The 88th Annual Convention of the National Association of State Aviation Officials (NASAO) was held in downtown St. Paul, Minnesota, September 7–11. About 270 attendees and 46 exhibitors participated, with 38 states represented.

The event officially opened the evening of Sept. 8 with a ribbon cutting by Cassandra Isackson, director of MnDOT’s Office of Aeronautics, and Shelly Simi, NASAO president and CEO. Isackson also serves as chair of the NASAO executive committee. As conference hosts, Isackson and MnDOT Aeronautics staff played an integral role in planning and delivering the event, with assistance from AirTAP staff.

On the first morning, Isackson and Simi offered a welcome, along with St. Paul Mayor Melvin Carter. Carter emphasized the importance of aviation in Minnesota and in particular, St. Paul. The Downtown St. Paul Airport/Holman Field supports more than 1,400 jobs, including about 400 directly tied to on-airport business.

“That’s an incredible impact, and our community wouldn’t be the same without it,” Carter said.

The convention agenda was packed with plenary and concurrent sessions exploring the future of urban air mobility, remote air traffic control towers, UAS operations, industry partnerships, and much more (see related article in this Briefings on air service trends). Attendees took part in off-site field trips focused on innovation at the St. Paul Downtown Airport (pictured, left) and 3M headquarters. Numerous award recipients were honored and new NASAO leadership was elected during the convention as well.

Isackson said of the many informative sessions offered this year, she learned the most in Mark House’s FAA budget presentation. In that session, House, the FAA Acting Assistant Administrator for Finance and Management, explained how the FAA is financed as well as the underlying problems with that financial structure. The agency has its own dedicated trust fund, funded primarily by commercial operations; despite that, it has been plagued by instability, House noted. He closed by offering a few potential solutions.

“Understanding the challenges our federal partners face, and vice versa, enables us to do a collective better job in delivering the nation’s aviation system,” Isackson said.

Next year’s NASAO convention will be held September 13–16 in Greenville, South Carolina. Isackson’s advice for next year’s planning committee: “Take a nap now—you’re going to need it!”

Small community airports have experienced turbulence in the past decade, and the current air service trends indicate the bumpy ride could continue in the years to come. During the National Association of State Aviation Officials 2019 conference held in St. Paul, Minnesota, experts came together to learn about these troublesome trends and the innovative approaches needed to combat them and preserve air service for smaller communities.

**An economic linchpin**

During the past 15 years, more than 30 small communities lost all commercial air service—an alarming trend for states that depend on service to smaller communities for both tourism and economic development.

“Of course we have the Atlanta airport, but we have many other non-hub airports as well,” said Steve Brian, aviation program manager at the Georgia Department of Transportation. “We are very concerned for those airports, because we really want to spread out our commerce throughout the state for economic development and keep these economies connected to the world.
through aviation.”

In rural states such as Wyoming, commercial air service is critical for a number of reasons, including tourism and geography. “Air service is a quality-of-life tool for us—we have a very low population with a lot of small towns, a lot of roads, and a lot of distance,” said Shawn Burke, air service development analyst with the Wyoming Department of Transportation. “We know that from an economic perspective, a 1 percent increase in air passenger traffic leads to a 0.12 percent increase in per capita income, and we can realize a $25 return for every dollar invested in air service.”

Rough skies ahead
Unfortunately, some challenging air service trends have made retaining commercial air service extremely difficult for smaller communities. One of the greatest difficulties is the national pilot shortage, which is expected to worsen in the years to come. According to the Regional Airline Association, pilot demand is growing, new pilot certificates are shrinking, and nearly half of today’s pilots are facing mandatory retirement within the next 15 years.

“Airlines have been turning to larger aircraft to reduce the number of pilots needed; however, not all small markets can support larger aircraft,” Brian said. “In addition, we’re dealing with volatility in the price of oil, constraints on the number of smaller jet aircraft that can be flown by regional operators, and reliability issues at the regional level in particular.”

These problems—along with signs that the economy may have peaked—have officials in Georgia preparing for a worst-case scenario. “We need to educate our local communities and governments about the vulnerability of local air service in our state before something happens and put a plan in place in case something does happen,” Brian said. “In the meantime, we’re working to come up with a program to sustain service if there is decline in the economy and develop a program to assist small airports with limited budgets.”

Weathering the storm
Despite the negative trends, there are some positive trends for air service in smaller communities. Several major carriers are currently demonstrating growth potential at small community non-hub airports, and regional airlines such as Twin Cities-based Sun Country Airlines are expanding. Since 2018, Sun Country has added 32 nonstop routes and 9 new cities to its network.

