMARY Results.....	68
5.1	Net Results .....	68
5.2	Sensitivity Analysis .....	75

Appendix A.	Cost Related Data.....	78
Appendix B.	Benefit Related Data .....	82
Appendix C.	Formulas Used to Estimate Costs and Benefits .....	87
Appendix D.	List of Related USDOT Reporting Requirements .....	88

## **List of Figures**

Figure 1: U.S. Air Carrier Scheduled Passenger Enplanements, 1996-2011 .....	15
Figure 2: Average U.S. Domestic-Itinerary Fare in 2011 Dollars .....	19
Figure 3: 2004-2010 Major U.S. Air Carrier On-Time Performance.....	21
Figure 4: The Growth of Revenues from Baggage Fees and Cancellation Fees in U.S. Airline Industry.....	28

## **List of Tables**

Table 1: Proposed Provisions and Alternatives .....	12
Table 2: "Reporting Carriers" and "New reporting Carriers if lowering the Reporting Pool to 0.5%" 2012 .....	17
Table 3: Scheduled Passenger Service on U.S. Carriers (domestics and international), 2010 .....	18
Table 4: Scheduled Passenger Service of US and Foreign Carriers, 2010 (Enplaned Passengers).....	20
Table 5: On-Time Performance of Reporting Carriers, Summary: 2004–2009 (Thousands of Flights) .....	22
Table 6: On-Time Performance by Reporting Carriers, By Carrier, 2011 .....	22
Table 7: Travel Agencies with Annual Revenue in Excess of \$100 Million, 2007 .....	23
Table 8: U.S. Airline Industry Ancillary Service Fees: 2004-2010 (Million \$).....	28
Table 9: Complaints by Category, January - December 2011, (Other Than U.S. Airlines).....	31
Table 10: Value of Time for Air Travel (2011 U.S. \$ per person-hour) .....	35
Table 11: Summary of Provision 2: Requirements, Carrier Actions, Costs, and Benefits.....	43
Table 12: Estimated Benefits for Provision 2 and Alternatives -- Time Savings Benefits for Portion of Purchasers of Ancillary Service Fees .....	46
Table 13: Estimated Costs for Provision 2 and alternatives .....	49
Table 14: Additional Airlines If the "Reporting Pool" is Expanded, 2012.....	53
Table 15: Summary of Provision 3: Requirement, Carrier Actions, Costs, and Benefits .....	54
Table 16: Summary of Provision 4: Requirements, Carrier Actions, Costs, and Benefits.....	55
Table 17: Estimated Costs for Provision 3 and 4 .....	59
Table 18: Summary of Provision 5: Requirements, Carrier Actions, Costs, and Benefits.....	62
Table 19: Estimated Costs for Provision 5 .....	65
Table 20: Summary of Costs and Benefits Over 10 Years, Discounted at 7 and 3 Percent (Millions \$).....	69
Table 21: Summary of NPV of Alternatives Over 10 Years, Discounted at 7 Percent (Millions \$).....	72
Table 22: Annual Costs and Benefits that Could be Monetized, By Provision .....	73
Table 23: Sensitivity Analysis Results— Increase in Percentage of Travelers Paying Ancillary Service Fees in Provision 2 .....	76
Table 24: Sensitivity Analysis Results— Adding Business Travelers to Provision 7 .....	77

Table 25: Sensitivity Analysis Results — Increase In Labor Hours for Providing Ancillary Service Fee Information in Provision 7.....	77
Table 26: Hours and Hourly Labor Cost to Prepare and Submit BTS Form 234 and 251 (2010 U.S. \$) .....	79
Table 27: One-Time Set Up Cost for Newly Reporting Carriers to Develop Computer System to Report Required Data to BTS Regularly (2011 U.S. \$).....	80
Table 28: One-Time Implementation Costs Ticket Agents for Provision 4 (2010 U.S. \$) and Number of Impacted Ticket Agents .....	81
Table 29: Value of Time for Air Travel (2011 U.S. \$ per person-hour) .....	82
Table 30: Forecast Growth of Airline Passenger Traffic (per Year) on U.S. Airlines.....	83
Table 31: Percentage of passengers who research ancillary service fees on multiple websites for lowest fees.....	84

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## **ACRONYMS AND ABBREVIATIONS**

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BTS – Bureau of Transportation Statistics

FAA – Federal Aviation Administration

GDS – Global Distribution System

NPRM – Notice of Proposed Rulemaking

NPV – Net Present Value

OMB – Office of Management and Budget

OTA – Online Travel Agency

RIA – Regulatory Impact Analysis

TMC – Travel Management Company

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## EXECUTIVE SUMMARY

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The US Department of Transportation (the Department) is presenting this Regulatory Impact Analysis (RIA) prepared by HDR Decision Economics (HDR) in support of the Notice of Proposed Rulemaking (NPRM) to enhance airline passenger protections in relation to: the display of airline-imposed ancillary service fees; customer service plans for ticket agents; code-share disclosure; and expanding the pool of carriers that report information to the Department, and the information they report. This RIA estimates the economic impact, in terms of all benefits accruing to airline passengers, and costs to U.S. and foreign air carriers and other entities regulated under this proceeding, as required by Executive Order (EO) 12866.

On December 30, 2009, and April 25, 2011, the Department published Final Rules to enhance airline passenger protections (see 74 FR 68983, December 30, 2009, and 76 FR 23110, April 25, 2011). Through these two Final Rules, the Department imposed various requirements on U.S. and foreign carriers, and other sellers of air transportation. The Final Rules included, among other things, requirements associated with tarmac delays and price transparency in the sale of air transportation. U.S. and foreign carriers were required to adopt contingency plans for lengthy tarmac delays and coordinate the plan with each large-, medium-, small-hub and non-hub airport at which they operate or use as a regular diversion airport. With respect to information transparency in the sale of air transportation, in the Final Rule of April 25, 2011, the Department made it mandatory for carriers and ticket agents to disclose information regarding baggage fees to consumers, but deferred action to a future rulemaking on requiring that all ancillary service fees be displayed at all points of sale (which involves the Global Distribution Systems (GDS)).

In this rulemaking, the Department is considering further enhancing the protections afforded to passengers in several areas:

1. Clarify and incorporate into regulation the definition of a “ticket agent” under USDOT regulations;
2. Require that carriers provide the necessary information regarding their basic ancillary service fees to either:
  - All ticket agents to whom they provide flight purchase information so that the ticket agents can display those ancillary service fees; or
  - All ticket agents to whom they provide flight purchase information and that sell air transportation (provision of information to GDSs not required)
3. Expand the pool of carriers that report on-time performance, mishandled baggage, denied boarding and oversales data to the Department (often called “reporting carriers”) from carriers which account for at least 1.0% of domestic scheduled passenger revenues (as currently required) to those carriers which account for at least 0.5% of domestic scheduled passenger revenues;

4. Expand reporting requirements for reporting carriers to include that the carriers file an additional set of reports that includes their domestic code-share partners' on-time performance, mishandled baggage, denied boarding and oversales data;
5. Set minimum customer service standards for ticket agents (similar to those required of carriers);
6. Ensure the disclosure of code-share segments in all marketing carriers' schedules, advertisements and communications with consumers;
7. Additional display requirements for ticket agents to disclose to consumers all carriers marketed (for which the Department is only seeking comments and not proposing rule text):
8. Prohibit undisclosed display bias by ticket agents; and
9. Prohibit post-purchase price increase of baggage fees in connection with the broader prohibition on post-purchase price increases.

Regulatory Impact Analyses (RIA), such as this one, also termed regulatory evaluations, are conducted in support of significant rulemakings with the purpose of evaluating the likely economic effects of the prospective rule and assessing whether, on balance, the expected benefits are likely to outweigh the expected costs. Overall, if benefits exceed costs, a rule is considered to be economically and socially worthwhile. When significant costs and benefits cannot be quantified or monetized, the issuing agency must still seek to evaluate, quantified and monetized or not, whether *all* likely benefit exceed *all* likely costs. The analysis presented in this RIA explains the proposed passenger protections, identifies the need for the Final Rule, defines the scope and parameters of the economic analysis, discusses the rule's anticipated effects, and presents a summary of the expected benefits and costs.

### **Summary of Results**

As shown in Table ES-1, the RIA estimates that over a 10-year period, total discounted cost for the Proposed Rule which could be monetized are expected to exceed discounted benefits which could be monetized by \$53.8 million (at a 7% discount rate). These values do not include estimates of the benefits from several of the provisions, since those benefits could not be measured and valued with confidence. The provision relating to transparency in core ancillary service fees generates the highest measurable costs, \$46.2 million over ten years. Provisions 3 and 4 (which are interconnected and are thus modeled together) have the next highest measurable costs, of \$29.8 million. Except for Provision 2, the benefits could not be quantified and monetized with reasonable accuracy for the rest of proposed provision.

For Provision 2, the benefits which could be monetized did not exceed estimated costs. The benefits estimated for provision 2 do not include all likely benefits. These unquantified potential benefits are associated with greater competition and lower overall prices for ancillary service fees. For those provisions for which benefits which were not able to be monetized, additional calculations were conducted on the net costs to determine minimum levels of non-monetized benefits needed for the provision to be net beneficial.

The analysis includes a threshold value estimation, which represents what the value of the per-passenger unquantified benefits must reach (while unquantified costs are minimal) for costs and benefits to be nearly equivalent. This threshold value was approximately \$0.01 (see table ES-1). In other words, if passengers are willing to pay, on average, one cent per trip for the Final Rule's provision, then the benefits of the Final Rule can be said to outweigh its costs.

**Table ES - 1: Summary of Costs and Benefits Over 10 Years, Discounted at 7 and 3 Percent (Millions \$)**

Provisions		10 Year Analysis Period		
		7% Discount Rate		
		Costs	Benefits	Net Benefits
1	Definition of Ticket Agent			
Monetized Costs and Benefits		N/A	N/A	N/A
2	Carriers provide ancillary service fee information to ticket agencies for display			
Monetized Costs and Benefits		\$46.2	\$25.1	(\$21.1)
Unquantified/ non-monetized benefits or costs <i>Greater Competition and Lower Overall Prices for Ancillary service fees</i> <i>Greater Efficiency by Consumers in Flight Purchases</i> Unquantified/ non-monetized Costs: <i>May Inhibit New Entrants</i> <i>May Decrease Carrier Flexibility to Customize Services</i>		Value of Unquantified Benefits per PAX Needed for Benefits to Equal or Exceed Costs Less than \$0.00 (21.06 M net cost / 1,666 M travelers purchasing via internet - 10 yrs)		
3 & 4	Expand reporting threshold to 0.50% and reporting as mainline carriers and code-share partners combined			
Monetized Costs and Benefits		\$29.8	N/A	(\$29.8)
Unquantified/ non-monetized benefits:  <i>Improved On-Time Performance for Newly Reporting Carriers and Code-Share Flights for All Reporting Carriers</i> <i>Improved Handling of Baggage for Newly Reporting Carriers and Code-Share Flights for All Reporting Carriers</i> <i>Decrease in Oversales</i> <i>Improved Customer Good Will Towards Carriers</i> <i>Insurance Value</i> <i>Improved Public Oversight of the Industry</i> Unquantified/ non-monetized Costs: <i>Increased Training Costs for Gathering Data to Report (some carriers only)</i> <i>Increased Management Costs To Improve Carrier Performance</i>		Value of Unquantified Benefits per PAX Needed for Benefits to Equal or  Exceed Costs \$0.7 (29.75 M net cost / 43.9 M PAX on newly reporting carriers 10 yrs) to Less than \$0.00 (29.75M net cost / 7,335 M all domestic PAX 10 yrs)		

Provisions		10 Year Analysis Period		
		7% Discount Rate		
		Costs	Benefits	Net Benefits
5	Minimum customer service standards for ticket agents			
Monetized Costs and Benefits		\$3.0	N/A	(\$3.0)
Unquantified/ non-monetized benefits: <i>Improved Customer Good Will Towards Ticket Agents</i> <i>Reduced Legal and Administrative Costs to Manage Complaints</i> <i>Faster Resolution of Complaints/Refunds</i> <i>Potential Increase in Competitiveness of Travel Agents vs. Carriers with Customer Protections Similar to Carriers</i> Unquantified/ non-monetized Costs: <i>Increased Training Costs</i> <i>Increased Management Costs</i> <i>Increased Staff Time</i>		Value of Unquantified Benefits per PAX Needed for Benefits to Equal or Exceed Costs Less than \$0.00 (2.95 M net cost / 3,405 M domestic PAX purchasing via travel agents 10 yrs)		
6	Disclosure of code-share segments in schedules, advertisements and communications with consumers			
Monetized Costs and Benefits		N/A	N/A	N/A
7	Disclosure of carriers marketed by ticket agents (no proposed rule text – seeking comments)			
8	Prohibition on undisclosed biasing			
Monetized Costs and Benefits		N/A	N/A	N/A
Unquantified/ non-monetized benefits: <i>Decrease in Incentive Payments to Ticket Agents from Carriers Potentially Leading to Lower Costs to Consumers</i> <i>Potential Decrease in Consumers Not Noticing Flights which Better Meet Their Criteria</i> Unquantified/ non-monetized Costs: <i>Programming Costs to Change Ranking Software/Systems or to Post Notice</i> <i>Legal Costs to Adjust Existing Contracts Currently Requiring Preferential Display</i>				
9	Prohibition of post-purchase price increase for ancillary service fees			
Monetized Costs and Benefits		N/A	N/A	N/A
Unquantified/ non-monetized benefits: <i>Improved Customer Good Will Towards Ticket Agents</i> <i>Reduced Legal and Administrative Costs to Manage Complaints</i>				
TOTAL (All Proposed Provisions)*		\$79.0	\$25.1	(\$53.8)
Value of Unquantified Benefits Per Passenger Needed for NPV to Equal at Least \$0				\$0.01

\*Note: Details may not sum to totals in table due to rounding.

## **The Effect of Alternative Scenarios**

The Department considered multiple alternatives to individual provisions of this Final Rule. In addition to considering each provision individually (such as the option to implement all provisions except #6, or all except #4, for example) the Department also considered three additional variations to specific provisions. Alternative A would lower the threshold for defining a reporting carrier from 1% of domestic airline passenger revenue to 0.25% of domestic airline passenger revenue, instead of to 0.5% of domestic airline passenger revenue. Alternative B would require reporting carriers to continue to report their data separately for themselves and to submit another set of data for code-share flights alone. Alternative C would require that carriers provide the necessary information to ticket agencies and global distribution systems (GDSs) that would enable those agents and GDSs to sell basic ancillary services directly, instead of just providing pricing information for those services.

Table ES-2 reports net benefits for the provisions in the Proposed Rule under these three alternative regulatory scenarios outlined above. Net benefits are shown for each provision *with the values shaded in gray where the alternative impacts values*. Alternatives A and B generate higher net costs than the Proposed Rule. Alternative C, which would enable consumers to obtain information about ancillary service fees from GDSs and purchase ancillary services from ticket agencies and GDSs, would generate greater benefits, leading net benefits to improve, from negative \$53.8 million to negative \$4.0 million. The Department has decided however not to propose a rule requiring “transactability” of ancillary services through ticket agents and GDSs due to the uncertain nature of current developments within the industry and so as not to conflict with business negotiations and the marketplace. However, one of the alternatives in the Proposed Rule on which the Department seeks comment is to require transactability. The Department may revisit the transactability of ancillary service fees in the future if appropriate.

**Table ES - 2: Summary of NPV of Alternatives Over 10 Years, Discounted at 7 Percent (Millions \$)**

Provisions		10 Year Analysis Period of Net Benefits			
		Proposed Rule	Alternatives		
			A Expand definition of a “reporting carrier” to at least <b>0.25% of domestic scheduled passenger revenues</b>	B Reporting carriers to report their code-share flights <b>separated</b> from their own flights	C Carriers to provide ancillary service fee information to <b>ticket agencies and</b> that these services be transactable
1	Definition of ticket agents	\$0.0	\$0.0	\$0.0	\$0.0
2	Carriers provide ancillary service fee information to ticket agencies for display	(\$21.1)	(\$21.1)	(\$21.1)	\$28.7
3 & 4	Lower reporting threshold to 0.50% and submit additional set of reports for code-share partners (combined report)	(\$29.8)	(\$31.7)	(\$34.1)	(\$29.8)
5	Minimum customer service standards for ticket agents	(\$3.0)	(\$3.0)	(\$3.0)	(\$3.0)
6	Disclosure of code-share segments in schedules, advertisements and communications with consumers	\$0.0	\$0.0	\$0.0	\$0.0
7	Disclosure of carriers marketed by ticket agents (no proposed rule text – seeking comments)	N/A	N/A	N/A	N/A
8	Prohibition on undisclosed biasing	N/A	N/A	N/A	N/A
9	Prohibition of post-purchase price increase for baggage fees	\$0.0	\$0.0	\$0.0	\$0.0
<b>TOTAL (Proposed Provisions)*</b>		(\$53.8)	(\$55.8)	(\$58.2)	(\$4.0)

\*Note: Details may not sum to totals in table due to rounding.

## **The Nature of Competition and Regulatory Response**

During the proceedings that led to the 2011 rule, the Department reached out extensively to air travel stakeholders, including individual carriers, airline trade associations, and consumer groups. Considerable comment and significant disagreements were voiced regarding the provision relating to the display of ancillary service fee information. Some stakeholders presented the Department with the argument that monopolistic practices (such as price shrouding and obfuscation) explain the absence of full disclosure and transactability of ancillary service fees on GDSs and OTAs. Others have argued that airlines are exhibiting a form of behavior known as myopia, in which they focus on the short-run benefits (greater control of access to customers, or decreased fees to GDSs) to their long-term detriment (greater overall consumer dissatisfaction and limited demand).

The domestic airline industry is concentrated among a small number of firms, which itself might create the conditions for monopolistic behavior. On the other hand, the federal government deregulated the airline industry in 1978 on the grounds that, while the industry is indeed concentrated, the market for air travel is sufficiently “contestable” to sustain competitive outcomes.

In addition to the airlines potentially exercising anti-competitive behavior, some stakeholders suggest it is the GDSs that are engaging in anti-competitive behavior, including charging carriers unreasonably high prices and limiting carriers’ ability to freely customize products and price them accordingly. The global distribution systems’ portion of the air travel sector is very highly concentrated. Proponents of the view that the GDSs are exerting market power point to high industry profit margins, potentially significant differences in transaction costs for similar activities performed by carriers and GDSs, and the bundling of multiple travel agent products with different renewal cycles which creates barriers to new entrants. The poor market outcomes being witnessed today in terms of product transparency and transactability are partially the result of what Behavioral Economists call rationality-limiting heuristics – essentially decision-making shortcuts that are based on previous experience, not on a rational examination of all possibilities – though they could also be the product of more anti-competitive behavior. Research conducted for this analysis was inconclusive regarding the degree to which the industry is competitive.

Therefore, this regulatory analysis supports an incremental approach, one that will protect consumers while allowing carriers, GDSs and travel agencies to develop a private industry-based solution that limits the risk of undue government interference in the marketplace. As such, the Department’s proposed Final Rule would require only disclosure of basic ancillary service fees to ticket agents and GDSs; transactability would not be required by the Rule. By requiring the industry to move in the direction of fuller disclosure, the Department believes that the market might well by itself recognize associated benefits and introduce appropriate changes, including transactability. If, over time, the Department discovers that additional regulation is necessary to protect consumers, further regulatory action can of course be considered.

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## **1. INTRODUCTION**

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The US Department of Transportation (the Department, or the USDOT) is presenting this Regulatory Impact Analysis (RIA) prepared by HDR Decision Economics (HDR) in support of the Notice of Proposed Rulemaking (NPRM) to enhance airline passenger protections in relation to: the definition of ticket agent and how carriers and ticket agents, display of airline-imposed ancillary service fees; customer service plans for ticket agents; code-share disclosure; and expanding the pool of carriers that report information to the Department, and the information they report. This RIA estimates the economic impact, in terms of all benefits accruing to airline passengers, and costs to U.S. and foreign air carriers, and other entities regulated under this proceeding, as required by Executive Order (EO) 12866.

On December 30, 2009, and April 25, 2011, the Department published two Final Rules to enhance airline passenger protections. See 74 FR 68983 (December 30, 2009) and 76 FR 23110 (April 25, 2011). Through these two Final Rules, the Department imposed various requirements on U.S. and foreign carriers. The Rules included, among other things, requirements associated with tarmac delays and price transparency in the sale of air transportation. U.S. and foreign carriers were required to adopt a contingency plan for lengthy tarmac delays and coordinate the plan with each large-, medium-, small-hub and non-hub airport at which they operate or use as a regular diversion airport. With respect to information transparency in the sale of air transportation, in the April 25, 2011, Final Rule, the Department made it mandatory for carriers and ticket agents to disclose information regarding baggage fees to consumers, but deferred action to a future rulemaking on requiring that all ancillary service fees be displayed at all points of sale (which involves the Global Distribution Systems (GDSs)).

In this rulemaking, The Department is seeking to further safeguard consumers by requiring greater transparency with regards to both prices and the exact nature of the ‘product’ being sold, and also requiring a minimum level of service from carriers and travel agents. The specific provisions include:

1. Clarify and incorporate into regulation the definition of a “ticket agent” under USDOT regulations;
2. Require that carriers provide the necessary information regarding their basic ancillary service fees to either:
  - All ticket agents to whom they provide flight purchase information so that the ticket agents can display those ancillary service fees; or
  - All ticket agents to whom they provide flight purchase information and that sell air transportation (provision of information to GDSs not required)
3. Expand the pool of carriers that report on-time performance, mishandled baggage, denied boarding and oversales data to the Department (often called “reporting carriers”) from carriers which account for at least 1.0% of domestic scheduled passenger revenues (as currently required) to those carriers which account for at least 0.5% of domestic scheduled passenger revenues;

4. Expand reporting requirements for reporting carriers to include that the carriers file an additional set of reports that includes their domestic code-share partners' on-time performance, mishandled baggage, denied boarding and oversales data;
5. Set minimum customer service standards for ticket agents (similar to those required of carriers);
6. Ensure the disclosure of code-share segments in all marketing carriers' schedules, advertisements and communications with consumers;
7. A requirement that ticket agents disclose to consumers which carriers it markets (for which the Department is only seeking comments and not proposing rule text);
8. Prohibit undisclosed display bias by ticket agents; and
9. Prohibit post-purchase price increase of baggage fees in connection with the broader prohibition on post-purchase price increases.

To support a rulemaking, a RIA is conducted to evaluate the likely economic effects of the prospective Rule and to assess whether, on balance, the expected benefits are likely to outweigh the expected costs. Overall, if benefits exceed costs, a Rule is considered to be in the public's interest. Even when significant costs and benefits cannot be quantified or monetized, the issuing agency must still seek to evaluate whether all likely benefits exceed all likely costs. The analysis presented in this RIA explains the proposed passenger protections, identifies the need for the Final Rule, defines the scope and parameters of the economic analysis, discusses the Final Rule's anticipated effects, and presents a summary of the expected benefits and costs.

This document provides an economic evaluation for each of the provisions in the Final Rule. For each provision addressed in the NPRM, we present its economic rationale. For some provisions, the RIA is unable to provide an estimate for costs and/or benefits because of the limited amount of data available. For Provision 2, both costs and benefits are estimated for the provisions and its associated alternatives. For all other provisions, benefits are not quantified due to lack of adequate data; for Provisions 1, 6, 7, 8, and 9 costs are not quantified because they are considered minimal or uncertain, or considered a codification of current policy.

This RIA provides information on current regulatory requirements, Department enforcement policy, and industry practices; specifies the nature of the benefits and a cost associated with the Final Rule; and indicates the sources of data used to quantify these costs and benefits, where possible. Benefit and cost estimates are presented for individual provisions, and the aggregate benefits and costs are used to determine the present value of net benefits over a 10-year time period. As per OMB guidelines, these results are annualized and discounted to reflect the time value of money using real discount rates of 3 percent and 7 percent.

## **1.1 Stated Need for Regulation**

The Department has explicit authority to protect consumers from unfair or deceptive practices and to ensure safe and adequate service in air transportation. The Final Rules published in 2009 and 2011 aimed at enhancing airline passenger protections were designed to ensure minimum levels of consumer comfort and customer service, and more transparent information flow

between consumers and air carriers. The Department undertook these rulemakings in response to a history of persistent flight delays, significant on-board delays, increasing customer complaints, and a report by the USDOT Inspector General in 2000 which concluded that carriers had not done enough to ensure minimum passenger care. The 2009 and 2011 Final Rules were met with strong positive consumer response and have been followed by significant improvements in some measures of airline performance (such as notable decreases in lengthy tarmac delays).

