

**AGREEMENT
CITY OF FRESNO, CALIFORNIA
CONSULTANT SERVICES**

THIS AGREEMENT is made and entered into effective the _____ day of October, 2016, by and between the CITY OF FRESNO, a California municipal corporation (hereinafter referred to as "CITY"), and Kimley-Horn and Associates, Inc., a North Carolina Corporation (hereinafter referred to as "CONSULTANT").

RECITALS

WHEREAS, CITY desires to obtain professional airport planning consulting services for the master plan update for Fresno Yosemite International Airport, hereinafter referred to as the "Project;" and

WHEREAS, CONSULTANT is engaged in the business of furnishing services as an Airport Planning Consultant and hereby represents that it desires to and is professionally and legally capable of performing the services called for by this Agreement; and

WHEREAS, this Agreement sets forth the terms and conditions under which CONSULTANT shall provide professional services, to be paid with Airport funds and reimbursed with pledged Federal Aviation Administration Entitlement Funds as they are made available; and

WHEREAS, CONSULTANT acknowledges that this Agreement is subject to the requirements of Fresno Municipal Code Section 4-107 and Administrative Order No. 6-19; and

WHEREAS, this Agreement will be administered for CITY by its Director of Aviation (hereinafter referred to as "Administrator") or his/her designee.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the covenants, conditions, and premises hereinafter contained to be kept and performed by the respective parties, it is mutually agreed as follows:

1. Scope of Services. CONSULTANT shall perform to the satisfaction of CITY the services described in **Exhibit A**, including all work incidental to, or necessary to perform, such services even though not specifically described in **Exhibit A**.

2. Term of Agreement and Time for Performance. This Agreement shall be effective from the date first set forth above ("Effective Date") and shall continue in full force and effect through October 30, 2019, subject to any earlier termination in accordance with this Agreement. The services of CONSULTANT as described in **Exhibit A** are to commence upon the Effective Date and shall be completed in a sequence assuring expeditious completion, but in any event, all such services shall be completed prior to expiration of this Agreement and in accordance with any performance schedule set forth in **Exhibit A**.

3. Compensation.

(a) CONSULTANT'S sole compensation for satisfactory performance of all services required or rendered pursuant to this Agreement shall be a total fee of One Million, One Hundred Sixty-Seven Thousand, One Hundred Three Dollars and Zero Cents. (\$1,167,103.00) Such fee includes all expenses incurred by CONSULTANT in performance of the services.

(b) Detailed statements shall be rendered monthly for services performed in the preceding month and will be payable in the normal course of CITY business.

(c) The parties may modify this Agreement to increase or decrease the scope of services or provide for the rendition of services not required by this Agreement, which modification shall include an adjustment to CONSULTANT'S compensation. Any change in the scope of services must be made by written amendment to the Agreement signed by an authorized representative for each party. CONSULTANT shall not be entitled to any additional compensation if services are performed prior to a signed written amendment.

4. Termination, Remedies and Force Majeure.

(a) This Agreement shall terminate without any liability of CITY to CONSULTANT upon the earlier of: (i) CONSULTANT'S filing for protection under the federal bankruptcy laws, or any bankruptcy petition or petition for receiver commenced by a third party against CONSULTANT; (ii) 7 calendar days prior written notice with or without cause by CITY to CONSULTANT; (iii) CITY'S non-appropriation of funds sufficient to meet its obligations hereunder during any CITY fiscal year of this Agreement, or insufficient funding for the Project; (iv) expiration of this Agreement

(b) Immediately upon any termination or expiration of this Agreement, CONSULTANT shall (i) immediately stop all work hereunder; (ii) immediately cause any and all of its subcontractors to cease work; and (iii) return to CITY any and all unearned payments and all properties and materials in the possession of CONSULTANT that are owned by CITY. Subject to the terms of this Agreement, CONSULTANT shall be paid compensation for services satisfactorily performed prior to the effective date of termination. CONSULTANT shall not be paid for any work or services performed or costs incurred which reasonably could have been avoided.

(c) In the event of termination due to failure of CONSULTANT to satisfactorily perform in accordance with the terms of this Agreement, CITY may withhold an amount that would otherwise be payable as an offset to, but not in excess of, CITY'S damages caused by such failure. In no event shall any payment by CITY pursuant to this Agreement constitute a waiver by CITY of any breach of this Agreement which may then exist on the part of CONSULTANT, nor shall such payment impair or prejudice any remedy available to CITY with respect to the breach.

(d) Upon any breach of this Agreement by CONSULTANT, CITY may (i) exercise any right, remedy (in contract, law or equity), or privilege which may be available to it under applicable laws of the State of California or any other applicable law; (ii) proceed by appropriate court action to enforce the terms of the Agreement; and/or (iii) recover all direct, indirect, consequential, economic and incidental damages for the breach of the Agreement. If it is determined that CITY improperly terminated this Agreement for default, such termination shall be deemed a termination for convenience.

(e) CONSULTANT shall provide CITY with adequate written assurances of future performance, upon Administrator's request, in the event CONSULTANT fails to comply with any terms or conditions of this Agreement.

(f) CONSULTANT shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of CONSULTANT and without its fault

or negligence such as, acts of God or the public enemy, acts of CITY in its contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. CONSULTANT shall notify Administrator in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, and shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to Administrator of the cessation of such occurrence.

5. Confidential Information and Ownership of Documents.

(a) Any reports, information, or other data prepared or assembled by CONSULTANT pursuant to this Agreement shall not be made available to any individual or organization by CONSULTANT without the prior written approval of the Administrator. During the term of this Agreement, and thereafter, CONSULTANT shall not, without the prior written consent of CITY, disclose to anyone any Confidential Information. The term Confidential Information for the purposes of this Agreement shall include all proprietary and confidential information of CITY, including but not limited to business plans, marketing plans, financial information, materials, compilations, documents, instruments, models, source or object codes and other information disclosed or submitted, orally, in writing, or by any other medium or media. All Confidential Information shall be and remain confidential and proprietary in CITY.

(b) Any and all writings and documents prepared or provided by CONSULTANT pursuant to this Agreement are the property of CITY upon completion of the services and payment in full of all monies due to the CONSULTANT and shall be turned over to CITY upon expiration or termination of the Agreement. CONSULTANT shall not permit the reproduction or use thereof by any other person except as otherwise expressly provided herein.

(c) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this Section 5.

(d) This Section 5 shall survive expiration or termination of this Agreement.

(e) Any modifications made by the CITY to any of the CONSULTANT'S documents, or any use, partial use or reuse of the documents without written authorization or adaptation by the CONSULTANT will be at the CITY'S sole risk and without liability to the CONSULTANT..

6. Professional Skill. It is further mutually understood and agreed by and between the parties hereto that inasmuch as CONSULTANT represents to CITY that CONSULTANT and its subcontractors, if any, are skilled in the profession and shall perform in accordance with the standards of said profession necessary to perform the services agreed to be done by it under this Agreement, CITY relies upon the skill of CONSULTANT and any subcontractors to do and perform such services in a skillful manner and CONSULTANT agrees to thus perform the services and require the same of any subcontractors. Therefore, any acceptance of such services by CITY shall not operate as a release of CONSULTANT or any subcontractors from said professional standards.

7. Indemnification. To the furthest extent allowed by law, CONSULTANT shall indemnify, hold harmless and defend CITY and each of its officers, officials, employees, and agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury,

death at any time and property damage), and from any and all claims, demands and actions in law or equity (including reasonable attorney's fees and litigation expenses) that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of CONSULTANT, its principals, officers, employees, agents or volunteers in the performance of this Agreement.

If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor to indemnify, hold harmless and defend CITY and each of its officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

This section shall survive termination or expiration of this Agreement.

8. Insurance.

(a) Throughout the life of this Agreement, CONSULTANT shall pay for and maintain in full force and effect all insurance as required in **Exhibit B**, which is incorporated into and part of this Agreement, with an insurance company(ies) either (i) admitted by the California Insurance Commissioner to do business in the State of California and rated no less than "A-VII in the Best's Insurance Rating Guide, or (ii) as may be authorized in writing by CITY'S Risk Manager or his/her designee at any time and in his/her sole discretion. The required policies of insurance as stated in Exhibit B shall maintain limits of liability of not less than those amounts stated therein. However, the insurance limits available to CITY, its officers, officials, employees, agents and volunteers as additional insureds, shall be the greater of the minimum limits specified therein or the full limit of any insurance proceeds to the named insured.

(b) If at any time during the life of the Agreement or any extension, CONSULTANT or any of its subcontractors/sub-consultants fail to maintain any required insurance in full force and effect, all services and work under this Agreement shall be discontinued immediately, and all payments due or that become due to CONSULTANT shall be withheld until notice is received by CITY that the required insurance has been restored to full force and effect and that the premiums therefore have been paid for a period satisfactory to CITY. Any failure to maintain the required insurance shall be sufficient cause for CITY to terminate this Agreement. No action taken by CITY pursuant to this section shall in any way relieve CONSULTANT of its responsibilities under this Agreement. The phrase "fail to maintain any required insurance" shall include, without limitation, notification received by CITY that an insurer has commenced proceedings, or has had proceedings commenced against it, indicating that the insurer is insolvent.

