

**AIRPORT MASTER PLAN UPDATE
ALBANY INTERNATIONAL AIRPORT (ALB)**

**SCOPE OF WORK
Contract S-1042**

INTRODUCTION

This Scope of Work was developed consistent with the guidance provided in Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-6B, *Airport Master Plans*. The outcome of the Study will provide planning and development guidance necessary to address landside and airside facilities and land development considerations for the next 20 years and beyond.

TASK 1: PROJECT MANAGEMENT AND ADMINISTRATION

1.1. Project Definition and Scoping

The scope of services for the Study will be prepared by CHA Consulting, Inc. (the “Consultant”) and project subconsultants (the “Consultant Team”) and reviewed by the Albany County Airport Authority (“ACAA”) and FAA. Following this review, the program will be further detailed and the level of effort and associated costs of accomplishing each component of this planning effort will be identified. Work activities under this task will include:

- Meetings/discussions with ACAA staff, FAA, and study subconsultants;
- Preparation of draft study scope, budget, and schedule; and
- Preparation of final work program, budget, and schedule for approval.

The Consultant Team will meet with ACAA to develop the study scope and procedures. Administrative issues will be discussed, and any questions addressed. A product of these meetings will be a final study scope of work and a description of management and administrative procedures to be followed (i.e., invoicing, memoranda format, media relations, communication protocols, etc.).

1.2. Kickoff Meeting & Working Schedule

The Consultant Team will hold a working session with ACAA to kickoff the study effort, review the project scope of work, and set procedures to be used throughout the planning study. The meeting will also discuss and refine the project schedule with the assistance of ACAA. This schedule will be agreed to by all parties and will be used as a benchmark of study progress. Any adjustment to the study procedures and schedule will be documented.

During the kickoff meeting, the Consultant will provide a list of existing relevant plans and reports to be provided, as well as a checklist of requested data (e.g., flight schedules, parking records, financial data, etc.).

1.3. Project Administration

The Consultant will develop and submit monthly progress reports for each active task during the reporting period. For each task, the progress reports will identify completed activities, schedule and financial status, issues encountered, and activities anticipated to be accomplished during the next reporting period. Progress reports will accompany the monthly invoices in a format specified by

ACAA. In addition, informal monthly meetings/teleconferences are suggested to discuss study activity and meeting schedule. Subconsultants will participate in these meetings as needed.

The Consultant will be responsible to oversee activities of all subconsultants, including DBE firms. Responsibilities include executing agreements, processing invoices, and documenting participation of DBE firms (via payment records). All required management and administration of subcontracts necessary for the project is included in this subtask.

Relevant technical data, drawings, and reports will be maintained by the Consultant and delivered to the ACAA at the completion of the study. Management and financial records will be maintained for possible review or audit for a period of three years following the completion of the contract.

The Consultant will maintain study files for this project that will include technical submissions, meeting notes, and key correspondence. The information prepared for the study will document methodologies and procedures used.

TASK 2: AIRPORT INVENTORY

This task will include a collection of existing available information and studies, field review of airport facilities, and meetings and interviews with airport staff and tenants. The product is a detailed overview of ALB for 2020 (current conditions).

2.1. Inventory of Airport Facilities

2.1.1. Inventory of Airfield Facilities

A comprehensive inventory of existing airfield facilities at ALB will be conducted. This inventory effort will include a review of runways, taxiways, aprons, lighting, marking, signage, landing aids, and navigational aids. Information will be gathered from discussions with ACAA staff, review of existing drawings and photographs, and from limited onsite visual inspection. It is understood that this information will be provided by ACAA and will only require review and refinement by the Consultant Team. In addition, the Consultant Team will collect and review existing pavement information provided by ACAA. It is understood that this data is available for incorporation into the master plan and ACIP and no new information will need to be generated. Problem areas and conditions will be considered in the development plans and financial plan.

2.1.2. Inventory of Passenger Terminal Facilities

Existing reports and studies pertaining to the Commercial Passenger Terminal facilities will be provided by ACAA prior to commencing this task and reviewed by the Consultant. Such documents, including terminal floorplans, will provide essential background and reference information for the project understanding of existing and projected terminal development activities, as well as provide insight into relevant planning issues and constraints. These previous and on-going programs will be utilized, to the greatest extent possible, as integral components of this Master Plan.

The Consultant Team will review existing data, studies, and schematics. A limited (one day) on-site observation of the existing terminal building conditions will be conducted to establish a general understanding of the current space utilization and operational characteristics. The Consultant will review the existing public and non-public areas of the terminal complex, with an emphasis on the security checkpoint. ACAA will provide the Consultant Team with electronic

CADD files of the terminal complex, including floorplans, as well as on-going studies and improvements to the existing terminal. These will be provided prior to initiating work. Documentation on the existing facilities will be reviewed, but not verified for accuracy. The Consultant may provide additional services to measure portions of the building solely for the purpose of verifying certain conditions. Under certain circumstances, (e.g., if the documentation of existing conditions is unavailable or appears to be unreliable) the Consultant may recommend a survey to document the existing conditions before proceeding with the planning activities.

The Consultant will review the materials relative to a variety of terminal functional areas, such as curb frontage, check-in counter utilization, SSCP utilization, gate/holdroom utilization, and baggage (inbound and outbound) utilization. The passenger corridor circulation, holdroom seating, airline lounges, and concession areas shall be reviewed (no survey or active data collection will be conducted). The intent of this subtask is to develop a general understanding of the current terminal building and its associated facilities.

2.1.3. Inventory of Support Facilities

An inventory of the various support facilities will be conducted. The support facilities to be inventoried will include, but are not limited to:

- Air Cargo Facilities
- General Aviation Facilities/FBO
- Aircraft Refueling Stations/Operations
- Aircraft Rescue and Fire Fighting (ARFF) Facilities
- Airfield Maintenance Facilities

2.2. Inventory of Operations, Airspace, and Air Traffic Control Procedures

2.2.1. Inventory of Air Traffic and Passenger Activity

Current data on passenger, cargo, and aircraft activities (e.g., air carrier, charter, cargo, general aviation, and military) at ALB will be collected to develop a profile of airport operations, including changes in use and levels of operations in recent years. Data sources will include but not be limited to FAA Air Traffic Statistics; Tower Airport Statistics Handbook; Statistical Handbook of Aviation; FAA Form 5010-1 and Terminal Area Forecasts; and ALB monthly and annual activity summaries.

2.2.2. Conduct Airfield Use Evaluation

An airfield use review will be conducted to identify runway and taxiway use patterns. Additionally, interviews with operations personnel will be conducted to identify operating procedures and assumptions. These procedures and assumptions will provide the framework for the future airfield facility requirements.

The following information, as available, will be collected for use in this effort: historical operations data; control tower logs; Standard Operating Procedures; and airline flight schedules. Historic ALB wind data obtained from the National Weather Service will be compiled and reviewed to calculate runway wind coverage. The data collected in this task will develop an inventory of operating practices and procedures at the Airport.

2.3. Interviews of Stakeholders

Information regarding key aviation activity drivers will be collected and organized by the Consultant Team. This process may include, but not be limited to, interviews with ACAA management, management contractors, and airport tenants to solicit opinions regarding satisfaction of present facility needs and perceived future aviation needs at ALB and the surrounding area. ACAA staff, management contractors, and FBOs will be queried regarding their perceptions of aviation trends in the region as well as their specific plans.

