Every year, hundreds of thousands of passengers arrive at their local airport to discover that their flight is overbooked. Unbeknownst to most travelers, their damages for the airlines’ breach of contract are governed by federal regulation. Since 1978, 14 C.F.R § 250.5 has set a statutory cap of four hundred dollars for all passengers bumped from domestic flights. In this Note, Elliott Blanchard examines the effects of this provision on passenger and airline behavior by applying modern contract theory to the problem of airline overbooking. He begins by examining the economic forces that led airlines to overbook flights and the subsequent federal government regulatory response in the 1970s. He observes that while a uniform system of compensation for all passengers made sense during the period of airline regulation, increased heterogeneity in both carriers and passengers now make such a system inefficient. While the market for airline travel has changed dramatically since the end of regulation, the statutory ceiling on damages has remained constant. The author argues that this cap undercompensates passengers for breach by the airlines, and rewards the carriers that overbook aggressively. Given the information asymmetries regarding the likelihood of being bumped, airlines have the opportunity to exploit passengers who cannot accurately discount an airline’s probability of performance. As a solution, the author suggests a repeal of the maximum damage amount coupled with increased disclosure of airline overbooking rates, which would encourage airlines to compete on performance as well as price.

Introduction

Imagine two passengers—Businessman Bill and Traveler Ted—are flying from New York to San Francisco. Traveler Ted purchased his $300 roundtrip ticket months ago, while Businessman Bill paid $1500 for his ticket yesterday. Once in San Francisco, Traveler Ted will embark on a weeklong ocean liner cruise which costs $2000 and Businessman Bill will head immediately to the city for a meeting. At Kennedy Airport, they arrive to find their flight overbooked and the airline offering $400 for anyone willing to wait for the next flight, six hours later. Which passenger should get to fly to San Francisco and
why? Assuming neither accepts the offered compensation and the airline bumps one of them, how much should that passenger be entitled to in damages? Under current federal regulations and prevailing industry practice, whoever arrived at the gate first would get to travel, and the other passenger would receive $400 (plus travel on the next available flight).\(^1\) Regardless of how much the traveler paid, which airline he travels on, or how desperately he needs to fly, his time of arrival determines which passenger can fly, and federal regulations determine his compensation.\(^2\)

Airlines attempt to fill every plane completely, and in order to account for last-minute cancellations and no-shows, they frequently will sell more tickets than there are seats. Normally, this overbooking practice is not problematic, as airlines are quite adept at predicting the number of no-shows on any given flight. However, when there are more confirmed passengers than seats, the airline must bump some passengers.\(^3\) It is the bumping process—the who, what, when, where, why, and how of airline overbooking—that is the focus of this paper. By applying contract theory to the real-world problem of airline overbooking, this Note evaluates the effectiveness of the federal caps on passenger damages.

Why would federal regulations impose a uniform limit on all passenger damages for overbooking?\(^4\) In passing the regulations, the federal government sought to “solve” the overbooking problem unilaterally by ensuring adequate compensation for bumped passengers. The federal government set the level of damages for passengers denied boarding at a maximum of $400\(^5\) and has not amended that

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1. See infra Part III.A.1.
3. In 2002, the largest U.S. airlines bumped 837,000 passengers, representing approximately 0.2% of domestic passengers. Of these, roughly 803,000 accepted compensation offered by the airlines to take a later flight and thus were voluntarily denied boarding. The remaining 34,000 rejected the offered compensation and thus were involuntarily denied boarding. Office of the Sec'y, U.S. Dep't of Transp., Air Travel Consumer Report (2003) [hereinafter NTS 2003] (summarized in National Transportation Statistics 2003, tbl.1-58), available at http://www.bts.gov/publications/national_transportation_statistics/index.html.

4. Federal regulations govern elements of the airline industry other than an airline’s overbooking practices, many with much more serious consequences than appropriate levels of compensation for bumped passengers. For the purposes of this paper, however, the reader is asked to assume that nothing is more important than achieving the efficient level of damages for breach, and thus all references to federal regulations refer solely to those governing damages.

5. The actual amount owed to a passenger is defined as “200 percent of the sum of the values of the passenger’s remaining flight coupons up to the passenger’s next stopover, or if none, to the passenger’s final destination, with a maximum of $400.” 14 C.F.R. § 250.5
amount since 1978.\textsuperscript{6} Every airline contract incorporates these amounts;\textsuperscript{7} hence these damages govern almost all commercial flights in the United States.\textsuperscript{8}

This Note discusses the development, economics, and regulation of airline overbooking and passenger bumping and concludes that these uniform damages are inefficient and need to be revised. First, this Note argues that federal regulations prevent efficient reliance by passengers and encourage inefficient breach by airlines. Second, by ignoring differences within the airline industry and treating all airlines uniformly, federal regulations grant airlines that choose to overbook an unwarranted economic advantage over those that avoid overbooking. The net effect of these policies is an advantage for those airlines that choose to exploit consumer ignorance about the likelihood of overbooking over those airlines that do not.

Part I of this Note provides general background on the airline industry, describes the development of overbooking, and explains how federal regulations emerged to combat the problems of airline overbooking policies. Part II examines the effects of these federal regulations on passenger and airline behavior, first in a world with only one type of airline, and then in one where airlines have varying propensities to overbook. It argues that, despite disclosure requirements mandated by federal regulations, passengers remain uninformed about the probability of breach and thus purchase tickets primarily based on price. This asymmetric information leads to inefficient breach and encourages airlines to exploit consumer ignorance. Part III proposes new solutions that would allow airlines to compete on the basis of their likelihood of performance and enable passengers to choose airlines accordingly.

\textbf{I}

\textbf{An Overview of Overbooking and the Federal Response}

This Part begins with a discussion of the importance of filling empty seats on all airlines and explains how and why the airline

\textsuperscript{6} The Department of Transportation considered updating these compensation amounts in 2001, \textit{see} Press Release, Dep't of Transp., DOT To Consider Updating Denied Boarding Compensation Rule (Apr. 13, 2001), \textit{available at} http://www.dot.gov/affairs/dot3501.htm, but the financial troubles of the airline industry post–September 11 precluded such changes, \textit{see} Jane Costello, \textit{Airlines Cut Payments to Bumped Flyers}, \textit{WALL ST. J.}, Nov. 12, 2002, at D1.

\textsuperscript{7} \textit{See infra} note 49.

\textsuperscript{8} 14 C.F.R. § 250.2 (2002).
industry developed overbooking as a solution to the empty-seat problem. Part I.B then addresses the compensation and information issues spawned by overbooking. Part I.C describes the federal response to these new overbooking problems and the enactment of regulations standardizing damages for all bumped passengers. Although these regulations may have worked well decades ago, they are an ineffective deterrent today and persist largely as a remnant of an older regulatory state.9 The regulations' effects on the modern airline industry are examined in Part II.

A. The Problems of Empty Seats and No-Shows

The airline industry presents a complex contracting problem due to its cost structure.10 Once an airline decides to provide service on a certain route, its costs are fixed, and once a flight takes off, the value of any unsold seats is lost forever. This "perishable inventory" problem means that maximizing seat utilization is especially important within the airline industry.11 Every empty seat represents lost incremental revenue at minimal incremental cost, and thus airlines attempt to maximize profits by minimizing empty seats.12 Though passengers may enjoy the extra space available from uncrowded planes, a full plane increases the profitability of air transportation and ensures frequent service by airlines.13

There are many possible ways to ensure that a plane departs as full as possible, and, in the 1960s and '70s, the Civil Aeronautics Board (CAB) experimented with a number of them.14 One of the simplest solutions is to make tickets cheap and non-refundable, thus guaranteeing a full flight (though not necessarily a profitable one).15


11 See HOLLOWAY, supra note 10, at 9–10.


15 Indeed, overbooking is not the only solution currently practiced by airlines. See infra Part II.C.2. For example, the simplest method of ensuring a full load would be not to leave
However, prior to the 1980s, the federal government, through CAB, regulated almost every aspect of the airline industry. CAB set routes, prices, and schedules for airlines allowed to service each route.\textsuperscript{16} Because of the airline industry's origin as a highly regulated, high-price, high-service industry,\textsuperscript{17} airlines developed a standard product that met the needs of its high-end passengers, combining expensive service with flexible reservations policies.

It is much more difficult to provide passengers with flexibility in reservations, a priority largely for passengers such as Businessman Bill, without increasing the odds of empty seats.\textsuperscript{18} Flexibility for passengers consists of two primary elements—making seats available on preferred flights and allowing cancellations without penalties.\textsuperscript{19} These two goals create enormous capacity problems for airlines—they do not want to be stuck with unsold seats when a flight takes off, but also need to keep some seats empty to allow for last-minute reservations. Furthermore, if airlines grant passengers flexibility in canceling reservations, any already-sold seat can turn into an empty seat if a passenger’s travel plans change. These last-minute cancellations, or “no-shows,” increase the number of empty seats on a plane, and thus can lead to higher prices in the long run.