Yet the Department continues to receive significant numbers of complaints regarding transparency of ticket prices, fees, information concerning air transportation, and the sale of air travel related to travel agencies.

In addition, the United States Government Accountability Office (GAO) has issued two reports which make recommendations regarding the need for greater price and fee transparency for air travel purchases. In September 2011, the GAO issued a report, *Airline Passenger Protections: More Data and Analysis Needed to Understand Effects of Flight Delays*, which recommended that USDOT “collect and publicize more comprehensive on-time performance data” and suggested requirements similar to two of the provisions of this Final Rule (“requiring airlines with a smaller percentage of the total domestic scheduled passenger service revenue, or airlines that operate flights for other airlines, to report flight performance information.”)

The GAO’s July 2010 report, *Consumers Could Benefit from Better Information about Airline-Imposed Fees and Refundability of Government-Imposed Taxes and Fees*, included recommendations that USDOT issue additional requirements to gather greater information on carrier fees, and ensure the disclosure of baggage and other fees for optional services and that such information “be consistently disclosed across all distribution channels used by the airline.” This recommendation is very similar to provision 6 of this proposed Final Rule.

The USDOT believes that regulation is warranted to ensure fair advertising and communication of critical information to air travel consumers as well as minimum customer service standards such that consumers are protected from unfair treatment.

### **A Balanced Approach to Air Travel Information Transparency**

If the market for airline services met textbook definitions of “perfect competition” and “perfect rationality,” consumers would bring about “welfare-maximizing” outcomes through their role in the automatic dynamics of demand and supply. Product attributes such as customer service and airline transparency about prices and conditions of supply would satisfy consumer expectations without the need for government regulatory intervention.

The ability to access full information related to a transaction, whether or not each consumer actually has access to and use of that information, is a pre-requisite of “perfect competition.”

Yet, as noted above, the volume of passenger complaints regarding certain attributes of customer service and product transparency convinces the Department that the market is not, at present, delivering welfare-maximizing outcomes. But it is not certain whether this is the result of imperfect competition (such as monopoly or oligopolistic behavior) or imperfect

rationality (i.e. businesses making ‘bad’ or not smart choices). The difference between the two is not trivial and helps dictate the degree to which government intervention is warranted. If monopolistic behavior of the airlines (or GDSs) were the main reason behind the consumer issues examined here, a strong or ‘aggressive’ regulatory response would be justified. On the other hand, if airlines or GDSs are simply behaving, as consumers often do, with a degree of myopia, short-sightedness or other such “heuristics” of real-life, then the preferred approach would be one that seeks the basic consumer protections through minimal government intervention, allowing the forces of the marketplace to work to greater market efficiency.

During the proceedings that led to the 2011 rule on enhancing airline passenger protections, the Department reached out extensively to air travel stakeholders, including individual carriers, airline trade associations, and consumer groups. Considerable comment and significant disagreements were voiced on provision 6, regarding the display of ancillary service fee information. Some stakeholders presented the Department with the argument that monopolistic practices (such as price shrouding and obfuscation) explain the absence of full disclosure and transactability of ancillary service fees on GDSs and OTAs. Others have argued that airlines are exhibiting a form of behavior known as myopia, in which they focus on the short-run benefits (greater control of access to customers, or decreased fees to GDSs) to their long-term detriment (greater overall consumer dissatisfaction and limited demand).

The domestic airline industry is concentrated among a small number of firms, which itself might create the conditions for monopolistic behavior. On the other hand, the federal government deregulated the airline industry in 1978 on the grounds that, while the industry is indeed concentrated, the market for air travel is sufficiently “contestable” to sustain competitive outcomes. At the same time, there is even greater concentration in the number of GDSs which serve the domestic U.S. market. Several carriers claim that it is the GDS who exhibit market power, noting the disparity between airline return on invested capital (two to three percent) and the return on investment for GDSs (20 percent). Both carriers and GDSs have recently been involved in litigation regarding the nature of the display of flight data, fees, contracts, and other issues. The Department of Justice is examining this issue further.

The poor outcomes being witnessed today in terms of product transparency and transactability are partially the result of what Behavioral Economists call rationality-limiting heuristics – essentially decision-making shortcuts that are based on previous experience, not on a rational examination of all possibilities – though they could also be the product of more anti-competitive behavior. Research conducted for this analysis was inconclusive regarding the degree to which observed industry behavior is only a result of myopia; or delayed contesting actions by some carriers; or of a fundamental problem with current industry structure.

Therefore, it is recommended that the Department adopt an incremental approach, one that will hopefully ‘nudge’ carriers, GDSs and travel agents into developing a private industry-based solution. For example, some stakeholders have pressed the Department to require airlines to disclose ancillary service fees through all ticket agents, including GDSs, and also to require ancillary service fee “transactability” through both such channels. In response, the Department’s Proposed Rule would require only disclosure through ticket agents not

transactability. This is not because full transparency and transactability are not considered to be attributes of a well-functioning market for air travel: indeed, our analysis demonstrates that economic benefits would exceed those of the Proposed Rule nearly three-fold. Rather, by nudging the industry in the direction of fuller disclosure and transactability, the Department believes that the market will by itself recognize such benefits and introduce appropriate changes accordingly. If however, in the fullness of time, the Department is proven wrong in this assumption, further regulatory action can of course be considered.

## 1.2 Proposed Regulation

The provisions being considered in this proceeding can be grouped into three broadly defined “purpose” categories:

1. Customer Service [provision 5]
2. Product Transparency [provision 1, provision 3, provision 4, provision 6]
3. Price Information [provision 2, provision 8, provision 9 ]

These provisions, plus three alternative scenarios to specific provisions upon which the Department is seeking comment but not proposing rule text, are summarized in Table 1 below.

**Table 1: Proposed Provisions and Alternatives**

Provision	Requirement Description
1	Definition of Ticket Agent
2	Carriers provide basic ancillary service fee information to ticket agents: either to all ticket agents to which it provides its fare information, including GDSs, or all ticket agents to which it provides its fare information, if the ticket agent sells to consumers
Alt C	<i>Carriers provide ancillary service fee information to ticket agencies and GDSs, <b>so that consumers can purchase ancillary services from ticket agencies/GDSs</b></i>
3	Expand the definition of a “reporting carrier” to one which accounts for at least 0.5 percent of domestic scheduled passenger revenues (the current requirement stipulates only carriers with at least 1.0 percent of domestic scheduled passenger revenues)
4	Expand reporting requirements for reporting carriers to include an additional, combined set of reports for both the carrier’s own flights and its code-share partners flights’ on-time performance, mishandled baggage, and denied boarding and oversales
Alt A	<i>Expand the definition of a “reporting carrier” to include all those which account for at least <b>0.25 percent of domestic scheduled passenger revenues</b>.</i>
Alt B	<i>Expand reporting requirements for reporting carriers to include an additional, separate set of reports which contains data only for carriers’ code-share flights</i>
5	Minimum customer service standards for ticket agents
6	Disclosure of code-share segments in schedules, advertisements and communications with consumers
7	Disclosure of carriers marketed by ticket agents
8	Prohibition on undisclosed biasing
9	Prohibition of post-purchase price increase for ancillary service fees

Additional information regarding related regulations, industry practices, and the need for additional regulation for each proposed provision is provided in Chapter 4.

Note that descriptions of the Final Rule’s provisions presented in this RIA are for informational use only; refer to the Final Rule text itself and the preamble for definitive language on the rules provisions as well as more detail on definitions, intents, and legal authority.

### **1.3 Report Organization**

The report is organized in the following structure: Chapter 2 provides an overview of the air transportation sector; Chapter 3 discusses the inputs and assumptions used in the RIA; Chapter 4 presents the results of the evaluation of each proposed provision; Chapter 5 examines the RIA results by incorporating risk factors and includes the sensitivity analysis and conclusions.

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## **2. AN OVERVIEW OF THE AIR TRANSPORTATION SECTOR**

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This chapter provides an overview of key characteristics of the passenger air travel sector, including: U.S. and foreign air carriers, travel agencies, tour operators and GDSs, ancillary service fees, complaints, and the history and issues regarding the GDSs. These characteristics and issues help define the industry baseline and some key parameters used in the analysis.

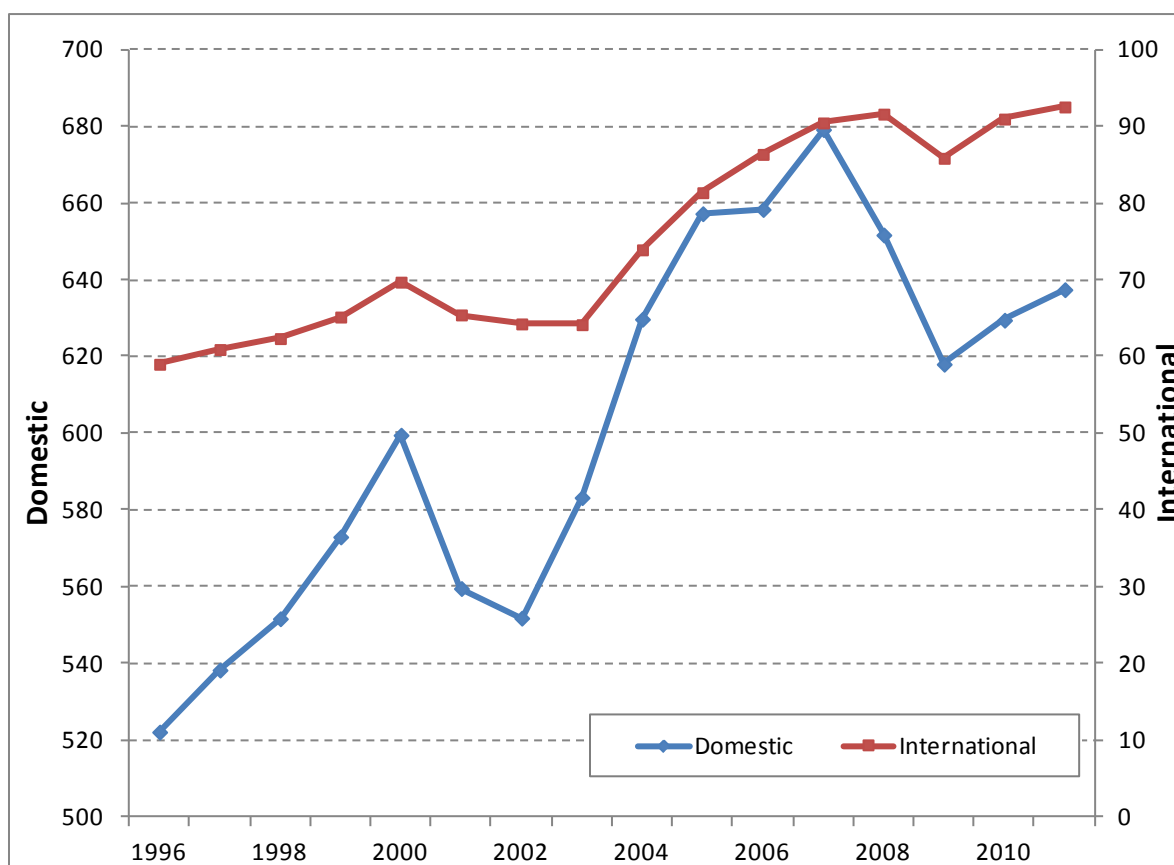
### **2.1 U.S. and Foreign Air Carriers**

There are over 300 U.S. and foreign air carriers providing some combination of scheduled and nonscheduled passenger and all-cargo air service within the U.S. and/or international destinations. According to 2010 Bureau of Transportation Statistics (BTS) data, within those 300 carriers, there were 59 U.S. carriers and 117 foreign carriers offering scheduled passenger and cargo services arriving or departing a U.S. airport.

Growth in enplanements fluctuated in the past fifteen years, in parallel with the business cycle. The number of enplanements has typically risen each year during the past two decades, but in 2001 and 2002 and again in 2008 and 2009, domestic enplanements fell by more than 7 percent (over each two year period, see Figure 1). These fluctuations are tied to multiple shocks, including recessionary periods, the terrorist attacks on September 11, 2001 and increasing fuel prices. The recent recession is the primary factor behind the significant declines in domestic enplanements from 2007 to 2009, with a partial recovery in the subsequent years. International enplanements have maintained a steadier pattern of growth during the past 15 years and enplanements in 2011 were approximately one and a half times the number in 1996.

After the economy fully recovers, the demand for air travel is expected to grow again, followed by a moderate rate of increase in the long run. The Federal Aviation Administration (FAA) Aerospace Forecast for 2012 to 2025 projected an annual increase of 2.3 percent for domestic air passengers and an annual increase of 3.9 percent for international air travelers (Table 30 in Appendix B: Benefit Related Data). These expected forecasts of passenger travel are used in the analysis as baseline growth rates.

**Figure 1: U.S. Air Carrier Scheduled Passenger Enplanements, 1996-2011**



Source: Bureau of Transportation Statistics

Several provisions of this Proposed Rule apply only to “reporting carriers,” so called because of specific requirements to report additional information to the US Department of Transportation. Reporting carriers must report information to BTS monthly on lengthy tarmac delays, on-time performance, and baggage handling, and or quarterly for denied boarding and oversales and incidents relating to transport of animals.

Currently, reporting carriers are those carriers with at least 1 percent of domestic scheduled passenger service revenues. As the airline industry has undergone consolidation in recent years, the number of reporting carriers in the U.S. has decreased from 16 carriers in 2011 to 13 carriers in 2012 (Table 2).<sup>1</sup> In the past two years, United has acquired Continental, ExpressJet has acquired Atlantic Southeast, and Southwest has acquired AirTran. Among the 13 reporting

<sup>1</sup> Note that currently, merged carriers Southwest and AirTran are reporting service data separately, but are expected to report that data as a single entity soon. In 2012, Pinnacle was not a mandatory reporting carrier, but became one at the start of 2013. Comair was a reporting carrier in 2011, but was not in 2012.

carriers listed in Table 2, six are mainline carriers (Alaska, American, Delta, Hawaiian, United, and US Airways), four are low-cost model airlines (Frontier, JetBlue, Southwest, and Virgin America), and three are regional carriers (American Eagle, ExpressJet, and SkyWest).

Several of the provisions differentiate between marketing and non-marketing carriers and/or their code-share partners. In 2010, there were 59 U.S. carriers providing scheduled passenger and cargo services within, to and from the U.S. Approximately half of those carriers sell tickets directly to the public and are thus considered ‘marketing carriers.’ Carriers that do not sell tickets directly to the public operate their flights under code-share agreements with other marketing carriers and are listed on the contracting carriers’ schedules (Table 2). For example, among the 13 reporting carriers, three carriers do not sell tickets to the public and operate flights for their code-share partners: American Eagle operates flights for Alaska, American and Delta; SkyWest operates flights for AirTran, Alaska, Delta, United and U.S. Airways; ExpressJet operates flights for United, U.S. Airways and Delta. A few small regional carriers, such as Mesa and Great Lakes, operate under contract and also offer independently-marketed flights. According to the February 2012 Official Airline Guide (OAG), there are 167 carriers (U.S. and foreign carriers) that market and sell tickets in the U.S.

**Table 2: "Reporting Carriers" and "New reporting Carriers if lowering the Reporting Pool to 0.5%" 2012**

Impacted Carriers		Number of Code-Share Partners
<b>Existing Reporting Carriers With Code-Share Partners And Market Code-Share Flights</b>		
1	Alaska	11
2	American	5
3	Delta	11
4	Frontier	2
5	Hawaiian	2
6	JetBlue	2
7	United/Continental*	14
8	US Airways	14
9	Virgin America	1
<b>Existing Reporting Carriers With Code-Share Partners But Not Market Code-Share Flights</b>		
10	American Eagle	1
11	SkyWest	4
12	Express Jet/ Atlantic Southeast*	2
<b>Existing Reporting Carrier Without Code-Share Partner</b>		
13	Southwest /AirTran*	0
<b>New Reporting Carriers With Code-Share Partners But Not Market Code-Share Flights</b>		
1	Air Wisconsin	2
2	Horizon**	1
3	Pinnacle***	1
4	Republic	3
5	Shuttle America	2
<b>New Reporting Carrier With Code-Share Partners and Only Market Their Own Tickets</b>		
6	Mesa****	1
<b>New Reporting Carriers Without Code-Share Partners and Market Their Own Tickets</b>		
7	Allegiant	0
8	Spirit	0

Notes: Currently, Southwest and AirTran are reporting service data separately, but are expected to reporting as a single entity soon. \* indicates Airlines that were merged. \*\*Horizon fell under the 0.5% reporting threshold in 2012, but it would be under 0.25% threshold in 2013; \*\*\*In 2013, Pinnacle became a mandatory reporting carrier under 1% threshold; \*\*\*\*Mesa is a voluntary reporting carrier currently, but would become mandatory reporting carrier under the 0.5% threshold.

Source: USDOT; Multiple sources used to estimate the number of code-share partners for reporting carriers including carriers' websites, and Flight Guide North America, Official Aviation Guide, February 2012. The number of code-share partners of each reporting carriers/new reporting carriers may be changed as this information was based on a survey study HDR study team conducted in March 2012.

Most U.S. air passenger travel is on scheduled service flights. In 2010, the 13 reporting carriers conducted 6.0 million departures (59.2 percent of total departures performed) and carried 604 million passengers (82.2 percent of total passengers transported). On average, reporting carriers' aircrafts can take more passengers (100 passengers per departure) than non-reporting carriers (31 passengers per departure) (Table 3). The passengers making these 604 million enplanements in 2010 purchased over 250 million tickets from the reporting carriers in 2010, at an average fare of \$347 (in 2011 dollars).

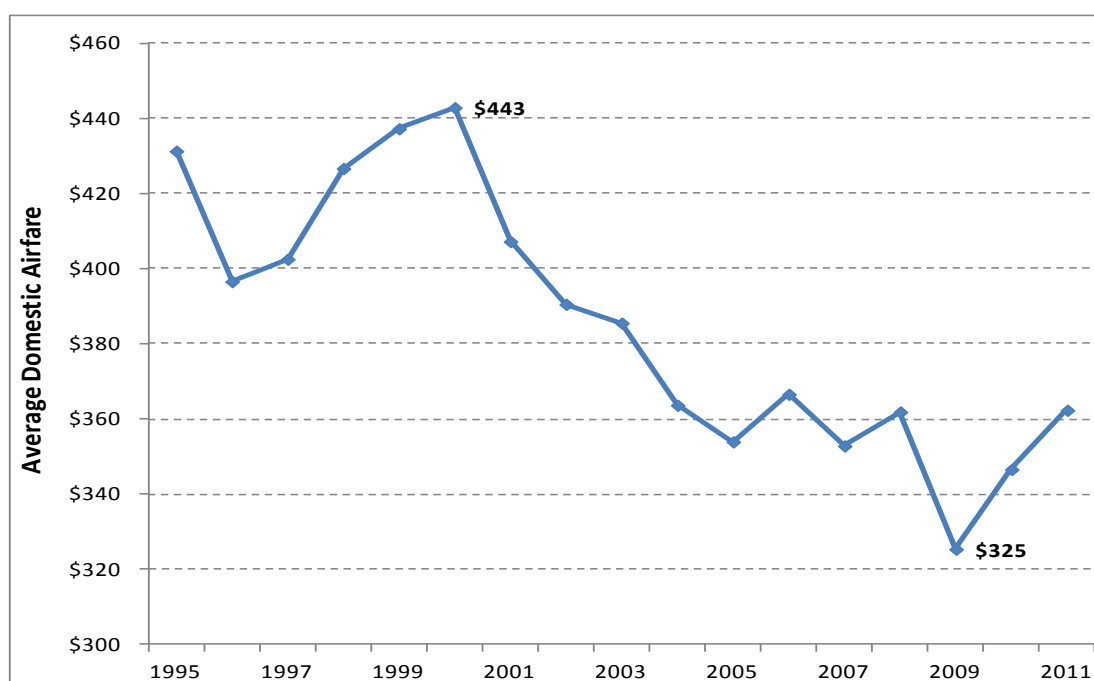
**Table 3: Scheduled Passenger Service on U.S. Carriers (domestics and international), 2010**

	Carriers		Departures		Enplanements		Avg. Enplanements per Departure
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	
Reporting Carriers	13	22%	6,032,139	59%	604,351,061	82%	100
Other U.S. Carriers	46	78%	4,153,659	41%	130,830,733	18%	31
<b>Total</b>	<b>59</b>		<b>10,185,798</b>		<b>735,181,794</b>		<b>72</b>

Source: Air Carriers: T-100 Segment (US Carriers Only), 2010, RITA, TranStats

The average U.S. domestic-itinerary fare declined markedly from 2000 to 2009, and has increased slightly since then. In 2000, the average air fare was \$443 (per itinerary); by 2009 the average fare had fallen by more than 25 percent to \$325 (per itinerary) as shown in Figure 2. In 2011, the average fare rose to \$362.

**Figure 2: Average U.S. Domestic-Itinerary Fare in 2011 Dollars**



Notes: Fares based on domestic itinerary fares. Itinerary fares consist of round-trip fares unless the customer does not purchase a return trip. In that case, the one-way fare is included. Fares are based on the total ticket value which consists of the price charged by the airlines plus any additional taxes and fees levied by an outside entity at the time of purchase. Fares include only the price paid at the time of the ticket purchase and do not include other fees paid at the airport or onboard the aircraft. Averages do not include frequent-flyer or "zero fares" tickets or a few abnormally high reported fares.

Rate calculated using Bureau of Labor Statistics Consumer Price Index.

Source: Bureau of Transportation Statistics

U.S. carriers account for a majority of international departures and passengers to and from the U.S. (61.6 percent of international departures and 55.9 percent of international passengers). Foreign carriers may transport passengers between two U.S. airports only on segments of flights that originate from or continue to international points (about 0.3 percent of domestic departures).

**Table 4: Scheduled Passenger Service of US and Foreign Carriers, 2010 (Enplaned Passengers)**

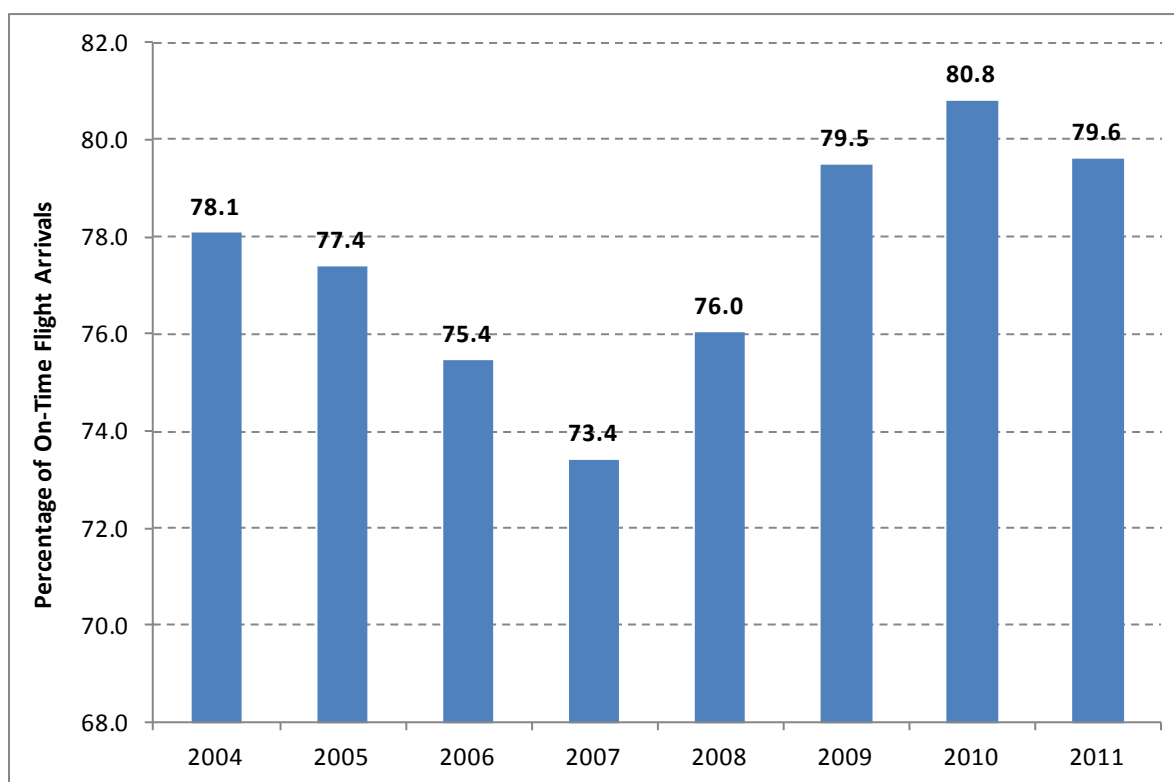
Category	Domestic	International	Combined
<b>Departures</b>			
U.S. Carriers	9,292,284	893,514	10,185,798
Foreign Carriers	27,993	557,704	585,697
<b>Total</b>	<b>9,320,277</b>	<b>1,451,218</b>	<b>10,771,495</b>
<b>Passengers (Segment)</b>			
U.S. Carriers	645,928,308	89,253,486	735,181,794
Foreign Carriers	530,025	70,805,319	71,335,344
<b>Total</b>	<b>646,458,333</b>	<b>160,058,805</b>	<b>806,517,138</b>
<b>Passengers (Market)</b>			
U.S. Carriers	632,111,246	89,197,727	721,308,973
Foreign Carriers	11,473	70,369,187	70,380,660
<b>Total</b>	<b>632,122,719</b>	<b>159,566,914</b>	<b>791,689,633</b>
<b>Passengers (Segment)/Departures</b>			
U.S. Carriers	69.5	99.9	72.2
Foreign Carriers	18.9	127.0	121.8
<b>Total</b>	<b>69.4</b>	<b>110.3</b>	<b>74.9</b>

*Note: If a flight's origin and destination are within the U.S., it is counted as a domestic departure; otherwise, it is counted as an international departure.*

*Source: Air Carriers: T-100 Domestic Segment and Market Database (All Carriers), 2010, RITA, TranStats*

Airline on-time performance has exhibited a marked turnaround in recent years. The percentage of flights arriving on-time (defined as no more than 15 minutes after scheduled arrival time) declined steadily from 78.1 percent in 2004 to 73.4 percent in 2007. The trend then reversed so that on-time performance exceeded 79 percent in 2009, 2010, and 2011 (Figure 3).