In addition to these direct airport users and tenants, ACAA is working in partnership research university Rensselaer Polytechnic Institute (RPI) and the research and development division of General Electric, GE Research. Both organizations will participate in the study with a focus on innovative and evolving technologies to advance ALB into a “smart airport” to improve the passenger experience.

In addition to the data collection efforts of Task 2.2, the Consultant Team may survey select airport stakeholders including:

- *Terminal Tenants:* Discussions may be held with ALB airline station managers, TSA, rental car concessionaires, retail concessionaries, ground transportation operators, or their representatives, as available, to discuss their facilities, plans, and considerations for their activity at ALB. Stakeholder discussions and interviews will be half-hour blocks of meetings as scheduled in a contiguous two-day period, after stakeholders have had an opportunity to review and respond to any questionnaires sent thru the ACAA in advance.
- *FBO, Key Tenants, and Other Users:* Discussions will be held with the FBOs, key tenants, and other property lease holders. Questions will focus on their future plans and needs, activity, and changes in their business and operations.
- *Airlines:* Discussions may be held with the current airlines serving ALB to identify concerns related to current economic considerations and anticipated changes to aircraft fleet mix and passenger demand. Stakeholder discussions and interviews will be as scheduled in a contiguous two-day period, after stakeholders have had an opportunity to review and respond to any questionnaires sent thru the ACAA in advance.
- *Cargo Carriers:* Discussions will be held with FedEx and UPS to identify current and anticipated plans at ALB.
- *Airport Operations Personnel:* Discussions with airport staff and operations personnel will be held to identify existing concerns related to day-to-day airfield maintenance and or concerns that may be unique to ALB.
- *Air Traffic Control Personnel:* Discussions with ALB air traffic control personnel will be held to discuss airspace considerations at and surrounding ALB.
- *Research Partners:* RPI and GE Research will be interviewed regarding new and evolving technologies to support passenger processing and various terminal functions, and for comparison to existing or propose practices of FAA, TSA, or HHS/CDC. RPI and GE Research will also be invited to participated in the site review of the terminal building listed above in Task 2.1.2.

The Consultant Team will attempt to conduct the interviews during a two-day period. However, it is anticipated that some stakeholder input will be provided by use of a survey form and telephone follow-up, as needed. The goal of this effort is to identify information useful in the facility requirement and alternatives tasks.

2.4. Socio-Economic Data

Socio-economic data for the region will be collected and analyzed to identify trends that may impact the aviation forecasts. Woods and Poole Economic Data will be purchased and used as the basis for this analysis and will be supplemented by available regional data. This data may be used directly or indirectly to inform the forecast and will be summarized at the beginning of the forecast document to provide a snapshot of the current socio-economic trends in the Capital Region.

2.5. Inventory of Existing Parking Facilities

An inventory of existing conditions will develop baseline information to be used in the planning effort, including transaction, revenue, and peak occupancy, as available. The Consultant will compile any available data to develop a profile of public parking activity. This data will be used as a foundation for the parking demand model.

Parking information will include the number of parking spaces within walking distance of the terminal, parking rates, number of rental car ready and return spaces, airport and private shuttle parking, etc. The existing landside area will be reviewed based on customer service and revenue generation, both in terms of industry standards.

2.6. Passenger Ground Access Model

The Consultant Team will summarize historical activity data provided by the ACAA describing how passengers arrive to and depart from the Airport. These are likely to include parking transactions by facility, rental car transactions or revenue, commercial vehicle transactions via an AVI system output, self-reported transportation network company (TNC) transactions, and public transit schedules information. A ground access model will be developed at a monthly level for the past two years, which illustrates how TNCs have impacted ground access market shares at the Airport. The Consultant will lead a discussion with the ACAA to determine future ground access assumptions to be used in the requirements analysis.

2.7. Development of Airport Layout Plan Base Map

The Consultant will prepare an Existing Airport Layout Plan (ALP) base map using the products of the ongoing AGIS contract, including the CADD files and orthophoto, as well as the airport property map provided by ACAA. This subtask will prepare an airport base map to include all airport facilities, airfield features and standards, building, roadway, parking, property limits, etc. This drawing will be used for figures and illustrations in the Master Plan, as well as for the development of the Airport Layout Plan (ALP) drawing set. The ACAA has or will supply the Consultant base mapping/planimetric data and aerial imagery in electronic CADD format from their recent (2017) AGIS project.

TASK 3: FORECASTS OF AVIATION DEMAND

The following elements will be included in this task, which develops the 5, 10, and 20-year planning horizons at ALB. The forecasts that will be used through the remainder of the study for developing facilities requirements and identifying “trigger points” for airport investments and improvements.

Historical aviation activity data and present activity will also be collected from the FAA Terminal Area Forecast (TAF) and the Official Airline Guide (OAG) scheduled flight information.

3.1. Aviation Forecasts

The Consultant Team will use the FAA's official Terminal Area Forecast (TAF) released in January 2020, or as revised by FAA, as the basis for the aviation activity forecasts for ALB for the short- (5 years), intermediate- (10 years), and long-term (20 years). No consideration will be given to loss of activity due to the COVID-19 pandemic, and no future activity scenarios will be developed to explore recovery options. The TAF will be documented, with derivatives prepared as needed for the following activity types:

- Enplanements
 - Annual domestic and international enplanements
 - Peak month and peak hour enplanements
- Operations
 - Total annual operations
 - Air carrier and air taxi operations (total and by fleet mix)
 - GA operations (total and by fleet mix)
 - GA operations by type (local versus itinerant)
 - Military operations
 - Cargo operations and tonnage
 - Peak month and peak hour operations (total and by type of operation)
- Based Aircraft
 - Based Aircraft by Fleet Mix
 - Critical Aircraft per FAA AC 150-5000-17

The FAA document "Forecasting Aviation Activity by Airport" (Appendix B and C) will be followed to provide a comparative table of the recommended airport forecast with the current TAF.

This task will also include a formal determination of the existing and future critical aircraft, based on regular use of the airport. The determination will follow the parameters of FAA Advisory Circular 150-5000-17. The forecast chapter and critical aircraft determination will be submitted to the FAA for review and approval; FAA approval is required.

3.2. FAA & State Coordination

The Consultant Team will prepare an Aviation Forecast chapter for submission to the FAA and NYSDOT for review. The Consultant will prepare for and attend a teleconference meeting with representatives of the ACAA, the NYADO and NYSDOT as necessary.

If new FAA guidance and requirements are established due to the COVID-19 pandemic during the time of the preparation of the forecast but before approval, additional scope and fee will be required in order to attain critical FAA and NYSDOT approval of the aviation activity forecasts, before further demand-driven planning can proceed.

3.3. Develop Future Design Day Flight Schedule

Once the forecast has been approved by the FAA, Design Day Flight Schedules (DDFS) for the base year and one future planning activity level will be developed. The DDFS will be based on the average day peak month departures from the forecast and will include anticipated future changes to aviation

activity such as changes in fleet mix and changes in airlines service (new entrants and destinations as well as potential loss of service) anticipated within the planning period. The DDFS will help drive the need for passenger gates as well as the terminal and landside facility requirements. The DDFS will be reviewed and approved by the ACAA, prior to development of terminal gate requirements.