Airlines began overbooking flights to combat the problem of no-shows.\textsuperscript{20} Overbooking is the selling of more confirmed tickets than available seats. This practice allows airlines to reduce the number of empty seats on a flight, while still maintaining passenger flexibility and liberal reservation policies.\textsuperscript{21} Passenger dissatisfaction with cancellations, until a flight is full. Many types of transportation follow this solution—a bus, for example, might sit and wait to fill with passengers before departing. More realistically, airlines could require a minimum number of reservations before guaranteeing a flight.


\textsuperscript{17} \textit{Report 230, supra} note 16, at 92–95.

\textsuperscript{18} \textit{Stephen Shaw, Airline Marketing and Management} 132–34 (4th ed. 1999) (“[B]usiness travelers often regard the right to no-show as an important part of the flexibility they are buying when using a very expensive fare.”); \textit{GAO Report, supra} note 12, at 19.

\textsuperscript{19} Oversales, 47 Fed. Reg. 52,980, 52,980 (Nov. 24, 1982) (codified at 14 C.F.R. pt. 250) (overbooking allows “flexibility in making and cancelling reservations, as well as buying or refunding tickets”); \textit{see also William E. O’Connor, An Introduction to Airline Economics} 116–18 (6th ed. 2001) (using word “quality” to describe frequency of flights and availability of seats on any individual flight).


\textsuperscript{21} \textit{Id.}
tion charges and other solutions led to the adoption of the overbooking system. Nevertheless, the no-show problem is primarily one of the airline industry’s own creation and is quite different than the underlying economic problem of empty seats. Empty seats are a fundamental economic problem facing all airlines due to their fixed-cost structure. Every airline is concerned with the lost revenue from flying with empty seats. No-shows, however, are a function of an airline’s reservation policy, and thus do not affect each airline and the transitory nature of their inventory equally. For example, airlines that choose to issue non-refundable tickets largely do not need to worry about no-shows. Since no-shows are primarily a function of an airline’s choice of booking policy, no-shows (and thus the need and extent of overbooking) vary from airline to airline. While the costs of flying with empty seats make no-shows a problem for airlines, the cause of the empty-seat problem itself is unrelated.

This distinction between the no-show problem and the empty-seat problem is crucial to understanding how and why airlines overbook, but it is frequently overlooked. It is important because, while every airline suffers from the same capacity constraints which


23 Shaw, supra note 18, at 132–34 (“[A]irlines are themselves creating the problem by an overgenerous attitude to those who book but fail to check-in for a flight.”); see also Priority Rules, Denied Boarding Compensation Tariffs, and Reports of Unaccommodated Passengers, 32 Fed. Reg. 459, 461 (Jan. 17, 1967) (codified at 14 C.F.R. pts. 221, 250) (“[I]t is within the means of the carriers to reduce the number of no-shows through reservation service charges.”).

24 Holloway, supra note 10, at 9–10.

25 See supra note 23 and accompanying text.

26 The empty-seat problem is a quality of the product being sold by the airlines—one which loses all value after a certain time (similar to a ticket to see yesterday’s matinee movie)—while an airline’s reservation policy is analogous to a store’s refund policy. All airlines (and movie theaters) suffer from the same need to sell their product before it expires, but each can employ different tactics to achieve that goal. An airline with a liberal reservation policy will have a large number of no-shows, just as a store with a liberal refund policy will have a lot of returned merchandise.

27 The Air Transport Association, an industry group comprising most of the major airlines, describes the need for overbooking as follows:

An airline’s inventory is comprised of the seats that it has on each flight. If a customer does not fly on the flight on which he or she has a reservation, his or her seat is unused and cannot be returned to inventory for future use as in other industries. This undermines the productivity of an airline’s operations; it is increasing productivity, of course, that contributes to lower airfares and expanded service.

ATA Handbook, supra note 13. This summary directly links overbooking with the empty-seat problem, ignoring the role that reservation policies play.
lead to the empty-seat problem, airlines do not necessarily have similar no-show problems. By connecting the two, federal regulations treat every airline the same, despite vast differences in individual airlines’ exposure to the no-show problem. As argued in Part II.C, this linking encourages airlines to pursue a particular type of sales model, which leads to overbooking.

B. The Problem of Overbooking

Although overbooking might have satisfied passengers’ desire for flexibility, it created a new difficulty for airline contracting. What should be done when an expected no-show passenger actually shows and an overbooked flight becomes oversold?28 Once airlines began overbooking flights systematically, passengers could no longer be certain that a flight would actually be able to accommodate them, a startling development for most people holding a “confirmed reservation.”29 Airlines defended overbooking by arguing that the practice lowered prices of airline travel, a claim generally beyond dispute. In return for this lower price, passengers gave up the degree to which they could rely on the airline’s performance and ran the risk of being denied boarding. Thus, overbooking presented two new problems: First, whether passengers agreed to bear this risk, and second, what compensation passengers should receive when the risk develops into an actual harm.

This exchange of lower prices for less reliability and greater flexibility has never been bargained over explicitly. Many passengers remain ignorant of this trade-off, even today.30 At first, the practice of overbooking itself was completely unknown, and thus all passengers were unaware of the remote possibility of being bumped. Initial government regulations dealt with this notice problem, aiming to make consumers aware of the potential of overbooking through disclosure provisions and to prevent fraud and misrepresentation by air-

28 “Oversale” refers to the situation where more passengers show up than there are seats available. Many more flights are overbooked than actually become oversold, since an airline can safely book 105 percent of capacity if five percent of passengers do not show. This Note will use the better known term “overbooking” for both situations, although it is technically inaccurate.

29 Perhaps the most famous example is that of Ralph Nader being bumped from his flight and suing the airline for fraudulent misrepresentation, a case which reached the Supreme Court and led to disclosure of airline overbooking policies. Nader v. Allegheny Airlines, Inc., 426 U.S. 290, 293–95 (1976) (alleging fraudulent misrepresentation arising from airline’s alleged failure to inform customers in advance of deliberate overbooking).

30 See infra Part II.A.
As a result, airlines now must disclose their overbooking policies “continuously in a conspicuous public place” and on each ticket sold in the United States.32 While this solves one information problem, a much larger problem remains today. Although both Businessman Bill and Traveler Ted are aware of the possibility of being bumped, neither is aware of the probability of being bumped on any given flight.

The second problem of overbooking is how to properly compensate a passenger who has been bumped. No individual passenger has necessarily asked for, or enjoyed, the benefits created by overbooking, nor are the costs of these benefits spread equally among passengers.33 Prior to overbooking, passengers could be certain that a seat would be available for them upon arrival at the airport. After overbooking began and prior to the introduction of federal regulations, passengers could not be certain that a seat would be available, nor did they know what would happen to them once bumped.

C. The Federal Solution: Regulation of Damages for Overbooking

Instead of directly regulating overbooking, the federal government settled on a system of regulation that addresses the consequences of overbooking. Recognizing that overbooking provided passengers with increased flexibility in reservations, CAB decided to regulate the amount of compensation owed to bumped passengers rather than prohibit the practice outright.34 Through these regulations, the government sought both to adequately compensate passengers for an airline's breach and to indirectly limit the airlines' incentives to overbook.35 An airline's overbooking decision depends heavily on the potential consequences of overbooking—what happens in the event that too many no-shows actually show. Airlines employ incredibly complicated forecasting

31 For a summary of overbooking as fraudulent misrepresentation and CAB's involvement, see Note, supra note 22, at 1200–08. Although overbooking was addressed by CAB through the 1960s and 1970s, it was not until after the Supreme Court's decision in Nader v. Allegheny Airlines that CAB required publication of overbooking policies. Construction, Publication, Filing and Posting of Tariffs of Air Carriers and Foreign Air Carriers, 42 Fed. Reg. 12,420, 12,420 & n.2 (Mar. 4, 1977) (codified at 14 C.F.R. pt. 250.11).
33 See infra Part II.B.2.
35 Oversales, 43 Fed. Reg. 24,277, 24,280 (June 5, 1978) (codified at 14 C.F.R. pt. 250) ("The increase [in compensation] will not only provide better compensation for passengers denied boarding against their will, but will give carriers greater incentive to refine their overbooking and boarding procedures so that involuntary oversales are minimized.").
models to determine when and how much to overbook a flight. They estimate the percentage of no-show passengers per flight and overbook to compensate for these expected no-shows. These no-show estimates are never certain and, thus, any model of overbooking must account for the compensation owed to passengers who are involuntarily denied boarding. The amount of damages owed to each passenger thus determines the airline’s incentives to increase its chances of breach. Airlines effectively gamble on the percentage of confirmed reservations which will disappear prior to a flight’s takeoff. If airlines owed passengers zero compensation, overbooking would be rampant; if airlines owed passengers extremely high damages, intentional overbooking would rarely occur. Once overbooking became the industry practice, ensuring an appropriate level of damages—one with incentives for efficient behavior by both airlines and passengers—went from an academic contract question to an actual concern.

Over the next decade, CAB slowly increased the damages amount originally offered by airlines, typically $20, to a maximum of $400 in 1978. Despite years of inflation, this amount still “constitute[s] liquidated damages for all damages incurred by the passenger” as a result of the overbooking. In recent years, the number of passengers bumped by overbooking peaked at over one million passengers per year from 1997 through 2001 and has averaged almost 900,000 passengers per year since 1990. Thus, although only a small percentage of passengers are denied boarding, in absolute terms the overbooking regulations apply to hundreds of thousands of passengers per year.

