

DANBURY AVIATION COMMISSION
MEETING MINUTES

Danbury Aviation Commission -- 7:00 p.m.
Danbury City Hall: 155 Deer Hill Ave., Danbury, CT 06810
Third Floor / Room 3C / Tuesday, October 15, 2013

01 Meeting Called to Order By Chairman Ashkar.

02 Roll Call:

Present: Commissioners Ashkar, Oppermann, Lee, Zilinek, Tamburri, Omasta

Absent: Baker

03 Motion made to accept the regular meeting minutes of April 16, 2013 and the special meeting minutes of July 23, 2013 as written by Commissioner Zilinek seconded by Commissioner Lee and unanimously approved.

04 Liaison Report: No report.

05 Administrator's Monthly Report:

Attached is a proposed draft of a colored document representing the end of the runway across from Federal Express. In May I requested permission from the FAA to add a Dog Park at the old Grenier property. From May to September we were back and forth with the FAA to obtain approval for that area for a Dog Park. The City's survey team is surveying the property, which will then be presented to the FAA along with the layout of the area. The funding will come from the City for fencing, cutting, etc. There will be no buildings. This will then be added to the Master Plan.

The Hazard Beacon project is underway and will be completed in the next couple of weeks. The rotating beacon has been swapped out and replaced. A new panel will be added to the Control Tower for the lighting system as the present panel parts are no longer made. This panel will be installed next week with fiber optic run between the Control Tower and the electrical vault. This should be completed by the third week of November. Lights will still be on until this project is complete and we switch to the new panel which will still be triggered by a new pilot control system which is also being installed in the tower with new wiring and new antennae.

Airport Master Plan document you have is the Scope of Services that are going to be provided and I have a recommendation to the Chairman to assign a committee the assignment on the technical advisory committee to assist in the development of our Master Plan update. There is a list of individuals involved in the process, Mr. Toher has agreed to serve on the committee, Bob King for the Mayor's Aviation Task Force has agreed to serve, Chairman Ashkar will serve, CT Department of Energy and Environmental Protection has not been filled yet and we will contact Bob Bruno of the Connecticut Airport Authority to find out who we can get from DEEP because we want to look at the 33 acres that we have behind my office as well as the 25 acres that are behind BAC to see what is salvageable from an environmental standpoint; is there anything we can get back to help develop the airport in the future in this new plan. Economic Development, Bruce Tumola will assist on the economic development standpoint to make sure we don't miss out on opportunities to commercially develop the airport. Our Planning Director, Dennis Elpern, and myself or designee will also be on the committee. The Technical Committee will assist the airport planners with the input and review of the airport planning documentation. The FAA has the final authority over the Master Plan. The Master Plan is signed by three individuals which is either accepted or rejected by the commission and if it is accepted by the commission, the Mayor signs it, State of CT and the FAA sign it and then it becomes an operational document and supersedes the current one on file. There is a lot of information that will be reviewed over the next 18 months and we hope to start the process next month if the Chairman decides we can go forward with the Technical Committee.

The Airport has a little dispute going on between two companies. I have tried to resolve it but unfortunately I did not make any headway. At this point Keri Sorenson/Tally-Ho Aviation is here tonight to address the commission under my report to explain what he is concerned about and what he wants to see accomplished.

Chairman Ashkar requested this item be added to "New Business" entitled "Tally-Ho Aviation."

Motion was made by Commissioner Zilinek to accept Administrator's Report, seconded by Commissioner Oppermann, and unanimously approved.

Motion made by Commissioner Oppermann to open Public Speaking, seconded by Commissioner Zilinek, and unanimously approved.

Public Speaking:

Mr. Chris Orifici/Westconn Aviation asked how the field will be kept up to date on the Master Plan progress. Mr. Estefan advised there will be public meetings and information will flow to the field as I receive it. Mr. Orifici asked if the field can be advised of the meetings; Mr. Estefan advised yes. Clarification was made to state Mr. Wayne Toher/Reliant Air will be the field representative.

Mr. Keri Sorenson/Tally-Ho Aviation gave a brief history of himself at DXR since 1984 and have quite a few qualifications. I have been at DXR a very long time and have never run into a situation like this. I was working for Arrow Aviation, went onto a ramp at an FBO, and was subsequently banned from that ramp for reasons I'm not sure of. This ramp has a lease by the City and it says in the lease lessor is granted ingress/egress to and from the premises, taxiways, tie-downs and other aviation operations. Since I don't know why I'm banned from this ramp I can only assume it's based on some other things. Section 28 covers those other items and that is the Lessee does not discriminate on account of age, creed, color, etc. I have customers that keep their airplanes on this ramp; I have moved customers from this ramp because of it. I did not want to file a formal complaint; I waited for six months to come before you and find out what to do. I requested a sit down with this individual twice to find out what the problem is and I have received no returns.

Motion was made to close public speaking by Commissioner Zilinek, seconded by Commissioner Oppermann, and unanimously approved.

Old Business

Santoto, LLC

Mr. Estefan advised he has received no information back from our attorney since we last met in July. Chairman Ashkar requested Mr. Estefan read into the minutes memo dated September 13, 2013, copy attached. Mrs. Lynda Silvestro advised she asked Attorney Barr not to respond to the offer that was put on the table. We had an option to exercise in our lease, we exercised our options in a timely manner. We do not need to accept or counter to the offer and the offer that was presented by Les Pinter deviated from our options exercise. I do believe at the last special meeting that this commission held, Les Pinter stated that there was to be no further discussion this is being handled by the lawyers. Chairman Ashkar advised the commission will stand down until we get some resolution of the matter from the two attorneys. Mrs. Silvestro advised her attorney will not negotiate with Les Pinter because there is nothing to negotiate about. Mrs. Silvestro added that she has the right according to her lease for quiet, peaceful enjoyment and this has been anything but that. Mr. Silvestro asked if the commission cannot act on this then why do we keep getting added to the agenda. Mr. Estefan advised he carries everything over from meeting to meeting until it is resolved and just in case you wanted to say something. Mrs. Silvestro added that her attorney under the FOI act requested every document, every tape which was provided same and listened to all the tapes, he reviewed all the documents, a lot of discussion about this being a "conditional" assignment which it's not and there is no documents regarding a conditional assignment.

New Business

Master Plan Update

Chairman Ashkar advised we already received update on the Master Plan during Administrator's Report. Mr. Estefan advised my recommendation to you to go forward with the people that are listed and when I get the Connecticut DEEP person I'll advise the commission. Mr. Estefan advised the cost is \$431,000 of which our share is being done as "in kind services" meaning that on the research and other items I will be participating in it to cover the city's cost so our share will be nothing. The other share will be 90% of the federal government and the state pays 3/4s of the balance and our share is 2.5% or about \$12,000. The last Master Plan was done in the 90's.

Discussion ensued regarding the drainage on the Mall's property to coincide with the drainage at the end of Runway 35 as possible acreage to be built upon.

Motion was made by Commissioner Oppermann to allow Mr. Estefan to move ahead on my October 15, 2013 letter, seconded by Commissioner Lee, and unanimously approved.

Tally-Ho Aviation

As Mr. Sorenson spoke during public speaking, Mr. Chris Orifici/Westconn Aviation has the opportunity to speak his concerns. Mr. Orifici stated he really had no comment, but there have been issues and I wouldn't be restricting the property if there wasn't any issues. Mr. Sorenson asked what issues and the only issues I can come up with are what's in the lease and in that case I'm going to ask that the lease be terminated and the FBO permit be revoked and I will do that in writing next month. Mr. Orifici stated his issues are not based on race, creed, age, etc. Mr. Estefan suggested that Commissioner Oppermann as the Liaison go by the airport and talk to both parties involved. Chairman Ashkar advised there is no place for us to take a stand as a commission because we didn't hear both sides of the story.

Mr. Estefan advised he has written a letter to the Zoning Enforcement Officer indicating that I do not have a problem with the restaurant and I designated all the FBO's building as a terminal on the airport which fits into the zoning code that way any FBO on the field if they wish to submit for a request for a hamburger place that fits within the layout through the proper zoning and planning department they can go forward and get a permit without having to change the zone.

Motion made to adjourn by Commissioner Oppermann, seconded by Commissioner Zilinek, and unanimously approved.