“We had record growth, revenue, and earnings in 2018 and are currently heading in a good direction,” said Joe Beckendorf, manager of network planning for Sun Country Airlines. “We’ve refined our strategy to target the leisure passenger going to warm-weather destinations and have reconfigured our planes to reflect that. We also have the flexibility to fly seasonal routes and not schedule flights on off-peak days.”

Part of the secret to Sun Country’s success has been a careful network planning process. “We start by looking at every possible opportunity, and often that information comes from airports with in-depth data we don’t always have access to,” Beckendorf said. “We begin with our existing markets and look at where we should adjust or increase frequencies, lay that out on a schedule, and then decide where we have the potential to add flights to new cities.”

In another win for small community air service, Wyoming’s innovative $15 million public-private partnership known as capacity purchase agreement resulted in a long-term commitment from SkyWest Airlines to provide service retention at critical-service airports requiring state support. “As a result of this new agreement, two of our airports gained additional flights, our state’s per-passenger costs were reduced by 25 percent, and we can carry an additional 40,000 passengers annually—all at a similar cost to our previous efforts,” Burke said.

“The reality is that many of our nation’s smallest airports are at risk of losing all service, and given the shift to bigger aircraft, we need a new way to go about things.”
—Shawn Burke, Wyoming DOT

Sustaining air service
In the future, it is likely that small communities will increasingly need to look at new ideas such as capacity service agreements or even small electric planes (as the technology emerges) to sustain their commercial air services despite strong headwinds.

“We all love living in small communities, and we deserve the same benefits and the same access to the national transportation system as some of the bigger communities. But the reality is that many of our nation’s smallest airports are at risk of losing all service, and given the shift to bigger aircraft we need a new way to go about things,” Burke said. “Remember you’re selling air service, not your state or communities. Act more like an airline and remember money talks. You need more than a portfolio that says, ‘You’re missing out on us.’ You need to have the financial support behind you.”

To make air service work in small communities, Burke added that airports need to get the service right and be patient. “Sustainable commercial air service doesn’t just happen overnight—you need to make a long-term commitment to get it to succeed,” he said. “You need to have the right aircraft flying at the right times, be reliable, stay realistic, and remember that commercial air service is an important economic development tool.”
An airport story’s: Mora Municipal Airport

The Mora Municipal Airport, located about 70 miles north of the Minneapolis–St. Paul metro area, serves east central Minnesota. The facility has undergone a number of updates and expansions since it was constructed in 1945; it currently includes a 4,800-foot paved primary runway, parallel taxiway, and a grass crosswind runway in addition to 17 hangars housing 45 based aircraft. More than 24,000 operations occur at the airport each year, most for tourism and local recreation.

“Flying is slowly making a return to the community and we’re seeing the number of operations increasing,” says Joe Kohlgraf, who serves as the airport manager in addition to his role as the city’s public works director. The duties of airport manager transitioned from the city administrator to the public works director in June 2016.

Kohlgraf sees young people showing more interest in aviation and in wanting to become recreational pilots. “This is evident through an increase in day and half-day trips for the purpose of getting up in the air and flying,” he says.

Most of the airport’s maintenance is handled by the city’s public works staff; however, larger projects requiring significant time or expertise may be contracted, Kohlgraf explains. The city does all of the mowing, trimming, snow plowing, and yearly crack sealing.

The airport received a Project of the Year award from the Minnesota Council of Airports in 2018 for its turf crosswind runway project. Construction began in October 2016 and ended in July 2017 at a cost of nearly $1.1 million. When nominating the project for the award, the airport’s consultant, SEH, noted that the project needed to overcome significant hurdles with the environmental approval process and necessary land acquisition resulting from opposition of residents adjacent to the airport. The outcome of the new runway construction, however, was a great asset to the airport and the city and improves safety for all airport users, SEH wrote.

Kohlgraf said that with his non-flying background, he appreciated learning about the airport design and layout process. “Turf runways are far and few in this area,” he says. “There have already been a lot of pilots who normally would not fly to Mora visiting to try it out.”

Get ready for winter with RCAM

Icing season is officially here in Minnesota! Like cars, aircraft don’t perform well on icy surfaces. Runway contaminants such as ice can increase the length of runway needed for an aircraft to safely land by 200 percent or more compared to a dry runway. Braking action can become poor to nil. If gusty winds are added to the mix, control of an aircraft can be nonexistent.

