8

Airports

2024 Regional Transportation Plan
8 Airports

There are two public-use airports located in Franklin County. They are the Orange Municipal Airport in Orange and Turners Falls Airport in Montague. A map showing the locations of these airports is located at the end of this chapter. These public-use airports benefit the region in several ways. Primarily, local airports are part of the national air transportation system, which provides intermodal connections and alternatives for fast, efficient transportation of people and goods. Local airports provide public safety services, such as emergency medical air transportation. The economic benefits of local airports include supporting existing businesses and attracting new businesses by providing convenient access to and from the area. The popularity of aviation-related recreational activities, such as parachuting, generates tourism activity that brings many visitors to the area and supports economic activity. In addition, there is more on the horizon to expand the industry in the region, with the planned launch of an aviation mechanics program led by the Franklin County Technical School at the Turners Falls Airport.

According to the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems, both the Turners Falls and Orange Municipal Airports are classified as “general aviation” airports. General aviation airports provide facilities for privately owned personal and corporate aircraft, and are also used for a variety of other aviation activities, such as flight instruction, charter services, aerial agricultural spraying, aerial photography, parachuting and similar activities. Both airports are expected to remain general aviation airports in the future, and are not expected to expand into commercial airports with scheduled passenger or freight service. At the same time, neither airport is at capacity, and both airports could accommodate increased business and flight activity.

Both airports are viewed as important economic resources for their towns and for the region overall. Both airports are located adjacent to industrial parks to facilitate and promote their use by local businesses. In Turners Falls, there is the 225-acre Airport Industrial Park. In Orange, there are two industrial parks, the 57-acre Orange Industrial Park to the east of the airport and the 59-acre Randall Pond Industrial Park to the west of the airport. Each of these industrial parks are nearly built out. The Town of Orange is exploring options to expand its industrial land offering near the Randall Pond Industrial Park to accommodate future business growth.

The Orange Municipal Airport and the Turners Falls Airport are each directed by an Airport Commission with the day-to-day management by an Airport Manager. Airport Commission
members are appointed by the Select Board. Both airports have engaged in long-term planning regarding improvements and expansions to their facilities and use, including activities to attract additional business.

An Airport Master Plan is a comprehensive study of a particular airport as it plans for its future growth and development. The community planning processes to create an Airport Master Plan involve coordination among the consultants preparing the plans, the Airport Commissions, municipal boards and officials, the general public, regional planning and economic development organizations, and State and Federal agencies.

Under the direction of the Airport Managers and Airport Commissions, the airports have each used a community planning process to create Airport Master Plans. The Orange Airport Master Plan was last updated in 2000 and is scheduled to be updated again in 2026. The Tuners Falls Airport completed its most recent Master Plan Update in February 2019, replacing the previous update from 1999. As part of the master planning process, an Airport Layout Plan (ALP) was prepared for each airport. An ALP is a detailed drawing of current and planned airport facilities. The planning process also includes the creation of a Capital Improvement Plan (CIP), which is a schedule of prioritized improvement projects with their estimated costs. An airport’s CIP is updated annually to reflect completed projects and to prioritize future projects.

Improvements that are specifically aviation-related may be eligible for funding by the FAA’s Airport Improvement Program (AIP). The purpose of the AIP is to provide assistance to public-use airports across the country to maintain a safe, secure, and efficient national civil aviation system. The costs for AIP eligible projects are divided between the FAA, the Massachusetts Department of Transportation (MassDOT), and local communities. The federal cost share of these projects is 90 percent, with MassDOT and the local airport sponsor each providing 5 percent. According to the FAA, eligible projects for AIP funding include improvements related to airport safety, capacity, security and environmental concerns. Projects not eligible for AIP funding include those for routine maintenance.