DELIVERABLE: Working Paper No. 1

This Working Paper will include an illustrated inventory of existing facilities and conditions at ALB as well as the comprehensive forecast of aviation demand. It will be provided to ACAA for review and comments, prior to being submitted to the Advisory Committees, and to FAA for review and approval. The approved forecasts are used in Task 4 to determine short and long-term facility requirements.

TASK 4: DEMAND/CAPACITY ANALYSIS AND FACILITY REQUIREMENTS

This task evaluates and identifies the existing and future demands for each airport component and provides the comprehensive determination of airport facility requirements throughout the planning period.

4.1. Determine Airfield Requirements

4.1.1. Airfield Capacity Analysis

With under 100,000 total annual operations currently and anticipated through the planning period, there is no need for a detailed airfield capacity analysis. As such, using the FAA's methodology for assessing airfield capacity and delay as described in FAA AC 150/5060-5, *Airport Capacity and Delay*, Chapter 2, a brief assessment of the current and future level of airfield capacity will be developed and documented in the study report.

4.1.2. Airport Reference Code and Runway Design Group

Based on the activity forecasts and critical aircraft determination, this task will document the existing and future critical aircraft, as well as the associated Airport Reference Code (ARC) and Runway Design Group (RDG) for both runways. Existing and future airline and air cargo aircraft will be considered in this evaluation. It is noted that large military transport and refueling aircraft conduct regular training activity at ALB; however, these aircraft will not be considered as part of the Facility Requirement evaluation.

Other runway requirements to be addressed include the runway width, strength, configurations, FAA design standards, and clearances from taxiways and structures.

Runway Safety Area (RSA) standards will be reviewed, including grades, and available FAA RSA determinations. This review will include an independent RSA evaluation for both runways, with comparison to the existing FAA RSA determinations. Recent work that improved the grading and drainage in the Runway 1-19 RSA will be incorporated. This effort will be documented in the master plan, and also provided separately to ALB.

Additionally, existing FAA Modifications to FAA Design Standards (MODs) will be identified and reviewed for continued applicability. The potential need for additional MODs will be listed, and later addressed in the Alternative Evaluation for potential improvements to satisfy FAA standards.

4.1.3. Crosswind Runway Requirement

The ALB wind information obtained in Task 2, along with forecasted operational data developed as part of Task 3 will also be used to consider the FAA requirement for Crosswind Runway 10-28,

including its FAA classification and anticipated use. FAA Order 5100.38D, the AIP Handbook, provides the eligibility requirements for crosswind and secondary runways and will be utilized to document the need for both runways at ALB.

4.1.4. Runway Length & Navigational/Landing Aide Requirements

The purpose of this subtask is to examine the existing runway length and navigational/landing aid facilities and their ability to accommodate current and forecast levels of demand. The Critical Aircraft, in terms of runway length, will be identified for each runway. Runway length requirements for the aircraft expected to use the Airport in the future will be identified for maximum payloads and for a range of stage lengths. In general, the runway length requirements of newer aircraft have been decreasing. As such, it is anticipated that the existing available runway lengths will be adequate throughout the planning period, even for longer stage lengths (i.e., non-stop west coast airline service).

Requirements for instrumentation, lighting, and visual aids will also be identified and compared to current conditions. This will include a review of ILS, CAT I, II and III procedures. Any deficiencies will be identified.

4.1.5. Taxiway Requirements and Airfield Geometry

The Consultant Team will evaluate the taxiway requirements with respect to need, safety, and new FAA design standards per changes to FAA AC 150/5300-13A. Based on this analysis, deficiencies will be identified and documented, as necessary. Considerations will include:

- Airfield intersections between runways, taxiways, and aprons
- Listed “hot spots” and line-of-sight conditions
- Direct apron-runway access
- 4 and 5 node intersections
- Surplus pavement areas
- Ambiguous configurations that may increase the potential for incursions

The new Taxiway Design Group (TDG) standard will also be used to determine the taxiway width requirements. The main taxiways at ALB are currently 75 feet wide to support aircraft such as the Boeing 757, in use by FedEx and UPS. Future requirements in the short- and long-term will be identified, including deficiencies in required geometry (e.g., fillets, turn radii, etc.), with sample diagrams and comparison to existing conditions.

4.2. Passenger Terminal Facility

4.2.1. Short-Term (up to 12 months) Passenger Terminal Facility Requirements

The terminal area demand capacity analysis will establish metrics that indicate demand levels below capacity, demand levels approaching capacity, and demand levels exceeding capacity. This review will be based on forecast passenger demand in the next six months up to twelve (recovery period). The passenger terminal facility requirements will be based on the latest best practices in terminal design.

This task will include a review of the capacity of the existing terminal based on available existing documentation.

For this review, the key individual terminal components will be considered, including:

- Ticket counters & facilities
- Security screening checkpoint/ TSA facilities
- Gates (holdrooms) and passenger concourses
- Public Circulation
- Baggage claim hall

In addition to facility needs, any new or pending screening and passenger processing requirements will be identified for programming into the current facility or short-term recommendations. Requirements established by FAA or other federal agencies will be identified, as well as additional technologies or processes identified by RPI and GE Research will be presented/evaluated for ACAA's consideration (e.g., facial recognition, retina scanning, temperature checks, digital identification, health passports, etc.). Such evolving tools are sometimes referred to as 'smart systems' with the goal of improvement the passenger experience. Such systems have potential to make passenger processing:

- Safer (i.e. touch free),
- More effective (i.e., greater accuracy), and
- More efficient (i.e., faster)

4.2.2. Passenger Terminal Facility Planning

The Consultant shall utilize the existing and forecast passenger and aircraft activity to assess current and future terminal facility needs, including peak demands. These metrics will identify 5-year, 10-year, and 20-year planning horizons of existing and projected capacity correlated with planning activity levels. This effort will consider both the currently planned improvements to the existing terminal and the long-term development of the terminal. This task will commence with a review of the capacity of the existing terminal, with implementation of all planned upgrades based on available documentation provided, including the security screening checkpoint, FIS facility, vertical circulation, etc. The intent is to provide adequate space for existing and forecasted passenger volumes and enhance passenger spending while in the terminal.

This review will estimate when, and at what planning horizon, the existing facility will reach its level of service capacity. The critical facility shortfall(s) will be identified. Thereafter, the capacity analysis completed for the planned new terminal complex will be compared to the forecast passenger demand. The need and timing for development of the new complex will be identified.

For this review, the key individual terminal components for their relative space/quantities, will be considered, including:

- Curbside requirements
- Ticket counters & facilities
- Security screening checkpoint/TSA facilities
- Gates and passenger concourses
- Public Circulation
- Concessions program

- Customs and Border Protection (CBP) (as/if required)
- Federal Inspection Services (FIS)
- Inbound and Outbound Baggage handling systems and facilities
- Restrooms (fixture count demand to be estimated by aviation planning method, based on levels of service and average fixture utilization per enplaning/deplaning passenger)
- Airport Operation/Management
- Wayfinding and Signage
- Loading Dock
- Mechanical, Electrical, Plumbing System Spaces (as a percentage of terminal net)

Again, long-term terminal facility needs will include potential screening and passenger processing technologies and systems to foster a ‘smart airport’ or ‘smart terminal’. These considerations could include systems within each of the facilities and items listed above.

