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COMMERCIAL AVIATION

Status of Air Service to Small Communities and the Federal Programs Involved

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GAO Highlights

Highlights of GAO-14-454T, a testimony before the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

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Why GAO Did This Study

Establishing and retaining reliable air service to small communities has been a challenge for decades. Communities seek access to air transportation services as a driver for attracting investment and generating employment. To incentivize service, Congress established two programs to help support air service to small communities—EAS and SCASDP. Airports are categorized by DOT's Federal Aviation Administration and described in terms of "hub" size based on the number of passengers served annually. Airports range from large hubs with at least 7.3 million passengers in 2012 to nonprimary airports with fewer than 10,000 passengers. Airports receiving subsidized EAS service are either nonhub or nonprimary, and SCASDP airports are small hub or smaller.

This testimony discusses (1) the airline industry factors affecting air service to small communities, (2) the federal programs and policies that support air service to small communities, and (3) other options for improving access to air service for these communities. The testimony is based on previous GAO reports issued from 2003 through 2014; analysis of industry data for years 2007 through 2013; and selected updates on EAS and SCASDP programs. To conduct these updates, GAO reviewed program documentation and interviewed DOT officials and industry representatives.

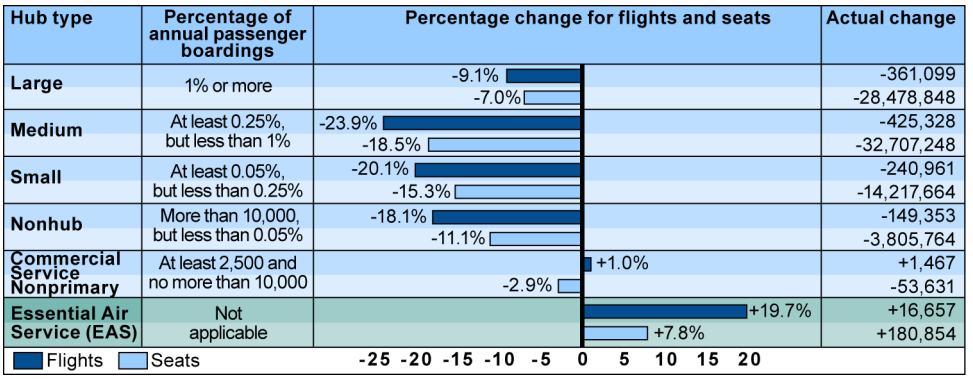
View GAO-14-454T. For more information, contact Gerald L. Dillingham, Ph.D., (202) 512-2834, dillinghamg@gao.gov.

What GAO Found

Air service to small communities has declined since 2007 due, in part, to higher fuel costs and declining population, and for some communities, compounded by more attractive service (i.e., larger airports in larger cities) within driving distance. In fact, airports of all sizes have lost capacity in the number of available seats, and largely for flights as well. However, medium-hub and small-hub airports have proportionally lost more service than large-hub or nonhub airports (see figure).

Percentage Change in Number of Flights and Seats, by Airport Category, 2007-2013

Hub type	Percentage of annual passenger boardings	Percentage change for flights and seats	Actual change
Large	1% or more	-9.1%	-361,099
		-7.0%	-28,478,848
Medium	At least 0.25%, but less than 1%	-23.9%	-425,328
		-18.5%	-32,707,248
Small	At least 0.05%, but less than 0.25%	-20.1%	-240,961
		-15.3%	-14,217,664
Nonhub	More than 10,000, but less than 0.05%	-18.1%	-149,353
		-11.1%	-3,805,764
Commercial Service Nonprimary	At least 2,500 and no more than 10,000	+1.0%	+1,467
		-2.9%	-53,631
Essential Air Service (EAS)	Not applicable	+19.7%	+16,657
		+7.8%	+180,854



Sources: Federal Aviation Administration and GAO analysis of DOT data.

The two primary programs, designed to help small communities retain air service, administered by the Department of Transportation (DOT), face challenges.

- The Essential Air Service (EAS) program, which received about $232 million in 2013, provided subsidies to airlines that served 117 eligible non-Alaskan communities in 2013. For the most part, only airports in eligible communities that received EAS-subsidized service have experienced an increased number of flights since 2007. However, the service may not always be the most cost-effective option for connecting people to the national transportation network, and the total and per-community EAS subsidies have grown since 2008. Legislation to control costs was recently enacted which limited access to EAS, for example by changing eligibility requirements.
- The Small Community Air Service Development Program (SCASDP) is a grant program to help small communities enhance air service at small-hub or smaller airports. DOT can award no more than 40 grants a year, thus SCASDP assists fewer communities than does EAS. Further, unlike EAS, funding for SCASDP—$6 million in 2013—has decreased since the program was created in 2002. Past reviews of SCASDP's effectiveness have found mixed success, with about half or less of the grants achieving their goals.

Multimodal and community-based approaches can be used to help small communities connect to the nation's transportation network. Multimodal solutions, such as bus access to larger airports or air taxi service, could be more cost-effective than current programs. In addition, some communities have had success with attracting air service through methods such as financial incentives and marketing support.

Chairman LoBiondo, Ranking Member Larsen, and Members of the Subcommittee:

I appreciate the opportunity to testify before you today on the status of air service to small communities in the United States and the current issues affecting this service. Communities of all sizes seek access to air transportation services as a driver for attracting investment and generating employment and providing mobility for citizens. However, the economics of the airline industry has traditionally made it difficult to establish or sustain viable air service in smaller communities.

Many small communities have struggled with limited air service since Congress deregulated commercial air service in 1978 to allow a competitive market for passenger air service to develop.[1] Since deregulation, airlines have largely been free to decide where in the United States they want to operate, how often they want to fly there, the type of aircraft, and how much they want to charge. Small and rural communities have found it difficult to retain and enhance their air service. Anticipating this difficulty, Congress created the Essential Air Service (EAS) in 1978 and, later in 2002, the Small Community Air Service Development Program (SCASDP)[2]—both under the U.S. Department of Transportation (DOT)—to help small communities maintain air service.[3] Since 2000, the overall aviation industry has experienced significant turmoil—including the two economic downturns, the terrorist events of September 11, 2001, and rising fuel costs—which has curtailed passenger demand and led to numerous bankruptcies and restructurings. Although airline profitability has rebounded over the last 4 years, fundamental changes in the industry have added to small communities' challenges in retaining or enhancing their air service.