The Airport Safety and Maintenance Program (ASMP) of MassDOT provides funds for projects, such as routine maintenance, that are not eligible for AIP funding. Matching funds from the local sponsor (usually the municipality) are also required for ASMP projects. All airport improvement projects, whether AIP eligible or ASMP eligible, must be listed on a statewide CIP which includes the airport specific CIPs filed with MassDOT.
The economic benefit of the airports include the direct benefits of the activities on-site at the airport (such as airport workers’ salaries), indirect benefits from off-site activities attributable to the airport (such as airport worker, pilot, and passenger spending), and a multiplier effect known as induced economic impact that results from the economic growth and activities induced by the airports’ presence. The latest statewide economic impact study of public use airports were completed in 2019 and 2014. This study found that local use airports contributed over $24 billion to the Massachusetts economy, including $7.2 billion in payroll for over 199,000 jobs\(^1\). This 2019 economic output was a 49% increase from 2014.

The 2019 study also estimated the annual economic impact for each public use airport. For the Turners Falls Airport, it was estimated that it resulted in 30 jobs and $1.4 million in payroll and contributed $3.9 million in annual economic output. Compared to 2014, both the total number of jobs and the total annual economic impact doubled by 2019. The Orange Municipal Airport was estimated to result in 110 jobs and $4.3 million in payroll and contributed $11 million in annual economic output in 2019. The estimates for jobs and annual economic output were reported to be higher in the 2014 study. However, at this time, there were also a major project to reconstruct the taxiway at the Orange Municipal Airport.

Recent and planned improvements at the Turners Falls and Orange Municipal Airports increase the utility and safety of these facilities, and address projected future aviation needs in the region. Improvements that enhance the quality of facilities for use by existing and prospective businesses can also contribute to the region’s overall economic health and resiliency. For example, businesses that require efficient access to airports may be attracted to locate or stay in the region because of these assets.

Like other industries and organizations across the globe, both airports experienced reductions in activity during the COVID-19 pandemic. To help offset financial losses and secure the continued success and safety of local use airports nationally, federal CARES Act funds were made available to increase the federal share of grants to 100% and to offer supplemental discretionary grants. Both local airports accessed these federal resources to support projects.

\(^1\) Massachusetts Statewide Airport Economic Impact Study Update, Executive Summary. MassDOT Aeronautics Division. January 2019.
Proposed airport improvements and related business growth are not currently anticipated to generate significant levels of increased traffic on nearby roadways. However, the FRCOG will continue to monitor how such projects could affect traffic volumes and roadways, and will recommend improvements, if necessary.

**Orange Municipal Airport**

**Existing Conditions**

The Orange Municipal Airport (airport code ORE) is the largest airport in the northwestern area of the Commonwealth. Located in the Town of Orange on the eastern edge of Franklin County, the airport is surrounded by two industrial parks, one on each side, and by forest and open land. The airport property abuts Route 2 and its entrance is approximately two miles from this highway. As mentioned previously, the Orange Municipal Airport is classified as a general aviation airport, which provides facilities for personal and corporate aircraft, and offers a variety of aviation and aviation-related activities. Information about the airport and its services is available on their website at [https://www.flyore.com/](https://www.flyore.com/).

![Aerial view of the Orange Municipal Airport. View looking northeast, with administration building and hangars.](image-url)
Aerial view of the Orange Municipal Airport. View looking southwest, with adjacent Orange Industrial Park.

The airport was built in 1929 as the Orange-Athol Airport. During World War II, the airport was significantly upgraded for potential military use. The airport’s triangular runway configuration is a remnant of this update. Currently, the airport has two active runways. The third discontinued runway serves as a taxiway.

The primary runway is runway 01-19, which measures 5,000 feet long and 75 feet wide. The airport’s secondary runway 14-32 measures 4,801 feet long and 75 feet wide. Both runways have an asphalt surface. The runways’ lengths enable the Airport to accommodate a wider variety of aircraft than some other smaller airports in the region, such as in Turners Falls and Gardner. In addition, the Airport has both Jet and 100LL aviation fueling capability on-site, which can be an important feature for pilots choosing where to land.

Current airport tenants include two aviation maintenance facilities, flight instruction business, two flying clubs, and a prominent skydiving business, as well as non-aviation entities such as a solar power company, graphic design company, an antique gas and steam engine club, a municipal dog park, and youth recreation programs.
A good demonstration of how one aspect of the airport’s use can be an economic driver for the region is the popularity of Jumptown, a parachuting club based at the Airport and the nation’s first commercial skydiving center. Approximately 2,000 to 3,000 people annually parachute with Jumptown, with about 3 percent to 5 percent of these people from the North Quabbin region and the rest from across New England. Jumptown was able to continue to operate during the pandemic by following the appropriate state and federal guidelines. In recent years other parachuting centers have downsized in the northeast, while Jumptown has grown. Current operations are reported to be at or above pre-pandemic levels. Jumptown continues to be a major visitor attraction to the North Quabbin area, and those visitors spend money to stay, eat, and shop at local businesses. Jumptown is working to make improvements now that would let them attract a national competition to the region in the future.

