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Report to the Chairman, Subcommittee on  
Aviation, Committee on Commerce,  
Science, and Transportation  
United States Senate

January 1986

# AIRLINE TAKEOFF AND LANDING SLOTS

## Department of Transportation's Slot Allocation Rule



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**Resources, Community, and  
Economic Development Division****B-221803**

January 31, 1986

The Honorable Nancy L. Kassebaum  
Chairman, Subcommittee on Aviation  
Committee on Commerce, Science,  
and Transportation  
United States Senate

Dear Madam Chairman:

On January 7, 1986, we discussed the Department of Transportation's (DOT's) slot allocation rule with staff of both the Senate Aviation Subcommittee and your office. The staff stated that the subcommittee would hold hearings on the slot allocation rule on February 6, 1986, and asked whether we could contribute any information on the rule to the subcommittee prior to that time. We agreed to quickly review available supporting documentation and, with our knowledge of the area, identify issues that the subcommittee could use in its inquiry concerning this rule, and develop a list of specific questions.

Our review was limited to considering those documents currently available in the public record. This included DOT's report entitled Regulatory Evaluation for the Final Rule to Establish a Transfer Mechanism for Slots Held by Operators at High-Density Airports. We also considered the available records from Chairman Mineta's September 19, 1985, hearing on the slot allocation rule and the testimony given at DOT's January 21, 1986, public hearing on the new slot allocation rule.

The Federal Aviation Administration (FAA) proposed the slot allocation rule to overcome inefficiencies in how airlines obtain or exchange takeoff and landing slots under the current system. The current system allocates slots on the basis of agreements among airline scheduling committees at each high-density airport. Deadlocks in these committees have restricted airlines from obtaining or modifying their slot allocations and have led to an inefficient use of available airport facilities. The slot allocation rule will replace the scheduling committees' allocations with an open-market system to facilitate the sale, leasing, or trading of slots between incumbent and new entrant airlines.

Some of the key features of the rule

- allow the purchase, sale, trading, or leasing by any person of air carrier or commuter slots (except for international and Essential Air Service

- slots) in any number at any of the high-density airports, beginning on April 1, 1986;
- allocate air carrier and commuter airline slots, which were in use on December 16, 1985, to those air carrier and commuter airlines holding those slots on that date;
  - provide separate slot pools for air carrier, commuter airline, and other operators;
  - provide for special treatment and restricted transfer of international and Essential Air Service slots;
  - "tag" all slots with a priority number, assigned by lottery, to determine the order of withdrawal of those slots if necessary as determined by DOT;
  - institute a use-or-lose provision, which requires that slots not used 65 percent of the time in a 2-month period must be returned to FAA;
  - establish a lottery procedure for the allocation of newly available slots and slots returned to the FAA under the use-or-lose provision;
  - make slots available for additional Essential Air Service operations, as requested and approved by the Office of the Secretary of Transportation, by taking slots from incumbent operators if not otherwise available;
  - make slots available for new international operations at O'Hare and John F. Kennedy Airports, as requested, by taking slots from incumbent operators if not otherwise available;
  - preserve slots currently used for general aviation;
  - do not create proprietary rights in slots; and
  - allow FAA to recall or eliminate slots for any operational reason.

On the basis of our cursory examination of various supporting analyses and studies, we identified several areas where further inquiry may provide insights for the subcommittee's deliberations. These issues, which relate to the adequacy of DOT's evaluation of the economic, competitive, legal, and administrative impacts of the slot allocation rule, are listed below.

1. The extent to which DOT complied with Executive Order 12291, which requires that the agency conduct a complete regulatory impact analysis of a rule that affects economic or competitive conditions significantly.
2. The approach DOT used in identifying the causes of and the problems with the existing slot allocation system.