CITY OF DANBURY

185 DEER HILL AVENUE

DANBURY, CONNECTICUT 06810

DANBURY MUNICIPAL AIRPORT
P.O. BOX 2299
DANBURY, CT. 06813-2299

AIRPORT ADMINISTRATOR
PAUL D. ESTEFAN
(203) 797-4624

May 10, 2013

Gail Lattrell

Airport Planner

Federal Aviation Administration

New England District

12 New England Executive Park

Burlington, Mass. 01803

Good Afternoon Gail,

On behalf of the Danbury Municipal Airport I submit to you the following request for a Dog Walk area in the RPZ for Runway 8 here at the Danbury Municipal Airport;

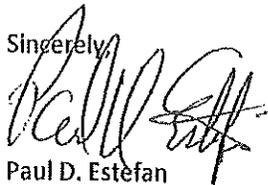
The proposed Dog Walk area is located on the southeasterly side of the Runway Protection Zone for Runway 8 at Danbury Municipal Airport. An exhibit is attached that shows the location of the Dog Walk area. Access to the Dog Walk area is off of Miry Brook Road. The area will be fenced to limit dogs and owners to this area and parking will be provided for pet owners. Though the airport owns the parcel south of the RPZ location, there is an open space conservation easement that precludes the development of the Dog Walk to the area within the Runway Protection Zone.

Reviewing Advisory Circular 150/5300-13A, *Airport Design*, and Interim Guidance for Land Uses within Runway Protection Zones dated September 27, 2012, the Dog Walk area will need to be reviewed by FAA. Considerations that should be assessed in the FAA review include the following:

1. The Dog Walk area is a low activity area intended to provide space for pet owners to exercise their pets.
2. The area will be day only use.
3. Automobile parking is primarily located within the Controlled Activity Area of the Runway Protection Zone.
4. The area will be fenced with a 4 foot chain link fence to limit dogs and owners to the area shown on the exhibit.
5. The area lies about 30' south of the runway centerline of the Runway 8 Approach, precluding people and pets directly under the approach to Runway 8.
6. Aircraft on approach are high over the Dog Walk area as the Runway 8 threshold is displaced 367'.

We understand that the proposed area will need FAA review and as such, please give me a call with any questions or concerns that you may have regarding the proposal. You may contact me at (203) 797-4624.

Sincerely,



Paul D. Estefan

Airport Administrator

Danbury Municipal Airport

Danbury, Connecticut 06810

Cc: File Estefan 107

Dog Walk Area



U.S. Department
of Transportation
**Federal Aviation
Administration**

New England Region

12 New England Executive Park
Burlington, Massachusetts 01803

August 29, 2013

Mr. Paul Estefan
Airport Administrator
Danbury Municipal Airport
PO Box 2299
Danbury, CT 06813-2299

Dear Mr. Estefan:

Thank you for your letter of May 10. I apologize that it took so long to get back to you formally.

You propose to create a Dog Walk area in the southeastern side of the Runway Protection Zone (RPZ) at the Danbury Municipal Airport. The Runway Protection Zone land uses are restricted to enhance the protection of persons and property on the ground. For that reason, prohibited uses include congregations of people and places of public assembly.

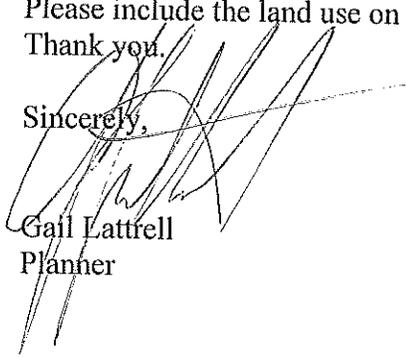
The Dog Walk, as proposed in your letter, would not be deemed a prohibited use and would be considered passive recreation and allowable in the area identified in the attached sketch. The protections you identify would need to remain in place and any modification to the Dog Walk area would require notice to the FAA. The protections include:

1. Low activity intended for individual recreation with pets.
2. Daytime use only.
3. Auto parking outside of the central portion of the RPZ and only in the controlled activity area.
4. Area will be fenced to prevent access outside the identified Dog Walk.

Please include the land use on the Airport Layout Plan drawing when it is completed.

Thank you.

Sincerely,


Gail Lattrell
Planner



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AIRPORT ADMINISTRATOR
PAUL D. ESTEFAN
(203) 797-4624

October 15, 2013

John Ashkar

Chairman

Danbury Aviation Commission

Dear Chairman Ashkar,

I submit to you the following names for the Airport Master Plan Technical Committee for your review and consideration;

1. Airport FBO: Wayne Toher or his designee
2. Mayor's Aviation Task Force Member: Robert King or his designee
3. Airport Commission: John Ashkar or his designee
4. Ct DEEP:
5. FAA: Gail Lattrell or her designee
6. Conn / CAA: Robert Bruno or his designee
7. Economic Development: Bruce Tuomala Director or his designee
8. City Planning Dept: Dennis Elpern Director or his designee
9. Airport Administrator Paul D Estefan or his designee

In closing this Technical Committee will assist the Airport Planners with input and review of Airport Master Planning Documentation. However the Technical Committee is advisory in nature only as the FAA has the final authority over the Master Plan Process.

Sincerely,

Paul D Estefan

Airport Administrator



CITY OF DANBURY
DANBURY, CONNECTICUT 06810

Danbury Municipal Airport
P. O. Box 2299
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(203) 797-4624
Fax: (203) 796-1569

Paul D. Estefan
Airport Administrator

CONFIDENTIAL MEMO

TO: Chairman John Ashkar
Commissioners Baker, Lee, Omasta, Oppermann, Tamburri, Zilinek

Cc: Attorney Laszlo Pinter – Corporation Counsel

FROM: Paul D. Estefan, Airport Administrator *P.D.E.*

DATE: September 13, 2013

SUBJECT: Aviation Commission

Attorney Pinter has submitted the Commission's proposal to Santo and Lynda Silvestro's attorney, Attorney Barr. To date, we have not received a counter proposal or any comments concerning the Commission's proposal. We have been notified by our insurance carrier that we have been put on notice of pending litigation. As soon as we get a substantive response, I recommend that we call a Special Meeting in Executive Session to discuss any proposals we receive concerning this matter.

If you have any questions, please feel free to contact me.

PDE/ald



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PAUL D. ESTEFAN
(203) 797-4624

September 29, 2013

Sean Hearty

Zoning Enforcement Officer

City of Danbury

Dear Zoning Enforcement Officer Hearty,

In response to your statement and discussions we had at the last City Council ad hoc committee meeting regarding WestConn restaurant, I submit to you the following Opinion;

At the Danbury Municipal Airport we do not have a Terminal Building like the Waterbury / Oxford Airport or any other Airport in Connecticut. We rely on our Fixed Base Operators to act as Terminal Buildings here at Danbury. There are two sides to an Airport the Land side and the Air Side, on the Land side is where we traditionally find restaurants to be located at an Airport. In my opinion the location that WestConn Aviation wants to locate the restaurant is on the Land Side of the Airport and I offer no objection to this submittal as shown on his site plan.

In closing Airport Safety cannot be comprised at this location or any other location on the Airport and the applicant has to keep the restaurant on the Landside of the Airport namely where the fence does not allow the public to go onto the Aircraft Parking Apron. If Pilots fly in to this Airport the applicant has to maintain the safety of the Aircraft Parking Apron, only allow authorized Pilots and passengers onto the Aircraft Parking Apron.

If you have any questions concerning this document please feel free to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul D. Estefan".

Paul D Estefan

Airport Administrator



EXHIBIT A
SCOPE OF SERVICES

FOR

DANBURY MUNICIPAL AIRPORT
DANBURY, CT

PREPARATION OF A SUSTAINABLE MASTER PLAN UPDATE

It is the desire of the City of Danbury, herein referred to as the SPONSOR of the Danbury Municipal Airport, to develop and maintain a vital transportation facility that is functional and provides the highest level of safety for based and transient aircraft operations. The airport also serves to support and enhance the existing and future economic development initiatives of the City of Danbury and the Greater Danbury Region. The technical work for development of this project shall be accomplished in accordance with the guidelines and requirements of the current Federal Aviation Administration (FAA) Advisory Circulars regarding airport planning, including AC 150/5300-13, *Airport Design* and 150/5070-6B, *Airport Master Plans*, as amended.