According to the Airport Manager, major employers in the region consistently cite access to local airport transportation as one of their top considerations. The employers that use the airport range from locally based businesses to national corporations. In addition, the airport is also used by state and federal military and public safety agencies as well as by groups providing medical services.

The runways at the Orange Municipal Airport can accommodate virtually all types of general aviation including jet traffic operations. An “operation” is defined as a landing, takeoff, or touch-and-go procedure by an aircraft at an airport. According to the Airport Manager, the number of annual operations at the Orange Municipal Airport is generally 30,000 to 35,000 per year. While there was a significant decrease in operations experienced during the Great Recession around 2009, it increased over the decade after to be at or above pre-recession levels. With the onset of the COVID-19 pandemic, the Orange Municipal Airport Manager estimated a 20% reduction in operations. As the pandemic’s impacts lessened, operations continued to increase but have not reached at pre-pandemic levels by 2023.

<table>
<thead>
<tr>
<th>Table 8-1: Orange Municipal Airport Operations by Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Operations</strong></td>
</tr>
<tr>
<td>Itinerant General Aviation</td>
</tr>
<tr>
<td>Air Taxi</td>
</tr>
<tr>
<td>Local General Aviation</td>
</tr>
<tr>
<td>Military</td>
</tr>
</tbody>
</table>

According to the FAA, there are different types of operations. Generally, a local operation is performed by aircraft that remain in the local traffic pattern or practice within a 20 mile radius of the airport. An itinerant operation is performed by an aircraft arriving from outside the area or leaving the airport area. Other operations include air taxi, which carries passengers or cargo for hire, as well as military and medical related operations. Table 8-1 shows the type of operations conducted at the Airport.

As of Spring 2023, there were 51 aircraft based at the Airport. These aircraft are predominantly single-engine airplanes, with some small multi-engine airplanes, typically used for skydiving and charter activities or larger corporate aircraft. Multi-engine and larger corporate aircraft use of the airport has increased over the years and is expected to increase further. The Airport continues to expand its capacity for aircraft on the ground. The Airport currently has 30 hangars and a new corporate hangar planned.

**Current and Future Activities**

Over the years, the Orange Municipal Airport has continued to enhance its facilities and ability to serve airport users. In the past five years, over $11 million has been invested in construction, equipment and related technical studies for the airport, of which 98% was funded by federal or state grant programs. These improvements have included: reconstructing Runway 1-19 and Taxiway Delta, replacing the runway approach lighting system for Runway 14-32, repairing the surface asphalt and paint markings and acquiring essential equipment, like a plow truck.

The Airport Capital Improvement Plan identifies priority projects to be undertaken in the next few years and that are eligible for federal funding (see Table 8-2). They reflect improvements, such as new fencing, long term planning and the reconstruction of one of the runways. The Airport Safety and Maintenance Program (ASMP) lists pending and future projects that are not eligible for federal funding but are eligible for state reimbursement for a percentage of the total project cost. These projects include equipment, planning and
improvements for maintenance and administration buildings.