**Figure 3: 2004-2010 Major U.S. Air Carrier On-Time Performance**



Source: USDOT, *BTS, On-Time Performance Data, 2010*; *National Transportation Statistics, Table A-13 Major US Air Carrier On-Time Performance*

Nevertheless, a substantial number of flights experienced performance issues. In 2009, 1.1 million flights departed late, 1.2 million flights arrived late<sup>2</sup>, 87 thousand flights were canceled, and 15 thousand flights were diverted.<sup>3</sup> The number of late departures fluctuated between 2004 and 2009 (from a high of 1.6 million in 2007 to a low of 1.1 million in 2009) as did the number of cancelled flights (from a high of 161 thousand in 2007 to a low of 87 thousand in 2009), while the rate of diverted flights has remained fairly steady (see Table 5). In 2011, among those flights that arrived at least 15 minutes late, approximately 28 percent of flight delays were due to the air carrier, 3 percent of delays caused by weather.

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<sup>2</sup> According to BTS definitions, if a flight departs or arrives 15 minutes late, it is regarded as a late departure or arrival flight (respectively).

<sup>3</sup> A late flight departure does necessarily not mean the flight will arrive late because pilots can make up time in transit. However, a late departure does increase the probability of a late arrival late.

**Table 5: On-Time Performance of Reporting Carriers, Summary: 2004–2009 (Thousands of Flights)**

Year	Total Operations	Late Departures	Late Arrivals	Cancelled Flights	Diverted Flights	On-Time Flights	
						(#)	(%)
2004	7,129	1,188	1,421	128	14	5,566	78.1
2005	7,141	1,279	1,466	134	14	5,527	77.4
2006	7,142	1,425	1,616	122	16	5,388	75.4
2007	7,455	1,573	1,804	161	17	5,473	73.4
2008	7,008	1,327	1,525	137	17	5,329	76.0
2009	6,450	1,086	1,218	87	15	5,130	79.5

Source: USDOT, National Transportation Statistics 2010, table 1-62

On-time performance varies among reporting carriers, and in 2011 ranged from a high of 93 percent to a low of 73 percent, a variance of 20 percentage points. Among carriers with the highest on-time performance were Hawaiian Airlines at 92.78 percent and Alaska Airlines at 88.2 percent.

**Table 6: On-Time Performance by Reporting Carriers, By Carrier, 2011**

Carrier	Percent of On-Time Arrivals
Hawaiian Airlines Inc.	92.78
Alaska Airlines Inc.	88.20
AirTran Airways Corporation	84.43
Mesa Airlines Inc.	83.73
Delta Air Lines Inc.	82.29
Southwest Airlines Co.	81.33
United Air Lines Inc.	80.16
US Airways Inc.	79.79
SkyWest Airlines Inc.	79.34
Frontier Airlines Inc.	79.16
American Airlines Inc.	77.79
Continental Air Lines Inc.	77.13
American Eagle Airlines Inc.	76.35
ExpressJet Airlines Inc.	75.15
JetBlue Airways	73.34

Source: USDOT, BTS, Airline On-Time Performance Data, 2011

## 2.2 Travel Agencies, Tour Operators and GDSs

This Proposed Rule affects carriers, travel agencies and tour operators. Provisions, 2, 5, and 7 relate to advertising, the display of information and customer service that impact travel agencies and the GDSs as well as clarifying the definition of a ticket agent for USDOT regulatory purposes. Tour operators that sell tickets to passengers for scheduled passenger service flights either separately or as part of a larger travel package may also be impacted.

The ‘travel agency’ category includes online travel agencies (OTAs), brick-and-mortar travel agencies, and corporate travel agencies using global distribution systems (GDS) formerly known as computer reservations system (CRS) to book and sell airline tickets. Before the evolution of direct online sale of tickets to consumers, air travel was primarily purchased through “brick and mortar” travel agents or directly from the carrier. That has changed dramatically in recent years as more consumers search online and purchase tickets from online travel agencies or directly from the airline itself. Nevertheless, the U.S. had more than 11,800 travel agencies in 2007 and more than 4 million tour operators (Table 7). These travel agencies and tour operators were mostly small businesses with fewer than 20 employees per firm and only a small portion of them had online ticketing capacity. Among them, only 81 firms have annual revenue in excess of \$100 million.

**Table 7: Travel Agencies with Annual Revenue in Excess of \$100 Million, 2007**

NAICS Description*	NAICS	Total Firms	Est. Receipt size classes,\$100 M,+**
Travel Agencies*	56151	11,803	57
Tour Operators*	56152	4,210,682	24

\* North American Industry Classification System. Travel Agencies comprises establishments primarily engaged in acting as agents in selling travel, tour, and accommodation services to the general public and commercial clients. Tour Operators comprises establishments primarily engaged in arranging and assembling tours. The tours are sold through travel agencies or tour operators. Travel or wholesale tour operators are included in this industry.

\*\* Firms with annual revenue in excess of \$100 million.

Source: Small Business Administration, 2007

The large online travel agencies dwarf most of the rest of the industry. The four largest online travel agencies—Expedia, Orbitz, Priceline, and Travelocity—reportedly account for 96 percent of all online sales by travel intermediaries in the leisure travel market segment.<sup>4</sup>

### The Role of Global Distribution Systems (GDSs)

The major online intermediaries that provide customized flight searches and sell tickets for airlines are known as global distribution systems (GDSs). GDSs play an important role in the air travel industry, linking carriers and travel agencies and tour operators. They consolidate and

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<sup>4</sup> PhoCusWright, *The Role and Value of the Global Distribution System in Travel Distribution*, November 2009

distribute information regarding airfares including ancillary service fees, connect carriers, travel agencies and corporate travel management companies, and facilitate the sale and distribution of tickets.

In the U.S., there are three major GDSs: Travelport, Sabre, and Amadeus. Among them, Sabre and Travelport provide infrastructure to process both online and offline transactions for most travel agencies and tour operators, with Sabre having the largest market share. Meanwhile, Sabre and Travelport, in addition to connecting carriers and travel agencies and travel management companies, have significant ownership interest in large OTAs as well (online travel agencies Travelocity and Orbitz, respectively) allowing them direct links to consumers. In the U.S., GDSs processed \$98.7 billion in travel agency and OTA bookings in 2008, which represented 72 percent of the nearly \$137 billion in travel booked through intermediaries.<sup>5</sup> In 2010, 76 percent of travel agents used GDSs to book tickets.<sup>6</sup>

### **History of GDSs**

Air carriers were some of the first users of early computer technology because the large amount of reservation and ticket data became too difficult to process manually. The largest carriers developed and hosted their own reservation systems in-house. In general, due to the high costs of purchasing and maintaining the systems, smaller carriers paid to be hosted by the systems of larger carriers. Travel agencies communicated with the individual airlines' reservation centers by phone.

In the 1970s, several of the largest airlines, among them United, American, TWA and Delta, began to offer their Computer Reservation System (CRS) to travel agencies so they could book travel directly. The agencies found the efficiencies very attractive. All but the largest could afford only a single major airline CRS for each office. Eventually bookings could be made through each of the major CRS's on virtually any airline, not only the system's airline parent. But allegations of bias toward the CRS owner's flights were made by the non-CRS carriers, whose flights could often be found only on the second display screen if the CRS parent carrier also offered service in the requested market.

In the late 1970's, Sabre and Apollo (the American Airlines and United Airlines CRSs respectively) began signing other carriers to "co-host contracts." These contracts provided that the carrier's flights would receive preferential display in the CRS in return for a fee paid on each booking which the carrier received through the CRS. The smaller airlines without their own CRS had to pay the CRS owner in the range of \$1.00 to \$3.00 per segment booked to receive similar treatment.

The Civil Aeronautics Board issued rulings in 1984 that prohibited bias. Later, a group of smaller carriers filed anti-trust litigation against Sabre and Apollo, the two largest CRS vendors. In the

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<sup>5</sup>American Society of Travel Agents (ASTA), *2010 GDS Report*, Premium version-March 2011

<sup>6</sup>*ibid*

1990's, airline financial difficulties ultimately caused American and United to sell stakes in their systems to non-airline investors, while policymakers' concerns about the potential competitive misuse of GDSs by carrier owners spurred complete divestiture.

## **Business Issues**

GDSs are a critical component of travel agency operations today. GDSs process 64 percent of the total U.S. airline gross sales by revenue.<sup>7</sup> Since the development of early airline-owned GDSs, consumer access to information has become much easier making the search for, and decisions regarding purchase of, airline tickets much faster and easier, and allowing for better comparisons across carriers.

Nearly all carriers have developed their own websites through which they can offer displays and transactions that they feel are superior to GDS systems in travel agencies. Consumer use of carrier websites also saves airlines the fee they would otherwise pay the GDS for each ticket. GDSs charge the carrier a fee per segment purchased (and GDSs often pay a portion of these fees to the travel agencies in the form of incentives) – which increases to the 'cost' of that trip to the carrier. Additionally, airlines can attempt to offer specials to win customer loyalty. Accordingly, airlines seek to drive as many customers to their websites as possible.

At various times, airlines have offered reduced "web-only" fares that are not available on GDSs, but most GDS' enforce "full content" contracts on their airline partners that require the sale of all airline fares offered on the airline's website be available to the GDS. This contract provision effectively prohibits the carrier from offering a fare on its own website without the cost of the GDS fees built-in, removing a powerful tool for directing consumers to purchase directly from the carrier. There are a few exceptions to this practice; Southwest Airlines, one of the largest carriers in the U.S. domestic market (with 15 percent of domestic revenue passenger miles<sup>8</sup>), participates in some GDSs, but at a very low level and on terms different from most other carriers.

GDS contracts with their travel agency partners are complex. The contracts often have three year terms or longer, and the three types of contracts have expiration dates that are staggered to expire in different years.<sup>9</sup> Some assert this is an attempt to lock-in the travel agency to a given GDS. In addition, GDSs provide valuable tools to travel agencies for enforcing their corporate clients' travel policies, as well as back office management systems to handle tasks such as accounting.

The relationship between the GDSs and the carriers whose product they sell can in some cases be characterized as adversarial or contentious, to the extent that both carriers and GDSs have initiated litigation in recent years. In some respects similar to the 1980's, airlines are claiming

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<sup>7</sup> PhoCusWright, *The Role and Value of the Global Distribution Systems in Travel Distribution*, 2009.

<sup>8</sup> BTS, *TranStats*, "Airline Domestic Market Share December 2011 - November 2012."

<sup>9</sup> The contracts are usually separate for: booking airfare; back-end office accounting services; fulfillment support.

that GDSs enjoy monopoly/oligopoly power in the distribution marketplace. Some claim evidence of this in the disparity between airline return on invested capital (two to three percent) and the return on investment for GDSs (20 percent). The GDSs, in turn, claim that the carriers have market power as demonstrated by the few new entrants to the market and price setting patterns that can be characterized as ‘herd-like.’

## **Technological Issues**

GDSs are an essential intermediary between the carriers and the travel agencies that are the primary point of sale for the majority of most carriers’ passenger revenues. Any regulation mandating additional display transparency for ancillary service fees and transactability of such fees on OTAs and other travel agent websites must consider the GDS and technological environment.

Some in the carrier community assert that the GDSs’ operate using outdated technologies which severely limit the GDS ability to respond in a reasonable timeframe—or at all—to changes in the regulatory or business needs in today’s airline environment.<sup>10</sup> They point to the flexibility and functionality they enjoy selling through their own websites and newer software offerings in the marketplace that can achieve those same advantages for travel agencies, in concert with a GDS or independently. But 2012 has seen the introduction of the ability to purchase some ancillary services on several of the GDSs. Sabre has introduced a service available to travel agents which includes information and the ability to purchase some ancillary services of United Airlines and to purchase US Airways Choice Seats, while Delta is selling some ancillary services through Amadeus and Travelport. Additional discussions are underway. Travelport is planning to market some ancillary services for United, easyJet and Southwest, while Sabre is in discussions with Virgin America and several European carriers. These recent developments point towards weaknesses in the arguments regarding technical incompatibility and/or obsolescence.

New entrants have appeared whose technology is claimed to be more sophisticated than the GDSs’ and therefore is more easily modified to meet additional passenger information and transaction needs. This results in costs savings. Some of these systems offer travel agents the ability to “direct connect” to the internal reservation systems of certain carriers, which allows more data to flow back and forth such as the frequent flyer status of the passenger, which can affect the pricing of ancillary services. To date, these new entrants have had little success penetrating an entrenched GDS environment.

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<sup>10</sup> Assertions of technological shortcomings include GDS use of the obsolete TPF operating system and EDIFACT protocol; the limitations of the ATPCO fare filing regime in which a single fare corresponds to a single character alphabetic fare code, restricting alternatives to 26 (i.e. no ability for variation for bundles of ancillary services); and no ability to identify the frequent flyer or credit card holder status of the passenger who is eligible to be charged lower or no fees.

Airlines and GDSs have had to work together to respond to previous USDOT rules to enforce uniform baggage rules on internet tickets which involved significant technological hurdles and a lengthy period to implement. Some carriers assert that the technology used by the GDSs greatly expands the complexity of any system modification and unreasonably lengthens the development time. The recent enhancements concerning the display of ancillary service fees and other information involved a lengthy development phase, which suggests that significant investment is required for all such GDS software-related development. Moreover, the investment suggests that much of the significant up-front costs in terms of time and money have already been expended so that future refinements should happen fairly quickly.

### **2.3 Ancillary Service Fees**

In 2008, some airlines began to charge for trip-related services such as checked baggage, meals, advance seat assignments and other amenities that were previously included in the fare. Charging additional fees for these services is also known as unbundling of charges (from the terminology of a bundled product), or charging ancillary service fees. These fees differ from other fees that are required to be included in the price of any ticket because the services are optional, though several of them (carry-on baggage, checked baggage, the ability to reserve a seat) have traditionally been included in standard ticket price for many years until recent years. Charges for other services, such as unaccompanied minors, reservation changes or cancellations, and oversized or overweight baggage, have existed in the industry for many years.

As carrier revenues and profits have come under increasing pressure due to events such as economic recession and increasing fuel prices in recent years, revenues from ancillary service fees have become increasingly important in supplementing carriers' air fare revenues. Table 8 presents the revenues of the U.S. airline industry from various sources from 2004 to 2010. The majority of airline revenues are collected at the time of ticket purchase; these are known as "passenger revenues". The second largest source of revenues is the revenues collected between carriers for code sharing service known as "transport related revenues". In 2009, about two-thirds of airline revenues were from ticket purchase, 20 percent from transport related revenues, and baggage fees and cancellation fees accounted for 2 percent, and 1 percent of total revenues respectively. After airlines began unbundling services in 2008, revenues from baggage fees and cancellation fees greatly increased (Table 8 and Figure 4). From 2007 to 2009, the revenues from baggage fees increased dramatically, nearly a 140 percent increase annually, and went from providing 0.6 percent of total operating revenues to fully 2 percent.

**Table 8: U.S. Airline Industry Ancillary Service Fees: 2004-2010 (Million \$)**

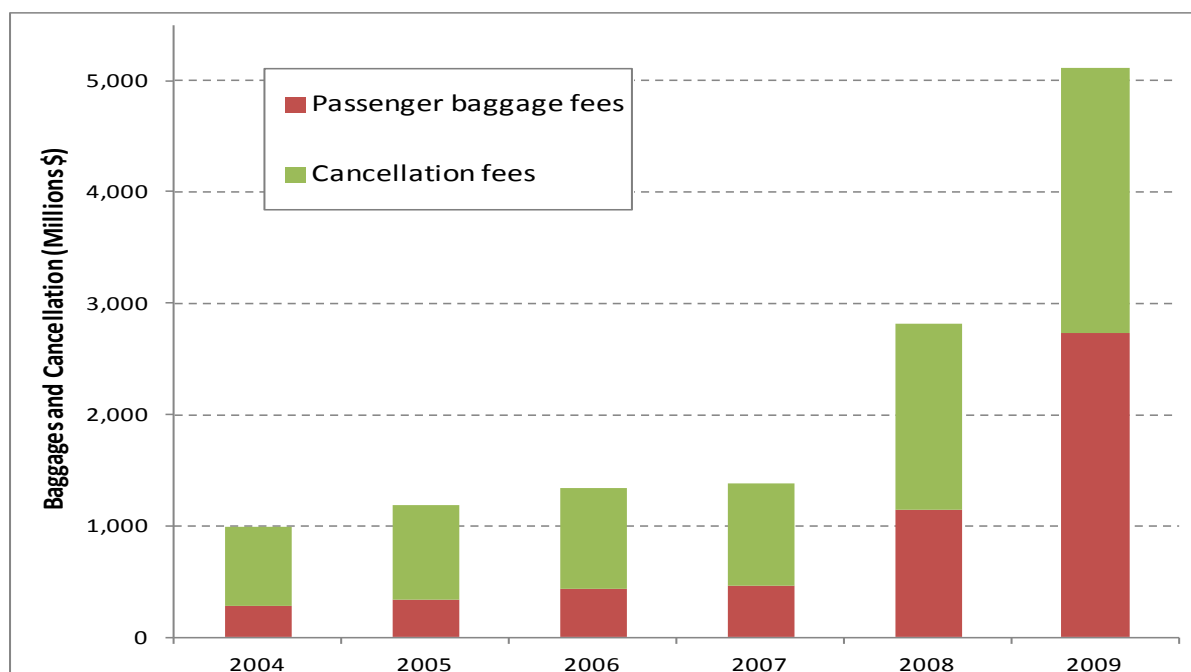
Year	Total Operating Revenues	Passenger Revenues		Passenger Baggage Fees		Cancellation Fees		Transport Related Revenues		Other Revenues	
		\$	% Total	\$	% Total	\$	% Total	\$	% Total	\$	% Total
2004	\$134,660	\$85,697	64%	\$286	0.2%	\$706	0.5%	\$22,914	17.0%	\$25,057	18.6%
2005	\$151,544	\$93,633	62%	\$342	0.2%	\$841	0.6%	\$28,729	19.0%	\$27,999	18.5%
2006	\$165,532	\$101,968	62%	\$441	0.3%	\$901	0.5%	\$32,148	19.4%	\$30,074	18.2%
2007	\$174,696	\$107,678	62%	\$464	0.3%	\$915	0.5%	\$33,670	19.3%	\$31,969	18.3%
2008	\$186,119	\$111,542	60%	\$1,150	0.6%	\$1,669	0.9%	\$35,893	19.3%	\$35,865	19.3%
2009	\$155,051	\$91,505	59%	\$2,729	1.8%	\$2,380	1.5%	\$31,008	20.0%	\$27,429	17.7%
2010	\$84,156	\$49,704	59%	\$1,660	2.0%	\$1,147	1.4%	\$16,163	19.2%	\$15,481	18.4%

Note: 2010 data are through June. Transport related revenues are the revenues collected between carriers for code sharing service. Passenger revenues are the revenues collected at the time of ticket purchase. Total operating revenues is not the sum but includes additional revenue sources such as charter, cargo, and miscellaneous operating revenue.

Other Revenues are calculated by HDR Decision Economics: Other Revenues equals Total Operating Revenues minus Revenues from Passenger, Baggage fees, Cancellation fees and Transport related.

Source: USDOT, TranStats Database, Air Carrier Financial Reports (Form 41 Financial Data), Special Tabulation, October 2010.

**Figure 4: The Growth of Revenues from Baggage Fees and Cancellation Fees in U.S. Airline Industry**



Source: USDOT, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Office of Airline Information, TranStats Database, Air Carrier Financial Reports (Form 41 Financial Data), Special Tabulation, October 2010

Airlines differ in how and when they impose ancillary service fees: during booking, at the airport, and on board a flight. For example, a passenger can choose to pay for checked bags when she (he) is booking the ticket, or pay at the airport during check-in. Timing for payment for baggage fees is not uniform across the industry, as some carriers provide an opportunity to pay before check-in while others do not.

Consumers also consume these services somewhat differently. Consumers are more likely to request seat selection services at time of booking, while they are more likely to want to pay baggage fees at check-in.

While some ancillary services (such as in-flight entertainment) have historically been provided at an additional cost consumer, others ancillary services have traditionally been included with ticket price before unbundling of services became common. The Department considers several ancillary services to be closely related to the basic travel and which until recently had traditionally been included in the base ticket price to be what it terms “basic ancillary services.” Currently, the Department includes checked baggage, carry-on baggage and seat assignment to be basic ancillary services.

## **2.4 Complaints**

The USDOT monthly Air Travel Consumer Report (prepared by the Office of Aviation Enforcement and Proceedings) presents information on complaints received regarding both air carriers and travel agents. Overall complaint data is presented for both industry sectors, as well as for individual companies.

The purpose for providing the complaint data to consumers is to provide consumers with additional data on the quality of the service being provided (either by carrier or travel agent). The performance and complaint data can be used in advertisements by those companies which perform well in order to attract additional consumers or accessed directly by consumers to avoid carriers or travel agents deemed to have relatively poor service. As this information is shared with the buying public, companies with a greater number of complaints will usually need to provide their service at a lower price than a better performing competitor in order to attract customers.

### **2.4.1 Carrier Complaints**

According to USDOT’s February 2012 Air Travel Consumer Report, there were 1.18 complaints against the 16 largest US airlines per 100,000 enplanements in 2011, a slight decrease from 1.20 in 2010.

In 2011, the predominant type of complaint related to cancellations, delays, or any other deviations from schedule (grouped together as Flight Problems), which accounted for nearly a third of all complaints received. The proportion of complaints regarding Flight Problems has been rising the past three years, increasing from 23.4 percent of all complaints in 2009 to 32.2 percent in 2011.

Other significant complaint categories include those relating to baggage handling, reservations, ticketing and boarding were the top types of passengers' complaints to USDOT. Sixteen percent of air carrier complaints concerned baggage issues, including lost and delayed bags, charges for excess baggage, carry-on problems, and difficulties with airline claims procedures. Another 12 percent of complaints concerned reservations/ticketing/boarding issues, which include mistakes from making reservations and ticketing by the airline or travel agent, problems in making reservations and obtaining tickets due to busy telephone lines or waiting in line, or delays in mailing tickets and problems boarding the aircraft.

