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PUBLIC INTEREST COMMENT

A PUBLIC INTEREST COMMENT ON PUBLIC CHARTER OPERATIONS

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"Regulatory Definitions of On-Demand Operation, Supplemental Operation, and Scheduled Operation"
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RIN: 2120-ZA32

This public interest comment is in response to the Federal Aviation Administration's request for comment on its intent to initiate a rulemaking to amend 14 CFR 110 by removing Part 380 definitions in 14 CFR 110.2 and delink FAA's Safety regulations from DOT's economic regulations. FAA's proposal would effectively expand the scope of some regulations that currently apply to only large commercial carriers to include small public charter services. We argue that the proposal lacks merit for several reasons:

- there does not appear to be an increase in public charter travel since relevant rules were first adopted;
- growth in this area on its own doesn't appear to justify new rules;
- there is little safety benefit to changing rules; and
- there are substantial costs to a variety of communities—from small cities, to Native American tribes, to consumer segments who value the products provided.

Additionally, it is unclear that existing law provides the requisite authority to make the contemplated changes, and at a minimum there are a number of required considerations that must occur before they would do so.

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The ideas presented in this document do not represent official positions of the Mercatus Center or George Mason University or any other organizations with which the authors may be affiliated.

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1 Introduction

The FAA has requested comments on its intent to initiate a rulemaking to amend 14 CFR 110 by removing Part 380 definitions in 14 CFR 110.2 and delink FAA's safety regulations from DOT's economic regulations. We are generally interested members of the public who wish to review this intent to pursue regulatory action from the perspective of the public interest. The views represented in this document are wholly our own and are meant to represent what regulatory options we see as maximizing societal welfare.

Congress has instructed the FAA to consider a number of factors as in the public interest in 49 CFR 40101. Accordingly, our public-interest comment will discuss the FAA's intent to regulate by providing comments on safety (49 USC 40101(a)(1-3)), competition (49 USC 40101(a)(6), (9), (10), (12), & (13)); availability of low-priced services, especially to underserved markets (49 USC 40101(a)(4), (11), & (16)); and a sound regulatory system (49 USC 40101(a)(7)). We also discuss features of the public charter market, pilot market, and procedural requirements for the intended regulation.

Overall, there does not appear to be an increase in public charter travel since relevant rules were first adopted. Growth in this area on its own does not appear to justify new rules; there is little safety benefit to changing rules, and there are substantial costs to a variety of communities —from small cities, to Native American tribes, to consumer segments who value the products provided. Additionally, it's unclear that existing law provides the requisite authority to make the contemplated changes, and at a minimum there are a number of required procedural considerations that must occur before the FAA could do so. Given the costs and benefits of such a change, changing this regulation should not be a priority.

2 Background

A number of airlines offer regularly scheduled public charter transportation in which a U.S. public charter operator[1] buys public charter flights[2] from a direct air carrier.[3] The U.S. public charter operator then offers these flights for sale to the public. Notable examples include Blade, JSX, and Contour Airlines.

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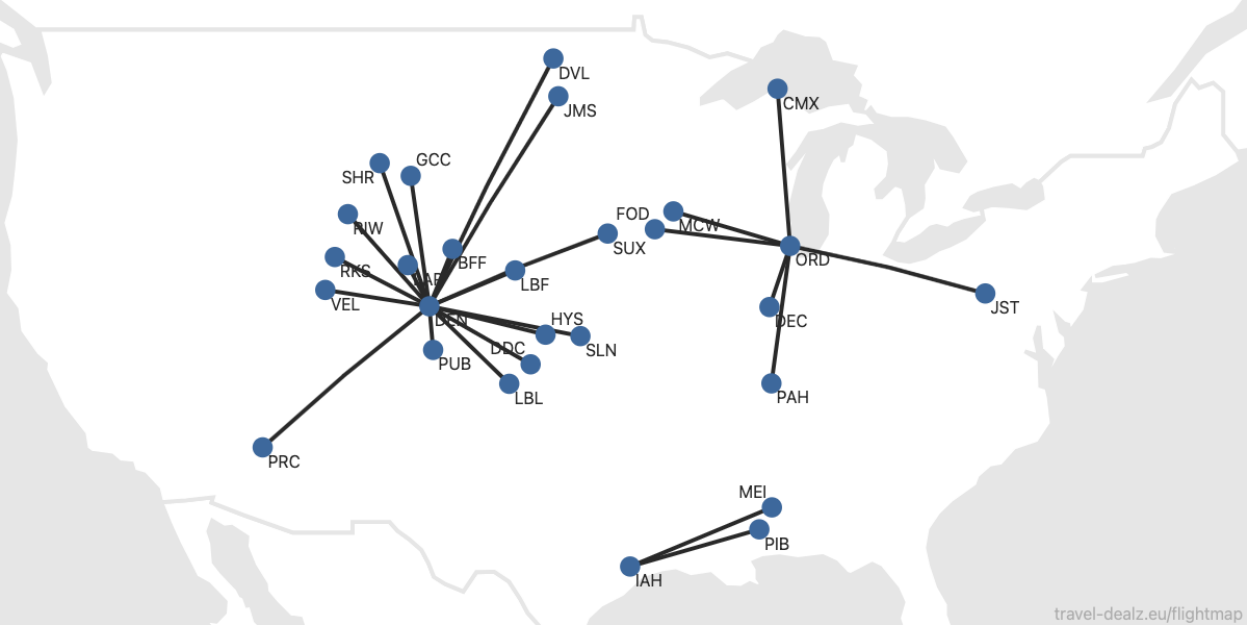
[1] U.S. Public Charter Operator is defined in 14 CFR 380.2 as, "U.S. Public Charter operator means an indirect air carrier that is a citizen of the United States as defined in 49 U.S.C. 40102(a) and that is authorized to engage in the formation of groups for transportation on Public Charters in accordance with this part."

[2] Charter and public charter flights are defined separately in 14 CFR 380.2. "Charter flight means a flight operated under the terms of a charter contract between a direct air carrier and its customer. It does not include scheduled air transportation, scheduled foreign air transportation, or nonscheduled cargo air transportation, sold on an individually ticketed or individually waybilled basis." And "Public Charter means a one-way or round-trip charter flight to be performed by one or more direct air carriers that is arranged and sponsored by a charter operator."

[3] Direct air carrier is defined in 14 CFR 380.2 as, "*Direct air carrier* means a certificated commuter or foreign air carrier, or an air taxi operator registered under Part 298 of this chapter, or a Canadian charter air taxi operator registered under Part 294 of this chapter, that directly engages in the operation of aircraft under a certificate, authorization, permit or exemption issued by the Department."

In June 2022, SkyWest applied to offer a new set of routes, including some routes classified as Essential Air Service, by using public charter services.[4] SkyWest proposed to operate 18 aircraft serving 25 markets. Each market would be served by two daily round trips to a larger city. The route map of their proposed operation is below.



Public charter services, under current regulations, are permitted to operate under 14 CFR 135 if they offer fewer than 31 seats. Air Line Pilots Association, International (ALPA), the largest pilots' union, filed a Motion for Leave to File and Surreply on July 22, 2022. Public comments resumed in spring of 2023 and continued into the summer of 2023. The docket includes numerous comments about not just SkyWest's application, but also JSX and other public charter operations under Part 135.

The pilots' unions (ALPA, APA, CAPA, and SWAPA), joined by other airline-industry unions (AFA, APFA, IAM, NATCA, TTD, and TWU) filed multiple briefs in opposition to the application, largely because the First Officer Qualification rules apply to Part 121 operations but not to Part 135 operations.[5] Their briefs frequently refer to operating public charters as a "loophole" that permits airlines to avoid the higher requirements of Part 121 operators and allows Essential Air Service Operators to skirt requirements for scheduled routes. Specifically, they claim public charter Part 135 operators are able to (a) hire first officers with less than 1,500 hours minimum

[4] DOT-OST-2022-0071.

[5] Capt. Joseph G. DePete and David M. Semanchick. 2022. "Motion for Leave to File and Surreply of the Air Line Pilots Association, International." Docket DOT-OST-2022-0071. Accessed September 2023 from https://www.regulations.gov/document/DOT-OST-2022-0071-0006

flight time, (b) hire chief pilots over the mandatory retirement ages, (c) have lower crew rest periods than Part 121 operators, and (d) have lower TSA burdens on passengers.

In the same docket, American Airlines published a comment asking for "regulatory clarity on the use of 14 CFR Part 380 public charter regulations to provide a facsimile of common carriage schedule service through 14 CFR Part 135 charter operations." American Airlines concurs with the unions' positions on the lower safety standards and lower TSA requirements for Part 121.

In response, SkyWest, JSX, the Regional Airline Association (RAA), and JetBlue (a part owner of JSX) filed multiple briefs arguing against the various points made by both the various unions and American Airlines.

It is against this backdrop of airlines and unions arguing over the legality of public charter operators that the FAA states its intention to "initiate a rulemaking to amend title 14, Code of Federal Regulations (14 CFR), Part 110 to address these public charter operations that, in light of recent high-volume operations, appear to be offered to the public as essentially indistinguishable from flights conducted by air carriers as supplemental or domestic operations under 14 CFR Part 121."

While the FAA does not offer specific language for the proposed changes, they do state, "The FAA is considering issuing a notice of proposed rulemaking that will seek comment on removing the exceptions for Part 380 public charter operators from the definitions in 14 CFR 110.2 and delink FAA's safety regulations from DOT's economic regulations."

Part 380 is cited three times in the definitions of "on-demand operation,"[6] "scheduled operation,"[7] and "supplemental operation"[8] in 14 CFR 110.2. Our understanding is that the FAA intends to make three changes to this part.

1. The FAA intends to delete the phrase "Passenger-carrying operations conducted as a public charter under Part 380" from the definition of "on-demand operations";
2. The FAA intends to remove the exclusion of public charters from scheduled air service; and
3. The FAA intends to delete the category of public charter as a type of supplemental operation.

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[6] An on-demand operation is; "any operation for compensation or hire that is one of the following:

(1) Passenger-carrying operations conducted as a public charter under Part 380 of this chapter or any operations in which the departure time, departure location, and arrival location are specifically negotiated with the customer or the customer's representative that are any of the following types of operations:
   (i) Common carriage operations conducted with airplanes, including turbojet-powered airplanes, having a passenger-seat configuration of 30 seats or fewer, excluding each crewmember seat, and a payload capacity of 7,500 pounds or less, except that operations using a specific airplane that is also used in domestic or flag operations and that is so listed in the operations specifications as required by § 119.49(a)(4) of this chapter for those operations are considered supplemental operations;
   (ii) Noncommon or private carriage operations conducted with airplanes having a passenger-seat configuration of less than 20 seats, excluding each crewmember seat, and a payload capacity of less than 6,000 pounds; or
   (iii) Any rotorcraft operation.

(2) Scheduled passenger-carrying operations conducted with one of the following types of aircraft with a frequency of operations of less than five round trips per week on at least one route between two or more points according to the published flight schedules:
   (i) Airplanes, other than turbojet powered airplanes, having a maximum passenger-seat configuration of 9 seats or less, excluding each crewmember seat, and a maximum payload capacity of 7,500 pounds or less; or
   (ii) Rotorcraft.

(3) All-cargo operations conducted with airplanes having a payload capacity of 7,500 pounds or less, or with rotorcraft."

[7] Scheduled operation is defined as: "any common carriage passenger-carrying operation for compensation or hire conducted by an air carrier or commercial operator for which the certificate holder or its representative offers in advance the departure location, departure time, and arrival location. It does not include any passenger-carrying operation that is conducted as a public charter operation under Part 380 of this chapter."

[8] Supplemental operation means any common carriage operation for compensation or hire conducted with any airplane described in paragraph (1) of this definition that is a type of operation described in paragraph (2) of this definition:

(1) Airplanes:
   (i) Airplanes having a passenger-seat configuration of more than 30 seats, excluding each crewmember seat;
   (ii) Airplanes having a payload capacity of more than 7,500 pounds; or
   (iii) Each propeller-powered airplane having a passenger-seat configuration of more than 9 seats and less than 31 seats, excluding each crewmember seat, that is also used in domestic or flag operations and that is so listed in the operations specifications as required by § 119.49(a)(4) of this chapter for those operations; or
   (iv) Each turbojet powered airplane having a passenger seat configuration of 1 or more and less than 31 seats, excluding each crewmember seat, that is also used in domestic or flag operations and that is so listed in the operations specifications as required by § 119.49(a)(4) of this chapter for those operations.

(2) Types of operation:
   (i) Operations for which the departure time, departure location, and arrival location are specifically negotiated with the customer or the customer's representative;
   (ii) All-cargo operations; or
   (iii) Passenger-carrying public charter operations conducted under Part 380 of this chapter.

Taken together, these three changes would mean that any public charter turbojets with regularly scheduled operations would not be considered "on-demand operators." The current language permits public charter operators to operate under Part 135 if they are turbojet operators and have fewer than 31 passenger seats or if they operate nonturbojet airplanes and have between 10 and 30 seats. Otherwise these public charter operators must operate on the basis of the requirements in Part 121.

For the purpose of this analysis, we assume that the proposed rule the FAA intends to undertake would primarily affect public charter operators operating turbojets with fewer than 31 seats and nonturbojets with between 9 and 30 seats. We are unclear on whether regularly scheduled public charter rotorcraft service, such as what BLADE offers, would be affected by this change. The FAA should clarify whether rotorcraft public charters would also be affected by this intended rule and in what way.

3 Where did Part 380 linkages come from?

In order to understand why Part 110 definitions link to Part 380, we must first describe a bit of regulatory history. Our understanding of this regulatory history stems from the preamble in the FAA's 1995 final rule on "Commuter Operations and General Certification and Operations Requirements," and our discussion here repeats much of the description word for word.[9] In 1953, airplanes with a maximum certificated takeoff weight (MCTW) of 12,500 pounds or less were defined as "small airplanes" and were permitted to carry fewer than 10 passengers in on-demand air taxi service. These rules eventually became Part 135. Airplanes with more than 12,500 pounds of MCTW were called "large airplanes." Beginning in the late 1960s, airplane manufacturers began to build small airplanes with an MCTW below 12,500 pounds capable of carrying more than 10 passengers. Some air taxi operators began to offer scheduled service with these newer planes and began to operate under the less restrictive Part 135; they became commuter carriers.

In 1978, airlines were deregulated; major carriers retreated from many smaller markets; and commuter carriers filled in the gap. Between 1978 and 1995, when the Commuter Operations rule was published, the FAA had issued a number of separate rules to align Part 135's safety requirements with those in Part 121. Accidents in the early 1990s caused the FAA to issue the Commuter Operations rule, requiring Part 135 commuter operators with planes carrying 10 to 30 seats to become Part 121 operators.

Public charter flights are mentioned nowhere in the Commuter Operations rule. The link to Part 380 is also not included in the major rewrite to Part 119 (where the Part 110 definitions were then located) or in the revised Part 121 and Part 135, as laid out in the Commuter Operations rule published on December 20, 1995.

[9] 60 FR 65832.

However, the FAA published a notice of proposed rulemaking (NPRM) a mere 14 months later, on February 3, 1997, to make editorial and other changes in Parts 21, 25, 91, 119, 121, and 135 to correct the "mistakes" in the Commuter Operations rule.[10] The FAA identified one such mistake as the lack of linking to Part 380 in the definitions of "on-demand operation," "scheduled operation," and "supplemental operation" contained in Part 119. The FAA stated in its NPRM that the intent is to make clear that public charter operations are not considered scheduled operations and therefore would not be affected by the original Commuter Operations Rule.[11] The FAA did not provide further discussion of public charters in its NPRM. The final rule reported that no comments were received, so the proposed language was adopted.[12]

We can only conclude from this regulatory history that the FAA's intent from the commuter rule was not to apply Part 121 rules to public charter operators, because the FAA identified the 1995 text as mistaken. From the FAA's description, it sounds like the FAA concluded that the safety issues present for commuter carriers were not similarly present for public charter carriers and/or that the FAA did not have the legal authority to alter the regulations to public charters under the proposed rule. We elaborate on why the FAA may not have had the legal authority to do so in Section 0 below.

Were the FAA to follow its stated intent in this notice and pursue regulation to remove the language that the FAA added in 1997 because of its own mistakes in the 1995 Commuter Operations rule, the FAA should explain what logic led to the FAA's alteration of the language in 1997, why it felt public charter regulations were sufficiently safe in 1997, and why that language is no longer tenable.

4 Does an increase in size and complexity matter?

E.O. 12866, as modified by Circular A-4, calls for agencies to demonstrate that the proposed action is necessary. Specifically, E.O. 12866 states, "Federal agencies should promulgate only such regulations as are required by law, are necessary to interpret the law, or are made necessary by compelling need, such as material failures of private markets to protect or improve the health and safety of the public, the environment, or the well being of the American people ... ."[13] The FAA has hinted at what it believes the need for the regulatory action would be. It stated in its notice, "The FAA intends to initiate a rulemaking … in light of recent high-volume operations, [public charter operations] appear to be offered to the public as essentially indistinguishable from flights conducted by air carriers as supplemental or domestic operations under 14 CFR Part 121. Specifically, the size, scope, frequency, and complexity of charter operations conducted as 'on-demand' operations under the Part 135 operating rules has grown significantly over the past 10 years."

[10] 62 FR 5076

[11] 62 FR 5077

[12] 62 FR 13248

[13] Exec. Order No. 12,866 (September 30, 1993), https://www.archives.gov/files/federal-register/executive-orders/pdf/12866.pdf

An increase in scope and complexity does not itself create a need for regulation, as increasing the scope and complexity usually goes with maturing companies becoming more efficient by availing themselves of an increasingly specialized purpose. It is the specializations that causes the complexity and rise in efficiency.

In fact, an increase in size, scope, frequency, and complexity would seem to increase competition: These flights are sometimes competing directly with incumbent carriers, they include flights under interline agreements, they are frequently undertaken by new and smaller companies, and they ensure that those in small communities in rural and remote areas have access to affordable and regularly scheduled air service. These features match the public-interest policy objectives of the FAA set by Congress under 49 USC 40101(a) (12), (8), (13), and (16) respectively.

Sometimes an increase in size, scope, and complexity can result in greater frequencies of accidents or incidents. However, as we argue in the section below on safety data, there are no current safety issues among public charter operators. In fact, because of current regulations, public charter operators are limited in the number of passengers and and the amount of weight they can convey, so if an accident were to occur for a Part 135 public charter operator, the consequences would be limited—making the consequences of an accident to be inherently less severe than for many other Part 121 operators.

Further, the FAA has delivered such a high level of safety across the aviation sector that the risk of death or injury is orders of magnitude greater in all other forms of transportation. Were the FAA to issue the intended proposed rule, the FAA should include, in its statement of the need for regulatory action, how the regulatory actions would lower aggregate risk to the American public. This should include calculation of the greater risk individuals would experience by taking a form of transportation other than flying, because the proposed rule would likely decrease the number and availability of regularly scheduled flights in the United States.