Various applicable reference sources will be reviewed for this task by the Consultant Team, including FAA Advisory Circular 150/5360-13A, Passenger Terminal Facilities and ACRP Report 25, Airport Passenger Terminal Planning and Design.

4.2.3. Terminal Gate Requirements

Leveraging the future design day flight schedules (DDFS), the Consultant will provide a hypothetical future aircraft gating plan and ramp chart visualization. The gate plan will respect aircraft gate compatibility, airline allocation, and AIRPORT gate utilization. Additionally, summary statistics such as aircraft departures per gate will be provided and discussed with the ACAA.

4.2.4. Passenger Terminal Building Energy Efficiency Review

This section will include a brief review of the existing passenger terminal building’s heating, ventilation, and air conditioning (HVAC) systems for review of energy efficiency and provide assessment of the existing conditions and recommendations of replacements or repairs to address immediate and planned needs. The existing HVAC systems and boilers are 22 years old. The Consultant will evaluate the existing HVAC systems and provide recommendations for upgrading or replacement. CHA will provide alternative options with cost analyses based on the energy efficiency and energy savings for HVAC upgrading or replacement to accommodate the current airport operations with consideration for future expansion of terminal buildings.

4.3. Determine Airport Parking and Curbside Requirements

The Consultant will project future parking demand based on enplanement projections through the 20-year planning horizon. This analysis will identify potential shortfalls in supply based on anticipated conditions, changes in mode split (between private vehicles, parking shuttles and express bus service) and other factors. The demand for and impact of the availability of additional off-site parking will be evaluated.

The Consultant will develop and evaluate requirements to balance parking supply and demand over the 20-year planning horizon. This will include potential expansion of parking supply as well as transportation demand management, as appropriate.

4.3.1. Develop Future Public Parking Requirements

The Consultant will assess historical daily peak and overnight parking demand for at least 12 months to identify the seasonality of parking demands and the typical design-day parking demand by facility. Parking requirements will be based primarily on the observed peak occupancy with allowances for any existing parking constraints. Future requirements will be based on proportional growth between parking demand and forecast growth in annual originating airline passengers. The estimated public parking requirements will be compared with available parking spaces (including the new Garage) and estimated deficiencies (or surpluses) in available spaces will be identified.

The existing parking garages include smart parking systems. Such systems, and other potential improvements will be considered for all airport parking facilities as appropriate. ACAA has already moved to automated payment systems (contact free), and additional smart technologies may be identified for potential implementation at ALB.

4.3.2. Develop Future Employee Parking Requirements

The Consultant will estimate the existing demand for employee parking, based on available data summarizing peak period parking lot accumulation counts by parking lot location. Future employee parking requirements will be estimated by assuming that employee parking requirements will increase in proportion to the expected annual increase in the expected average growth in originating airline passenger volumes and aircraft activity. The requirements will be compared with available parking spaces and deficiencies/surpluses will be identified.

4.3.3. Develop Future Roadway & Curbside Requirements

The Consultant will project access roadway, circulation roadway and curb front traffic volumes using spreadsheet models to determine future requirements for number of lanes and expected level of service. Future requirements will be compared against existing available capacity to identify anticipated future roadway deficiencies. Due to the decreased activity attributable to COVID-19, no new traffic count data is expected. Therefore, the Consultant Team will rely entirely on historical data provided by the ACAA. If no traffic counts are available, the Team will develop roadway and curbside requirements using peak-hour passengers and assumptions from the ground access model.

4.3.4. Develop Future Rental Car Facility Requirements

The Consultant will prepare a high-level program for rental car facilities based on historical revenues and any available transaction information provided by the ACAA or the RAC tenants. The program will include elements such as ready/return spaces, quick turnaround fuel vacuum and car wash bays. If no tenant activity data is available, the Team will develop RAC requirements using peak-hour passengers and assumptions from the ground access model.

4.4. Evaluate Air Cargo Facility Requirements

Based on the interviews and plans of existing operators, and the forecast of cargo volume/tonnage, the need for additional air cargo facilities will be evaluated, and a demand/capacity analysis will be completed for cargo facilities at ALB. Specific industry methodologies will be used for each support element, considering the unique factors that influence its demand. Facility features to be analyzed include but are not limited to:

- Facility size and age

- Type of equipment
- Number of personnel, and parking spaces

In conjunction with the air cargo forecast analysis this task will compare capacity and future demand and identify future requirements for cargo facilities at the Airport, including but not limited to:

- Aircraft apron space / positions for narrow and wide body aircraft
- Processing/storage facilities
- Truck and Automobile Parking

4.5. Determine Corporate/FBO/General Aviation Requirements

The existing general aviation facilities requirements will be reviewed and compared to the forecasts of based aircraft and fleet mix. Future demand for the base forecast scenario will be used to identify future requirements for general aviation facilities at ALB, including:

- Aircraft parking (ramp, tie-down, hangar, etc.)
- Fixed based operator facilities
- Based corporate aviation facilities
- MRO and other facilities and functions

4.6. Develop Support Facility Requirements and 'Through-the-Fence' Operations

For estimating the size of the Support Facility elements listed below, the Consultant shall use the facility information collected during the inventory phase supplemented with operational elements and space utilizations as provided by ACAA. The support facilities will include the following:

- Aircraft Maintenance Facilities
- FAA Facilities
- Aircraft Rescue and Fire Fighting (ARFF) Facilities
- Aircraft Fueling Systems Facilities

Additionally, the any existing 'through-the-fence' operations of any type will be identified. This term refers to any facilities, property, or persons that have access to the Airport, from any off-airport location of property. Such operations are restricted or highly regulated by FAA. Any such operations will be evaluated to determine if an adequate agreement and approvals are in place, and if not, provided a proposed recommended plan of action.

DELIVERABLE: Working Paper No. 2

This Working Paper will include the results of the demand/capacity analysis and recommended facility requirements for ALB.

TASK 5: AIRPORT DEVELOPMENT CONCEPTS

In this task, the Consultant Team will establish the approach and criteria for evaluating airport development concepts in a working session with the ACAA. It is anticipated that evaluation criteria will include the following factors:

- Construction and operating costs (order of magnitude based on unit of area or volume)
- Flexibility (to accommodate future demand and operational fluctuations)
- Convenience of passengers

- Construction impacts, including ease of phasing and construction
- Revenue generating potential
- Airfield access and operational factors
- Environmental impacts

Following the development of the evaluation approach and criteria, the following elements will be analyzed:

5.1. Airfield Improvement Concepts

This subtask will identify and evaluate potential runway and taxiway improvements that will address the overall aircraft flows between the runway system and the various functional areas. Schematic concept drawings and narrative descriptions will be provided for each concept. Runway and taxiway concepts will be screened through qualitative analyses of the following:

- Operational benefits
- Environmental considerations
- Implementation costs/feasibility
- Construction/phasing issues
- Community acceptance

It is anticipated the airfield alternatives will be limited in nature, but will likely include:

- Runway design standard upgrades
- Revised taxiway layouts to address revised FAA Standards
- Configuration changes for the following (and other identified areas):
 - Taxiway C West
 - Taxiway D & G
 - Extension of Taxiway P to Runway 10 end
 - Minor revisions to Taxiways J and K

New runways and runway extension alternatives are not anticipated.