<table>
<thead>
<tr>
<th>Project (with expected federal fiscal year start of construction)</th>
<th>Projected Total Cost</th>
<th>Federal Funding</th>
<th>State Funding</th>
<th>Local Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport Layout Plan Update (FFY23)</td>
<td>$125,000</td>
<td>$112,500</td>
<td>$6,250</td>
<td>$6,250</td>
</tr>
<tr>
<td>Environmental Assessment &amp; Permitting for Airport Fence (FFY23)</td>
<td>$150,000</td>
<td>$135,000</td>
<td>$7,500</td>
<td>$7,500</td>
</tr>
<tr>
<td>Final Design &amp; Construction for Airport Fence (FFY24)</td>
<td>$1,140,000</td>
<td>$1,026,000</td>
<td>$57,000</td>
<td>$57,000</td>
</tr>
<tr>
<td>Building for Snow Removal Equipment (FFY25) *</td>
<td>$900,000</td>
<td>$636,000</td>
<td>$250,800</td>
<td>$13,200</td>
</tr>
<tr>
<td>Purchase Avigation Easements (to secure air space rights) (FFY 27)</td>
<td>$560,000</td>
<td>$504,000</td>
<td>$28,000</td>
<td>$28,000</td>
</tr>
<tr>
<td>Easement tree clearing (FFY28)</td>
<td>$200,000</td>
<td>$180,000</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Environmental Assessment for short-term improvements (FFY28)</td>
<td>$166,667</td>
<td>$150,000</td>
<td>$8,333</td>
<td>$8,333</td>
</tr>
<tr>
<td>Reconstruct Runway 14-32 (FFY29)</td>
<td>$7,500,000</td>
<td>$6,750,000</td>
<td>$375,000</td>
<td>$375,000</td>
</tr>
</tbody>
</table>

* A portion of this project is part of their Airport Safety and Maintenance Program (ASMP), which is not eligible for federal funding but is eligible for state reimbursement for a percentage of the total project cost.

Source: Len Bedaw, Orange Municipal Airport Manager, March 2023.

The Orange Municipal Airport property contains a diverse and unique mixture of grassland, farmland, and forest areas, which provide important habitats for a wide diversity of plant and animal species including rare grassland birds. The Orange Municipal Airport property also contains a portion of an aquifer Zone II recharge area. The aquifer recharge area is strictly regulated in terms of drainage, stormwater discharge, and allowed developed land uses. Airport and municipal officials recognize the sensitive environmental nature of this area, and as a result, most incorporate these conditions into any future airport expansions or construction projects.

The Orange Municipal Airport property also contains a portion of an aquifer Zone II recharge area. The aquifer recharge area is strictly regulated in terms of drainage, stormwater discharge, and allowed developed land uses. Airport and town officials cooperatively recognize the sensitive environmental nature of this area, and as a result,
plans for any future airport expansions or construction projects leave this area undisturbed.

By successfully securing funding and implementing key projects, the Airport management has been able to continue to improve and maintain its facilities and services. This work has resulted in continued demand for the airport’s facilities and services. Improvements range from significant infrastructure investments, such as the $5.2 million Runway 1-19 reconstruction and the $1.2 million replacement of the approach lighting system on Runway 14-32, to the recent provision of a courtesy vehicle for pilots to use.

In 2022, the Orange Police Department donated a vehicle to the Airport for use as a courtesy vehicle. With no local taxi service and very limited Uber or Lyft services, it was difficult for pilots and their passengers to run errands, such as getting food. Access to this vehicle has greatly improved the experience of these pilots at the Airport.

Located along the Route 2 corridor and within an easy drive of the Boston metro area, the Orange Municipal Airport has been able to attract a number of tenants and other airport users from eastern Massachusetts. There are other general aviation airports located east along the Route 2 corridor. However, the Orange Municipal Airport is one of the few to have a 5,000-foot runway and other amenities, like access to a 24-hour self-service aviation fueling station. These features allows the Orange Municipal Airport to serve a diverse mixture of aircraft and makes it competitive to other airports nearby.
**Turners Falls Airport**

**Existing Conditions**

The Turners Falls Airport (airport code 0B5) is a general aviation airport located in the Town of Montague. The property is bordered by an industrial park, the regional vocational high school, and forest land. Interstate 91 and Route 2 are both within a close distance to the airport. Information about the airport and its services is available on their website at [https://fly0b5.com/](https://fly0b5.com/).

![Aerial view of the Turners Falls Airport. View looking north, with adjacent Franklin County Technical School.](image)

The Turners Falls Airport has one runway (Runway 16-34) and a parallel taxiway. The paved runway is 3,200 feet long and 75 feet in width, and can accommodate small single engine and multi-engine piston aircraft, and small jets such as the Cessna Citation. The runway approaches are visual. The Turners Falls Airport has a fixed base operator on-site that provides various services including maintenance, storage and fuel, as well as flight instruction.

