

DRAFT

8



Airports

8 Airports

There are two public-use airports located in Franklin County. They are the Turners Falls Municipal Airport in Montague, and the Orange Municipal Airport in Orange. 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 a national air transportation system, which provides intermodal connections and alternatives for fast, efficient transportation of people and goods. The economic benefits of local airports include supporting existing businesses and attracting new businesses by providing convenient access to and from the area. Local airports also provide public safety services, such as emergency medical air transportation. In addition, the popularity of some aviation-related recreational activities, such as parachuting, generates tourism activity that brings many visitors to the area.

According to the Federal Aviation Administration's 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.

As indicated in the Orange Community Development Plan (2004) and the Montague Community Development Plan (2004), 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. The Orange Community Development Plan identified five locations for potential future industrial and large commercial development in Orange; three of the five sites were near the Orange Municipal Airport. The FRCOG participated in the development of both the Orange Community Development Plan and the Montague Community Development Plan.

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

Under the direction of the Airport Managers and Airport Commissions, the airports each implemented a community planning process to create Airport Master Plans in the late 1990s and early 2000s. 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 the Airport Master Plans involved coordination between the consultants preparing the plans, the Airport Commissions, town boards and officials, the general public, regional planning and economic development organizations, and regional, State and Federal agencies. The FRCOG participated actively in the development of the Airport Master Plans. 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 included the creation of a Capital Improvement Plan, which is a schedule of prioritized improvement projects with their estimated costs. An airport's Capital Improvement Plan is updated annually to reflect completed projects and to prioritize future projects.

DRAFT

Improvements that are specifically aviation-related may be eligible for funding by the Federal Aviation Administration's (FAA) 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%, with the MassDOT and the local airport sponsor each providing 5%. Relevant projects eligible for the FAA's AIP funding include facilities or equipment associated with the construction or reconstruction of an airport. AIP funding is not available for routine maintenance projects. 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 the statewide Capital Improvement Plan which the airports file with MassDOT.

The planned improvements at the Turners Falls and Orange Municipal Airports will increase these facilities' current utility and safety, and will address the projected future aviation needs in the region. These improvements will also promote economic development in the region by providing high quality aviation facilities to existing business users and to prospective businesses that may be seeking to locate in Franklin County. 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. For example, some of the business growth at the industrial parks near the airports could be induced by the airports' facilities and services. The airport expansions 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 the impact of the airport projects on area traffic and area roadways, and to recommend improvements, if necessary, at a future date.

Orange Municipal Airport

Existing Conditions

The Orange Municipal Airport is the largest airport in the Franklin County region. 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 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.

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 previous runway is now a taxiway. The airport's two primary runways are Runway 01-19, and the crosswind runway, Runway 14-32. Runway 01-019 measures 5,000 feet long and runway 14-32 measures 4,800 feet long. Both runways are 75 feet wide and hard surfaced. The runways' lengths enable the airport to accommodate a wider variety of aircraft than smaller airports in the greater region, such as in Turners Falls, Gardner, and Fitchburg. In addition, the airport has fueling capability on-site, which can be an important feature for pilots choosing where to land.

Current airport tenants include aviation clubs, individuals, and six businesses that offer flight instruction and guided tours, air craft maintenance, recreational parachuting activity, an advanced auto driver training school, a motorcycle training school and a graphic arts/marketing firm. Several local businesses also use the airport on a regular basis.

DRAFT

The average drive time for these passengers after arriving at the airport is about 45 minutes.



Aerial view of the Orange Municipal Airport (Pictometry)

The Orange Municipal Airport was recently awarded \$500,000 of federal American Recovery and Reinvestment Act (ARRA) funds to improve the condition of the pavement on the runways. The runways at the Orange 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. The estimated number of annual operations at the Orange Municipal Airport for 2009 was 25,000. This is a sharp decrease from 36,000 in 2006. According to the Airport Manager, airports are a good barometer of the economy, the decrease in operations is directly related to the national financial crisis of 2008. Airports across the state have reported a decrease in operations of up to 50 percent.

As of 2009, the mix of aircraft using the Orange Municipal Airport consists predominantly of single-engine airplanes (75% of the annual operations), with some small multi-engine corporate airplanes (15%), typically used for skydiving and charter activities, and large corporate aircraft (10%) such as small jets including Gates Lear Jets and Cessna Citations. Corporate aircraft use of the airport has increased by 2 percent since 2006. The number of aircraft based at the airport as of 2009 is 60, which is the same as 2006 but an increase of 11 percent since 1999, when the number stood at 54.