#### **2.4.2 Travel Agency Complaints**

Consumers also file complaints with USDOT regarding travel agents. Table 9 summarizes complaints received by the Department by category regarding travel agents and tour operators, by category, as reported by USDOT. In 2011, the Department recorded 166 complaints lodged against travel agents, and approximately half as many lodged against tour operators. Nearly half the complaints lodged against travel agents (47 percent) related to reservations, ticketing, or boarding, followed by complaints related to refunds (27 percent) and fares (13 percent). The most common complaint lodged against tour operators related to flight problems (31 percent), followed by complaints regarding reservations, ticketing, or boarding (28 percent) and refunds (17 percent).

Most of the complaints lodged against travel agencies were lodged against online travel agencies. On average, the number of complaints per travel agency was approximately 26 in 2011 and 27 in 2010. The travel agencies with the most complaints were Expedia, Orbitz and Cheapoair.

Similar to carrier complaints, travel agency complaints are reported directly to the responsible travel agencies, or with the Better Business Bureau and/or local and national consumer advocates. In fact, in 2011, there were 5,841 complaints against travel agencies and bureaus filed with the US Better Business Bureau, thirty-five times more complaints than recorded at the Department.

**Table 9: Complaints by Category, January - December 2011, (Other Than U.S. Airlines)**

Entity	Flight Problems	Over-Sales	Res/Tktg Boarding	Fares	Refunds	Baggage	Customer Service	Disability	Advertising	Discrimination	Animals	Other	Total
<b>Travel Agents</b>													
Cheap Tickets	0	0	8	1	4	0	0	0	0	0	0	0	13
Cheapoair.com	1	0	9	5	10	1	0	0	0	0	0	0	26
Expedia.com	2	0	20	2	11	0	4	0	1	0	0	0	40
Orbitz.com	2	0	16	6	9	0	2	0	2	0	0	0	37
Priceline.com	1	0	14	3	4	0	1	0	1	0	0	0	24
Travelocity.com	1	0	7	4	7	0	0	0	1	0	0	0	20
Other Travel Agents	0	0	4	1	0	0	0	0	1	0	0	0	6
<b>Totals</b>	<b>7</b>	<b>0</b>	<b>78</b>	<b>22</b>	<b>45</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>166</b>
Percent of Total	4%	0%	47%	13%	27%	1%	4%	0%	4%	0%	0%	0%	
<b>Tour Operators</b>													
Direct Air and Tours	26	1	24	8	14	0	3	4	2	0	0	1	83
Other Tour Operators	1	0	0	0	1	0	0	0	0	0	0	1	3
<b>Totals</b>	<b>27</b>	<b>1</b>	<b>24</b>	<b>8</b>	<b>15</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>86</b>
Percent of Total	31%	1%	28%	9%	17%	0%	3%	5%	2%	0%	0%	2%	
<b>Miscellaneous</b>													
Other Miscellaneous	26	3	28	6	19	28	5	2	5	0	0	13	135
<b>Totals</b>	<b>26</b>	<b>3</b>	<b>28</b>	<b>6</b>	<b>19</b>	<b>28</b>	<b>5</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>135</b>
Percent of Total	19%	2%	21%	4%	14%	21%	4%	1%	4%	0%	0%	10%	

Note: Companies are listed individually if USDOT received ten (10) or more complaints against them during the reporting period. Complaints against companies accounting for fewer complaints than that are included under "Other Travel Agents".

Source: Air Travel Consumer Report, February 2012, USDOT

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### 3. BENEFIT-COST ANALYSIS APPROACH

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This chapter discusses the methodological framework used to estimate the costs and benefits of the Proposed Rule. The theoretical framework used to estimate benefits is presented, as well as the methodology for estimating costs. Overall assumptions are also presented, including key data assumptions. Other assumptions related to specific data are described in the appendices.

The OMB Circular A-4 stipulates that a regulatory analysis should account for only costs and benefits that arise as a result of the proposed regulatory action. This RIA estimates the costs and benefits likely to arise from the Proposed Rule, taking into account that certain carriers are already compliant with certain parts. The RIA estimates *incremental* costs and benefits from the Proposed Rule and the alternatives, i.e., the additional costs and benefits generated by actions taken specifically for compliance compared to the absence of this rule.

#### 3.1 Analytical Framework

The purpose of the Final Rule is to enhance aviation passenger protections through improved management of **customer service**, **transparency**, and **ticket price information**. One of the NPRM's provisions relates to minimum customer service standards for ticket agents; three relate to transparency; three relate to price information; and one clarifies definitions. The provisions relating to transparency (provision 1, provision 3, provision 4, provision 6) are assumed to require carrier and/or ticket agents actions that will improve information flow between air carriers and consumers by expanding the pool of reporting carriers, reporting performance statistics of code-share flights, and disclosure of code-share segments. The components relating to ticket price information (provision 2, and provision 8, provision 9) related to the fact that airline consumers would be able to make more optimal choices – i.e. preferred choices based on quality/type of product and price -- by easier access to fees for basic ancillary services or provide certainty that fees will not change after purchase yet before flight.

Transparency in product and price information is a critical component of competitive marketplaces. When consumers have limited information regarding price or product quality (or features), they may not be able to identify those suppliers who are charging higher prices for the same product or service or the same price for an 'inferior' product (such as a flight requiring a change in aircraft versus a direct flight, both leaving at the same time). In these situations, some consumers will pay more than they otherwise would have if they had better information.

There are market situations in which one group of consumers knows more about products and/or prices than others. Economic theoreticians have elaborated on a 'tourists and natives' framework, in which consumers are divided into two groups – those with access to more information about lower prices/better quality (the natives) and those with very limited information who will often pay more (the tourists). (Some researchers have called these two groups 'savvy' and 'unsavvy' travelers.) This framework has two price-equilibriums, the 'tourist'

one is higher than the one for ‘natives’. Improving information among the ‘tourist’ group of consumers can lead to lower average prices.<sup>11</sup>

An example of such a split among consumers in the air travel industry is the consumers who are well informed regarding fees for ancillary services (i.e. aware of most carrier seat assignment fees and know how to quickly access that information for other carriers) in contrast to other travelers (perhaps those who rarely travel) who are not aware of the fact that many carriers no longer allow for pre-flight seat assignments without paying an additional fee.

In this rulemaking, the provisions leading to greater customer service and/or price transparency is expected to lead to either better services/goods (tickets and travel services) provided at the same price as before, or the same services/goods provided as before but at a better price. Consumers are expected to derive more utility for the same travel itinerary provided under improved goods/services. As the service or good improves while price remains the same, consumer demand should increase. In terms of product transparency, the rules will allow consumers to realize travel options previously unknown to at least some of them. Greater travel options may require consumers to prepare differently for air travel in order to optimize their decisions based on their new choice set, and even to change their travel decision altogether. In the end, the result is some combination of the same goods and services at a lower price or more/better goods and services at the same price as before the provisions, which is a more ‘efficient’ outcome.

### **3.2 General Assumptions Used in Estimating Benefits and Costs**

The ability to evaluate and interpret the results of an economic analysis depends to a significant degree on the documentation of the data and assumptions used. The following general assumptions apply throughout the entire analysis of benefits and costs:

- In accordance with Office of Management and Budget (OMB) guidelines, a real discount rate of 7 percent is used in the primary analysis and is supplemented with overall estimates using a 3 percent discount rate as well.
- The requirements are estimated as if taking effect on January 1, 2013, with quantifiable benefits and costs calculated over the 10-year period from 2013 through 2022. A ten year period was chosen to reflect the on-going nature of the benefits.
- This analysis includes benefits and costs for foreign businesses that provide air transportation service to/from the U.S. and citizens that take flights provided by U.S. carriers on flights in/to/from the U.S.

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<sup>11</sup> See S. C. Salop, and J. E. Stiglitz. “Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersion.” *Review of Economic Studies*, 44, (1977). Also, Raj Chetty, Adam Looney and Kory Kroft. “Salience and taxation: Theory and Evidence.” *American Economic Review*. 2009.

- The numbers of flights and passengers are assumed to increase annually at the rates projected in the FAA Aerospace Forecast for 2012 through 2032.<sup>12</sup>
- The value of travel time (and the cost of air travel delay) is estimated at \$44.56 per hour for all airline travelers (2011 US\$).<sup>13</sup>
- The dollar value of estimated benefits and costs presented in this report is in 2011 U.S. dollars.

A more detailed description and discussion of the baseline data and assumptions used in developing the benefit and cost estimates are provided Appendix A and B.

Costs to carriers are estimated as the additional cost to undertake an action required by or generated by a requirement in the NPRM, such as reprogramming report systems to include performance statistics of code-share flights or display baggage fees prominently in carriers' baggage policy. Details of the costs and benefits related to each component are described in subsections below detailing the framework for each component.

### **3.3 Cost Estimation**

Costs were calculated by identifying individual and group cost categories and estimating the full range of costs to airlines from each of the proposed requirements. In each case, costs estimated were developed reflecting incremental costs relative to what could reasonably be expected to occur if this proposed regulatory action did not take place

A spreadsheet cost model was developed which included specific estimates of capital costs, implementation costs, and continuing operations and maintenance costs. It also incorporated a life-cycle analysis and the timing for the roll-out of the various requirements. Specific cost items examined included:

- Information Technology – the costs associated with additional technology requirements including labor, software and hardware costs for the posting of fees, code-share disclosure, and other requirements;
- Program Management – the cost associated with all the tasks that go into the investigation, scoping, and definition of the requirements.
- On-going operations costs – the period costs of submitting reports and maintaining files.

### **3.4 Benefits Estimation**

The goal of an RIA's benefits estimation is to determine the economic and social value to be created through the implementation of the requirements. By increasing transparency and

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<sup>12</sup> U.S. Department of Transportation, *FAA Aerospace Forecast, Fiscal Years 2012-2032*, Washington, DC.

<sup>13</sup> USDOT: Revised Departmental Guidance on Valuation of Travel Time in Economic Analysis, 2011

setting customer service standards this rule is expected to have benefits which are difficult to measure. Many of these provisions may be expected to increase customer goodwill towards carriers, increase consumers ability to purchase the optimum combination of components of the air travel experience given price and quality, decrease administrative costs associated with managing complaints, and perhaps lead carriers to improve the efficiency of their operations, among other considerations, etc. These benefits are not quantified because of limitation of data availability. As noted in OMB Circular A-4, while not all potential benefits can be monetized or even measured, they should be noted because they can still be significant. OMB requires that a regulatory analysis also examine un-quantifiable benefits, since they may be substantial. Any hard-to-quantify benefits from the proposed requirements are discussed for each provision.

Only for Provision 2, is the value of some of the benefits is estimated. The benefits that can be quantified were estimated in terms of: i) time saved (such as for reviewing potential purchases and making a purchase); and ii) more optimal purchasing choices made by accesses to greater information on fees.

### **3.4.1 Value of Time**

A significant number of benefits are driven by time saved for consumers. Economists measure the value of time saved using set estimates derived from wage rate to reflect the cost to the individual of time spent in transit instead of on another activity. USDOT has synthesized extensive research and analysis to develop values of time for travelers by mode and purpose (business or leisure) and this analysis uses those values (see Table 10).

**Table 10: Value of Time for Air Travel (2011 U.S. \$ per person-hour)**

	Lower 10% Limit	Median	Upper 10% Limit
Value of Time for Passenger (Personal Non-Travelling)	\$28.29	\$34.66	\$42.44
Value of Time for Passenger (Personal)	\$28.47	\$33.22	\$42.71
Value of Time for Passenger (Average for All Travelers)	\$36.78	\$44.56	\$55.17

*Source: USDOT: Calculated by HDR study team based on USDOT's guidance on Revised Departmental Guidance on Valuation of Travel Time in Economic Analysis, 2011*

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## **4. REGULATORY EVALUATION OF SPECIFIC REQUIREMENTS**

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The assessment of the impact, benefits, and costs for each of the provisions will be described by the following structure:

- ***Current Requirements, Industry Practices, and Need for Additional Regulation.*** This section outlines relevant current regulatory requirements and USDOT enforcement policies for each area in which additional passenger protections were developed, presents a summary of current industry practices, and describes the needs addressed by the rule.
- ***New Requirements to Address Identified Needs.*** This section outlines regulatory requirements adopted as part of the Final Rule and provides information on the entities that will be affected.
- ***Estimated Benefits of Requirements.*** This section presents the methodology used to evaluate benefits; estimates the components that could be evaluated quantitatively; and describes the benefits for which no quantitative estimates could be developed.
- ***Estimated Costs of Requirements.*** This section presents the methodology used to evaluate costs; estimates the components that could be evaluated quantitatively; and describes the costs for which no quantitative estimates could be developed.

Benefit and cost estimates were also developed for alternative requirement scenarios for comparison with requirements included in the rule text of the NPRM listed in Table 1.

Data used in this RIA were collected from independent third-party sources, including the federal government, academic literature, associations representing the airline industry and relevant sectors, and consumer groups. In the few instances in which independent data was not available, primary research was conducted or internal experts were consulted. Key variables and their distributions are listed in Appendix A: Cost Related Data and B: Benefit Related Data.

## **4.1 Provision 1: Definition of Ticket Agent**

### **4.1.1 Current Requirements, Industry Practices, and Need for Additional Regulation**

The term air travel “ticket agent” is set forth in 49 U.S.C. § 40102 and is used by the Department to refer to any agent that facilitates the purchase or distribution of an air ticket for transportation and is compensated in some manner for the sale of air transportation. This Department considers the term ticket agent to describe traditional brick and mortar travel agents, online travel agents through which a consumer may purchase a ticket for air travel, and multiple metasearch engines which facilitate the selection of a ticket for air travel by a consumer.

It is generally understood in the air transportation industry that the USDOT uses the term “ticket agent” to cover OTAs and some of the newer online entities which facilitate the search for air ticket and then direct the consumers to carrier websites. However, some of the newer metasearch sites that provide specialized travel search, such as Google and Bing have not previously considered themselves to be subject to the Department’s authority in connection with the display of air transportation itineraries. Meanwhile, significant investment is occurring in some of the new metasearch sites as their technology and roles evolve.

### **4.1.2 Estimated Benefits and Costs for Provision 1**

The vast majority of entities which the Department considers as ticket agents already generally comply with the applicable Department regulations, therefore the incremental benefits and/or costs would be minimal. The impacts to other metasearch engines such as Bing and Google that operate specialized search tools for air travel is not entirely clear but the Department does not expect that they are significant.

## **4.2 Provision 2: Transparency in Basic Ancillary Service Fees (Including Availability on OTAs and GDSs)**

### **4.2.1 Current Requirements, Industry Practices, and Need for Additional Regulation**

Under a previous rulemaking, the Department mandated that carriers and ticket agents disclose information regarding baggage fees to consumers, but deferred any action on requiring that all ancillary service fees be displayed at all points of sale (April 25, 2011, Final Rule). Under that previous rule, carriers were required to provide information on their ancillary service fees in one easily accessible page or series of pages on their websites.

However, the manner in which the baggage fee information is provided has been found to have some limitations in its effectiveness and salience for consumers. Baggage fees often vary depending on a number of factors, including the itinerary. In addition, consumer sometimes have to click through multiple webpages to retrieve the exact baggage information they need, either on a carrier website or even more so when booking via an OTA.

As the industry continues to unbundle its product and break out pricing for ancillary services which were traditionally considered part of standard ticket purchase, other “basic” ancillary service fees are also coming under increased attention from consumers during their purchasing decisions. Some of these fees may still be provided in a range, particularly for seat assignments. And for those consumers wishing to purchase via an OTA, additional effort is required to separately check the ancillary service fees of each carrier being considered.

Accordingly, although consumers currently do have an increased ability to locate ancillary service fees, they often still must actively search and spend time to locate and review the fees to determine which fee is applicable to their itinerary and, particularly in the case of seat assignments, the consumer still may not know with very much specificity what the fee might be since the range of seat assignment fees is so great.

Consumers who purchase from an airline website currently have the most direct access to the ancillary service fee information, but even those displays could be more salient since currently consumers must select an itinerary and proceed through the purchase process to learn the seat assignment fee. Baggage fees are also not displayed in initial search results on most airline websites.

OTA websites do not currently have itinerary-specific bag or seat assignment fees. Accordingly, the required disclosure of bag and seat assignment fee information would greatly enhance the information available on OTA websites.

Many, but not all, individual business travelers that rely on travel management companies are not likely to be concerned with the cost of bag fees or seat assignment fees. However, there is a benefit to the company. Travel managers complain that the information is not readily accessible to ensure that business travel is booked according to company policy and the fee information is not readily incorporated into internal reservation tracking or accounting programs. The information must be manually entered, often based on receipts or information provided by the travelers themselves. The increased effort results in higher costs related to company travel. Those costs cannot be easily quantified so are not included in the cost benefit analysis but they are unquantifiable costs that have been identified repeatedly to the USDOT by travel management company representatives and raised at meetings of the Advisory Committee for Aviation Consumer Protection.

In this rulemaking, the Department considers the display and transactability of ancillary service fees through all distribution channels and proposes to require disclosure of certain basic ancillary service fee information. Under the proposed rule, airlines and ticket agents would be required to provide in itinerary search results the standard checked baggage fee and standard minimum seat assignment fee for the particular itinerary searched by the consumer. Travel agents would be prohibited from charging additional fees for distribution of ancillary service fees.

#### **4.2.2 New Requirements to Address Identified Needs**

Provision 2 requires that all ticket agents and airlines that provide fare information to consumers to also provide basic ancillary service fee information to consumer for:

- first checked bag,
- second checked bag,
- one carry-on item,
- an assigned seat.

The rule would expressly prohibit travel agents from charging consumers simply the information regarding ancillary service fees.

Multiple alternatives were considered by the Department, one of which has two different options for implementation (and for which the Department is seeking comments), and several which were rejected earlier in the rulemaking effort. Those for which costs and benefits were assessed include:

- Proposed Rule – Ancillary Service Fee Transparency: Carriers are required to provide information regarding the fees for basic ancillary service fees, to either
  - All ticket agents to which it provides its fare information, including GDSs (Ticket Agent and GDSs Option)
  - All ticket agents to which it provides its fare information, if the ticket agent sells to consumers but not require any carrier to provide the information to intermediary ticket agents, such as GDSs (Ticket Agents that Sell To Consumers Option)

The Proposed Rule does not require carriers to allow the purchase of ancillary services by ticket agents and/or GDSs.

- Alternative C – Ancillary Service Fee Transparency and Transactability: Providing information regarding the fees for ancillary services to **OTAs and GDS** as well as the opportunity to make those **ancillary purchases** on the travel agent websites.

Those for which costs and benefits were not assessed include:

- Setting design standards rather than performance standards.

- Requiring different set of fees for which information must be made available (instead of the proposed fees for carry-on, first and second checked baggage and seat assignment):
  - All ancillary service fees,
  - Baggage fees only,
  - Baggage fees and early boarding.

The Department does not currently have a preference between the two different implementation options of the Proposed Rule (Ticket Agent and GDSs Option versus Ticket Agents that Sell To Consumers Option) and is seeking comments on the relative strengths and weaknesses of one versus the other.

The proposed rule will decrease the information asymmetry by providing fee information on critical ancillary services that were traditionally part of the full fare and which may often not be feasible for many consumers to forgo (such as checking in baggage for a long trip). The increased transparency in ancillary service fee information will lead to some portion of consumers making more informed, and thus better, purchasing choices. This, in turn, generates downward pressure on the fees themselves, as more consumers have the information to better evaluate the total price for the trip they are considering. The information transparency is facilitating the competitive marketplace, pushing the market towards either better services/goods (tickets and travel services) provided at the same price as before, or the same services/goods provided as before but at a better price (see section 3.1 Analytical Framework for a fuller discussion of the effects of reducing information asymmetry).

Additional, time-saving benefits may also arise. Other consumers, who would have searched for that needed ancillary information anyway, will now save time in comparing fares and planning their trips. Under Alternative C, considered but not adopted, additional time savings would be realized for some purchasers who would no longer go to the carrier website.

Both consumers who purchase directly from carrier websites and those who use travel agents would benefit. Consumers purchasing from carrier websites would experience time savings and greater salience. Note that information on baggage fees is already required to be available from travel agents, though it is often available through links, which requires more time and effort from the consumer.

While carriers and GDSs have been debating for some time the relative merits of requiring ancillary service fee transparency and/or transactability or not, the agreements as well as the current technology is notably in flux. Some carriers and GDSs are already exploring opportunities to share ancillary service fee information on OTAs while aspiring new entrants in the ticket intermediary market are focusing significant attention on fees and new display systems.

In addition to the alternatives discussed above and assessed for costs and benefits, the Department considered several other alternatives which it later rejected earlier in the rulemaking process.

1. Among these alternatives the Department considered setting a design standard instead of the performance-based approach it has decided upon. For this alternative, the Department

considered specifying exactly what form the information should take and setting standards for its transmission, including an option of requiring certain data regarding ancillary service fees to be conveyed using existing electronic systems to ATPCO, for transmission with flight data to travel agents. However, in light of the fast pace of technological change in IT systems and the uncertainty regarding future transmission systems, the Department decided not to pursue this approach. As noted in OMB's Circular A-4, performance standards are generally preferred since they ". . . give the regulated parties the flexibility to achieve regulatory objectives in the most cost-effective way."<sup>14</sup>

It appears, for example, that a major carrier industry association is working to resolve the technology obstacles to carrier customization of services and new entry in the distribution of air transportation. IATA has announced plans to create a New Distribution Capability (NDC) that will include open XML standards. According to IATA, the new system will allow airlines to change the way airline products are distributed and offer customized or personalized air transportation packages including the fare and various ancillary services for one price. The system is intended to allow airlines to control the way their "product" is marketed, regardless of distribution channel.<sup>15</sup>

The publicly available information about IATA's NDC indicate that it is an initiative involving developing an XML-based data transmission standard for airlines and other entities to use for the distribution of information about airline flights, fees and other products. Having a uniform standard would potentially allow for transmission of significantly greater amounts of segregated and combined information regarding flights and pricing. It is not currently tied to the development of any specific IT product - though private entities are free to develop and market any product which would use data transmitted using the XML standards. Once development of the standards are complete, airlines would be able to (but not required to) use the standard to develop systems to transmit to travel agents and GDSs greater information about variable pricing options, ancillary service fees and other information which is expected to allow for easier customization of flight and pricing options to consumers.

In June 2013, IATA members adopted an AGM Resolution supporting NDC which included several statements addressing some of the concerns that have been raised about the potential limitations and/or misuses of NDC, including statements:

- 'Confirming' that use of NDC will be voluntary;
- 'Affirming' that NDC standards ". . . should support current shopping methods, including anonymous shopping . . .";

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<sup>14</sup> Office of Management and Budget. Circular A-4. Page 8.

<sup>15</sup> "With the NDC, airlines will be able to recognize these customers and therefore provide tailored offerings, as they already can for those customers who go directly to airline websites." IATA press release, Oct. 19, 2012 <http://www.iata.org/pressroom/pr/Pages/2012-10-19-02.aspx>.

- ‘Affirming’ that IATA intends to continue supporting existing legacy standards.<sup>16</sup>

In March 2013, IATA filed an application for approval of its Resolution 787, IATA’s foundation Resolution supporting NDC, to the United States Department of Transportation (DOT). The Department is still considering this application. IATA has stated that it expects to begin deployment of NDC in 2015 with a global roll-out to begin in 2016.<sup>17</sup>

A stated goal of IATA in developing NDC is to facilitate new entrants into the distribution of air transportation in order to increase competition. If implemented by airlines, NDC could potentially result in lower distribution costs to airlines and increased choices for consumers. However, it is impossible to quantify the impact that NDC may have on the distribution of air transportation at this time. The set of standards is still in development and, even if fully developed, any impact would be dependent on adoption and implementation by airlines. Some carriers may adopt NDC immediately once the standards are finalized, others may not be willing or able to undertake the necessary investment to do until much later. Meanwhile, since travel agents usually sign multi-year contracts with GDSs, many will not be in a financial position to adopt NDC immediately, even after information is available for all the carriers which that travel agent markets.

An unknown factor is whether consumers will interact with travel agents and/or airlines differently when NDC is used. If the availability of cheaper flights and/or ancillary service fees for some consumers (such as business travelers or reward class passengers) becomes more salient (i.e. more ‘front of mind’ to the consumer) when travel agents use NDC, consumers may react in unexpected ways, in turn impacting purchasing decisions. For instance, some consumers, believing the NDC is being used as a tool for price discrimination, may decide to avoid carriers or travel agents perceived as supporting NDC. Other consumers may become more aware of the benefits of consumer loyalty programs leading to significant increases in enrollment for those programs. Either way, since the set of standards is still in development and it will take time for airlines and travel agents to implement NDC after any standards are in place, it is unlikely to significantly impact consumer purchases for several years.