36 Holloway, supra note 10, at 329–49.
37 Id. at 424–25.
38 For a sample airline overbooking model compensating for “uncertain customer show-up and cancellations,” see Operations Research in the Airline Industry 85 (Gang Yu ed. 1998).
39 Other constraints on an airline’s propensity to breach, such as reputational concerns and the cost of providing bumped passengers with later flights, are outside of the scope of this Note. However, it is clear that such concerns place an important limitation on an airline’s propensity to overbook.
40 See infra Part II.B.
44 14 C.F.R. § 250.7 (1977).
45 NTS 2003, supra note 3, tbl.1-58.
There is an important caveat to this discussion of passenger rights under the current federal regulations. Under 14 C.F.R. § 250.9, passengers involuntarily denied boarding are free to reject the compensation offered by the airlines and pursue actual damages in court.\(^4\) However, passengers bumped from a plane rarely litigate.\(^4\) First, the transaction costs involved with litigating such a claim often outweigh the benefits from any damages a court may award.\(^4\) Second, regardless of the potential of court-awarded damages, litigation is an empty alternative; federal regulations essentially prescribe both the method of bumping passengers and the amount owed to bumped passengers, and every major airline has incorporated these procedures and amounts into their contracts.\(^4\) Thus, a passenger pursuing his or her claim in court may find additional damages barred by the terms of the contract.\(^5\)

**II**

**THE COST OF LIMITED DAMAGES FOR OVERBOOKING**

Part I established the economic reasons that airlines choose to overbook (minimizing empty airline seats while maintaining flexible reservation policies) and the problems generated by overbooking (passenger ignorance of the practice and inadequate compensation for

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\(^4\) 14 C.F.R. § 250.9 (2002).

\(^4\) A Lexis search of all federal and state cases since 1990 for the phrase "involuntarily denied boarding" produced only two cases where passengers exercised their right to sue for damages under 14 C.F.R. § 250.9. While it is unlikely that this search found all such cases, it is indicative of the extreme infrequency with which passengers litigate overbooking claims against airlines.


bumping). Part II discusses the effects of this government-imposed, uniform-damages solution on passengers and airlines. Specifically, this Part argues that passengers are unaware of the costs of overbooking when purchasing tickets. Because of continued consumer ignorance regarding airline overbooking rates, the level of damages for all passengers set by federal regulations under-compensates many passengers. Moreover, the current federal regulations are not only inefficient, but act as a subsidy to certain types of airlines. By offering an economic windfall to airlines that exploit passenger ignorance of overbooking policies, the regulations hinder airlines that choose not to overbook aggressively.

A. The Unknown Cost of Being Bumped

The federal government requires that airlines provide boilerplate disclosure language about the possibility of overbooking. Passengers are aware that their flight may be overbooked but are unaware of when and if their flight is overbooked. While information about individual airline overbooking rates is available, the relative infrequency of being bumped and the unavailability of information about specific flight overbooking rates make it unlikely that passengers consider the odds of being bumped while purchasing a ticket. Without such information, passengers cannot estimate the cost of

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51 For a discussion of the high information costs facing passengers in the airline industry, and the role of federal regulation in maintaining these costs, see Michael E. Levine, Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy, 4 YALE J. ON REG. 393, 425-33 (1987). Levine notes that “airline efforts to offer a non-standard product have repeatedly experienced difficulty” due to the legacy of federal regulation. Id.

52 14 C.F.R. § 250.11 (2002) (requiring airlines to provide notice that “[a]irline flights may be overbooked, and there is a slight chance that a seat will not be available on a flight for which a person has a confirmed reservation” as well as information about denied-boarding compensation and boarding priorities).


54 The Supreme Court has described passengers as unaware of bumping because “[t]he chance that any particular passenger will be bumped is so negligible that few prospective passengers aware of the possibility would give it a second thought.” Nader v. Allegheny Airlines, Inc., 426 U.S. 290, 294 (1976). The federal government originally proposed a notification system which would have informed passengers of overbooking the moment it happened, allowing passengers to adjust their plans accordingly. Passenger Priorities and Overbooked Flights, Docket No. 16563, 30 Fed. Reg. 13,236, 13,236 (Oct. 16, 1965) (codified at 14 C.F.R. pts. 221, 250). At the time of the proposal, liberal reservation and refund policies would have allowed passengers to take steps such as purchasing tickets on alternative flights in response to these notifications.
being bumped. Rather, this Note argues that passengers base purchasing decisions on the most visible factor available to them, namely price.

Is such passenger behavior plausible? While an in-depth discussion of imperfect information is beyond the scope of this Note, a number of factors suggest that passengers might suffer from information gaps. Scholars have noted three broad ways in which consumers may be ignorant of contract terms: imperfect information about contract risks, imperfect information about market alternatives, and ignorance of the contract terms themselves. Although federal regulations have addressed the last condition through disclosure, the infrequency of overbooking and the difficulty in obtaining relative overbooking rates suggest that passengers do not know of the risks of overbooking and the availability of alternatives. Information about the probability of being bumped on a specific flight is simply unattainable, and available information regarding overbooking rates is too remote to play a large role in purchasing decisions.

Furthermore, the infrequency of overbooking mitigates the traditional contract-theory assumptions that some informed subgroup of general consumers will bargain for the best contracts and thus spur competition to the benefit of the greater group. While most passengers will think of overbooking as a necessary evil of modern air travel, some passengers might be highly concerned with the practice. However, the incidence of involuntary bumping might be simply too low to use this defense of standard contracts. Given that the individual risk of being bumped is quite small, just 0.18 percent, it may not be enough of a risk to the average passenger to make competition worthwhile. Additionally, the odds of being bumped repeatedly are miniscule. Thus, if most passengers are ignorant of the overbooking practices, have little chance of being involuntarily bumped, and an even lower chance of it occurring again, no single passenger has suffi-

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56 See Levine, supra note 51, at 451 (noting relative ease of communicating ticket-price information to consumers).
58 For an overview of the informed-minority argument and its limited applicability, see R. Ted Cruz & Jeffrey J. Hinck, Not My Brother's Keeper: The Inability of an Informed Minority to Correct for Imperfect Information, 47 HASTINGS L.J. 635 (1996).
59 NTS 2003, supra note 3, tbl.1-58.
cient interests at stake to devote time and energy to reforming the airline contracts, despite the net inefficiencies across all passengers. 60

This consumer ignorance has serious effects on the efficiency of airline contracts. First, it hinders a competitive market for overbooking from developing. 61 If passengers make purchasing decisions on price, without regard to overbooking, an airline has little incentive to alter its overbooking policies. In fact, in reexamining the efficacy of federally regulated damages prior to deregulation, CAB expressed concerns that “the regulation may also inhibit competition among carriers and stifle innovation by lessening competitive uncertainty.” 62 Thus, the uniformity established by federal regulations in an attempt to lessen the problems of overbooking may, in fact, exacerbate these problems by preventing competition.

Second, ignorance about the probability of overbooking prevents passengers from knowing how reliable performance by an airlines is. Imagine that Traveler Ted knew that he bore a thirty percent chance of being bumped from the flight, and that he would receive only $400 in damages if bumped. Such information would allow Traveler Ted to make an informed decision about whether to rely on airline performance and invest in cruise tickets worth $2000. 63

Third, if passengers do not know which airlines are more reliable, and thus cannot estimate the expected costs of breach, a uniform system of low damages penalizes the airlines that choose not to overbook, and grants an economic windfall to those airlines that choose to exploit this economic inefficiency. 64

60 See Cruz & Hinck, supra note 58, at 664–77 (noting that it is difficult for consumers to change contract terms, especially when suppliers can differentiate between types of consumers); see also Michael I. Meyerson, The Efficient Consumer Form Contract: Law and Economics Meets the Real World, 24 GA. L. REV. 583, 601 (1990) (noting “there generally will be too few informed consumers to produce a competitive market for contract terms”).

61 See Levine, supra note 51, at 448 (concluding that incumbent carriers “exploited economies of information to match fare levels, but not fare conditions of their new entrant competitors”).


63 Given such an (artificially) high chance of being bumped, it is highly unlikely that Traveler Ted would purchase tickets valued at $2000, since he only has a seventy percent chance of making the cruise (making its expected value $1400), and will only receive $400 in compensation in the event he is bumped, not enough to compensate him for the lost expected value of the cruise. For more information on the difficulties in estimating the cost of bumping, see infra Part II.B.

64 See infra Part II.C.
B. The Efficiency of Uniform Damages with One Type of Airline

Uniform federal damages originally were aimed at limiting an airline's incentive to breach and pay inadequate compensation to passengers. This Section examines whether such a goal is possible under the current information constraints and whether federal regulations have been successful in achieving that goal.

1. Opportunistic Breach by Airlines

The introduction of overbooking might have satisfied passengers' desire for flexibility, but it introduced reliability as a new element by which to assess the value of the contract. Once airlines began overbooking flights systematically, the meaning of a "confirmed reservation" changed dramatically. Through the combination of limited damages and allowable overbooking, airlines could lower the price of tickets offered to their passengers. In return for this lower price, passengers had to give up the degree to which they could rely on the airline's performance.