(c) The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The duty to indemnify CITY shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

(d) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor /sub-consultant to provide insurance protection, as an additional insured, to the CITY and each of its officers, officials, employees, agents and volunteers in accordance with the terms of this section, except that any required certificates and applicable endorsements shall be on file with

CONSULTANT and CITY prior to the commencement of any services by the subcontractor. CONSULTANT and any subcontractor/sub-consultant shall establish additional insured status for CITY, its officers, officials, employees, agents and volunteers by using Insurance Service Office (ISO) Form CG 20 10 11 85 or both CG 20 10 10 01 and CG 20 37 10 01 or by an executed manuscript company endorsement providing additional insured status as broad as that contained in ISO Form CG 20 10 11 85.

9. Conflict of Interest and Non-Solicitation.

(a) Prior to CITY'S execution of this Agreement, CONSULTANT shall complete a City of Fresno conflict of interest disclosure statement in the form as set forth in **Exhibit C**. During the term of this Agreement, CONSULTANT shall have the obligation and duty to immediately notify CITY in writing of any change to the information provided by CONSULTANT in such statement.

(b) CONSULTANT shall comply, and require its subcontractors to comply, with all applicable (i) professional canons and requirements governing avoidance of impermissible client conflicts; and (ii) federal, state and local conflict of interest laws and regulations including, without limitation, California Government Code Section 1090 et. seq., the California Political Reform Act (California Government Code Section 87100 et. seq.) and the regulations of the Fair Political Practices Commission concerning disclosure and disqualification (2 California Code of Regulations Section 18700 et. seq.). At any time, upon written request of CITY, CONSULTANT shall provide a written opinion of its legal counsel and that of any subcontractor that, after a due diligent inquiry, CONSULTANT and the respective subcontractor(s) are in full compliance with all laws and regulations. CONSULTANT shall take, and require its subcontractors to take, reasonable steps to avoid any appearance of a conflict of interest. Upon discovery of any facts giving rise to the appearance of a conflict of interest, CONSULTANT shall immediately notify CITY of these facts in writing.

(c) In performing the work or services to be provided hereunder, CONSULTANT shall not employ or retain the services of any person while such person either is employed by CITY or is a member of any CITY council, commission, board, committee, or similar CITY body. This requirement may be waived in writing by the City Manager, if no actual or potential conflict is involved.

(d) CONSULTANT represents and warrants that it has not paid or agreed to pay any compensation, contingent or otherwise, direct or indirect, to solicit or procure this Agreement or any rights/benefits hereunder.

(e) Neither CONSULTANT, nor any of CONSULTANT'S subcontractors performing any services on this Project, shall bid for, assist anyone in the preparation of a bid for, or perform any services pursuant to, any other contract in connection with this Project unless fully disclosed to and approved by the City Manager, in advance and in writing. CONSULTANT and any of its subcontractors shall have no interest, direct or indirect, in any other contract with a third party in connection with this Project unless such interest is in accordance with all applicable law and fully disclosed to and approved by the City Manager, in advance and in writing. Notwithstanding any approval given by the City Manager under this provision, CONSULTANT shall remain responsible for complying with Section 9(b), above.

(f) If CONSULTANT should subcontract all or any portion of the work to be performed or services to be provided under this Agreement, CONSULTANT shall include the

provisions of this Section 9 in each subcontract and require its subcontractors to comply therewith.

(g) This Section 9 shall survive expiration or termination of this Agreement.

10. Recycling Program. In the event CONSULTANT maintains an office or operates a facility(ies), or is required herein to maintain or operate same, within the incorporated limits of the City of Fresno, CONSULTANT at its sole cost and expense shall:

- (i) Immediately establish and maintain a viable and ongoing recycling program, approved by CITY'S Solid Waste Management Division, for each office and facility. Literature describing CITY recycling programs is available from CITY'S Solid Waste Management Division and by calling City of Fresno Recycling Hotline at (559) 621-1111.
- (ii) Immediately contact CITY'S Solid Waste Management Division at (559) 621-1452 and schedule a free waste audit, and cooperate with such Division in their conduct of the audit for each office and facility.
- (iii) Cooperate with and demonstrate to the satisfaction of CITY'S Solid Waste Management Division the establishment of the recycling program in paragraph (i) above and the ongoing maintenance thereof.

11. General Terms and Federal Assurances.

(a) Except as otherwise provided by law, all notices expressly required of CITY within the body of this Agreement, and not otherwise specifically provided for, shall be effective only if signed by the Administrator or his/her designee.

(b) Records of CONSULTANT'S expenses pertaining to the Project shall be kept on a generally recognized accounting basis and shall be available to CITY or its authorized representatives upon request during regular business hours throughout the life of this Agreement and for a period of three years after final payment or, if longer, for any period required by law. In addition, all books, documents, papers, and records of CONSULTANT pertaining to the Project shall be available for the purpose of making audits, examinations, excerpts, and transcriptions for the same period of time. If any litigation, claim, negotiations, audit or other action is commenced before the expiration of said time period, all records shall be retained and made available to CITY until such action is resolved, or until the end of said time period whichever shall later occur. If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this paragraph. This Section 11(b) shall survive expiration or termination of this Agreement.

(c) Prior to execution of this Agreement by CITY, CONSULTANT shall have provided evidence to CITY that CONSULTANT is licensed to perform the services called for by this Agreement (or that no license is required). If CONSULTANT should subcontract all or any portion of the work or services to be performed under this Agreement, CONSULTANT shall require each subcontractor to provide evidence to CITY that subcontractor is licensed to perform the services called for by this Agreement (or that no license is required) before beginning work.

(d) CITY will carry out applicable federal requirements in the administration of this Agreement. Notwithstanding Section 25 herein, CONSULTANT agrees to comply with all applicable federal assurances identified in **Exhibit D** and require that each subcontract include the same assurances by each of its subcontractors.

12. Nondiscrimination. To the extent required by controlling federal, state and local law, CONSULTANT shall not employ discriminatory practices in the provision of services, employment of personnel, or in any other respect on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Subject to the foregoing and during the performance of this Agreement, CONSULTANT agrees as follows:

(a) CONSULTANT will comply with all applicable laws and regulations providing that no person shall, on the grounds of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity made possible by or resulting from this Agreement.

(b) CONSULTANT will not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. CONSULTANT shall ensure that applicants are employed, and the employees are treated during employment, without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Such requirement shall apply to CONSULTANT'S employment practices including, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of this nondiscrimination clause.

(c) CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of CONSULTANT in pursuit hereof, state that all qualified applicants will receive consideration for employment without regard to race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era.

(d) CONSULTANT will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising such labor union or workers' representatives of CONSULTANT'S commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(e) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this Section 12.

13. Independent Contractor.

(a) In the furnishing of the services provided for herein, CONSULTANT is acting solely as an independent contractor. Neither CONSULTANT, nor any of its officers, agents or employees shall be deemed an officer, agent, employee, joint venturer, partner or associate of CITY for any purpose. CITY shall have no right to control or supervise or direct the manner or method by which CONSULTANT shall perform its work and functions. However, CITY shall retain the right to administer this Agreement so as to verify that CONSULTANT is performing its obligations in accordance with the terms and conditions thereof.

(b) This Agreement does not evidence a partnership or joint venture between CONSULTANT and CITY. CONSULTANT shall have no authority to bind CITY absent CITY'S express written consent. Except to the extent otherwise provided in this Agreement, CONSULTANT shall bear its own costs and expenses in pursuit thereof.

(c) Because of its status as an independent contractor, CONSULTANT and its officers, agents and employees shall have absolutely no right to employment rights and benefits available to CITY employees. CONSULTANT shall be solely liable and responsible for all payroll and tax withholding and for providing to, or on behalf of, its employees all employee benefits including, without limitation, health, welfare and retirement benefits. In addition, together with its other obligations under this Agreement, CONSULTANT shall be solely responsible, indemnify, defend and save CITY harmless from all matters relating to employment and tax withholding for and payment of CONSULTANT'S employees, including, without limitation, (i) compliance with Social Security and unemployment insurance withholding, payment of workers' compensation benefits, and all other laws and regulations governing matters of employee withholding, taxes and payment; and (ii) any claim of right or interest in CITY employment benefits, entitlements, programs and/or funds offered employees of CITY whether arising by reason of any common law, de facto, leased, or co-employee rights or other theory. It is acknowledged that during the term of this Agreement, CONSULTANT may be providing services to others unrelated to CITY or to this Agreement.

14. Notices. Any notice required or intended to be given to either party under the terms of this Agreement shall be in writing and shall be deemed to be duly given if delivered personally, transmitted by facsimile followed by telephone confirmation of receipt, or sent by United States registered or certified mail, with postage prepaid, return receipt requested, addressed to the party to which notice is to be given at the party's address set forth on the signature page of this Agreement or at such other address as the parties may from time to time designate by written notice. Notices served by United States mail in the manner above described shall be deemed sufficiently served or given at the time of the mailing thereof.

15. Binding. Subject to Section 16, below, once this Agreement is signed by all parties, it shall be binding upon, and shall inure to the benefit of, all parties, and each parties' respective heirs, successors, assigns, transferees, agents, servants, employees and representatives.

16. Assignment.

(a) This Agreement is personal to CONSULTANT and there shall be no assignment by CONSULTANT of its rights or obligations under this Agreement without the prior written approval of the City Manager or his/her designee. Any attempted assignment by CONSULTANT, its successors or assigns, shall be null and void unless approved in writing by the City Manager or his/her designee.