2. The Department also considered several other combinations of ancillary service fees about which carriers would need to transmit information, including:

- All ancillary service fees,
- Baggage fees only,
- Baggage fees and early boarding,

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<sup>16</sup> IATA’s AGM Resolution On New Distribution Capability (NDC) can be found at <https://www.iata.org/pressroom/pr/Documents/agm69-resolution-ndc.pdf>. Note with regard to existing standards, that an IATA factsheet dated December 2013, states “. . . that IATA would continue to support the existing legacy standard while demand for it exists.” [https://www.iata.org/pressroom/facts\\_figures/fact\\_sheets/pages/distribution.aspx](https://www.iata.org/pressroom/facts_figures/fact_sheets/pages/distribution.aspx).

<sup>17</sup> See IATA, “Fact Sheet: New Distribution Capability,” at [https://www.iata.org/pressroom/facts\\_figures/fact\\_sheets/pages/distribution.aspx](https://www.iata.org/pressroom/facts_figures/fact_sheets/pages/distribution.aspx)

- Baggage fees and seat assignment (the current proposal).

The Department considered and rejected the alternative of requiring that all ancillary service fees be covered by this provision, determining that the scope of fees and their variability would generate a very large amount of data, which while helpful, would not be valuable enough (to a great majority of consumers) to ensure that the benefits would outweigh the likely higher costs of implementation. In addition, some fees, such as for food and beverage, change with great frequently, at times with the type of aircraft, and are not often used in the choice of a particular flight. While exploring possible standards for the various types of fees, the Department concluded that the added complexity and burden of requiring the provision of information for all fees was not advisable.

In addition, the Department considered the inclusion of fees for early boarding in the rulemaking, when fees were charged for that service. After weighing the reality that many passengers with have specific boarding needs address those at the gate, and that many loyalty clubs provide early boarding perks, the Department determined that the costs of including this ancillary service fee in the provision would not likely exceed the extra benefits.

**Table 11: Summary of Provision 2: Requirements, Carrier Actions, Costs, and Benefits**

Transparency in Basic Ancillary Service Fees		
Travel agent and carrier actions in Final Rule version 3	Costs	Benefits
<ul style="list-style-type: none"> <li>• Proposed Rule: <ul style="list-style-type: none"> <li>▪ Carriers will provide <b>information</b> on basic ancillary service fees to: <ul style="list-style-type: none"> <li>○ ticket agents and GDSs, or</li> <li>○ only ticket agents that sell to consumers</li> </ul> </li> </ul> </li> <li>• Alt C: <ul style="list-style-type: none"> <li>▪ Carriers will provide GDSs with information on basic ancillary service fees <b>and the fees will be transactable</b> via OTAs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Initial Costs: <ul style="list-style-type: none"> <li>▪ Additional IT costs to incorporate fees into information transfer between carrier and GDSs and to revise website</li> </ul> </li> <li>• On-going Costs: <ul style="list-style-type: none"> <li>▪ Longer contract negotiations between sectors</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Short-term benefits: <ul style="list-style-type: none"> <li>▪ Time savings for consumers purchasing via OTAs who wish to purchase ancillary services</li> <li>▪ Cost savings to those customers otherwise missing additional fee information who can now adjust (packing) behavior.</li> <li>▪ Decrease in uncertainty regarding overall trip costs.</li> </ul> </li> </ul>

#### 4.2.3 Estimated Benefits for Provision 2

Although ancillary service fees are not required by carriers to travel, they are nevertheless not always considered ‘optional’ by passengers. It is possible, though perhaps impractical, for some passengers to take a flight without paying for checked baggage and choosing a desired seat in advance. For example passengers on lengthy trips visiting places with very different climates may decide that it is not feasible to travel without checked baggage; or a family traveling with two small children may need to sit together. In these situations, the baggage fee/seat

assignment fee is nearly as much a part of the full fare as any government required taxes and fees.

Not having ready access to ancillary service fee information can be a critical disadvantage. If the consumer remains unaware of the additional fees, he or she may make a suboptimal purchasing decision by either purchasing a ticket at a higher overall cost than another ticket (likely from another carrier) or paying more than initially budgeted for the trip. As nearly three fourths of air travel is purchased via the internet, at the margin, greater transparency in ancillary service fees should lead to overall downward price pressure on such fees.

Estimating the effect of ancillary service fee transparency on the price of ancillary services is particularly challenging at this point in time because the air transportation industry is currently in the midst of a significant change in business practices. Carriers are moving away from full product pricing into partitioned pricing, or the ‘unbundling’ of the travel services, thus making the determination of the services included in the baseline pricing uncertain. So while the impact of this provision on containing the price of ancillary services may be the primary benefit of this provision, the analysis was unable to prepare a robust estimate of the amount of that impact.

Other benefits would accrue to some consumers, either in the form of time savings or more efficient allocation of resources. These consumers can be grouped into three different categories, for which some benefits were estimated.

*1. Consumers who purchase directly via carrier websites and are concerned with baggage fees*

A little more than a fourth of airline passengers purchase tickets directly from carrier websites (PhoCusWright estimates this figure at 23%).<sup>18</sup> While these consumers have the most direct access to ancillary service fees, many must still access multiple webpages to reach the data sought. Many carrier websites do not include basic ancillary service fees when first quoting an itinerary fare. Under the Proposed Rule, basic ancillary service fee information will be consolidated in one place on carrier fare displays, decreasing the amount of time which some consumers would spend searching for the desired fee information.

There is currently not enough information on the number of consumers who click on multiple webpages when purchasing a ticket, nor on how much time they might save under the Proposed Rule. Therefore, the RIA does not estimate the time savings benefits to this subset of impacted consumers.

*2. Business travelers who purchase via a travel management company or OTA at a company concerned with ancillary service fees*

As noted above in section 4.2.1, many businesses are concerned with the fee associated with baggage and seat assignment on employees’ trips. Travel can be a significant expense for many companies and ancillary service fees can substantially increase trip costs. Many business

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<sup>18</sup> PhoCusWright (2011) "U.S. Online Travel Overview"

travelers book flights via travel management companies that seek the best flight at the best price for the traveler, given his parameters. But much of the information need to ensure that each traveler gets the best full price taking into account base fare, mileage club memberships, specific credit cards used and any other potential discounts are not often readily available. Thus, many businesses either pay more than they needed to for a particular flight or must have employees spend time seeking out the appropriate fee information in order to make the best choice.

While there is much interest in the industry on the impact of unbundling and ancillary service fees on the costs of business travel, there is not adequate data on this impact to estimate benefits for of this provision on these business travelers.

3. *Leisure travelers who purchase via an OTA and who are concerned with ancillary service fees*

Meanwhile, a significant number of leisure travelers book online via online travel agencies, use metasearch engines, or even their businesses travel management company. But since OTA websites do not currently have itinerary-specific bag or seat assignment fees, these consumers must check multiple websites in order to get an accurate estimate of the flight costs including the fees for basic ancillary services related to checked and carry-on baggage and seat assignment.

Enough robust data was found only to make a partial estimate of the benefits to this group of leisure travelers and is presented below.

Table 12 presents estimated benefits for leisure travelers who purchase online under both the Proposed Rule and the alternative including ancillary service transactability over 10 years. For the proposed provision, which covers transparency but not transactability of ancillary service fees, estimated benefits include \$3.0 million in the first year and \$25.1 million over the ten-year study period (discounted at 7 percent) in time savings to savvy shoppers who search and compare ancillary service fees before purchasing. Under alternative C (transactability of ancillary service fees), benefits to passengers include both Benefit 1 and 2 discussed above, are \$9.1 million in the first year and \$74.9 million for the first ten years (discounted at 7 percent).

The time savings are derived using an estimate of the number of potentially impacted ticket purchases (the number of tickets sold scaled down to only leisure travelers who purchase online from an OTA, TMC or metasearch engine (but not the carrier website).

**Table 12: Estimated Benefits for Provision 2 and Alternatives -- Time Savings Benefits for Portion of Purchasers of Ancillary Service Fees**

	Carriers Provide Ancillary Service Fee Information to Travel Agents and OTAs <i>Proposed Provision</i>		Carriers Provide Ancillary Service Fee Information to OTAs and GDS allowing for Transactability <i>Alternative</i>	
	<b>2013 (First Year)</b>	<b>2013-2022</b>	<b>2013 (First Year)</b>	<b>2013-2022</b>
<b>Estimation of Tickets Sold</b>				
<i>Number of tickets for flights sold by reporting carriers</i>	261,324,391	2,900,990,018	261,324,391	2,900,990,018
<i>Percentage of passengers on reporting carriers (Dom)</i>	81.8%	81.8%	81.8%	81.8%
<b>Number of tickets sold (reporting carriers and non-reporting carriers)</b>	<b>319,381,689</b>	<b>3,545,490,286</b>	<b>319,381,689</b>	<b>3,545,490,286</b>
<b>Adjustments for Leisure Travelers Purchasing Online Via Avenues Other Than Carrier Websites</b>				
<i>Percentage of passengers who purchase online (but not on carrier websites)</i>	47.0%	47.0%	47.0%	47.0%
<i>Percentage of total non-business (leisure) passengers</i>	68.3%	68.3%	68.3%	68.3%
<b>Percentage of passengers who purchase online <i>and</i> leisure travelers</b>	<b>32.1%</b>	<b>32.1%</b>	<b>32.1%</b>	<b>32.1%</b>
<b>Tickets Purchased by Consumers Who May Be Impacted</b>				
<b>Tickets purchased from OTAs by recreational travelers</b> <i>(tickets sold x percent of leisure PAX purchasing online)</i>	<b>102,524,716</b>	<b>1,138,137,837</b>	<b>102,524,716</b>	<b>1,138,137,837</b>
<b>Adjustment for Those Interested and Who Search for Ancillary Service Fees</b>				
<i>Percentage of passengers who research ancillary service fees on multiple webpages</i>	20%	20%	20%	20%
<i>Percentage of passengers who purchase ancillary services</i>	13%	13%	13%	13%
<b>Passengers who opt-out of ancillary service fees purchase</b>	<b>205,049</b>	<b>2,276,276</b>	<b>205,049</b>	<b>2,276,276</b>
<b>Passengers who save search time while purchasing ancillary service fees</b>	<b>2,460,593</b>	<b>27,315,308</b>	<b>2,460,593</b>	<b>27,315,308</b>
<i>Average travel trip party size</i>	1.4	1.4	1.4	1.4
<b>Time Saved and Its Valuation</b>				
<i>Value of time for passenger (personal non-traveling)</i>	\$35.21	\$35.21	\$35.21	\$35.21

	Carriers Provide Ancillary Service Fee Information to Travel Agents and OTAs <i>Proposed Provision</i>		Carriers Provide Ancillary Service Fee Information to OTAs and GDS allowing for Transactability <i>Alternative</i>	
	2013 (First Year)	2013-2022	2013 (First Year)	2013-2022
Average incremental <u>search</u> time (savvy passengers searching for ancillary service fees information) (hours)	0.05	0.05	0.05	0.05
Average incremental <u>transaction</u> time (savvy passengers for ancillary service) (hours)	na	na	0.10	0.10
Average value of ancillary service fees search time, per search for	\$1.60	\$1.60	\$1.60	\$1.60
Average value for additional ancillary service transaction time, per transaction	na	na	\$3.44	\$3.44
<b>Monetized Time Saved from Reduction in Search Cost (millions)</b>				
Undiscounted benefits	\$3.0	\$33.8	\$9.1	\$100.9
<b>Discounted benefits (7%)</b>	<b>\$3.0</b>	<b>\$25.1</b>	<b>\$9.1</b>	<b>\$74.9</b>

Sources: Number of Tickets-Domestic Flights Marketed by Reporting Carriers, BTS: DB1B Ticket Database 2010. Percentage of PAX on Domestic Flights, Reporting Carriers: BTS, T-100 Domestic Segment (US Carriers) 2010. Percentage of PAX Who Purchase Tickets Online via an OTA or TMC: PhoCusWright (2011) "U.S. Online Travel Overview" (includes all except those purchasing directly from carrier website or through central reservations/walk through; Note that this is lower than another estimate presented to the Department by InterVISTAS of 50 percent of round trip tickets purchases via a GDS). Percentage of PAX Traveling for Leisure (Not for Business): BTS, Nationwide Personal Transportation Survey 1995. Percentage of PAX Likely to Research Ancillary service fees for Ticket Purchase or Trip Planning Purposes: Proxy value estimated by HDR from data from Google Trends search of "air fare" and "baggage fees", accessed February 2013. Percentage of PAX Likely to Purchase An Ancillary Service: HDR Analysis based on data from BTS, U.S. Airline Industry Ancillary service fees: 2004–2010 and T-100 Market Database. Average Travel Trip Party Size: Estimate from a 2007 Travel Industry Association study cited in ATA comments. See Appendix B for greater detail.

The above estimation assumes that consumers who do check/research for ancillary service fees do so only once for each trip and will check only one website (though that may require clicking on multiple webpages), while in truth many may search several times before accessing the website for the purpose of purchasing a ticket. Researchers are only beginning to study the search patterns of airline consumers, not enough robust information was found on the amount of time spent on these per-purchasing searches that would be specifically to check basic ancillary service fees. Nevertheless, one study (a dissertation) using proprietary data found that more than half of those researching specific air travel visit more than one websites, and that of those consumers checked an average of 2.55 webpages (associated with one or more

websites), indicating that the potential for time savings during earlier research efforts may be much higher.<sup>19</sup> While this RIA does not adjust for the fact that many consumers will conduct multiple individual searches for a single ticket purchase, it does incorporate the dissertation finding regarding accessing an average of 2.55 webpages for that final search.

The exact number of people making use of ancillary services is unknown. The RIA team estimated the percentage of passengers checking a bag (as a proxy for using at least one ancillary service) to be 13 percent, based on carrier ancillary revenues from BTS and a broad estimate of average baggage fees. An analysis by another firm, IdeaWorks estimated that 30.2 percent of US Airways passengers checked a bag.<sup>20</sup>

#### **4.2.4 Estimated Costs for Provision 2**

If carriers have to provide ancillary service fee information to OTAs and GDS, the GDSs will likely demand that carriers transmit the data through ATPCO which will cost \$36,000 annually per carrier.<sup>21</sup> Adding up this additional cost with the annual labor costs to providing basic ancillary service fee information to ticket agents yields the total costs for carriers to implement Provision 6. The estimated implementation cost is \$6.1 million for the first year and \$46.2 million for 10 years (7 percent discount). The costs to carriers of Provision 2 are presented Table 13 below:

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<sup>19</sup> Ciju T.R. Nair, *Essays On Online Browsing And Purchase*. doctoral dissertation. 2010.

<sup>20</sup> IdeaWorks, "US Airlines Will Generate Millions from Higher Baggage Fees," January 20, 2010. (<http://seekingalpha.com/user/563503/instablog>). Using revenue and traffic disclosures made by US Airways.

<sup>21</sup> From "The Role of the GDS in the Travel Marketplace-Part II", 2011, Sabre. See Appendix A: Cost Related Data for greater detail.

**Table 13: Estimated Costs for Provision 2 and alternatives**

	Carriers Provide Ancillary Service Fee Information to OTAs and GDS	
	2013 (First Year)	2013-2022 (Ten Years)
Number of impacted carriers	167	167
Annual labor hours to provide information to ticket agents	8	8
Hourly labor cost for reporting	\$90.10	\$96.87
Annual cost each airline needs to pay to ATPCO to transmit ancillary service fees to GDS	\$36,000	\$360,000
<b>Total Component Costs (millions)</b>		
Undiscounted costs	\$6.1	\$61.4
<b>Discounted costs (7%)</b>	<b>\$6.1</b>	<b>\$46.2</b>

Sources: Annual Cost Carriers Need to Pay to ATPCO to Publish Ancillary Fee Information: The Role of the GDS in the Travel Marketplace-Part II, 2011, Sabre. See Appendix A for greater detail.

Note that the reported costs do not include the costs to the GDSs to reprogram their software. This is because at least one of the three large GDSs has already revised its software so that it would be capable of meeting the requirements for both the display and transactability of multiple different fees for multiple different ancillary services (far more than the Department is considering under rulemaking). Also, the industry trade association has indicated that other GDSs are already preparing similar upgrades, if not already undertaking them, for market competition reasons. Therefore, the GDSs will have the capability to comply with this provision independently of this rulemaking.

Several potential additional costs are identified but could not be quantified or monetized:

- **May Inhibit New Entrants.** There is concern in some quarters that requiring carriers to provide full information to travel agents and other ticket agents at no cost to the travel or ticket agents would inhibit new entrants from coming into the market of airline information and ticket distribution. If new entrants are not able to provide significant cost savings to carriers or significant benefits to users allowing them to further invest in their technologies and services, they are unlikely to survive in the market. Some industry observers fear that requiring transparency as currently proposed may discourage new entrants or limit their ability to compete. The impact of any new entrants is theoretical and cannot be quantified. It is not possible to predict the likelihood of new entrants in the absence of this regulation or the impact that theoretical new entrants would have had on the distribution costs of carriers.
- **May Decrease Carrier Flexibility to Customize Services.** Many carriers have indicated a concern that if they are required to provide information to ticket agents regarding their

ancillary service fees, they in turn would be limited in their ability to customize their services or to do so as quickly as desired.

- **Limit of Technological Development.** Some stakeholders argue that requiring carriers to provide certain basic ancillary services such as standard bag fees and seat assignment fees applicable to a particular itinerary to all ticket agents will result in carriers investing only in the existing distribution model. They argue that carriers do not have the funds to invest in distributing ancillary service fees through the existing model by paying ATPCO filing fees and at the same time, funds to invest in new methods as well. As a result, carriers will decide to delay or abandon investment in developing new technology/ alternative distribution methods that would allow them to further customize their services.

Even assuming that carriers would choose not to invest in new technologies/alternative distribution methods, based on the proposed regulation, the costs of any new entrants that would be inhibited and the flexibility of customization of services can't be quantified.

#### **4.2.5 Short-run and Long-run Impact Issues for Provision 2**

Research conducted on carrier and GDS systems and agreements highlights that the industry is in a state of rapid change. The issues that GDSs will continue to face include greater unbundling of services, changing prices for ancillary services, contested negotiations with carriers, and the rise of slightly differentiated competitors (for example those who can provide the same traveling information without ticketing capacity). Given the ongoing issues, long term prospect of the industry is therefore unclear.

The analysis cannot take into account all the possible long-term impacts especially if the requirement for transparency in ancillary service fee disclosure shifts bargaining power between carriers and GDSs. Therefore, the Department plans to monitor display and transparency of fees for ancillary service to determine if further rulemaking or adjustments to the current Proposed Rule are warranted.

#### **4.2.6 Prohibition of Ticket Agent Charges for Distribution of Ancillary Service Fee Information**

The rule would expressly prohibit travel agents from charging consumers simply for communicating to them the information they agent has received regarding ancillary service fees. At least one GDS has communicated that it already has the capability to distribute that information to its ticket agent clients at no additional cost. As GDSs and travel agents are under competitive pressure from potential new entrants and the fact that such information would be available at no additional cost on individual carrier websites, current market pressures make it unlikely that any agent would do so.

Nevertheless, if this prohibition was not included, it is possible that some ticket agents would include an additional charge for providing this information, but in a manner that might not be fully transparent and thus overlooked by consumers. In such cases, some consumers might

unknowingly pay for access to information needed to make an informed purchasing choice, while others did not.

### **4.3 Provision 3: Expand “Reporting Carrier” Pool and Provision 4: Expand Reporting Requirements for Reporting Carriers**

Provision 3 expands the “reporting carrier” pool, and Provision 4 expands the reporting requirements for all reporting carriers to include additional set of reports which also includes the carrier’s domestic code-share flights. Since the details of Provision 4 depend on the details of Provision 3, the benefits and costs for both are estimated and discussed together.

#### **4.3.1 Current Requirements, Industry Practices, and Need for Additional Regulation.**

Currently, air carriers (Table 2) that account for at least 1 percent of domestic scheduled passenger revenues are required to submit the following operational data (referred as “flight performance data” hereafter) to BTS regularly:

- BTS Form 234 “On-Time Performance Report” on a **monthly** basis
- Report baggage mishandling, statistics **monthly**
- BTS Form 251 regarding denied boarding/oversales on a **quarterly** basis

A reporting carrier only needs to report performance data to BTS on flights which it operates, even though its passengers may travel on a segment operated by another entity. There is no requirement for reporting carriers to report flight performance data of their code-share flights to the Department. In 2011, more than 50 percent of scheduled flights offered by mainline carriers are operated by their affiliated regional carriers<sup>22</sup>. In most cases, a reporting carrier flight performance data reported to BTS only represents about half of its scheduled flights. Consumers would benefit if these reports included flights operated by each reporting carrier’s domestic code-share partners.

Currently, four out of five airline passengers domestically and internationally travel on flights listed as service of reporting carriers. But this estimate includes passengers carried not only by flights operated by reporting carriers themselves, but also by their domestic code-share partners. According to the BTS enplanement data, approximately 20 percent of passengers travel on a domestic code-share flight. In addition, 20 percent of passengers take flights operated by smaller carriers that are not required to report to BTS. While these two categories may overlap somewhat, it is clear that a significant minority of passengers currently travel on flights for which BTS has no information regarding flight performance.

Lack of information on carrier performance enables – but does not ensure – lower quality service (such as higher rates of flight delays and cancellations) on those carriers and code-share flights. Lack of (or incomplete) information about poor carrier performance hampers

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<sup>22</sup> JetBlue, *Marketing Carriers vs. Operating Carriers*, April 11, 2012

consumers ability to choose a higher performing alternative (be it another carrier or even another mode of travel).

To enhance aviation consumers' decision-making on choosing carriers and itineraries, a 2011 GAO report recommends<sup>23</sup>:

*“Collect and publicize more comprehensive on-time performance data to ensure that information on most flights, to airports of all sizes, is included in the Bureau of Transportation Statistics’ database. USDOT could accomplish this by, for example, requiring airlines with a smaller percentage of the total domestic scheduled passenger service revenue, or airlines that operate flights for other airlines, to report flight performance information.”*

The Department believes that regulation is warranted to ensure that as much information as practical be collected to provide more complete information to passengers. With more information regarding flight performance, customers could make better choices for their travel arrangements.

#### **4.3.2 New Requirements to Address Identified Needs**

Provision 3 requires expanding the “reporting carrier” threshold to include more carriers, which will enhance overall information transparency regarding carriers’ on-time performance, baggage handling, and denied boarding and oversales for the industry as a whole. Currently, the cut-off point for “reporting carrier” is 1 percent of domestic scheduled passenger revenues. This provision lowers that threshold to 0.50 percent (or 0.25 percent under Alternative A), which expands the pool of carriers. This provision will lead to detailed data on carriers’ performance provided to the USDOT and thus by extension, to consumers, for some smaller carriers. Table 14 lists the additional reporting carriers by different thresholds using 2012 data. If the reporting threshold is lowered to 0.50 percent of domestic scheduled passenger revenues, eight additional carriers will be required to report to BTS regularly.

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<sup>23</sup> *Airline Passenger Protections: More Data and Analysis Needed to Understand Effects of Flight Delays*, September 2011, GAO

**Table 14: Additional Airlines If the “Reporting Pool” is Expanded, 2012**

Carriers That Become Reporting Carriers If Threshold Is Reduced To 0.5%	
1	Air Wisconsin
2	Allegiant
3	Horizon*
4	Mesa
5	Pinnacle**
6	Republic
7	Shuttle America
8	Spirit
Additional Carriers That Become Reporting Carriers If Threshold Is Reduced To 0.25% (In addition to those noted above)	
1	Colgan
2	Executive***
3	Mesaba****
4	PSA

*Note: Pinnacle Airlines Inc., Mesaba Aviation, Inc., and Colgan Air, Inc. are jointly owned. Pinnacle merged with Mesaba and, as of Jan. 2012, the Mesaba aircraft have been placed on the Pinnacle operating certificate so their operations will be reported together going forward. In 2013, the four additional carriers need to report if the reporting threshold lowered to 0.25% are: Chautauqua, Colgan, Horizon, and PSA.*

*\*Horizon fell under the 0.5% reporting threshold in 2012, but would be under 0.25% reporting threshold in 2013; \*\*Pinnacle became a mandatory reporting in 2013. \*\*\*Executive was under 0.25% threshold in 2012, but fell under 0.25% threshold in 2013. \*\*\*\*Mesaba is no longer an independent carrier in 2013 as it is operated under Pinnacle.*

*Source: USDOT*

Table 15 details the requirements and associated costs and benefits to carriers and passengers of Provision 3.