In a traditional bargaining situation, this trade-off between price and reliability can be made explicit by the parties to the contract through the negotiation of contract terms. In the airline context, however, the damages variable has been set by the federal government for all parties. This Section discusses the economic arguments in favor of set damages for breach and then examines whether such arguments apply when passengers have different preferences but incomplete information about the likelihood of being bumped.

The primary argument in favor of setting limited damages is that it lowers the cost of performance for airlines, and thus lowers the price charged to passengers. Standard expectation damages can give passengers such as Bill and Ted the wrong behavioral incentives, encouraging them to rely too heavily on performance by an airline, and causing airlines to invest too heavily in ensuring performance. Arguably, Ted was irresponsible to invest $2000 in a cruise that leaves on the day of his flight, and if the airline must pay him for the cost of missing his trip, its ticket prices will rise accordingly. If a passenger is

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66 See Robert Cooter, Unity in Tort, Contract and Property: The Model of Precaution, 73 CAL. L. REV. 1, 13−14 (1985) (noting that required compensation may induce overreliance); Craswell, supra note 55, at 376 (same); Steven Shavell, Damage Measures for Breach of Contract, 11 BELL. J. ECON. 466, 468 (1980) (same); see also William P. Rogerson, Efficient Reliance and Damage Measures for Breach of Contract, 15 RAND J. ECON. 39, 40 (1985) ("Because expectation damages 'insure' the reliever against all breaches of the other party, the reliever's private return to reliance exceeds the joint return. As a consequence, levels of reliance are set excessively high.").
always guaranteed the full benefit of the bargain in the event of non-performance, the passenger has no incentive to consider the possibility of breach and to limit potential damages in the event of such breach. As one commentator has argued, "Because the expectation measure guarantees [the passenger] full compensation whether [the airline] performs or not, it generates the moral hazard problem that arises under any full insurance scheme, for it means that [the passenger] can ignore the risk that [the airline's] nonperformance might leave [the passenger's] reliance expenditures wasted."  Although traditional limitations on expectation damages curb overreliance somewhat, many commentators argue that limited-damages provisions provide a more precise method of ensuring efficient reliance by the passenger and efficient performance by the airline. Limiting the amount that airlines pay for breach of contract can discourage passengers from overrelying on airlines' performance and making unreasonable expenditures as a result. Accordingly, it lowers costs for both parties.

The more complicated question is what level of limited damages ensures such efficient behavior. This theory of limited damages is efficient only if both parties gain from the transaction. Thus, it requires setting damages at a level where the decrease in reliance, because of more aggressive overbooking, leads to an equal decrease in costs of performance to the airlines. If passengers merely lose reliance without any subsequent gain, the result is just a boon to the airlines. Conversely, if airlines must pay passengers unlimited damages for overbooking, they must invest more heavily in ensuring performance, raising ticket costs above the amount that most people would be willing to pay, an outcome that only benefits those with abnormally

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67 Craswell, supra note 55, at 376–77.
69 See, e.g., id. ("The advantages of stipulating in advance a sum payable as damages are manifold."); Cooter, supra note 66, at 14–15.
70 To illustrate this point, consider the amount of extra money a consumer would be willing to pay to guarantee that a cable repairman would arrive at noon. This increased price would ensure performance, and thus a consumer could make reliance decisions based on the probability of performance, for example scheduling a meeting at 1 p.m. Instead, a consumer limits her reliance on cable repairmen to almost nothing, and cable providers charge consumers less for service.
71 Craswell, supra note 55, at 365 ("[R]ules that provide no compensation make the promisee properly cautious about relying but severely reduce the promisor’s incentive to perform.").
high reliance.\textsuperscript{72} Finding the right balance of joint-cost minimization between the passenger and the airline works in theory,\textsuperscript{73} but it is quite difficult in most situations to determine the correct level of damages to achieve that balance in practice.\textsuperscript{74} Setting limited damage levels can solve the problem of overreliance, but not without the possibility of introducing underreliance and opportunistic breach behavior by the airlines.\textsuperscript{75}

If passengers made their purchasing decisions with full knowledge of the probability of breach and the level of damages they would receive upon breach, the level set by federal regulation would not necessarily be a problem. Whatever level the government sets, passengers could simply adjust the price they are willing to pay for a ticket based on their desired mix of price and reliability. If Businessman Bill would pay $1000 for a guaranteed seat, but cannot get a truly guaranteed seat because of airline overbooking policies, he simply would reduce the amount he is willing to pay until the price reflected his preference for reliability. The federal government has set only one variable, damage compensation, but as long as all the parties are aware of that fact, price should merely fluctuate to incorporate the fixed amount.

The argument that passengers and airlines can minimize the overall costs to both parties by limiting reliance presupposes the ability of passengers to estimate the likelihood of performance. However, as shown in Part II.A, passengers cannot accurately estimate the expected costs of being bumped due to a lack of available information, especially in the face of price as a more compelling differentiator. Under this scenario, traditional contract analyses "are severely limited by their assumption that the promisee [the passenger] chooses his reliance with exact knowledge of the probability that the promisor [the airline] will perform."\textsuperscript{76} Furthermore, in situations where the performing party holds all of the information about the likelihood of

\textsuperscript{72} For a discussion of the incentive effects of overcompensatory damage clauses, see Farnsworth, supra note 68 (noting overcompensatory damages will "deter breach by compelling performance.").


\textsuperscript{74} Aaron S. Edlin & Alan Schwartz, Optimal Penalties in Contracts, 78 Chi.-Kent. L. Rev. 33, 40 (2003) (describing difficulty of determining joint maximization where customers value cost of breach differently).

\textsuperscript{75} Craswell, supra note 55, at 365.

\textsuperscript{76} Craswell, supra note 55, at 366. For an example of such an assumption, see Cooter, supra note 66, at 14. Cooter notes that, "[s]tipulated damages are efficient when they equal the loss that the victim would suffer from breach if her reliance were efficient." Id.
breach, limited damages can provide incentives for the party to misrepresent that likelihood in order to maximize profits.\textsuperscript{77}

As discussed previously, the airline industry currently exhibits such asymmetrical information.\textsuperscript{78} In the overbooking context, the airline is in complete control of the probability of breach.\textsuperscript{79} Changes in the probability of performance are a result of an inaccurate demand forecast that leads to overbooking. While passengers might know the overall rates of overbooking, passengers have no information about the likelihood of breach on any specific flight,\textsuperscript{80} and thus cannot appropriately discount the price they are willing to pay for their ticket by the possibility of nonperformance by the airline.

Consider the mechanics of how a flight becomes oversold. To price discriminate effectively, airlines make an estimate of the demand curve for a particular flight.\textsuperscript{81} In order to keep high-value passengers (business travelers) from purchasing low-cost tickets, these low-cost tickets are sold subject to a number of use restrictions.\textsuperscript{82} Saturday night stayovers, for example, are important in preventing sales to the wrong group. The most important element for overbooking, however, is that airlines typically sell the least expensive tickets first and the most expensive tickets last. Overbooking does not occur because airlines have sold more discount tickets than intended months in advance; those are limited in supply and almost always sell out.\textsuperscript{83} Flights become overbooked when more people buy high-price

\begin{thebibliography}{99}
\bibitem{77}Craswell, supra note 55, at 378. Multiple authors have discussed promisors’ incentives to represent or misrepresent their level of reliability. See Jason Scott Johnston, \textit{Strategic Bargaining and the Economic Theory of Contract Default Rules}, 100 \textit{Yale L.J.} 615, 631–39 (1990) (noting that a reliable carrier can “easily signal its type by charging a high price”); Schwartz & Wilde, supra note 57, at 1388–91 (“[F]irms could be charging supracompetitive prices for terms in response to consumer ignorance of market opportunities.”).
\bibitem{78}See supra Part II.A.
\bibitem{79}While airlines cannot know which passengers will be no-shows, they are in exclusive control of the extent of overbooking and of all relevant data regarding the likelihood of passengers not showing up, including historical no-show rates for specific types of passengers and for specific flights. Oversales, 43 Fed. Reg. 24,277, 24,278 (June 5, 1978) (codified at 14 C.F.R. pt. 250) (finding that causes of most bumpings “are within the exclusive control of the carriers and their agents”).
\bibitem{80}See supra note 53 and accompanying text.
\bibitem{81}See Holloway, supra note 10, at 329–49.
\bibitem{83}Ivan L. Pitt & John R. Norsworthy, \textit{Economics of the U.S. Commercial Airline Industry: Productivity, Technology and Deregulation} 88 (1999) (“The idea is then to coerce consumers into paying higher fares in the so-called ‘bait-and-switch’ technique.”). Furthermore, airlines are not subject to the requirements placed on other industries that they maintain sufficient inventory to meet demand for discounted products placed. \textit{Id.}
\end{thebibliography}
tickets than expected in the days immediately prior to the flight. This is because, like a pyramid, each fare class includes the inventory of the cheaper class below it, and thus "no fare class . . . can ever be sold out ahead of any fare class below it." Airlines are not concerned only with filling planes, but also with earning revenue. Current overbooking regulations give airlines a strong incentive to increase their percentage of high-revenue seats by reselling their discount seats. Just as every empty seat is lost revenue, so is every seat sold at a discount.