Some airports have the ability to remove contaminants from their runways fairly quickly for arriving and departing aircraft. Others might have to close runways for several hours until help can arrive. Either way, those wintery conditions can affect how aircraft will perform on the surface, and airports need to let pilots know about it.

The FAA recently came out with the runway condition assessment matrix (RCAM), which is a new way to evaluate runway contaminants. Airport managers assess runway conditions and aircraft control and braking based on a set of criteria, then assign a number (on a scale of 0–6) called a runway condition code. Airport managers notify pilots of the runway condition code with a notice to airmen (NOTAM). A RCAM NOTAM allows pilots to calculate the increase in runway length needed for their aircraft to land safely. It also allows them to evaluate the risk involved, their comfort level, and the skill level needed to take off or land at an airport with contaminants. Without this type of information, pilots might assume a runway has no contaminants and possibly land at an airport with ice so thick their aircraft brakes wouldn’t be effective—which in turn could lead to a hazardous situation such as a runway incursion. Assuming is never a good method of practice when it comes to flying. That’s why RCAM NOTAMs are so important for airport managers to publish and for pilots to read.

—Kelly Akhund, MnDOT Office of Aeronautics

Attend training right where you are

Speaking of NOTAMs, have you been wanting to learn more about them—and other airport hot topics—but can’t spare time to travel? If so, MnDOT’s Office of Aeronautics has training just for you! MnDOT’s E-Learning courses are training modules for airport managers, sponsors, board members, staff, contractors, and others—offered on-demand and FREE of charge. Topics include 5010 airport inspections, NOTAMs, and the state grant process, along with the related laws, rules, and regulations.

Bob Hansen, fleet, facility, and landfill manager for the City of Fergus Falls, oversees the city’s buildings and equipment, including its municipal airport. He says one significant challenge is trying to meet FAA guidelines on airport equipment, including size limits and purchasing. Hansen has completed MnDOT’s E-learning courses on self-inspections, NOTAMs, snow and ice control plans, and the state grant process and found them beneficial. “I think anyone that has any dealings with the airport, no matter how significant, will get a better understanding of airport operations from these courses,” he says.

MnDOT’s E-Learning courses are available at dot.state.mn.us/aero/operations/airportmanagerreferences.html.
Training opportunities

Get more information about these FREE training events and register at [http://www.airtap.umn.edu/events/index.html](http://www.airtap.umn.edu/events/index.html).

**Airports 101**
Dec. 10, 2019: Minnesota State University—Mankato

Whether you’re a new airport manager or a seasoned pro, join your peers from across Minnesota in Mankato on December 10 for Airports 101, a one-day workshop on airport operations and management.

You’ll learn how airport managers ensure that their airport is safe for operations, which includes making regular inspections, reporting discrepancies through NOTAMs, and repairing deficiencies promptly. The event will also review airport managers’ access to aircraft operating areas and manager duties such as maintaining airport lighting, mowing, plowing snow, and monitoring fuel systems.

**Airport Economic Impact Study: Methodology and Calculator Training**
- Feb. 4, 2020: Brainerd
- Feb. 5, 2020: University of MN–Twin Cities
- Feb. 11, 2020: Owatonna
- Feb. 12, 2020: Willmar
- Feb. 19, 2020: Thief River Falls
- Feb. 20, 2020: Virginia

Have you ever wondered how much annual economic activity is generated by your local airport? Would you like to know how this translates into jobs, earned income, and spending in the local economy? If so, please join us to learn the answers to these and other questions related to how airports benefit communities throughout Minnesota.

In 2019, MnDOT conducted a statewide airport economic impact study, which culminated in a public economic impact calculator. The statewide economic benefits will be announced in December and the tool will be available by January 1, 2020.

In this training, you’ll learn about the study methodology, the calculator, and media tools to help share the economic benefits of airports throughout the state.

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New aviation resources

The *Minnesota Airport Directory and Travel Guide* has gone digital with a ForeFlight Content Pack download and an interactive web map. MnDOT has created a custom content pack to integrate the *Airport Directory* into the ForeFlight mobile app and a mapping application to allow users to interact with the directory information. Check these out at:
- [foreflight.com/products/foreflight-mobile/user-content/content-packs](http://foreflight.com/products/foreflight-mobile/user-content/content-packs)
- [dot.state.mn.us/aero/airportdirectory/airportfinder/index.html](http://dot.state.mn.us/aero/airportdirectory/airportfinder/index.html)