5.2. Passenger Terminal Facility Concepts

5.2.1. Short-Term Terminal Facility

In light of the current changing passenger safety and wellness concerns, the Consultant will develop initial high-level recommendations to implementing changing passenger and processing needs, such as health and safety screening, social distancing, etc. The key finding will be to size and locate the likely facilities, and the ability of the existing passenger terminal to accommodate these anticipated needs and short-term requirements within the next six to twelve months.

5.2.2. Terminal Design Charrette/Visioning

Upon the commencement of Task 5.2., The Consultant will coordinate a virtual design charrette (or visioning session) with the ACAA and any other necessary parties, including the end-user and other parties required to make design decisions. The objective of the design charrette will be to review and discuss the design approach, goals, and objectives in order to establish the design direction for the Project. The Consultant will prepare minutes documenting the discussions and decisions made during the charrette. The minutes will also document any questions and issues which the parties may agree to address at a later stage.

5.2.3. Smart Airport Systems

Inherent to each component of the passenger terminal planning, will be the consideration and addition of Smart Airport Systems. This subtask is dedicated to identification, review, and evaluation (based on data available) of such new system for potential implementation at ALB. Some new systems may become mandatory per future federal requirements, whereas others may provide an added value to be implemented at the Airport's discretion. This study component will be led by RPI and GE Research, with incorporation into the overall planning study. Considerations and recommendations may include:

- Passenger acceptance (short or long-term)
- Costs and logistical considerations in reference to other terminal recommendations
- Accuracy and efficiency (including any required certifications)

Several systems are currently under discussion for use at the security checkpoint; however, there are potential smart airport benefits at nearly all phases of the passenger experience, including: parking, curbside access, check-in/ticketing, security checkpoint, concessions, restrooms, and gate and passenger boarding.

5.2.4. Passenger Terminal Facility

Utilizing the terminal facility requirements developed in Task 4.2. and the design direction from the Design Charrette/Visioning, the Consultant will develop a phased enhancement of the passenger terminal facility to meet forecast demand by horizon in such areas as curbs, check in, security check point, retail, circulation, holdrooms, baggage claim and bag makeup. These shall be developed for planning horizons of 5-, 10-, and 20-years. Based on the goals and objectives and the Design Charrette/Visioning meeting, sustainability aspects shall be incorporated and compared as part of the evaluations.

5.2.5. Initial Terminal Facility Alternatives

The Consultant shall prepare and develop up to two (2) initial terminal alternatives for the long-term (20 years) period, with conceptual sketches of how each alternative may be developed from the near-term/short term through the intermediate term planning horizons. The development of each terminal alternative will focus on the utilization of existing terminal facilities until a point of saturation occurs. This ensures the maximum use of existing facilities up to a point when they must be significantly modified or replaced. The timing and scale of improvements will be based on the preferred activity forecast and facility requirements as previously developed in Task 4.2. Alternative analysis will include planning level schematics of the alternatives for the purposes of presentation and comparison. Architectural and engineering level schematics will not be prepared. The Consultant will make recommendations related to aesthetic upgrades and full reconstruction depending on the condition and requirements associated with each facility. Consideration for the adaptable reuse of existing facilities (buildings) will be given before extending the current facility footprint.

At the midpoint of the initial terminal alternatives development, the Consultant will present them to ACAA for comment and feedback. The Consultant will refine the alternatives per the input and feedback.

Development of the initial alternatives will be presented by functional blocking and stacking diagrams, identifying key program functional areas and adjacencies.

5.2.6. Preferred Terminal Facility Alternative

The preferred terminal facility alternative will be developed further and refined per input and feedback. As with the initial alternatives, there will be a midpoint and final presentation to ACAA for comment and review.

At this planning stage, Code and Life Safety analysis of the preferred alternative shall be limited to overall strategies and approaches to life safety consistent with the Consultant Team's aviation experience on similar projects and identification of the governing codes and authorities having jurisdiction.

Development of the preferred alternative shall be by developed planning diagrams (assume overall terminal plan representations plotted at a scale of approximately 1:1200/1":100' on 34"x22" sheets) and basic building sections and up to two (2) 3D massing to illustrate building form. Schematic renderings are not included in this scope, and may be provided as an Additional Service, if requested.

5.2.7. Cost Estimates of Preferred Terminal Alternative

Planning level cost estimates, to a rough order of magnitude based on area or volume, will be prepared for the preferred terminal alternative.

5.3. Access and Parking Concepts

5.3.1. Develop Vehicle Parking Concepts

Based on the recommended airfield and terminal alternatives parking alternatives will be developed to meet the anticipated future demand. Alternatives will consider as appropriate the ability to meet the long-term quantity of parking, considerations for different parking products; such as short- and long-term, remote, rental car, and employee parking; and potential future locations for parking expansion as required to meet the facility requirements identified.

5.3.2. Develop Access & Roadway Concepts

Based on the recommended airfield and terminal alternatives, alternatives will be developed for airport roadways and access to the terminal area. Alternatives may consider additional or modified access to the terminal area depending on changes or potential relocations to roads, modifications to the exit configuration of the terminal area, or other improvements to the flow of vehicles to and from the terminal. Of particular interest will be the new configuration created by traffic exiting the new parking garage and integration with the existing flow. Potential options for this location will be considered.

5.3.3. Develop Terminal Curb and Ground Transportation Alternatives

Based on the recommended terminal alternatives, terminal curb and ground transportation configurations will be prepared. Alternatives may consider additional curb front lanes, potential allocation of curb lanes, or modifications to pedestrian vehicle interactions.

5.3.4. Develop Rental Car Facility Alternatives

Based on the parking expansion concepts, alternatives will be developed to meet the anticipated rental car demand. It is assumed that all alternatives will continue with the current operating environment. Working with the ACAA, a preferred rental car alternative will be recommended.

5.4. General Aviation, Air Cargo, and Support Facility Concepts

The purpose of this subtask will be to add aviation-related support functions to the preferred terminal concept. Conceptual layouts of general locations, sizes, and configurations of general aviation, cargo, support facilities, etc. will be developed. The layouts will reflect the projected facility requirements as well as opportunities for other development.

5.4.1 General Aviation (GA)

Concepts will be based on anticipated demand and will include up to five (5) potential layouts, located in multiple areas of the airport, including on property for potential acquisition. As GA develop is typically conducted by airport tenants (not the ACAA), the concepts will be intended to illustrate practical layouts that may be considered, but not the final size of facility siting.

5.4.2 Airline MRO Facilities

ALB currently has two Maintenance, Repair & Overhaul (MRO) facilities operated by regional airlines. Based on needs of these and other airlines, potential facility expansion, or new facility concepts will be identified. Any known airline requirements and aircraft types to be serviced will be incorporated into the development options.