(b) CONSULTANT hereby agrees not to assign the payment of any monies due CONSULTANT from CITY under the terms of this Agreement to any other individual(s), corporation(s) or entity(ies). CITY retains the right to pay any and all monies due CONSULTANT directly to CONSULTANT.

17. Compliance With Law. In providing the services required under this Agreement, CONSULTANT shall at all times comply with all applicable laws of the United States, the State of California and CITY, and with all applicable regulations promulgated by federal, state, regional, or local administrative and regulatory agencies, now in force and as they may be enacted, issued, or amended during the term of this Agreement.

18. Waiver. The waiver by either party of a breach by the other of any provision of this Agreement shall not constitute a continuing waiver or a waiver of any subsequent breach of either the same or a different provision of this Agreement. No provisions of this Agreement may be waived unless in writing and signed by all parties to this Agreement. Waiver of any one provision herein shall not be deemed to be a waiver of any other provision herein.

19. Governing Law and Venue. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding, however, any conflict of laws rule which would apply the law of another jurisdiction. Venue for purposes of the filing of any action regarding the enforcement or interpretation of this Agreement and any rights and duties hereunder shall be Fresno County, California.

20. Headings. The section headings in this Agreement are for convenience and reference only and shall not be construed or held in any way to explain, modify or add to the interpretation or meaning of the provisions of this Agreement.

21. Severability. The provisions of this Agreement are severable. The invalidity, or unenforceability of any one provision in this Agreement shall not affect the other provisions.

22. Interpretation. The parties acknowledge that this Agreement in its final form is the result of the combined efforts of the parties and that, should any provision of this Agreement be found to be ambiguous in any way, such ambiguity shall not be resolved by construing this Agreement in favor of or against either party, but rather by construing the terms in accordance with their generally accepted meaning.

23. Attorney's Fees. If either party is required to commence any proceeding or legal action to enforce or interpret any term, covenant or condition of this Agreement, the prevailing party in such proceeding or action shall be entitled to recover from the other party its reasonable attorney's fees and legal expenses.

24. Exhibits. Each exhibit and attachment referenced in this Agreement is, by the reference, incorporated into and made a part of this Agreement.

25. Precedence of Documents. In the event of any conflict between the body of this Agreement and any Exhibit or Attachment hereto, the terms and conditions of the body of this Agreement shall control and take precedence over the terms and conditions expressed within the Exhibit or Attachment. Furthermore, any terms or conditions contained within any Exhibit or Attachment hereto which purport to modify the allocation of risk between the parties, provided for within the body of this Agreement, shall be null and void.

26. Cumulative Remedies. No remedy or election hereunder shall be deemed exclusive but shall, wherever possible, be cumulative with all other remedies at law or in equity.

27. No Third Party Beneficiaries. The rights, interests, duties and obligations defined within this Agreement are intended for the specific parties hereto as identified in the preamble of this Agreement. Notwithstanding anything stated to the contrary in this Agreement, it is not intended that any rights or interests in this Agreement benefit or flow to the interest of any third parties.

28. Extent of Agreement. Each party acknowledges that they have read and fully understand the contents of this Agreement. This Agreement represents the entire and integrated agreement between the parties with respect to the subject matter hereof and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be modified only by written instrument duly authorized and executed by both CITY and CONSULTANT.

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IN WITNESS WHEREOF, the parties have executed this Agreement at Fresno, California, the day and year first above written.

CITY OF FRESNO,
a California municipal corporation

Kimley-Horn and Associates, Inc,
a North Carolina corporation

By: _____
Kevin Meikle, Architect,
Director of Aviation
Airports Department

By: 
Name: Michael J. Hermann

ATTEST:
YVONNE SPENCE, CMC
City Clerk


Title: Senior Vice President
(if corporation or LLC, Board
Chair, Pres. or Vice Pres.)

By: _____
Deputy

By: _____
Name: _____

APPROVED AS TO FORM:
City Attorney's Office

Title: _____
(if corporation or LLC, CFO,
Treasurer, Secretary or Assistant
Secretary)

By:  10/4/16
Amanda Freeman Date
Deputy City Attorney

Any Applicable Professional License:
Number: 49177
Name: Michael J. Hermann
Date of Issuance: 26 JUN 1992

Addresses:
CITY:
City of Fresno
Attention: Beth McDonell,
Capital Development Specialist
4995 E Clinton Way
Fresno, CA 93727
Phone: (559) 621-4521
FAX: (559) 251-4528

CONSULTANT:
Kimley-Horn and Associates, Inc.
Attention: Pam Keidel-Adams,
Project Manager
7740 N. 16th Street
Phoenix, AZ 85020
Phone: 602-678-3422
FAX: 602-944-7423

- Attachments:
1. Exhibit A - Scope of Services
 2. Exhibit B - Insurance Requirements
 3. Exhibit C - Conflict of Interest Disclosure Form
 4. Exhibit D - Assurances

Exhibit A

SCOPE OF SERVICES

**Consultant Service Agreement between City of Fresno (“City”)
and Kimley-Horn and Associates, Inc. (“Consultant”)
Master Plan Update for Fresno Yosemite International Airport
PROJECT TITLE**

BACKGROUND

The City of Fresno Airports Department (“the City” or “the Airports Department”) has contracted the services of Kimley-Horn and its team of subconsultants (the “Consultant”) to prepare a Master Plan Update (MPU or “the Study”) for the Fresno Yosemite International Airport (FAT or “the Airport”). Our Consultant will work closely with the Airports Department and the Federal Aviation Administration (FAA) to achieve results that meet their respective requirements and to create a plan that enhances the operational sustainability of the Airport. The end result of the entire effort will be a “Master Plan Update” report and an updated Airport Layout Plan (ALP) drawing set that integrates new aeronautical surveying conducted to meet the FAA’s requirements for Airports Geographic Information Systems (AGIS).

Of direct relevance to this Study is the potential of a concurrent California Air National Guard’s 144th Fighter Wing (ANG or 144th) long-term planning effort for their facilities at FAT. The ANG is a significant tenant and user at FAT and their analysis of future facility and operational needs, both airside and landside, should be considered to ensure that FAT’s primary function as a Part 139 certificated civilian facility is not adversely impacted while still meeting the ANG’s needs. Coordination between the FAT MPU and the ANG planning effort is essential to the successful outcome of this MPU Study and for the long-term sustainability of both organizations.

In addition, the Airports Department is concurrently preparing a Master Plan Update for the Fresno Chandler Executive Airport (FCH) which is located approximately eight miles from FAT. With the City being the sponsor of these two airports, which primarily serve different segments of the aviation market, these two master plan studies must be coordinated to account for the broader system-wide influences the two facilities have on each other and the national air space system. Kimley-Horn is also performing the FCH work effort and will strive to maximize cross-sharing of information, reduce redundancy of work efforts, and streamline the administration/management of both projects.

Preparation of the FAT MPU and ALP will conform to the FAA’s guidance as currently available including the following:

- FAA Advisory Circular 150/5300-13A, *Airport Design*;
- FAA Advisory Circular 150/5070-6B, *Airport Master Plans*;
- FAA Advisory Circular 150/5300-16A, General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey;
- FAA Advisory Circular 150/5300-17C, Standards for Using Remote Sensing Technologies in Airport Surveys;

- FAA Advisory Circular 150/5300-18B, General Guidance and Specifications for Aeronautical Surveys: Airport Survey Data Collection and Geographic Information System Standards;
- FAA Airports Division (ARP) Standard Operating Procedures (SOPs);
- FAA Order 5100.38, Airport Improvement Program (AIP) Handbook; and
- Other FAA Advisory Circulars, Orders and Regulations applicable to this project.

The MPU and ALP will provide the Airports Department guidance and serve as the general basis for ongoing facility and land development of the Airport. The overall goal of this guidance is to satisfy aviation demands and for the Airport to be wholly compatible with the community and environment. Specific objectives within this MPU Scope of Services are as follows:

- To develop new safety-critical data per section 4.1.3 Safety Critical Data of FAA AC 150/5300-18B, Change 1. Obstacle and imagery collection will include the Airport's Part 77 obstruction identification surfaces for existing approaches for use in the FAA's AGIS program.
- To research factors likely to affect air transportation demands in the local area over the next 20 years, including FAT's interaction with FCH, and develop forecasts of aviation demand that are approved by the FAA.
- To determine the projected needs of Airport users for the next 20 years, taking into consideration recent revisions to FAA design standards, instrument approach capabilities, and future fleet mix.
- To recommend improvements that will enhance the Airport's ability to satisfy future aviation needs, meet FAA design standards, and enhance safety.
- To evaluate on- and off-Airport land use compatibility for both aeronautical activities and, on a cursory level, to determine potential opportunities to generate additional revenue.
- To establish a schedule of development priorities and funding needs for improvements proposed in the MPU, consistent with the FAA's capital improvement program planning, including identifying short term needs.
- To develop an ALP drawing set that is approved by FAA.
- To conduct a public outreach process that provides information on the Airport MPU, and offers opportunities for input and comment on the Study including use of an Advisory Committee and public workshops.

ELEMENT 1: PRE-PLANNING, STUDY DESIGN, AND ADMINISTRATION

This element includes the coordination necessary to determine the initial needs for the project and develop and finalize the Scope of Services, execute the contract agreements, and the ongoing project management needed to effectively and efficiently perform the MPU Study.