5 Have size and complexity increased?

The concern about the increase in size, scope, and complexity can only be true if the size, scope, and complexity have actually increased. Specifically, the FAA makes a claim that public charter operations have increased over the past 10 years. Indeed, according to recent data from the FAA, the frequency of charter flights has grown in the past 10 years. However, earlier data indicates a decline in public charter flights.

We gathered data on the number of public charter flights and seats flown for the years 2010 and 2022 from publicly available data published by the FAA. Part 380 of the DOT's regulations requires all persons who wish to arrange public charter flights to first submit a charter prospectus to DOT containing information about the proposed charter program. DOT publishes

a list of public charters on its website based on this information.[14] We also gathered data from an NPRM the FAA published in 1991 entitled "Aviation Public Charters."

In the 1991 rule, the FAA stated, "The Public Charter industry is composed of nearly 300 charter operators and approximately 100 active U.S. and foreign air carriers. We estimate that over 4.5 million customers were carried on Public Charters during 1991 to destinations throughout the U.S. and the world... [T]he number of enplanements on domestic and international charters has been remarkably stable over the past 15 years." The final rule was published in 1998 and did not present any updated figures or note any significant market changes from the 1991 rule.

Unfortunately, an extract of the regulatory evaluation was not published in the preamble, and the publication of the rule predates availability on the docket on regulations.gov, so we could not verify whether the final regulatory evaluation included any discussion of the market size. We assume that had the market changed materially, the FAA would have so noted in its final rule. Given that the FAA does note any change, it sounds as though the volume of public air charters between 1976 and 1998 was relatively stable with around 300 operators, 100 carriers, and 4.5 million passengers.

We compare these numbers from the 1991 rule to the numbers from the public charter reports from 2010 and 2022 in the table below. As can be seen from this data, the number of passengers from about 10 years ago (2010) is far below the number of passengers in the 1976 to 1998 period. Unfortunately, the 1991 data does not list the number of flights, but it is worth noting that the number of both operators and carriers is down significantly from what was common in the 1976 to 1998 period.

[14] "Public Charters" (webpage), Licensing, U.S. Department of Transportation, https://www.transportation.gov/policy/aviation-policy/licensing/public-charters.

Public Charter Operations 1976 to Present

Years	Operators	Carriers	Flights	Passengers (in Millions)	Data Source
1976–1998	300	100	N/A	4.5	1991 NPRM
2010	81	57	2,030	1.4[15]	2010 Charter Report
2022	62	73	41,841	5[16]	2022 Charter Report

These data present more questions than answers. Were the FAA to issue a regulation on public air charters, the FAA should answer the following questions in its background and/or regulatory analysis:

1. Why is the public charter industry half the size in 2010 that it was between 1976 and 1998?
2. What caused this decline in public charter services between 1998 and 2010?
3. What is the full timeline of public charter flight operations between 1991 and the present?
4. Did the decline in public charter services have anything to do with post-9/11 security regulations and/or the 2008 financial crisis?
5. Did the decline in public charter flights have anything to do with FAA safety rulemakings like the Commuter Operations Rule?
6. Did the 1976 to 1998 public charter industry include regularly scheduled public charter service sold by the seat to customers? If so, what was the relative size of that market?
7. If that industry went away because it was no longer commercially viable, why does the reinvigoration of the public air charter industry constitute a need for regulation?

Additionally, were the FAA to publish the intended NPRM, the FAA should republish in the docket the full regulatory evaluation taken for the 1991 NPRM and the 1998 final rule.

[15] There were 1.7 million seats flown in 2010 based on the 2010 public charter reports. The average load factor for airlines was 81.9% in 2010 as reported in U.S. Bureau of Transportation Statistics, Load Factor for U.S. Air Carrier Domestic and International, Scheduled Passenger Flights [LOADFACTOR], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/LOADFACTOR, September 24, 2023. To calculate the number of passengers flown we multiply 1.7 million seats by the load factor of 81.9% yielding 1.4 million passengers, rounded.

[16] There were 6.1 million seats flown in 2022 based on the 2022 public charter reports. The average load factor for airlines was 82.7% in 2022 as reported in U.S. Bureau of Transportation Statistics, Load Factor for U.S. Air Carrier Domestic and International, Scheduled Passenger Flights [LOADFACTOR], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/LOADFACTOR, September 24, 2023. To calculate the number of passengers flown we multiply 6.1 million seats by the load factor of 82.7% yielding 5 million passengers, rounded.

6 Would regulatory action be authorized by statutes?

In Section 3, we noted that the FAA did not elect to pursue a regulation on public charters but did not state why. One potential reason is that the FAA may not have had the authority to do so. 49 USC 41104 seems to limit FAA's authority to issue regulations on public air charters. It states: "The Secretary of Transportation may prescribe a regulation or issue an order restricting the marketability, flexibility, accessibility, or variety of charter air transportation provided under a certificate issued under section 41102 of this title only to the extent required by the public interest. A regulation prescribed or order issued under this subsection may not be more restrictive than a regulation related to charter air transportation that was in effect on October 1, 1978."

If safety regulation is a regulation under this subsection that limits the "marketability, flexibility, accessibility or variety of charter air transportation" in a manner that is more restrictive than regulation on charter transportation in October 1, 1978, then the FAA would have been prohibited from issuing such a regulation. Because the Commuter Operations rules increased the standards on all aircraft operating with between 9 and 30 passengers, and because this would change the "variety" of transportation on offer, the statutory law would imply the then new Commuter Operations rule would be more restrictive for public charters than the standards in 1978. The rule might not have been valid on public charters because the FAA did not have the authority to increase regulatory burdens on public charters.

Similarly, were the FAA to delink Part 380 from the definitions in Part 110, the FAA would be increasing the regulatory burdens on public air charters. If the Commuter Operations rule could not be extended to public charters, then the FAA would not have the authority to issue new regulations on public charters. We suggest that if the FAA were to undertake a rule delinking Part 380 from Part 110, they should explain how 49 USC 41104 is not applicable to that rule.

Additionally, it is worth highlighting other language existing in this part that bears on public comments filed by proponents of delinking Part 380 from Part 110 in the SkyWest Charter application docket. Numerous opponents of SkyWest Charter's application stated that public charter operators could not offer regularly scheduled service for which tickets are booked by the public on set and advertised schedules because the definition of "scheduled operation" does not include public charter operations.

However, Congress does recognize that public charter operators may offer regularly scheduled service in such a manner. In 49 USC 41104(1) they state, "regularly scheduled charter air transportation, for which the public is provided in advance a schedule containing the departure location, departure time, and arrival location of the flight…" Regularly scheduled charter air transportation is defined in 49 USC 41104(b)(2) as follows: "the term 'regularly scheduled charter air transportation' does not include operations for which the departure time, departure location, and arrival location are specifically negotiated with the customer or the customer's representative." The excluded type of charter in that definition seems to coincide with how opponents of SkyWest charter application seem to believe public charters should be operating,

but there are congressional definitions of regularly scheduled public charter transportation as separate from both traditional charter transportation and traditional common carriage passenger-carrying operation for compensation by a traditional air carrier under Part 121.

Were the FAA to publish a rule delinking Part 380 from the definitions in Part 110, the FAA should explain why the FAA has the authority to treat these operations as identical to traditional noncharter air carriers if Congress has treated regularly scheduled public charters as a separate category since at least the 1970s.

7 Public charter operators likely to be affected by the intended rule

Below we describe each of the public charter carriers that would be affected by the intended rule. Because the intended rule appears to target the operators that are most similar to traditional airlines, we only report the operators that had at least 50 flights in 2022 indicating at least weekly scheduled service. From a high level, current public charters can be organized into three groups:

1. Commuter public charters focusing on small communities and/or Essential Air Service (EAS) routes; examples include: Advanced Air, Contour Airlines, the proposed SkyWest Charter, and Southern Airways under Mokulele Airlines.
2. Public charters on premium routes offering business class amenities and premium service; examples include Aero, Blade, JSX, and Wildcat Touring.
3. Public charters providing service to luxury travel destinations; examples include Caesars Entertainment and the Lajitas route of JSX organized by Resort Air Services.

To identify the relevant carriers, we reviewed the 2022 Charter Report Prospectuses accepted in calendar year 2022 published by the FAA.[17] We reproduce the flight totals, aircraft, and seat count for any public charter operator that listed a jet aircraft with fewer than 31 seats. This way we also can exclude the operators whose business model would be most similar to that of private charters.

When the operator listed additional public charter flights that were not on jet aircraft with fewer than 31 seats, we only included flight totals and aircraft descriptions for aircraft that would be affected. In a few instances, aircraft listed would include both affected jet aircraft and not-affected turboprop aircraft seating fewer than 9 passengers. In those instances, we report the total flights.

We report estimated maximum passenger amounts by multiplying the number of seats by the number of flights. Where there are multiple aircraft with different seat counts, we take an average of the seats across the aircraft and multiply the average times the number of flights.

[17] "Charter Report – 2022 Prospectuses" (table), https://www.transportation.gov/sites/dot.gov/files/2023-05/Charters%202022%20%285-19-23%29.pdf

We add additional descriptions for each of the air carriers by reviewing their websites and their associated Wikipedia pages. We reproduce route maps from their websites where possible and produce route maps where none are listed. All route maps were created with Flight Map from Travel-Dealz.[18]

[18] "Create & Download Your Individual Flight Map," Flightmap, Travel-Dealz (website), https://travel-dealz.com/tools/flightmap/#routes=LHR-NYC-MIA%0AAMS-NYC&labels=iatacode&projection=mercator&zoom=0&rotate=&width=1200&height=600&copyright=true&--flightmap-background-color=%23e6e6e6&--flightmap-color-countries=%23ffffff&--flightmap-color-countries-borders=%23e6e6e6&--flightmap-width-countries-borders=0.5&--flightmap-color-airport=%233d689c&--flightmap-width-airport=4&--flightmap-color-label=%23292929&--flightmap-size-label=3.5&--flightmap-opacity-label=1&--flightmap-color-route=%23292929&--flightmap-width-route=0.5&--flightmap-opacity-route=1

7.1 Advanced Air

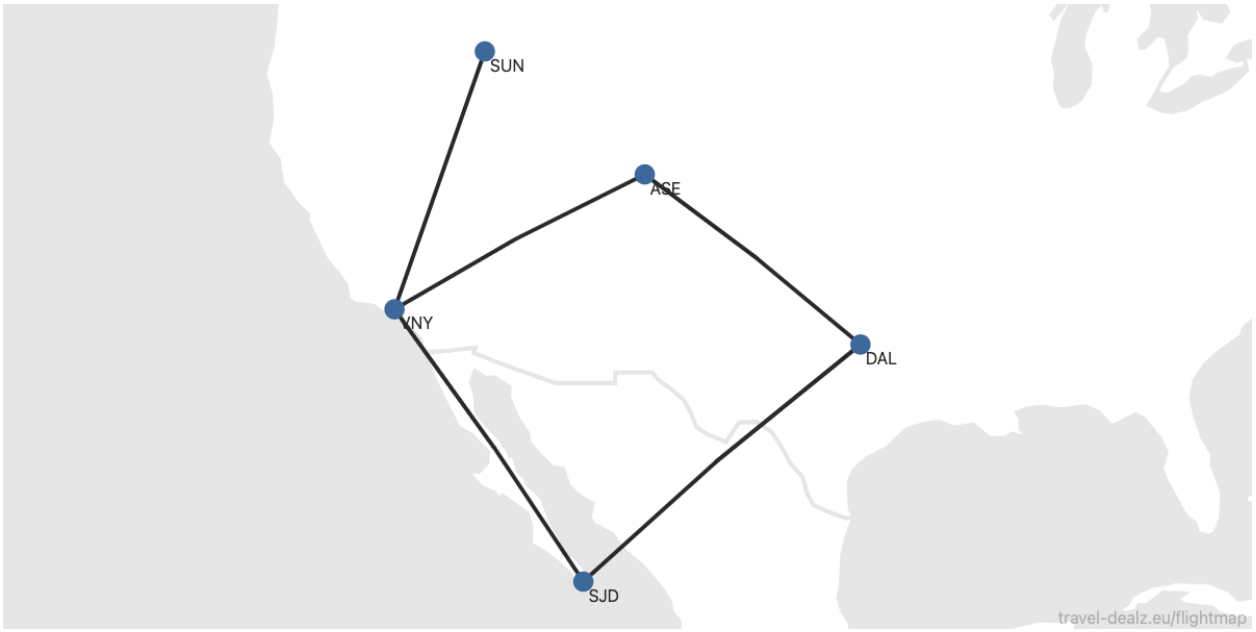
a. Description: Advanced Air is a commuter air carrier and essential air service operator. It operates its flights as public charters and is based at Hawthorne airport in California.
b. Aircraft: Dornier 328 Jet with 30 seats (affected by intended rule) or King Air 350 with 9 seats (not affected by intended rule)
c. Number of flights in 2022: 896 flights, and 376 flights with a cancelled program
d. Maximum passenger count: 18,252 + 7,332 on the program that was canceled
e. Destinations: Advanced Air currently serves 10 airports with nine routes and has two more routes and one more airport coming soon. Of these 10 airports, three are EAS Communities.
f. Essential Air Service: Advanced Air flies to the following three EAS communities: Carlsbad, NM (CNM); Merced, CA (MCE); and Silver City/Hurley/Deming, NM (SVC).
g. Airports where the public charter is the sole operator: Advanced Air is the sole operator at seven airports. They are Carlsbad, CA (CNM); Mammoth Lakes, CA (MMH); Merced, CA (MCE); Hawthorne, CA; Gallup, NM (GUP); Silver City/Hurley/Deming, NM (SVC); and Las Cruces, NM (LRU).

Advanced Airlines Routemap[19]

[19] "Route Map," Advanced Airlines (website), https://advancedairlines.com/route-map/.

7.2 Aero

a. Description: "Aero is a jet service offering direct, premium flights to coveted destinations across North America. Our flights are booked by-the-seat and operated from private terminals. We specialize in routes between Los Angeles, Aspen, Dallas, + Cabo."[20]
b. Aircraft: Embraer ERJ-135LR with 16 seats and Embraer ERJ-135BJ with 13 seats
c. Number of flights in 2022: 1,405
d. Maximum passenger count: 20,373
e. Destinations: Aero operates out of the private terminals at five airports: Dallas Love Field (DAL), Aspen (ASE), Los Cabos (SJD), Sun Valley (SUN), and Van Nuys Airport of Los Angeles (VNY). No route map was available on the website, so we created one.
f. Essential Air Service: This public charter operator does not fly any EAS routes.
g. Airports where the public charter is the sole operator: There are no airports where the public charter is the sole operator.



7.3 BLADE

a. Description: "BLADE is a technology-powered, global urban air mobility platform committed to reducing travel friction by enabling cost-effective air transportation alternatives to some of the most congested ground routes in the U.S. and abroad. No company flies more people in and out of city centers than BLADE. With BLADE, you can book by-the-seat on scheduled flights between Manhattan and JFK or Newark airports, between Vancouver and Victoria in Canada and between Nice and Monaco in Europe. Alternatively, you can charter or crowdsource a flight anywhere in the world. From the moment you book, you'll experience a level of precision, culture of accommodation and

[20] "What is Aero?" Aero (website), https://help.aero.com/hc/en-us/articles/14191047245204-What-is-Aero-.

on-the-ground experience that is unmatched. Whether you're traveling by helicopter, seaplane or jet, BLADE is the most time-efficient, cost-effective and inspiring way to mitigate urban travel pain points that have increasingly become a significant part of our daily lives."[21]

b. Aircraft: Cirrus Vision Jet with 4 seats, Challenger 850 with 12 or 16 seats engaged.[22]
c. Number of flights in 2022: 54 in the Vision Jet and 832 in the Challenger Jet
d. Maximum Passenger Count: 11,864
e. Destinations: BLADE does not currently offer any affected regularly scheduled flights where individual seats could be booked. Nonetheless, based on BLADE's business model, it is very likely some of their activities would be affected.
f. Essential Air Service: This public charter operator does not fly any EAS routes.
g. Airports where the public charter is the sole operator: Because we could not identify any affected regularly scheduled flights, we did not identify any airports where BLADE is the sole operator. However, they do operate numerous public charter routes from central cities with helicopters and plan to operate with eVTOL craft that are unlikely to be served by any other operator.

7.4 Caesars Enterprise Services, LLC

a. Description: Caesars Entertainment is a casino gaming company. They run public charter aircraft to fly individuals between home airports and their casinos. The majority of their flights are Part 121 public charter flights, but a minority are on public charter regional aircraft that have the ability to operate under Part 135.
b. Aircraft: Dornier 328 with 30 seats or Embraer 135LR with 30 seats
c. Number of flights in 2022: 206
d. Maximum passenger count: 780
e. Destinations: No route map could be found. Further, no listing of the routes on which Caesars flies its 30 seat regional Dornier 328 or Embraer 135LR could be found. However, their casinos are relatively concentrated, and they do list upcoming flights. Those flights go to Biloxi, MS; Bullhead City, AZ; Reno, NV; and Atlantic City, NJ.
f. Essential Air Service: This public charter operator does not fly any EAS routes.
g. Airports where the public charter is the sole operator: Caesars airline is the sole operator to Bullhead City, AZ (IFP).

[21] "BLADE Urban Air Mobility," BLADE (website), https://www.blade.com/p/about.

[22] We are not sure if BLADE's rotorcraft would be impacted, so we did not include these aircraft in our research on passenger counts or safety.