This testimony discusses (1) the airline industry factors affecting air service to small communities, (2) the federal programs and policies that support air service to small communities, and (3) other options for

[1]Airline Deregulation Act of 1978, Pub. L. No. 95-504, 92 Stat. 1705 (1978). Cargo air service was deregulated the year before. Pub. L. No. 95-163, 91 Stat. 1278 (1977).

[2]Pub. L. No. 106-181, § 203, 114 Stat. 61, 92 (2000).

[3]No common definition exists for what constitutes a small community, however, for SCASDP eligibility pursuant to criteria in federal statute, it is an airport serving a community which is not larger than a small-hub airport. 49 U.S.C. § 41743.

improving access to air service for these communities. This statement is drawn from several GAO reports issued since 2003, as well as additional government, industry, and academic reports related to this topic. We have updated the information related to our previous work on the EAS and SCASDP programs through (1) a review of DOT's documents and interviews with appropriate DOT officials within the Office of Secretary of Transportation (OST), (2) analysis of passenger enplanement and DOT's airline activity data for the period 2007 through 2013, and (3) interviews with relevant industry stakeholder groups. Related GAO products are footnoted throughout the statement. The reports and testimonies cited in this statement contain more detailed explanations of the methods used to conduct our work. DOT reviewed a draft of this statement and provided technical comments, which we incorporated where appropriate.

The work upon which this testimony is based was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Air service in the United States is highly concentrated, with 88 percent of all passenger boardings at the 62 large- or medium-hub airports (see fig. 1). Small airports refer to small-hub, nonhub, and commercial-service nonprimary airports, each with less than 0.25 percent of all annual passenger boardings, or less than 1.8 million total boardings in 2012.[4] Many small communities across the United States have access to the

[4]The Bureau of Transportation Statistics also compiles a list of rural airports annually for the Department of the Treasury's Internal Revenue Service. This list is used by airlines to assist in establishing airfares. The rural airports designation originated with The Taxpayer Relief Act of 1997 (Pub. L. No. 105-34, § 1031(c), 111 Stat. 788, 929 (1997)). The Internal Revenue Service defines a Rural Airport as any airport that has fewer than 100,000 commercial passengers departing from the airport by air during the second preceding calendar year and at least one of the following is true: (1)The airport is not located within 75 miles of another airport from which 100,000 or more commercial passengers departed during the second preceding calendar year, or (2) the airport was receiving essential air service subsidies as of August 5, 1997, or (3) the airport is not connected by paved roads to another airport, and (4) had fewer than 100,000 commercial air passengers on flight segments of at least 100 miles during the second preceding calendar year. IRC § 4261(e)(1)(B).

more than 450 small airports with scheduled passenger service, provided mostly by regional airlines that are under contract with mainline network airlines, like Delta Air Lines or United Airlines.[5] The airport categories in figure 1 also determine the allocation of Airport Improvement Program (AIP) grants for airport capital improvements.[6] FAA awarded nearly $3 billion in grants to all airports in fiscal year 2013, for safety, capacity, and environmental capital improvements. The grants offset the fees that airports charge users, so they are critical for small airports hoping to retain or attract airport users. For example, any airport with at least 10,000 passengers is assured at least $1 million in annual grant funding.[7]

Figure 1: Airport Categories Based on 2012 Boardings

Hub type	Percentage of annual passenger boardings	Statistics in 2012			
		Minimum number of boardings	Number of boardings	Percentage of total boardings	Number of airports
Large	1% or more	7,318,005	518,145,004	70.8%	29
Medium	At least 0.25%, but less than 1%	1,829,501	124,445,303	17.0%	33
Small	At least 0.05%, but less than 0.25%	365,900	64,976,324	8.9%	76
Nonhub	More than 10,000, but less than 0.05%	10,000	23,620,648	3.2%	251
Commercial Service Nonprimary	At least 2,500 and no more than 10,000	2,500	613,191	0.1%	125

Source: GAO presentation of FAA data.

Note: The term “hub” is defined in federal law to identify commercial service airports as measured by passenger boardings, and the airports are grouped into four categories (49 U.S.C. § 47102). Most of the remaining commercial airports that qualify for federal funding are commercial service nonprimary airports, such as the Mid Delta Regional Airport in Greenville, Mississippi, and Cape Girardeau Regional Airport in Scott City, Missouri.

[5]Regional airlines provide domestic and limited international passenger service, generally using aircraft with fewer than 90 seats, and cargo service to smaller airports.

[6]AIP is a federal grant program funded from the Airport and Airway Trust Fund, which receives revenue from various aviation-related taxes.

[7]49 U.S.C. § 47114(c)(1)(b).

The EAS program has historically provided the most direct support to small community air service. Anticipating that airlines would focus their resources on generally more profitable, high-density routes, Congress established the EAS program as part of the Airline Deregulation Act of 1978. Under the EAS program, if an airline cannot provide air service to eligible communities without incurring a loss, DOT provides an airline a subsidy to serve those communities.[8] The program was initially enacted for 10 years, it was then extended for another 10 years, and in 1996, the 10-year time limit was removed. Congress has, over time, revised eligibility requirements, such as maximum subsidy amounts per passenger, and operating requirements, such as providing service with two-engine, two-pilot planes. The program now provides subsidies to airlines to serve small airports that are (1) at least 70 driving miles from the nearest medium- or large-hub airport, or (2) requires a per-passenger EAS subsidy less than $200 unless such point is greater than 210 miles from the nearest medium- or large-hub airport.[9] The amount of subsidies varies by location. Operating airlines receiving the subsidies must provide direct service to a nearby medium- or large-hub airport so that passengers can connect to the national air transportation network.[10] Our discussion of EAS in this testimony does not include communities in Alaska receiving EAS-subsidized air service since the requirements for communities in Alaska are different and are not representative of the program in the rest of the country.[11]

Congress also established SCASDP as a pilot program in 2000 in the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21),[12] to help small communities enhance their air service. AIR-21

[8]EAS-eligible communities are currently in 35 states and Puerto Rico.

[9]Communities located more than 210 miles from the nearest medium- or large-hub community airport are exempt from this $200-per-passenger subsidy limit.

[10]The governing statutes require DOT to consider five general selection criteria for airlines: (1) service reliability; (2) contractual and marketing arrangements with a larger airline at the hub; (3) interline arrangements with a larger airline at the hub; (4) community views as to which airline and option they prefer; and (5) whether the airline has included a plan in its proposal to market its services to the community. 49 U.S.C. § 41733(c)(1).

