

# A Voucher Proposal to Redevelop Encumbered Airport Slots

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# Disclaimer

- The opinions expressed in this talk are those of the author and do not necessarily represent the views of the FCC or any other members of its staff. Indeed, some at the FCC are skeptical.

# Three Scarce Resources Inefficiently Used by the Airline Industry

- Spectrum
- Airport slots
- Airspace

# Using Markets to Increase Efficiency

- Well designed market mechanisms can foster efficient use of scarce resources.
- For markets to work well must first properly define property rights.
- Dealing fairly with incumbents is critical to a successful transition from an administrative allocation to a market allocation.

# Overview of Voucher Proposal

- Can use vouchers to clear and restructure use of heavily encumbered resource while keeping incumbents whole.
- Incumbents turn in the resources they are using (slots or spectrum) in exchange for transferable vouchers equal to the market value of the resources given back.
- Resources are put up for sale in simultaneous combinatorial auction open to all including incumbents, who can buy back their former rights.

# Airport Slot Voucher Proposal

- Incumbents turn in their airport slots in exchange for vouchers equal to the market value to their current slots
- Incumbents could opt out of voucher plan and be assigned a reduced number of slots (e.g. one quarter of their current number)
- FAA creates new, unencumbered optimally designed slots (could keep current scheme)

# Voucher Valuation

- Face values of slot vouchers equal to auction prices of corresponding slots
  - Each incumbent attributed quantities of slots (designated by time of day, day of week, etc.) based on current assignments
  - Voucher face value equal to auction price of a slot with time window of voucher

# Vouchers Equivalent to Cash

- Vouchers could be used at face value to pay winning bid in this or any subsequent slot auction
- Vouchers are fully transferable and divisible
- Vouchers allow incumbents that no longer want to maintain current slots to sell out



# Voucher Proposal Auction Design

- FAA holds simultaneous one sided auction w/ package bidding for all slots in a slot-constrained airport
- Bidders would bid on slots with certain characteristics (time of day window, day of week, time between landing and takeoff, etc.)
- Identities of bidders not public until after auction to minimize opportunity for destructive strategic behavior in auction

# Benefits of Voucher Proposal Compared to Limited Slot Auction

- Clears all slots
  - Puts all slots in airport in market at the same time allowing complete restructuring of use
  - Promotes efficient entry
  - Allows FAA to choose efficient new slot plan
  - Increases liquidity of slot market
- Keeps incumbents whole
- Forces all incumbents to face opportunity cost of retaining their slots

# Thank You

## For More Information

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