Contract theory predicts that under such asymmetric information conditions "[n]o constant damage rule will optimize [the passenger's] reliance decision if [the passenger] has inaccurate information about the probability of performance." While Bill and Ted know that they might be bumped, they never know the relative likelihood of that occurring, and thus cannot limit their reliance accordingly.

2. The Costs and Benefits to Bill and Ted

The previous Section argued that passengers are often under-compensated for breach by airlines due to imperfect information. Federal regulations standardize damages for breach by the airlines, but passengers do not have information to estimate the probability of breach, nor do they necessarily use any information besides price in purchasing tickets. This Section will briefly discuss whether the costs and benefits of overbooking are distributed equally among different types of passengers.

The current system allocates the risk of being bumped evenly among all passengers, but does every passenger benefit equally from this shared risk? As stated earlier, the primary benefit of using overbooking to decrease empty seats is that it increases flexibility in reservation policies while maintaining high seat utilization. Although all passengers theoretically benefit equally from flexible reservations, passengers such as Businessman Bill—who prioritize flexibility—receive the vast majority of the benefits from such a system. Indeed, as the advent of overbooking changed the meaning of a "confirmed" seat, widespread price discrimination has changed the meaning of a "discount" fare. "More than [ninety] percent of tickets sold by U.S. airlines are discounted, with discounts averaging two-thirds off full

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84 Holloway, supra note 10, at 426.
87 Oversales, 47 Fed. Reg. 52,980, 52,980 (Nov. 24, 1982) (codified at 14 C.F.R. pt. 250) ("The costs of overbooking are spread among all passengers.").
88 See supra note 18 and accompanying text.
fare.” These “standard-fare tickets” are typically fully refundable, while current discount tickets usually are not. Unless tickets are refundable, the no-show issue is not a large problem for airlines because passengers have a strong incentive to make their original flights. Thus the passengers who are taking advantage of the flexible reservations, by creating the no-shows and last minute cancellations, are the travelers paying for the full-fare tickets which come with these rights. The benefits of overbooking flow to Businessman Bill, while the risks are spread evenly among passengers.

Traveler Ted is not necessarily worse off because of this state of affairs. Despite the nomenclature of a “standard” fare, refundable tickets are actually much more expensive than most tickets, due to widespread price discrimination within the airline industry. Instead of charging a single market-clearing price, airlines price discriminate, charging different passengers different amounts. Leisure travelers, such as Traveler Ted, often can obtain tickets that are a fraction of the cost of those paid by business travelers such as Bill. As a result, as little as ten percent of airline passengers may provide as much as forty percent of the revenue for a major airline. While the vast majority of people must face the risk of overbooking for a flexibility benefit enjoyed by a slim minority, that slim minority is paying a much higher price for service. In terms of the potential for overbooking, however, federal regulations govern all passengers equally, regardless of the price paid for a ticket.

C. Uniform Damages with Multiple Types of Airlines

1. Theoretical Effects of Such Damages

Analyzing the efficiency of uniform limited damages for all passengers becomes much more complicated when one considers variations in the types of airlines. Airlines differ greatly in the service they

89 ATA HANDBOOK, supra note 13.
90 See REPORT 230, supra note 16, at 94–95 (describing payment of full fares by business travelers “in return for greater flight frequencies and last-minute bookings and flight changes” while discount fares bear restrictions).
91 Low-fare travelers are the least likely to modify travel plans. REPORT 255, supra note 9, at 3–4.
92 REPORT 255, supra note 9, at 30–40 (analyzing growth in spread between highest and lowest fares paid by passengers for service on same flight).
93 GAO REPORT, supra note 12, at 11 (noting that airlines “might offer 25 or more different fare classes” for each market).
94 Elaine X. Grant, The Air Fare Game, TRAVEL AGENT, Jan. 11, 1999. The GAO reports that, on average, thirty to fifty percent of passenger traffic accounts for sixty to eighty percent of revenue. GAO REPORT, supra note 12, at 21.
95 See infra Part III.A.1.
provide their passengers, yet the federal overbooking regulations treat them all uniformly. This Section examines the differences between the two most prevalent types of airlines and argues that the current overbooking regime substantially benefits those airlines that aggressively overbook.

Imagine that our two passengers, Traveler Ted and Businessman Bill, have two airlines they can choose between—Reliance Air and Fly-By-Night Flights.96 True to its name, Reliance never overbooks, opting instead to allow the chance of a few empty seats instead of bumping passengers. Conversely, Fly-By-Night overbooks rampantly, by far exceeding industry norms. Assuming that each offered similar tickets at the same price, Bill and Ted would be irrational not to choose Reliance. Reliance offers a guaranteed service, while Fly-By-Night has a high likelihood of bumping passengers and potentially under-compensatory damages. An efficient distribution of travelers would have everyone flying on Reliance, and Fly-By-Night would eventually go out of business.

This analysis ignores two crucial facts. First, as shown in Part II.A, passengers make their purchasing decisions based on price, largely disregarding the probability of being bumped. Thus, even assuming equal ticket prices, passengers would likely be indifferent between the two airlines and thus split evenly between Reliance and Fly-By-Night. More importantly, overbooking decreases an airline’s pricing, and thus it is unlikely that Reliance and Fly-By-Night could offer tickets at the same price. Through its effects on price, the limited-damages clause actually encourages passengers to fly on the less reliable airline.

To the extent that the level of damages set by federal regulations is under-compensatory to passengers, airlines receive a windfall from bumping passengers. Essentially, Fly-By-Night can pass on some of the costs of breach to the passengers who are under-compensated for being bumped from their flights. Assuming that both airlines offer tickets at the same price, Fly-By-Night is charging a higher than competitive price for its tickets. By masking its unreliability, Fly-By-Night can sell its tickets at a higher price than if its propensity to overbook and under-compensate were known.97 Conversely, and perhaps more accurately describing the modern airline industry, Reliance’s ticket

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97 Craswell, supra note 55, at 378.
prices might be artificially higher due to its decision to forsake overbooking. Reliance charges its passengers the true cost of providing service, rather than exploiting the information gap as Fly-By-Night does. Bill and Ted, unaware of these differences in overbooking, merely see two prices to San Francisco, one high and one low, and purchase the cheaper Fly-By-Night tickets.

Fly-By-Night is cheaper for both Bill and Ted, however, only in the short-term. Eventually, each has to bear the long-term costs of flying the less reliable airline. At some point, Fly-By-Night will be unable to accommodate its passengers and will offer them the set level of damages for bumping. At that point, Bill or Ted would pay the price for Fly-By-Night’s gambling, a gamble neither passenger was completely aware he was making.

2. Evidence of Actual Variation in Overbooking

Just as federal regulations ignore differences in the types of passengers flying, they are equally indifferent to variations in airlines’ business models and marketing strategies. Although federal overbooking regulations apply to every carrier identically, there are a number of different types of airlines within the industry. The major carriers and the low-cost carriers have fundamentally different business models and cost structures. While both suffer from the same fixed-cost problems, the low-cost airlines have substantially lower overhead than the major airlines, attributable primarily to their non-union workforces, resulting in lower labor expenditures, and to their emphasis on point-to-point service of high-density routes, creating lower infrastructure costs. Because of these factors, the low-cost airlines have a lower average seat cost than the major airlines and, along high-density routes, should, and often do, provide a viable alternative to the major airlines.

Price discrimination makes it possible for the major airlines to compete directly with the low-cost carriers for the low end of the

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99 O’Connor, supra note 19, at 82.
100 For a discussion of the hub and spoke system, as well as other network strategies, see Holloway, supra note 10, at 248–67.
101 For example, the Bureau of Transportation Statistics reported that low-cost carriers had average operating expenses of 7.3 cents per available seat mile in the third quarter of 2003, while network airlines had an average cost of 11.7, sixty percent larger. Press Release, U.S. Dep’t of Transp., BTS Releases Third Quarter 2003 Airline Financial Data: Regional Passenger Airlines Report Highest Rate of Domestic Profit (Dec. 23, 2003), available at http://www.dot.gov/affairs/BTS2903.htm (last visited June 20, 2004).
market. As long as the major airline covers its overall cost by managing its average fare for the flight, it can "always advertise fares that meet or beat those of the competition . . . by varying the number of seats allocated to different fares." Since the spread between the highest and lowest fare charged is much greater for the major airlines than for low-cost airlines, the major airlines can still meet their higher costs while offering fares as low as the discount airlines.

The ticket sale model followed by JetBlue, a leading discount airline, shows how the overbooking problem is intricately linked to an airline's pricing model. Rather than create many different price buckets, low-cost airlines simply raise fares as the travel date approaches. Since JetBlue's last-minute price is not a large multiple of its average cost, it does not make economic sense for the airline to overbook. This is because the profit made on a last-minute JetBlue ticket is unlikely to cover the cost of damages owed to the passenger that JetBlue will be forced to bump to accommodate the new ticket sale. Consequently, JetBlue does not overbook flights at all. However, all tickets are non-refundable, so the model does not work

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102 Indiscriminate Pricing, ECONOMIST, Aug. 1, 1998, at 66. It is possible that the damage amounts in the federal overbooking regulations actually encourage price discrimination by airlines. As long as the difference between the highest price paid for a ticket and the cheapest ticket sold on a flight is greater than the federal damages amount, it is profitable (assuming no other costs) for an airline to overbook.