Task 1.1 – Pre-planning

Description: As part of developing the draft and final Scope of Services, pre-planning is required to understand the concerns and specific needs of the City and the Airports Department to establish the context and purpose of the Study. This consists of dialogue and coordination with FAA and City representatives on the primary issues and

requirements to be addressed in the MPU. Previous study documents, as provided by the City, and readily available information will be reviewed to provide additional insight and understanding of the issues. Any resources or studies considered will be documented within the Study report. This coordination will be performed primarily via teleconferences with City representatives, Airport staff, FAA personnel and the Consultant, as well as one in-person scoping meeting attended by two personnel.

Product: Preliminary coordination, teleconferences, a scoping meeting, and initial review of existing documents to be used in the development of the Scope of Services.

Task 1.2 – Develop Scope of Services

Description: A draft Scope of Services will be prepared based on the pre-planning efforts and will be submitted to the Airports Department and FAA for review. Additional teleconferences may be performed and upon resolution of any comments from the Airports Department and FAA, the final scope will be prepared for the City's use in obtaining an Independent Fee Estimate (IFE) for the proposed work. A preliminary project schedule and preliminary fee estimate will also be prepared by Consultant. Following this, the Airports Department and Consultant will negotiate and execute all appropriate prime and subcontract agreements.

Product: Draft and final Scope of Services, schedule, project budget, and executed contracts.

Task 1.3 – Project Management and Quality Control

Description: Appropriate direction and project management will be provided in the development of the MPU as each element is undertaken and completed. This includes:

- Bi-weekly calls between the Airports Department and Consultant project managers to discuss strategy, resolve issues, and coordinate progress and schedule;
- Regular in-house meetings and internal Team coordination to manage workflow and quality control of deliverables;
- Quality reviews of all written and graphic communication produced in the form of working papers, technical memorandums, draft reports, final reports, summary brochures, and other materials, as needed;
- Preparation of project status reports that will be submitted with monthly invoices; and
- Assist the Airports Department with preparation of associated FAA Quarterly Performance Reports for this project.

Product: Bi-weekly coordination calls, schedule maintenance, monthly invoicing and status reports, and assistance preparing FAA's Quarterly Performance Reports.

ELEMENT 2: STAKEHOLDER COORDINATION AND PUBLIC INVOLVEMENT PROGRAM

This element includes stakeholder, agency and public engagement efforts that will be performed throughout the course of the Study.

Task 2.1 – Kickoff Meetings

Description: A one-day set of internal team “kickoff” meetings will be held at the Airport subsequent to executing the contract agreements. It is anticipated that up to 8 personnel from the team, representing all major facets of the analysis, will participate in these meetings. These meetings will be used to introduce the team members and Airports Department staff, discuss the project goals and objectives, establish coordination and communication procedures, identify external coordination points, identify data resources, and generally define and clarify the mechanics of the Scope of Services. This meeting will also be used to initiate Element 4. The meeting is included in this task while the work associated with Element 4 is described and included in that element.

Product: Series of kickoff meetings will be conducted at the Airport with Study Participants to introduce the project and prepare for the initiation of technical analyses.

Task 2.2 – Master Plan Advisory Committee

Description: The Consultant will facilitate establishment of an Advisory Committee for the MPU. The Advisory Committee will serve as a non-voting body to provide stakeholder input and advise the Airports Department on content and recommendations for the MPU through meetings and review of the interim working papers. The Advisory Committee membership will be coordinated and confirmed with the Airports Department but may include representatives from the following entities:

- City of Fresno Airports Department;
- Airport Tenants, Airlines, Rental Car Companies, Fixed Base Operators;
- FAA Program Manager & Planner;
- California Department of Transportation (Caltrans) Division of Aeronautics;
- FAA Air Traffic Control Tower (ATCT);
- Transportation Security Administration (TSA);
- California Air National Guard (ANG);
- California Army National Guard Aviation Classification and Repair Activity Depot;
- U.S. Forest Service and California Department of Forestry and Fire Protection;
- Fresno Council of Governments (including Airport Land Use Commission);
- City of Fresno Representative;
- Fresno Economic Development Corporation;
- Fresno Chamber of Commerce;
- City of Clovis Representative; and
- Fresno State University.

The Consultant will facilitate up to five (5) Advisory Committee meetings to be held at the Fresno Yosemite International Airport or another location determined in coordination with the Airports Department. At least four (4) Consultant team personnel will attend the meetings.

The first meeting will consist of a kickoff meeting as described previously. Subsequent meetings will be held to present draft findings of the MPU as it progresses. The date and time of the meetings will be coordinated with the Airports Department. The Consultant will distribute electronic copies of the working papers to the Committee prior to

scheduled meetings, once approved by the Airports Department. The Consultant will prepare necessary meeting materials such as PowerPoint presentations, handouts, sign-in sheets and meeting summaries. Meetings are anticipated to be held in association with the key study topics as follows:

- Study Kickoff;
- Inventory and Activity Forecasts;
- Facility Requirements;
- Alternative Development Strategies; and
- Recommendations and Implementation Plan.

Product: Five (5) Advisory Committee meetings will be conducted at the Airport with supporting materials provided before and after the meetings, as appropriate. At least four (4) Consultant team personnel will attend the meetings.

Task 2.3 – Airports Department and FAA Briefings/Coordination Meetings

Description: The Consultant will meet with the Airports Department and FAA staff to coordinate the MPU's and ALP's review and approval. Two (2) meetings at either the Airport or the FAA's San Francisco Airports District Office (ADO) are accounted for with at least two (2) Consultant team personnel attending the meetings. These coordination meetings will be used to discuss the study's progress, provide opportunities for review and input on specific issues such as forecasts, alternative evaluations, ALP development, and/or other topics that arise during the MPU.

Product: Two (2) Airports Department/FAA coordination meetings are anticipated to be held in San Francisco. At least two (2) Consultant team personnel will attend the meetings.

Task 2.4 – Airports Department and ANG Coordination Meetings

Description: The Consultant will meet with the Airports Department and ANG staff to coordinate the Airport and ANG planning efforts. Two (2) meetings at the Airport are accounted for with at least two (2) Consultant team personnel attending the meetings. These coordination meetings will be used to discuss both of the studies' progress, provide opportunities for review and input on specific issues such as forecasts, alternative evaluations, ALP development, and/or other topics that arise during the studies.

Product: Two (2) Airports Department/ANG coordination meetings to be held separate from all other meetings. At least two (2) Consultant team personnel will attend the meetings.

Task 2.5 – Technical Working Group Meetings

Description: The Consultant will coordinate meetings with relevant stakeholders to discuss and evaluate technical issues. While a separate "Technical Advisory Committee" is not being established, two (2) meetings are included for use in convening working groups to discuss technical issues. These technical working groups will be established in

coordination with the Airports Department. The Airports Department will identify the meeting attendees based on the topics to be discussed. For each of the two (2) meetings, the Consultant will prepare materials and conduct the meetings, scheduled to be held at the Airport, with at least three (3) Consultant team personnel attending the meetings.

Product: Two (2) technical working group meetings to be held separate from all other meetings. At least three (3) Consultant team personnel will attend the meetings.

Task 2.6 – Briefings for Government Officials and/or Special Interest Groups

Description: During the course of the Study, it is likely that the need will occur to brief elected or government officials, or special interest groups, on areas of special concern or interest to them, ahead of broader public discussions and announcements. It is also anticipated that briefings will be needed at the conclusion of the planning effort to present the study findings to the City Council or others deemed important by the Airports Department. This task accounts for preparation and attendance at two (2) such briefings/meetings by at least one (1) Consultant team member.

Product: Two (2) government or special interest group briefings outside of the other regularly scheduled meetings. These are planned to occur in conjunction with other meetings at the Airport, without separate travel budgeted. At least one (1) Consultant team member will attend the meetings.

Task 2.7– Public Workshops

Description: Development of the FAT MPU will be coordinated with the general public in public workshops, offering opportunities for input from stakeholders and the local community. The workshops will follow the “open house” format as recommended in FAA AC 150/5070-6B, *Airport Master Plans*. At least four (4) Consultant team personnel will attend the workshops. Advertising for the workshops will be accomplished by the Airports Department primarily through electronic means (email, website, social media), as well as through notifications in the local news media. The location and times for all workshops will be coordinated with the Airports Department and are anticipated to be held at facilities on or near the Airport. The Consultant will have appropriate personnel in attendance to manage and conduct the workshops and address public questions.

Three (3) workshops have been budgeted over the course of the MPU, scheduled to coincide with the Advisory Committee meetings and covering the following topics:

- Study purpose, goals and inventory of existing facilities;
- Activity forecasts and facility requirements and alternatives; and
- Recommendations and implementation plan.

Product: Three (3) public information workshops and development of presentation materials to be provided in both hard copy and electronic format for posting on the Airport’s website. At least four (4) Consultant team personnel will attend the workshops.

Task 2.8 – Online Engagement

Exhibit A

Description: The Consultant will obtain a domain (preferred is FresnoAirportMasterPlan.com) for a website and will develop a website that provides information for both FAT and FCH. The Airports Department's website (FlyFresno.com) will have minimal FAT MPU information and will provide a link to the MPU website. The Consultant will develop materials regarding the FAT MPU. The Consultant will work with the Airports Department on the general layout of the website or applicable MPU page(s). The website will be hosted by the Consultant for the duration of the project – at least until FAA's approval of the final documentation is received. During the planning process, draft materials (e.g. working papers) will be available for review and download on the website as approved by the Airports Department. The website will provide the public with a means to make comments on the contents of the MPU (either on the website itself or direct them to a location to submit those comments). All pertinent comments will be included within the Final Master Plan document.