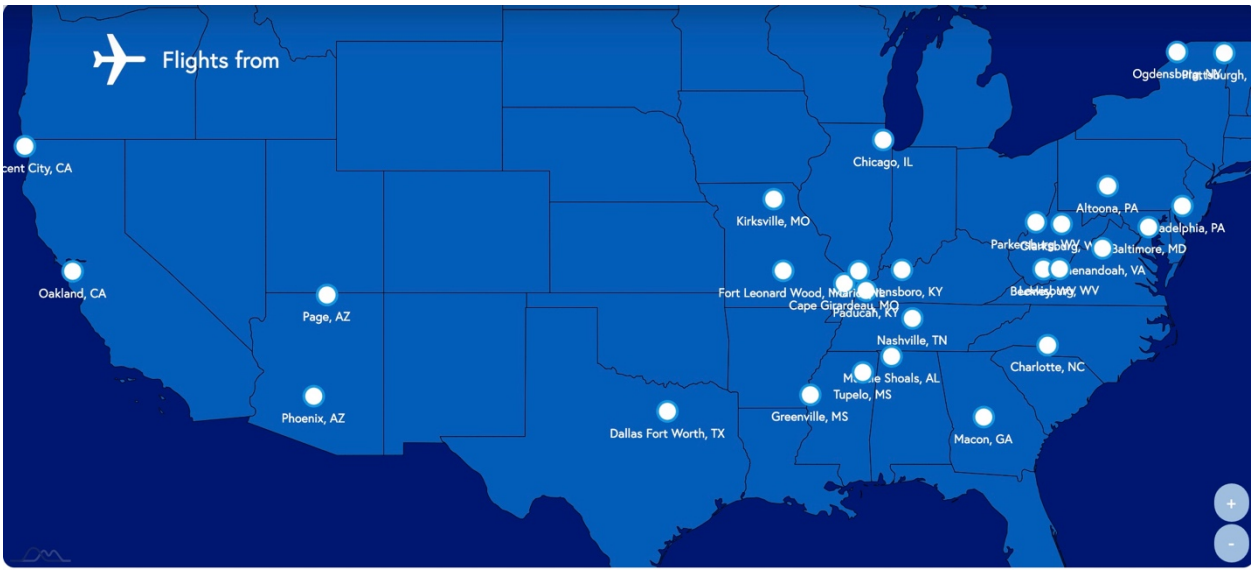
7.5 Contour

a. Description: "Contour Airlines is the regional airline brand of Contour Aviation, based in Smyrna, TN. Contour Aviation was founded in 1982 as Corporate Flight Management, a private jet charter company. The company's services grew to include aircraft sales and management, aircraft maintenance, and FBO services. Today, Contour Aviation is among the 10 largest Part 135 charter operators in the United States, and the largest in the Southeast. The company operates a diverse fleet of aircraft for private charter, ranging in size from 8 passenger light jets to three cabin ultra long-range business jets. Contour is rated Platinum by ARG/US, the highest possible safety rating for private jet operators in the industry. Contour's private jet and commercial operations are supported by a world-class operations team based at its headquarters. Contour is also a U.S. Department of Defense contractor and supplier of aviation-related government services around the world."[23]

   Contour airlines also has an interline agreement with its public charter operations and American Airlines. This interline agreement allows passengers to access destinations beyond the Contour-operated route map, the same baggage allowance across an entire trip, and flight protection against delays and cancellations during the entire trip.

b. Aircraft: Embraer 135, Embraer 140, and Embraer 145 with 30 seats each
c. Number of Flights: 20,176
d. Maximum Passenger Count: 605,280
e. Destinations: Contour airlines operates from 25 airports, many of which connect to American airlines hubs at Chicago, Charlotte, Dallas, Philadelphia, and Phoenix. Out of the 25 airports, 19 are designated as Essential Air Service Communities.
f. Essential Air Service: Contour flies to the following 19 EAS communities: Muscle Shoals, AL (MSL); Page, AZ (PGA); Crescent City, CA (CEC); Macon, GA (MCN); Marion/Herrin, IL (MWA); Owensboro, KY (OWB); Paducah, KY (PAH); Greenville, MS (GLH); Tupelo, MS (TUP); Fort Leonard Wood, MO (TBN); Cape Girardeau/Sikeston, MO (CGI); Kirksville, MO (IRK); Ogdensburg, NY (OGS); Plattsburgh, NY (PBG); Altoona, PA (AOO); Beckley, WV (BKW); Clarksburg/Fairmont, WV (CKB); Greenbrier/White Sulphur Springs/Lewisburg, WV (LWB); and Parkersburg, WV/Marietta, OH (PKB).
g. Airports where the public charter is the sole operator: There are 12 airports where Contour is the sole operator. They are Muscle Shoals, AL (MSL); Crescent City, CA (CEC); Macon, GA (MCN); Marion/Herrin, IL (MWA); Fort Leonard Wood, MO (TBN); Cape Girardeau/Sikeston, MO (CGI); Kirksville, MO (IRK); Ogdensburg, NY (OGS); Altoona, PA (AOO); Beckley, WV (BKW); Greenbrier/White Sulphur Springs/Lewisburg, WV (LWB); and Parkersburg, WV/Marietta, OH (PKB).

[23] "About Us," Contour Airlines (website), https://www.contourairlines.com/corporate/about-us.

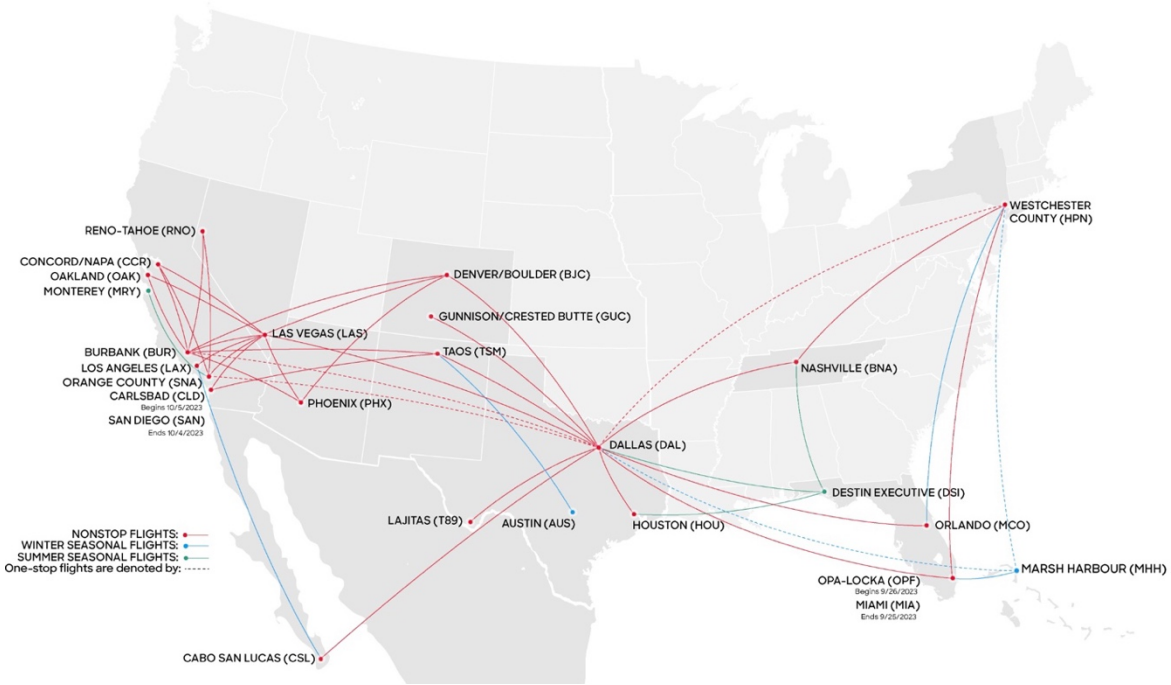

Flights from
Chicago, IL
Kirksville, MO
Altoona, PA
Baltimore, MD
Oakland, CA
Page, AZ
Fort Leonard Wood, MO
Cape Girardeau, MO
Paducah, KY
Nashville, TN
Charlotte, NC
Tupelo, MS
Greenville, MS
Phoenix, AZ
Dallas Fort Worth, TX
Macon, GA

7.6 JSX

a. Description: “JSX is a hop-on jet service that’s faster on the ground and more comfortable in the air. As a unique public charter operator, we offer you the perks of private air travel, booked by-the-seat, at attainable fares. Flying JSX allows you to travel in style between private terminals on roomy 30-seat jets. No lines, no crowds, no hassles. Simply hop on and go! Once onboard, you can enjoy:

- Comfortable roomy seats
- Business class legroom
- Power outlets at every row
- Full flight attendant service
- Complimentary gourmet snacks, beer, wine and spirits
- Free onboard Starlink WiFi, rolling out fleetwide through Spring 2023
- Planeside baggage retrieval gets you out and on your way just minutes after touchdown.”

b. Aircraft: Embraer 135 and 145, 30 seats each
c. Number of flights in 2022: 110,305
d. Maximum Passenger Count: 3,309,150
e. Destinations: JSX operates from the private terminals at 24 airports.
f. Essential Air Service: This public charter operator does not fly any EAS routes.
g. Airports where the public charter is the sole operator: There are five airports where JSX is the only carrier: Concord, CA (CCR); Denver/Boulder, CO (BJC); Lajitas, TX (T89); Miami-Opa Locka, FL (OPF); and Taos, NM (SKX).



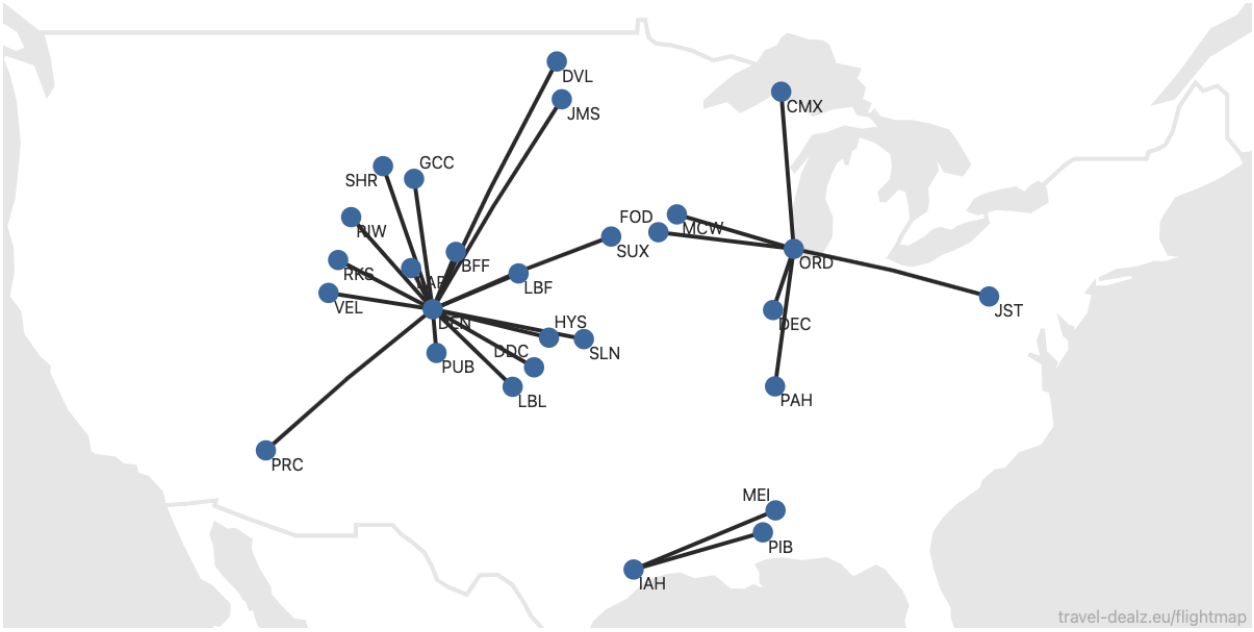
7.7 SkyWest Charter (proposed)

a. Description: "SkyWest Airlines operates through partnerships with United Airlines, Delta Air Lines, American Airlines and Alaska Airlines carrying over 40 million passengers in 2022. Headquartered in St. George, Utah, our fleet of nearly 500 aircraft connects passengers to 252 destinations throughout North America." These operations are Part 121 commuter airline operations.

   SkyWest also proposed to operate public charter flights to EAS communities under SkyWest Charter described in its ETS filing mentioned in the background section.
b. Number of Flights in 2022: N/A; SkyWest Charter proposed 25 markets with two daily round trips per market for 100 daily round trips total or 36,500 annual flights.
c. Maximum Passenger Count: 1,095,000
d. Destinations: SkyWest Charter's application states the following:

   > "The 25 proposed markets for initial service are below. Because of SWC's relationship with SkyWest Inc and its subsidiaries, the Company has unique access to the operational and market history in each of these locations. SWC has used that data to forecast demand in each of the markets, making estimated adjustments for the 30-seat configuration of SWC aircraft, and believes it is well positioned to operate profitably and reliably in these markets.
   >
   > City Pair: BFF-DEN, CMX-ORD, DEN-DDC, DEN-DVL, DEN-GCC, DEN-HYS, DEN-JMS, DEN-LAR, DEN-LBF, DEN-LBL, DEN-PRC, DEN-PUB, DEN-RIW, DEN-RKS, DEN-SHR, DEN-SLN, DEN-SUX, DEN-VEL, FOD-ORD, IAH-MEI, IAH-PIB, JST-ORD, MCW-ORD, ORD-DEC, and ORD-PAH.
   >
   > The list of proposed markets is not to the exclusion of others, and SWC will continue looking for opportunities to serve smaller communities. While SWC plans to provide EAS service, it also evaluating options for other arrangements with local communities and airports in the event it is not selected for EAS in certain markets."[24]
e. Essential Air Service: SkyWest Charter proposes to serve the following 21 EAS communities: Prescott, AZ (PRC); Pueblo, CO (PUB); Fort Dodge, IA; Mason City, IA (FOD); Sioux City, IA (SUX); Decatur, IL (DEC); Dodge City, KS (DDC); Hays, KS (HYS); Liberal, KS/Guymon, OK (LBL); Salina, KS (SLN); Paducah, KY (PAH); Hancock/Houghton, MI (CMX); Laurel/Hattiesburg, MS (PIB); Meridian, MS (MEI); North Platte, NE (LBF); Scottsbluff, NE (BFF); Devil's Lake, ND (DVL); Jamestown, ND (JMS); Johnstown, PA (JST); Vernal, UT (VEL); and Laramie, WY (LAR).
f. Airports where the public charter is the sole operator: Because the prior EAS contracts are still active and SkyWest Charter has not begun to operate these flights, it is premature to estimate which airports would be solely served by these flights.

[24] Exhibit SWC-500 of DOT-OST-2022-0071-0001. Attachment 3 accessed September 2023: https://www.regulations.gov/document/DOT-OST-2022-0071-0001



7.8 Southern Airways Express

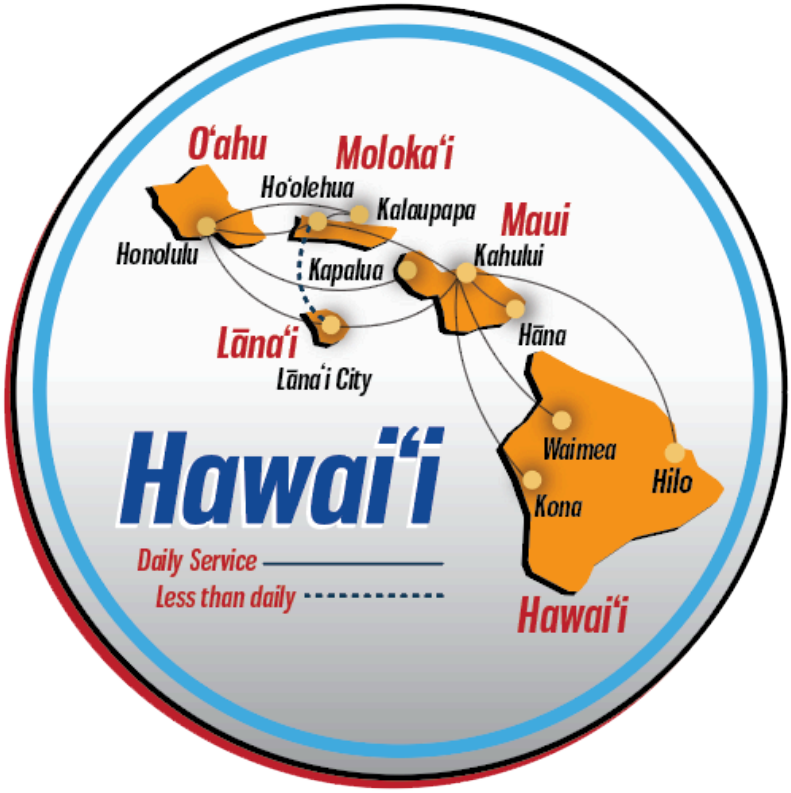
a. Description: "Southern Airways Corporation operates one of the largest commuter airlines in the country, safely carrying hundreds of thousands of passengers per year. Southern Airways, along with its Hawaiian brand, Mokulele Airlines, fly over 200 daily departures stretching from Nantucket to Honolulu. Despite being the fastest growing airline in America, the Southern staff remains ever-mindful of those first days of the airline—we know we must take care of Every Passenger, Every Day, on Every Flight."[25]

   The majority of Southern Airways Operation is on turboprop planes with fewer than 10 seats. However, via its Hawaiian brand, Mokulele Airlines, Southern Airways Express flies two routes with 30-seater passenger jets that would be affected by this intended rule.

b. Aircraft: SAAB 340 with 30 seats, or Cessna Caravan with 9 seats
c. Number of Flights in 2022: Two flights per day to Lana'i and Moloka'i from Honolulu.[26] We estimate this volume as 1,460 per year.[27]
d. Maximum Passenger Count: 43,800 passengers
e. Destinations: With the Saab 340, Mokulele flies between Honolulu and Moloka'i and Honolulu and Lana'i. We reproduce Mokulele's full Hawaiian route map below.
f. Essential Air Service: Southern Airways Express serves the following EAS communities with its affected aircraft: Moloka'i, HI (MKK) and Lana'i, HI (LNY). Both are EAS routes.

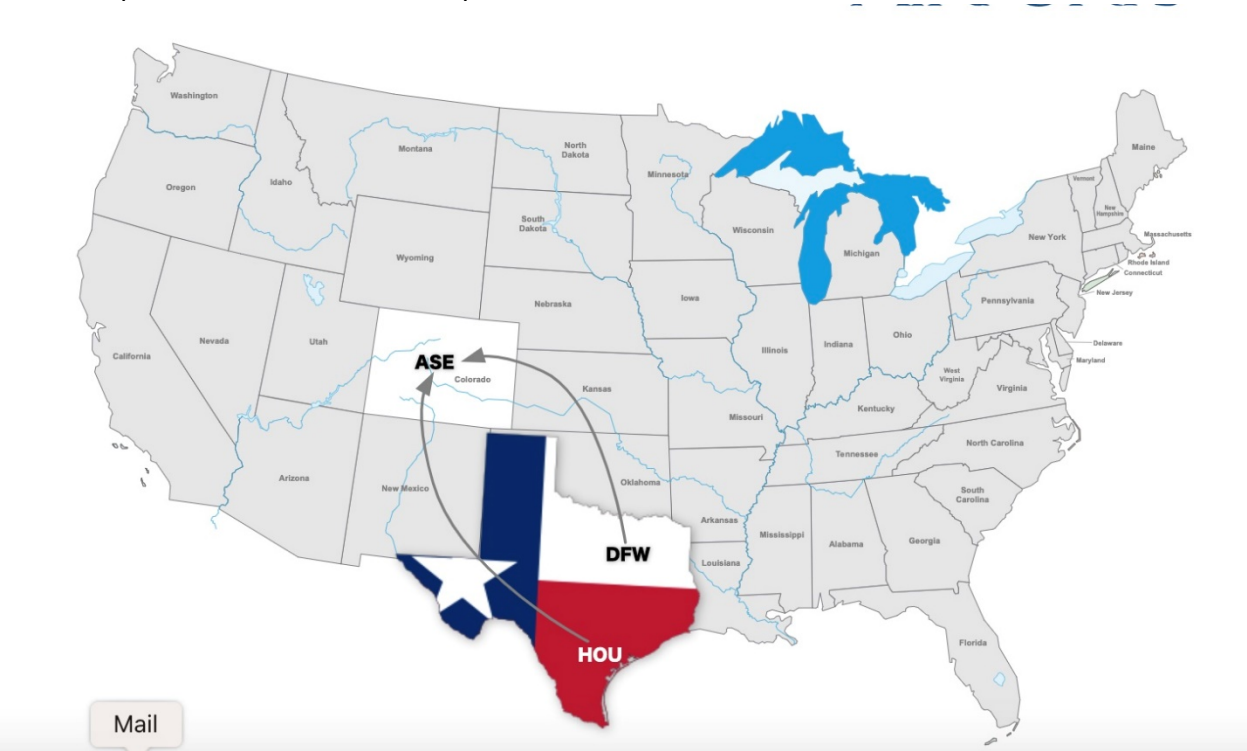
[25] "Your Hometown Airline to the World," Southern Airways Express (website), https://iflysouthern.com/about/.
[26] Nate V., "The Saab Has Arrived!" Mokulele Airlines (website), https://mokuleleairlines.com/the-saab-has-arrived/.
[27] 365 days x 2 flights per day x 2 airports = 1460 flights

g. Airports where the public charter is the sole operator: Southern Airways Express is the sole operator at both Moloka'i, HI (MKK) and Lana'i, HI (LNY).