103 Levine, supra note 51, at 477.

104 REPORT 255, supra note 9 at 32–34 (noting low-cost carriers' highest fare on short-haul flights is double their median price for those flights, while major airlines charge high-fare travelers at triple their median price).

To understand how the major airlines compete despite their higher costs, and how the regulations assist them, it is necessary to understand the different pricing models of the two types of airlines. For convenience in illustrating these differences, I have made assumptions regarding the relative costs for each airline and the prices they charge for tickets. These numbers are illustrative, not actual.

Assume that the major airlines have a cost per flight of $80,000 on a 200-person flight from New York City. A low-cost carrier can service that same route, at three-quarters of the price, for a cost of $60,000. Thus, the major airline has an average seat cost of $400, while the low-cost carrier has an average seat cost of $300. Under a traditional economic model, each would charge their average cost, and everyone would fly on the low-cost airline, which would expand its capacity to meet full demand. Using the numbers from our hypothetical flight, that would mean twenty tickets sold for $1600 each. With 180 seats remaining on the flight and only $48,000 of cost left, the major airlines' average price needed to cover costs on the seats remaining is now $267, thirty-three dollars less than the discount airline's average ticket price.


106 Using our example of an average cost per seat of $300, plus compensation of $400, JetBlue would need to sell a ticket for $700 for overbooking to be worthwhile.

107 Chris Woodyard, Unlike Rivals, JetBlue Won't Do the Bump; Carrier Shuns Popular Practice of Overbooking, USA TODAY, Oct. 24, 2003, at B1.
perfectly for those who value flexibility over all other factors. Other discount carriers have not followed JetBlue's lead in eschewing the overbooking model. Nevertheless, its example illustrates the feasibility of alternative solutions to the empty-seat problem and raises the possibility that fewer airlines would overbook without federal regulations.

The JetBlue example demonstrates that real airlines have different approaches to overbooking and suggests that the theoretical inefficiencies of federal regulations have actual consequences. Airlines can differ widely in the degree to which they overbook their planes. Each has different forecasting methods, serves different markets, has different concerns for customer satisfaction, uses different reservation policies, and offers different volunteer amounts—yet all are governed by one set of federally regulated damages. Overbooking represents a choice by airlines to trade reliability for all passengers for flexibility for some, and the prevalence of involuntary bumping varies within the industry. This system is not necessarily unfair, but to the extent that the lack of competition on contract terms is a result of federal regulations, JetBlue cannot compete effectively against major airlines with its strongest weapon—reliability.

As seen, an examination of the practical and theoretical effects of limiting contract damages for overbooking finds most of the justifications for these limitations lacking. While it is possible that a set damages amount of $400 provides efficient performance and reliance incentives for all types of passengers and all types of airlines, the empirical and theoretical evidence suggests otherwise. In addition, even if one were to assume the efficiency of that level, there is little reason to codify the amount as part of federal law and thus hinder effective competition between the airlines on contract terms.

III
POSSIBLE IMPROVEMENTS TO THE
OVERBOOKING REGULATIONS

Admittedly, the contracting problem identified in this Note is not overwhelming. Everyday, thousands of passengers purchase tickets with nary a thought to the potential of overbooking, and, for most of them, this oversight will not lead to being denied boarding. Neverthe-

108 For example, Delta denied boarding to passengers against their will at a rate over three times greater than US Airways during the first nine months of 2003. U.S. DEP'T OF TRANSP., AIR TRAVEL CONSUMER REPORT, Jan. 2004, at 29, available at http://airconsumer.ost.dot.gov/. Granted, both rates were quite small as a percentage of overall passengers (1.35 and 0.37 per 10,000 passengers, respectively). Id.
less, the inefficiencies of the current overbooking situation suggest a number of improvements that could reduce under-compensation and excessive overbooking. This Part evaluates some potential solutions, ranging from reforming the selection of passengers to be bumped, to increasing the compensation for bumping, to expanding the overbooking disclosure requirements, to repealing overbooking regulations altogether. In the end, this Part concludes that the best method for allowing the benefits of overbooking while minimizing the costs to both bumped passengers and reliable airlines is to repeal the set damage amounts for bumped passengers and prohibit involuntary bumping.

A. Potential Solutions

1. Minor Changes to Current Regulations

The current overbooking regulations govern whom the airlines choose to bump and how much compensation those passengers receive. Both of these aspects can be improved to ensure that high-value passengers are not bumped and that those passengers who are bumped are not under-compensated. By revising airline boarding priorities, airlines can decrease the arbitrary nature by which passengers are bumped, and by increasing the compensation amount offered, federal regulations also can decrease the number of passengers that are under-compensated. However, since neither of these solutions address the information asymmetry facing passengers, nor guarantee adequate compensation for all passengers who are bumped, they reduce the problems of overbooking, but do not eliminate them.

Currently, airlines use a two-step process in deciding which passengers to bump. First, federal regulations require that, before involuntarily bumping any passengers, airlines must make a request for passenger volunteers.110 In exchange for volunteering, airlines offer these bumped passengers compensation, a theoretically discretionary amount unregulated by the federal government. While there are no requirements regarding the amount of compensation to be offered to volunteers (and thus an airline could theoretically offer next to nothing for volunteers),111 this auction system is a marked improvement over the strict arrival time system which predated it.112 By running an auction for volunteers, the current system allows those

110 14 C.F.R. § 250.2b (2002).
111 Id.
112 Oversales, 47 Fed. Reg. 52,980, 52,982 (Nov. 24, 1982) (codified at 14 C.F.R. pt. 250) (noting that volunteer system is popular with passengers because it “mitigates the hardship on time-sensitive passengers while at the same time providing a benefit for those passengers that are inconvenienced”).
passengers who value the flight the least to accept the offered compensation, while those who value it more than the volunteers remain on the flight.\textsuperscript{113} The vast majority of passengers accept the compensation offered to them by the airlines through the mandatory volunteer auction system.\textsuperscript{114} However, an average of fifty thousand passengers a year since 1990 have turned down the offered compensation and been involuntarily bumped.\textsuperscript{115} Although most involuntarily bumped passengers accept the compensation offered by the airline, this compensation may not truly compensate all the passengers for their damages from breach.\textsuperscript{116} While this system is highly effective at determining which passengers value performance the least, it fails in determining the relative value of performance for passengers who do not volunteer.\textsuperscript{117}

The reason for this failure is the federal cap on overbooking damages.\textsuperscript{118} In practice, the volunteer auction system fails because the parties bargain in a less than fully functioning market.\textsuperscript{119} Federal


\textsuperscript{114} NTS 2003, supra note 3, tbl.1-58 (indicating that over ninety-five percent of denials were voluntary in 2002).

\textsuperscript{115} Id.

\textsuperscript{116} In its first regulation of passenger compensation, CAB rejected the argument that acceptance of compensation by involuntarily bumped passengers meant that such amounts were actually compensatory. Priority Rules, Denied Boarding Compensation Tariffs and Reports of Unaccommodated Passengers, 32 Fed. Reg. 11,939, 11,940 (Aug. 18, 1967) (codified at 14 C.F.R. pt. 250) ("And clearly no inference can be drawn from the fact that passengers in the main accept what is offered to them rather than engage in costly litigation with the carrier.").

\textsuperscript{117} For example, imagine a flight has five more passengers than available seats, and the airline is offering $400 for passengers to take a later flight. If three passengers value being on that specific flight at less than $400, the airline's offer will succeed in convincing those three who value performance least to wait for a later flight; but it will fail in distinguishing the relative values of the remaining passengers, and thus which of those passengers value the flight least (and might accept compensation at some level above $400).

\textsuperscript{118} This cap on the volunteer auction was intentional, with CAB noting that airlines have an incentive to seek volunteers "by offering attractive, yet lower compensation than is prescribed for non-volunteers." Oversales, 43 Fed. Reg. 24,277, 24,279 (June 5, 1978) (codified at 14 C.F.R. pt. 250).