[11]For example, under EAS requirements for communities in Alaska, airlines may use smaller aircraft. Also, eligibility requirements differ for such things as amount of subsidy per passenger or distance from nearest large- or medium-hub airport.

[12]Pub. L. No. 106-181, § 203, 114 Stat. 61, 92 (2000).

authorized the program for fiscal years 2002 and 2003, and subsequent legislation reauthorized the program through fiscal year 2008 and eliminated the "pilot" status of the program.[13] Further, the FAA Modernization and Reform Act of 2012 reauthorized funding for SCASDP through fiscal year 2015.[14] The law establishing SCASDP allows DOT considerable flexibility in implementing the program and selecting projects to be funded. Grant funds can be used to cover various projects that can be reasonably related to improving air service to the community, such as any new advertising or promotional activities, or for studies to improve air service and traffic. The law defines basic eligibility criteria and statutory priority factors, but meeting a given number of priority factors does not automatically mean DOT will select a project. SCASDP grants may be made to single communities or a consortium of communities, although no more than 40 grants may be awarded in a given year and no more than four grants each year may be given in the same state.

The Airline Industry Is Adapting to Economic Pressures that Creates Challenges to Maintaining Air Service to Small Communities

Service to Small Communities Has Declined since 2007

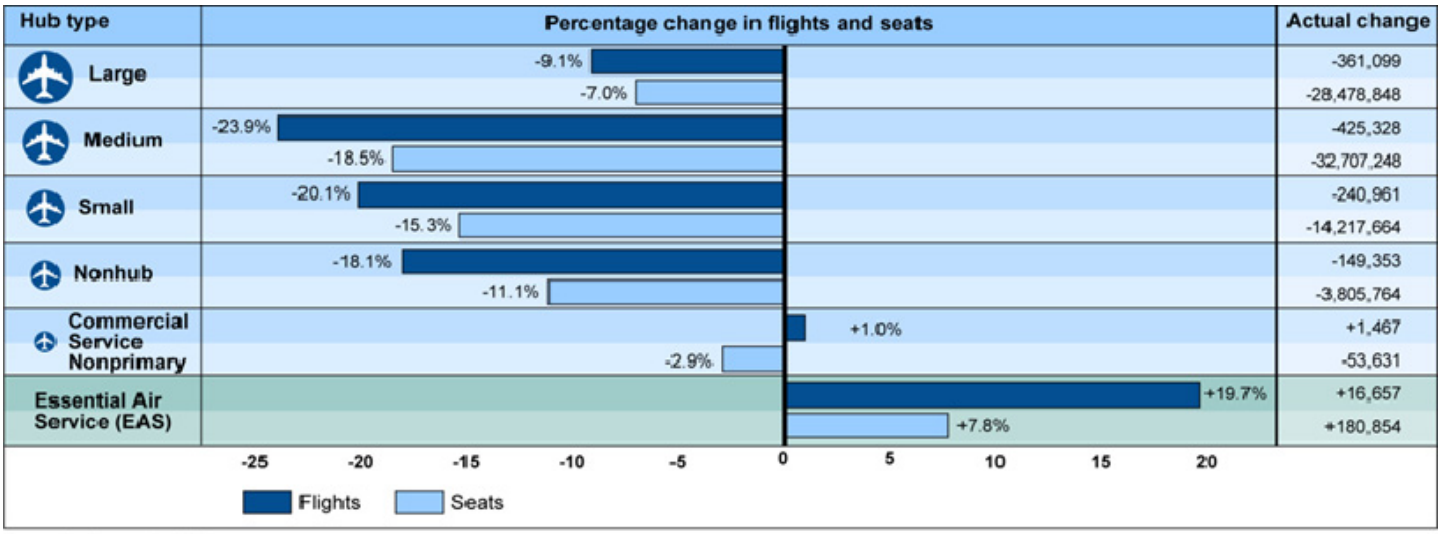
Air service to small airports as measured by the number of flights and seats available has mostly declined since 2007, but so has service to airports of all sizes. Small airports generally serve small communities. As figure 2 shows, medium-hub, small-hub, and nonhub airports saw the largest net declines proportionally in flights and available seats since 2007, and the largest airports experienced the smallest declines. The

[13]Vision 100—Century of Aviation Reauthorization Act, Pub. L. No. 108-176, 117 Stat. 2490 (2003).

[14]Pub. L. No. 112-95, § 429, 126 Stat. 11, 100 (2012).

smallest airports—commercial service nonprimary airports—experienced a slight increase in flights but a decline in available seats. Further, according to a recent Massachusetts Institute of Technology (MIT) study, 23 airports in small communities lost all service between 2007 and 2012.[15] Airports receiving EAS-subsidized air service saw about a 20-percent increase in flights and about an 8-percent increase in available seats since 2007 as some regional airlines serving EAS communities switched to smaller aircraft.[16]

Figure 2: Percentage Change in Number of Flights and Available Seats by Airport Category, from 2007 through 2013



Source: GAO analysis of DOT data.

Note: The term "hub" is defined in federal law to identify commercial service airports as measured by passenger boardings and are grouped into four categories (49 U.S.C. § 47102). Most of the remaining airports that qualify for federal funding are commercial service nonprimary airports.

[15]In the study, the term "smaller airports" refer to airports classified as medium-hubs, small-hubs, or nonhubs. See Michael D. Wittman and William S. Swelbar, *Trends and Market Forces Shaping Small Community Air Service in the United States*, MIT International Center for Air Transportation (May 2013).

[16]Air service is not alone in declining levels of transportation access. In addition to losing air service, small communities have also lost access to other transportation modes. According to DOT, an estimated 3.5 million rural residents lost access to intercity transportation (e.g., air, bus, ferry, or rail) between 2005 and 2010. In addition, while the percent of rural residents covered by airline service (72 percent) was unchanged during this period of time, the number of rural residents with air service as their sole mode of transportation more than doubled, increasing from 2.6 million in 2005 to 5.5 million rural residents in 2010.