7.9 Wildcat Touring

a. Description: Wildcat Touring is a luxury travel operator providing domestic first class service between Dallas and Houston and Aspen. They fly out of private terminals and advertise service similar to Aero and JSX.
b. Aircraft: Saab 2000, 30 seats
c. Number of flights in 2022: 80
d. Maximum Passenger Count: 2,400
e. Destinations: Wildcat Touring connects Dallas and Houston to Aspen.
f. Essential Air Service: This public charter operator does not fly any EAS routes.
g. Airports where the public charter is the sole operator: There are no airports where this public charter is the sole operator.



8 Safety of Part 135 Public Charter Operators

Congress has instructed the FAA to assign the highest priority to safety in air commerce, to evaluate the safety implications of new air transportation services, and to prevent the deterioration in established safety procedures in 49 USC 40101(a)(1)(2) and (3). To that end, the FAA has undertaken numerous regulations to encourage and require safe air transportation. In large part because of the FAA's action, today commercial air transportation is by far the safest form of transportation by any metric.

It is entirely understandable that the FAA review the safety practices of public charter operators and ensure that they conform to the levels of safety established elsewhere in the air-

transportation industry. However, as we show, there is no evidence of any safety issues present among these public charter operators.

Because public charter operators are flying a limited set of aircraft types, we were able to search accident databases for the specific aircraft types. Specifically, we searched the FAA's Accident and Incident Data System (AIDS), the Aviation Safety Information Analysis and Sharing (ASIAS) database, and the NTSB's Case Analysis and Reporting Online (CAROL) database for any aircraft types flown by public charter operators. For the NTSB's CAROL database, we first limited our search to Part 135 operators, and then we looked only at the aircraft reported by public charter airlines.

Below we list each of the aircraft used by a public charter operator that would be impacted by the intended rulemaking and the results of our search for each of these aircraft in the relevant safety databases. None of the relevant aircraft where found in the preliminary reports listed in the ASIAS database.

8.1 Dornier 328

a. Public charter operators with this aircraft: Advanced Air and Caesars Entertainment
b. Results from AIDS: There are 84 incidents between 1994 and 2011. None involve either Advanced Air or Caesars Entertainment, so we conclude there have been no incidents reported with this aircraft.
c. Results from CAROL: There were seven incidents listing "Embraer" as an aircraft make between 1987 and 1993. None indicate 328 as a model, so we conclude there have been no incidents reported with this aircraft.

8.2 Embraer 135

a. Public charter operators with this aircraft: Aero, Caesars Entertainment, Contour, and JSX.
b. Results from AIDS: There are 67 incidents from 1999 to 2022. There was one incident reported with an Aero flight. The incident reads as follows: "THE AIRCRAFT LANDED ON RUNWAY 15 AT ASPEN/PITKIN COUNTY AIRPORT (ASE). AFTER LANDING THE PILOT DEPLOYED THE THRUST REVERSER. THE PILOT APPLIED THE AIRCRAFT BRAKES WITH NO RESPONSE. THE NUMBER 4 MAIN TIRE ON THE RIGHT LANDING GEAR LOCKED UP CAUSING THE AIRPLANE TO VEER TO THE LEFT AND EXIT THE RUNWAY. THERE WAS NO DAMAGE TO THE AIRCRAFT OTHER THAN A FLAT SPOT ON THE NUMBER 4 MAIN TIRE."[28] The pilot's total flight time was not listed. This appears to be a minor mechanical failure and not a function of pilot error. As a result, it is unlikely that this incident would be prevented by applying Part 121 standards to this operator.

[28] Federal Aviation Administration, "FAA Accident and Incident Data System (AIDS) Brief Report(s)," https://www.asias.faa.gov/apex/f?p=100:18:::NO::AP_BRIEF_RPT_VAR:20220224000959I.

c. Results from CAROL: There were 43 incidents listing "Embraer" as an aircraft make between 1982 and 2018. None indicate 135 as a model, so we conclude there have been no incidents reported with this aircraft.

8.3 Cirrus Vision Jet (SF50)

a. Public charter operators with this aircraft: BLADE
b. Results from AIDS: When we specified the aircraft make as "Cirrus," the models Vision Jet or SF50 were not listed, so we conclude there have been no incidents reported with this aircraft.
c. Results from CAROL: There were four incidents listing "Cirrus" as an aircraft make between 2007 and 2017. None indicate Vision Jet or SF50 as a model, so we conclude there have been no incidents reported with this aircraft.

8.4 Bombardier Challenger 850

a. Public charter operators with this aircraft: BLADE
b. Results from AIDS: When specifying the aircraft make as "Bombardier," Challenger 850 was not listed as a model option, so we conclude there have been no incidents reported with this aircraft.
c. Results from CAROL: There were nine incidents with a Bombardier make with dates ranging between 2005 and 2022. None were for Bombardier Challenger 850s, and none were operated by one of the public charter operators above, so we conclude there have been no incidents reported with this aircraft.

8.5 Embraer 140

a. Public charter operators with this aircraft: Contour Airlines
b. Results from AIDS: When specifying the aircraft make as "Embraer," 140 was not listed as a model option, so we conclude there have been no incidents reported with this aircraft.
c. Results from CAROL: There were 43 incidents listing "Embraer" as an aircraft make between 1982 and 2018. None indicate 140 as a model, so we conclude there have been no incidents reported with this aircraft.

8.6 Embraer 145

a. Public charter operators with this aircraft: Contour Airlines and JSX
b. Results from AIDS: There are 295 incidents listing "Embraer 145" as the aircraft between 1997 and 2022. We reviewed all incidents. We found one incident that may be from a public charter operator possibly affected by this intended rule. IBC Airways has operated public charters out of the Miami area and into the Caribbean to destinations such as Haiti and Grenada. They are primarily an air cargo operator to the Caribbean.[29] The reason this

[29] IBC Airways, "About IBC Airways," https://ibcairways.com/index.php/about-ibc-airways/.

may be a public charter that might be affected by the intended rule is that the report on the incident lists 32 people under persons aboard, possibly indicating 30 passengers and two pilots.

The incident report reads, "AN EMB-145 AIRCRAFT, N261BC, OPERATED BY IBC AIRWAYS (OZCA) DEPARTED AMES MUNICIPAL AIRPORT (AMW) AT 16:50 ON 10/18/2019. THE HYDRAULIC SYSTEM 1 QUANTITY DROPPED TO 0 AND HYDRAULIC SYSTEM 1 FAILED AFTER TAKEOFF. THE FLIGHT WAS DIVERTED TO DES MOINES INTERNATIONAL AIRPORT (DSM), LANDED WITHOUT INCIDENT AND TOWED TO PARKING. MAINTENANCE PERSONNEL REPLACED THE LH ENGINE HYDRAULIC PUMP, SERVICED THE SYSTEM AND OPS CHECK SATISFACTORY. THE AIRCRAFT WAS RETURNED TO SERVICE ON 10/19/2019."[30]

As can be seen from the description, the incident was a result of a mechanical issue and not due to pilot actions. Additionally, we could not find any record of IBC Airways flying a public charter near Ames, IA as reported in the 2018, 2019, or 2020 DOT Public Charter reports. Since the intent of the rule is focused on public charter flights, this incident likely would not have been prevented by the intended rule, because it was a mechanical issue on a likely private charter flight.

c. Results from CAROL: There were 43 incidents listing "Embraer" as an aircraft make between 1982 and 2018. Two indicate 145 as a model, so we reviewed both incidents. Neither incident indicates a public charter operator was involved, so we conclude there have been no incidents reported with this aircraft.

8.7 CRJ-200

a. Public charter operators with this aircraft: SkyWest proposes to operate its public charter routes with this aircraft
b. Results from AIDS: When specifying the aircraft make as "Bombardier," CRJ-200 was not listed as a model option, so we conclude there have been no incidents reported with this aircraft.
c. Results from CAROL: There were nine incidents with a Bombardier make between 2005 and 2022. None included a CRJ-200 model, and none were operated by one of the public charter operators above, so we conclude there have been no incidents reported with this aircraft.

8.8 Saab 340

a. Public charter operators with this aircraft: Southern Airways Express
b. Results from AIDS: There are 446 incidents listing "Saab 340" as the aircraft between 1984 and 2021. We reviewed all incidents. There are 110 incidents from an "air taxi

[30] Federal Aviation Administration, "About ASIAS," https://www.asias.faa.gov/apex/f?p=100:18:::NO::AP_BRIEF_RPT_VAR:20191018020209I.

commuter" before the Commuter Operations Rule was published. Only one incident with a SAAB 340 on an air taxi commuter occurred after 1999, and it did not take place on a public charter flight. There were no incidents concerning any of the public charter operators.

c. Results from CAROL: There were seven incidents listing SAAB as an aircraft make between 1985 and 1994. All seven involved a 340 model, so we reviewed each of these incidents. All seven incidents occurred on aircraft operated as Part 135 commuter airlines prior to the 1995 Commuter Operations rules, so we conclude there have been no incidents reported with this aircraft operated by public charters today. Further, in all seven incidents all pilots had more than 1,500 hours of total flight time.

8.9 Saab 2000

a. Public charter operators with this aircraft: Wildcat Touring
b. Results from AIDS: When specifying the aircraft make as "SAAB," 2000 was not listed as a model option, so we conclude there have been no incidents reported with this aircraft.
c. Results from CAROL: There were seven incidents listing SAAB as an aircraft make between 1985 and 1994. All seven involved a 340 model, so we conclude there have been no incidents reported with a Saab 2000 aircraft.

8.10 Summary of accidents and incidents from public charter carriers

As can be seen from the review of accidents and incidents above, there has been only one incident recorded featuring a known public charter operator. Notably, this incident was a very minor mechanical issue resulting in no injuries and minor damage to the tire. It was also not a result of pilot error or training. This review suggests that public charter operators have been able to deliver an exceptional safety performance despite operating under the Part 135 standards.

Because we could not find any data indicating unsafe operations among Part 135 public charter operators, we are left asking a number of questions about the FAA suggestion that public charter operators are less safe. Were the FAA to issue an NPRM delinking Part 380 economic regulations from Part 110 definitions for the purposes of increasing safety, we make the following recommendations for what the FAA should do in its NPRM and regulatory analysis:

1. The FAA should only include data following the implementation of the commercial air regulations.
2. The FAA should only include Part 135 incidents on public charter carriers.
3. All data on incidents should be normalized and corrected on the basis of frequency of operations.
4. If the FAA makes the claim that public charter operators are less safe than Part 121 operators, the FAA should explain with data how public charter operators are less safe than Part 121 airlines.

5. If the FAA makes the claim that public charter operators are less safe than Part 121 operators, the FAA should compare the incident rate between nonpublic charter and public charter operators. If Part 135 nonpublic charter operators are less safe than Part 121 operators and Part 135 public charter operators, the FAA should explain why it is regulating Part 135 public charter operators exclusively.
6. The FAA should undertake a risk trade-off comparing the relative risks of driving and flying. If the net risk is increased for passengers while driving, the FAA should explain how this meets its statutory requirements to promote safe travel as its highest priority.

9 Colgan Air Crash and the 1,500-Hour rule

On February 12, 2009, Colgan Air, Inc. flight 3407 stalled and crashed into a house in Clarence Center, New York, killing all 49 passengers and crew as well as one person inside the house. In 2010, in response to the crash, Congress passed Public Law 111-2—"Airline Safety and Federal Aviation Administration Extension Act of 2010"—which included a number of requirements intended to make air travel safer.

Indeed, some of its provisions, such as mandatory periods of rest, are likely to increase safety. However, the Congress instructed the FAA to issue a rule requiring all Part 121 operators ensure that their crews each have an airline transport pilot (ATP) certificate. Further, Congress mandated that the ATP certificate require at least 1,500 hours of flight time despite the fact that both pilots in the Colgan Air crash had more than 1,500 hours of total flight time.

Unfortunately, there does not appear to be any evidence that the 1,500-hour rule increases safety or is cost effective. In its own rule implementing the 1,500-hour requirement the FAA stated, "We estimate the costs of the ATP certificate requirement to be $6.4 billion ($2.2 billion in present value), almost all of which stems from the 1,500-hour requirement. The FAA was unable to find a quantifiable relationship between the 1,500-hour requirement and airplane accidents and hence no benefit from the requirement. For most accidents reviewed by the FAA, both pilots had more than 1,500 hours of flight time and for those SICs that did not, there were other causal factors identified by the NTSB."[31] Similarly, the NTSB reported to Congress that "We've investigated accidents where we've seen very high-time pilots, and we've also investigated accidents where we've seen low-time pilots. We don't have any recommendations about the appropriate number of hours…."[32]

In fact, the 1,500-hour requirements may actually decrease safety directly. The Pilot Source Studies (PSS) are independent, academic studies of a pilot's training and qualification background relative to success in initial airline training. The first 2010 study was used to develop

[31] Federal Aviation Administration. 2012. "Final Regulatory Evaluation Pilot Certification and Qualification Requirements for Air Carrier Operations." https://www.regulations.gov/document/FAA-2010-0100-1925, p. 3-4.

[32] Aviation Safety: One Year After the Crash of Flight 3407, Second Session, Before the Subcommittee on Aviation Operations, Safety, and Security, 111th cong. (February 25, 2010) https://www.govinfo.gov/content/pkg/CHRG-111shrg56412/html/CHRG-111shrg56412.htm.

the 1,500-hour rule, and later studies examined the effects of the rule. Pilots with more hours of flight time after the 1,500-hour rule performed worse than those before the rule because the greater flight time not in service of commercial operations led to a gradual deterioration in knowledge.[33]

Additionally, Congress had the ability to apply the minimum flight-time requirements to credentials for both Part 135 and Part 121 pilots but chose to only increase the flight-time requirements for Part 121 pilots. Congress left the ability for Part 135 public charter operators to fly planes without the 1,500-hour flight-time requirements.

Taken together, while the 1,500 hours of flight time is required for Part 121 pilots, a desire for increasing safety does not justify extending these requirements to others. First, the FAA at the rule's publication, the NTSB, and the PSS all find no relationship between flight time and safety. Second, current public charter operations are operated safely. Third, European and other foreign air carriers operate inside the United States even though their nations' flag requirements do not mandate 1,500 hours of flight time for all pilots. No safety issues have been cited with these foreign operations, and European safety performance rivals that of the United States.

Given these facts, were the FAA to delink Part 380 economic regulations from Part 110 definitions, the FAA should explain the following:

1. If both the NTSB and FAA found no relationship between flight time and safety, why wouldn't the additional flight time requirements for current SIC pilots of Part 135 public charter flights outweigh the safety benefits?
2. If the PSS studies show that the 1,500 hours of flight time actually result in making pilots less safe, why wouldn't the FAA requiring SIC pilots to get an ATP license before flying actually make air transportation less safe?
3. The original rule did not account for the effects on the air transportation market from a shortage of ATP pilots. The FAA should include the cost of smaller air market volumes as a cost of requiring more pilots to get an ATP certification.

10 There is a pilot shortage

During the commenting period and immediately following the 2013 Pilot Certification rule implementing the 1,500-hour requirement, many individuals and organizations were concerned that the requirement would result in a pilot shortage. Others countered that no shortage would result. For example, shortly after the 2013 rule was published NPR summarized, "Cohen [head of the RAA] can't say when the regional airlines might face an acute shortage of pilots, but warns that when they do, flights will be canceled and service to some communities will be cut. But others say Cohen is overstating his case."

[33] Pilot Source Study, "2018 Pilot Source Study," https://www.pilotsourcestudy.org/.

Today, this debate continues. The ALPA proudly stated, about the recent number of original ATP licenses, that "The FAA's numbers make it clear that qualified pilots are in abundant supply; what we have a shortage of is airline CEOs willing to own their business decisions to cut service so they can increase their profits."[34] The RAA in its "Small Community Air Service & the Pilot Shortage" slide deck counters that the ALPA argument about the FAA data lacks context because it does not include the lower number of pilots issued ATP credentials during COVID.[35] Separately, Alaska Airlines,[36] Allegiant,[37] American,[38] Delta,[39] Frontier,[40] Southwest,[41] and United[42] have publicly stated a pilot shortage exists.

Here we intend to start with the question of whether or not a shortage exists. To do so, we begin by reviewing the basic microeconomic definitions and effects of a shortage and comparing these to current conditions. Then, we also review the current growth in the number of ATP pilots to see if this shortage is increasing or slowing over time.

10.1 Economics of a shortage

In economic terms, a shortage is when the quantity demanded is greater than the quantity supplied at a given market price. The RAA and airlines have argued a shortage exists stemming from the 2013 rule requiring 1,500 hours of flight time for ATP pilots. Conceptually, we can think of this as the supply curve moving back and to the left as in the figure below. Notice that the

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[34] Air Line Pilots Association, "2022: A Record Year for Pilot Production in the United States" (blogpost), December 20, 2022, https://www.alpa.org/news-and-events/news-room/2022-12-20-pilot-production-record-year#:~:text=Pilot%20Supply%20Continues%20to%20Outpace%20Demand&text=In%20addition%20to%20the%20impressive,pipeline%20remains%20strong%20and%20robust.

[35] Regional Airline Association, "Small Community Air Service & the Pilot Shortage" (presentation), February 6, 2023 https://www.raa.org/wp-content/uploads/2023/02/1Q23-Small-Community-Air-Service-Deck-Final.pdf, 13.

[36] Kirsten Dobroth, "Alaska Air Carriers Are Feeling the Pinch of Nationwide Pilot Shortage," *KTOO*, June 2, 2022, https://www.ktoo.org/2022/06/02/alaska-air-carriers-are-feeling-the-pinch-of-nationwide-pilot-shortage/.

[37] Jonathan E. Hendry, "Allegiant Air Highlights US Pilot Shortage Amid Hispanic Heritage Month Celebrations," *Simple Flying*, September 20, 2023, https://simpleflying.com/allegiant-air-marks-hispanic-heritage-month/

[38] Alexandra Skores, "American Airlines CEO Says It Can't Deploy 150 Regional Jets Because of Pilot Shortage," *The Dallas Morning News*, June 1, 2023, https://www.dallasnews.com/business/airlines/2023/06/01/american-airlines-ceo-says-it-cant-deploy-150-regional-jets-because-of-pilot-shortage/.