Most of the current users of the Turners Falls Airport are for flight training and recreational flyers. Students and families of students from the independent boarding schools in the region also use the airport to travel between school and home. There are also some...
business-oriented travelers that use the airport to transport personnel between a local plant and corporate headquarters.

The original Turners Falls Airport Master Plan was completed 1990 and updated in 1999. In 2019, an Airport Master Plan Update was prepared by Gale Associates, Inc. and approved by the FAA and MassDOT. The comprehensive Update examined historic trends and projected levels of use of the airport, and concluded with recommendations including extending the existing runway to allow for larger aircraft to use the airport, and acquiring Pioneer Aviation property that has fueling and maintenance facilities.

The FAA defines an operation as a landing, takeoff or touch-and-go procedure by an aircraft at an airport. According to the FAA’s Terminal Area Forecast data, the annual operations at the Turners Falls Municipal Airport was reported as 16,620 for 2019 through 2021. Airport operations are currently split 72 percent local and 27 percent itinerant, with the remaining operations being air taxi or for other purposes. This ratio of local and itinerant is expected to stay the same. The predicted mix of local and itinerant operations is an important factor in determining how much short-term parking and long-term storage of based aircraft will be needed at the airport in the future. The breakdown of these operations are in the following table.

<table>
<thead>
<tr>
<th>Type of Operations</th>
<th>% of Total Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Itinerant General Aviation</td>
<td>27%</td>
</tr>
<tr>
<td>Air Taxi</td>
<td>1%</td>
</tr>
<tr>
<td>Local General Aviation</td>
<td>72%</td>
</tr>
<tr>
<td>Military</td>
<td>0%</td>
</tr>
</tbody>
</table>


The Airport Master Plan Update evaluated several factors, including population and economic projections, to forecast future aviation demand at the Airport over the next twenty years. The forecast for total operations in 2022, 2027 and 2037 is expected to continue at current levels.

The mix of aircraft using the Turners Falls Airport continues to be predominantly single-engine aircraft. As described in the Airport Master Plan Update, the annual mix of aircraft
will be 80 percent single-engine, 10 percent multi-engine, 5 percent turboprop, 4 percent helicopter, and less than 1 percent jet.

Aircraft based at the Turners Falls Municipal Airport has increased over the years from 29 in 2010 to 34 by 2021. One factor in increasing the number of aircraft based at the airport is amount of hangar space available. The recent increase is due to a new hangar built in 2019 to store three aircraft.

**Current and Future Activities**

The 2019 Turners Falls Airport Master Plan Update included forecasts for the number of aircraft to be based at the airport in the next five to twenty years. These forecasts consider historic trends specific to the airport as well as projected trends for New England. The Update recommended an aviation demand forecast for planning purposes that assumes a continued level of operations and aircraft based at the airport. However, if demand required, more tie-down spaces and/or hangar space could be constructed.

It is suggested in the Update that a moderate increase in operations by larger aircraft could be achieved if the runway length were adequate to accommodate this type of aircraft. The Airport presently can only accommodate B-I general aviation aircraft (weighing 12,500 pounds or less). If the runway was extended, it could accommodate all aircraft in the category of B-II general aviation aircraft (30,000 pounds in weight or less) with less than ten passenger seats. The Update evaluated multiple alternatives for future development, and concluded with a recommendation to extend the runway and continue to make improvements over a long-term, twenty-year period.

Given that the property is constrained by environmentally sensitive areas, the Update recommended that the Airport acquire some of the developed adjacent property, such as Pioneer Aviation. In 2019, the Airport acquired Pioneer Aviation, which included the property and fueling station, and constructed a new hangar on the site.
Projects identified in the Airport Master Plan Update will be incorporated in the Airport’s Capital Improvement Plan (CIP), which prioritizes projects eligible for federal and state funding, and the Airport Safety and Maintenance Program (ASMP), which prioritizes projects eligible for state funding. The latest CIP includes over $11.6 million of projects programmed over a period seven-year period. These projects range from small improvements to the office building and purchasing new maintenance equipment, to large scale projects such as the final design and construction to extend Runway 16-34, improved lighting for the Runway 16 approach, and later the rehabilitation of Runway 16-34. State and federal funding sources were identified to cover 85 percent of the $11.6 million in projects.