The Consultant will announce the public workshops via the study website and will provide material to the Airports Department to also announce the workshops via their online methods.

Product: Acquire domain for website that will host information for both FAT and FCH. Website content development and access to project materials will be provided for separately for FAT.

ELEMENT 3: NEW AERIAL PHOTOGRAPHY AND PLANIMETRIC MAPPING

Task 3.1 – Obtain New Aerial Photography and Planimetric Mapping

Description: The purpose of this task is to accomplish an FAA Airport Airspace Analysis Survey for all surfaces defined in FAA Advisory Circular 150/5300 - 18B: Section 2.7.1.1, Runways with Vertical Guidance. The project will be done in compliance with FAA AGIS policies and will include an airport airspace analysis for vertically-guided operations for existing and future Runways 11L-29R and 11R-29L. For this project, we will acquire new vertical stereo digital imagery at a physical image scale of 1"= 3,750' of the obstruction surface areas and 1"=972" of the airport property. The aerial imagery will cover all of the VG Airspace Analysis surfaces using an Ultracam Falcon Digital Aerial Mapping System, or comparable, during leaf-on conditions. In addition we will cover all of the non-precision Part 77 surfaces.

From the 1"= 3,750' imagery, the Consultant will produce the following:

- Limited landmark feature planimetric mapping;
- Color digital orthophotos with a 1.0' pixel resolution;
- Identification and mapping of obstruction obstacles for the VG surfaces; and
- Identification and mapping of obstruction obstacles for all objects within 10 feet of the Part 77 surface.

From the 1"= 972 imagery, we will produce the following:

- 100 scale mapping with 2' contours of the existing Airport property (1,190 acres);

Exhibit A

- Top of all buildings on Airport property.
- Included roadway elevations where they intersect the extended runway centerlines and edges of the RPZ/Part 77 Approach Surfaces as indicated on the attached ALP Inner Approach Drawings. This will include:
 - a. East Dakota Avenue
 - b. Chestnut Drive
 - c. East Garland
 - d. Clovis Avenue
 - e. East McKinley Avenue
 - f. AT & SF Railroad
- Color digital orthophotos with a 0.5" pixel resolution; and
- Identification and mapping of obstruction obstacles for the VGRPS, VGPCS & VGPS surfaces.

The Consultant will be responsible for preparation and submittal of the Statement of Work (SOW), Survey and Quality Control Plan, Imagery Acquisition Plan, Imagery Acquisition Report, Final Project Report and all associated data files as required for submission to the FAA AGIS online database.

Quality Standards: The project has been designed to conform to the National Map Accuracy Standards for 1"=100' scale planimetric feature collection, two-foot contours and six and twelve-inch orthophoto production. In addition, the Consultant ensures that the photogrammetric mapping will meet all FAA and NGS standards. The Consultant will exercise reasonable care and will conform to the standards of practice ordinarily used by the photogrammetric profession.

Project Area: The project area encompasses all of Fresno Yosemite International Airport inclusive of the obstruction surfaces as defined in AC 150/5300-18B.

Control Surveying: The aerial photography will be completed with ABGPS control which will be used for the base control for the geo-referencing of the aerial imagery. The Consultant will process the ABGPS data using COR stations and reference it to the project control datums:

- Horizontal: North American Datum of 1983/2011 (NAD 83(2011)), in the CA State Plane Coordinate System, zone IV in US survey feet.
- Vertical: North American Vertical Datum of 1988 (NAVD 88).

A member of the Consultant team will complete all of the remaining on-site ground control surveys, including:

- Geodetic control validation of the existing Airport PACS and SACS stations or establish temporary Airport control according to the guidelines established in AC 150/5300-16A.
- Establishing all necessary photo-identifiable ground control and FAA mandated check-points required to validate the ABGPS and IMU control. The Consultant will provide information on the specific locations of the required control and check points.
- Collection of all the Airport runway end positions.
- Collection of vertical profiles for all runways.

- Collection of the position, elevation, and where required the appropriate navigational aid perpendicular point of all electronic and visual navigational aids (NAVAIDS) located on the Airport and associated with any current instrument approach servicing the Airport.
- Full field-collected attribution of all Airport features.
- All other tasks, not specifically listed above, as outlined in FAA AC-18B, Table 2-1 "Survey Requirements Matrix for Airport Layout Plan".

Photogrammetric Mapping: The Consultant will collect the features normally shown on 1"=100' scale mapping within the mapping limits identified in the RFP (see exhibit). The Consultant will build a digital terrain model (DTM) by collecting masspoints and breaklines. These DTM elements will be used to construct a triangulated irregular network (TIN) surface from which 2-foot contours will be interpolated. Contours will be dashed in areas where the ground is obscured by trees, dense brush, deep shadows or other obstructing features. Dashed contours indicate a lower level of accuracy. Additional field surveys should be performed in areas of dashed contours prior to design. All contours will be continuous polylines. The final data will be delivered in ESRI Shapefile format (FAA) and AutoCAD format.

Orthophoto Mapping: The Consultant will use the control solution and imagery to generate a Digital Elevation Model (DEM) of the VG surfaces. The imagery will be processed into color digital orthophotos using the aforementioned DEM to rectify the images. Orthophotos for the entire project area will be developed with a 1.0' pixel resolution and for the Airport property, with a 0.5' pixel resolution. Orthos will be delivered in a GeoTIFF file format.

VG Obstruction Surveys: For the VG Obstructions Surfaces the Consultant will satisfy the following requirements of the AC 150/5300-18B:

- 2.7.1.2 Analysis of Runway 11R-29L and 11L-29R with Vertically Guided Operations (Surfaces include the VGRPS, VGPCS, VGAS, VGPS, VGATS, VGHS and VGCS).

The specific types and quantities of obstructions for each surface are outlined and clearly defined for the particular surface in each circular section. Any obstructions that meet the requirement of the circular, but are of a nature that elevations at the highest point of the obstruction are virtually impossible to read through photogrammetric methods (cell tower, electrical tower, etc.), will be identified and relayed to the surveyor to initiate field surveyed elevations for the obstruction.

The obstruction delivery will include the limited landmark planimetric feature collection. The final data will be delivered in ESRI Shapefile format.

Deliverables: The Consultant will submit all data collected and associated required deliverable in the formats specified in the appropriate advisory circulars to the FAA Office of Airports, Airports Surveying-GIS Program. All data submissions to the FAA will be through the program's web site at <http://airports-gis.faa.gov>.

The AC 150/5300-17C project data deliveries that will not be submitted through the web site will be delivered on external hard drives or DVDs. The 18B deliverables that will be uploaded to the AGIS website include:

- Statement of Work, Imagery Plan and Survey and Quality Control Plan;
- Image Delivery;
- Digital limited landmark detail outside the Airport;
- Color digital orthophotos with a 1.0' pixel resolution (GeoTIFF format);
- Obstruction survey data (that covers VG surfaces);
- Surveyed centerline profile on VG runways;
- NAVAID data;
- Planimetric data and two-foot contours to 18B specs (Shapefile format);
- Photogrammetrically derived and surveyed attributes in defined format;
- FGDC compliant metadata; and
- Final Report.

Other than the 18B delivery, the Consultant will deliver the following items to the Airport:

- Planimetric data and two foot contours to 18B specs in Civil 3D (or other) format;
- Color digital orthophotos with a 1.0' pixel resolution in GeoTIFF (project area)
- Color digital orthophotos with a 0.5' pixel resolution in GeoTIFF (Airport property); and
- 2 color enlargements (30"x40") covering the Airport and surrounding area (mounted/laminated/framed).

In addition to the above, Part 77 deliverables will include:

- Obstruction survey data within 10 feet for Runways 11R/20L and 11L/29R in Microstation/Excel/CSV file format (20,200 feet beyond each runway).
- All digital files will be delivered on external hard drive or CD/DVD.

Product: Updated mapping for preparing the ALP drawing set, including obstructions analysis and FAA-compliant Geographical Information System.

ELEMENT 4: REVALIDATE AIRPORT VISION

This effort will revalidate the Airports Department's vision and mission for the future of the Airport. It is anticipated that the vision will set the framework by which the MPU Study and any development and land use alternatives will be crafted, evaluated and refined. This visioning revalidation effort will reflect input from both internal and external stakeholders as determined by the Airports Department. This effort will be performed in concert with the MPU Study for FCH due to the relationship of the general aviation activity between both airports and the need to understand the roles of both airports in serving the region's general aviation demand.

Task 4.1 – Situational Analysis

Description: The focus of this analysis will be to give an honest, "real-world" look at the potential issues that could affect the future of the Fresno Yosemite International Airport and influence the results of the MPU. This includes a high-level assessment of the

Airport's environment as well as its strengths, weaknesses, threats and opportunities. This task will be based on readily available information and operational data provided by the Airports Department and be performed in coordination with Airports Department staff. Topics to be addressed in this analysis may include:

- Physical setting and boundaries;
- Political jurisdictions;
- Community concerns;
- Surface transportation;
- Financial situation and economic health;
- Legal and regulatory framework;
- City of Fresno goals, initiatives and programs;
- Environmental and sustainability considerations;
- Airport role in federal and state system plans (i.e. CASP, NPIAS);
- Operational and management structure;
- Regional and global aviation and airline trends;
- On- and off-airport land use and zoning; and
- Physical, financial and regional economic impact of the government use of FAT.