5.4.3 Air Cargo

Currently air cargo operators are supported in the cargo facility in the northeast quadrant of the airport. Based on discussions with existing, or potential additional operators, layout options for expansion, relocations, or new developments will be identified. If the existing facility constraints prevent supporting of future needs, concepts for a second air cargo development area will be identified.

5.4.4 Support Facilities

The planning effort for support facilities will be limited in the master plan, but will include siting for requirements identified by ACAA, or for replacement of any existing development displaced by the master plan recommendations (i.e., existing administration building and equipment garage)

5.5. Final Concept Development

The purpose of this subtask is to integrate each airport development recommendation into an overall recommended improvement program. Combining individual recommendations into the overall plan may identify additional necessary refinements for compatibility. General factors to be considered for the airside and landside components will include, overall passenger convenience, optimal use of available Airport land, order-of-magnitude construction and operating costs, engineering feasibility, ease of phasing and construction, and environmental impacts.

5.6. Environmental Overview

This subtask includes a brief environmental summary based on existing available studies and data, and to identify potential environmental impacts of the development alternatives and recommendations. The environmental overview will consider a range of environmental concerns associated with the development of ALB and identify those which may warrant further analysis prior

to project implementation. Previous environmental evaluations conducted for the Airport will be utilized. The range of potential environmental concerns will be considered based on FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects* and FAA Order 1050.1F: *Environmental Impacts: Policies & Procedures*.

Based on the Consultant's experience at ALB, key considerations will include the following:

- *Water Quality and Floodplains (drainage)*: Shaker Creek transverses the airport property, include it unnamed tributaries that drain the airport property. High water table and standing water, including within the Runway Safety Area have been an issue addressed by the airport. The Consultant will review existing drainage evaluations and improvements completed by CHA and others, to identify any potential impacts of the development alternatives.
- *Wetlands*: Several portions of the airport property have been field-delineated in the past, and all areas of the airport and adjacent property have been generally mapped for wetland and hydric soils by USACOE and NYSDEC. The Consultant will review existing wetland delineations completed by CHA and others, to identify any potential impacts of the development alternatives.
- *Endangered and Threatened Species*: This task will include review of existing data available from regulatory agencies to identify any recent changes in species on concern. The alternatives will be review for likely impacts.
- *Historic, Architectural, Archaeological, and Cultural Resources*: The adjacent Watervliet Shaker National Register Historic District is well documented and has been address by the airport for several projects (including the recent 1,000 space parking garage). These past studies will be reviewed for potential consideration of impacts that may be created by future recommendations.

The list of other NEPA environmental considerations will reviewed for potential impacts from study recommendations. These additional items will be included in tabular form to identify current conditions and potential impacts. The results of this effort task will be a generalized review of potential environmental impacts of the recommended airport improvements and to consider the potential extent of future environmental analyses and regulatory issues.

5.7. Airport Noise Evaluation

This task will provide a new airport noise evaluation, including existing and future noise contours based on the activity forecasts. The evaluation will identify if existing and future activity results in potential noise impacts based on the federal criteria provided in FAA Order 1050.1F, *Environmental Impacts – Policies and Procedures*, and through the generation of Day-Night Average Noise Level (DNL) noise contours. The evaluation will identify if noise sensitive land uses (e.g., homes, schools, and place of worship) are exposed to noise levels above the federal threshold of impact (DNL 65 dB); however, the increase in DNL (if any) will not be calculate. This task will employ the most recent version of the FAA Aviation Environmental Design Tool (AEDT) for the evaluation.

5.7.1 Prepare Noise Model Inputs

Data input for the existing noise evaluation will use calendar year 2019 annual aircraft operations. The inputs will rely on existing available data, including Air Traffic Control Tower (ATCT) operation counts, FAA T100 data, FAA's Enhanced Traffic Management System Counts (ETMSC), and flight schedules. Operations will be identified by aircraft type for jet aircraft. Types that comprise less than two percent of the total activity may be grouped with a similar aircraft type. For general aviation turboprop and piston aircraft, operations will be categorized as single or twin engine, and input as a composite or representative aircraft.

ACAA will assist with setting up a teleconference with ATCT staff to discuss operational procedures and flight tracks in use at ALB as inputs to the noise model. Items to discuss will include the following, and other items as determined:

- Runway end distribution/percentage for takeoffs and landings
- Typical or estimated nighttime activity (before 7 AM and after 10 PM)
- Approach and departure procedures, and variations by aircraft type/category
- Touch & Go and closed traffic pattern procedures

The future year noise analysis will use the approved 5-year forecast of activity. The future operations will be assembled for a typical (average) day of the year. Operations will be divided into runway ends, aircraft type, day vs. night, operation type (landing, takeoff, touch-&-go, etc.) and input into the AEDT model. Helicopters and special operations can be added to the analysis (but are not currently included).

5.7.2 Noise Modeling

The FAA AEDT will be used to model and generate existing and future noise contours for the Airport, and will generate:

- Existing noise levels based on the current runway layout, airport activity, and operating procedures
- The anticipated future noise levels based on the forecasts, fleet mix, and recommended operational procedures.
- Produce Day-Night Sound Level (DNL) noise contours for the DNL 60, 65, 70, and 75 dBA levels.

The flight tracks identified by ATCT staff will be used to generate input data assignments to the AEDT model. If desired by ACAA or FAA, the scope can be expanded to include an evaluation of recorded historical radar track data available from the Approach Surveillance Radar (ASR) system to determine more detailed flight track use (radar tracks analysis is not currently included in the scope). This task will be conducted exclusively by standard modeling; no noise monitoring activities are included.

2.7.3 Land Use Compatibility

The DNL noise contours will be incorporated into a land use drawing depicting existing noise sensitive land use categories. The drawing scale will be adequate to illustrate the extents of the DNL 60 dBA contour. A combined drawing will be used for current and future noise contours. The noise analysis will identify any potential impacted areas per federal standards located within the DNL 65,

70, or 75 dBA noise contours, with a focus on the differences between the existing and future noise levels.

The location of noise sensitive land uses will be identified within the 65 DNL. All known noise-sensitive locations and facilities within the contours (e.g., homes, schools, churches, etc.) will be illustrated. A summary of findings will be prepared, including a description and illustrations of the following:

- For existing conditions, the number of homes, or other noise sensitive land uses, within the DNL 65, 70, or 75 dBA contours (if any)
- For forecast conditions, the number of homes, or other noise sensitive land uses, within the DNL 65, 70, or 75 dBA contours (if any)

5.8. Solid Waste and Recycling Plan

The 2012 FAA Reauthorization Act requires airport master plans to address the feasibility of solid waste recycling at airports. This task will review current waste generation and recycling activities and provide a description of best practices that may minimize the volume of solid waste disposal and/or recycling efforts.

The Consultant will discuss existing procedures with local waste and recycling providers for this brief review of the solid waste and recycling stream at the Airport. The waste review will be conducted through informal interviews with local providers, airport management, and vendors. The review will summarize the:

- Amount and types of solid waste generation at the Airport
- Current recycling programs and procedures in place
- Existing waste management contracts

Based on the finding of the review, recommendations for improving solid waste disposal and promoting recycling and waste minimization may be identified.