<table>
<thead>
<tr>
<th>Project (with expected federal fiscal year start of construction)</th>
<th>Projected Total Cost</th>
<th>Federal Funding</th>
<th>State Funding</th>
<th>Local Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realign Taxiway Stub and Improve Pioneer Ramp, Phase I (FFY23)</td>
<td>$487,866</td>
<td>$439,079</td>
<td>$24,393</td>
<td>$24,393</td>
</tr>
<tr>
<td>Environmental Assessment, Tribal Coordination and Permitting for Wildlife Fence* (FFY23)</td>
<td>$150,000</td>
<td>$0</td>
<td>$120,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Realign Taxiway Stub and Improve Pioneer Ramp, Phase II (FFY24)</td>
<td>$343,333</td>
<td>$309,000</td>
<td>$17,167</td>
<td>$17,167</td>
</tr>
<tr>
<td>Design/Construct Wildlife Fence* (FFY24)</td>
<td>$500,000</td>
<td>$0</td>
<td>$400,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Environmental Assessment (for Runway Extension) &amp; Tribal Coordination (FFY25)</td>
<td>$166,667</td>
<td>$150,000</td>
<td>$8,333</td>
<td>$8,333</td>
</tr>
<tr>
<td>Realign Taxiway Stub and Improve Pioneer Ramp - Phase 3 (Final) Construction (FFY25)</td>
<td>$176,667</td>
<td>$159,000</td>
<td>$8,833</td>
<td>$8,833</td>
</tr>
<tr>
<td>Design, Permit and Construction for Runway 16-34 Extension (1,000 foot extension) (FFY26)</td>
<td>$2,676,667</td>
<td>$2,409,000</td>
<td>$133,833</td>
<td>$133,833</td>
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<tr>
<td>Runway 16 Approach Lighting (FFY27)</td>
<td>$500,000</td>
<td>$450,000</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
<tr>
<td>Reconstruct West Apron/Taxilanes (FFY28)</td>
<td>$500,000</td>
<td>$450,000</td>
<td>$25,000</td>
<td>$25,000</td>
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<tr>
<td>Rehabilitate Runway 16-34 (FFY29)</td>
<td>$2,500,000</td>
<td>$2,250,000</td>
<td>$125,000</td>
<td>$125,000</td>
</tr>
<tr>
<td>Rehabilitate Taxiways A &amp; B (FFY30)</td>
<td>$2,000,000</td>
<td>$1,800,000</td>
<td>$100,000</td>
<td>$100,000</td>
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<tr>
<td>Resurface Parking Lot- Millers Falls Road (FFY30)</td>
<td>$150,000</td>
<td>$0</td>
<td>$0</td>
<td>$150,000</td>
</tr>
</tbody>
</table>

*This project is part of the Airport Safety and Maintenance Program (ASMP), which is not eligible for federal funding but is eligible for state reimbursement for a percentage of the total project cost.

Source: Turners Falls Airport Manager, March 2023.
It should be noted that the Montague Airport Commission recognizes the environmental and archaeological sensitivity of the area. In advance of key projects, the environmental assessments are conducted, and advance communication and coordination with indigenous tribal organizations is undertaken.

To make the most out of the resources they have, the Airport Commission has initiated a green energy program. These efforts have included: replacing equipment with more energy efficient models, installing LED lighting upgrades, and constructing a 25,000 watt solar canopy with electric vehicle charging ports.

The Airport has also leveraged access to the Franklin County Technical School to host an intern/co-op student position to provide additional staff capacity to benefit airport operations. A new program with the Franklin County Technical School will be launched in the next few years that will enhance the aviation industry for the region. The School will offer an aviation mechanics program at the Airport, as funded by a $4.2 million state grant. It was reported that this program will seek certification from the Federal Aviation Administration (FAA) to be an approved Aviation Maintenance Technical School. There only seven certified programs in New England presently.