**Table 15: Summary of Provision 3: Requirement, Carrier Actions, Costs, and Benefits**

Expand “Reporting Carrier” Pool			
Component requirements	Carrier actions	Costs	Benefits
<p>Additional carriers to submit BTS forms for on-time performance and baggage-handling statistics :</p> <p>(a) BTS Form 234 “On-Time Performance Report” on a <b>monthly</b> basis</p> <p>(b) Report <b>monthly</b> (domestic system basis, excluding charter flights) total checked bags per segment, and number of mishandled checked bags</p> <p>(c) file, on a <b>quarterly</b> basis, BTS Form 251 regarding denied boarding/ oversales (denied boardings in US)</p>	<ul style="list-style-type: none"> <li>• Develop system to track all data needed for BTS Forms 234 and 251</li> <li>• Develop computer system to tabulate data and submit</li> </ul>	<ul style="list-style-type: none"> <li>• Initial Costs: <ul style="list-style-type: none"> <li>▪ Up-front planning time to develop procedures</li> <li>▪ IT and software development costs</li> <li>▪ Update training curriculums</li> </ul> </li> <li>• On-going Costs: <ul style="list-style-type: none"> <li>▪ Staff time to manage data and process/submit</li> <li>▪ IT time for system updates</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Short-term benefits <ul style="list-style-type: none"> <li>▪ Time savings to passengers from avoiding frequently delayed flights</li> <li>▪ Improved customer service from avoiding underperforming carriers.</li> </ul> </li> <li>• Long-term benefits <ul style="list-style-type: none"> <li>▪ Improvements in carrier performance (on-time, service).</li> <li>▪ Lower fares from underperforming carriers</li> </ul> </li> </ul>

Provision 4 expands the information that each reporting carrier is required to submit to USDOT to include an additional, combined set of performance data for both the carrier’s own flights *and* its domestic code-share flight segments (or, an additional set which presents only its code-share operated flight performance data, under Alternative B). Similar to Provision 3, this provision will lead to greater information on performance in a manner that will allow USDOT, and thus consumers, to assess the performance of reporting carrier operated segments and code-share operating segments. Such information should give consumers better ability to discern the value to them of code-share and non-code share segments of flights. Table 16 illustrates the requirements and associated costs and benefits to carriers and passengers.

**Table 16: Summary of Provision 4: Requirements, Carrier Actions, Costs, and Benefits**

Expand Reporting Requirements for Reporting Carriers			
Component requirements	Carrier actions	Costs	Benefits
<p>Reporting carriers (old and new definition) must file <b>combined reports</b> for both their flights and their <b>code-share flights</b> for:</p> <p>a) on-time performance (monthly)</p> <p>b) Baggage-handling statistics (monthly),</p> <p>c) Denied boarding/oversales (quarterly).</p>	<ul style="list-style-type: none"> <li>• Develop system to track all data needed for BTS Forms 234 and 251 separately for code-share segments</li> <li>• Develop computer system to tabulate data and submit</li> <li>• Some code-share carriers will need to develop systems to track on-time performance, mishandled baggage, and oversales</li> <li>• Incorporate code-share data into existing reporting system</li> </ul>	<ul style="list-style-type: none"> <li>• Initial Costs: <ul style="list-style-type: none"> <li>▪ Up-front planning time to develop procedures</li> <li>▪ IT and software development costs</li> <li>▪ Update training curriculums</li> <li>▪ Post flight delay information online for newly added carriers that market their own tickets</li> </ul> </li> <li>• On-going Costs: <ul style="list-style-type: none"> <li>▪ Staff time to manage data and process/submit</li> <li>▪ IT time for system updates</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Short-term benefits <ul style="list-style-type: none"> <li>▪ Time savings to passengers from avoiding frequently delayed code-share flights</li> <li>▪ Improved customer service from avoiding underperforming carriers.</li> </ul> </li> <li>• Long-term benefits <ul style="list-style-type: none"> <li>▪ Improvements in carrier performance (on-time, service).</li> <li>▪ Lower fares from underperforming carriers</li> </ul> </li> </ul>

Three Scenarios with different combinations of alternatives to Provision 3 and 4 were evaluated. For Provision 3, lowering reporting threshold to 0.25 percent instead of 0.50 percent, the number of newly added reporting carriers would be increased from 8 carriers to 12 carriers (Table 14). The following are the different combinations of alternatives of Provision 3 and 4 evaluated in this RIA:

- Proposed Provisions: Lower reporting threshold to **0.50 percent** and reporting as mainline carriers and code-share partners **combined**;
- Alternative A: Lower reporting threshold to **0.25 percent** and reporting as mainline carriers and code-share partners **combined**; and
- Alternative B: Lower reporting threshold to **0.50 percent** and reporting as mainline carriers and code-share partners **separated**;

In the following section, estimated benefits and costs under each scenario will be presented.

#### **4.3.3 Qualitative Benefits for Provision 3 & 4 and their alternatives**

Provision 3 and 4 would lead to additional performance data reported to the BTS, and in turn made available to consumers through the publications in the Air Travel Consumer Report. In particular, many of the larger regional carriers and some of the smaller national carriers would provide a great deal of information regarding their performance reported to BTS. The public will now be able to compare the performance of these newly reporting carriers across a range of critical performance indicators (e.g. on-time performance, rate of mishandled baggage, etc.).

At the same time, Provision 4 will require that performance data to be reported by marketing carriers (i.e. those that sell directly to consumers) for both themselves and then again for themselves and all their code-share flights combined. Thus, consumers will be able to compare the performance of all the flights marketed by a reporting carrier, which is the main source from which consumers purchase. Moreover, consumers are expected make more informed purchasing decisions, as they can better compare the costs of differing air travel options against a fuller range of the quality of that travel – characterized by the likelihood of on-time arrival, of bags not lost or stolen, etc.

Transportation researchers have quantified that consumers place a value on on-time performance<sup>24</sup> and are therefore responsive to performance metrics. Presumably, in a competitive market, repeated poor performances by a carrier will lead to a decline in demand for its service as consumers choose better performing carriers. The decline in demand for carriers with poor performance will force carriers to either improve their services, or lower prices to remain competitive. Thus, the end result should be continual pressure on carriers to either improve performance or lower prices. Performance metrics may further induces competition, as carriers may use reliability in their advertising to differentiate themselves and attract more consumers.

Another aspect of the benefits associated with the Provisions akin to an insurance value. For instance, some consumers traveling on carriers that already were required to report these performance data would nevertheless feel that there is some value to them for requiring additional carriers to report these statistics – in case some day in the near future the consumer would want to travel on one of the new reporting carriers. In this situation, the carrier has been required to be reporting the information, and presumably has had an incentive to improve operations. The more information that is available for carriers that consumers are considering or are traveling on now and in the future, the better for the consumer.

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<sup>24</sup> Steven Morrison and Clifford Winston estimated the value of a one percentage point change in on-time performance (within 15 minute of scheduled arrival time) as worth \$1.21 in a 1989 study and an improvement of more than 25 percent has having the same value as a hour reduction in travel time. (Morrison and Winston, “Enhancing the Performance of Deregulated Air Transportation System,” Brookings Papers: Microeconomics 1989.

Lastly, there is also a public benefit regarding the Department having access to more performance information for a greater number of carriers, since the additional information will assist the Department in its role of investigating significant service problems regarding carriers.

Specific qualitative benefits for these two Provisions are listed below:

- **Improved On-Time Performance for Newly Reporting Carriers and Code-Share Flights for All Reporting Carriers.** As noted above, the availability of performance data can generate incentives for carriers to improve their performance...
- **Improved Handling of Baggage for Newly Reporting Carriers and Code-Share Flights for All Reporting Carriers.** As with on-time performance, the greater availability of information on baggage handling should lead to better performance in this area.
- **Decrease in Oversales.** As with the above benefits, more publically available information regarding oversales should lead to pressure to reduce oversales.
- **Improved Customer Good Will Towards Carriers.** With improved carrier performance, overall customer good will towards carriers should improve. Improved good will may lead to a slight increase in demand.
- **Insurance Value.** Many consumers place some value on having information on carrier performance even if they do not use it immediately.
- **Improved USDOT Oversight of the Industry.** With additional information on the performance of smaller carriers as well as information on the performance of code-share flights, the Department will be better informed as to the true performance of a greater number of carriers, which in turn should improve its ability to perform its mandated oversight functions.

#### **4.3.4 Estimated Costs for Provision 3 & 4 and their alternatives**

The costs to carriers to implement the proposed provisions are calculated by multiplying the number of impacted carriers by the one-time programming cost to collect and report data, and on-going costs to process and report data to the Department. Table 17 presents total costs under proposed provisions. The total estimated implementation costs increases when the reporting threshold moves from 0.50 percent to 0.25 percent as more carriers and their associated code-share partners are impacted. In addition, reporting flight performance data separated from with their code share partners would cost more to carriers than a combined report.

Costs to carriers are calculated by summing the following and are presented in Table 17 below:

- **The one-time set up costs for newly reporting carriers:** The number of newly reporting carriers multiplied by the one-time set up costs yields the total one-time costs for all impacted carriers. The number of newly reporting carriers changes as the reporting threshold changes. If lowering the reporting threshold to 0.50 percent, there will be 8 newly added reporting carriers with 10 code-share partners impacted; if lowering to 0.25 percent, there will be 12 newly added reporting carriers with 18 code-share partners impacted.
- **Costs to support disclosure of on-time performance data, born by newly reporting carriers that market their own flights:** Only those carriers which market directly to consumers are required to disclose on-time performance data, including making it available on their websites. Newly reporting carriers that operate code-share flights for other carriers and do market directly to consumers (such as Mesa, Pinnacle or Republic) will not incur this cost. If the reporting threshold is lowered to 0.50 percent of domestic passenger service, two newly added reporting carriers, Allegiant and Spirit, will incur costs to disclose on-time performance; if expanding the threshold to 0.25 percent, three additional carriers will incur this cost (Allegiant, Spirit and Mesaba).
- **The ongoing labor costs for reporting regularly:** The annual hours needed to perform reporting tasks multiplied by the hourly labor costs yields the annual ongoing costs for impacted carriers. The number of hours to perform reporting tasks depends on reporting data of code-share flights separately or combined. If reporting separately, the hours needed to perform reporting tasks annually are 24 hours more than reporting combined.

A couple of potential additional costs were identified but not quantified or monetized, but are not expected to be very significant.

- **Increased Training Costs for Data Gathering.** Many smaller carriers which do not current supply the data to BTS required of reporting carriers still do have systems in place to gain business intelligence regarding on-time performance, baggage handling, and oversales, but not all carriers have this data gathering system in place. Some of the newly reporting carriers may need to increase training system-wide to collect the data which will be transmitted to BTS (note that the costs to organize and transmit the data are accounted for as a separate item for this provision).
- **Cost for Reporting Carriers to Report Performance Data of Their Code-Share Operating Carriers.** To implement this rule, existing reporting carriers, who have contracted with other carriers (their code-shares) and also market code-share flights, need to report an additional set of reports with their code-share carriers' performance data together with their own performance data. For those newly reporting carriers that have code-shares but do not market their code-share flights, an additional set of performance reports to BTS is not

required. Therefore, they only need to report their own performance data. The number of total impacted code-share carriers is 62 (Table 2).

The analysis uses an annual estimate of 496 hours for each carrier to process On-time performance and Oversales reports.<sup>25</sup> Under proposed provisions, the total estimated cost to carriers would be \$5.2 million for the first year and \$29.8 million over ten years (discounted at 7 percent). If reporting separately, the estimated costs would be slightly higher: \$5.7 million for the first year and \$34.1 million for a 10-year period. If the reporting threshold is lowered to 0.25 percent and the reporting code-share flight data are combined, the estimated costs would be \$5.8 million for the first year and \$31.7 million for a 10-year period. Reporting separately will lead to first year costs of \$6.3 million and ten-year costs of \$36.3 million.

**Table 17: Estimated Costs for Provision 3 and 4**

	Reporting Threshold 0.50%			
	Second Set of Reports Combines Code-Shares and Reporting Carrier Flights Proposed Provision		Second Set of Reports for Code-Share Flights Only Alternative	
	2013 (First Year)	2013-2022 (Ten Years)	2013 (First Year)	2013-2022 (Ten Years)
<u>Affected Carriers</u>				
Number of existing reporting carriers has code share (1% reporting threshold)	9	9	9	9
Number of newly reporting carriers (with code share partners)	5	5	5	5
<i>Number of newly reporting carriers (without code share partners)</i>	3	3	3	3
Number of code-shares and reporting carrier pairs	62	62	62	62
<u>Costs Elements for Performance Reporting to BTS</u>				
Reporting Carrier Set-up costs (first year only)	\$100,763	\$100,763	\$100,763	\$100,763
Annual hours for form 234 on-time performance per carrier	480	538	528	592

<sup>25</sup> A risk-adjusted value based on average data. USDOT, Federal Register Notice, July 19 2010, Volume 75, Number 137, Agency Information Collection; Activity Under OMB Review; Airline Service Quality Performance-Part 234; US USDOT, Form 251 - Report of Passengers Denied Confirmed Space. See Appendix A for greater detail.

	Reporting Threshold 0.50%			
	Second Set of Reports Combines Code-Shares and Reporting Carrier Flights Proposed Provision		Second Set of Reports for Code-Share Flights Only Alternative	
	2013 (First Year)	2013-2022 (Ten Years)	2013 (First Year)	2013-2022 (Ten Years)
Annual hours per carrier for form 251 (on-time performance; oversales)	16	16	40	40
Hourly labor cost for reporting on forms 234 and 251*	\$90	\$97	\$90	\$97
Extra hours for reporting carriers to report data regarding code share partners	0	0	72	72
Cost of existing reporting carriers if reporting separately	0	0	77,849	836,998
<u>Elements for Compliance with Reporting Carrier Requirement to Post Delay Data Online (from first Enhancing Airline Passenger Protections rule)</u>				
Number of new reporting carriers that market their own tickets	3	3	3	3
Cost of posting delay information on line	\$419,394	\$419,394	\$419,394	\$419,394
<b>Totals For All Impacted Carriers</b>				
<b>Costs to All Newly Reporting Carriers</b>	<b>\$2,421,814</b>	<b>\$6,369,398</b>	<b>\$2,512,637</b>	<b>\$7,392,007</b>
Set-up costs	\$806,103	\$806,103	\$806,103	\$806,103
Annual labor cost for forms 234 and 251	\$357,527	\$4,305,111	\$409,426	\$4,909,222
Annual labor cost if reporting separately	\$0	\$0	\$38,924	\$418,499
Cost of posting delay information on line (newly reporting carriers that market their own tickets)	\$1,258,183	\$1,258,183	\$1,258,183	\$1,258,183
<b>Cost to Co-Share Partners</b>	<b>\$2,770,836</b>	<b>\$33,364,613</b>	<b>\$3,173,054</b>	<b>\$38,046,470</b>
Annual labor cost for reporting (code share partners of currently reporting carriers)	\$2,770,836	\$33,364,613	\$3,173,054	\$38,046,470
<b>Total Component Costs (millions)</b>				
Undiscounted costs	\$5.2	\$39.7	\$5.7	\$45.6
<b>Discounted costs</b>	<b>\$5.2</b>	<b>\$29.8</b>	<b>\$5.7</b>	<b>\$34.1</b>

\*: The hourly labor cost for reporting is an average of hourly rates presented in *Enhancing Airline Passenger Protections Final Rule* of April 25, 2011 RIA and 2003 hourly rates for this specific technical work provided by a reporting carrier which shared this confidential data under agreement that they would not be named publicly. The hourly labor cost for reporting includes benefits and supervisory review time. It is adjusted in years going forward by 1.6 percent annually during the study period. Refer to Table 26 for detailed information.

*Sources: Annual Hours, and Hourly Labor Cost to Prepare and Submit BTS Forms 234 and 251 for Reporting Carriers Annually, Adjusted of Labor Productivity Growth: USDOT, Federal Register Notice, July 19 2010, Volume 75, Number 137, Agency Information Collection; Activity Under OMB Review; Airline Service Quality Performance-Part 234; US USDOT, Form 251 - Report of Passengers Denied Confirmed Space. U.S. USDOT Final RIA Consumer Rulemaking: Enhancing Airline Passenger Protections II, Econometrics and HDR Decision Economics 2011;; CBO, Current Economic Projections: Selected Tables from CBO's Budget and Economic Outlook, January 2011; Federal Register/Vol.77, No. 20. January 31, 2012. One-Time Set Up Cost for Newly Reporting Carriers to Develop and Implement the Systems Needed to Report Required Data to BTS Regularly: 14 CFR Part 234 Revision of Airline Service Quality Performance Reports and Disclosure Requirements, Docket No. RITA 2007-28522, RIN number 2139-AA 12, BTS; Federal Register /Vol. 76, No. 136 / Friday, July 15, 2011 / Proposed Rules, Department of Transportation, Office of the Secretary 14 CFR Parts 234 and 241 [Docket No. RITA 2011-0001] RIN 2139-AA13 Reporting Ancillary Airline Passenger Revenues; Final Regulatory Impact Analysis of Rulemaking on Enhanced Airline Passenger Protections, Final RIA, HDR Decision Economics, 2009; Estimated initial cost provided by a reporting carrier, 2012. Cost to Carriers of Providing Delay Data on Their Websites: U.S. USDOT Final RIA Consumer Rulemaking on Enhanced Airline Passenger Protections I, 2009. See Appendix A for greater detail.*

## **4.4 Provision 5: Minimum Customer Service Standards for Ticket Agents**

### **4.4.1 Current Requirements, Industry Practices, and Need for Additional Regulation**

Complaints regarding ticket agency customer services are increasing; the average number of complaints per travel agent increased from 21.5 in 2009 to 25.7 in 2011 while the average annual growth of enplanement was less than 0.02% for the same period, according to “Air Travel Consumer Report” released by US USDOT<sup>26</sup>. The lack of specific minimum customer service standards for ticket agents makes it difficult for both customers and the Department to evaluate the services of ticket agents.

In addition, many consumers and some industry professionals note that the existence of minimum customer service standards of carriers provides consumers additional protections when purchasing a ticket directly from a carrier instead of through a ticket agent. Minimum customer service standards may lead some consumers to feel that, all other things being equal, it is ‘better’ to purchase directly from a carrier because of the added safety of those customer service protections. In essence, the existence of a federal regulation ensure certain customer standards for the purchase of the same product – an airline ticket – would protect air travelers regardless of how or from which entity (a carrier or a ticket agent) they purchased their ticket. The Department believes that regulation is warranted to ensure that a specified minimum

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<sup>26</sup> The Air Travel Consumer Report includes the number of complaints received by major travel agents in US. By the end of 2011, there were six major travel agents: Cheap Tickets, Cheapoair.com, Expedia.com, Orbitz.com, Priceline.com and Travelocity.com.

customer service standard exists to deter unfair or deceptive practices and unfair methods of competition that may be employed by ticket agents.

#### **4.4.2 New Requirements to Address Identified Needs**

Table 18 details the content of Provision 4 and associated costs to travel agents and benefits to customers. The benefits from this provision are assumed to be a premium on complaint-free air travel based on a portion of the weighted average air fare.

**Table 18: Summary of Provision 5: Requirements, Carrier Actions, Costs, and Benefits**

Minimum Customer Service Standards for Ticket Agents			
Component requirements	Travel agent actions	Costs	Benefits
Ticket Agent required to: (a) Provide ticket refunds by 7 days for credit card; & 20 days for cash, check or debit. (b) Hold reservation at quoted fare (or permit cancellation without penalty) for at least 24 hours. (c) Disclose cancellation policies. (d) Notify consumers of changes in travel itineraries. (e) Acknowledge receipt of consumer complaints within 30 days of complaint and send a written substantive response within 60 days	<ul style="list-style-type: none"> <li>Modify systems and practices to meet requirements</li> </ul>	<ul style="list-style-type: none"> <li>Initial Costs:               <ul style="list-style-type: none"> <li>Potential system updates and training</li> </ul> </li> <li>Annual Costs:               <ul style="list-style-type: none"> <li>Additional staff time to provide required disclosures and notifications (when occur)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Short-term benefit:               <ul style="list-style-type: none"> <li>Improvement in customer satisfaction (quality of service).</li> <li>Potential increase in demand for travel agent services and possibly for air travel</li> </ul> </li> <li>Long-term benefits:               <ul style="list-style-type: none"> <li>Uncertain/unclear</li> </ul> </li> </ul>

#### **4.4.3 Benefits for Provision 5 Not Quantified**

The Department believes the minimum customer service standards for ticket agents in the rule will motivate ticket agents to provide better service to their customers and decrease confusion and complaints from airline passengers.

Because no data was found to quantify the value of decreased anxiety during extended wait periods, this provision is not quantified. A recent review of literature on the value of travel time found changes based on various levels of comfort as low as 8%, or .08 (Chapter 5, Transportation Cost and Benefit Analysis – Travel Time Costs, Victoria Transport Policy Institute, revised August 10, 2007). Other research literature in transportation economics have used

survey-based data that reflect travel time values that incorporate the quality of waiting, walking and transfer conditions in multiple other modes of transportation and have arrived at premiums ranging from 35% to 50%.<sup>27</sup>

At the end of 2009, the Department mandated that carriers adopt customer service plans and audit their plan.<sup>28</sup> After implementation of this rule, the average number of complaints per domestic carrier decreased from 507 in 2010 to 381 in 2011. Complaints per 100,000 enplanements dropped from 1.4 to 1.2, a 22 percent reduction, during the same period. As ticket agents and domestic carriers both provide services to airline passengers, the study team assumes that the proposed rule would have a similar effect on ticket agents regarding improvement in customer service.

This provision only applies to ticket agents with annual revenue in excess of \$100 million. The four largest travel agencies—Expedia, Orbitz, Priceline, and Travelocity—reportedly account for 96 percent of all online sales by travel intermediaries in the leisure travel market segment.<sup>29</sup> Therefore, travel agencies with annual revenue in excess of \$100 million would handle the vast majority of sales by travel intermediaries including online travel agencies.

Followings are benefits likely to arise from this provision which could not be estimated:

- **Reduction in Complaints to Ticket Agents.** With the implementation of minimum customer service standard, the number of complaints to ticket agents per 100,000 enplanements is expected to decline. This could be an added value for each passengers that otherwise would have had cause to complain before these standards led to improved customer service.
- **Improved Customer Good Will Towards Ticket Agents.** With improved overall customer service, overall customer good will towards ticket agents should improve. Improved good will may lead to a slight increase in demand.
- **Reduced Legal and Administrative Costs to Manage Complaints.** Implementation of the customer service standards should lead to fewer complaints, as estimated above. Fewer complaints also mean decreased legal and administrative costs to manage complaints.
- **Faster Resolution of Complaints/Refunds.** Implementation of the customer service standards should also generate faster resolution of complaints and faster refunds.

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<sup>27</sup> See William Waters, *The Value of Times Savings for the Economic Valuation of Highway Investments* in British Columbia, BC Ministry of Transportation and Highways, 1992 as discussed in *Transportation Cost and Benefit Analysis - Travel Time Costs*, Victoria Transport Policy Institute, revised August 10, 2007 and Marcus von Wartburg and W.G. Waters 11, Chapter 2: Congestion Externalities and the Value of Travel Time Savings, in *Towards Estimating the Social and Environmental Costs of Transportation in Canada*, Anming Khang, et al, eds. Center for Transportation Studies, University of British Columbia, August 2004, for recent reviews of the literature.

<sup>28</sup> US USDOT, *Enhancing Airline Passenger Protections*, Federal Register Vol. 74, No. 249, December 30, 2009

<sup>29</sup> PhoCusWright, *The Role and Value of the Global Distribution System in Travel Distribution*, November 2009.

- **Potential Increase in Competitiveness of Travel Agents vs. Carriers with Customer Protections Similar to Carriers.** Given that carriers are required to have and audit customer service plans but travel agents are not, there may be a perception amongst some consumers that purchasing from a carrier is safer than purchasing from a travel agent. A requiring similar customer service standard for both carriers and travel agents helps to ensure a ‘level playing field.’