The airport’s expanding capacity for aircraft on the ground, including more parking, more hangars,

more tie-down space, and the presence of a full-service fixed-based operator to service aircraft will allow it to accommodate growth as the economy recovers. The airport has 29 hangars; this is a 9 percent increase from 2006. More hangars are planned. However, the increased price to bring power to the hangars went from a few thousand dollars to approximately \$30,000. Unfortunately, this fact has deterred a lot of potential business development.

Current and Future Activities

The Orange Airport has succeeded in acquiring the easements for the approaches and the removal of off-property obstructions related to future phases of airport property development. The airport has also installed new security fencing and gates. The runway pavement will be repaired with the \$500,000 ARRA grant. Top priority projects for the next 5 years, as identified in the airport’s Capital Improvement Plan, are listed in **Error! Reference source not found.**

These priorities include the rehabilitation of the existing taxiways, the construction of terminal apron (paved area near the airport hangars and buildings), the purchase of snow removal equipment, and a building to house the equipment.

Projects that are currently not in the Orange Municipal Airport’s Capital Improvement Plan, but that have been identified for future implementation are the establishment of a large corporate aircraft hangar, a smaller aircraft T-hangar (with about eight bays), and a new Terminal Building. The hangars and building will all be municipally-owned. The airport is currently seeking alternative funding sources for these projects, and therefore has not incorporated them into the CIP at this time.

DRAFT

Table 8-1: Orange Municipal Airport Capital Improvement Plan Projects

Project (with expected federal fiscal year of the start of construction)	Projected Total Cost	Federal Funding (90% of cost)	State Funding (5% of cost)	Local Funding (5% of cost)
Acquire Snow Removal Equipment (2 trucks with plow attachments) (FFY10)	\$230,000	\$207,000	\$11,500	\$11,500
Reconstruct Taxiway A & Existing GA Ramp – Phase I (FFY11)	\$1,520,000	\$1,368,000	\$76,000	\$76,000
Reconstruct Taxiway B (TWB) & Existing General Aviation Ramp – Phase II Design Phase (FFY12)	\$1,142,000	\$1,027,800	\$57,100	\$57,100
Reconstruct Taxiway D (FFY13)	\$968,000	\$871,200	\$48,400	\$48,400
Construct New Taxi lane /Apron (Parallel to TWB) Phase I (FFY14)	\$750,000	\$675,000	\$37,500	\$37,500
Purchase Additional Snow Removal Equipment (front end loader and large snowblower)	\$600,000	\$540,000	\$30,000	\$30,000
Construct Snow Removal Equipment Building (FFY15)	\$750,000	\$675,000	\$37,500	\$37,500

Note: FFY = Federal Fiscal Year (October 1st through September 30th)

Source: Orange Municipal Airport, September 2009.

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 a number of rare grassland birds. The airport is well known as an important birding site in the region. The Town of Orange recognizes the wildlife value of the airport property, and has worked with the State’s Natural Heritage and Endangered Species Program, run through the Department of Fish and Game’s Division of Fisheries and Wildlife, to ensure that the airport’s improvement and expansion projects do not negatively impact important animal habitats located on site.

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,

the plans for future airport expansions and construction projects leave this area undisturbed.

In 2004, the Orange Municipal Airport became financially self-sufficient, and now no longer relies on Town subsidies for its operation. This self-sufficiency was achieved years earlier than initially projected, and reflected the numerous projects to update and expand the airport’s

infrastructure, and the resulting growth in use and demand for the airport’s facilities and services.

Some of this increased use also comes from individuals and businesses that had previously relied on airport facilities in other metropolitan areas nearby. With Orange 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. The Orange Municipal Airport competes for potential users from Eastern Massachusetts with the general aviation airports located east along Route 2 in Gardner and Fitchburg, However, the Orange Airport is the only public-use airport along the Route 2 corridor to have a 5,000-foot runway, a feature which continues to attract users and which allows it to serve a more diverse mixture of aircraft than other airports nearby.

DRAFT

Turners Falls Municipal Airport

Existing Conditions

The Turners Falls Municipal Airport is located in the Town of Montague and 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. The Turners Falls Municipal Airport is also a general aviation airport. The Turners Falls airport has one runway (Runway 16-34) and a parallel taxiway. The paved runway is 3,213 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 Municipal Airport has a fixed base operator on-site that provides various services including maintenance, flight instruction and fuel.