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3. The approach DOT used in identifying and analyzing the economic, competitive, legal, and administrative issues associated with other alternatives to the slot allocation system, such as

- improvements in the operation of scheduling committees through the use of deadlock-breaking mechanisms and use-or-lose provisions;
- use of slot auction mechanisms, which require airlines to bid for the slots they currently operate;
- use of a “blind-sale” slot allocation system to prevent anticompetitive practices in the purchase, sale, trade, or leasing of slots;
- use of “peak-hour pricing” mechanisms as a means of allocating scarce airport and airspace capital facilities to their most efficient use; and
- allowing the purchase or leasing by air carriers and commuter airlines of slots operated by general aviation during peak hours at high-density airports, or the elimination of general aviation slots during peak hours at high-density airports.

4. The approach DOT used in identifying and analyzing the competitive issues associated with the slot rule, particularly regarding the following issues:

- the effect of the “grandfathering” or granting of slot rights to incumbent airlines on the structure, conduct, and performance of the airline industry;
- the capital cost barriers to entry associated with slot purchase and leasing; and
- the anticipated improvement in airlines’ operating efficiency associated with the use-or-lose provision.

5. The approach DOT used in identifying and analyzing the issues associated with the slot allocation rule’s impacts on the provision of airline service to small communities, particularly those communities under the Essential Air Service Program.

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We hope you find these questions useful in planning your upcoming hearings on this topic. As agreed, we plan to distribute this report to appropriate congressional committees, the Secretary of Transportation, and other interested parties.

Sincerely,

A handwritten signature in black ink that reads "J. Dexter Peach". The signature is written in a cursive style with a large, stylized initial "J".

J. Dexter Peach  
Director



# List of Questions Concerning DOT's Slot Allocation Rule

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## DOT's Compliance With Requirements of Relevant Executive Orders

Did DOT comply with the requirements in Executive Order 12291 to conduct a complete regulatory impact analysis of any proposed rule having significant effects on the economy, prices, or competitive conditions? In particular, what analyses were performed by DOT to describe the following, and what were the results of those analyses performed on

- the potential benefits of the rule, including any beneficial effects that could not be quantified in monetary terms, and the identification of those likely to receive the benefits?
- the potential costs of the rule, including any adverse effects that could not be quantified in monetary terms, and the identification of those likely to bear the costs?
- the potential net benefits of the rule, including an evaluation of effects that could not be quantified in monetary terms?
- a description of alternative approaches that could substantially achieve the same regulatory goal at lower cost, together with an analysis of the potential benefits and costs of the alternatives and a brief explanation of the legal reasons why such alternatives, if proposed, could not be adopted?

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## DOT's Evaluation of Problems With Existing Slot Allocation System

Did DOT perform any analyses to evaluate the causes of deadlock in the airport scheduling committee negotiations or the effectiveness of use-or-lose techniques at the four high-density airports, and what were its conclusions? In particular, did DOT find

- intentional collusion on the part of any scheduling committee member airlines for the purpose of frustrating the resolution of slot allocation issues generally or for the purpose of frustrating the market entry or market expansion efforts of any airline?
- any relationship between the occurrence of deadlock in the scheduling committee for an airport and
  - the availability of slots at the airports?
  - the composition and number of slot users at the airports (i.e., the number of slots held by each air carrier, commuter airline, charter airline, general aviation, and international airline firm at the airports)?
  - the presence of use-or-lose provisions for any category of air service at the airports?