#### **4.4.4 Estimated Costs for Provision 5**

The costs to ticket agents to comply with this provision are calculated by multiplying the number of impacted ticket agents by the one-time cost of implementation, such as reprogramming systems. The one-time set up cost differs among ticket agents and is based on its size. For example, it would be much more expensive for a large ticket agent to modify its practices to meet this requirement. According to Small Business Administration, 2007, 81 travel agencies and tour operators have annual revenue in excess of \$100 million (estimated are reported in Table 7). The estimated total cost for ticket agents to implement this provision is \$3.0 million in the first year. Cost details are provided in Appendix A.

The principal costs of this provision are thought to be costs to develop and set up internal systems. After setting up the needed internal system(s), it was assumed that the cost of complying with this requirement, e.g., making a refund to any client who cancels within 24 hours of booking, would be minimal. Thus, additional costs that are identified but not quantified or monetized for this provision include the on-going operations costs. Other unquantified costs include:

- **Increased Training Costs.** Many ticket agents may need to modify and/or expand their training programs to incorporate guidance for employees regarding the new customer service provision.
- **Increased Management Costs.** Some ticket agents may need to make notable management changes in order to comply with the minimum customer service requirements, include allowing for 24 hours holds and providing faster refunds.
- **Staff Time to Address Passenger Complaints.** Those covered ticket agents which are currently not allocating adequate staff time to address customer complaints in a timely fashion may incur additional costs to comply with that portion of the rule provision.

**Table 19: Estimated Costs for Provision 5**

	<b>2013 (First Year)</b>
Number of large ticket agencies and tour operators	81
Cost of implementation per agency (one-time set up cost)	\$36,682
Cost to large ticket agents	\$2,971,279
Undiscounted costs	<b>\$3.0</b>
<b>Discounted costs (7%)</b>	<b>\$3.0</b>

Sources: One-Time Cost of Implementation of Minimum Customer Service Standards (CSP) for Ticket Agents and Number of Impacted Ticket Agents: U.S. USDOT Final RIA Consumer Rulemaking: Enhancing Airline Passenger Protections II, 2011; Small Business Administration, 2007. See Appendix A for greater detail.

#### **4.5 Provision 6: Disclosure of Code-Share Segments in Schedules, Advertisements and Communications with Consumers**

Provision 6 is already in effect<sup>30</sup>; however there is a need to clarify and strengthen some of the rule text. This provision codifies language that requires that carriers disclose all segments that are operated by their code-share partners in advertisements, in the first display following an internet schedule/fare request, and in any direct oral communication with a consumer.

As this part of the proposal would codify the requirement of a recent statute (41712(c)), all carriers and ticket agencies should already be complying with the substance of the requirement. Therefore, this evaluation assumes there should be no additional costs or benefits from incorporating the statutory language into this provision.

#### **4.6 Provision 7: Disclosure of Carriers Marketed by Ticket Agents**

The Department is concerned about the lack of disclosure by ticket agents of the carriers which they market. Some ticket agents may not present information on all carriers servicing certain routes, although some consumers may assume that the ticket agent does do so. The most prominent current example is the fact that Southwest, one of the larger US carriers, is not listed on many metasearch engines and does not participate with all the GDSs. Thus, many consumers may be making purchasing decisions unaware of Southwest as an option.

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<sup>30</sup> 14 CFR 257.5-Notice Requirement, the U.S. USDOT, August 2005

The Department is seeking comments on the potential impact and effectiveness of requiring operators of electronic airline information systems to disclose which carriers it includes in its system, or to note which domestic reporting carriers which market to consumers it does not include.

If any such requirements were to be proposed by the Department, all entities which fall under the definition of a ticket agent would be affected, including metasearch engines such as Google and Bing. But the Department is not certain of the impacts on these entities, which are still growing and changing rapidly.

The Department expects that such display requirements would lead, in the long run via greater transparency to more informed and therefore more optimal choices by consumers. Being aware of which carriers are marketed by a ticket agent, a savvy consumer may want to check if the fares of other carriers who are not marketed by a particular ticket agent are lower or whether another carrier might have a preferable schedule. Instead of purchasing the fare and route suggested by the ticket agent that does not market all carriers that serve a particular market, consumers may go to other online ticket agents or directly to carrier websites to find the fares and schedules of other carriers.

#### **4.7 Provision 8: Prohibition on Undisclosed Biasing**

The Department is aware of several instances in the past few years in which GDSs and large OTAs have manipulated ticket search results and provided biased or filtered flights and fare information. In particular, this concern was highlighted when a large network carrier discovered that at least one GDS and two OTAs had influenced itinerary search results to disfavor the network carrier's flights, and in some cases, not display the carrier's flights in search results at all. These actions were part of a business dispute, but the display bias was not disclosed to consumers.

Therefore, the Department is proposing requiring operators of electronic airline information systems to provide prominent disclosure if their system uses any factors not related to airline identity in ordering search results, or else that they order the search results so that the lowest fare available that meets the consumer's specified search criteria is displayed conspicuously and no less prominently than any other fare.

This requirement applies to all entities which fall under the definition of a ticket agent, including metasearch engines such as Google and Bing.

#### **4.8 Provision 9: Prohibition of Post-Purchase Price Increases for Ancillary Service Fees**

##### **4.8.1 Current Requirements, Industry Practices, and Need for Additional Regulation**

In recent years, consumers could possibly find themselves incurring higher costs for air travel than was contracted for at the time of purchase because of increases in ancillary service fees such as checked baggage fees. On April 25, 2011 (76 FR 23110), USDOT published the second

Enhancing Airline Passenger Protections rule. It included a prohibition of post-purchase price increase that states that:

*“It is an unfair and deceptive practice...to an increase in the price of the seat, an increase in the price for the carriage of passenger baggage, or an increase in an applicable fuel surcharge, after the air transportation has been purchased by the consumer, except in the case of an increase in a government-imposed tax or fee.”*

Currently, airlines change ancillary service fees frequently. Spirit Airlines increased fees for carry-on baggage from \$45 to as much as \$100 each way starting November 2, 2012. Passengers unaware of such a change in an ancillary service fee may end up paying much more than expected for their air travel. Unlike other ancillary services, until relatively recently two checked bags and one or two carry-on pieces were included in the price of a ticket. In comparison with other ancillary services, baggage service is considered a basic element of air travel. In late 2011, USDOT issued guidance on its policy change which prohibits an increase in the price of baggage fees to a consumer after the ticket is purchased, but allows an increase in other ancillary services.<sup>31</sup> Provision 10 of this Final Rule codifies that guidance.

As the Department is proposing to codify existing guidance, all carriers are supposed to be complying with the substance of the requirement already. Therefore, this evaluation assumes there should be no additional costs or benefits from this provision.

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<sup>31</sup> *Guidance On Price Increases Of Ancillary Services And Products Not Purchased With The Ticket*, Issued On December 28, 2011 (Available At <http://www.dot.gov/airconsumer/guidance-price-increases-ancillary-services-not-purchased-ticket-12282011>).

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## **5. SUMMARY RESULTS**

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The goal of this analysis is to estimate the incremental benefits and costs of adopting the Department's Proposed Rule to enhance airline passenger protections. The difference between benefits and costs quantified over the study period and discounted to the present value is the primary indicator of economic validation. This follows OMB Circular A-4, which stipulates that this difference – the net present value (NPV) – is to be regarded as a principal measure of value produced by a benefit-cost analysis. Further, Executive Order 12866 states that agencies should attempt to maximize the net benefits of their rulemakings, subject to statutory requirements. An NPV greater than zero indicates that measured benefits exceed measured costs and that the regulation is likely to increase the general level of economic welfare accordingly. An NPV of less than zero means that measured costs exceed measured benefits. The existence and magnitude and implications for NPV of unmeasured costs and benefits may be assessed in a threshold analysis.

This section describes the comparative analysis of estimated costs and benefits for the Proposed Rule and associated alternatives. This section also discusses the risk and sensitivity analysis of NPV findings in relation to key variables.

The Proposed Rule is assessed along with three separate alternatives from both quantitative and non-quantitative (qualitative) grounds. The next section describes the outcomes of the quantitative analysis. The section following that discusses the qualitative analysis.

### **5.1 Net Results**

As shown in Table 20, the RIA estimates costs for the Proposed Rule as \$53.8 million greater than benefits which could be monetized, over a 10-year analysis period (at a 7 percent discount rate). These values do not include estimates of the benefits from several of the provisions, since those benefits could not be measured and valued with confidence. Provisions 3 & 4 (which are interconnected and are thus presented together) generate the largest net cost at \$29.8 million, followed by Provision 2 with net cost \$21.1 million. Except for Provision 2, no benefits could be quantified and monetized with accuracy for the rest of proposed provisions.

The benefits which could be estimated for provision 2 does not include the value of all likely benefits, as values for some could not be adequately estimated. These expected benefits, such as greater competition and lower overall prices for ancillary service fees and greater efficiency by consumers in flight purchases, could not be monetized with confidence. For those provisions, additional attention is paid to expected benefits which were not able to be monetized, and additional calculations were conducted on the net costs to determine minimum levels of non-monetized benefits needed for the provision to be net beneficial.

The impact of those provisions with negative net benefits (as currently estimated) can also be examined by apportioning the costs across all beneficiaries, and if the resulting per 'person' cost is very low policymakers may conclude that unquantified benefits will exceed costs. Thus,

if consumers are willing to pay on average more than one hundredth of a cent per flight for proposed provisions, those provisions can be termed as net beneficial.

As shown below, **if the value of unquantified benefits, per passenger, is any amount greater than one cent, then the entire rule is net beneficial.** In other words, if passengers are willing to pay, on average, one penny per trip for all provisions of the rule, then the value of the rule outweighs its costs.

**Table 20: Summary of Costs and Benefits Over 10 Years, Discounted at 7 and 3 Percent (Millions \$)**

Provisions		10 Year Analysis Period		
		7% Discount Rate		
		Costs	Benefits	Net Benefits
1	Definition of Ticket Agent			
Monetized Costs and Benefits		N/A	N/A	N/A
2	Carriers provide ancillary service fee information to ticket agencies for display			
Monetized Costs and Benefits		\$46.2	\$25.1	(\$21.1)
Unquantified/ non-monetized benefits or costs <i>Greater Competition and Lower Overall Prices for Ancillary service fees</i> <i>Greater Efficiency by Consumers in Flight Purchases</i> Unquantified/ non-monetized Costs: <i>May Inhibit New Entrants</i> <i>May Decrease Carrier Flexibility to Customize Services</i>		Value of Unquantified Benefits per PAX Needed for Benefits to Equal or Exceed Costs Less than \$0.00 (21.06 M net cost / 1,666 M travelers purchasing via internet - 10 yrs)		
3 & 4	Expand reporting threshold to 0.50% and reporting as mainline carriers and code-share partners combined			
Monetized Costs and Benefits		\$29.8	N/A	(\$29.8)
Unquantified/ non-monetized benefits:  <i>Improved On-Time Performance for Newly Reporting Carriers and Code-Share Flights for All Reporting Carriers</i> <i>Improved Handling of Baggage for Newly Reporting Carriers and Code-Share Flights for All Reporting Carriers</i> <i>Decrease in Oversales</i> <i>Improved Customer Good Will Towards Carriers</i> <i>Insurance Value</i> <i>Improved Public Oversight of the Industry</i> Unquantified/ non-monetized Costs: <i>Increased Training Costs for Gathering Data to Report (some carriers only)</i> <i>Increased Management Costs To Improve Carrier Performance</i>		Value of Unquantified Benefits per PAX Needed for Benefits to Equal or Exceed Costs \$0.7 (29.75 M net cost / 43.9 M PAX on newly reporting carriers 10 yrs) to Less than \$0.00 (29.75M net cost / 7,335 M all domestic PAX 10 yrs)		

Provisions		10 Year Analysis Period		
		7% Discount Rate		
		Costs	Benefits	Net Benefits
5	Minimum customer service standards for ticket agents			
Monetized Costs and Benefits		\$3.0	N/A	(\$3.0)
Unquantified/ non-monetized benefits:  Improved Customer Good Will Towards Ticket Agents Reduced Legal and Administrative Costs to Manage Complaints Faster Resolution of Complaints/Refunds Potential Increase in Competitiveness of Travel Agents vs. Carriers with Customer Protections Similar to Carriers Unquantified/ non-monetized Costs: Increased Training Costs Increased Management Costs Increased Staff Time		Value of Unquantified Benefits per PAX Needed for Benefits to Equal or Exceed Costs  Less than \$0.00 (2.95 M net cost / 3,405 M domestic PAX purchasing via travel agents 10 yrs)		
6	Disclosure of code-share segments in schedules, advertisements and communications with consumers			
Monetized Costs and Benefits		N/A	N/A	N/A
7	Disclosure of carriers marketed by ticket agents (no proposed rule text – seeking comments)			
8	Prohibition on undisclosed biasing			
Monetized Costs and Benefits		N/A	N/A	N/A
Unquantified/ non-monetized benefits:  Decrease in Incentive Payments to Ticket Agents from Carriers Potentially Leading to Lower Costs to Consumers Potential Decrease in Consumers Not Noticing Flights which Better Meet Their Criteria Unquantified/ non-monetized Costs: Programming Costs to Change Ranking Software/Systems or to Post Notice Legal Costs to Adjust Existing Contracts Currently Requiring Preferential Display				
9	Prohibition of post-purchase price increase for ancillary service fees			
Monetized Costs and Benefits		N/A	N/A	N/A
Unquantified/ non-monetized benefits:  Improved Customer Good Will Towards Ticket Agents Reduced Legal and Administrative Costs to Manage Complaints				
TOTAL (All Proposed Provisions)*		\$79.5	\$25.1	(\$53.8)
Value of Unquantified Benefits Per Passenger Needed for NPV to Equal at Least \$0				\$0.0

### **Alternative Scenarios**

The Department considered multiple alternatives to individual provisions of this Final Rule. In addition to considering each provision individually (such as the option to implement all provisions except #6, or all except #8, for example) the Department also considered three additional variations (see Table 1) to specific provisions. Alternative A would lower the threshold for defining a reporting carrier from 1 percent of domestic airline passenger revenue to 0.25 percent of domestic airline passenger revenue, instead of to 0.5 percent of domestic airline passenger revenue. Alternative B would require reporting carriers to report their data separately for themselves and another set that contains their code-shares flights only (instead of reporting performance data for themselves and for their code-shares combined). Alternative C would require that carriers provide the necessary information to ticket agencies and global distribution systems (GDSs) in a format that would enable those agents and GDSs to sell basic ancillary services directly, instead of just providing pricing information for those services.

Table 21 reports net benefits for the 9 provisions in the Proposed Rule under these three the alternative regulatory scenarios (as defined at the foot of the Table). Net benefits are shown for each provision *with the values shaded in gray where the alternative impacts values*. Alternatives A and B will result in lower net benefits (which are negative and can thus be described as net costs) for provisions 1 and 2, while the Alternative C will result in higher total benefits. Alternative C, which enables consumers to obtain information about ancillary service fees from GDSs and purchase ancillary services from ticket agencies, is estimated to generate significant benefits, improving net benefits (which are negative – i.e. net costs) for the entire rule from -\$53.8 million to -\$4.0 million. Although Alternative C has a better NPV value than the proposed Rule, the Department is currently only seeking comment regarding “transactability” of ancillary services through ticket agents and GDSs but is not proposing specific rule text due to the uncertain nature of current developments within the industry and so as not to conflict with other regulatory and oversight efforts.

**Table 21: Summary of NPV of Alternatives Over 10 Years, Discounted at 7 Percent (Millions \$)**

Provisions		10 Year Analysis Period of Net Benefits			
		Proposed Rule	Alternatives		
			A Expand definition of a “reporting carrier” to at least <b>0.25% of domestic scheduled passenger revenues</b>	B Reporting carriers to report their code-share flights <b>separated</b> from their own flights	C Carriers to provide ancillary service fee information to <b>ticket agencies and</b> that these services be transactable
1	Definition of ticket agents	\$0.0	\$0.0	\$0.0	\$0.0
2	Carriers provide ancillary service fee information to ticket agencies for display	(\$21.1)	(\$21.1)	(\$21.1)	\$28.7
3 & 4	Lower reporting threshold to 0.50% and submit additional set of reports for code-share partners (combined report)	(\$29.8)	(\$31.7)	(\$34.1)	(\$29.8)
5	Minimum customer service standards for ticket agents	(\$3.0)	(\$3.0)	(\$3.0)	(\$3.0)
6	Disclosure of code-share segments in schedules, advertisements and communications with consumers	\$0.0	\$0.0	\$0.0	\$0.0
7	Disclosure of carriers marketed by ticket agents (no proposed rule text – seeking comments)	N/A	N/A	N/A	N/A
8	Prohibition on undisclosed biasing	N/A	N/A	N/A	N/A
9	Prohibition of post-purchase price increase for baggage fees	\$0.0	\$0.0	\$0.0	\$0.0
<b>TOTAL (Proposed Provisions)*</b>		(\$53.8)	(\$55.8)	(\$58.2)	(\$4.0)

**Table 22: Annual Costs and Benefits that Could be Monetized, By Provision**

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
<b>Provision 1</b>											
Costs (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Costs (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
Benefits (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Benefits (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
<b>Provision 2</b>											
Costs (millions)	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.2	\$61.4
<i>Discounted Costs (millions)</i>	\$6.1	\$5.7	\$5.4	\$5.0	\$4.7	\$4.4	\$4.1	\$3.8	\$3.6	\$3.3	\$46.1
Benefits (millions)	\$3.0	\$3.1	\$3.2	\$3.3	\$3.3	\$3.4	\$3.5	\$3.6	\$3.7	\$3.7	\$33.8
<i>Discounted Benefits (millions)</i>	\$3.0	\$2.9	\$2.8	\$2.7	\$2.5	\$2.4	\$2.3	\$2.2	\$2.1	\$2.0	\$25.1
<b>Provisions 3 &amp; 4</b>											
Total Costs (millions)	\$5.2	\$3.3	\$3.4	\$3.5	\$3.7	\$3.8	\$4.0	\$4.1	\$4.3	\$4.5	\$39.7
<i>Discounted Costs (millions)</i>	\$5.2	\$3.0	\$3.0	\$2.9	\$2.8	\$2.7	\$2.6	\$2.6	\$2.5	\$2.4	\$29.8
Benefits (millions)	na	na	na	na	na	na	Na	na	na	na	na
<i>Discounted Benefits (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
<b>Provision 5</b>											
Costs (millions)	\$3.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.0
<i>Discounted Costs (millions)</i>	\$3.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.0
Benefits (millions)	na	na	na	na	na	na	Na	na	na	na	na
<i>Discounted Benefits (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
<b>Provision 6</b>											
Costs (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Costs (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
Benefits (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Benefits (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
<b>Provision 7</b>											

*Initial Regulatory Impact Analysis For Proposed Consumer Rulemaking  
Regarding Enhancing Airline Passenger Protections III*

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Costs (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Costs (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
Benefits (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Benefits (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
<b>Provision 8</b>											
Costs (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Costs (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
Benefits (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Benefits (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
<b>Provision 9</b>											
Costs (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Costs (millions)</i>	na	na	na	na	na	na	na	na	na	na	na
Benefits (millions)	na	na	na	na	na	na	na	na	na	na	na
<i>Discounted Benefits (millions)</i>	na	na	na	na	na	na	na	na	na	na	na

## **5.2 Sensitivity Analysis**

In addition to the risk analyses conducted to estimate probability ranges of outcomes, sensitivity analyses are conducted to isolate the impact of changes in a set of key variables. The sensitivity is introduced into the variables following the OMB guidance. Specifically, the OMB Circular A-4 provides the following guidance with respect to the conduct of sensitivity analyses:

Use a numerical sensitivity analysis to examine how the results of your analysis vary with plausible changes in assumptions, choices of input data, and alternative analytical approaches. Sensitivity analysis is especially valuable when the information is lacking to carry out a formal probabilistic simulation. Sensitivity analysis can be used to find “switch points” -- critical parameter values at which estimated net benefits change sign or the low cost alternative switches. Sensitivity analysis usually proceeds by changing one variable or assumption at a time, but it can also be done by varying a combination of variables simultaneously to learn more about the robustness of your results to widespread changes.

Following the OMB guidance, key inputs and assumptions are individually varied one at a time. Sensitivities with respect to the following are tested:

- **Provisions 2:** Increase the percentage of passengers who purchase ancillary services from 13 percent to 30 percent;
- **Provision 2:** Change the number of impacted passengers to include both leisure and business passengers;
- **Provision 2:** Increase the labor hours required for carriers to provide ancillary service fee information to ticket agents by 100 percent;

**Provision 2: Increase the percentage of passengers who research ancillary service on multiple websites for lowest fees from 13% to 30%.** The estimate of the percentage of travelers who pay ancillary service is expected to have a significant impact on the total benefits estimated under provision 7. Increasing the baseline estimate of 13 percent to 30 percent (another estimate for the percentage of passengers who purchase ancillary services encountered during research)<sup>32</sup>, which is a 131 percent increase in impacted travelers, will drive up discounted (7 percent) net benefits by 61 percent.

**Table 23: Sensitivity Analysis Results— Increase in Percentage of Travelers Paying Ancillary Service Fees in Provision 2**

	13% Ancillary Participation (Baseline Analysis)	30% Ancillary Participation (131% increase from Baseline)	Resulting Change (%)
<b>Benefits (\$ millions)</b>			
Total Economic Benefits	\$33.8	\$78.0	131%
PV 7% Discounting	\$25.1	\$57.9	131%
PV 3% Discounting	\$29.6	\$68.2	130%
<b>Costs (\$ millions)</b>			
Total Costs	\$104.20	--	--
PV 7% Discounting	\$78.90	--	--
PV 3% Discounting	\$91.00	--	--
<b>Net Benefits (\$ millions)</b>			
Total Net Benefits	(\$72.00)	(\$27.8)	61%
PV 7% Discounting	(\$55.40)	(\$22.6)	59%
PV 3% Discounting	(\$63.00)	(\$24.4)	61%

The second sensitivity tests the assumption that the vast majority of business travelers do not search for information on ancillary service fees before making a ticket purchase. The baseline analysis assumes that travel costs for most business travelers are borne by their employers and there is little incentive to spend time comparing relatively small additional fees. Yet some business travelers, especially the self-employed, may well search and compare such fees. Adding business passengers into the analysis for Provision 6 increases total benefits by approximately 46-47 percent (Table 24).

<sup>32</sup> IdeaWorks, "US Airlines Will Generate Millions from Higher Baggage Fees," January 20, 2010. (<http://seekingalpha.com/user/563503/instablog>). Using revenue and traffic disclosures made by US Airways, IdeaWorks estimated that 30.2 percent of US Airways passengers checked a bag.

**Table 24: Sensitivity Analysis Results— Adding Business Travelers to Provision 7**

Benefits (\$ millions)	Non-Business PAX Only (Baseline Analysis)	Business PAX Included	Resulting Change (%)
<b>Benefits (\$ millions)</b>			
Total Economic Benefits	\$33.8	\$49.5	46%
PV 7% Discounting	\$25.1	\$36.8	47%
PV 3% Discounting	\$29.6	\$43.3	46%
<b>Costs (\$ millions)</b>			
Total Costs	\$104.2	--	--
PV 7% Discounting	\$78.9	--	--
PV 3% Discounting	\$91.0	--	--
<b>Net Benefits (\$ millions)</b>			
Total Net Benefits	(\$70.4)	(\$54.7)	22%
PV 7% Discounting	(\$53.8)	(\$42.1)	21%
PV 3% Discounting	(\$61.4)	(\$47.7)	22%

Doubling the labor hours required for providing ancillary service fee information for provision 6 has little impact on total costs and the rule NPV.