Product: A list of concerns and issues facing the Airport to establish a situational baseline.

Task 4.2 – Identify Strategic Goals and Define Airport Vision

Description: From the results of Task 4.1, the Consultant will work with the Airports Department to identify specific strategic goals that the Airports Department would like to achieve for the Airport over the planning horizon. The MPU strategic goals will be focused on operational, development, and market-related objectives. These goals will then be used to assist the Airports Department in revalidating or refining the vision statement and/or mission statement in a manner that reflects the Airports Department's current desires for the future direction of the Airport.

Product: A list of strategic goals and revalidated vision/mission statement for the Airport.

Task 4.3 – Visioning Work Session/Charrette

Description: The purpose of this work session/charrette, which is envisioned to be held during the kickoff meeting described in Task 2.1, is to gain additional input and acceptance on the situational analysis, strategic goals, and Airport vision. Appropriate decision makers within the City and Airports Department management team will be invited to participate in the work session to ensure that the goals and vision align with any broader City and regional goals. The MPU objectives and results of **Tasks 4.1 and 4.2** will be presented and discussed. Following this meeting, the goals and vision statement will be refined as necessary and submitted to the Airports Department for approval or adoption. Once adopted, these will define the overarching context of the MPU and be used to guide the remainder of the Study.

Product: Airport strategic goals and vision approved/adopted by the Airports Department.

Task 4.4 – Confirm MPU Objectives and Identify Baseline Assumptions

Building upon the MPU Study objectives defined previously (refer to “Background” section of this scope) and the results of the preceding tasks, a refined list of Study objectives that clearly identifies the primary expectations of the MPU process will be prepared. General assumptions that will be utilized for the study effort will also be developed and outlined. Such general assumptions may include existing and anticipated future conditions that are relevant to the Study’s process and results. These assumptions will be coordinated with the Airports Department and FAA and included in the introduction section of the MPU.

Product: Refined list of Study objectives and general study assumptions.

Task 4.5 – Prepare Working Paper #1 – Introduction

Description: The Consultant will prepare a working paper describing gathered data and results of the previous tasks. It will focus on introducing the Study, defining the Airports Department’s vision for FAT, and identifying the Study’s context and parameters. The draft will be submitted in electronic Word and PDF formats to the Airports Department for review and comment. Upon response to comments received from the Airports Department, the working paper will be posted on the Study website and provided to the Advisory Committee. Ultimately, this working paper will become a chapter in the final MPU document.

Product: Draft and final working paper, in electronic Word and PDF formats, submitted to the Airports Department and Advisory Committee and posted on the Study website.

ELEMENT 5: INVENTORY OF EXISTING CONDITIONS

The purpose of this element is to assemble and organize existing relevant information and data pertaining to the Airport and its environs. This information will be used in subsequent elements of the MPU Study. The information will be collected through on-site visits, stakeholder interviews, desktop research and review of previous studies and plans (including those initially reviewed as part of **Task 1.1**).

Task 5.1 – Collection and Review of Other Reports and On-Going Studies and General Data

Description: Building upon information obtained during previous pre-planning, scoping, and stakeholder coordination, this task will collect and review other identified studies and reports that provide historical and contextual information relevant to the MPU. The goal of this is to reduce the duplication of work and develop a common base of information from the various stakeholders. Materials may include, but are not limited to, previous master planning efforts, transportation studies, market assessments, inter-modal concept evaluations, pavement management programs, wildlife hazard studies, economic impact studies, 10-year history of all FAA airport grants, or other reports as appropriate. Where possible, the Airports Department will provide copies of existing

studies for the Team's reference and use. Collected reports and studies will be housed on a Kimley-Horn established file-share network (FTP) for use by the Study Team.

Product: Compilation of data to be used by the Consultant and stored on a file-share network. A brief description of any recommendations, issues, or concerns presented in the various existing or on-going relevant studies will be included in the MPU documents as appropriate.

Task 5.2 - Inventory of Airport Physical Facilities

Description: This inventory will identify and generally describe the existing Airport facilities as to quantity, type, and condition. This effort will make maximum use of information available from the Airports Department and FAA and will include, but not be limited to, the following:

Land Holdings: A review of the Airport's current Exhibit "A" will be conducted with Airports Department staff to obtain information on the Airport boundary and property interests (i.e. fee-simple, easement, rights-of-way) are accurately reflected. As discussed in a subsequent task, a boundary survey and title and deed search are included to ensure compliance with FAA's SOP 3.00 for FAA Review of Exhibit "A" Airport Property Inventory Maps, which includes completing a checklist.

Airfield: Runway, taxiway and ramp configurations including pavement strength and condition, markings, signing, lighting, navigational aids, shoulder pavement, blast pads, aircraft circulation, and access to the Airport Operational Areas will be reviewed. Pavement Condition Index (PCI) and Pavement Condition Number (PCN) evaluations recently prepared by Kimley-Horn for the Airports Department will be referenced and noted, as appropriate. No additional field studies, field surveys or geotechnical analysis is accounted for in this task.

Passenger Terminal: Airside and landside components of the current terminal area will be inventoried. Attention will be paid to the number and configuration of aircraft parking positions by aircraft size and passenger access to the terminal, aircraft and passenger circulation, distribution of space by functional use within the terminal building as set forth in current as built drawings, vertical circulation and conformity with current ADA requirements, baggage handling space (including the existing planning study for an inline baggage screening/explosive detection system (EDS)), facility utilization by public and non-public spaces, and age and condition of the terminal building. The age of the terminal is a specific concern as it relates to determining the long-term ability of the facility to be expanded given the existing infrastructure. It is anticipated that the Airports Department will provide electronic archive record drawings (PDF format) of each existing terminal building construction project and CADD files of the terminal building complex which will be supplemented by the Team's on-site observations and measurements. The intent of this exercise is to develop an accurate and up-to-date layout plan of the terminal building as it currently exists, understanding the ability of the facility to be updated and/or expanded given the age of the infrastructure.

To support the subsequent evaluation of future terminal facility needs, including the feasibility of and need for new terminal facilities, this effort includes the following specific facility and system inventories:

- Terminal Building Age and Condition Inventory: Document age and condition of each major terminal building component with a building diagram that lists the age and remodel history of each component and references the archived construction documents for each component. This information will be used to evaluate options for remodel, replacement and expansion of terminal building components to meet future passenger forecast demands. This information is required to accurately cost estimate and evaluate terminal building remodel, replacement and expansion alternatives to meet the passenger forecast demands.
- Terminal Building Mechanical System Inventory: Prepare an inventory of terminal building mechanical systems including documentation and evaluation of the existing central plant and HVAC system components (hydronic loop, boilers, chillers, cooling towers, pumps, VFDs, VAVs, fan coils, air handlers, and DDC controls). Evaluate the capacity of the existing central plant and excess capacity available for terminal building expansion to meet the passenger forecast demands. Evaluate the age and condition of the existing mechanical systems and estimate the life expectancy. This information is required to accurately cost estimate and evaluate terminal building expansion alternatives to meet the passenger forecast demands.
- Terminal Building Electrical System Inventory: Prepare an inventory of existing power service capacity to the building including documentation of multiple points of power service connection, terminal power load based on actual use, emergency generator power capacity and excess capacity available for terminal expansion. Evaluate the age and condition of the primary power systems and estimate the life expectancy. Prepare an inventory of existing lighting systems, documenting lighting deficiencies and opportunities for energy efficiency upgrades. Evaluate the age and condition of the existing lighting systems and estimate the life expectancy.

Automobile Access and Circulation: This will include review of the roadways and intersections (including signalization), terminal curbside, rental car facilities, commercial vehicle staging areas, public transportation and general ground access including interface with the local roadway network immediately adjacent to the Airport and access from Sierra Freeway/168 and Sequoia Kings Canyon Freeway/180.

Field observations and interviews with local transportation agencies will be conducted to provide a more detailed documentation of access, circulation and parking components at FAT. Specific observations will be conducted during peak times for a period of one week (morning and evening rush hours) to determine the general function of key intersections of the access roadway. Traffic counts will be conducted for the terminal area, including roadways and intersections such as East Clinton Way with East McKinley Avenue and North Peach Avenue, North Gateway Boulevard, North Fine Avenue and North Winery Avenue.

The focus of these observations will be to determine the general mix of local versus Airport traffic, the general impact to the access roadway of this mix, and an estimate of

the level of service/functionality of these key intersections in order to adequately assess the facility needs and demand for airport traffic. The observation effort will be supplemented with a vehicle counting program.

To assist in the eventual evaluation of alternatives a landside simulation model will be developed and calibrated for the base year. The results of the landside survey and observation efforts, along with discussions with the Airports Department, will be used to validate the results of the calibration process.

Parking and Rental Car Facilities: An inventory and utilization assessment of parking facilities by use classification (e.g. short-term, long-term, rental car, employee, and valet) in the terminal area will be addressed. Parking data to include average stay time for short and long term products, peaking characteristics within the parking areas, and daily occupancy for average day and peak day will be solicited from the Airports Department and/or parking concessionaire as will parking revenue and expense data. In addition, on-site observations will be made of landside facilities during peak activity periods.