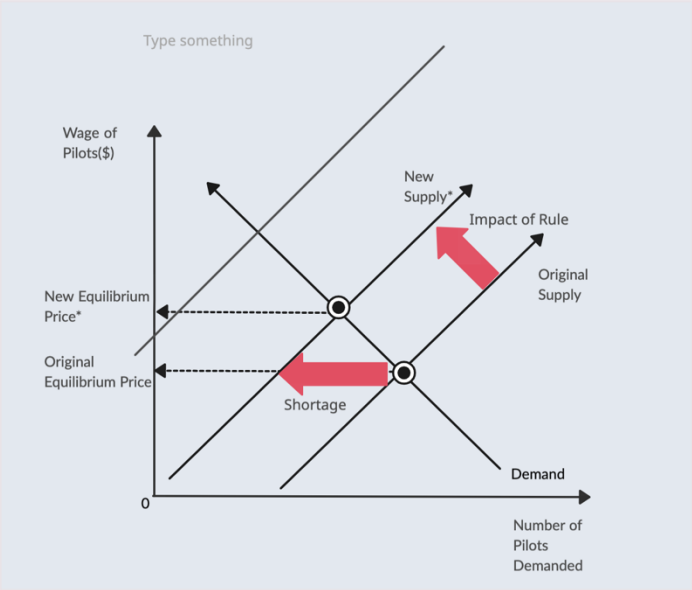
[39] Rich Thomaselli, "Delta CEO Says Pilot Shortage is Coming," *TravelPulse*, October 27, 2021, https://www.travelpulse.com/news/airlines-airports/delta-ceo-says-pilot-shortage-is-coming.

[40] Aviation Week Network, "Pilot Shortage Could Linger If No Remedy Emerges, Frontier CEO Says" (blogpost), May 27, 2022, https://aviationweek.com/air-transport/airlines-lessors/pilot-shortage-could-linger-if-no-remedy-emerges-frontier-ceo-says.

[41] Rajesh Kumar Singh, "Southwest Airlines CEO Sees Industry-wide Pilot Shortage Persisting for Three Years," *Rueters*, June 2, 2022, https://www.reuters.com/article/southwest-ceo/southwest-airlines-ceo-sees-industry-wide-pilot-shortage-persisting-for-three-years-idUSKBN2XN3RK.

[42] Prarthana Prakash, "'The System Simply Can't Handle the Volume': United Airlines CEO Says the Labor Shortage Will Create a Tough Year for Travel in 2023," *Fortune*, January 19, 2023, https://fortune.com/2023/01/19/united-ceo-airlines-2023-pilot-shortage-technology/.

new equilibrium pilot wage is higher than previously and the number of pilots demanded is smaller than previously.



However, markets do not move to a new equilibrium instantaneously. It takes time for prices and quantity demanded to adjust to the new reality. If a shortage exists, two features of the market will be occurring at the same time as the market tries to move to a new equilibrium:

1. There is upward price pressure; in other words, pilot wages should be rising.
2. Fewer pilots are demanded than previously; in other words, previously scheduled flights will be scaled back because there is a shortage of pilots to fly those flights.

10.2 Empirical evidence of a shortage

At present we are seeing both of these features in the market for airline pilots. In the past year, pilots have received historic raises of 20 to 40% at Alaska Airlines,[43] Allegiant,[44] American,[45]

[43] Dominic Gates, "As Major Airlines Hike Pilot Pay, Alaska Airlines Boosts Wages," *The Seattle Times*, August 25, 2023, https://www.seattletimes.com/business/boeing-aerospace/as-major-airlines-hike-pilot-pay-alaska-airlines-boosts-wages/.

[44] Ted Reed, "Pilot Contract Talks Are Tough. Allegiant Pilot Contract Talks Are the Toughest of Them All," *Forbes*, May 18, 2023, https://www.forbes.com/sites/tedreed/2023/05/18/pilot-contract-talks-are-tough-allegiant-pilot-contract-talks-are-the-toughest-of-them-all/?sh=296f52d07a22.

[45] Leslie Josephs, "American Airlines Pilots Approve Sweetened Labor Deal With Big Raises," *CNBC*, August 21, 2023, https://www.cnbc.com/2023/08/21/american-airlines-pilots-approve-labor-deal-with-big-raises.html.

Delta,[46] JetBlue,[47] Frontier,[48] Spirit,[49] and United,[50] while Southwest pilots are threatening strikes as union negotiations have stalled. This rapid growth in pilot wages is not new: Since the publication of the 2013 Pilot Certification rule, pilot wages have been growing faster than wages for all other employees. We report historic pilot pay between 2007 and 2022, as reported by the Bureau of Labor Statistics Occupational Employment and Wages for occupational group "53-2011 Airline Pilots, Copilots, and Flight Engineers."[51] We compare pilot pay to that of all occupations in below, which records the cumulative percentage change in wages by year. We added a line to represent the effect date of the 2013 rule requiring 1,500 hours for ATP licenses. As can be seen, wages for pilots increased at similar rates to those of all occupations before 2013, but since 2013 wages have grown substantially faster than all other occupations subsequent to the Pilot Certification rule.

[46] Leslie Josephs, "Delta Pilots Approve New Contract With 34% Raises," *CNBC*, March 1, 2023, https://www.cnbc.com/2023/03/01/delta-pilots-new-contract-big-raises.html.

[47] Rajesh Kumar Singh, "JetBlue Pilots Approve Two-year Contract Extension – Union," *Rueters*, January 30, 2023, https://www.reuters.com/business/aerospace-defense/JetBlue-pilots-approve-two-year-contract-extension-union-2023-01-30/#:~:text=This%20shortage%20is%20projected%20to,time%20payment%20up%20to%20%2417%2C000.

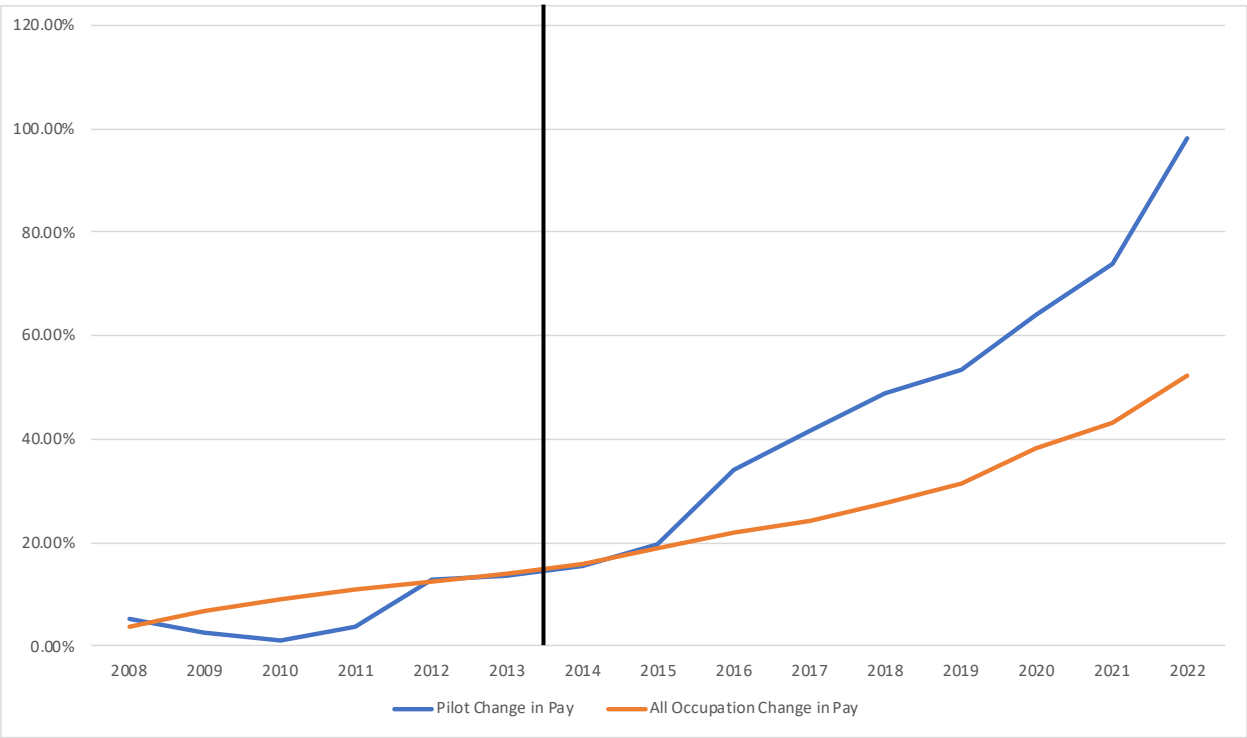
[48] Pilot Career Center USA, "Frontier Pilots Ratify New Five Year Contract" (blogpost), January 13, 2019 https://pilotcareercenter.com/Aviation-Pilot-Recruitment-News-Item/8369/Frontier-pilots-ratify-new-five-year-contract.

[49] Tribune News Service, "Spirit Airlines Pilots Ratify Contract With 34% Pay Raises," *The Dallas Morning News*, January 10, 2023, https://www.dallasnews.com/business/airlines/2023/01/10/spirit-airlines-pilots-ratify-contract-with-34-pay-raises/#:~:text=Spirit%20Airlines%20pilots%20have%20ratified,Line%20Pilots%20Association%20said%20Tuesday.

[50] David Koenig, "United Airlines, Pilots' Union Reach Deal to Raise Pay By Up to 40%," *USA Today*, July 17, 2023, https://www.usatoday.com/story/travel/airline-news/2023/07/17/united-airlines-union-pilots-raises/70419677007/.

[51] Errors in data collection, mean that data could only be collected back to 2007.

Cumulative Percent Change in Pilot Pay by Year



A shortage of pilots means not just rising wages, but also scaled-back flight operations. Indeed, airlines are parking jets and flying fewer routes because of the pilot shortage. For example, American Airlines says it can't deploy 150 regional jets because of the pilot shortage,[52] and Airlines for America reports 414 regional jets have already been parked since 2019. Of the 414 parked regional aircraft, 329 are small regional jets with fewer than 50 seats, and 85 are large regional jets with between 51 and 100 seats. A decline of 329 passenger jets with fewer than 50 seats represents a 50% decline in the number of small regional jets operated.

Because of fewer regional jets, airline routes are also being dropped as a result of the pilot shortage.[53] Between January 2020 and January 2023, 324 airports (or 76% of U.S. airports) have experienced air-service loss, and the average loss was greater than 30% of departures.[54] Of these, 53 lost more than half of their flights, and 14 airports lost all scheduled commercial flights.[55] Unsurprisingly, with this loss of regional jets, the loss is concentrated among smaller

[52] Alexandra Skores, "American Airlines CEO Says It Can't Deploy 150 Regional Jets Because of Pilot Shortage," *The Dallas Morning News*, June 1, 2023, https://www.dallasnews.com/business/airlines/2023/06/01/american-airlines-ceo-says-it-cant-deploy-150-regional-jets-because-of-pilot-shortage/.

[53] Regional Airline Association, "Small Community Air Service & the Pilot Shortage" (presentation), February 6, 2023, https://www.raa.org/wp-content/uploads/2023/02/1Q23-Small-Community-Air-Service-Deck-Final.pdf, 21.

[54] Regional Airline Association, "Small Community Air Service & the Pilot Shortage" (presentation), February 6, 2023, https://www.raa.org/wp-content/uploads/2023/02/1Q23-Small-Community-Air-Service-Deck-Final.pdf, 28.

[55] Ibid.

airports. The average loss of scheduled flights at nonhub airports was 32%, and the average loss at nonprimary airports was 45%.

Data on wages, recent parking of planes, historic pilot contract wage increases, and estimates of the size of a shortage indicate that there is a shortage in airline pilots. Based on these facts, the FAA should address the following if it issues the intended rule:

1. The FAA should account for the faster-than-average growth in wages for pilots and account for those wage costs in future value calculations.
2. The FAA should assess the cost of forgone flights due to a shortage of pilots.
3. If the FAA disagrees that there is a shortage, the FAA should explain, with data, why there is not a shortage of pilots and why the above analysis is inaccurate.
4. The FAA should assess how the pilot shortage may worsen if the stringency of current license rules is increased.

11 How large is this shortage?

The 10-year average number of new ATP pilots is 6,776.[56] United Airlines, Oliver Wyman, the RAA, and Boeing have all separately estimated the size of the current airline pilot shortage.

1. United Airlines states that the demand for ATP pilots is 10,000 per year, indicating a shortage of 3,224 ATP pilots per year.[57]
2. Oliver Wyman estimates the pilot shortage to be 17,000 (or 15% of current workforce), peaking at 24,000 (or 23% of current workforce) for the North American market.[58] To increase the number of current ATP license holders by 15% over the next decade, the total number of new ATP certificates would need to increase by approximately 2,600 annually.
3. The RAA estimates the ATP pilot shortfall at between 8,600 and 11,585 by 2030, or 1,075 and 1,448 per year.[59]
4. Boeing states that 127,000 additional pilots are needed for the North American market over the next 20 years, or roughly 6,350 per year.[60] If we assume Boeing's estimate for North

[56] Federal Aviation Administration, "2022 Civil Airmen Statistics," https://www.faa.gov/data_research/aviation_data_statistics/civil_airmen_statistics.

[57] United Airlines, "UAL 4Q22/FY22 Earnings Call" (presentation), January 18, 2023, https://ir.united.com/static-files/5b5b2c9c-aa92-44da-ad37-753035bedd8d.

[58] Oliver Wyman, "The Pilot Shortage May Be Easing Slightly, But Aviation Now Needs Mechanics," *Forbes*, February 2, 2023, https://www.forbes.com/sites/oliverwyman/2023/02/02/the-pilot-shortage-may-be-easing-slightly-but-aviation-now-needs-mechanics/?sh=ee08b592b5e4.

[59] Regional Airline Association, "Small Community Air Service & the Pilot Shortage" (presentation), February 6, 2023, https://www.raa.org/wp-content/uploads/2023/02/1Q23-Small-Community-Air-Service-Deck-Final.pdf, 21.

[60] Boeing, "Passenger Air Traffic Returning to Growth," https://pto.boeing.com/.

America breaks down into the ratio of pilots between Canada, Mexico, and the U.S., then the U.S. would need an additional 5,715 pilots per year.[61]

Collectively, these organizations estimate the needed growth in pilot populations to be between 1,075 and 5,715 pilots per year. Based on this data, in order to close the shortage, the number of new ATP certificates issued per year would need to be between 16% and 84% higher (rounded) than the current 10-year average of new ATP certifications issued annually by the FAA.

Delinking Part 380 economic regulations from Part 110 definitions would increase the pilot shortage because it would make pilots ineligible to fly currently available routes. Instead of exacerbating the pilot shortage, the FAA should consider addressing the pilot shortage directly by either raising the retirement age or issuing regulations to promote structured training with more limited amounts of flight time for Part 135 and Part 121 operators.

12 Realistic public charter flight alternatives are less safe, less convenient, and serve fewer passengers

Were the FAA to delink Part 380 requirements from the definitions in Part 110, public charter operators would not be allowed to operate jets under Part 135 with fewer than 31 passengers. We identify three options of what could occur to public charter operated routes after this intended rule. We discuss the likelihood of each of these conceptual options for the three segments of the public charter industry identified in Section 5 above (commuter, premium, resorts).

12.1 Current public charter routes become operated by Part 121–compliant regional airlines or the public charter operators switch to Part 121–compliant craft

Due to the pilot shortage and the 50% decline in regional aircraft with less than 50 seats, for both the commuter and business segments of the charter industry, we do not believe it is likely that all of these craft can be switched to become Part 121 compliant. Their business models are predicated on hiring pilots who are not currently eligible to fly for Part 121 airlines, either because the pilot in command has reached the mandatory retirement age or because the second-in-command does not have enough flight time. We do not believe it is reasonable to assume that commuter or premium public charters would switch to be Part 121 compliant because there are simply too few ATP pilots, as the previous section demonstrated. Were the FAA to issue the intended rule, the FAA should explain precisely why, if regional airlines are

[61] Based on FAA data, there were 165,228 active ATP licenses in 2017. Canada had 13,970 ATP licenses, and Mexico employs 4,185 pilots for 183,383 pilots in the North American market in 2017. The U.S. composes 90% of this average. Applying 90% to 6,350 yields approximately 5,700 per year. Data for Canada located here: https://tc.canada.ca/en/aviation/licensing-pilots-personnel/aviation-personnel-licensing-statistics#toc1, and data for Mexico located here: https://www.sct.gob.mx/fileadmin/DireccionesGrales/DGAC-archivo/modulo5/amc-2017-i.pdf.

shrinking because they cannot source enough ATP-certified pilots, requiring public charter airlines to get ATP-certified pilots would result in different effects for commuter and business-class public charter operators.

Resorts are generally offering weekly routes in lower volumes than either the commuter or business class airlines, so it is possible that they elect to operate a plane that is Part 121 compliant. However, this would still result in significantly higher costs of charter operations due to the required higher pay for pilots. The FAA should be sure to assess the higher costs for these operators.

12.2 Public charter operators switch to operating 9-seater turboprops on their routes compliant with Part 135

Resorts, as discussed above, are most likely to convert existing planes to be Part 121 compliant because resorts are most likely to be creating public charters to increase the number of guests at their resort. For resorts, switching to 9-seater turboprops means fewer total guests served. As a result, we do not believe resorts are likely to operate 9-seater turboprops instead of Part 121–compliant jets.

Premium public charters are similarly unlikely to operate 9-seater turboprops. Turboprops are slower than jets and are not identified with the premium experience offered. No premium public charter company currently offers service on a turboprop plane, indicating intentional selection of jets over turboprops. The economics are also less favorable, because the fixed costs of a flight are fitted over fewer seats.[62]

Commuter airlines may, however, switch to offering 9-seater turboprops, especially as many of these routes are currently subsidized by the federal government. As comments from communities supporting SkyWest Charter's application noted, many EAS communities sought applications from Part 121 regional airlines offering 30 or more seats, but they received no bids. There are many similar EAS communities served by 9-seater turboprops. It follows logically, then, that commuter airlines may switch to 9-seater turboprops, especially on EAS routes. However, the changed economics of these routes for passengers and carriers is worth noting. SkyWest Charter, for example, promised to operate two round-trip flights a day on 30-seater jets. Were SkyWest Charter to offer 60 seats a day on round-trip flights, it would need to offer seven round-trip flights with 9-seater turboprops. If we assume one ATP pilot on 9-seater turboprops, SkyWest would need five more ATP pilots than currently used for its service.