TASK 6: AERONAUTICAL & NON-AERONAUTICAL DEVELOPMENT EVALUATION

Complementary aeronautical dependent and non-aeronautical land use development can benefit the airport and surrounding community. This task reviews the general shortage and limitation of the airport property, addresses potential property acquisition, and overall development compatibility.

6.1. Property and Land Use Inventory

The existing airport property is rather limited for an airport with the activity of ALB. In several locations, private property existing within a few hundred feet of the airfield. For this task, the Consultant will review existing airport property limits and inventory adjacent parcels generally within 1,000 feet of the airport property line. Items of interest include:

- Ownership (public vs private)
- Land use/compatibility and zoning districts
- Airport overlay zoning
- Size, ground access, and utilities

- Known environmental sensitivity
- Assessed value
- Potential for airfield access

These properties will be listed and illustrated and may be included in the Land Use Plan drawing of the ALP drawing set.

6.2 Demand/Development Potential

This review will classify general land use areas, and the amount of land devoted to each land use category. It will identify existing land use regulations that impact development of the site, such as municipal zoning, overly zoning, and airport development standards. A general determination will be made with respect to what land parcels are the most suitable for immediate and short-term development for potential aviation or non-aeronautical.

An opportunities and constraints map will be created that illustrates where potential new improvements could occur to provide a stream of revenue for the Airport. Complementary non-aeronautical land use development can benefit the airport and surrounding community, in consideration of the recommended long-term airport dependent development, including any property reserved for potential airport needs.

The key to realizing maximum development potential is the assessment of the optimal uses the land will support based on physical, demand, and regulatory considerations. The general evaluation will focus on the airport and support services but may also include other future demand for various land uses (office/hotel/retail/industrial/logistics) in the surrounding area that have been identified by the Town, County, or regional organizations.

The existing Town of Colonie airport overlay zoning will be reviewed for sufficiency and illustrated on the airport mapping. Potential revisions to protect the Airport will be identified where necessary for consideration by the Town.

This task will include a recommendation for:

- Parcels needed to protect airspace and airport safety requirements
- Property acquisition for existing or future airport facilities
- Property Acquisition for land use compatibility or economic development potential
- Locations for environmental preservation
- Locations/parcels to have limited benefit to the airport

DELIVERABLE: Working Paper No. 3

This working paper will present the findings and recommendations of the development concepts, environmental overview, and the land use analysis.

TASK 7: AIRPORT PLANS

7.1 Recommended Phasing Plan and Costs

The purpose of this subtask will be to develop the phasing plan and cost estimates consistent with the refined development concept. The Consultant Team will evaluate the phasing plan for facilities construction within the 5-year, 10-, and 20-year planning horizons developed for the preferred

airport development concept. A focus will be on the next 10 years, with less details provide for remaining years of the plan.

7.2 Airport Layout Plan

The ALP set will be developed in color by the Consultant Team following consultation with ACAA staff and the FAA with regard to compliance with FAA AC 150/5070-6B, *Airport Master Plans*. The ALP sheets will be prepared in accordance with the FAA ALP Review Checklist (ARP SOP No. 2.00). However, the Inner Portion of the Approach, Runway Departure Surface, and Airport Airspace Drawing sheets have been completed under previous contract and are not included as part of this scope. The specific ALP sheets to be prepared are listed below. Planimetric mapping and property boundary data collected as part of Task 2.7 will be used to complete the sheets.

7.2.1 Update Title Sheet

The title sheet will include the title of the project, location and vicinity maps, and a sheet index.

7.2.2 Existing Airport Layout Map

The airport-based plan obtained during Task 2.5 will be used to illustrate airport facilities as they exist currently.

7.2.3 Airport Layout Plan

The ALP will be updated in accordance with the previously referenced FAA Advisory Circulars and will depict existing and future airport development projects in schematic form on a large-scale plan at 1" = 600'. The ALP will include basic information such as topographic detail, runway data, RPZ data, safety areas, property lines, and the Airport reference point. The ALPs will also include approval blocks and title and revision blocks.

7.2.4 Airport Data Sheet

The data sheet will include wind roses, wind coverage tables, Airport data tables, and runway data tables. Standardized templates for each table are provided in the FAA ALP Review Checklist.

7.2.5 Terminal Area Plan

A terminal area plan will be updated in accordance with the previously-referenced FAA Advisory Circulars. Terminal area plans will be developed for the proposed passenger terminal complex recommended for ALB. Details not depicted on the ALP will be depicted on the larger scale terminal area plans at a likely scale of 1" = 200'. The plan will include existing and future building data tables, known elevations of structures, passenger terminal building and parking details, and a legend.

7.2.6 Land Use Plan

This plan will be prepared in accordance with the previously referenced FAA Advisory Circulars. The land uses will be depicted by general use categories. This plan will be a key study product, since it will identify existing and recommended uses for all areas under Airport control, as well as surrounding areas within the Runway Protection Zones (RPZ) and DNL 65 noise contour (to be provided by ACAA).

7.2.7 Airport Property Map Preparation

This subtask will use available information provided by the ACAA (in AutoCAD) for updating the Property Map. The key purpose of this drawing is to identify the airport property boundary and history of parcel acquisition, including use of federal grants.

FAA ARP SOP No. 3.00 for FAA Exhibit 'A' Airport Property Inventory Maps will be used to determine any shortfalls in the property data. This task will add the available Exhibit A data to new airport mapping. No research, site surveys, searches of titles, deeds, or property history is included in this work effort. Any work effort needed to update, and supplement information provided by ACAA is considered extra work and out-of-scope.

7.2.8 Airspace / Inner Approach Surface Drawings

The Part 77 airspace and inner approach surface drawings are included in the separate AGIS and Obstruction Study contract is being completed for ACAA. That effort includes a drawing set that contains the Inner Approach Surface Plan and Profile Drawings, Airspace Drawing, and associated Obstruction Data Table Sheets being prepared by others. CHA will incorporate those drawings into the overall master plan ALP drawing set for delivery to FAA. CHA is available to work with the firm prepare those sheets to standardize the drawing format (e.g., scale, colors, title blocks, sheet numbering, etc.) for consistency and submission to FAA.

7.2.9 Airport Design Services Shape Files

This subtask will provide GIS shape files for existing and proposed airport design surfaces, such as the RSA, ROFA, TSA, TOFA, POFZ, BRL, RPZ, easements, and airport property boundary. Each airport design surface shall be provided as individual shape files. These items will be generated from the ALP. No new survey is included in the master plan.

DELIVERABLE: ALP Drawing Set

The ALP drawings will consist of a set of formal plan sheet for review by ACAA, the Advisory Committees, and FAA. A formal draft will be provided for review and comment. The final ALP drawings are presented at the end of the study for FAA approval

TASK 8: DOCUMENTATION

8.1 Master Plan Technical Report

8.1.1 Revisions to Master Plan Working Papers

The results of the above tasks will be documented in separate working papers to serve as the primary data reference for the Study. All working papers, which will include narratives and supporting tables, charts, and other appropriate graphic materials, throughout the development of the Master Plan Update will be combined in to the "pre-draft" master plan report and distributed to ACAA and FAA for review and comments. Comments received will be incorporated and include in the formal "Draft" Airport Master Plan Update report.