General Aviation Facilities: Land uses and facilities devoted to general aviation activity, including Fixed Base Operators (FBOs), corporate flight departments/operators, flight schools, hangars, and aprons will be identified and evaluated as to their size, use (maintenance hangar, conventional storage hangar, T-hangar, parts storage/shop space, office, etc.), age and/or condition, and tenant lease areas. The inventory will include a description of the services and amenities provided by the FBOs, and, to the extent available, the clientele and aircraft types served along with the distribution of area devoted to specific FBO uses and activities. This information will be gathered from existing data provided by the Airports Department and through interviews/discussions with FBO management and major corporate tenants. It has been identified that there is substantial transient government use (Navy, Marines, Air Force, etc.) beyond the ANG. Discussion of this use with the FBOs will be an important component of accurately reporting the activity and needs of these users relative to airfield facilities.

To support this effort, a survey questionnaire will be created to guide the interviews and for distribution to general aviation-related businesses. The survey will solicit information including services provided, satisfaction with current facilities, level of activity conducted from the Airport, based aircraft by type, itinerant aircraft serviced, future expansion plans, and perceived Airport needs. Responses will be tabulated and used in subsequent analyses. For the survey to be successful, assurances will be given as to confidentiality of the information provided to the Consultant and results of the survey will be reported in a manner to ensure that confidentiality is protected.

Using data obtained during these interviews as well as from the Airports Department, a based aircraft survey will be conducted at FAT to secure information from based aircraft owners regarding their use of FAT and FCH, infrastructure needs, amenities desired, and the desire for based aircraft to consider relocating to FCH.

Finally, a survey will also be developed to obtain information from itinerant users to determine their general aviation facility needs. This survey will be conducted at FAT to examine if some users could use FCH instead of FAT and what infrastructure or amenities would be needed to support their activity at FCH. The survey will be

developed with both hard copy and web-based completion options. Coordination will be necessary with the FBOs to ensure they understand the reason for the survey, the request for their assistance, how to promote the survey, and how to return the surveys. Signs will be prepared for display at the FBO facilities and at fueling locations, identifying the web address and possibly a QR code for scanning. The Consultant will coordinate with the Aircraft Owners and Pilots Association (AOPA), National Business Aircraft Association (NBAA), and other groups to encourage participation. These groups can assist by discussing the importance of the survey in some of their communications such as email blasts, newsletters, or through other means.

Military & Federal Agency Facilities: Land uses and facilities devoted to military and federal agency aviation activity, including ANG, the California Army National Guard Aviation Classification and Repair Activity Depot (AVCRAD), and the U.S. Forest Service will be identified and described. Leadership at these organizations/units will be interviewed to identify current and future activity levels, mission parameters, expansion plans, anticipated operational fleet changes, operational constraints and perceived Airport needs. Additional ANG coordination was previously identified due to their planning activities.

Air Cargo Facilities: Land uses and facilities devoted to the movement and processing of air cargo will be identified and described in terms of lease area, facility uses and sizes, general condition, and access and circulation. Cargo company management (i.e. FedEx and UPS) will be interviewed to identify current and future activity levels, expansion plans or anticipated operational fleet changes, and operational constraints and perceived Airport needs. Any belly cargo facilities provided at the Airport or maintained by the passenger airlines will also be identified.

Support Facilities: Airport support facilities to be inventoried will include, but not necessarily be limited to, the aircraft fueling and operations, Ground Support Equipment (GSE), airport maintenance, aircraft de-icing, and Aircraft Rescue and Fire Fighting (ARFF).

Utility Systems: Utilities both on the Airport and those key trunk systems adjacent to the Airport boundary will be inventoried from existing data sources available from the Airports Department including as-built drawings and others. The water system, sewer system, stormwater system, gas distribution system, electrical distribution system, and fiber-optic communications system will be included to the extent that existing mapping information is available. Information will be obtained from readily available sources such as utility company maps, City GIS mapping, and record drawings from the Airport. No field verification or surveys will be performed. The collected utility data will be consolidated into a multi-layer CAD mapping base. The intent of this effort will be to combine the various mix of electronic and hard copy utility maps into a single utility mapping file. This drawing will be prepared in similar format to the Airport Layout Plan drawing sheets and will be provided to the City in electronic CAD format.

It was also noted that PG&E, who provides power to the Airport, has identified that the substation serving the Airport is at capacity. A qualitative discussion of the issue will be included in the documentation, however, a quantitative analysis will not be performed.

Product: Tabulated Airport facilities inventory for use in subsequent tasks.

Task 5.3 - Inventory Air Traffic Activity

Description: Data on historic and current air traffic activity at the Airport will be assembled and organized. This effort will make use of relevant operations data and information on Airport operating procedures that were collected for the ongoing 14 CFR Part 150 Noise Exposure Map (NEM) Update. This material will include information previously obtained from the Airport, aircraft operators, FAA data from the National Offload Program (NOP), and interviews. Other sources of data will include:

- Multiple FAA databases (TAF, ATADS, TFMSC, OPSNET, etc.);
- Air Traffic Control Tower (ATCT) records;
- Airports Department activity reports – including monthly landing fee reports;
- Airline activity records and schedules;
- FBO activity records and based aircraft lists;
- ANG and military tenant operational projections; and
- Two years of FAT general aviation activity data, including aircraft type, purchased from Airport IQ.

Activity data to be collected will include:

- Enplanements – annual, monthly, by carrier, and international-vs-domestic;
- Operations – annual, monthly, by carrier, by category, by aircraft type, local-vs-itinerant, and international-vs-domestic;
- Air cargo – total annual and enplaned and deplaned by carrier;
- Historical consolidated flight schedules;
- Aircraft fleet data and fleet orders by carrier;
- Overnight parked aircraft;
- Based aircraft – total and fleet mix (including military); and
- Itinerant general aviation fleet mix (to extent available).

Product: Tabulated activity data for use in subsequent tasks including forecasts and identification of critical design aircraft.

Task 5.4 - Inventory of Air Traffic Control, Airspace Structure and Approach Capability

Description: An inventory of the existing instrument approach capabilities and local area airspace will be undertaken with an emphasis on instrument procedures and minimums, noise abatement measures, traffic patterns, and airspace conflicts. Coordination with the ATCT manager will be performed to gain an understanding of runway utilization, ground movements, potential for improved minimums, programmed FAA navigational aid improvements, ATC procedure changes that may be currently under development or those associated with FAA NextGen initiatives, and any operational limitations due to existing airfield facilities or regional airspace. With FAT already providing Category-III precision instrument approach capability to Runway 29R and an LPV approach to Runway 11R with ¾ mile minimums, it is anticipated that these are likely the best achievable approaches with current navigational systems and technology. The Consultant will also discuss with ATCT

management any deficiencies or issues associated with the current ATCT building and facilities that could require consideration over the 20-year planning horizon.

Product: Input to subsequent tasks.

Task 5.5 - Inventory Socioeconomic Data

Description: The Consultant will obtain available statistical data on historical and forecasted socioeconomic factors for the Fresno Metropolitan Statistical Area and/or Fresno-Madeira Combined Statistical Area from a third party such as Woods and Poole. These factors will include employment, income, and population, with emphasis placed upon the identification of specific socioeconomic characteristics of the developed areas in the local environs, as well as trends that have been established for future development and habitation.

Product: Input to subsequent activity forecasting effort.

Task 5.6 - Inventory Vicinity Land Use and Controls

Description: The Consultant will review existing local, regional, and state land use planning and zoning regulations for the Airport environs. This will incorporate information from existing studies and input from the Airports Department and County including the current "Fresno General Plan" and the ongoing 14 CFR Part 150 NEM Update study being prepared by HMMH. Planned transportation improvements and planned local developments in the Airport vicinity will also be reviewed for potential incompatible land use. Information on historic resources in the study area will be obtained through the State Historic Preservation Office and local agencies. The limits of this area will be approximately one-half mile lateral to the runways and up to one and one-half miles beyond the runway ends depending upon the noise contour limits as prepared for the NEM Update (by HMMH). In combination with GIS and GoogleEarth review, a cursory windshield survey will be conducted in the vicinity of the approaches to the Airport, to verify the existing land uses and provide the Consultant with first-hand knowledge of the Airport environs.

Product: Composite off-Airport land use map for use in subsequent analyses.

Task 5.7 - Inventory of Nearby Airports

Description: To aid in the identification of regional aviation trends and market factors that could influence the demand for public aviation facilities at FAT, a high-level inventory of facilities, amenities and development plans at nearby public use airports (within approximately 50 miles) will be obtained. Information will be obtained through readily available sources including various FAA databases, the California Aviation System Plan (CASP), and individual airport websites. The Consultant will also perform a limited windshield survey of the selected airports to provide perspective on the research findings. Within this regional system, the comparative analysis will include the following airports:

- Madera Municipal
- Chowchilla
- Merced Regional
- Mariposa-Yosemite
- Firebaugh
- William R. Johnston
- Fresno Chandler Executive
- Hanford Municipal
- Mefford Municipal
- Visalia Municipal
- Woodlake
- Sequoia Field
- Reedley Municipal
- Sierra Sky Park

Product: Tabular data comparing the features of the selected nearby airports and generalized descriptions of their activity and planned development as obtained from readily available sources.