## DOT's Analysis of Economic, Competitive, Legal, and Administrative Impacts of the Rule

1. Did DOT perform any economic, legal, or administrative analyses of the competitive impacts of the slot rule, and what were its conclusions? In particular, did DOT find that
  - any adverse or positive impacts on the competitive structure, conduct, and performance of the airline industry would be caused by the one-time capital windfall from the "grandfathering" of slot rights to incumbent airlines?
  - the uneven distribution of the windfall associated with the "grandfathering" of slot rights to large airlines holding a large number of slots would make those firms more dominant in their markets and increase their financial resources relative to those of smaller or financially weaker carriers?
  - the slot rule's allowance of slot purchase or leasing would increase capital cost barriers to entry at the four high-density airports?
  - the slot rule's elimination of the role of airport scheduling committees in slot allocation would reduce administrative or legal barriers to entry?
  - airlines earned monopoly profits because of barriers to entry under the present slot allocation system and that such profits would be eliminated under the slot rule?
  - available airport and airspace capital facilities (e.g., runways, terminals, ground and air traffic control systems, etc.) would be more efficiently used because of the effect of the slot rule's use-or-lose provision?
  - airline operating efficiency would be improved because of more efficient allocation of slots under the slot rule?
  - consumers would benefit from improved airline operating efficiency in terms of lower fares or improved service under the slot rule?
  - airline investors would benefit from improved airline operating efficiency in terms of higher stock values through retained earnings or higher dividends under the slot rule?
  - inefficiencies such as the airlines' carrying of excess slot, seat, or other capacity for the purpose of maintaining a market "presence" would be eliminated by the slot rule?
  - economic inefficiencies or distortions in competition would be introduced by the fixed allocation of slots to general aviation under the slot rule?
  - airlines would be able to acquire capital necessary to finance slot purchases within a reasonable time under the slot rule given the current conditions in capital markets?
  - there would be no significant displacement of airlines' other operating expenditures or capital expenditures for planes, equipment, or facilities by airlines' slot acquisition expenditures under the slot rule?

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- airlines would engage in anticompetitive practices in the sale, leasing, or trading of slots to competitors through the use of price discrimination, contracts tying slot transactions to the sale or leasing of related airline-owned airport capital facilities, refusal to sell to all interested purchasers, or any other practices?

2. Did DOT analyze the economic, legal, and administrative impacts of the interruption of service that would be caused by the slot allocation rule, and what were its conclusions? In particular, did DOT find that

- the service interruptions caused by the withdrawal of 5 percent of incumbent airlines' slots under the slot rule would have a significant effect on airlines' profitability and competitive position and a significant effect on service to the public?
- there would be significant reduced economic value in airport gate and other facilities currently owned by incumbent airlines who would lose slots under the 5-percent withdrawal provision?

3. Did DOT analyze DOT and/or Department of Justice (DOJ) administrative mechanisms required to monitor slot transactions in order to prevent and/or prosecute anticompetitive practices, and what were its conclusions? In particular, did DOT find that

- DOT and/or DOJ currently have the legislative, regulatory, and rulemaking authority and staff necessary to monitor slot transactions and prevent and/or prosecute anticompetitive practices associated with slot transactions?

4. Did DOT perform any economic, legal, or administrative analyses of the potential disruption of airline service to small community airports operated under the Essential Air Service Program, and what were its conclusions? In particular, did DOT find that

- service at small community and/or Essential Air Service airports would be significantly reduced because of intensified airline competition for slots at high-density airports?
- DOT currently has the legislative, regulatory, and rulemaking authority and staff necessary to monitor slot transactions to ensure continued airline service to small community airports operated under the Essential Air Service Program?

5. Did DOT draft the legal definitions for "legitimate operations" by air carriers, commuter airlines, charter airlines, Essential Air Service-

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providing airlines, and domestic- and foreign-flag international airlines in such a manner that the slot allocation rule would be enforceable in designating prohibited actions by all such types of airlines?

6. What were DOT's estimates of the costs necessary to police the competition-maintenance and small-community-service implications of the slot allocation rule?

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## **DOT's Evaluation of Alternatives to the Slot Allocation Rule**

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### **Improvements in the Operation of Scheduling Committees**

1. Did DOT evaluate the possibility of developing for high-density airports, deadlock-breaking mechanisms and use-or-lose provisions similar to those under which commuter carriers currently operate, and what were its conclusions? In particular, did DOT find that

- the use by all types of airlines at high-density airports of a use-or-lose provision similar to that operating for commuter carriers at Chicago's O'Hare Airport could not significantly improve the efficiency with which all slots are used at those airports? The O'Hare commuter carrier use-or-lose provision states that a commuter carrier that fails to operate its slots 5 days per week at least 80 percent of the time during a particular scheduling period will surrender those slots to the O'Hare Regional Carrier Scheduling Committee for reallocation.
- binding federal arbitration would not work as a deadlock-breaking mechanism in the slot scheduling committees of high-density airports?