\textsuperscript{119} Absent other concerns, the airlines have no incentive to offer any passenger more money to volunteer than the damage amounts set by federal regulation for passengers involuntarily denied boarding. Though direct evidence of the amounts offered to volunteers is difficult to obtain, available evidence suggests the range offered seldom goes above the statutory maximum. For a description of volunteer amounts, see Costello, supra note 6 (reporting that American Airlines, United, and Northwest all limited compensation for volunteers to $400 or below for domestic flights). See also Charlie Leocha, \textit{The Bump Grind} (Sept. 29, 1999), available at http://www.ticked.com/cheapcharlie/2000/chdenied.htm (noting most volunteers are offered between $200 to $500 in compensation).
compensation for passengers who are involuntarily denied boarding is set at a maximum of $0 for those delayed less than an hour, $200 for those arriving at their destinations with more than a two-hour delay, and $400 for those arriving at their destinations with more than a four-hour delay.\textsuperscript{120} Thus, an airline asking for volunteers has little to no incentive to offer its volunteers compensation greater than these statutory amounts.\textsuperscript{121}

In the event that there are not enough volunteers, the regulations mandate that airlines follow their established boarding priority in determining which passengers to bump.\textsuperscript{122} For almost every major airline, a passenger’s time of arrival at the boarding gate establishes boarding priority. Regardless of how much a passenger paid for his ticket or how much he needs to get to his destination, how early he arrived at the airport determines whether or not he will be bumped by his carrier.\textsuperscript{123} As the Department of Transportation advises, “The most effective way to reduce the risk of being bumped is to get to the airport early.”\textsuperscript{124}

Little can be said in defense of such a random allocation of the costs of overbooking. Although time of arrival might be an indicator of passenger value on the flight, using such a standard to allocate the right to fly does not create the best system possible.\textsuperscript{125} It makes no attempt to distinguish between those passengers placing a high value

\textsuperscript{120} 14 C.F.R. § 250.5 (2002).
\textsuperscript{121} This willingness to bump passengers involuntarily is captured by a United spokeswoman who is quoted as saying, “We don’t wheel and deal. We offer a free ticket. If there aren’t enough volunteers, then we have to bump involuntarily.” Costello, supra note 6.
\textsuperscript{122} 14 C.F.R. § 250.3 (2002).
\textsuperscript{125} Allocation of any good on a first-come, first-serve basis prevents an efficient initial distribution of goods to those who value them most highly. The most cited example is that of event tickets and the subsequent scalping after-market, where the inefficiencies of the first-come system have led to a quasi-legal secondary market that redistributes tickets to those individuals who value them more highly. For a description of the inefficiency of queuing, see KARL E. CASE & RAY C. FAIR, PRINCIPLES OF MACROECONOMICS 108 (4th ed. 1996).
on performance by the airline and those placing a low value on per-
formance, other than assuming time of arrival is a valid proxy for
value. Such an arbitrary rule may leave the passengers who place a
high value on performance waiting for the next flight and severely
undermines all passengers' ability to predict the odds of airline
performance.

A system that would allow passengers to know their boarding pri-
ority—and thus their relative chance of being bumped—in advance of
arrival at the gate would be a marked improvement over the current
system. Such a system could award boarding priority based on time
of purchase of the ticket, or by price paid for the ticket, with those
who paid more receiving a higher boarding priority. While the
price paid beforehand does not necessarily reflect the value of per-
formance at the time of the flight, most contract theorists assume that
an increase in price paid for a contract will improve either the level of
damages one receives for breach or the probability of performance by
the promisor. As neither of those assumptions currently holds true
in the airline industry, simply creating a boarding priority system
based on the price paid for a ticket would introduce a level of effi-
ciency not currently present. Such a system would at least align the
price paid per ticket and the possibility of being bumped, and alleviate

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126 One could just as easily assume a negative correlation between the value one places
on performance and time of arrival at the boarding gate, since those passengers who place
the highest value on "time" would be least likely to arrive early and most likely to be
harmed by being bumped.

127 This point is related to the unknown cost of being bumped discussed earlier. See
supra Part II.A. While it is currently quite difficult for passengers to estimate the likeli-
hood that their specific flight will be overbooked, it is also impossible for them to deter-
mine their individual chance of being involuntarily denied boarding in the event their flight
is overbooked.

128 At the time of purchase, a passenger could be told that the ticket was number
twenty-five of three hundred. Since this solution just substitutes purchase time for arrival
time in order to determine bumping, it similarly fails to distinguish between passengers
who value performance the most. However, it would be an improvement over arrival time
since it would allow passengers to know in advance their boarding priority, and thus their
chance of being a passenger chosen for bumping.

129 Delta Airlines uses a variant of this system, assigning boarding priority to first-class
passengers above those in coach. See Delta Airlines, Inc., Delta Domestic General Rules

130 This idea—that an increase in price paid will increase either the probability of per-
formance or amount of damages—pervades almost all contract literature on liquidated
damages. See, e.g., Johnston, supra note 77, at 636-37 (noting that contracts can vary with
"different price[s] for different levels of carrier liability"); Schwartz, supra note 96, at 407
("T[he higher the contract's liquidated damages clause, the higher the seller's costs, and so
the higher the contract price."). The point here is not to attack that idea, but rather to note
that, under current airline overbooking practices, such a linkage does not exist.

131 The use of price would allow passengers to better estimate the risk of breach by the
airline, with those paying more for a ticket receiving a greater probability of performance.
some of the cross-subsidization problems which currently occur between business and low-cost travelers.\footnote{See supra Part II.B.2.} In contrast, the imperative to show up early to ensure a seat lacks any predictive power since no one can know when the other passengers will arrive, and decisions about the relative odds of being bumped thus cannot be formed until one is at the gate.

In addition to reforming how airlines choose to bump non-volunteers, an increase in the amount of compensation would increase the efficiency of the current regulations. The current maximum level of compensation has not been updated since it was set at $400 in 1978.\footnote{See supra note 42–44 and accompanying text.} As a result, arguing that the amount still represents an adequate level of compensation requires unlikely assumptions about the changing preferences of most airline passengers over the past three decades. Adjusting for inflation, $400 in 1978 is worth approximately $1142 in 2004 dollars, or, conversely, $400 today was worth $140 in 1978.\footnote{See supra note 43.}

As this Note discussed earlier,\footnote{See supra Part II.B.1.} setting contract damages at $400 should allow all passengers to set their reliance decisions at that level as well.\footnote{Cooter, supra note 66, at 15 ("Liquidated damages restrain reliance by making damages invariant with respect to reliance.").} Such a damage rule should be more efficient than expectation damages, since passengers will have no incentive to overrely and airlines will not have to bear the cost of passenger overreliance.\footnote{Id.} For these justifications to work, however, the level of reliance damages must be efficient, and passenger reliance behavior must reflect these limited damages. Even assuming the existence of one efficient level of limited damages for all airline passengers, the available empirical evidence suggests that the current level is too low to prevent inefficient airline breach.

Of the 2.9 million people denied boarding from 2000 to 2002, 2.76 million of them volunteered to accept the compensation offered by the airlines and thus were voluntarily bumped onto another flight.\footnote{NTS 2003, supra note 3, tbl.1-58.} By volunteering to accept the payment offered by the airlines, the overwhelming majority (approximately ninety-five percent) of bumped passengers indicated that they valued performance at or below the level of the limited damages, seemingly vindicating contract theory and making the damages appear truly compensatory. Over that same three-year period, however, more than 130,000 passengers
preferred performance to the offered compensation but were involun-
tarily denied boarding.\textsuperscript{139} These passengers had not set their reliance
investment at the level of limited damages and, if given the choice,
would have rejected hundreds of dollars in compensation offered by
the airlines to take a later flight.\textsuperscript{140} Thus, approximately one out of
twenty passengers denied boarding deemed the amount of damages
under-compensatory.\textsuperscript{141} With five percent of passengers valuing per-
formance over damages, the limited-damages level cannot be
achieving fully its goal of limiting reliance. Though admittedly cir-
cumstantial, these statistics suggest that the level of damages is too
low to compensate all passengers adequately.

An increase in the maximum compensation for passengers invol-
untarily denied boarding should reduce both the frequency of
overbooking and the percentage of passengers under-compensated by
the award. However, as discussed earlier, determining the appro-
priate federal damages amount is quite difficult to do, especially on an
industry-wide basis. Furthermore, to the extent that the current regu-
latory regime inhibits outright competition on overbooking, an
increase in the amount offered would simply perpetuate this
regime.\textsuperscript{142} Since an increase in the compensation amount would not
increase a passenger's ability to estimate the probability of being
bumped, nor increase competition between airlines in the area of
overbooking practices, it is at best a partial solution to the problem of
under-compensatory booking.

2. \textit{Expand Disclosure of Overbooking Rates}

Another approach would be to address the information gaps dis-
cussed in Part II.A, which prevent passengers from accurately esti-
mating the costs of being bumped. More specific information would
allow passengers to estimate the likelihood of performance by the air-
line and adjust their price and reliance accordingly. Airlines would no
longer be able to exploit asymmetric information, and so prices
charged by all airlines would better reflect the true cost of service by
that airline.

To that end, the simplest solution would be to amend the existing
federal regulations to require much greater disclosure of overbooking

\textsuperscript{139} \textit{Id.}
\textsuperscript{140} The specter of large litigation costs might force a passenger to accept, ex post, what
would have been unacceptable as compensation ex ante. \textit{See supra} note 116.
\textsuperscript{141} \textit{Id.}
\textsuperscript{142} Each airline would still be governed by the same, larger federal amount, regardless
of its propensity to overbook.
Data about historical overbooking patterns is only available on an aggregate basis—in contrast to historical on-time rates, which are often available on a flight-by-flight basis at the time of booking. Currently, passengers can determine which airlines have higher overbooking rates but cannot determine historical overbooking rates for specific flights. Flight-specific information would allow passengers to consider a flight’s past overbooking history and adjust the amount they are willing to pay for that flight accordingly. All else equal, most passengers would not pay the same price for a flight overbooked five percent of the time and one overbooked fifty percent of the time. Furthermore, greater disclosure regarding the rates of overbooking could help fuel competition between the airlines on these contract terms by raising awareness of differences in practices.