**Aerial view of the Turners Falls Municipal Airport
(Pictometry)**

Most of the current users of the Turners Falls airport are recreational flyers. Students and families of students from the many private boarding schools in the region use the airport to travel between school and home. There are also some business-oriented travelers. For example, a local manufacturer has been known to use the airport for transporting personnel back and forth between the local plant and the corporate headquarters in a nearby state. Pioneer Aviation is located adjacent to the Airport property and runs a flight school and offers services for pilots.

The Turners Falls Municipal Airport completed an Airport Master Plan in 1990, and updated the plan in 1999. The 1999 Airport Master Plan Update

examined the current and projected levels of use of the airport, and concluded with recommendations to extend the existing runway and upgrade various facilities. As a follow-up to the Master Plan Update, a Runway & Terminal Area Study and Airport Layout Plan Update was created by Gale Associates, Inc. for the Montague Airport Commission in 2002.

The FAA defines an operation as a landing, takeoff or touch-and-go procedure by an aircraft at an airport. As of 2009, annual operations at the Turners Falls Municipal Airport stand at approximately 18,000, a 44 percent increase since 1998. The airport's Master Plan Update (1999) forecasted that the number of annual operations would grow to 18,000 in 2009, and to 23,625 in 2019.

As of 2009, the mix of aircraft using the Turners Falls Airport is predominantly single-engine aircraft (96%) with some multi-engine aircraft (4%). However, with planned improvements to increase the runway length and install navigational aids, the aircraft mix is expected to show a moderate decrease in the percentage of single-engine aircraft, and a moderate increase in the percentage of multi-engine, turbo and potentially jet aircraft. At the same time, however, it is unlikely that the airport will attract and maintain bulk airfreight services in the foreseeable future due to its proximity to larger airports such as Barnes Municipal Airport in Westfield, Westover Metropolitan Airport in Chicopee, and the Orange Municipal Airport in Orange.

Airport operations are currently split 67 percent local and 33 percent transient; this ratio is expected to continue. Local operations are those that take place within 20 miles of the airport or are within the local traffic pattern. Transient operations are those that originate or terminate at another airport or outside of the local traffic pattern. 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.

As of August 2008, there were 31 aircraft based at the airport, a slight decrease since 2007. One issue

DRAFT

in increasing the number of aircraft based at the airport has been the limited amount of hangar space. The airport currently has 10 privately-owned hangars which hold a total of up to 25 aircraft. According to the Turners Falls Airport Manager, in the last few years, the municipal airports in Fitchburg, Orange, and Northampton have both expanded their hangar spaces, and as they have done so, some aircraft previously based at the Turners Falls Airport have relocated to these other airports. To address this issue, the Turners Falls Airport is hoping to begin adding up to 26 new hangars as soon as a funding source becomes available.

Current and Future Activities

The current capital improvement activities at the Turners Falls Municipal Airport focus on implementing the recommendations of the 1999 Airport Master Plan Update and the Runway & Terminal Area Study and Airport Layout Plan Update. These recommendations addressed facility improvements, including extending the length of the runway. The Airport Layout Plan (ALP) presents detailed plans for the proposed expanded runway and associated facilities. The ALP was created through a community planning process guided by a Technical Advisory Committee consisting of residents, local officials, regional officials, and State agencies appointed by the Montague Airport Commission. The FRCOG participated in this planning process. The ALP update is an important document that allows relevant projects to be eligible for FAA funding through its Airport Improvement Project (AIP). The ALP has been approved by both the FAA and the Massachusetts Department of Transportation (MassDOT).

Recent improvements at the airport based on the recommendations of the Master Plan Update and Airport Layout Plan include the development of an airport administration building and the construction of a new security fence along Millers Falls Road. Current activities focus on the proposed rehabilitation and reconstruction of the airport's runway. The first phase of the reconstruction extended the runway from its current length of 3,013 feet by 200 feet on the west end. Also part of

the first phase, includes installing navigational lighting and a rotating beacon. The installation of the navigational lighting and rotating beacon are still in progress. The second phase will hopefully expand the runway by an additional 1,000 feet to the east side of the runway in the next five years. The second phase is contingent on getting more funding and designing the expansion so it avoids environmentally sensitive areas, the area of sacred Native American stones, and other areas that need to be protected. The consultants who created the 1999 Master Plan recommended expanding the runway length and width to 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. Presently the Turners Falls Municipal Airport can only accommodate B-I general aviation aircraft (weighing 12,500 pounds or less). There are multiple environmental conditions and aircraft characteristics that determine appropriate runway length requirements for any given aircraft. The proposed runway reconstruction addresses these factors.