Economic Factors Have Contributed to the Decline in Service to Small Communities

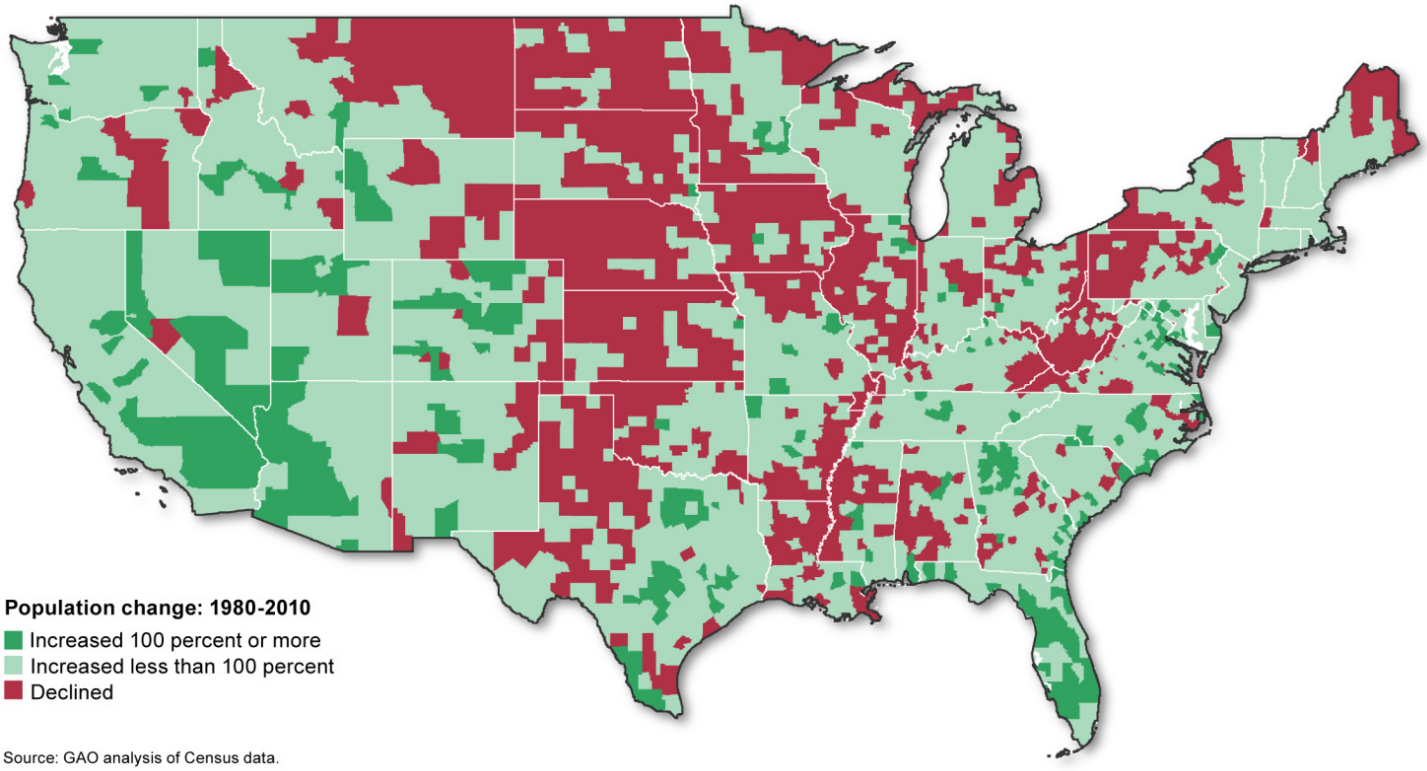
The reduced capacity for airline service in the United States since 2007 is attributable to a combination of factors, including higher costs, industry consolidation, and the last recession, which reduced demand. These and other factors also have had an effect on air service for small communities.

- First, the price of jet fuel more than quadrupled from 2002 through 2012 in nominal terms and endured a temporary spike where the price doubled over the 2007–2008 period. As a result of increased fuel prices, fuel costs have grown to become airlines' single largest expense at nearly 30 percent of airline operating costs in 2012. According to a study by MIT, regional aircraft—those mostly used to provide air service to small communities with between 19 and 100 seats—are 40 to 60 percent less fuel efficient than the aircraft used by their larger, mainline counterparts—those with more than 100 seats.[17] According to the study, fuel efficiency differences can be explained largely by differences in aircraft operations, not technology, as the operating costs per passenger for regional aircraft are higher than mainline aircraft because they operate at lower load factors and are flown fewer miles over which to spread fixed costs.
- Second, many small communities have lost population over the last 30 years. In previous work, we have found that population movement has decreased demand for air service to small communities.[18] Geographic areas, especially in the Midwest and Great Plains states, lost population between 1980 and 2010, as illustrated in figure 3 below. As a result, certain areas of the country are less densely populated than they were 35 years ago when Congress initiated the EAS program. For small communities located close to larger cities and larger airports, a lack of local demand can be exacerbated by passengers choosing to drive to airports in larger cities to access better service and lower fares.

[17]According to this study, regional jets are also 10 to 60 percent less fuel efficient than turboprops. See Raffi Babikian, Stephen P. Lukachko, and Ian A. Waitz, *The Historical Fuel Efficiency Characteristics of Regional Aircraft from Technological, Operational, and Cost Perspectives*, Massachusetts Institute of Technology, Department of Aeronautics and Astronautics.

[18]See GAO, *National Transportation System: Options and Analytical Tools to Strengthen DOT's Approach to Supporting Communities' Access to the System*, GAO-09-753 (Washington, D.C.: July 2009).

Figure 3: Shift in Population Distributions, from 1980 through 2010



Source: GAO analysis of Census data.

The effect of industry consolidation on the level of service to small communities is reflected in "capacity purchase agreements"[19]—agreements between mainline airlines and their regional partners. Under these agreements, a mainline airline pays the regional airline contractually agreed-upon fees for operating certain flight schedules. In recent years, according to a 2013 MIT study, mainline airlines have shifted a larger percentage of their small community service to regional

[19]Under a capacity purchase agreement, mainline airlines contract with regional airlines to provide air service beyond the mainline airline's route network to increase their capacity and revenue. Agreement terms vary, but mainline airlines generally take on all commercial functions, such as brand marketing, flight scheduling, and ticket pricing while the regional airlines are responsible for the aircraft and crews to operate the flights, and provide ground and flight operations.

airlines.[20] However, according to another 2013 MIT study, these mainline airlines have been reducing the total amount of capacity for which they contract by eliminating previous point-to-point service between nearby smaller airports, thus, reducing the level and frequency of service provided.[21]

Federal Programs and Policies Support Service to Small Communities but Face Challenges

Two federal programs continue to support air service to small communities but also face some challenges. EAS provides subsidies to operating airlines that provide air service to eligible communities in order to maintain the service and SCASDP provides competitive grants to small communities to attract and support local air service.