One of the most active General Aviation (GA) airports in the New England Region, the Airport has two paved runways with a supporting taxiway system, Air Traffic Control Tower, aircraft parking aprons, hangar and T-hangar facilities to store aircraft. The airport has several Fixed Based Operators (FBO) that provide aviation services to the local and itinerant general aviation community. The airport is the center of a complex of aviation related businesses, some of which are on airport and some of which are immediately adjacent to the airport. Based on the most recent FAA Airport Master Record Form (5010), the airport has 83,420 annual operations and 265 based aircraft.

The primary goal for this project is to update the 1996 Master Plan and to reflect current FAA design standards for both air and landside infrastructure and to meet the growing needs of the airport and the region. This goal includes identification and implementation of realistic sustainable targets and practices. The work includes improvements to existing air and landside facilities, as well as recommendations for new and innovative concepts to enhance cost effective operations, profitability, and customer services of the airport.

1. STUDY DESIGN

PURPOSE

To prepare a comprehensive study design that guides future airport development, is acceptable to the SPONSOR, and is fully eligible for FAA funding.

METHODOLOGY

The CONSULTANT (McFarland Johnson) will coordinate with the SPONSOR, Connecticut Department of Transportation Bureau of Aviation and Ports (CONNDOT) or successor Authority, and FAA to prepare a scope of work for the Airport Master Plan Update. Careful consideration will be given to the development of a work scope that is consistent with FAA and CONNDOT requirements and is responsive to the SPONSOR's specific needs concerning potential airport and economic development opportunities.

The goals of the study include:

- Prepare a Master Plan Update and Airport Layout Plan (ALP) to meet current and future aviation demand in accordance with FAA design standards. The Plan will identify and promote the implementation of strategies for guiding sustainable development and maximizing the efficiency of airport operations.
- Maximize currently undeveloped areas of airport property for aviation development as well as potential non-aviation revenue producing uses.
- Produce Airport Geographic Information System (AGIS) compliant base mapping and develop an application that will be compatible with existing AutoCAD software and will expand the Airport's ability to store and access Airport, aviation data and facilitate improved Airport management operations.
- Conduct an A-GIS compliant aeronautical survey for Runways 08-26 and 17-35 to provide data for future improved instrument approach procedures.
- Integrate elements of the NEPA process into planning efforts to streamline project implementation.
- Assess current Through The Fence (TTF) agreements against recent FAA TTF policies.
- Review current lease structure, rates and charges, and minimum standards for compliance with grant obligations and recommend needed changes..
- Develop financial tools to assist with planning and programming of future airport capital projects.

It is the goal of this Scope of Work that the information contained herein will be sufficient for the preparation of a Master Plan Update, which will be reviewed by the FAA and CONNDOT. However, if unanticipated work items are identified as a result of project scoping, agency coordination, and public involvement activities; or if unanticipated environmental resources or unforeseen planning issues are encountered, these items will be addressed under a separately funded Phase II environmental/planning document.

DELIVERABLE

The output of this task will be a comprehensive study design that is acceptable to the SPONSOR, is fully eligible for FAA and CONNDOT funding.

A Kickoff meeting will be held with the Technical Advisory Committee (TAC) (see Task 3.1) to review the Scope of Work and to present an overview of the planning process for this Master Plan Update.

2. AGIS AIRPORT SURVEY & MAPPING and OBSTRUCTION STUDY

PURPOSE

To update Airport aerial imagery and mapping in accordance with current FAA requirements for Master Plan mapping. The mapping shall include an Aeronautical Survey to identify obstructions to airspace imaginary surfaces identified in current FAA criteria which will be the basis of an Airport Obstruction Study and an updated Airport Obstruction Chart. The topographic Airport mapping will be compatible with both AutoCAD and GIS platforms and will be the basis for preparation of AGIS compatible data.

METHODOLOGY

2.1 Airport Imagery and Mapping

The CONSULTANT shall provide new aerial imagery meeting the requirements of Advisory Circular (AC) 150/5300-17B as amended. The area of coverage will consist of all the imaginary surfaces surrounding Danbury Municipal Airport as described in Section 2.2.7.1 (Airport Airspace Surveys for Runways with Vertical Guidance) of AC 150/5300-18B as amended. An Aeronautical Survey will be conducted, including both analysis of aerial imagery and ground survey verification, based on criteria for airports with vertically-guided approaches. Mapping of Airport features will be compliant with Airport/GIS requirements as to layering, topography, attribution, and will be suitable for development of a robust GIS application for Danbury Municipal Airport. Data will be uploaded to the FAA's Airport GIS website.

Aerial imagery collected as part of the aeronautical survey and mapping task will be compiled into an orthoimage and delivered in an easily accessible format such as .tiff or Mr. Sid.

2.2 Develop Airport GIS

The CONSULTANT shall utilize the Airport GIS-compatible mapping to develop an Airport GIS application for Airport management. The system will be structured in accordance with the feature classes as described in AC 150/5300-18B as amended and be compatible with the current FAA Airport GIS Program. It is anticipated that the data delivered as part of this project will be included in the following feature classes:

- a. Airfield
- b. Airspace
- c. Obstructions
- d. Environmental
- e. Geospatial

- f. Man Made Structures
- g. Navigational Aids
- h. Surface Transportation
- i. Utilities

To better define the needs and desires of Airport management, the CONSULTANT shall conduct a GIS Needs Analysis during this project phase. The Needs Analysis will be conducted with City engineering, planning, operations, real estate, and Airport management to determine the desired functions, capabilities, and users of an expanded GIS for Danbury Municipal Airport. The Needs Analysis will determine the responsibilities for development and maintenance of system components, and an implementation schedule will be developed. It is important to understand that development and maintenance of a GIS is an ongoing project and, although this project will provide the basis for the system, the development and implementation of all the ultimate capabilities such a system is capable of is well beyond the scope of this project. The resulting GIS deliverable for this project will be the data collection component of the basic GIS development and a Base Drawing, which is described as the "Existing Airport Layout".

DELIVERABLE

The deliverable will be aerial imagery of the airport property and approach areas, airport base mapping in AutoCAD format file compatible with the FAA's AGIS program, and an aeronautical survey of Runways 08-26 and 17-35. An obstruction study of the airport's FAR Part 77 surfaces, to including programming guidance, will be included as part of the Master Plan narrative report and will not be provided separately.

3. PUBLIC PARTICIPATION AND COORDINATION

PURPOSE

To allow for technical review of documents and to solicit comments from and engage the public through participation in the planning process.

METHODOLOGY

The Public Participation and Coordination process will consist of two elements: 1) Technical Advisory Committee Meetings and 2) Public Information Meetings.

3.1 Technical Advisory Committee Meetings

To assist in the coordination of the study effort with interested parties, regulatory agencies, airport users, the local community and the general public, a Technical Advisory Committee (TAC) will be established for the project. In consultation with the SPONSOR, representatives from the following groups will be considered:

- City of Danbury Representatives;
- Representatives from the aviation community (FBO, etc.);
- Housatonic Valley Council of Elected Officials;
- FAA New England Region;
- CONNDOT; and
- Other agency representatives identified by the SPONSOR.

The SPONSOR will review and approve all TAC members prior to mailing TAC membership request letters, which will be developed by the CONSULTANT, on behalf of the SPONSOR. The CONSULTANT will be responsible for the development of all presentation materials (e.g., maps, displays, renderings, PowerPoint presentation, etc.) and will present study findings and answer questions at the TAC and Public Information meetings. The CONSULTANT will also be responsible for the preparation of meeting minutes.

The TAC will serve as a steering committee and will meet four times during the course of the project to review and comment on the study products as indicated in the scope of services. It is noted that the TAC has no official approval role – this body is strictly advisory in nature. A kickoff meeting will be held at the beginning of the project to introduce the TAC to the planning process and explain their role. Input from the TAC will be used to identify and address local issues, concerns and requirements as they relate to future planning and development at the airport. The TAC meetings will be held during the day, and scheduled as outlined below:

<u>MEETING NO.</u>	<u>STUDY PHASE</u>	<u>TASKS ADDRESSED</u>
1	Interim Report #1	Kickoff, Tasks 4, 5
2	Interim Report #2	Task 6, 7
3	Interim Report #3	Task 8
4	Interim Report #4	Task 9, 10

3.2 Public Information Meetings

To gain public input for this project, two Public Information Meetings will be held to present the draft study recommendations prior to the preparation of the final plan. These meetings will be accomplished in a public workshop format. These meetings will be held during the evenings of TAC Meeting 2 and 4. The CONSULTANT will be responsible for the development of all presentation materials (maps, displays, renderings, etc.). The use of an informal workshop format is anticipated for these meetings, in which the study findings will be presented in a series of stations, and the CONSULTANT will provide personnel to answer questions and explain the graphics as needed. The CONSULTANT will also be responsible for the preparation of meeting minutes.