More than likely, as is common in many current EAS markets serviced by 9-seater turboprops, the number of flights will remain at two round trips per day with smaller 9-seater planes, meaning that 42 fewer passengers can travel each day. These 42 fewer possible passengers may drive to another better-served airport, may drive to the destination itself, or may discontinue

[62] Blade operates numerous public charter flights via helicopter and eventually evotl. It is unclear how these flights would be impacted by the intended rule.

travel. The FAA should discuss and evaluate the increased safety risk to passengers who drive instead of fly. They also should evaluate the economic costs of discontinuing travel. Because these airlines are primarily serving remote and small communities, some of which include sizable Native American populations, a distributional analysis of these impacts is warranted. We discuss these questions further in relevant sections on distributional analysis below.

12.3 Public charter operators discontinue the route as it is not economical to operate Part 121–compliant aircraft on these routes

Resort operators may discontinue flight routes or decrease flight frequency. For example, Caesars Entertainment operates both Part 121 aircraft and Part 135 aircraft under public charter rules. It is plausible that Caesars Entertainment simply discontinues its Part 135 aircraft. Passengers would then need to either drive to a larger airport to catch the Caesars flight or discontinue traveling altogether.

As argued above, there is a pilot shortage. There are not enough pilots under the mandatory retirement age and with the requisite flight time to meet current or future needs. Commuter and premium public charter operators will need to either discontinue flights or operate turboprop planes limited to nine seats. As noted earlier, turboprops are not likely for premium operators and commuter operations without government funding via EAS routes.

Based on the above conceptual model, the FAA should address the following:

1. The FAA should estimate the share of currently available routes by each category likely to be canceled.
2. The FAA should estimate the share of traffic that will switch to cars instead of flying because of reduced or canceled flights.
3. The FAA should estimate the distributional impacts of the decline in these routes.
4. The FAA should project these costs over 10 years.
5. As the FAA notes, these airlines are growing, and that implies that a three-year historical average undercounts future passenger volumes. The FAA should be comparing against projected future volumes.

13 Analysis of public charter impacts on competition

The FAA has been instructed by both Congress and the president to promote competition through its rulemakings. President Biden issued EO 14036 on "Promoting Competition in the American Economy,"[63] calling on agencies to "use their authorities to further the policies set forth in section 1 of this order, with particular attention to the influence of any of their respective regulations, particularly any licensing regulations, on concentration and competition

[63] The White House, "Executive Order on Promoting Competition in the American Economy," July 9, 2021, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/.

in the industries under their jurisdiction." The order also called on the Department of Transportation, specifically in regard to air markets, to "facilitate innovation that fosters United States market leadership and market entry to promote competition and economic opportunity and to resist monopolization, while also ensuring safety, providing security and privacy, protecting the environment, and promoting equity…"

Congress has instructed the FAA to place "maximum reliance on competitive market forces and on actual and potential competition—(A) to provide the needed air transportation system; and (B) to encourage efficient and well-managed air carriers to earn adequate profits and attract capital";[64] to avoid "unreasonable industry concentration, excessive market domination, monopoly powers, and other conditions that would tend to allow at least one air carrier or foreign air carrier unreasonably to increase prices, reduce services, or exclude competition in air transportation";[65] to encourage, develop, and maintain "an air transportation system relying on actual and potential competition—(A) to provide efficiency, innovation, and low prices; and (B) to decide on the variety and quality of, and determine prices for, air transportation services"; and to encourage "entry into air transportation markets by new and existing air carriers and the continued strengthening of small air carriers to ensure a more effective and competitive airline industry."

In total, the FAA is called to consider whether any licensing regulations restrict competition and promote industry concentration, with these specific goals:

1. Facilitate innovation and market entry to promote competition
2. Rely on competitive market forces to provide the air-transportation system and decide on the variety and quality of air transportation
3. Avoid concentration
4. Encourage air transportation to rely on actual and potential competition to provide efficiency, innovation, and low prices
5. Encourage entry by new air carriers and strengthen small air carriers

Regularly scheduled public charter operators are all small entities, as will be discussed further, and therefore are small air carriers. Their services as public charter operators are also new entrants into the scheduled air-transportation space; the first public charter flights stem from 2016. Because these are new entrants and small air carriers, the FAA is instructed by Congress to encourage their development (and additional market entry) and strengthen their operations. Removing their ability to operate would not be following these instructions from Congress.

13.1 Commuter public charter operators

Commuter public charter operators are serving underserved communities and limit concentration in air markets. We discuss in more detail the effect on small and underserved

[64] 49 USC 40101(a)(6).

[65] 49 USC 40101(a)(10).

communities in Section 14. We will discuss the competitive advantages of commuter public charter operators here.

As demonstrated earlier, Part 121 regional carriers have been shrinking their networks as their pilots have been poached by the major carriers. Commuter public charter operators have begun to fill the gap. Contour Airlines flies to many small underserved communities and has an interline agreement with American Airlines, like many Part 121 regional carriers. Through this interline agreement, the operator is able to sell tickets throughout the U.S. and internationally. SkyWest Charter was planning to base operations at Denver and Houston airports, both of which are United hubs. We therefore expect that SkyWest Charter was likely to obtain a similar interline agreement through United for its proposed route network as it had in the past under SkyWest, the Part 121 operator.

Notably, SkyWest Charter intended to operate at airports where Contour Airlines was also operating. SkyWest Charter and Contour Airlines would separately offer access to two major airlines (United Airlines and American Airlines, respectively) in areas where the major and regional carriers have been retreating. This would provide competition in small regional cities that to date have experienced nothing but declines in service over the past decade.

Public charter operators, to date, have not been from any major airlines, but have been from smaller regional airlines or start-ups. When the regional air carriers are made healthier by having access to additional markets served by alternate business models, concentration in the total air market declines because major airlines directly serve only 33% of airports.

Service has been cut substantially in regional airports. Any increase in flights must be an increase in competition. While many of these public charter routes to date have been to EAS communities, there is reason to believe that will not always be the case. Both Contour Airlines and the proposed SkyWest Charter routes proposed certain routes to non-EAS airports. There is reason to believe that the cost of these routes will be similar to other EAS routes and offered at low prices. For example, Advanced Air is planning on offering routes to Mammoth Lakes, which is not an EAS community. Its posted fares do not seem to be different from fares to EAS communities. In either case, moving from no air service to some air service represents an infinite decrease in air prices. Were the FAA to issue an ANPRM or NPRM, the FAA should ask if commuter public charter operators intend on growing to routes currently not served by regional airlines or if other regional airlines might take advantage of the public charter rules.

13.2 Premium public charter operators

Some of these airlines are also innovating by providing a new type of all-business-class service, bucking the trend of ever smaller seats. These airlines are often competing with major carriers on some of their most high-frequency routes for their most profitable passengers. For example, JSX flies from Dallas (an American and Southwest hub) to Phoenix (another American and Southwest hub) and to numerous airports in Southern California at which both American and Southwest have additional hubs. JSX is offering business-class products at prices as low as

economy class on major carriers, all while providing exceptional ground service. For example, one of these authors was traveling from Miami to Dallas (both American hubs, and Dallas and Fort Lauderdale are Southwest hubs) after a cruise, and the ticket prices were $300 for an economy-class ticket late in the day on American or Southwest or $350 on JSX 5 hours earlier. The author gladly purchased the ticket on JSX, preferring a nicer seat and earlier flight on a three-and-a-half-hour journey.

Premium carriers are not just competing on price, they are also competing on quality. They advertise superior ground experiences, superior in-flight experiences, faster Internet, lower luggage fees, more flexible pet policies, and less invasive TSA requirements. Wildcat Touring, for example, permits two bags up to 60 pounds per passenger for free, and additional bags are charged at $100 per bag. No legacy carrier has bag fees this low except for top-tier loyalty members. As for the less invasive TSA requirements, 30-seater planes not flying between cleared areas are permitted to operate under the less invasive TSA requirements. Legacy carriers could also avail themselves of these rules, but to date have not chosen to do so.

Lighter restrictions on bringing your pet along is actually a major feature of these premium airlines. For those who are unsure about whether this is an important competitive feature of air travel, the pet market has been growing substantially over time. Pet spending has increased from $21 billion[66] in 1996 to $138 billion in 2022[67] while 31.6% of households owned a dog in 1996[68] and 49% of households own a dog today.[69]

American,[70] Delta,[71] Southwest,[72] and United[73] only permit small dogs that can fit in an approved carrier on the plane. Most note that a limited number of pets are permitted on each flight and that larger pets must fly in the "belly" of the plane. By contrast, Aero,[74] BLADE,[75] JSX,[76] and Wildcat[77] each permit larger pets than those that can fit in an approved air carrier.

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[66] Tom McReynolds, "Americans Spent $72 Billion On Their Pets in 2018," *AAHA*, March 27, 2019, https://www.aaha.org/publications/newstat/articles/2019-03/americans-spent-72-billion-on-their-pets-in-2018/#:~:text=To%20put%20it%20in%20context,animal%20purchases%2C%20and%20other%20services.

[67] American Pet Products Association, "Pet Industry Market Size, Trends & Ownership Statistics" (website), https://www.americanpetproducts.org/press_industrytrends.asp.

[68] Elizabeth A. Clancy and Andrew N. Rowan, "Companion Animal Demographics in the United States: A Historical Perspective," *The State of the Animals II: 2003*, http://concordanimals.com/Links/PDF/DogCatDemographics.pdf.

[69] American Pet Products Association, "Pet Industry Market Size, Trends & Ownership Statistics" (website), https://www.americanpetproducts.org/press_industrytrends.asp

[70] American Airlines, "Pets" (webpage), https://www.aa.com/i18n/travel-info/special-assistance/pets.jsp.

[71] Delta, "Pet Travel on Delta" (webpage), https://www.delta.com/us/en/pet-travel/overview.

[72] Southwest, "Flying with Pets" (webpage), https://www.southwest.com/help/booking/pet-policy.

[73] United, "Traveling with Pets" (webpage), https://www.united.com/en/us/fly/travel/traveling-with-pets.html.

[74] Aero, "Can I Fly with My Pet?" (webpage), https://help.aero.com/hc/en-us/articles/7642326109588-Can-I-fly-with-my-pet-.

[75] BLADE, "BLADE's Pet Policy" (webpage), https://www.blade.com/p/pets.

[76] JSX, "JSX Pet Policy" (webpage), https://www.jsx.com/petpolicy.

[77] WildcatTouring, "Travel Information" (webpage), https://www.wildcattouring.com/travel-info/.

They usually do so by requiring the purchase of an additional seat for the pet, and they do not restrict the number of pets per flight. This can be a huge deal for pet owners, as flying as cargo can be traumatizing for a pet, and many owners do not like the effects of putting their pet in the belly of the aircraft. This may be because 51% of pet owners see their pets as part of the family, as much as a human member. Since individuals probably would not want to see grandma handled as cargo underneath the plane, they also don't want their pet handled like cargo. Indeed, when this author flew JSX, there were probably 10 dogs on a 30-seater jet.

In this manner, new premium carriers are competing directly with established legacy carriers, sometimes even offering lower prices and certainly offering superior quality. Market forces are now determining the (higher) quality of air transportation in many premium routes. How much have these premium carriers already led to a decline in business-class prices? For example, there is ample evidence that when JetBlue offers its Mint business-class product in transatlantic routes, the business-class prices decrease significantly. Are public charter premium carriers leading to similar price competition in major city routes?

13.3 Resort public charter operators

Resort public charter operators are increasing access to their resorts for individuals who might want that experience. Doing so may make them more competitive versus other leisure activities by decreasing the travel time and thereby the total cost to visit the resort. There are also many desirable places to visit that may be far from major cities or are near small airports with infrequent routes. For example, many Caribbean islands have small and infrequent air transportation, and many national parks are far from major cities. Competition in the leisure travel space is actually spawning new and innovative routes. The FAA should continue to rely on competition to determine the availability of these routes.

13.4 Does licensing restrict competition?

As argued above, a pilot shortage exists and is getting worse. This shortage is resulting in significant declines in regional air passenger transportation. Declines in regional air passenger transportation concentrate a greater share of the air market in the hands of legacy carriers. New and growing airlines also face the challenge of sourcing pilots, and these licensing regulations only make this process more difficult during an existing pilot shortage. For example, JetBlue is seeking to acquire Spirit instead of Alaska Airlines largely due to the mix of pilots available at Spirit.[78] This means the air industry today is more concentrated because of the 1,500-hour rule. In response to this rising industry competition, the FAA should continue to allow public charter operators to operate 30-seater jets under Part 135 instead of Part 121. The FAA also could raise the Part 135–permitted capacity back to 30-seater jets from the current 9-seater turboprop.

[78] Jon Sindreu, "How the Pilot Shortage Made JetBlue Overpay for Spirit," *The Wall Street Journal*, July 28, 2022, https://www.wsj.com/articles/how-the-pilot-shortage-shattered-frontiers-dream-to-buy-spirit-11659002170.

As demonstrated above, all three groups of public charter operators appear to be relying on the market to determine the quality and availability of services. They are, in some instances, competing directly with legacy carriers by offering better on- and off-board experiences. In others, they are partnering with legacy carriers to offer seamlessly connected experiences providing the full route map of a legacy carrier to the public charter customers. They are also frequently flying to markets with few other air carriers, or no other carriers at all. Finally, new leisure travel routes are possible via public air charters that may be bundled with hotel and resort experiences. In all these instances, restricting public charter operators to Part 121 operations and the concomitant decline in service that that entails means decreasing competition in many markets and violating the instructions of Congress and the president.

14 Analysis of impacts on access to small and underserved communities

In 49 USC 41101(a)(4), (11), & (16) Congress has instructed the FAA to consider the availability of transportation, especially to small and underserved communities, when pursuing regulation as being in the public interest. Specifically, Congress stated the following are in the public interest:

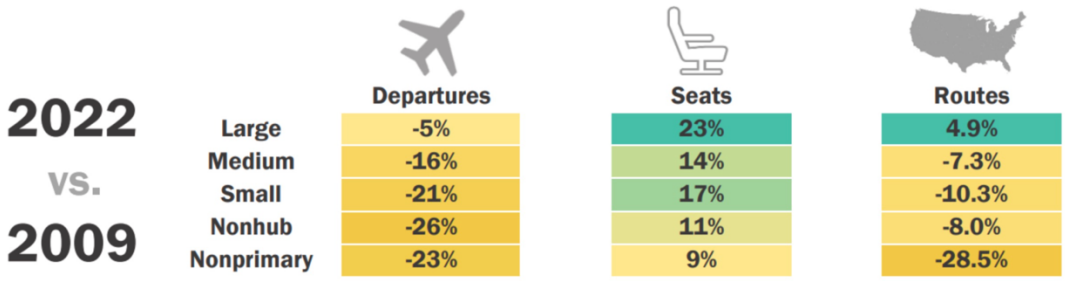
> (4) the availability of a variety of adequate, economic, efficient, and low-priced services without unreasonable discrimination or unfair or deceptive practices.
> (11) maintaining a complete and convenient system of continuous scheduled interstate air transportation for small communities and isolated areas with direct financial assistance from the United States Government when appropriate.
> (16) ensuring that consumers in all regions of the United States, including those in small communities and rural and remote areas, have access to affordable, regularly scheduled air service.

Unfortunately, because of the current pilot shortage, the air-transportation system is currently failing at these objectives. The availability of air service, especially to small communities, is declining. As noted above in the section on the shortage of pilots, 76% of U.S. airports have experienced air service loss, and the average loss was greater than 30% of departures. Of these, 53 lost more than half of their flights, and 14 airports lost all scheduled commercial flights. Additionally, 11 of the 53 airports losing more than half of their service are EAS communities.

As can be seen from this graphic from the Regional Airline Association, between 2009 and 2022 all airports had fewer departures, and routes declined most from the smallest airports. Nonprimary airports lost 28.5% of their routes over this period. Due to the existing 1,500-hour flight time requirement, consumers in all regions of the United States no longer have scheduled air service as frequently as before to as many destinations.

Major Airlines Have Not and *Cannot* Replace Most Regional Flights

Regional airlines use aircraft rightsized for smaller markets. When larger aircraft with more seats can be used, all but the very largest airports lose both destination options and frequency. Airports of all sizes lose frequency.

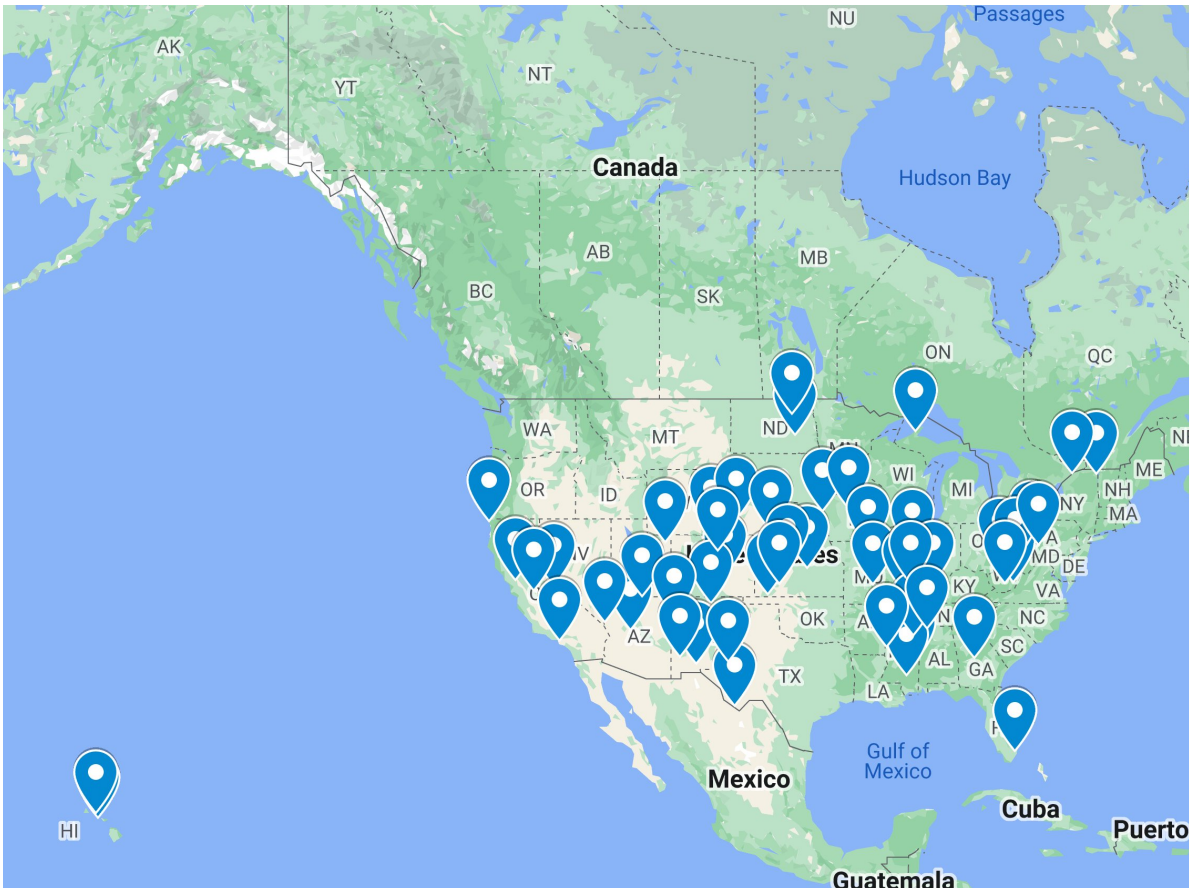


Source: OAG Schedule Analyser

Public charter carriers are growing rapidly, as the FAA notes. Due to this growth, public charters are starting to fill the regional transportation gap left by retreating airline networks. Public charters have been adding flights to underserved areas and may add additional flights back to airports that have lost all commercial service. Out of the 53 airports that have lost more than 50% of service, public charters are either already serving or proposing to serve six of these airports.