EAS Subsidies Are Increasing and Recent Program Changes Are Intended to Limit Eligibility

Subsidies provided to airlines serving EAS airports continue to increase. In 2009, we found that EAS subsidies had increased over time.[22] Specifically, the average annual subsidy that DOT provided for EAS service per community for U.S. states, excluding Alaska, almost doubled from $1 million in 2002 to $1.9 million in 2013. In addition, the appropriations Congress made available to EAS increased from about $102 million in fiscal year 2003 to about $232 million in fiscal year 2013 (see table 1 below).[23] According to DOT, the appropriation for the EAS program for fiscal year 2014 is $246 million.

[20]See Wittman and Swelbar, *Trends and Market Forces Shaping Small Community Air Service in the United States*.

[21]See Michael D. Wittman and William S. Swelbar, *Modeling Changes in Connectivity at U.S. Airports: A Small Community Perspective*, MIT International Center for Air Transportation (June 2013).

[22]See GAO-09-753.

[23]Funding for EAS has come from a combination of permanent and annual appropriations. The Federal Aviation Reauthorization Act of 1996 permanently appropriated $50 million of such funding for EAS and safety projects at rural airports from the collection of overflight fees. Pub. L. No. 104-264, § 278, 110 Stat. 3213, 3249 (1996). Congress has also appropriated additional funds from the general fund on an annual basis.

Table 1: Summary of EAS Program Appropriations, Communities Served, and Annual Subsidies, Fiscal Years 2002 through 2013

		Includes only non-Alaska		
Fiscal year	Total EAS appropriations (in millions)	Total annual subsidies (in millions)	Number of communtiies served	Average subsidy amount per community (in millions)
2002	$113.0	$89.6	94	$1.0
2003	$101.8	$93.1	103	$0.9
2004	$101.7	$89.1	108	$0.8
2005	$101.6	$93.3	115	$0.8
2006	$109.4	$99.1	116	$0.9
2007	$109.4	$98.1	109	$0.9
2008	$109.4	$97.7	103	$0.9
2009	$138.4	$151.8	107	$1.4
2010	$200.0	$163.0	109	$1.5
2011	$199.7	$176.0	109	$1.6
2012	$215.5	$225.0	120	$1.9
2013	$232.2	$219.9	117	$1.9

Source: DOT.

Note: The appropriations data are for the entire EAS program, including Alaska, Hawaii, and Puerto Rico. However, DOT's data, for information about the communities and airlines receiving EAS subsidies and their amounts, exclude EAS operations to communities in Alaska. These data do not represent a continuous picture of service provided under the EAS program within each fiscal year. The appropriations include the annually-appropriated $50 million from overflight fees.

EAS subsidies have supported air service to eligible communities as shown in table 1 above; however, that service may not always be the most cost-effective and practical option for some communities for connecting people to the national transportation network.[24] Under the EAS program, if an airline cannot provide air service to eligible communities without incurring a loss, DOT provides the airline a subsidy

[24]We have previously reported on how EAS service could be more cost effective and better suit community needs. See GAO-09-753 and GAO, *Options to Enhance the Long-term Viability of the Essential Air Service Program*, GAO-02-997R (Washington, D.C.: Aug. 30, 2002).

to serve those communities.[25] However, we have found that aircraft serving airports that provide EAS service were far less full than aircraft serving airports that did not receive such assistance. In 2009, we found that planes serving airports in 2008 with EAS service were only about 37 percent full versus an industry average of about 80 percent.[26] This was due, in part, to EAS subsidized service not having the destinations, frequency, or low fares that passengers prefer. Further, according to DOT officials, the population around some of the very small airports is too low to result in very high passenger loads. Since then, the load factor for these flights—the percentage of available seats filled by paying passengers—increased somewhat and was roughly 49 percent versus the industry average of 83 percent in 2013. This may be due, in part, to more regional airlines serving these EAS airports with smaller aircraft, as a result of changes in the EAS program that we recommended in 2009.[27] The number of EAS communities being served by airlines with aircraft smaller than 15-seats doubled from 2009 through 2013. In 2009, 16 EAS communities were served using 9-seaters, but 32 EAS communities were served with this aircraft in 2013. Great Lakes is one of the few remaining regional airlines that flies 19-seat turboprops, while other small regional airlines such as Cape Air, SeaPort, and Air Choice One—fly smaller 9-seat aircraft not subject to some FAA rules for operating scheduled

[25]Airlines requesting to provide subsidized EAS service must demonstrate to DOT that they cannot profitably serve the community without a subsidy. DOT then reviews information about the aviation industry's pricing structure, the size of aircraft required, the amount of service required, and the number of projected passengers who would use this service. DOT selects an airline based on statutory selection criteria and sets an annual subsidy amount intended to compensate the airline for the amount by which its projected operating costs exceed its expected passenger revenues as well as a profit element of at least 5 percent of total operating expenses, according to statute. 49 U.S.C. § 41734(d)(1).

[26]See GAO-09-753.

[27]See GAO-09-753. We recommended that Congress consider revising the EAS program to, among other changes, reexamine the statutory requirement that EAS support aircraft that are at least 15-seat, 2-engine, 2-pilot aircraft given that (1) the industry was not producing such aircraft and (2) a few airlines receiving EAS subsidies were providing quality, reliable service with smaller, usually 9-seat, aircraft. The regional aircraft fleet that has historically served small communities, the 37 to 50-seat jets, has become too costly to operate due to high fuel prices and is being removed from the regional airline fleet. At the same time, another mainstay of the small community airports—19-seat turboprops—is also exiting from service because of rule changes in the 1990s. The Consolidated and Further Continuing Appropriations Act (2012), Pub. L. No. 112-55, adopted our recommendation by waiving the requirement that communities that receive EAS service do so with 15-seat or larger aircraft. Additional legislation extended the elimination of the requirement through September 30, 2014.

service flights.[28] (See fig. 4 for examples of a 19-seat and 9-seat twin-engine turboprop aircraft.)

Figure 4: Examples of a 19-Seat Beechcraft 1900 Series and a 9-Seat Cessna 402 Turboprop Aircraft

Source: Great Lakes Aviation.

Source: Cape Air.

As a result of economic and cost trends, in 2009, we suggested program modifications and alternatives that presented the opportunity for more targeted and effective use of government subsidies.[29] DOT fully implemented our recommendation, and several reforms have recently been enacted limiting some access to the EAS program in an effort to control costs.

- Congress, through the enactment of the Federal Aviation Administration Modernization and Reform Act of 2012, changed the

[28]14 C.F.R. Part 121 prescribes rules governing the flight operations to hold an air carrier (airline) certificate. Scheduled-service airlines are generally issued a Part 121 certificate by FAA and operate turbojet-powered aircraft or aircraft with more than nine passenger seats or aircraft having a payload capacity of more than 7,500 pounds.