DELIVERABLE

Four TAC meetings and two public information meetings will be held throughout the master planning process.

4. INVENTORY

PURPOSE

To document existing airfield facilities and gather information on current and potential airport users. The airport and surrounding service area, current and potential airport users, airport facilities, aeronautical activity, land use patterns and plans, NAVAIDS, airspace and obstructions, socioeconomic data, and environmental concerns that influence airport operations will be documented.

METHODOLOGY

Existing documents relating to the airport and surrounding area will be reviewed including: existing airport layout plan and airspace plan, applicable regional aviation system plan, state aviation system plan, airport marketing and business plans, community plans and recent newspaper or other media articles. Discussions will be held with airport management, local planning agencies, airport tenants, and other interested parties concerning airport activity and its relationship to the airport service area and airport needs. Site visits and field investigations will be made to confirm the physical condition of airfield facilities and to review the need for additional study of the site.

4.1 Airport Facilities Inventory

The CONSULTANT will conduct a detailed inventory of existing conditions and facilities. The year 2012, or the last full year of available aviation data, will be used as the base year from which all future requirements will be measured. This will include airport facilities, local public infrastructure, existing land use and zoning, airport property, and state and local regulations affecting future development. Information from previous planning studies including the last Master Plan Update, Comprehensive Plans, Land-Use Plans, Regional and State Aviation System Plans, other available studies, and engineering work will be reviewed and incorporated to the extent that they are valid for planning purposes. This information will be augmented as necessary with data obtained through on-site reconnaissance, FBO and tenant surveys, agency coordination, consultation with airport management and follow-up interviews. This task may also involve coordination with local businesses, industries and aviation groups to evaluate existing and potential aviation need. Data assembled during this task will serve as the basis upon which the remainder of the study will be developed. One two day trip will be completed to obtain information from the City, the Airport, and Tenant interviews.

The detailed inventory of existing airport facilities, conditions, users, etc. will involve on-site documentation of facilities, and consultation with the airport management. The inventory

will include aviation facilities located both on and off airport property. Key functional areas of the airport will be identified and discussed. The inventory will include items such as:

Airside/Airspace:

- Present Airport Classification and Level of Service
- Airfield Facilities - Size, Condition and Pavement Strength, as readily available, of Runways and Taxiways
- Fueling Systems
- Airfield Lighting Systems
- NAVAIDS
- Traffic Pattern
- Airspace Considerations
- Air Traffic Activity, including Based Aircraft, Operations, and Fleet Mix
- Existing and Historical Instrument Approaches
- Airfield Expansion Capabilities

Landside:

- Airport Property and Easements
- Terminal Buildings, Hangar Facilities, and Aprons
- Ground Access and Parking
- Airfield Maintenance Facilities and Equipment
- Land Use Considerations, Adjacent Development, and Planned Improvements
- Landside Expansion Capabilities
- Airport Tenants
- Regional socioeconomic and populations data

4.2 Integrated Noise Model

As part of this effort, the initial Integrated Noise Model (INM) will be developed. Data used as input to the INM will be collected and incorporated into the model. This data will include day/night operations, aircraft fleet mix flight tracks, and other relevant data required to run the INM. Data will be based on operations occurring through the year 2012, or the last full year of available aviation data. An existing conditions noise contour outlines, established in terms of the day-night average sound level (DNL) in decibels will be developed as part of this effort and incorporated onto an existing land use map that will be obtained as part of Task 4.1.

4.3 Obstruction Study

As part of the Airport/GIS compliant mapping Task 2.1, an aeronautical survey of the airspace surrounding Danbury Municipal Airport is required. That survey, which will be submitted to the FAA Airport Surveying-GIS Program for approval and verification, will be based on the airspace surfaces described in AC 150/5300-18B as amended, which are

unique to that type of survey. The survey, upon verification by the National Geodetic Service (NGS) will be the basis for the development of new instrument approach procedures for the airport. In addition, the CONSULTANT will collect additional object height information suitable for the analysis of FAR Part 77 and other airspace surfaces specific to Danbury Municipal Airport. Analysis will consist of the following:

- a. Analysis of existing and future FAR Part 77 Surfaces as required for Airport Master Plans. The resulting obstruction drawings and data will be part of the ALP drawing set.
- b. Also as required by FAA Master Plan criteria, the Runway End Siting Surfaces (RESS) applicable to each runway end will be included in the ALP drawing set. Because the RESS are very similar to the Terminal Instrument Procedures (TERPS) surfaces, the CONSULTANT will consult with the SPONSOR and FAA to determine the most appropriate criteria to use in evaluating obstructions for this project and avoid duplication.
- c. Based on the findings of c above, the CONSULTANT will prioritize the recommended obstruction removal and provide a proposed schedule and identify environmental approval requirements, along with cost estimates for design and construction. These recommendations will be incorporated into the final implementation plan.

DELIVERABLE

A written report will be completed summarizing the inventory of airside and landside facilities. Data obtained for the obstructions will be developed and utilized in remaining sections of this Master Plan.

5. ENVIRONMENTAL OVERVIEW

PURPOSE

Prepare a comprehensive inventory of existing environmental conditions at Danbury Municipal Airport.

METHODOLOGY

An inventory of environmental conditions and constraints to development at Danbury Municipal Airport will be prepared. The analysis will utilize federal, state, and local environmental documents and requirements to develop the environmental overview.

5.1 Environmental Conditions

The objective of this task will be to identify critical environmental concerns or constraints to future airport development. This task will include a review of readily available information

about the site. Each impact category identified in FAA Order 5050.4B, *Airport Environmental Handbook* and FAA Order 1050.1E, *Policies and Procedures for Considering Environmental Impacts* will be investigated to determine its relevance and significance to the airport development program. Agency coordination will be undertaken to identify current regulatory agency resource data and applicable permit requirements. An on-site inspection of the airport environs will be conducted to identify potential environmental constraints. The following subject areas will be addressed in the Environmental Inventory:

- Air Quality
- Coastal Resources
- Compatible Existing and Future Land Use
- Department of Transportation Act: Sec. 4 (f)
- Farmlands
- Fish, Wildlife, and Plants
- Floodplains
- Hazardous Materials, Pollution Prevention, and Solid Waste
- Historical, Architectural, Archeological, and Cultural Resources
- Light Emissions and Visual Impacts
- Natural Resources and Energy Supply
- Noise
- Socioeconomic, Environmental Justice, and Children's Environmental Health and Safety Risks
- Water Quality
- Wetlands
- Wild and Scenic Rivers

Recent relevant documents, including National Environmental Policy Act (NEPA) documents and permit applications will be reviewed to identify known conditions at the airport. A field walkover will be conducted to confirm the conditions and finding of those documents or make current observations where conditions have changed. Resource agencies will be contacted to identify the known presence or absence of resources under their respective jurisdictions. Publicly available information on Cultural Resources and readily available data from previous studies will be summarized. To the extent practical and available, GIS information will be obtained from the resource agencies and incorporated into the AGIS base mapping data.

The Environmental Inventory will be summarized in a narrative included as a chapter of the Master Plan Report. The narrative will identify the important constraints to development, with emphasis on those conditions that may influence the alternative analysis. Regulatory requirements for future projects will be summarized with associated data, as available, to reduce future environmental analyses in an effort to expedite environmental approvals.

5.2 Wetland Delineation

The wetland delineation will be conducted by professional soil scientists meeting the qualifications found in Section 22a-38 of the Connecticut General Statutes, will be responsible for delineating the limits of wetlands and watercourses located on the approximately 250± acres comprising Danbury Municipal Airport property. Wetlands and watercourses will be delineated with consecutively numbered survey tape flags at nominal 30-foot intervals in accordance with State of Connecticut Inland Wetlands and Watercourse regulations and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (Environmental Laboratory U.S. Army Corps of Engineers, January 2012). Approximately 15,000 linear feet of wetland edge will be delineated.