Public charters are also serving an increasing number of EAS communities. In its May 8, 2023, letter to the heads of the Department of Transportation, FAA, and TSA (published in the docket concerning the SkyWest application to operate public air charter routes), SkyWest, Inc. states, "over 82% of subsidized EAS communities are safely served by Part 135 operators." We reviewed the list of Eligible Essential Air Service (EAS) Communities as of December 2021 (excluding Alaska and Hawaii) published by the FAA. This list includes 110 communities, and, out of the 110 EAS communities, 40 have, or are proposed to have, routes provided by a public charter carrier operating with more than nine seats.

Currently, public charter carriers with between 9 and 30 seats serve 53 airports that no other airline serves. This does not include the number of airports proposed to be served by SkyWest Charter that would not be served by anyone else. Out of these 53 airports, 43 are in EAS communities. Here is a map showing the locations of these affected airports.



We also looked at the passenger volumes at each of these airports using the FAA's annual report on the number of enplanements and change by year.[79] Based on 2022 data, public charter airlines fly to six airports that are currently unranked, meaning there is no data on passenger volumes. Including those airports, the 53 airports with public charters as their sole regularly scheduled operations have a median rank of 415 out of 543. The airport ranked 415th was Cape Girardeau Regional Airport (CGI) in Missouri, which had 8,713 enplanements in 2022, or 23.8 per day.

These airports are small indeed. The markets in these communities could not afford to have larger planes operating on them. In fact, at the median airport of CGI, the number of enplanements results in a load factor of 79.6%, which is below the average load across the industry (82.7%). However, smaller planes would not be able to fill the gap left by banning Part 135 public charter operators with fewer than 31 seats. Smaller planes operating routes to CGI with only nine seats would need three flights per day to carry 23.8 passengers per day. Three flights per day would require three ATP pilots, or two more than currently used on that route. If

[79] Federal Aviation Administration, "Passenger Boarding (Enplanment) and All-Cargo Data for U.S. Airports" (webpage), https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger.

regional carriers' ATP pilots are being poached by major carriers, they are unlikely to staff more pilots than currently used on existing routes.

Were the FAA to pursue its intended regulation of delinking Part 380 economic regulations from Part 110 definitions, small communities will suffer disproportionately, as public charter operators would be unable to carry on the same flights. Small communities would be left with smaller and less frequent service, failing to deliver the policy promises Congress has requested that the FAA uphold.

If the FAA undertakes this regulation, the FAA should address:

1. The economic impact to these 53 communities from the removal of all air service.
2. The impact on the EAS program, which now relies heavily on public charter operators.
3. The additional distance necessary to reach another airport were flights no longer to operate here.
4. There are four states with more than four airports that would be affected (CA, KS, NM, and WV). One additional state would have more than four airports impacted if SkyWest Charter were disallowed (WY). Would there be any adverse financial impacts on the state governments from the lost passenger revenue?

15 Procedural implications

Congress has instructed the FAA to "develop and maintain a sound regulatory system that is responsive to the needs of the public and in which decisions are reached promptly to make it easier to adapt the air transportation system to the present and future needs of—
(A) the commerce of the United States;
(B) the United States Postal Service; and
(C) the national defense."

Congress, the president through executive orders and memoranda, and the Department of Transportation through its guidances have described the myriad features of what a sound and responsive regulatory system looks like. To that end, we want to highlight some procedural implications necessary for a sound regulatory system that may arise from this rulemaking, especially those that might not be the most usual implications of other similar rules.

15.1 Economically significant regulations and major rule

President Biden recently updated the definition of an economically significant regulation via E.O. 14094 titled "Modernizing Regulatory Review."[80] In it, a "significant regulatory action" means any rule that may "have an annual effect on the economy of $200 million or more." As discussed in previous sections, the rule the FAA intends to propose would make many of the

[80] Exec. Order 14094 (April 6, 2023), https://www.federalregister.gov/documents/2023/04/11/2023-07760/modernizing-regulatory-review.

current business models nonviable. Newer routes, especially those to small communities, would decline in frequency and seat count or be canceled altogether.

We googled the revenues of each of the affected companies and came up with the following estimates:

Company	**Revenue**
Advanced Air[81]	$29.1 M
Aero	$28 M
Blade[82]	$18 M
Caesars	N/A
Contour[83]	$147 M
JSX[84]	$500 M
SkyWest Charter (Projected)[85]	$220 M
Southern Airways Express (estimated)[86]	$2.6 M
Wildcat Touring[87]	$1-5 M
Total	**$947 M**

Were the scheduled public charter traffic to decline by 20% from current levels, this regulation would result in an economically significant regulation from that facet alone. Based on our discussion above, it seems highly likely that the size of this market would shrink with additional regulation as the regional flights provided by these carriers would be uneconomical.

Additionally, the above revenues are based on 2022 data. But, as the FAA states in its notice, this market is growing. JSX expects its number of flights to be 65% higher than in 2023 and to grow to $1 billion in revenue in the next five years. That projected growth is just for JSX. If that represents the industry as a whole, then revenue will be roughly $2 billion across public charter operators in five years. Were the FAA to simply project slowing or halting of growth then it would be producing an economically significant regulation, because the forgone growth would result in costs greater than $200 million in a single year.

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[81] "Who is Advanced Air" (webpage), Zoominfo, https://www.zoominfo.com/c/advanced-air-llc/353586269.

[82] BLADE Air Mobility, INC., Form 10-Q, March 31, 2023, https://ir.blade.com/sec-filings/all-sec-filings/content/0001779128-23-000052/0001779128-23-000052.pdf, revenue includes non-medical passenger exclusively.

[83] "Who is Contour Airlines" (webpage), Zoominfo, https://www.zoominfo.com/c/contour-airlines/395901000.

[84] Mateen Kontoravdis, "JSX Elevates Flying Experience with Starlink and Rapid Growth," *Airline Geeks*, March 23, 2023, https://airlinegeeks.com/2023/03/23/jsx-elevates-flying-experience-with-starlink-and-rapid-growth/#:~:text=While%202022%20was%20the%20air,in%20the%20next%20five%20years.

[85] Exhibit SWC-501.

[86] Because Southern Airways express only operates 2 affected 30 seater aircraft, we estimate their annual revenue on these two aircraft as follows: 30 seats * 1509 flights * .84 load factor * $70 = 2.7 M rounded. Estimated price of $70 sourced from google flights; flight count sourced from the FAA's 2022 public charter report.

[87] "Who is Wildcat Touring" (webpage), Zoominfo, https://www.zoominfo.com/c/wildcat-touring-llc/398080945.

It is common practice and was mandatory under the prior DOT Order 2100.6A on "Rulemaking and Guidance Procedures" (published December 20, 2018) that DOT agencies prepare and submit an ANPRM for any economically significant rulemaking. Were the FAA to continue in its regulatory path, we suggest that the FAA issue an ANPRM to start this rulemaking.

If this rule is an economically significant regulation, then the Congressional Review Acts would also apply, as it would also be a "major" rule. The FAA should consider the impacts under the Congressional Review Act and other similar acts as well.

15.2 E.O. 12866 and OMB Circular A-4 requirements

Under E.O. 12866 and DOT order 2100.6A, the FAA is supposed to prepare an economic analysis to accompany all significant regulations. These analyses are meant to assess the benefits and costs of regulatory actions and guide agency policymaking. Circular A-4 provides additional guidance on drafting and conducting regulatory analyses. Given the growing nature of this market, and the distributed impacts across the United States, we want to first review the basic analysis requirements and then note where additional analysis is likely necessary.

We want to highlight some basic requirements of economic analysis. As Circular A-4 states, "A good regulatory analysis should include the following three basic elements: (1) a statement of the need for the proposed action, (2) an examination of alternative approaches, and (3) an evaluation of the benefits and costs—quantitative and qualitative—of the proposed action and the main alternatives identified by the analysis." Circular A-4 also states that major rules should be supported by both a benefit-cost analysis and a cost-effectiveness analysis, so both analyses should be present in the regulatory analysis.[88]

First, the FAA should make a clear statement of the need for the policy action. This means the FAA must identify a significant market failure or systemic problem making the regulation necessary. On this, E.O. 12866 states, "Federal agencies should promulgate only such regulations as are required by law, are necessary to interpret the law, or are made necessary by compelling public need, such as material failures of private markets to protect or improve the health and safety of the public, the environment, or the well-being of the American people."[89]

Circular A-4 lists the following as common examples of need for regulation: market failures, such as an externality; market power; inadequate or asymmetric information; other social purpose, such as congressionally authorized redistribution; making government more efficient; prohibiting discrimination; protecting privacy; permitting more personal freedom; promoting other democratic aspirations; or promoting distributional fairness. The FAA should identify which compelling need for regulation requires the FAA to issue this regulation. Additionally, Circular A-4 states about market failures that "[i]f the regulation is designed to correct a

[88] Circular A-4, 9.

[89] Exec. Order No. 12,866 (September 30, 1993), https://www.archives.gov/files/federal-register/executive-orders/pdf/12866.pdf.

significant market failure, you should describe the failure both qualitatively and (where feasible) quantitatively. You should show that a government intervention is likely to do more good than harm." Congress has set out additional justifications for regulation in 49 USC 40101.

As we showed previously, there are no examples of safety issues in the public charter market. Further, public charters are small regional carriers, increasing competition to larger carriers and delivering services to remote and small communities. Were the FAA to disallow these operations, they would be violating their own public interest guidance requirements set out by 49 USC 40101.

Second, the FAA should compare its proposal to alternatives. We suggest the FAA should consider the following:

1. Greater latitude for candidates who undertake a structured training program with lower flight time minimums as eligible to receive an ATP license. This is a viable alternative because the demand and use of Part 135 public charter operators is due to the pilot shortage. Relieving this shortage may result in more operators moving to Part 121 operations on their own.
2. Further align equipment requirements in Part 135 with Part 121, but do not change the credential requirements.
3. Permit all Part 135 airlines to operate with up to 30 seats. While the accident rate of commuter airlines with fewer than 30 seats was higher than that of Part 121 airlines when the rule was published in 1995 (and the analysis was conducted in 1993), technology and training has advanced significantly. The accident rate for all airlines has declined to virtually zero. This would likely achieve the goal of decreasing the utilization of public charter operations while not changing the ability to conduct public charters substantially. Further, this option would likely result in expanded access for smaller cities. How many Part 135 airlines operating EAS routes would increase their 9-seater planes to 30-seater planes?

Third, the FAA must assess the benefits and costs of the regulatory action. The FAA should quantitatively estimate the costs and benefits both of this regulatory action and of alternatives. When agencies produce a cost-benefit analysis, they are required to design regulations "in the most cost-effective manner to achieve the regulatory objective"[90] and to "propose or adopt a regulation only upon a reasoned determination that the benefits of the regulation justify its costs."[91] Accordingly, the FAA should select the most cost-effective regulatory approach.

As part of estimating both costs and benefits, agencies must estimate benefits and costs against the appropriate baseline and identify relevant affected populations. Standard practice in estimating the baseline is to take a historical average of flight operations. However, in this instance the public charter market is growing rapidly. The FAA should take into account the

[90] EO 12866, § 1(b)(5)

[91] EO 12866, § 1(b)(6).

future size of the market in its appropriate baseline, which would require projecting forward the growth in the market.

As for the affected population, there are a few obvious affected populations, such as the public charter operators and the public charter pilots of planes with fewer than 31 seats. However, there are a few additional populations that may not normally be considered. Many small airports may be threated with the removal of all air service were this rule to pass. In most instances, airports are government entities and collect fees on the basis of the number of flights and passengers. Small airports and government jurisdictions would be directly affected by this rule. Similarly, passengers, left with fewer air transportation options and longer drives to airports, would also be affected.

Finally, the federal government is also affected by this proposed rule through the EAS program. Many EAS routes are currently served by affected public charter flights. Will changing the permissibility of public charter flights lead to greater required subsidies in the program? Will fewer subsidies be awarded because fewer airlines can muster the number of pilots necessary to fly the routes?

In terms of cost, the FAA should include the forgone revenue, as it is the appropriate measure of opportunity cost to society. Circular A-4 says, "'Opportunity cost' is the appropriate concept for valuing both benefits and costs. The principle of willingness-to-pay (WTP) … captures the notion of opportunity cost by measuring what individuals are willing to forgo to enjoy a particular benefit. In general, economists tend to view WTP as the most appropriate measure of opportunity cost … Market prices provide rich data for estimating benefits and costs based on willingness-to-pay if the goods and services affected by the regulation are traded in well-functioning competitive markets."[92] Air travel is a fiercely competitive market with very high elasticities of demand and frequent alternatives, such as driving or electing not to travel. Consequently, market prices can be used to estimate willingness to pay.

Specifically, the revenue of public charter operators is the sum of individual willingness-to-pay estimates. Every paying fare between a public charter operator and a passenger represents a transaction between buyer (passenger) and seller (public charter operator). When a public charter operator sells a seat, it is indicating that selling the seat is higher priority than the alternative use of their capital. Similarly, when a passenger buys a seat, the passenger is indicating that the value of the seat is greater than the opportunity cost of what their money could otherwise have been used for. The sum of all seats sold for a public charter operator becomes that operator's revenue.[93] As a result, were the FAA to issue this rule diminishing the frequency of public charter operations, it should estimate that decline in revenue and use that decline as an estimate for part of the aggregate cost to society.

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[92] Circular A-4, 18-19.

[93] Thus far, public charter carriers do not have revenue streams like cobranded credit card deals that would occur outside of flying planes and selling the seats. Subsidies through the EAS program should be subtracted from revenue as those are societal transfers.

Circular A-4 also states, "The opportunity cost of an alternative includes the value of the benefits forgone as a result of choosing that alternative."[94] Part of the net benefits of choosing a flight is the travel time saved and the relative safety of planes versus all other forms of transportation. As an estimate of the costs, the FAA should measure the reduction of benefits to travelers based on increased travel time and decreased safety from increased drive time. Because some public charter operations occur at smaller airports, or airports with the twelve-five security program, the FAA should be sure to include the reduced time necessary to get through the airport compared with other larger cities.

In describing costs and benefits for "major rules involving annual economic effects of $1 billion or more, you should present a formal quantitative analysis of the relevant uncertainties about benefits and costs."[95] In view of the fact that this market is growing quickly and the rule will heavily impact public charter revenue, travel time, lives lost due to driving, and the income of pilots over 65 or in a secondary-in-command role, it is possible that this rule has more than $1 billion in economic effects in a year, so a formal quantitative analysis of the relevant uncertainties may be required. Even if it is not, the FAA should present an uncertainty analysis and estimate the share of market declines that might be brought about by the rule.

One additional note is that Circular A-4 states that there is a presumption against economic regulation, which includes "controls on entry into employment or production, except (a) where indispensable to protect health and safety (e.g., FAA tests for commercial pilots)." Delinking Part 380 from Part 110 definitions would result in requiring that public charter operators hire second-in-command pilots with an ATP certificate, and all public charter pilots would be subject to the mandatory retirement age of 65. These requirements would in effect "control entry into employment" as a public charter pilot. While Circular A-4 specifically states an exemption for FAA tests for commercial pilots, as demonstrated in the history of the 1,500-hour rule, the FAA and the NTSB have both stated that there are no safety benefits to the rule and that there is no relationship between flight time and safety. These statements were reconfirmed with the Pilot Source Studies, which seemed to indicate negative safety implications from the 1,500-hour rule. The FAA has also not demonstrated that the mandatory retirement age itself promotes safety. Taken together, both a minimum of 1,500-hours of flight time and a maximum age of 65 are not indispensable for safety. As a result, there is a presumption against this style of regulation. The FAA must show that the safety benefits outweigh the costs of both provisions.

15.3 Small entities concerns

Under the Regulatory Flexibility Act, agencies must consider the impact of their rulemakings on small entities (small businesses, small organizations, and local governments). A Presidential Memorandum of Jan 18, 2011 on "Regulatory Flexibility, Small Business, and Job Creation" builds on the requirements of the Regulatory Flexibility Act. It directs agencies to minimize

[94] Circular A-4 19.

[95] Circular A-4, 40.

impacts on small entities where possible, especially when the rule would have a significant economic impact on a substantial number of small entities.

As noted previously, the rule would result in a contraction of flights, seats, and therefore revenue. All public charter operators are offering regularly scheduled passenger air transportation and therefore should fall under NAICS 48111 "Scheduled Passenger Air Transportation." The SBA defines the size of a small entity for NAICS 48111 as 1,500 employees. All currently existing public charter airlines, except for Caesars Entertainment, have fewer than 1,500 employees. We reproduce the employee counts of each airline below.

Company	**Employees**
Advanced Air[96]	150
Aero[97]	482
Blade[98]	246
Caesars	N/A
Contour[99]	400
JSX[100]	345
SkyWest[101]	13,364
Southern Airways Express[102]	437
Wildcat Touring	N/A

Additionally, we identified 53 airports that could lose all air service from this rule, not including airports SkyWest intends to operate in. Many of these are in very small, remote communities and would likely be considered small entities. Based on our analysis, it is very likely that the intended rule would result in a significant impact on a significant number of small entities.

The RFA and the presidential memo note that different requirements for small businesses and partial or total exemptions are applicable forms of flexibility. The current regulatory environment provides maximized flexibility to small entities. Public charters may operate under Part 135 as a public charter or Part 121 as a public charter or traditional airline. Were the FAA to issue the intended regulation, the FAA should specify why it wishes to remove currently existing flexibility for small and regional air operators.

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[96] Advanced Air's LinkedIn profile, https://www.linkedin.com/company/advancedairlines/.

[97] "Aero Information" (webpage), RocketReach, https://rocketreach.co/aero-profile_b45fb861fc68373d.

[98] "Who is BLADE" (webpage), Zoominfo, https://www.zoominfo.com/c/blade/359368902.

[99] Contour Airlines, "About Contour" (webpage), https://www.careers.contourairlines.com/about-us#:~:text=About%20Contour&text=Now%20with%20over%20400%20team,base%20operations%2C%20and%20aircraft%20sales.

[100] "JSX Air Employee Directory" (webpage), Zoominfo, https://www.zoominfo.com/pic/jsx-inc/474761309.

[101] SkyWest Airlines, "About" (webpage), https://www.SkyWest.com/about-SkyWest-airlines.