During the permitting process for the airport's current runway reconstruction and expansion project, areas of environmental sensitivity and archeological concern on the airport property were identified. Meetings were held with representatives of the Narragansett tribe and friends of Wissatinnewag regarding Native American relics on site. The National Register declared a set of stones on the airport property to be a "sacred ceremonial hill" in December 2008. Discussions were also conducted with State environmental officials on how to protect the grasshopper sparrow and frosted elfin butterfly habitats that were found. The proposed reconstruction and expansion of the runway takes these environmental and archeological factors into consideration so that the project avoids impacting these areas.

Additional recommended improvements in the Turners Falls Airport Layout Plan include work on the runway's associated taxi lanes and taxiways, upgrades to the runway approach, improvements to the apron, as well as perimeter fencing and other security recommendations. Many of the

DRAFT

improvements recommended in the ALP have been implemented while others have been found not to be needed. Recommendations completed in recent years include the acquisition of private property in the Runway 34 approach and improvements to the apron. Future planned projects are outlined in the airport's Capital Improvement Plan. These projects include the installation of an obstruction light on the summit of Country Hill in the Montague State Forest.

Airport Security

Since September 11, 2001, greater attention has focused on security at the nation's major airports. In Massachusetts, attention on airport security has included the state's small airports as well.

MassDOT oversees and regulates the 42 public-use airports in Massachusetts, excluding Logan and Hansom Airports. There are two public-use airports located in Franklin County – the Turners Falls Municipal Airport in Montague and the Orange Municipal Airport in Orange. Since 2001, MassDOT has established a number of policies and programs to increase airport security. MassDOT has funded security enhancements at municipal airports including security fencing, access control systems, and video monitoring. MassDOT has also implemented a statewide badge program for aircraft users and airport tenants, and all badges have been entered into centralized state database. Additionally, MassDOT now requires that each public-use airport develop and implement an airport security plan, and that the plan be consistent with MassDOT security guidelines and regulations.

Both the Orange Municipal Airport and the Turners Falls Municipal Airport have created airport security plans for their facilities. They have both implemented the use of badges for aircraft users, and have made security improvements onsite, including new perimeter fencing and gates at vehicle access points. The Orange Municipal Airport manager also indicated to the FRCOG that other security measures taken at the Orange Airport include the following:

- lighting has been improved in high security areas;

- the airport staff meets regularly with local law enforcement officials to discuss airport security issues, and
- the local police have increased the number of their patrols to the airport during the day and evening.

Recommendations for Airports

- **Complete short-term projects** (within 0-3 years) which are included **in the Orange Municipal Airport's Capital Improvement Plan (CIP)**, such as the rehabilitation of the terminal apron area, the building of new hangars, and construction of a new taxiway.
- **Implement mid-term projects** (within 4-6 years) which are included **in the Orange Municipal Airport's CIP**, such as the construction of a new snow removal equipment building and the rehabilitation of Runway 14-32.
- Continue pursuing **long-term (beyond 6 years) improvements** at the Orange Municipal Airport.
- Pursue the **funding for, and implementation of, other projects that have been identified for future implementation**, such as the establishment of a large corporate aircraft hangar, a small aircraft T-hangar, and a new Terminal Building.
- Complete **short-term projects in the Turners Falls Municipal Airport's CIP**, such as reconstruction and extension of Runway 16-34, reconstruction of a parallel taxi-way, and extension of the itinerant apron area, and land acquisitions.
- Implement **mid-term projects** (within 4-6 years) which are included **in the Turners Falls Municipal Airport's CIP**, such as the purchase of new ground maintenance equipment, the installation of an automated weather observing system, and the replacement and relocation of the airport's locating beacon.
- Continue pursuing **long-term improvement projects at the Turners Falls Municipal Airport**, such as the

DRAFT

construction of up to 26 new airport hangars.

- Revise and update the **Master Plans and Capital Improvement Plans for the Turners Falls and Orange Municipal Airports** as necessary to reflect changing airport conditions, updated funding and cost figures, and revised project timetables.
- Continue considering the **impacts of planned and proposed improvement and construction projects at the airports**, on important archeological and environment resources, and continue to involve State environmental agencies, and other appropriate officials in the planning processes for the airport projects.
- Follow **environmental best management practices** at the airports for vegetation control, stormwater management, the use of deicing compounds, and the management of chemical storage and waste disposal.
- Continue promoting the **expansion of activities and facilities at the Turners Falls Municipal Airport and Orange Municipal Airport**, within the framework of the airports' plans, that will help promote and sustain the airports' financial self-sufficiency, and that will serve regional business interests and support economic development in the region.
- Continue **monitoring security at the Orange Municipal Airport and the Turners Falls Municipal Airport**, and implement additional security measures as necessary.