To the extent that overbooking rates vary widely from flight to flight, such information could be incredibly helpful in addressing information asymmetries regarding rates of breach.

More radically, the federal government could require airlines to notify passengers whenever a flight becomes overbooked. Although this system was suggested and rejected in the 1960s as unworkable, it merits reconsideration today. The airline industry was concerned that notification would lead to an increase in the amount of no-shows and duplicative reservations, the latter presumably causing the former. However, since reservation policies are completely within an airline’s discretion, airlines can control these problems by charging cancellation fees.

143 See, e.g., 14 C.F.R. § 250.10 (2002).
145 The Bureau of Transportation Statistics maintains highly detailed databases containing airline on-time performance. See Bureau of Trans. Statistics, TranStats: On-Time Performance (“[These] table[s] contain] ] departure delays and arrival delays for non-stop domestic flights by major air carriers, and provide[ ] such additional items as origin and destination airports, flight numbers, scheduled and actual departure and arrival times, cancelled or diverted flights, taxi out and taxi in times, air time, and non-stop distance.”), at http://www.transtats.bts.gov/DatabaseInfo.asp?DB_ID=120&Link=0 (last visited Sept. 27, 2004).
146 For example, American Airlines Flight 59, departing from New York to San Francisco at 7:00 a.m. on June 15, 2004, is on time eighty percent of the time, while America West Flight 411, departing an hour later that same day, is on time only sixty percent of the time. Searches done at www.expedia.com on May 25, 2004 (results on file with the New York University Law Review).
147 See supra note 51.
148 See supra Part II.A.
150 See supra note 23 and accompanying text.
In the 1960s, the airline industry also argued that notification could cause passenger confusion and anxiety, since many passengers might not know that overbooking does not necessarily mean that anyone actually will be denied boarding. The concern is valid, but policymakers must weigh any increase in anxiety against the potential efficiencies such shared information could create. Passengers notified about overbooked flights could take steps to reduce their potential damages in the event that they are bumped, decreasing the number of passengers under-compensated for breach. In theory, a well-run notification system would benefit the airlines who could offer even less compensation in the event of breach if all passengers had the opportunity to reduce their reliance on performance prospectively. However, given that current information regarding the frequency of flights that are overbooked, but do not lead to any bumpings, is unavailable (due to the lack of publication of passenger no-show rates), it is difficult to estimate the unwarranted anxiety costs of such a prospective notification system.

3. Eliminate Involuntary Bumping

A more drastic solution would be to prohibit involuntary bumping of passengers and to require that the airlines run auctions until enough volunteers are willing to take the offered compensation. This proposal would maintain the current regulatory framework of the overbooking process, and thus avoid the abuses seen in the early days of overbooking, while refraining from setting a government cap on damages.

Since airlines already offer compensation to volunteers on overbooked flights, this proposal would not impose additional transaction costs on the airlines. Instead, it simply would require that the airlines continue to offer compensation until enough passengers are willing to take a later flight—helping to address the concerns that airlines are exploiting passengers' imperfect information. If airlines could not bump passengers involuntarily and pay them under-compensatory damages, the amounts offered during volunteer auctions likely would rise. Every passenger who values performance above

152 See supra Part I.B.
154 In originally structuring the volunteer system, CAB recognized that airlines probably would set the amount of compensation offered to volunteers at levels lower than the mandatory amount set for involuntarily bumped passengers. Oversales, 43 Fed. Reg.
the offered compensation would be able to remain on the flight, while low-value passengers would accept compensation. Improving on the current model, this system allows airlines to continue overbooking, but also ensures that those who valued performance most got to remain on the flight.

Such a volunteer system—where damages are essentially negotiated at the time of breach—can raise concerns about incentives for strategic behavior by passengers.\textsuperscript{155} Knowing that the airlines face potentially unlimited liability, passengers might have the incentive to overstate their damage amounts, and hold out for inflated compensation. For example, a student who places little value on any particular flight and is willing to fly later in the day for only $50 of compensation, might hold out for additional money. This is a concern under the current volunteer regime\textsuperscript{156} and is largely mitigated by the number of passengers involved in any volunteer passenger auction. In a group setting, any potential holdout would risk losing all compensation if another passenger volunteered first. Barring coordinated strategic action by passengers, a highly unlikely event, there is little chance such holdouts could negatively influence the auction.

By prohibiting involuntary bumping, federal regulations could force airlines to internalize the entire cost of nonperformance. As noted earlier, this would likely raise prices and would introduce the potential for overreliance by passengers.\textsuperscript{157} However, considering that the current level of damages satisfies over ninety percent of bumped passengers,\textsuperscript{158} any rise in overall ticket prices should be minimal. Given that most passengers probably do not evaluate the risk of being bumped while purchasing tickets,\textsuperscript{159} a rule that fully compensates the ignorant party, even if it raises overall prices slightly, is preferable to one that randomly under-compensates certain passengers and encourages airlines to overbook aggressively.

\textsuperscript{155} See Goetz & Scott, supra note 73, at 982–83 (noting moral hazard problem of renegotiation).


\textsuperscript{157} See supra Part II.B.1.

\textsuperscript{158} See supra notes 114–16 and accompanying text.

\textsuperscript{159} See supra Part II.A.
4. Repeal All Regulations Governing Overbooking

Finally, a repeal of all regulations governing overbooking and compensation could spark actual competition among the airlines over the terms of service. Prior to deregulation, the government considered repealing the overbooking rules for fear that "[r]etaining the regulation may [...] inhibit competition among carriers and stifle innovation by lessening competitive uncertainty. Carriers may have some confidence that their competitors will continue to follow traditional overbooking practices and that they will have advance notice of any carrier's attempt to adopt innovative procedures."\textsuperscript{160} The highly uniform nature of many airlines' current overbooking and boarding policies suggests that the regulations may be stifling such innovation.

After repeal, airlines would be free to compete on all aspects of reliability and damages terms, allowing more freedom of contract between the parties.\textsuperscript{161} The airlines with competitive advantages in reliability could then showcase those advantages and provide better service to their passengers.\textsuperscript{162} Such competitive advantages in reliability could come from pricing models, such as JetBlue's, which do not require overbooking; committing to lower overbooking rates (thus allowing greater damages in event of overbooking); employing better no-show forecasting models; or consciously prioritizing lower overbooking rates over lower prices. While it is possible that the market would converge on a single default contract with terms similar to the current ones, it is also possible that consumers would be given a greater range of choice of potential airline contracts.

However, a repeal could backfire so that, rather than improve the overbooking situation through competition, airlines would further exploit the information asymmetry discussed in Part II.A. It is possible that overbooking would increase and damage awards would decrease without any commensurate benefit flowing to passengers, as some airlines come to resemble the Fly-By-Night example, charging high prices for unreliable performance.\textsuperscript{163} When last allowed to overbook freely, the airlines provided passengers with sorely undercompensatory damages for bumping, provoking the original need for federal regulations.\textsuperscript{164}

\textsuperscript{161} Id.
\textsuperscript{162} Levine, supra note 51, at 427–28 (arguing that "[r]egulatory rules and incentives ha[ve] forced airlines to offer almost identical price/quality characteristics, defining a standard industry product").
\textsuperscript{163} See supra Part II.C.1.
\textsuperscript{164} See supra Parts I.B–C.
Now that the airline industry is more competitive, it is likely that unregulated overbooking would function better, with different airlines offering different product mixes (in terms of a price and reliability) to customers. However, the sudden lack of any uniformity in overbooking procedures and payments would increase the search costs for passengers who now benefit from the simplicity of a standard system. Indeed, in the past, the federal government has cited the benefits of uniformity as the primary reason for maintaining the overbooking regulations. Without any mechanism to ensure that airlines do not exploit information asymmetries regarding performance, repeal of all overbooking regulations would be unwise.

CONCLUSION

Overbooking provides tangible benefits to passengers, allowing increased flexibility in reservation policies and decreased overall costs. As always, these benefits come at a price: decreased reliability of performance and inadequate compensation for those bumped. The federal regulations governing these problems have failed to provide passengers with either adequate compensation or predictable performance due to fundamental gaps in passenger information. Furthermore, by under-compensating bumped passengers, these regulations encourage airlines to overbook, penalizing those airlines which choose not to overbook and those passengers with a high value on performance. While the system functions the majority of the time, federal regulations allow a shift in the cost of overbooking from airlines to passengers and from airlines with a high propensity to overbook to those with a low propensity to do so. Eliminating the federal caps on compensation would allow airlines to maintain current overbooking practices, while preventing them from under-compensating bumped passengers and denying a competitive advantage to those airlines that overbook aggressively.

165 Under regulation, airlines were forced to offer highly similar product offerings to their passengers. Levine, supra note 51, at 428. While deregulation has lessened this somewhat, the major airlines still "produce a physical product which greatly resembles the product marketed under regulation." Id. at 428–29. A complete repeal of all overbooking regulations should lead to greater variation in the type of services offered.