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### **Use of Slot Auction Mechanisms**

2. Did DOT analyze the economic, competitive, legal, administrative, and fiscal impacts of a policy of auctioning off all or a large portion of existing domestic air carrier, commuter airline, charter airline, and general aviation slots at high-density airports, and what were its conclusions? In particular, did DOT find

- any federal, state, local, or corporate legal restrictions against the sale of slot assets by federal, state, local, or airport authorities at prices greater than their cost?

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- any legal or administrative restrictions against deposit of slot auction revenues into the Aviation Trust Fund or against an equal sharing of slot auction proceeds between the Aviation Trust Fund and the relevant airport authorities' capital improvement funds?
- that a "phased" auction of all existing domestic air carrier, commuter airline, charter airline, and general aviation slots at high-density airports would be an economically inefficient or inequitable alternative to the current slot allocation system? The phased auction option has been discussed as a way to minimize the interruption of service, the changes in airlines' competitive position, and the impact on capital markets inherent in a one-time auction of all existing slots.

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**Use of a Blind-Sale Slot**  
**Allocation System**

3. Did DOT perform any economic, competitive, legal, or administrative analyses of the use of a blind-sale system whereby sellers and buyers of slots would conduct their transactions through intermediaries without knowledge of the identity of each other, and what were its conclusions? Such a system of slot transactions might prevent price discrimination, contracts tying slot transactions to the sale or leasing of related airline owned airport capital facilities, refusals to sell, lease, or trade slots, and other anticompetitive practices.

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**Use of Peak-Hour Pricing in**  
**Airport Takeoff and**  
**Landing Fees**

4. Did DOT perform any analyses of the use of peak-hour pricing differentials by airport authorities as a method of reducing peak-hour demand for scarce airport and airspace capital facilities, and what were its conclusions? Such reduction in demand for scarce capital facilities could reduce the potential for deadlocks in scheduling committees under the current system and could reduce the current and future demand for airport and airspace capital expenditures paid out of the Aviation Trust Fund and by airport authorities.

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Extending the Buy-Sell  
Provision to General  
Aviation Slots or  
Eliminating General  
Aviation Slots During Peak  
Hours at High-Density  
Airports

5. Did DOT perform any analyses of the effects of extending the buy-sell provisions of the rule to general aviation slots or the effects of eliminating general aviation slots during peak hours at high-density airports as a means of reducing peak-hour demand for scarce airport and airspace capital facilities, and what were its conclusions?

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General Comparison of  
the Proposed Slot Rule  
Against the Current  
Slot Allocation System  
and Other Alternatives  
to the Current System

Did DOT perform any summary comparative analyses of the economic, competitive, fiscal, legal, and administrative impacts of the slot rule relative to the impacts of the current slot allocation system and other alternatives to that system as discussed above, and what were its conclusions? In particular, did DOT find that the slot rule was more economically efficient and equitable than the current slot allocation system and all its other alternatives, when evaluated with respect to

- efficiency in pricing of airport slots used by each type of airline (i.e., air carriers, commuter airlines, general aviation, charter airlines, and international airlines)?
- competitive impacts on all airlines, particularly the prevention of price discrimination, contracts tying slot transactions to the sale or leasing of related airline-owned capital facilities, and refusals to sell, lease, or trade slots to competitors?
- fiscal impacts, with particular emphasis on the current and future demand for expanded airport and airspace capital expenditures and on contributions to the Aviation Trust Fund?
- interruption of all types of airline service at all airports?
- effects on airline service to small communities with particular emphasis on Essential Air Service communities?



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