[29]See GAO-09-753. We recommended that DOT evaluate the reasonableness of providing transportation alternatives, such as unscheduled air service or surface transportation that might better serve communities than current scheduled EAS service. Further, we suggested Congress consider re-examining the EAS program's statutory requirements to determine if program changes could address how changes in aviation industry and population shifts affected the program. Also see GAO, *Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue*, GAO-11-318SP (Washington, D.C. March 2011). We suggested that Congress might wish to consider updating eligibility criteria and targeting service to consolidate subsidized air service. We also suggested that Congress may wish to consider revising the program's requirements to improve efficiency and better match capacity with community use.

eligibility requirements to limit participation in the EAS program by allowing only communities that would be eligible for the program to (1) have received subsidized EAS service at any time between September 30, 2010, and September 30, 2011, or (2) have received a 90-day notice from their operating airline to terminate subsidized EAS service, and DOT required the airline to continue to provide such service to the community.[30] Therefore, no new communities can enter the program should they lose their unsubsidized service.

- The act also requires that in order to remain in the EAS program, beginning with fiscal year 2013, EAS communities must maintain an average of at least 10 passenger boardings per service day.[31] On April 24, 2014, DOT issued a tentative order terminating EAS eligibility at 13 communities because they did not meet the 10-enplanement-per-day requirement established in the act.
- Further, the act prohibits DOT from providing EAS subsidized service to communities whose annual passenger subsidies are greater than $1,000 per passenger regardless of their distance from the nearest hub airport. According to DOT, the $1,000 per passenger limit has resulted in four communities being eliminated from the EAS program.

With some changes to the EAS program having only recently gone into effect, the impact on the program is not yet fully known.

Small Community Grants Have Had Limited Effectiveness in Retaining Air Service

Small-hub and smaller airports are eligible for SCASDP grants provided the airport is not receiving sufficient air service or had unreasonably high airfares.[32] Congress has provided funding for SCASDP since fiscal year 2002—ranging from a high of $20 million for fiscal years 2002 through 2005 to a low of $6 million in fiscal years 2010 through 2013. In fiscal year 2013, DOT awarded 25 grants totaling almost $11.4 million to

[30]The FAA Modernization and Reform Act of 2012 also specified that only locations that have at least 10 boardings per day during the most recent fiscal year beginning after September 30, 2012, except for locations beyond 175 miles of a large- or medium-hub airport, are considered eligible under the EAS program, but the Secretary of Transportation is allowed to restore eligibility if certain conditions are met. Alaska and Hawaii are exempted from this change. Pub. L. No. 112-95 § 421, codified at 49 U.S.C. § 41731(a)(1)(B) and 41731(d).

[31]49 U.S.C. § 41731(a)(1)(B). The law provides exceptions for communities in Alaska and Hawaii, and for those that are more than 175 driving miles from the nearest large or medium hub airport. 49 U.S.C. § 41731(c).

[32]49 U.S.C. § 41743.

airports in 22 states (see table 2). While funding for SCASDP is significantly less than funding for the EAS program, some small community airports depend on SCASDP grant awards as a means to stimulate economic development and attract business to the area surrounding the airport through enhanced air service. According to DOT, the appropriation for SCASDP for fiscal year 2014 is $5 million.

Table 2: Summary of SCASDP Funding from Fiscal Years 2002 through 2013

Fiscal year funding	Total SCASDP appropriations (in millions)	Total annual grant awards (in millions)	Number of grants	Average grant award amount (in millions)
2002	$20.0	$20.0	40	$0.5
2003	$20.0	$19.9	36	$0.6
2004	$20.0	$21.8	46	$0.4
2005	$20.0	$19.0	35	$0.6
2006	$10.0	$9.7	25	$0.4
2007	$10.0	$9.0	26	$0.4
2008	$8.0	$6.5	15	$0.5
2009	$8.0	$6.9	20	$0.3
2010	$6.0	$7.0	19	$0.4
2011	$6.0	$15.0	29	$0.2
2012	$6.0	$13.9	33	$0.2
2013	$6.0	$11.4	25	$0.2

Source: DOT.

Note: For fiscal year 2010, Congress appropriated $6 million for SCASDP, but DOT added additional funds that could be reallocated from prior year recoveries in order to make funding available for additional grant awards, which continued into fiscal year 2013.

We and others who have examined SCASDP have observed that the grant program has had limited effectiveness in helping small communities retain air service. In 2005, we found that initial SCASDP projects achieved mixed results.[33] Specifically, about half of the airports that reported air service improvements were self-sustaining after their grant had been completed. At that time, we recommended that DOT evaluate the program again before the program was reauthorized.

[33]See GAO, *Commercial Aviation: Initial Small Community Air Service Development Projects Have Achieved Mixed Result*s, GAO-06-21 (Washington, D.C.: November 2005).

In response to our recommendation, the DOT Assistant Secretary for Aviation and International Affairs requested the DOT Office of Inspector General (OIG) to review the program's effectiveness in improving air service to small communities.[34] The review included 40 grants awarded between 2002 and 2006 (excluding feasibility studies) that had been closed for 12 months or more as of March 31, 2007, and determined whether the projects could sustain themselves without continued federal financial support. The OIG found that 70 percent of the grants in the review failed to fully achieve their objectives; specifically, 50 percent of the grants were unable to achieve any of their articulated grant objectives or were unable to sustain grant benefits beyond the grant completion and 20 percent were either partially able to obtain or achieve all of their grant objectives or were voluntarily terminated. The remaining 30 percent of the grants were successful in achieving their grant objectives and sustaining the resulting benefits for at least 12 months. The OIG made recommendations to improve the grant award process by (1) giving priority to communities with better developed grant applications, (2) requiring communities requesting non-marketing grants to use a part of the funding awarded to them to implement a marketing program, and (3) evaluating the impact of the "same project limitation"[35] on program effectiveness and seek legislative changes, if necessary. According to the OIG's report, DOT concurred with each of the recommendations and took the appropriate actions to implement them. Most recently, an academic study conducted by an MIT researcher evaluated 115 SCASDP grants from 2006 through 2011 and found that less than 40 percent of the grants met their primary objectives.[36]

On the other hand, SCASDP grants have been used to fund some successful projects. We found in 2005 and 2007 that SCASDP grantees pursued a variety of goals and strategies for supporting air service, and some of the grants resulted in successfully meeting their intended

[34]DOT OIG, *Report on the Audit of the Small Community Air Service Development Program*, Office of Aviation Analysis, CR-2008-051 (May 13, 2008).