[102] "Who is Southern Airways Express" (webpage), Zoominfo, https://www.zoominfo.com/c/southern-airways-express-llc/357916631.

15.4 Significant impact on tribes

President Biden, through two separate memos, has sought to emphasize and restrengthen the requirements sent forth in E.O. 13175 on "Consultation and Coordination with Indian Tribal Governments."[103] This order requires consultations with tribes over actions that have tribal implications, and it defines policies with tribal implications as "regulations, legislative comments, or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian tribes, or on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes."

We are most concerned with the first clause, describing when regulations "have substantial direct effects on one or more Indian tribes." The E.O. defines both "Indian tribe" and "tribal officials" separately, making it clear that the "Indian tribe" is not the tribal government. Specifically, "'Indian tribe' means an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, 25 U.S.C. 479a." In other words, a substantial direct effect on an Indian tribe is a substantial direct effect on the membership of a tribe recognized as a federally recognized Indian Tribe.

Because this regulation might substantially reduce or eliminate public charter air service and because some airports receive their only regularly scheduled air service from public charter operators, then this regulation would have tribal implications triggering the consultation requirements if the areas around these airports have high tribal populations. Accordingly, we reviewed the 53 identified airports that are solely served by public charter flights plus some of the airports SkyWest plans to serve as the sole operator to see if the airports were near any reservations of federally recognized tribes. We identified a number of tribes that would likely be substantially directly affected by this regulation; they might lose air service were this regulation to proceed. We found 25 Native American reservations that would lose all flights at the closest airport to the reservation.

[103] Exec. Order 13175, (November 6, 2000), https://www.govinfo.gov/content/pkg/FR-2000-11-09/pdf/00-29003.pdf.

Reservation	State	Airport
Chemehuevi	Arizona	Bullhead City Airport (IFP)
Colorado River	Arizona	Bullhead City Airport (IFP)
Fort Mojave	Arizona	Bullhead City Airport (IFP)
Hopi	Arizona	Page (PGA)
Navajo	Arizona	Page (PGA)
Yavapai-Prescott	Arizona	Prescott (PRC)
Benton Paiute	California	Mammoth Lakes (MMH)
Elk Valley	California	Crescent City (CEC)
Tolowa Dee-ni'	California	Crescent City (CEC)
Yurok	California	Crescent City (CEC)
L'Anse	Michigan	Houghton (CMX)
Choctaw (Mississippi)	Mississippi	Meridian (MEI)
Crow	Montana	Sheridan County Airport
Omaha	Nebraska	Sioux City (SUX)
Santee	Nebraska	Sioux City (SUX)
Winnebago	Nebraska	Sioux City (SUX)
Navajo	New Mexico	Gallup (GUP)
Navajo (Ramah)	New Mexico	Gallup (GUP)
Picuris	New Mexico	Taos (SKX)
Taos	New Mexico	Taos (SKX)
Zuni	New Mexico	Gallup (GUP)
Spirit Lake Reservation	North Dakota	Devil's Lake (DVL)
Turtle Mountain	North Dakota	Devil's Lake (DVL)
Uintah and Ouray	Utah	Vernal (VEL)
Wind River	Wyoming	Central Wyoming Regional Airport

15.5 Significant distributional effects

DOT order 2100.6A requires the FAA to consider any significant distributional impacts from regulations. We have already identified some populations above to assess the distributional impacts on small entities, tribes, and EAS communities. Congress has additionally specified looking at the impact on government entities (via the Unfunded Mandates Reform Act) and families (via section "Assessment of Federal Regulations and Policies on Families"); presidents have required agencies to consider environmental justice. We provide numerous comments on these various laws and orders.

15.5.1 Small communities and their government entities

According to a U.S. Government Accountability Office (GAO) report on small community air

service development released on March 26, 2020, "Communities of all sizes seek access to air service as a driver for attracting investment, generating employment, and providing mobility for citizens. Small communities obtain economic benefits from connection to the global air transportation network. Direct service to a mainline airline's hub provides one-stop access to hundreds of additional destinations around the globe." Regional air service losses have resulted in some companies moving their headquarters. For example, Caterpillar, Krystal, Albemarle, Charter, ConAgra, and Archer Daniels Midland all cited air service as one of the major benefits of their move.[104] When company headquarters move from a smaller community to a larger one, small communities suffer job losses, declines in tax revenue, and other negative economic implications. The FAA should assess whether its rule may result in lower economic development or the moving of company headquarters from small affected communities.

Small communities face two possible declines in tax revenue from this rule. The first is from declining economic growth from a lack of air service, resulting in lower property values, sales, and income tax revenue. The second is that small communities earn tax revenue directly from flights, hotels, and rental cars, all of which will likely be negatively impacted by this rule. The FAA should assess the financial impacts on small entities from declining tax revenues in accordance with the Unfunded Mandates Reform Act.

15.5.2 Native American tribes

Executive Order 13175 and subsequent presidential memoranda call on agencies to assess the impact of regulation on tribes. The FAA should assess whether declining air service from the intended rule would

1. Result in declining visitors to reservations
2. Result in declining tax revenues for tribal entities
3. Lower the income of tribal residents
4. Negatively impact tribal businesses

15.5.3 Families

Congress requires agencies to assess the impact of their policies on family well-being before implementing them.[105] Specifically, each agency shall assess whether "(1) the action strengthens or erodes the stability or safety of the family and, particularly, the marital commitment; (2) the action strengthens or erodes the authority and rights of parents in the education, nurture, and supervision of their children; (3) the action helps the family perform its functions, or substitutes governmental activity for the function; (4) the action increases or decreases disposable income or poverty of families and children." Today, approximately 50% of

[104] RAA, "Small Community Air Service & the Pilot Shortage" deck, 37.

[105] 5 USC 601 note

children will experience the divorce of their parents.[106] Sometimes, divorcing parents will relocate to different regions. The existence of flights to small airports and remote communities aids separated parents in visiting their children and aids their children in visiting them. Insofar as the regulatory action decreases the availability of regional flights, parents will be less able to exercise their parental rights and the stability of the family will be eroded, as it will be harder for parents and children to visit each other. Accordingly, the FAA should assess the number of children with divorced parents potentially affected by this regulation and the distributional impact on these individuals.

As noted in the section on small communities, the lack of regional air service often results in the moving of company headquarters and consequent economic decline. It will also result in direct declines in air traffic. The FAA should assess the impact on disposable income and poverty of families with children in small communities based on the economic decline from the loss in air service and the decline in transportation-related jobs in these communities. The FAA should also assess the safety impact on these families as they have to travel by road, which is a substantially less safe form of travel.

15.5.4 Environmental justice

Presidents have issued the following orders concerning environmental justice: E.O. 12898, 12498, and 14008. The DOT has also published its operating rules for complying with these environmental justice executive orders in 77 FR 27534. E.O. 14008 states, "Agencies shall make achieving environmental justice part of their missions by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts."

Many of the small communities affected by the intended rule have large minority populations and low incomes. The FAA should assess the distributional impacts of these rules on minority populations and low-income populations in the relevant communities.

Additionally, many of these communities lack top-tier health facilities. One of the reasons these air services are considered essential is that many individuals must travel to access quality health care for rare or specialized medical treatments and procedures that are not available locally. The FAA should assess how the access to rare or specialized medical treatments and procedures may decline with a shrinking route network from this rule.

[106] Marija Lazic, "13 Saddening Children of Divorce Statistics for 2022," *LegalJobs*, May 20, 2023, https://legaljobs.io/blog/children-of-divorce-statistics/#:~:text=Children%20of%20divorce%20statistics%20can,experience%20their%20parents%20getting%20divorced.

15.6 1,500 hours of flight time and mandatory retirement ages are design standards

It is generally recognized as good regulatory practice to prefer performance standards to design standards. Circular A-4 defines performance and design standards as follows: "Performance standards express requirements in terms of outcomes rather than specifying the means to those ends."[107] The FAA is essentially intending to require pilots for public charter operators to be younger than 65 and for second-in-command pilots to have 1,500 hours of flight time. Both of these standards are design standards. They specify the means (age, flight time) by which compliance must take place. A performance standard would be for a structured training provider to assess the competency of pilots before awarding ATP certificates.

16 TSA and security requirements

Numerous public comments in the docket on the SkyWest application discussed the public charter rules as permitting public charter operators to face less stringent TSA regulations. There are two issues with public comments. The first is that the FAA no longer has the authority over TSA regulations. The proper venue for this is the TSA, not the FAA. Second, the statement that the Part 135 public charter operators face less stringent TSA regulations than Part 121 operators is not the case. Under current regulations in 49 CFR Part 1544 Subpart B, scheduled passenger and public charter operations are treated identically based on the number of seats and whether passengers are enplaned or deplaned into a sterile area. Because many public charters fly from private terminals, passengers are not enplaned or deplaned into a sterile area. Hypothetically, if scheduled passenger airlines chose not to enplane or deplane in a sterile area and if they had a low enough seat count, then they could also operate with the less stringent TSA standards, like public charter operators.

17 Consolidated list of questions

In order to aid the FAA, we created a consolidated list of questions and suggestions based on our analysis above. The questions below do not constitute the only comments on the regulation, and the document should be read in its entirety.

1. The FAA should clarify if rotorcraft public charters would also be affected by this intended rule and in what way.
2. The FAA should explain what logic led to the FAA's alteration of the language to link Part 380 public charter regulations in 1997.
3. The FAA should explain why the FAA felt public charter regulations were sufficiently safe in 1997 but feels now that public charters must no longer be allowed to operate under Part 135.

[107] Circular A-4, 8.

4. The FAA should include in its statement of the need for regulatory action how the regulatory actions lower aggregate risk to the American public, including the risk trade-off between taking a form of transportation other than flying, because the proposed rule would likely decrease the number and availability of regularly scheduled flights in the United States.
5. Why was public charter industry half the size in 2010 that it was between 1976 and 1998?
6. What caused this decline in public charter services between 1998 and 2010?
7. What is the full timeline of public charter flight operations between 1991 and the present?
8. Did the decline in public charter services have anything to do with post-9/11 security regulations or the 2008 financial crisis?
9. Did the decline in public charter flights have anything to do with FAA safety rulemakings like the Commuter Operations Rule?
10. Did the 1976 to 1998 public charter industry include regularly scheduled public charter service sold by the seat to customers? If so, what was the relative size of that market?
11. If that industry went away because it was no longer commercially viable, why does the reinvigoration of the public air charter industry constitute a need for regulation?
12. The FAA should republish in the docket the full regulatory evaluation taken for the 1991 NPRM and 1998 Final Rule.
13. The FAA should explain how 49 USC 41104 is not applicable to that rule.
14. The FAA should explain why, if Congress has treated regularly scheduled public charters as a separate category since at least the 1970s, the FAA has the authority to treat these operations as identical to traditional noncharter air carriers.
15. The FAA should only include data following the implementation of the commercial air regulations.
16. The FAA should include only Part 135 incidents on public charter carriers.
17. All data on incidents should be normalized and corrected based on the frequency of operations.
18. If the FAA makes the claim that public charter operators are less safe than Part 121 operators, the FAA should explain with data how public charter operators are less safe than Part 121 airlines.
19. If the FAA makes the claim that public charter operators are less safe than Part 121 operators, the FAA should compare the incident rate between nonpublic charter and public charter operators. If Part 135 nonpublic charter operators are less safe than Part 121 operators and Part 135 public charter operators, the FAA should explain why it is regulating exclusively Part 135 public charter operators.
20. The FAA should undertake a risk trade-off comparing the greater risks of passengers driving (instead of flying) to flying. If the net risk is increased for passengers while driving, the FAA should explain how this meets its statutory requirements to promote safe travel as its highest priority.
21. The FAA should clarify why, if both the NTSB and FAA found no relationship between flight time and safety, the additional flight time requirements for current SIC pilots of Part 135 public charter flights would outweigh the safety benefits.
22. The FAA should explain why, if the PSS studies show that the 1,500 hours of flight time actually results in making pilots less safe, the FAA's requiring SIC pilots to get an ATP license before flying would not actually make air transportation less safe.

23. The original rule did not account for the effects on the air-transportation market from a shortage of ATP pilots. The FAA should include the cost of smaller air market volumes as a cost of requiring more pilots to get an ATP certification.
24. The FAA should account for the faster-than-average growth in wages for pilots and account for those wage costs in present value calculations.
25. The FAA should assess the cost of forgone flights due to a shortage of pilots.
26. If the FAA disagrees that there is a shortage, the FAA should explain, with data, why there is not a shortage of pilots and why the above analysis is inaccurate.
27. The FAA should assess how the pilot shortage may worsen by increasing the stringency of current license rules.
28. The FAA should consider addressing the pilot shortage directly by either raising the retirement age or issuing regulations to promote structured training with more limited amounts of flight time for Part 135 and Part 121 operators.
29. The FAA should explain precisely why the rule change would result in different effects for commuter and business-class public charter operators, if regional airlines are shrinking because they cannot source enough ATP-certified pilots.
30. The FAA should be sure to assess the higher costs for Part 135 public charter resort operators necessary to operate under Part 121.
31. The FAA also should evaluate the economic costs of discontinuing travel.
32. The FAA should estimate the share of currently available routes by each category in our conceptual likely to be canceled.
33. The FAA should estimate the share of traffic that will switch to driving rather then flying due to reduced or canceled flights.
34. The FAA should estimate the distributional impacts of the decline in routes as discussed in our conceptual model.
35. The FAA should estimate these costs over a projected 10 or 20 years.
36. As the FAA notes, these airlines are growing, and that implies that a three-year historical average undercounts future passenger volumes. The FAA should be comparing against projected future volumes.
37. Are public charter premium carriers leading to similar price competition in major city routes?
38. The FAA should ask in its ANPRM or NPRM whether commuter public charter operators intend on expanding to routes currently not served by regional airlines or if other regional airlines might take advantage of the public charter rules.
39. The FAA should evaluate the economic impact to the 53 communities served by only public charter operators from the removal of all air service.
40. The FAA should evaluate the impact on the EAS program, which now relies heavily on public charter operators.
41. The FAA should evaluate the additional distance necessary to reach another airport were flights no longer to operate here.
42. There are four states with more than four airports that would be affected (CA, KS, NM, and WV). One additional state would have more than four airports impacted if SkyWest Charter were disallowed (WY). Would there be any adverse financial impacts on the state governments from the lost passenger revenue?

43. This is an economically significant rulemaking with an economic effect greater than $200M in a single year.
44. We suggest the FAA issue an ANPRM to start this rulemaking.
45. This rule is also a "major rule" under the Congressional Review Act and similar acts.
46. Circular A-4 also states that major rules should be supported by both a benefit-cost analysis and a cost-effectiveness analysis, so both analyses should be present in the regulatory analysis.
47. The FAA should make a clear statement of the need for the policy action. This means the FAA must identify a significant market failure or systemic problem making the regulation necessary.
48. We suggest the FAA should consider the following alternatives:

    a. Greater latitude for candidates who undertake a structured training program with lower flight-time minimums as eligible to receive an ATP license. This is a viable alternative because the demand and use of Part 135 public charter operators is due to the pilot shortage. Relieving this shortage may result in more operators moving to Part 121 operations on their own.
    b. Further align equipment requirements in Part 135 with Part 121, but do not change the credential requirements.
    c. Permit all Part 135 airlines to operate with up to 30 seats. While the accident rate of commuter airlines with fewer than 30 seats was higher than that of Part 121 airlines when the rule was published in 1995 (and the analysis was conducted in 1993), technology and training has advanced significantly. The accident rate for all airlines has declined to virtually zero. This would likely achieve the goal of decreasing the utilization of public charter operations while not substantially changing the ability to conduct public charters. Further, this option would likely result in expanded access for smaller cities. How many Part 135 airlines operating EAS routes would increase their 9-seater planes to 30-seater planes?

49. The FAA should quantitatively estimate the costs and benefits of both this regulatory action and of alternatives.
50. The FAA should select the most cost-effective regulatory approach.
51. The FAA should take into account the future size of the market in its appropriate baseline, which would require projecting forward the growth in the market.
52. Small airports and government jurisdictions would be directly affected by this rule.
53. Passengers, left with fewer air-transportation options and longer drives to airports, would also be affected.
54. The federal government is also affected by this proposed rule through the EAS program.
55. Will changing the permissibility of public charter flights lead to greater required subsidies in the EAS program?
56. Will fewer EAS subsidies be awarded because fewer airlines can muster the number of pilots necessary to fly the routes?
57. The FAA should include the forgone revenue, as it is the appropriate measure of opportunity cost to society.

58. The FAA should measure the reduction of benefits to travelers based on increased travel time and decreased safety from increased drive time. Because some public charter operations occur at smaller airports or with the twelve-five security program, the FAA should be sure to include the reduced time necessary to get through the airport and fly when compared with larger cities.
59. Between the fact that this market is growing quickly and the rule will heavily impact public charter revenue, travel time, lives lost due to driving, and the income of pilots over 65 or in a secondary-in-command role, it is possible that this rule has economic effects of more than $1 billion per year, so a formal quantitative analysis of the relevant uncertainties may be required. Even if it is not, the FAA should present an uncertainty analysis and estimate the share of market declines that might be brought about by the rule.
60. The FAA has also not demonstrated that the mandatory retirement age itself promotes safety. Taken together, both 1,500 flight time minimums and a maximum age of 65 are not indispensable for safety. As a result, there is a presumption against this style of regulation in Circular A-4. The FAA must show that the safety benefits outweigh the costs of both provisions.
61. Based on our analysis, it is very likely that the intended rule would result in a significant impact on a significant number of small entities.
62. The FAA should specify why it wishes to remove currently existing flexibility for small and regional air operators.
63. We identified 25 Native American tribes that would be substantially directly affected by this regulation because all flights at the closest airport to their reservation would be affected. The FAA should conduct the requisite tribal consultations.
64. The 1,500-hour flight time requirement and a mandatory retirement age are design standards. The FAA should not pursue these requirements as design standards, which are not preferred modes of regulation.
65. The FAA should perform a distributional analysis on small entities, tribes, and EAS communities.
66. The FAA should assess whether its rule may result in the moving of company headquarters or reduced economic development in small affected communities.
67. The FAA should assess the financial impacts from declining tax revenues on small entities, in accordance with the Unfunded Mandates Reform Act.
68. The FAA should assess whether declining air service from the intended rule would
    a. Result in declining visitors to reservations
    b. Result in declining tax revenues for tribal entities
    c. Lower the income of tribal residents
    d. Negatively impact tribal businesses

69. The FAA should assess the number of children with divorced parents potentially affected by this regulation and the distributional impacts on these individuals.
70. The FAA should assess the impact on disposable income or poverty of families with children in small communities based on the economic decline from the loss in air service and the decline in transportation-related jobs in these communities.

71. The FAA should assess the distributional impacts of these rules on minority populations and low-income populations in the relevant communities.
72. The FAA should assess how the access to rare or specialized medical treatments and procedures may decline with a shrinking route network from this rule.
73. The FAA should also assess the safety impact on these families as they have to travel by road, which is a substantially less safe form of travel.

About the Authors

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