Where the differences between the two wetland boundaries are separated by less than 10 feet, the state and federal boundaries will not be delineated separately and will be considered coincident. Both wetland and adjacent non-wetland soil type units will be classified and represented schematically on a field sketch. Since the location and extent of potential wetland impact areas are not known, this scope does not include the collection data and preparation of federal wetland determination data forms. If impact is proposed in the future, data could be collected in the proposed impact area under a supplemental agreement to the contract. In addition to the delineation, field notes recording a general inventory of wetland soils, evidence of wetland hydrology, and a list of dominant plant species within the tree, shrub, and herbaceous strata will be collected.

A wetland delineation report will be prepared documenting the results of the investigation. The report will include a sketch of the site showing wetland flag locations and general soil types, a list of the sequence of wetland delineation flags used to complete the delineation, a list of wetland and non-wetland soil types encountered during fieldwork, a general description of wetland and upland plant associations, and a narrative describing existing wetland conditions.

Schedule: The wetland delineation field work will be completed within three weeks of notice to proceed. The wetland delineation report will be completed approximately one week following completion of field work.

Wetland boundaries will be flagged as part of the field investigation. Land surveyors will field locate wetland delineation flagging placed during the wetland delineation task. Using Global Positioning System (GPS) receivers, measurements will be made at wetland flagging and resulting raw files will be downloaded for further post processing and differential correction. Expected accuracies for GPS locations, after post processing, are one to three meters. After post processing is complete, that data will be exported into CAD software and point nodes and symbols will be created at each wetland flagging location.

DELIVERABLE

A written report documenting the results of this task will be prepared and will be summarized in the Environmental Overview. Wetland delineations and flagging conducted as part of this project will be included in the Airport base mapping along with any flood zones and other environmental conditions as appropriate.

Results of the above Inventory and Environmental Overview will be documented in narrative and tabular form as Interim Report #1. TAC meeting #1 will be held to review Interim Report #1 and will also serve as a Kickoff Meeting.

6. AVIATION DEMAND FORECASTS

PURPOSE

To establish forecasts of aeronautical activity (general aviation aircraft operations and based aircraft) at the airport for the short-term (0-5 years), intermediate (6-10 years) and long-range (11-20 years) planning periods; and to establish forecasts of aircraft parking, tiedown and hangar needs.

METHODOLOGY

The forecasts will be developed using historical activity, previous master plan forecasts, FAA Terminal Area Forecasts, and other forecasts derived for Danbury Municipal Airport. This data will be reviewed and several forecasts will be developed as part of this task.

6.1 Data Collection

The Demand Forecasts will present projections of aeronautical activity (aircraft operations and based aircraft) at the airport for the short-term (0-5 years), intermediate (6-10 years), and long-term (11-20 years) planning periods.

Existing forecast data available from the FAA, State, regional agencies, and other sources will be assembled and reviewed. Current aircraft registration data, interviews, surveys of businesses and local aircraft owner/operators, and socioeconomic data may also be used as the basis of forecast development.

6.2 Develop Forecasts of Aviation Demand

Methodologies to develop the forecast may include trend line analysis, regression analysis, application of growth factors, or other accepted forecasting methodology. An existing and future design aircraft will also be identified. Preparation of the demand forecasts will entail the following:

Examine existing readily available aeronautical forecasts for the airport including:

- Based aircraft fleet mix
- Local vs. itinerant
- Design Aircraft
- Estimated current and historical activity
- Cargo, military, and air taxi demand/operations
- General Aviation passenger enplanements
- Annual operations
- Review FAA aeronautical forecasts (as available)
- Review State and Regional forecasts (as available)

Forecast future demand, including:

- Establish forecasts of based aircraft by fleet mix
- Establish forecasts of annual aircraft operations, including local, itinerant, military and air taxi
- Establish operational fleet mix forecast
- Establish peak-day/peak-hour forecasts
- Designate critical aircraft and Airport Reference Code (ARC) for planning purposes
- Document reasonableness and practicality of the forecasts

Airport management and aircraft owners will be asked to provide input in the forecasting process. The aviation demand forecasts and selection of the design aircraft will be submitted to FAA and CONNDOT for review and comment prior to the start of subsequent tasks. Comments and/or approval of submitted forecasts are anticipated and expected within 30 days of submittal to FAA and CONNDOT.

DELIVERABLE

A written report will be completed summarizing the Aviation Demand Forecasts.

7. DEMAND/CAPACITY ANALYSIS AND FACILITY REQUIREMENTS

PURPOSE

To examine capacity over the planning period and determine the type and amount of Airport facilities (runways, taxiways, aprons, tie-downs, storage hangars, vehicle parking, terminal area facilities, navigational and approach/landing aids, Airport lighting, instrument approaches, etc.) needed to accommodate the Airport Demand Forecasts over the next 20 years and to meet current design standards.

METHODOLOGY

Airside Capacity Analysis, such as Annual Service Volume (ASV), as well as Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) hourly capacities will be evaluated using FAA AC 150/5060-5, Airport Capacity and Delay as amended and other industry guidelines. The capacities and requirements of runways, taxiways, aircraft parking areas, vehicle parking facilities, and passenger terminal facilities will be assessed based on the Forecasts identified in Task 6.0. Airport Facility Requirements for the next 20 years will be determined through a comparison of aviation demand and scenario-based opportunities with existing Airport features and facilities.

7.1 Airfield Capacity Analysis

Based on guidance provided in FAA Advisory Circular 150/5360-5, *Airport Capacity and Delay* as amended, the current and forecast capacity of the airfield will be determined and compared with forecast demand. Capacity will be described in terms of:

- Annual Service Volume (ASV)
- Peak Hour VFR Capacity
- Peak Hour IFR Capacity

The demand/capacity analysis will provide basic information for the determination of future airfield facility requirements. The airfield, airspace and surface access capacities of existing facilities will be evaluated based upon projected levels of aviation activity. NAVAID requirements will also be addressed. Future instrument requirements and capabilities will be based on demand forecasts and consultation with the FAA and/or CONNDOT.

7.2 Airside Facility Requirements

Based on the anticipated aircraft fleet mix and level of operational activity, this section will determine the need for airfield improvements. Particular attention will be given to maximizing the use of current runway systems, and recommendations for improved approach procedures. Any layout dimensions or other requirements for the proposed Airport Reference Code that do not meet current standards will be identified and addressed. Airside elements examined will include the following:

- Runway improvements, runway safety areas, object-free areas, object-free zones, protection zones, and approach areas
- Taxiways, taxiway safety areas, object-free areas
- Aircraft parking aprons
- Load bearing capacity of pavements
- Airport marking and lighting
- Instrument approaches and nav aids
- De-icing areas as applicable
- Obstruction identification and FAR Part 77 Surfaces

7.3 Landside Facility Requirements

Landside Airport facilities will be identified. Interviews will be conducted with Airport management, operational personnel and tenants as part of the process to determine current procedures and potential areas of concern. Opportunities to improve Airport revenue generation and sustainability will be sought and investigated for these functions as well:

- FBO areas and facilities
- Aprons, tie-downs, taxi-lanes (general aviation and cargo)
- Airport administrative offices
- Aviation fuel storage and distribution
- Airfield maintenance facilities and snow removal equipment storage
- ARFF facilities
- Land/easement acquisition
- Establishment of "Use Areas/Development Nodes"
- Non-aviation use areas

7.4 Utilities and Support Systems

The gross demand on existing and future utilities and support systems will be assessed based on discussions with utility company representatives and with publicly available data through local municipalities, as well as data made available by the City of Danbury. Future demands will be compared with existing facilities to assess basic future needs in the following areas:

- Electrical Power (including backup power)
- Storm Drainage
- Domestic Water
- Sanitary Sewer
- Natural gas
- Telephone
- Fiber Optic/Cable TV/Internet Access
- Airport Communications System (radio, repeaters, etc.)

Opportunities for increasing the environmental sustainability of the Airport's utility infrastructure could include solar and wind generation, co-generation, innovative storm water management practices, and other cost-effective means of increasing Airport sustainability.

DELIVERABLE

A written report will be completed summarizing the Airport Capacity and Facility Requirements for the Master Plan Update.