[35]Communities that have been awarded grants in previous years that want to apply for another grant are precluded from seeking funds for projects with goals for which they have already received a grant award. However, previous grant recipients may submit grant proposals and seek grant funds for new projects.

[36]See Michael D. Wittman, *Public Funding Of Airport Incentives: The Efficacy Of The Small Community Air Service Development Grant (SCASDG) Program*, Massachusetts Institute of Technology, International Center for Air Transportation (January 2014).

purposes.[37] We found these successes include grantees that identified a variety of project goals and strategies to improve air service to their community, including (1) adding flights, airlines, and destinations; (2) lowering fares; (3) upgrading the aircraft serving the community; (4) obtaining better data for planning and marketing air service; (5) increasing enplanements; and (6) curbing the loss of passengers to other airports. For example, our 2005 report found that 19 of the 23 completed grants resulted in some kind of improvement in service, either in terms of an added carrier, destination, flights, or change in the type of aircraft.

In 2007, we also found that a review of 59 grantees' final reports for completed projects indicated that 48 of these increased enplanements as a result of their SCASDP grant. In addition, the 2008 DOT OIG report found that grants targeting the introduction of new service rather than expanding existing service were more successful and noted that grants targeting existing service may be less likely to succeed because mature markets may provide less of a growth opportunity than well-selected new markets or may reflect attempts by communities to resuscitate a failing service. Lastly, the recent MIT study highlighted three communities—Appleton, Wisconsin; Bozeman, Montana; and Manhattan, Kansas—that were able to effectively use the grants to expand service in their communities.

In addition, DOT program officials we interviewed highlighted other benefits that have resulted from SCASDP grants that they said extend beyond the completion dates of the grants. For example, the officials stated that one recipient of a 2011 grant recently reported that simply obtaining the federal grant allowed the community to obtain a line of credit and prove to an airline that the grantee was able to support sustained and profitable service, even though the federal grant funds were not expended. In another example, the officials stated that one recipient of a 2002 grant reported in 2011 that while unable to establish air service prior to receiving its grant, the grant enabled the community's airport to establish and sustain air service to the area and has resulted in substantial economic benefits for the community.

[37]See GAO-06-21 and GAO, *Commercial Aviation: Programs and Options for Providing Air Service to Small Communities*, GAO-07-793T (Washington, D.C.: April 2007).

Legislation, Regulations, and Airport Policies Affect Service to Small Communities

In addition to the federal programs previously discussed, other legislative and regulatory policies could affect the provision of air service to small communities.

- **Perimeter rules.** Airlines operating out of Reagan National, LaGuardia, and Dallas Love Field Airports are restricted in the distance that they can travel.[38] The purposes of these rules vary but are intended, in part, to help encourage air service to smaller communities closer to the airport. However, the restrictions at Dallas Love Field will end later this year, and the number of exemptions to the perimeter rule at Reagan National has increased.[39]

- **Safety regulations.** A new federal law that increased the qualification requirements for pilots to be hired at U.S. airlines has caused some concerns related to a potential future shortage of qualified pilots.[40] In July 2013, FAA, as required by law, issued a new pilot qualification rule that increased the requirements for first officers who can fly for U.S. passenger and cargo airlines and requires that first officers now hold an airline transport pilot certificate, just as captains must hold, requiring, among other things, a minimum of 1,500 hours of total time as a pilot.[41] Regional airlines—most likely to provide air service to small communities—have been disproportionally affected by the new rule because, prior to the new rule, more of their pilots did not meet the new minimum qualifications compared to their larger, mainline

[38]At Reagan National Airport, unless congressionally exempted, no direct service can extend beyond 1,250-miles (49 U.S.C. § 49109), at LaGuardia beyond 1,500 miles, and at Dallas Love Field to Texas and neighboring states. The Port Authority of New York and New Jersey impose the LaGuardia rule, while the Reagan National and Dallas Love rules are imposed by statute. In 2006, the Dallas Love restrictions, called the "Wright Amendment," were repealed as of October 13, 2014. Pub. L. No. 109-352, § 2(b), 120 Stat. 2011.

[39]GAO, *Slot-Controlled Airports: FAA's Rules Could be Improved to Enhance Competition and Use of Available Capacity*, GAO-12-902 (Washington, D.C.: September 2012).

[40]Airline Safety and FAA Extension Act of 2010, Pub. L. No. 111-216, § 217 (c)(1), 124 Stat. 2348, 2368.

[41]The airline transport pilot certificate is the highest level of pilot certification, requires the highest amount of cumulative flight time and is necessary to fly as a captain or first officer for an airline. Previously pilots could work as first officers for regional airlines and build additional flight time necessary to qualify for an airline transport pilot certificate, but under the new pilot qualification rule, they must attain this experience in other ways prior to being eligible to fly for a regional airline. 78 Fed. Reg. 42324 (July 15, 2013).

airline counterparts.[42] Earlier this year, we found that 11 of the 12 regional airlines that were interviewed reported difficulties finding sufficient numbers of qualified pilots over the past year. Furthermore, five of these regional airlines reported to us that they were limiting service to some smaller communities because they did not have pilots available to provide that service. For instance, Great Lakes Airlines recently canceled service to ten small communities reportedly due to a lack of available pilots. Similarly, Silver Airways provided DOT with the required notice of its intent to discontinue scheduled service to five small communities reportedly for the same reason. However, given that the congressional mandate to increase pilot qualifications for airline pilots only recently went into effect, some market adjustments are to be expected, and such adjustments could continue to affect air service in smaller community markets.

Multimodal and Nongovernmental Transportation Options Could Help Small Communities

A Multimodal Approach Could Be Used to Connect Communities

In July 2009, we concluded that a multimodal approach—one that relies on for example, bus service to larger airports or air taxi service to connect communities—is an alternative to providing scheduled air-service connectivity to small communities. For some communities that receive EAS subsidies—for example, those that have limited demand for the service due to proximity to other airports or limited population—other transportation modes might be more cost effective and practical than these subsidies. This approach may be of use to small communities that have not been able to generate sufficient demand to justify the costs for provision of air service, resulting in rising per-passenger subsidies.[43]

[42]GAO, *Aviation Workforce: Current and Future Availability of Airline Pilots*, GAO-14-232 (Washington, D.C.: February 2014).