**Table 25: Sensitivity Analysis Results — Increase In Labor Hours for Providing Ancillary Service Fee Information in Provision 7**

	Proposed Rule	100% Increase in Labor Hours	Resulting Change (%)
<b>Benefits (\$ millions)</b>			
Total Economic Benefits	\$33.8	--	--
PV 7% Discounting	\$25.1	--	--
PV 3% Discounting	\$29.6	--	--
<b>Costs (\$ millions)</b>			
Total Costs	\$104.2	\$104.6	1%
PV 7% Discounting	\$78.9	\$79.1	2%
PV 3% Discounting	\$91.0	\$92.1	1%
<b>Net Benefits (\$ millions)</b>			
Total Net Benefits	(\$70.4)	(\$70.8)	-1%
PV 7% Discounting	(\$53.8)	(\$54.0)	0%
PV 3% Discounting	(\$61.4)	(\$62.5)	-2%

## **Appendix A. Cost Related Data**

The key assumptions that drive the cost analyses are described in detail in the regulatory evaluation and summarized in chapter 4 and this Appendix. In Chapter 4, the estimated total cost for carriers to implement each provision is based on multiple assumptions such as hours needed to implement a provision, and one-time programming cost to set up data reporting system. This Appendix details data sources and references on the assumptions employed in cost estimation.

### **Provision 1**

No quantitative cost analysis is conducted for this provision.

### **Provision 2**

**Variable Name: Annual Cost Carriers Need to Pay to ATPCO to Publish Ancillary Service Fee Information**

**Variable Description:** This is the annual cost for U.S. and foreign carriers that sell tickets in the U.S. to disclose ancillary service fees to ticket agents and GDSs through Airline Tariff Publishing Company (ATPCO). ATPCO is a corporation that publishes the latest airfares, including ancillary service fees if provided by airlines, for more than 500 airlines multiple times per day. ATPCO charges each airline approximately \$3000 per month to file ancillary service fees with GDSs. So the annual cost for each airline to release ancillary service fee information through ATPCO is approximately \$36,000.

**Source:** The Role of the GDS in the Travel Marketplace-Part II, 2011, Sabre

### **Provision 3 and 4**

**Variable Name: Annual Hours, and Hourly Labor Cost to Prepare and Submit BTS Forms 234 and 251 for Reporting Carriers Annually, Adjusted of Labor Productivity Growth**

**Variable Description:** These inputs include the estimated annual hours and associated hourly labor cost for carriers to prepare and submit BTS Forms 234 and 251. The estimated hours needed annually for a carrier to fulfill the reporting requirements are provided by the USDOT. The hourly labor cost for reporting are averaged from data presented in the Enhancing Airline Passenger Protections Final Rule of April 25, 2011 RIA and a reporting carrier who supplied detailed estimates in 2012<sup>33</sup>.

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<sup>33</sup> The name of the reporting carrier cannot be disclosed due to confidentiality reasons.

According to USDOT guidance (as prepared for benefit-cost analyses in support of TIGER grant applications) wages can be expected to grow at the rate of annual productivity growth, which the Congressional Budget Office has recently estimated to be 1.6 percent (real terms). Therefore, the hourly labor cost is adjusted in years going forward by 1.6 percent annually during the study period.

**Source:** USDOT, Federal Register Notice, July 19 2010, Volume 75, Number 137, Agency Information Collection; Activity Under OMB Review; Airline Service Quality Performance-Part 234; US USDOT, Form 251 - Report of Passengers Denied Confirmed Space. USDOT Final RIA Consumer Rulemaking: Enhancing Airline Passenger Protections II, Econometrics and HDR Decision Economics 2011; CBO, Current Economic Projections: Selected Tables from CBO's Budget and Economic Outlook, January 2011; Federal Register/Vol.77, No. 20. January 31, 2012

**Table 26: Hours and Hourly Labor Cost to Prepare and Submit BTS Form 234 and 251 (2010 U.S. \$)**

	Lower 10% Limit	Median	Upper 10% Limit
Airline Service Quality Performance-Part 234 (Annually)	336	480	528
Form 251 - Report of Passengers Denied Confirmed Space (Annually)	4	16	40
Hourly Labor Cost for Reporting*	\$62.08	\$88.68	\$97.05

\*: The hourly labor cost includes benefits and supervisory review time.

**Variable Name: One-Time Set Up Cost for Newly Reporting Carriers to Develop and Implement the Systems Needed to Report Required Data to BTS Regularly**

**Variable Description:** This is the cost for newly reporting carriers to develop an IT system to collect, process, and report the required data to the USDOT for BTS Forms 234 and 251. The data required to submit regularly are: On-Time Performance Report (BTS Form 234), baggage handling statistics, and denied boarding/oversales (BTS Form 251). An assumption was made that one-time set up costs for carriers to develop a system to: 1) track all data needed for BTS Forms 234 and 251, 2) track checked mishandled bags, 3) tabulate data and submit to BTS, could range from \$24,082 and \$355,876 per carrier.

Since no specific estimates of the cost for carriers to implement the Proposed Rule are available, the cost range of this variable was developed by the study team based on the existing cost data for carriers to implement other related data reporting regulatory. A literature review was conducted to verify the cost assumption used in the analysis, especially through estimated costs for carriers to implement required reporting duties published by the USDOT. For example, according to the USDOT 14 CFR Part 234, they estimated the cost for programming to provide additional data on gate returns and cancelled and diverted flights could range from \$10,000 to \$60,000 per carrier. USDOT also commented that Delta Air Lines claimed it would cost Delta up to \$500,000 to reprogram its system to fulfill this requirement. Another Federal Register notice

published in 2011 estimated that the one time programming cost to the airline industry to report ancillary revenues and collect data on baggage handling would be just over \$150,000 per carrier. Those estimated costs are in the cost range used in this RIA.

**Source:** 14 CFR Part 234 Revision of Airline Service Quality Performance Reports and Disclosure Requirements, Docket No. RITA 2007-28522, RIN number 2139-AA 12, BTS; Federal Register /Vol. 76, No. 136 / Friday, July 15, 2011 / Proposed Rules, Department of Transportation, Office of the Secretary 14 CFR Parts 234 and 241 [Docket No. RITA 2011-0001] RIN 2139-AA13 Reporting Ancillary Airline Passenger Revenues; Final Regulatory Impact Analysis of Rulemaking on Enhanced Airline Passenger Protections, Final RIA, HDR Decision Economics, 2009; Estimated initial cost provided by a reporting carrier, 2012

**Table 27: One-Time Set Up Cost for Newly Reporting Carriers to Develop Computer System to Report Required Data to BTS Regularly (2011 U.S. \$)**

	Lower 10% Limit	Median	Upper 10% Limit
Set Up Costs	\$24,082	\$100,763	\$335,876

**Variable Name: Cost to Carriers of Providing Delay Data on Their Websites**

**Variable Description:** This is the variable presents the estimated cost to newly reporting carriers that market flights directly to consumers to post delay data on their websites, as required of reporting carriers by the first Rule Enhancing Airline Passenger Protections, published in 2009. The cost per carrier was derived from the researched estimates prepared for the 2009 rule and averages \$400,000 per carrier, which was inflated to 2011 dollars, or \$419,394 per carrier. This cost estimate is based on the assumption that since the carrier already has the necessary delay data in electronic format (in order to report it to BTS) the only notable additional cost would be to set up the website and infrastructure to receive and post delay data.

**Source:** USDOT Final RIA Consumer Rulemaking on Enhanced Airline Passenger Protections I, 2009

### **Provision 5**

#### **Variable Name: One-Time Cost of Implementation of Minimum Customer Service Standards (CSP) for Ticket Agents and Number of Impacted Ticket Agents**

**Variable Description:** This includes the inputs for estimating the cost per large ticket agent to modify systems and practices to meet minimum customer service standard requirements. As the provision only applies to ticket agents with annual revenue in excess of \$100 million, the costs are only estimated for the 57 ticket agents of that size, based on data published by the Small Business Administration. The cost of compliance per carrier was derived from researched estimates of carriers' cost of compliance for a nearly identical set of customer service requirements (less the cost of auditing its compliance) for the 2011 rulemaking Enhancing Airline Passenger Protections.

**Source:** USDOT Final RIA Consumer Rulemaking: Enhancing Airline Passenger Protections II, 2011; Small Business Administration, 2007

**Table 28: One-Time Implementation Costs Ticket Agents for Provision 4 (2010 U.S. \$) and Number of Impacted Ticket Agents**

	Impacted Ticket Agent	Range of Implementation Cost Per Agent		
		Lower 10% Limit	Median	Upper 10% Limit
Large Ticket Agent	57	\$17,500	\$35,000	\$70,000

### **Provision 6**

No quantitative cost analysis is conducted for this provision.

### **Provision 7**

No quantitative cost analysis is conducted for this provision.

### **Provision 8**

No quantitative cost analysis is conducted for this provision.

### **Provision 9**

No quantitative cost analysis is conducted for this provision.

## Appendix B. Benefit Related Data

The key assumptions that drive the benefit analyses are described in detail in the regulatory evaluation and summarized in chapter 4 and this appendix. In Chapter 4, the estimated total benefits for passengers to implement each provision are based on multiple assumptions such as value of time, the time saving because of improved information transparency. This Appendix details data sources and references on the assumptions employed in benefit estimation.

### **Variable Name: Passenger Value of Time**

**Variable Description:** This is the monetized value of time for airline passengers. This variable is used to calculate time savings and benefits from increased reliability and certainty, or reduced search and transaction time because of the Proposed Rulemaking.

Estimates of the value of time for air travelers while traveling are those prepared by the Department of Transportation for economic analyses. The future value of passenger time used in the RIA for the 10-year study period is augmented by 1.6 percent (projected annual growth rate of real median household income used by the Congressional Budget Office) per year.

The value of time for air travelers while not traveling is calculated by earnings estimates used by the Department of Transportation as follows: a weighted average (by proportion of all travelers) of (1) 100 percent times the average hourly earnings of those traveling by air on business and (2) 50 percent times the average hourly earnings of those traveling by air for personal trips. According to the USDOT, for all airline passengers, 59.6 percent of their trips are for personal travel, and the rest for business travel.

**Source:** USDOT, “Revised Departmental Guidance Valuation of Travel Time in Economic Analysis”, 2011.

**Table 29: Value of Time for Air Travel (2011 U.S. \$ per person-hour)**

	Lower 10% Limit	Median	Upper 10% Limit
Value of Time for Passenger (Personal Non-Travelling)	\$28.3	\$34.7	\$42.4
Value of Time for Passenger (Personal)	\$28.5	\$33.2	\$42.7
Value of Time for Passenger (Average for All Travelers)	\$36.8	\$44.6	\$55.2

### **Variable Name: Forecast Average Growth of Airline Passenger Traffic per Year**

**Variable Description:** This is the projected annual growth in airline passenger traffic on domestic and international flights from and to airports in the U.S. These rates are employed to forecast the number of airline passengers in during the outer years of the analysis.

**Source:** USDOT, Federal Aviation Administration, Aerospace Forecast Fiscal Years 2012–2032.

**Table 30: Forecast Growth of Airline Passenger Traffic (per Year) on U.S. Airlines**

Year	All Flights	Domestic Flights	International Flights
2010-2011	0.4%	0.1%	3.3%
2011-2012	0.2%	-0.1%	1.9%
2012-2013 and future	2.5%	2.3%	3.9%

**Variable Name: Number of Tickets Sold by Reporting Carriers**

**Variable Description:** This is the number of tickets sold by reporting carriers including tickets sold by carrier itself, OTAs and brick-and-mortar travel agencies. It is used to estimate the number of passengers who would benefit from the Proposed Rules such as provision 6 and 8. According to 2010 BTS data, the estimated number of tickets sold by reporting carriers (only includes scheduled passenger flights) is 253 million. It is augmented by the forecasted average growth of airline passenger traffic per year (Table 30) to yield the expected number of tickets for flights sold by reporting carriers in the 10-year study period.

**Source:** BTS, Airline Origin and Destination Survey (DB1B), 2010

**Variable Name: Percentage of Passengers Who Research ancillary Service Fees on Multiple Websites for Lowest Fees**

**Variable Description:** This is the percentage of passengers (20 percent) who research and compare ancillary service fees on multiple websites and book flights with the lowest fares (ticket price plus ancillary service fees). It is used to estimate the number of passengers who would benefit from increased information transparency regarding ancillary service fees thus less time spent on researching and comparing ancillary service fees. Through the survey research HDR study team conducted, there were no valid estimates regarding the portion of passengers who research and compare ancillary service fees on multiple websites. In continuing the search for evidence of incidence rates in this area, the team has queried *Google Trends* in relation to searches on “airfare” and on “baggage fees”. We found that Google searches on “baggage fees” are on average 20% of all searches on “airfare” (over the past three years). Though it is not a specific estimate of the portion of passengers who research and compare ancillary service fees before making purchase decisions, it could be used as a proxy for this variable as baggage fee is an important component of ancillary service fees. A risk range, listed in Table 31, is applied to this variable to estimate the uncertainty associated with this variable.

**Table 31: Percentage of passengers who research ancillary service fees on multiple websites for lowest fees**

	Lower 10% Limit	Median	Upper 10% Limit
Percentage of passengers who research ancillary service fees on multiple websites for lowest fees	2.0%	20%	33%

**Source:** Google Trends analysis of "air fare" and "baggage fees", <http://www.google.com/trends/explore#q=baggage%20fees%2C%20airfare&geo=US&date=1%2F2010%2037m&cmpt=q>, accessed on Feb 6 2013

**Variable Name: Percentage of Passengers Who Purchase Ancillary Services**

**Variable Description:** This is the estimated percentage of airline passengers (13 percent) who purchase ancillary services. HDR derived this figure using revenue data from BTS. According to the USDOT, the total revenue from baggage fees for US airlines was \$2.7 billion in 2009. The total number of domestic airline passengers<sup>34</sup> was 620 million in 2009. Since the cost range of checked bag(s) is from \$15 to \$35 for the 1<sup>st</sup> checked bag, and \$25 to \$70 for 2<sup>nd</sup> checked bag, an assumption is made that the average expense for checked baggage used in the analysis is \$37.50 per leg. The number of passengers who pay checked baggage fees is calculated by dividing the revenues from baggage fees by the average expense per checked baggage. Then, dividing the estimated number of passengers who pay checked baggage fees by the total number of airline passengers yields the portion of passengers who pay for bag(s). The calculation is based on 2009 and 2010 data as airlines started unbundling fares (e.g., assessing baggage fees) in 2008.

A similar calculation was prepared by IdeaWorks, "US Airlines Will Generate Millions from Higher Baggage Fees," January 20, 2010. (<http://seekingalpha.com/user/563503/instablog>). Using revenue and traffic disclosures made by US Airways, IdeaWorks estimated that 30.2 percent of US Airways passengers checked a bag.

**Source:** HDR Decision Economics' estimation based on the data provided by USDOT, BTS T-100, Air Carrier Financial Reports (Form 41 Financial Data), 2010

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<sup>34</sup> A passenger who takes a non-stop flight or multiple flights from origin to destination is counted as one passenger. For a round trip, the same passenger will be counted as two passengers in this analysis.

**Variable Name: Incremental Time Spent by Savvy Passengers Seeking Additional Information on Fees**

**Variable Description:** This is the average incremental time spent per savvy passenger to find hidden fees such as baggage fees before making a final purchase decision. The figure (0.04 hour) used in this RIA is calculated following the method and data provided by the report “Benefits and Costs of Proposed Changes in USDOT Regulations Regarding Transparency and Transactability of Ancillary Airline Fees” conducted by GRA, Incorporated (2012). It is used as a proxy to estimate the incremental time spent by savvy passengers finding the flight information regarding code-share segments and, if there is any, ancillary service fees. It is calculated by multiplying the number of extra webpage lookups for ancillary service fees per savvy passenger (2.55 webpages) by minutes per lookup (1.09). Therefore, for savvy passengers – those who check multiple websites – the average number of webpage lookups (which may be all related to one site) is approximately 2.55, and each lookup will take 1.09 minutes (to scan the page for the needed information, read it, etc.). Under this assumption, one search means 0.05 hours ( $2.55 \text{ lookups} \times 1.09 \text{ minutes} = 0.05 \text{ hours}$ ).

**Source:** GRA, Incorporated, “Benefits and Costs of Proposed Changes in USDOT Regulations Regarding Transparency and Transactability of Ancillary Airline Fees”, March 2012; Nair, C.T.R. *Essays on Online Browsing and Purchase* Dissertation, Washington University, Olin School of Business, St. Louis Missouri, 2010

**Variable Name: Percentage of Passengers Percentage Who Purchase Online (but not on carrier websites)**

**Variable Description:** This is the percentage of airline passengers (47 percent) purchase online through an avenue other than a carrier website. According to estimates by PhoCusWright (2011), 31 percent passengers purchased tickets through TMCs, and 16 percent via an OTA. Since both TMCs and OTAs use GDSs to book air tickets, the share of passengers who will benefit from improved salience on ancillary service fees would be the total of both ticket distribution channels (47 percent).

Other, higher proxy estimates were also found. The Department was present with another, similar estimate by InterVISTAS. Based on data from GDSs on revenue per segment and from BTS on average price per ticket, InterVISTAS estimated that 50 percent of US national round trip passengers book their ticket via a GDS. Meanwhile, the US Travel Association estimated that 67 percent of all passengers use the internet to purchase tickets. (US Travel Association: Travelers Use of the Internet, 2009).

**Source:** PhoCusWright, U.S. Online Travel Overview, 2011

**Variable Name: Percentage of Passengers Traveling for Leisure**

**Variable Description:** This is the percentage of airline passengers (68 percent) who are traveling for leisure. This variable is used to estimate the number of leisure passengers who may benefit from the proposal to increase disclosure when purchasing ancillary services.

**Source:** Nationwide Personal Transportation Survey, 1995.

**Variable Name: Incremental Time Spent by Passengers on Ancillary Service Transaction (hours)**

**Variable Description:** This figure (0.10 hour) is the average incremental time saving per savvy passenger if passengers could purchase ancillary services through OTAs' websites instead of through carriers' website only.

**Source:** GRA, Incorporated, "Benefits and Costs of Proposed Changes in USDOT Regulations Regarding Transparency and Transactability of Ancillary Airline Fees", March 2012.

## Appendix C. Formulas Used to Estimate Costs and Benefits

<b>Table 17: Estimated Costs for Provision 3 and</b>	<b>Page 59</b>
<b>Cost of New Reporting Carriers for Performance Reporting to BTS</b> Number of new reporting carriers * (one-time set up costs per carrier+ annual labor cost for reporting per carrier)	
<b>Cost for New Reporting Carriers That Market Their Own Tickets to Post Delay Data Online</b> Number of impacted carriers * one-time set up cost of posting delay information online per carrier	
<b>Cost for Reporting Carriers to Report Their Code-Share Flight Data</b> Number of impacted carriers * annual labor cost for reporting per carrier	
<b>Table 19: Estimated Costs for Provision 5</b>	<b>Page 65</b>
<b>Cost to Large Ticket Agencies and Tour Operators</b> Number of large ticket agencies and tour operators * one-time set up cost per agency	
<b>Table 12: Estimated Benefits for Provision 2 and Alternatives -- Time Savings Benefits for Portion of Purchasers of Ancillary Service Fees</b>	<b>Page 46</b>
<b>Number of Passengers Who Purchase Ancillary Services</b> Number of tickets for flights sold by reporting carriers / percentage of passengers on reporting carriers (domestic flights) * percentage of passengers who purchase ticket through OTAs * percentage of non-business passengers * percentage of passengers who research ancillary service fees on multiple websites	
<b>Time Saving Benefits Per Passenger Who Research ancillary Service Fees</b> Value of time per passenger (personal non-traveling) * average incremental search time for ancillary service fee information per ticket purchase	
<b>Total Time Saving Benefits for Passengers Who Research ancillary Service Fees</b> Number of passengers who purchase ancillary services * time saving benefits per passenger who research ancillary service fees	
<b>Table 13: Estimated Costs for Provision 2 and alternatives</b>	<b>Page 49</b>
<b>Cost for Carriers to Provide Ancillary Service Fee Information to OTAs and GDS</b> Number of impacted carriers * (annual labor cost to provide information to ticket agents per carriers + annual cost to ATPCO to transmit ancillary service fee information to GDS per carrier)	

## **Appendix D. List of Related USDOT Reporting Requirements**

### **(a) BTS Form 234 “On-Time Performance Report” (monthly)**

Form 234 requires U.S. reporting carriers to submit scheduled flight performance data and mishandled-baggage information to the Department, and to provide on-time performance codes to Computer Reservation System (CRS) vendors. These data are used to monitor each carrier's on-time performance and baggage handling, and to provide information to consumers. The scheduled flight performance data are filed electronically. The mishandled-baggage information is submitted as a one-page report with the required certification and transmittal letter.

The estimated time per responses for “On-Time Performance Report” and mishandled-baggage information is 20 hours per response, 12 responses per reporting carrier per year.

Source: USDOT, 14 CFR Part 234 Revision of Airline Service Quality Performance Reports and Disclosure Requirements, Docket No. RITA 2007-28522; US USDOT, Title 14 Code of Federal Regulation Part 234, Amended, Technical Directive #14-On-Time Reporting, Issue Date: October 2, 2006

### **(b) BTS Form 251 regarding denied boarding/ oversales (quarterly)**

BTS Form 251, “Report of Passengers Denied Confirmed Space,” is a one-page report submitted four times per year, on the number of passengers denied seats either voluntarily or involuntarily, whether these bumped passengers were provided alternate transportation and/or compensation, and the amount of the payment. Reporting carriers must report oversales on all operations with aircraft with 30 seats or more that depart a U.S. airport.

Source: USDOT, Form 251-Report of Passengers Denied Confirmed Space, OMB No. 2138-0018

### **(c) Cost for One-time Programming to Provide Additional Data:**

In 2007, after a public meeting regarding revision of Airline Quality Performance Reports and Disclosure requirements (Docket No. RITA 2007-28522), some carriers commented to BTS that the cost for programming to provide additional data on gate returns and cancelled and diverted flights could range from \$10,000 to \$60,000 per carrier.

Source: USDOT, 14 CFR Part 234 Revision of Airline Service Quality Performance Reports and Disclosure Requirements, Docket No. RITA 2007-28522

As for on-going costs to manage data and reporting once the system is reprogrammed, it should be negligible. According to one posting from the USDOT, for reporting additional information, USDOT assumes that once the reporting system is reprogrammed, there will be no additional costs or burdens for reporting as those carriers already need to do reporting. Here is the text from the USDOT’s posting:

*“Based on information collected during the pilot project, we estimate that the proposed reporting requirements would require each reporting carrier to expend 10-20 hours to reconfigure its data system. Once these initial resources are expended, we estimate that there will be no additional costs or burdens for delay and cancellation reporting. We estimated reprogramming costs of \$100.00/hour. Thus, we estimate that for the 12 reporting air carriers, there would be initial reprogramming costs of \$12,000-\$24,000. We estimate that the benefits to the traveling public, as well, more accurate information for the allocation of transportation resources outweigh the minimal costs that would be incurred by the reporting air carriers.”*

Source: USDOT, Notice of Proposed Rulemaking for Reporting the Causes of Airline Delays and Cancellations, Federal Register Notice, Volume 66, Number 248, December 27, 2001

#### **(d) Reporting Ancillary Airline Passenger Revenues:**

In July 2011, The US USDOT [been there, done that] proposed to collect revenue information in a more detailed manner regarding airline imposed fees from those air carriers meeting the definition of a large certificated air carrier.

Following is the text from the Federal Register on costs of developing a system to report ancillary revenues and collect data on baggage handling.

*“The Department estimates that the one time programming cost to the industry would be just over \$150,000 to report ancillary revenues to the Department. The approximately 77 air carriers would each incur about 40 hours of programming costs to capture the items that are considered ancillary revenues. The recurrent annual industry cost for submitting the new report is estimated at \$100,000 or \$700 per medium regional carrier and \$1,400 for other Form 41 reporters.*

*The cost to the 18 air carriers that would have to collect data on checked and mishandled baggage is estimated to be approximately \$180,000 (as of 18 reporting carriers) or \$10,000 per carrier. Most of the cost would be associated with developing a system for counting the number of gate-checked bags that are not scanned by the carrier when the passenger checks in for the flight. The Department also believes that the cost of the requirement to collect data on damage, delay or loss of wheelchairs or scooters transported in the aircraft cargo would be minimal for carriers, since we believe most carriers as a matter of good business practice already gather and maintain this information for their own purposes.”*

This Federal Register document also provided a list of information that reporting carriers should report on ancillary revenues and baggage-handling statistics.

Source: **Federal Register** /Vol. 76, No. 136 / Friday, July 15, 2011 / Proposed Rules, Department of Transportation Office of the Secretary 14 CFR Parts 234 and 241 [Docket No. RITA 2011–0001] RIN 2139–AA13 Reporting Ancillary Airline Passenger Revenues