The Aviation Demand Forecasts, Demand/Capacity Analysis and Facility Requirements will be combined into Interim Report #2. The Second TAC meeting will be held to review Interim Report #2.

A Public Information Meeting will also be held to present the data collected and to receive input from the public prior to the development of the Airport Development Alternatives.

8. SUSTAINABILITY

PURPOSE

To implement Danbury Municipal Airport's commitment to maximizing the environmental quality and efficiency of all aspects of Airport operations, an Environmental Sustainability Plan will be prepared in coordination with the TAC and incorporated into the Sustainable Master Plan.

METHODOLOGY

Sustainability considerations will be incorporated into the Master Plan Update as an integral component of the project. The aviation community as a whole is moving toward a future in which Airport facilities contribute significantly to reductions in air quality, greenhouse gas emissions, energy and water consumption plus other factors. As each sustainability plan is unique, the following process has been prepared specifically for Danbury Municipal Airport the process will identify opportunities to incorporate sustainability in the day to day activities of the Airport as well as capital projects identified as part of the Master Plan. Sustainable concepts will also be identified and incorporated into the traditional Master Plan process to enhance the planning process and outcomes. The Master Plan will develop a custom sustainability approach for Danbury Municipal Airport, based on the specific issues at the Airport.

8.1 Sustainability Framework

This task includes developing the sustainability framework for the master plan through identifying the key tasks that will incorporate sustainability considerations. Master Plan Team will work with the Airport to develop a written Sustainability Policy or Mission Statement. The Master Plan Team will work identify the appropriate sustainability categories (limited to five; such as surface transportation, waste management, water quality, and community or economic programs) for the Airport that will lay the groundwork for the sustainability baseline assessment and goals and objectives setting.

The FAA recommends that the public and stakeholders are involved in the development of a sustainable master plan. The Master Plan Team will provide suggestions for including sustainability considerations in the stakeholder process.

8.2 Sustainability Baseline Analysis

A sustainability baseline assessment will be conducted based strictly on readily available information provided by the Airport. The sustainability baseline assessment will include the sustainability categories identified in Task 8.1. The MJ Team will prepare a data needs request to in spreadsheet format for submission to the Airport. The data will be gathered in concert with the Airport. The MJ Team will document the baseline assessment addressing the five sustainability categories identified in Task 8.1. The baseline assessment will form the basis for developing draft sustainability goals and objectives for the Airport's consideration.

8.3 Sustainability-related Alternatives Screening Criteria

Alternatives screening criteria that take sustainability considerations into account will be developed and incorporated into the evaluation of alternative concepts. This task will also provide a summary of environmental and sustainability considerations analyzed for each alternative during the planning process, with the intent to provide a clear understanding of the environmental requirements needed to move forward with each project contained in the recommended development program. The MJ Team will develop sustainability evaluation criteria that will be factored into the alternatives evaluation and screening process. No formal agency coordination will be included in this effort.

8.4 Develop Implementation and Monitoring Plan

Based on the findings from Task 8.2, the MJ Team will develop sustainability performance targets for the sustainability categories identified. Consideration will be given to regulatory mandates. Through consultation with the Sustainable Aviation Guidance Alliance (SAGA) database and other industry resources, The MJ Team will identify and evaluate candidate sustainability initiatives based on criteria specifically developed in collaboration the Airport. Sustainability initiatives will be identified and evaluated for incorporation into the recommended Master Plan development program and stand-alone sustainability initiatives that are appropriate for the Airport. The MJ Team will recommend sustainability implementation and monitoring recommendations for inclusion in the master plan report.

8.5 Recycling and Waste Management

The recently passed FAA Reauthorization bill (FAA Modernization and Reform Act of 2012) includes a new requirement for Airport Master Plans that includes:

- Evaluating the feasibility of solid waste recycling,
- Minimizing the generation of waste,
- Identifying operations & maintenance requirements,
- Reviewing of waste management contracts, and
- Identifying the potential for cost savings or revenue generation.

The City of Danbury currently has a recycling program instituted within government offices as well as a public program, but does not extend to the Airport. Therefore, the following

steps will be completed to identify recommendations that can be employed to develop a recycling program for the Airport:

1. Collect information on the City's waste management program

A discussion with City officials will be conducted to understand the current waste management program for the City. Materials currently recycled will be identified, determine the process that is used and how materials are collected and processed. Potential revenue generation of the program will also be discussed.

2. Survey Airport Tenants waste generation and recycling programs

Through the inventory process, tenant's current recycling programs (voluntary or corporate mandates) will be catalogued. The process will identify the materials that are currently recycled and the methods used to collect, store and process recyclable wastes. Other information to be gathered as available will include monthly waste/recycling invoices and the waste-related recycling costs (containers, hauling, disposal, and labor).

3. Develop recommendations for instituting an Airport recycling program

Based on the above tasks, recommendations will be developed that address how the City's current program can be instituted at the airport and what will be necessary (educational pamphlets, recycling bins, etc.) to implement a recycling program. Information from tenants programs will also be assessed and where current practices not covered under the City's program will be assessed. Recommendations will be made on how such programs can either be expanded to include other tenants or combined to more efficiently recycle materials generated by Tenants as well as the Airport.

DELIVERABLES

A written report that develops recommended sustainability measures for incorporation into the proposed Master Plan development program, appropriate stand-alone initiatives and sustainability implementation and monitoring recommendations. Recommendations for instituting a recycling program for the Airport and Tenants will also be developed as part of this task.

9. AIRPORT DEVELOPMENT ALTERNATIVES

PURPOSE

In this task, feasible development alternatives having the potential to satisfy the various airport facility requirements identified in Task 7.0 will be presented using the forecasts identified and established in Task 6.0. The alternatives will be evaluated on the basis of criteria described below and preferred alternative will be identified. The preferred

alternatives will be incorporated into an overall development plan for the airport which will be the basis for the final Airport Layout Plan.

METHODOLOGY

Based on the results of Task 7.0, the next step is to identify alternative development scenarios for the various functional areas of the airport. The alternatives will consider the airside and landside features.

To guide the evaluation of viable alternative development scenarios, the CONSULTANT will rely on the goals established in Task 1.0. These will be supplemented by criteria reflecting FAA design standards, cost effectiveness, environmental impact, and the degree to which the alternative in question meets the identified facility requirement. A set of standards will be established for each type of plan developed (e.g. airside, landside). To facilitate future NEPA review of projects prior to construction, the "No-Build Alternative" will also be evaluated.

9.1 Airside and Landside Alternatives

Airside and landside development alternatives will be developed to meet the identified facility requirements. The airside alternatives will focus on the runway and taxiway system as well as aircraft parking aprons. Landside facilities will focus on the conventional and T-hangar needs, terminal building, maintenance facilities and roadway access. Up to three alternatives will be developed for the airside and landside facilities.

9.2 Alternatives Evaluation

The alternatives will be evaluated according to various criteria, which may include the following:

Airside Alternatives:

- Facility Requirements: Does the Alternative meet the existing and future needs of the Airport and is the Alternative feasible for implementation?
- NEPA/Environmental Impact: What are the potential environmental impacts associated with implementation of the Alternative? To what extent does this Alternative further achievement of the Airport's Sustainability Goals and Targets? What NEPA action will be required as part of the process?
- FAA Standards: Does the Alternative meet the design standards of FAA Advisory Circular 150/5300-13 as amended and Federal Aviation Regulation (FAR) Part 77 Surfaces to the maximum extent feasible?
- Development Costs: Does the Alternative have reasonable development costs in comparison to other Alternatives that achieve the same goal? At the Alternatives stage, planning-level cost estimates will be developed for general comparison amongst airside Alternatives.

- **Development Flexibility:** To what extent does this alternative leave flexibility for change and future surrounding development? Does this alternative allow flexibility from an operational standpoint?