[43]GAO-09-753.

When potentially cost-effective alternatives, such as bus service to other airports, are not used, the costs of subsidies may be higher than necessary to link these communities to the nation's passenger aviation system.

In 2009, we recommended that DOT assess whether other forms of air service or other modes of transportation might better serve some communities and at less cost. While DOT did not conduct such an assessment, the department took action to implement the options we identified in the report and achieved the intent of our recommendation. Further, the Future of Aviation Advisory Committee—a committee that provides information, advice, and recommendations to the Secretary of Transportation on U.S. aviation industry competitiveness and capability to address evolving transportation needs—recommended in 2011 that a task force be established to examine the EAS program and identify rural multimodal service opportunities for EAS-eligible communities, among other things. Although no provisions have been enacted into law to specifically promote intermodal alternatives to the EAS program, DOT (1) convened a working group in 2011 to study this area and (2) added new language to its SCASDP 2012 Request for Proposals, such language that carried forward in the 2013 request, to clarify that intermodal solutions to air service—for example, cost-effective bus service—are eligible for grants. In 2009, we also suggested that Congress consider re-examining EAS program's objectives and statutory requirements to include the possibility of assessing multimodal solutions for communities. Considering options to the current EAS program, such as multimodal transportation, may help Congress identify opportunities to limit the financial strain on the EAS program.

Local Community Approaches to Attracting Air Service Have Had Some Success

Some local communities and small airports in danger of losing service or hoping to attract new service have opted to provide a range of incentives to airlines. The DOT OIG also found that federal SCASDP grants were more likely to be successful when paired with funding mechanisms based on local community support.[44] The different types of incentives that communities and airports offer to airlines include:

[44]DOT OIG, *Report on the Audit of the Small Community Air Service Development Program*.

- Minimum revenue guarantees—agreements that establish a target amount of revenue that an airline will receive for operating a particular service to a particular destination over a given length of time. According to a 2009 Transportation Research Board (TRB) report, as airlines have been increasingly reducing service at many communities because of financial hardships, airports have increased the amount of revenue guarantees that they have provided.[45] The report found, based on a survey of several airports, that SCASDP funds were often used to support the minimum revenue guarantees, and the amounts of the guarantees ranged from $250,000 to $1.6 million. For example, Rhinelander-Oneida County (Wisconsin) Airport used a SCASDP grant to provide a revenue guarantee of $492,000 to support nonstop service to Minneapolis. Rhinelander convinced Northwest Airlink to convert three of its four daily one-stops (via Eau Claire, Wisconsin) to nonstops. Because the service generated more revenue for the airline than had been expected, the airport was able to return nearly half of the revenue guarantee to DOT.
- Guaranteed ticket purchases (travel banks)—programs that effectively ensure that the target airline will have passenger traffic worth a certain volume of revenue. Businesses or individuals deposit funds in a bank account that can be used only for purchasing tickets on the target airline for travel from a community during a given period of time. In 2005, we found that most airline officials interviewed were unfavorably disposed toward travel banks, citing the difficulty in administering them and their poor track record of success.[46] Additionally, beginning in 2005, DOT announced that it would not support travel banks for SCASDP grants.
- Cost subsidies—financial incentives that generally offset some aspect of an airline's costs of operation. These subsidies can include waivers or discounted fees (e.g., landing fees, terminal rents, gates, jet bridges) or ground station costs during a promotional period. Cash subsidies are generally a fixed amount and are paid without regard to the amount of revenue that an airline may generate during the agreed-upon period. For example, according to the 2009 TRB report, the Charles M. Schulz Sonoma County Airport waived terminal rents and landing fees for Horizon Air for 12 months to incentivize the airline to maintain its service at the airport, and valued that waiver at slightly

[45]TRB, *Passenger Air Service Development Techniques*, Airport Cooperative Research Program Report 18, sponsored by FAA (Washington, D.C.: June 2009).

[46]GAO-06-21.

under $100,000. However, according to DOT, this example would be considered as a type of in-kind contribution, which is discussed below.

- Marketing and advertising services—agreements whereby airports or communities purchase the marketing or advertising on behalf of the airline's new service designed to build awareness for a new service and develop demand so that the service can become self-sustaining. Many small airports are located in multi-airport regions in which passengers will drive long distances to nearby airports to save on price, so such advertising is of increasing importance to attract passengers to fly from their local airport. For example, according to the 2009 TRB report, Huntsville, Alabama, used a SCASDP grant to support its airport's "Huntsville Hot Ticket" program that sent e-mail fare alerts to customers when fare specials were announced, and allowed customers to book tickets directly on the airport's flyhuntsville.com website.
- Non-financial (in-kind) contributions—assistance referring to products, goods, or services that otherwise might have to be paid for, but which third-party providers can donate instead. For example, local advertising firms may provide billboards or local media may provide newspaper or TV coverage.

Each of these incentives has certain advantages and associated risks or disadvantages, but more airports in smaller communities tend to use revenue guarantees, likely because those communities recognize that they need to share in the airlines' financial risk of serving smaller markets. However, few incentives tend to be undertaken as the only type of incentive, that is, for example, revenue guarantees are usually combined with other forms of incentives, such as cost or fee waivers.[47] In addition, given that the service may fail, the use of federal funds to support the minimum revenue guarantees effectively requires the federal government to share this potential risk. In its 2008 review of SCASDP, the DOT OIG reported that airlines operating in small communities typically have limited resources to invest in marketing designed to stimulate demand, and using funds for marketing programs in support of other incentive programs—such as revenue guarantees or cost subsidies—can stimulate demand by increasing awareness of airport services and mitigate "leakage" of passengers to surrounding airports.

[47]TRB, *Passenger Air Service Development Techniques*.

Chairman LoBiondo, Ranking Member Larsen, and Members of the Committee, this completes my prepared statement. I would be pleased to respond to any questions that you may have at this time.

Appendix I: GAO Contact and Staff Acknowledgments

GAO Contact and Staff Acknowledgments

For further information on this testimony, please contact Gerald L. Dillingham, Ph.D., at (202) 512-2834 or dillinghamg@gao.gov. In addition, contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Individuals making key contributions to this testimony statement include Paul Aussendorf, Assistant Director; Cathy Colwell, Assistant Director; Vashun Cole; Bonnie Pignatiello Leer; Joshua Ormond; and Amy Rosewarne. The following individuals made key contributions to the prior GAO related work include: Amy Abramowitz, Dave Hooper, John Mingus, and Sara Ann Moessbauer.