8.1.2 Draft Master Plan Technical Report

The purpose of this task will be to provide the ACAA, FAA, airport committee, and general public with the opportunity review and comment on the study findings prior to publication of the final report. The Draft Report will be published for public review on the study website. Emails will be sent to all committee members (see Task 12) with notice of the availability of the draft report, as well as to persons on the study mailing list.

Ten (10) copies of a draft Master Plan Update technical report, including color exhibits where appropriate, will be prepared and submitted for ACAA and FAA review. The draft report will be amended as necessary based on this review and the comments provided.

8.1.3 Publish Final Master Plan Technical Report

The Final Master Plan Update technical report will be published in an electronic format, on the study website, and up to twenty (20) hard copies will be provided to ACAA.

8.2 Executive Summary

An executive summary of the Master Plan Update will be prepared for placement at the front of the final Master Plan Update technical report. The text will be formatted to allow for separate reproduction and distribution. It will include an overview of the analysis and findings, and a description of the recommendations. Graphics and maps will be provided to facilitate understanding by a wide range of potential readers. Up to 200 copies of the Executive Summary will be printed, with an electronic copy (in PDF) will be published on the study website.

TASK 9: STAKEHOLDER & COMMUNITY OUTREACH

The Stakeholder and Community Outreach program will commence at the initiation of the master plan and extend through the formal FAA approval of the Airport Layout Plan. This program will consist of public meetings, technical and regional advisory committee meetings, periodic briefings to the ACAA board, as well as a study website to post study related information.

As listed in the subtasks below the general schedule of meetings is outlined as follows, but subject to change at the direction of the ACAA. In all, 11 formal meetings are planned during the course of the study effort.

Timeframe for Study Meetings				
Meeting Type	Working Paper 1	Working Paper 2	Working Paper 3	Draft Report
Public Meetings	X	X		X
Technical Advisory Committee (TAC)	X	X	X	X
Regional Advisory Committee (RAC)	X	X	X	X

9.1 Study Website

The Consultant will design, develop, and host a custom website suited to the subject matter of the study. The website will be located on a separate registered domain with a name such as: www.ALB-master-plan.com

This website will provide narrative and graphical information and will be maintained and updated up to ten times throughout the study duration. The goal of the website is to provide a readily accessible, convenient location where the public can access project specific information, such as project public meeting announcements, meeting agendas, and minutes, contact information, working papers, and draft and final master plan reports. The website will also contain links to the Albany airport website, and others with pertinent information to the project.

Contact information for the Sponsor and an email address for submitting comments will also be included. The Consultant will assist the Sponsor with responses to email questions and comments. All email comments will be saved; however, responses to all comments are not anticipated.

Website visitor will have the option to sign-up for email notifications for new posted information. Persons signing up for announcements will be informed of the date, time, and location of each of the public meetings, as well as once a study report is uploaded for public review.

To assist with day-to-day collaboration between ACAA, FAA, and Consultant Team members, a password protected cloud-based file storage system will be included as part of the web services. This tool will operate as a traditional cloud base storage system site such as Microsoft SharePoint, providing defined folders to organize and centralize project data. The cloud-based storage system avoids limitations on file size transfers via email and provides for permanent storage and accessibility pre-draft documents by Airport staff.

9.2 Public Meetings/Workshops

Three public information meetings/workshops will be held following the release of working papers 1 and 2, and the draft master plan report. These meetings will be designed to inform the general public of study progress and findings as the study advances. It will also provide the opportunity for public comment on the program. The public meetings/workshops may be structured as traditional or "open house / workshop" type gatherings. The intent is to involve both the local community affected by Airport development and the larger regional community concerned with air service and economic development issues. Public meeting activities will include:

- Issue meeting notices to the news media, web postings, and email notifications
- Prepare presentation materials and handouts
- Attend and present at the meetings (3 Consultant Team members)
- Prepare comment forms, collect comments.
- Prepare meeting summaries and responses to key comments
- Posting of material on study website

Meetings will be held in the early evening in a location determined by ACAA that is large enough to accommodate the anticipated attendance. The public meetings may utilize a facility provided by the Town of Colonie, Albany County, or a local school. Alternatively, hotel conference space may be utilized, but will require a project eligible fee.

9.3 Technical Advisory Committee Meetings

A study technical advisory committee (TAC) will be formed to provide guidance and advice on technical issues to the ACAA and to the Consultant team. It will consist of representatives of ACAA, as well as airport users and operators including:

- Airport Operations/management
- Airlines and air cargo operators
- Other airport tenants (FBO's &
- Service vendors (rental car, parking, concessions)
- Corporate tenants (FBO, Business Aviation)
- ATCT staff
- Public Safety: TSA, Sheriff, NYS Police

- Technology partners: RPI & GE Research
- FAA & NYSDOT

The TAC will meet four (4) times during the course of the work program and include up to approximately 20 members. It is anticipated that the TAC meetings will be held as part of coordinated series of meetings at key decision points in the study process.

For each meeting 2 to 3 members of the Consultant Team will attend and will vary depending on the subject matter of the meeting (attendance may be virtual as needed). For each meeting, the Consultant will prepare and distribute a meeting announcement (via email), an agenda, presentation and/or handouts, and prepare the meeting notes for review and approval by ACAA. It is assumed that each meeting will be held in the main terminal conference room (terminal building 3rd floor) during regular business hours.

Consultant Team activities will include:

- Invitation letters via email/phone calls, as needed
- Preparation of presentation materials and briefing papers
- Attendance/presentations at meetings
- Meeting summaries
- Posting of materials on study website

9.4 Regional Advisory Committee Meetings

A separate regional advisory committee (RAC) will be formed to provide insight and information on non-technical issues that are pertinent to a broader community perspective. The RAC may also include up to approximately 20 members. The consultant team and the Authority will work together on identifying members of the RAC. Typically, the RAC will include representation from regional planning agencies, economic development organizations, and transportation planning groups, business-related organizations, and elected official (or their appointee). The RAC will meet four (4) times during the work program. These meetings will be programmed to occur after the TAC meetings, either on the same day or on the following day. It is anticipated that the RAC meetings will be held as part of coordinated series of meetings at key decision points in the study process.

Potential membership may include:

- Albany County
 - Department of Public Works
 - Department of Economic Development, Conservation & Planning
- Town of Colonie
 - Department of Planning & Economic Development
 - Department of Public Works
- Capital District Regional Planning Commission (CDRPC)
- Capital District Transportation Authority (CDTA)
- Capital District Transportation Committee (CDTC)
- Capital Region Chamber
- Shaker Heritage Society
- NYS Senator and Assembly Representatives
- Municipal representatives (Albany County, City of Albany, & Town of Colonie)

Consultant Team activities will include:

- Invitation letters, via email/phone calls, as needed
- Preparation of presentation materials and briefing papers
- Attendance/Presentations at meetings
- Meeting summaries
- Posting of materials on study website

9.5 Briefings for the ACAA Board

During the Study, it is anticipated that the need will occur to brief the Airport Authority on areas of special concern or interest to them, ahead of broader public discussions and announcements. The program will include three (3) of these board briefings. This task covers preparation for and attendance at these briefings.