Landside Alternatives:

- **Land Use Compatibility:** Is the Alternative compatible with on-Airport and off-Airport patterns of land use? This criterion will evaluate such things as access to the airside movement areas and the local road network and the degree to which the Alternative is compatible with activities occurring in surrounding on- and off-Airport lands.
- **Environmental Impact:** What are the environmental impacts associated with implementation of the Alternative? To what extent does this Alternative further achievement of the Airport's Sustainability Goals and targets?
- **Potential for Expansion:** Does this Alternative have the ability to accommodate future unanticipated expansion? This criterion recognizes the fact that location decisions made today will influence future Airport development for many years to come. Planning shall consider future development needs beyond the Facility Requirements of the current planning period.
- **Operational Efficiency:** Will this Alternative contribute to the development of a smoothly functioning Airport with efficient movement of aircraft? This criterion will consider whether the Alternative makes the best and most efficient use of Airport facilities.
- **Revenue Generation Capability:** Does the Alternative afford opportunities for Airport Management to increase revenue generation thereby improving the overall competitiveness and cost effectiveness of the Airport?

It is recognized that unforeseen changes during the planning process may require the addition of other criteria or changes in the selected criteria.

Conceptual cost estimates for each alternative will be developed as part of this task. Evaluation criteria noted above will be used to evaluate the benefits of each alternative. A recommended airport development plan will then be selected based upon the above evaluation, and consultation with the SPONSOR, CONNDOT and FAA.

9.3 Selection of the Preferred Alternative

In this task, the previous evaluations will be considered from an airport-wide viewpoint, in order to select the best alternative. A qualitative analysis will be conducted to identify the highest ranked airfield concepts. As part of the process, features from different alternatives may be combined to form a preferred alternative, without compromising the integrity of the analysis. In this manner, the preferred alternative can be refined, and may well represent a composite of the best features of each of the individual alternatives. As such, a refined alternative will be developed that best meets the future

capacity and facility requirements, and provides an overall airport development program for Danbury Municipal Airport.

DELIVERABLE

A written report will be completed presenting the Airport Development Alternatives studied for this Master Plan Update, and identifying the preferred alternatives for future airside and landside development.

Results of the Airport Development Alternatives will be documented in Interim Report #3. The findings will be presented at TAC meeting #3.

10. DRAFT AIRPORT LAYOUT PLAN DRAWING SET AND CAPITAL IMPROVEMENT PROGRAM

PURPOSE

This section incorporates the overall preferred alternative for the airport into a draft Airport Layout Plan (ALP) set and identifies funding required for development over the planning period.

METHODOLOGY

An Airport Layout Plan Set will be developed using FAA guidance and the New England Region ALP checklist. A capital plan of the proposed development will also be developed and funding sources, including FAA, CONNDOT, the SPONSOR and private funding will be identified.

10.1 Airport Layout Plan Set

A draft Airport Layout Plan (ALP) Drawing Set will be prepared from the recommended plan and TAC inputs obtained in Task 9.0. The recommended plan will then be incorporated into a draft ALP that will conform to the following guidelines:

- FAA Advisory Circular 150/5300-13, *Airport Design* as amended
- State Aviation Regulations
- Federal Aviation Regulations Part 77 as amended
- FAA New England Region ALP Checklist

The draft ALP set will contain the following sheets:

Existing Airport Layout

Prepare a drawing depicting the current airport layout in accordance with the FAA New England Region ALP checklist directives.

Airport Layout Plan

Prepare an airport layout plan in accordance with industry and FAA guidelines. The drawings will depict those features as indicated on the attached New England Region Airport Layout Plan Checklist.

Terminal Area Plan

Prepare a terminal area plan indicating existing and recommended future uses and development for the passenger terminal, general aviation areas, tenant areas, and ground access and vehicle and aircraft parking. To the extent practical and advisable the recommended security improvements will also be illustrated. The drawing will include those features as indicated on the attached New England Region Airport Layout Plan Checklist.

Airport Airspace Plan

Prepare an airport airspace plan for all ultimate FAA Part 77 imaginary surfaces, including approach slopes and any height or slope protection established by local zoning ordinance. The drawing will include those features as indicated on the attached New England Region Airport Layout Plan Checklist. Data obtained as part of Task 2.0 will be used to develop this plan.

Inner Portion of the Approach Surface Drawing

Prepare an inner approach surface and runway protection zone control including a plan and profile of the ultimate runway protection zones and inner approach surface areas showing the controlling obstructions therein, their top elevations and proposed disposition. The drawing will include those features as indicated on the attached New England Region Airport Layout Plan Checklist such as the Runway End Siting Surface and FAR Part 77 Surfaces. Data obtained as part of Task 2.0 will be used to develop this plan.

Runway Departure Surfaces Drawing

Prepare departure surface drawings including 40:1 surface drawings for all applicable runway ends. These drawings will be prepared using obstruction and obstacle data derived from the mapping conducted in accordance with FAA Advisory Circular 150/5300-18B as amended. The CONSULTANT will give special emphasis to the identification of any obstructions that penetrate the 40:1 departure surface. The Master Plan Update will provide recommendations for obstruction removal on the basis of the findings from these drawings. Data obtained as part of Task 2.0 will be used to develop this plan.

Airport Land Use Plan

The Airport Land Use Plan will be prepared and will indicate specific airport uses and show off-airport compatible and non-compatible land uses. The drawing will incorporate noise contours generated as part of this process which is discussed below. The drawing will include those features indicated on the New England Region ALP Checklist.

The Integrated Noise Model will be revised based upon the recommended development identified in Task 9.0 and forecasted operations and fleet mix data from the forecasts in Task 6.0. The resulting noise contours will be overlaid upon the land use map and assessed for potential impacts to residential area and other incompatible land uses. Contours to be generated shall be the 60, 65, 70, and 75 decibel Day Night Average Level (DNL). The assessment of potential noise impacts will be included in this section.

Airport Property Map

Prepare a Property Map Exhibit to identify land owned and/or to be acquired by the SPONSOR for improvements. Off-airport property required for landside/airside development will be identified for acquisition and areas not needed for aviation use may be shown available for future release. The drawing will include those features indicated on the New England Region Airport Layout Plan Checklist.

Data for the Exhibit A will be collected from the City of Danbury. The property line will be obtained from the City of Danbury and will be based on the most current information the City has. No boundary survey will be conducted under this task. Data regarding specific properties that comprise the entire airport property and aviation easements will be obtained from the City and the County Clerk's office via online data and supplemented through a site visit to the City and County Clerk's Office.

10.2 Capital Improvement Plan

A Capital Improvement Plan will be prepared. A listing of airport development projects necessary to implement a phased development plan will be prepared. The recommended projects associated with an obstruction removal program will be included in this plan. The phases will be organized into Short Range (0-5 years), Intermediate Range (6-10 years), and Long Range (11-20 years) projects. For each project, design and construction cost estimates and funding sources will be identified. All realistically available sources will be considered, including federal, state, local and private funding sources. The resulting Capital Improvement Plan will be compatible with FAA's 5-year Airport Capital Improvement Plan (ACIP) requirements and CONNDOT's Aviation Capital Plan.

10.3 Airport Management and Financial Plan

The final task under this section will be the review of the existing management structure, policies, minimum standards, rules and regulations, leases and rates and charges. Special attention will be paid to the current leases and minimum standards with regard to airport users to ensure that they represent the current types of operators at the airport. The existing Through The Fence (TTF) agreements will also be reviewed to determine their ability to meet the current FAA policies regarding TTF's at airports. Findings and recommendations will be provided based upon the analysis conducted.

To maximize the ability of the airport to fund needed development identified in the airport's capital improvement plan, financial analyses and financial planning tools will be development. As part of the analysis, the existing financials will be reviewed to assess the

short and long-term financial impact of current policies and to identify options for enhancing future revenues through adjustments to existing lease agreements or entirely new sources of revenue. Existing rates and charges/fee structure will be compared to the recommended changes in the development of a financial model that can guide decision-making at the Airport. The financial model will be designed as a tool that can be utilized to adjust variables and evaluate prospective growth paths should particular choices be made. In this way, the Airport and the City can consider future impacts of maintaining the status quo and of changes in the fee structure or lease agreements over time. Additionally, recommendations will be provided for improvements for lease agreements and the rates and charges/fee structure to better position the Airport for future growth.