**Unmanned Aircraft Systems**

The use of unmanned aircraft systems, commonly referred to as drones, has increased over the years. The FAA addresses this situation by providing important guidance and established rules about their use. Depending on the type of operator (i.e. recreational, commercial or public safety and government), different FAA rules apply. For recreational users, the federal law requires that the operator pass an aeronautical knowledge and safety test, and have proof of passing this test on them if asked by public safety or FAA personnel. For commercial users, the FAA requires the operator to pass a knowledge test to become a FAA certified Drone Pilot. For government and public safety purposes, the FAA has separate guidance and takes emergency use into consideration. To help drone users with real time information about airspace restrictions and other requirements based on the GPS location of the drone user, the FAA has created a mobile app called B4UFLY. The FAA also requires operators to register their drones if they weigh 55 lbs. or more. Operators with drones that are less than 55 lbs. do not have to register, but there are safety regulations that must be followed.

At this time, drones are not being used to transport people or goods in Franklin County. However, as both technology and business operations evolve this may change in the
future. Currently in the region, drones are used for: high resolution video, aerial photography, multispectral imaging sensors (similar to infrared), and/or collecting data such as distance, area and volume for use in creating 3D models.

These services can be used for a variety of purposes, such as creating topographic maps, developing ecological assessment maps such as for wetlands or forest, studying riverbank erosion, inspecting infrastructure such as water tanks, or documenting construction progress. In addition, the use of drones have been effective in resiliency planning and responding to natural disasters, hazardous spills and other emergencies. Drones can be used to capture important information used for risk assessment, such as determining areas that may be more vulnerable to flooding or the status of critical infrastructure. After a disaster strikes, drones can capture images from varied vantage points to better view the damage and they can be sent to areas too dangerous for emergency personnel to enter. Based on this information, maps can be generated and decisions made in a timely manner.

View of apron and taxi lane at Turners Falls Municipal Airport
**Recommendations**

- The Orange and Montague Airport Commissions continue to improve and invest in facilities, within the framework of each airports' master plans, to enhance safety, energy efficiency, and cost effectiveness.

- Orange Airport Commission to complete short-term projects (within 0-3 years) which are included in the Orange Municipal Airport’s Capital Improvement Plan (CIP) and Airport Safety and Management Plan (ASMP), such as updating the Airport Layout Plan, completing the environmental assessment and permitting and the final design and construction of the airport property’s perimeter fence, and improving an equipment outbuilding.

- Orange Airport Commission to implement mid-term projects (within 4-5 years) which are included in the Orange Municipal Airport’s CIP/ASMP, such updating the Airport Master Plan and purchasing avigation easements.

- Orange Airport Commission to continue to pursue long-term projects (beyond 5 years), including short-term improvements to be identified in the Airport Master Plan Update as well as reconstruction Runway 14-32.

- Montague Airport Commission to complete short-term projects (within 0-3 years) which are in the Turners Falls Airport’s CIP and ASMP, such as design and construction of improvements to the taxiway the ramp to the recently acquired Pioneer Aviation property, and conducting an environmental assessment, coordinating with indigenous tribal organizations, and permitting for a wildlife fence.

- Montague Airport Commission to implement mid-term projects (within 4-5 years) and long-term projects (beyond 5 years) which are in the Turners Falls Airport’s CIP/ASMP such as preparing for a potential runway extension by conducting an environmental assessment and coordinating with the indigenous tribal organizations, and then conducting design, permitting and construction. Also in later years, improved Runway 16 approach lighting and a reconstruction of the west apron/taxi lanes are proposed.

- The Montague Airport Commission has included additional projects in the CIP/ASMP in which funding has not yet been identified or secured. These projects include important pieces of equipment (like a mowing tractor and back-up
generator) and improvements to facilities (like building repairs and roof replacements). Maintaining the facilities and continuing to adopt green practices will extend the useful life of the airport’s assets and make operations more cost effective.

- The Orange and Montague Airport Commissions continue to review and update their respective CIPs and ASMPs to reflect changing airport conditions, revised funding and cost figures, and adjusted project timetables.

- The Orange and Montague Airport Commissions to consider leveraging the services of FRCOG and/or other regional stakeholders in supporting the development and implementation of recommendations from their respective Airport Master Plans.

- The Orange and Montague Airport Commissions, FRCOG and other stakeholders are to continue to encourage the use of airport facilities and the aviation related industry, to support economic development, public safety and other regional interests.