Data that will be collected as part of this process, as made available by the Airport/City will include:

- Organizational chart, or reporting structure.
- Number of employees by type/function listed for both full and part time work.
- Expenditures on payroll and operations, if different from budget.
- Average annual expenditure on capital improvements and latest ACIP.
- The latest three (3) years of Airport expenses and revenues.
- The latest budget for the Airport.
- Summary of existing lease and TTF agreements, including: the term of the lease; square footage of area leased; rental payment schedules/rates; scheduled rent escalations; fuel flowage rates.
- List of rates and charges for aircraft storage facilities including: conventional hangars, T-hangars, and tie-downs (including rates by type of aircraft, where appropriate) if applicable.
- List of all other rates and charges. For example: percent, or cents, charged per gallon of gas (Jet-A or 100 LL); landing fees; consignment fees; special events, etc.
- List of businesses using the Airport, e.g., air cargo, pilot training, corporate, medevac, etc., including any notable groups and/or individuals.
- List of all on-airport employers and aircraft tenants.

A baseline financial outlook will be estimated based upon three-year historical data and a forecast of performance under status quo conditions.

Revenue enhancement strategies will be explored and described, including growth assumptions for: changes in levels of corporate aviation and/or fractional ownership; increased flight training via high school and/or college programs; new or improved terminal services or amenities; changes or additions to Airport FBOs; changes in services provided; impacts of on- or –off Airport property development; and, changes in rates and charges.

Basic expense forecasts will be generated to include the cost of implementing revenue enhancement strategies, which may include debt service for hangar development. Budget projections will be provided based on known factors and analyses including, but not limited to: inflation, development expenses, changes to staffing levels, expected aircraft growth,

leases, contracts, and the local match on grants. These expenses will then be compared with the future revenues in a net revenue analysis.

A series of fee structure alternatives (max of 4) will be prepared to provide options to the City in establishing an improved fee structure, including the white paper discussing the advantage and disadvantage of creating the airport as an enterprise fund. Various alternatives can be compared to projected expenses under the status quo alternative and under revenue enhancement scenarios. A conference call will be held with Airport Management to discuss alternative revenue enhancement strategies. Changes to the preliminary recommendations will be made at that time.

Based on the alternatives, recommendations for enhancement of the Airport's financial performance will be provided. As part of the recommendations, action steps will be identified. These actions will include:

- Identify initiatives that can improve financial performance and better position the Airport for growth, including viable development and operational enhancements.
- Identify potential partnering opportunities with the business community or area schools to improve the Airport's market position and take advantage of synergies.
- Identify potential efficiencies in current business practices and systems.
- Discuss capital investment options.
- Present financial pro formas for the recommended plan.
- Identify a preferred, improved fee structure alternative.

DELIVERABLE

A draft ALP set and a written report will be completed summarizing the Airport Layout Plan Set and Financial Plan for this Master Plan Update. This will be combined into Interim Report #4. The Final TAC meeting will be held to Review Interim Report#4.

A management and financial plan will be developed identifying strategies to enhance management and financial performance of Danbury Municipal Airport.

A Public Information Meeting will also be held to present the proposed plan of development for Danbury Municipal Airport.

11. FINAL AIRPORT MASTER PLAN REPORT AND ALP DRAWING SET

PURPOSE

To finalize the Airport Master Plan Update based upon the review and comment of the SPONSOR, and funding agencies. The New England Region ALP Checklist will be used as a guide during this process.

METHODOLOGY

The Master Plan Update and ALP drawing set will be finalized based upon comments received in Task 10.0. The resulting report and ALP drawing set will be submitted to the SPONSOR and the FAA for approval and signature.

11.1 Master Plan Narrative Report

The narrative report will consolidate supporting documentation and findings developed throughout the course of the study (Interim Reports #1 through #4 corresponding to the study phases). The report will be prepared in standard 8-1/2" x 11" format with 11" x 17" foldout exhibits as necessary. The report will incorporate appropriate graphics and be bound as requested by the SPONSOR. The report will be submitted to the SPONSOR, CONNDOT and FAA. All reports will be prepared using laser quality printers. An electronic copy of the final report in Microsoft Word format will be provided to the SPONSOR and FAA.

11.2 Final Airport Layout Plan

The final Airport Layout Plan will be developed based upon final comments from the TAC, FAA, CONNDOT and public comment. The plans will be developed on 24"x 36" and bound. The final ALP set will comprise the following sheets:

- Cover Sheet
- Existing Airport Layout
- Airport Layout Plan
- Airport Airspace Drawing
- Inner Approach Surface & RPZ Control Plan
- Terminal Area Drawing
- Land Use Drawing with Noise Contours
- Airport Property Map, "Exhibit A"

The Airport Layout Plan drawings will be prepared on compatible electronic media for use in preparing reports, exhibits and presentation materials. An electronic copy of the ALP drawing set in AutoCAD format (or fully compatible format) will be provided to the SPONSOR and FAA. Full size reproducible drawings of the final ALP drawing set will be submitted to FAA for approval and signature.

12. STUDY DOCUMENTATION

PURPOSE

To clearly specify the project deliverables.

METHODOLOGY

The Master Plan Update and ALP drawing set will be finalized based upon comments received in Task 11.0. The resulting report and ALP drawing set will be submitted to SPONSOR, the FAA, and CONNDOT for approval and signature.

12.1 Final Report

The final report will be assembled and all comments received from the TAC, FAA and CONNDOT will be incorporated. Ten (10) copies of the final report will be printed and an electronic version in PDF format that is suitable for placement on the City's web site will be completed. The TAC will be provided a CD that will have the complete final report.

12.2 Executive Summary

An executive summary that is useful for conveying the findings of the master plan update to a general audience will be prepared. It is anticipated that the executive summary will be a full-color, glossy document. Ten (10) hardcopies of the Executive Summary will be prepared along with an electronic version in PDF format that is suitable for placement on the City's web site.

12.3 Airport Layout Plan Drawings

Five (5) copies of the draft ALP drawing set will be prepared for distribution as the SPONSOR directs. It is anticipated that drawings will be prepared on 24" x 36" sheets as approved by the SPONSOR and FAA.

Ten (10) copies of the final ALP drawing set for signature will be prepared. Copies of all drawing sheets in PDF will be delivered, as well as AutoCAD drawing and reference files for each of the sheets.

12.4 Airport GIS Compatible Mapping

Mapping, meeting the requirements of AC 150/5300-18B as amended, will be delivered to Airports/GIS and National Geodetic Survey (NGS) for approval and verification of safety critical elements, and to the Airport. All required features will be present, and feature attribution will meet FAA requirements. Mapping will include an Aeronautical Survey of the Airport suitable for use in the development of Instrument Approach Procedures.

12.5 Airport GIS Management Tool

GIS files depicting Airport topographic features based on the mapping collected and described in Task 2.0 will be delivered. Additionally, GIS coverage of environmental features collected under Task 5.0 will be incorporated in the GIS application.

This GIS application will be delivered as an Electronic 'Existing Airport Layout' with selectable and editable features.

This deliverable will include training on the A-GIS to review of key features, attributes, printing and options.

13. ADMINISTRATION/PROJECT MANAGEMENT

PURPOSE

To provide project oversight for all aspects of the planning process, to prepare required grant documentation and to coordinate subcontractor agreements.

METHODOLOGY

A Project Manager will be assigned and administrative staff will assist as necessary to complete the following subtasks:

13.1 Grant Administration

A Grant Administrator will be assigned to the project. The Grant Administrator will assist the SPONSOR with reimbursement requests to the funding agencies, as applicable to the project. The Grant Administrator will assist with providing any information needed to initiate and closeout the project.

13.2 Project Management and Coordination

The CONSULTANT will conference with CONNDOT and FAA to review their programming and design standards, and discuss data that is already available for the project. Up to two (2) coordination trips will be included as part of this task.

The CONSULTANT will coordinate and provide liaison services between the SPONSOR and the regulatory agencies. This task will involve the preparation of general correspondence, special reports and other necessary items referenced herein for the project.

The CONSULTANT will procure special services such as surveying and consultation necessary for completion of the work to be done under this contract. This includes the preparation of the necessary subcontract documents, negotiation and/or bid solicitation and award. The CONSULTANT shall also coordinate the activities of all subcontractors including scheduling and review of their work in accordance with established schedules, goals, and objectives of this project.

City of Danbury, CT
Danbury Municipal Airport

Paul D. Estefan

PRINCIPAL-IN-CHARGE
Mike Long

PROJECT MANAGER
Jorge Panteli

QA/QC COORDINATOR
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Zach Staff
Rick Lucas

ENGINEERING
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Brian Bennett

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Key:

McFarland Johnson
Hoyle, Tanner & Associates, Inc.
Aerometric
Vanasse Hangen Brustlin, Inc.