Task 5.8 – Obtain and Evaluate Wind and Meteorological Data

Description: Historic weather data including peak and average temperatures will be obtained from the National Oceanic and Atmospheric Administration (NOAA). Historic wind and weather observation data for FAT will be obtained from the FAA and the National Climatic Data Center (NCDC) to include the latest 10 years of observations from the Automated Surface Observation System (ASOS) located at FAT. From this data, a crosswind coverage analysis will be performed for the existing runway configuration and FAA standard wind roses will be developed for “all-weather”, “instrument meteorological conditions” and “visual meteorological conditions.”

Product: Tabulated wind and weather data, and wind roses, for use in subsequent airfield analysis and preparation of the ALP drawing set.

Task 5.9 – Conduct Environmental Inventory

Description: Through the use of existing reports, maps, studies, environmental documents, the Internet, on-site observation and, if needed, correspondence with the various state regulatory agencies, the Airport’s environmental setting and key environmental resources that may be affected by development will be described. In addition to the socioeconomic and land use data obtained during previous tasks, the following information, to the extent available, will be collected for the general environs of the Airport:

- Federal and State inventories of endangered and threatened species;
- State inventories of historic and archaeological sites;
- Water resources including coastal zones, flood plains, wetlands, wild and scenic rivers, and waters of the U.S.;
- Topographical maps of soil information;
- Federal and State air quality data;
- Section 4(f) resources (e.g. public parks);
- Hazardous materials sites (e.g. RCRA, CERCLA, UST/AST);

- Noise sensitive land uses (e.g. churches, schools, hospitals);
- Any Airport sponsored Wildlife Hazard Assessments or Wildlife Management Plans;
- Any Airport stormwater discharge permits;
- Any Airport environmental or sustainability plans (e.g. 2012 Sustainability Management Plan), policies or initiatives;
- Previous on-site environmental studies or National Environmental Policy Act (NEPA) documents; and
- Stormwater Pollution Prevention (SWPPP) and Spill Prevention Control & Countermeasures (SPCC) Plans.

Existing noise contours will be obtained from the recent NEM Update being prepared for FAT. It is understood that these were developed using the most current FAA-approved noise modeling tool – the Airport Environmental Design Tool (AEDT). The noise contours will depict the existing (2015 or whatever year consistent with the NEM Update) aircraft activity profile and will be presented for the CNEL 60, 65, 70, and 75 levels and overlaid on a land use base map and aerial photography. During the Alternatives Element, additional noise contours will be prepared to reflect the preferred development and the 20-year operational activity levels approved by the FAA from the Forecasts Element.

Product: An environmental inventory narrative, and corresponding environmental resource map, will be prepared to briefly describe the existing environmental and community resources in the Airport environs. This information will be used in the preparation and evaluation of alternative airport development scenarios.

Task 5.10 - Prepare Working Paper #2 – Inventory

Description: The Consultant will prepare a working paper documenting the results of the previous tasks, focused on the inventory of existing Airport facilities, environs and operational activity levels. The draft will be submitted in electronic Word and PDF formats to the Airports Department for review and comment. Upon response to comments received, the working paper will be posted on the Study website and provided to the Advisory Committee. The information in this working paper will be used in subsequent elements of the MPU and ultimately be incorporated into appropriate chapters of the final MPU document.

Product: Draft and final working paper, in electronic Word and PDF formats, submitted to the Airports Department and Advisory Committee and posted on the Study website.

ELEMENT 6: AVIATION FORECASTS

Since the completion of the last Master Plan, significant changes have occurred within the aviation industry including airline service patterns and consolidation, fuel price and economic fluctuations, and changing technology and security requirements. The nature of these changes, both on a broad national level and in the local market, need to be factored into an updated forecast of passenger, cargo and operational trends at FAT in the post recessionary aviation industry environment of 2016. This includes identifying which of those changes were transient in nature (e.g. recession) versus those that will likely continue to influence aviation activity in the FAT marketplace. This element will also be coordinated with the Airports Department's ongoing NEM Update project which also has an activity forecasting element, as well as ongoing air service analyses. One of the Consultant's

member firms (HMMH) is performing the NEM Update under a separate contract, and this coordination will ensure consistency between these two studies. Another firm (InterVISTAS) is currently conducting air service analyses which will help to identify potential future commercial service activity.

The forecasting of aviation activity at FAT will address general aviation from a Fresno “system” perspective. This will entail projecting based aircraft and operational demands for a combined FAT and FCH market and then determining the level of general aviation demand each airport will likely experience based on airport-specific strengths, constraints, opportunities, and user preferences.

Task 6.1 – Commercial and Military Aviation Forecasts

This part of the forecasting effort will focus on non-general aviation activity at FAT.

6.1.1 Review Existing Forecasts for Baseline Understanding

Description: The Consultant will review existing forecasts prepared for the Airport in terms of the following:

- Forecast methodology and approach;
- Underlying forecast assumptions, including average seats per operation, and enplaned passenger load factor;
- Variance between actual activity and forecast values for the years since the forecasts were prepared, including forecasts for enplaned passengers, air cargo, and aircraft operations; and
- Economic and airline industry conditions at the time the forecasts were prepared.

Forecasts to be reviewed will include any internal forecasts maintained by the Airports Department, previous planning study forecasts completed within the last three years, those from the NEM Update, as well as the most recent version of the FAA Terminal Area Forecast (TAF).

Product: Brief memorandum (1-2 pages) identifying the forecasts reviewed and the variance between realized activity and the forecast projections.

6.1.2 – Coordinate with Airlines and Military for Insight into Future Plans

Description: The Consultant will coordinate with the airlines serving the Airport for their input on the forecasts, including:

- Future plans for air service offerings, looking out approximately 3 years;
- Potential changes in their future schedules and market development at the Airport;
- Future fleet mix planned for use at the Airport; and
- Future military missions and aircraft fleet.

To obtain airline input, the Consultant will conduct telephone interviews with the airlines’ route planners. For military insight, previously identified meetings with the ANG and other units, as determine appropriate by the Airports Department, will be conducted. Data on military activity from the NEM Update will also be utilized as provided.

Product: Brief memorandum (1-2 pages) summarizing findings from interviews with the airlines and/or military operators for which teleconferences were conducted.

6.1.3 – Prepare Annual Non-General Aviation Baseline Forecasts

Description: The Consultant will prepare annual baseline forecasts for the following non-general aviation components:

- Enplaned passengers (domestic and international);
- Air cargo (freight and mail);
- Aircraft operations by type (air carrier, air taxi and commuter);
- Commercial aircraft fleet mix; and
- Military aircraft operations and fleet mix (all, not just ANG).

The Consultant proposes that the baseline year for the MPU be consistent with the NEM Update, with five-year interval forecasts after the baseline year.

Product: The Consultant will prepare a working paper documenting the commercial and military aviation activity forecast, including the following sections:

- Introduction and Summary;
- Economic Basis for Aviation Demand;
- Historical Air Traffic;
- Aviation Demand Forecasts; and
- Aircraft Fleet Mix.

Task 6.2 – General Aviation Forecasts

This part of the forecasting effort will be coordinated with the concurrent master planning effort being performed for FCH and will evaluate general aviation activity at FAT as derived from a FAT/FCH system perspective. This forecasting effort will identify aviation demand that is anticipated to occur over a 20-year planning period using acceptable forecasting analysis techniques consistent with current FAA guidance including *Forecasting Aviation Activity by Airport* (July 2001).

6.2.1 – Identification of Historical and Current Aviation Activity

Description: Data on historic and current air traffic activity at both FCH and FAT will be assembled and organized. Historical and current information that will be incorporated into the forecasts includes:

- Annual general aviation operations by airport;
- General aviation local vs. itinerant operations by airport;
- Based aircraft totals and fleet mix by airport; and
- Itinerant general aviation fleet mix (to extent available) by airport.

Additional information specific to FAT that will be compiled and documented includes:

- Peak month general aviation operations; and

- Additional peak activity operations as available (daily, hourly, etc.).

Information concerning peak hourly operations, daily, monthly, and annual activity will be quantified to the extent feasible. Data will be obtained from Airport records, Airport users, Fixed Base Operators (FBOs), ATCT data and personnel, and sources at the FAA.

Product: Collection, analysis, and documentation of historical and current general aviation activity at FAT and FCH.

6.2.2 – Review of Existing Forecasts

Description: The Consultant will identify and review for validity any existing forecasts of general aviation demand as they pertain to FAT, FCH, and the Fresno/Central California Region. These forecasts may include, but are not limited to, the FAA TAF, the previous master plan for FAT (2006), the previous master plan for FCH (1999) and the ongoing Part 150 NEM Update.

Product: Review of and documentation of existing forecasts for FAT, FCH and the Fresno/Central California Region for use in projecting future general aviation activity at FAT.

6.2.3 – Evaluate Trends and Factors that Impact Aviation Demand

Description: The Consultant will review local, regional, and national trends that have the potential to influence general aviation demand within the FAT/FCH system. This will include socioeconomic trends such as demographics, income, and employment as well as aviation related factors such as fuel prices, pilot certificates/training, aircraft sales/production, NextGen technologies, etc. The roles of these two airports within the Fresno region will also be reviewed relative to the comparison of nearby airports performed previously (i.e. within an approximate 50-mile radius of FAT).

Product: Evaluation and documentation of local, regional, and national trends that impact general aviation activity at FAT, FCH, and the Fresno area as a whole.

6.2.4 – Prepare System Level and Airport-Specific 20-year General Aviation Forecast

Description: FAT/FCH system level and FAT-specific general aviation forecasts will be prepared for the short-term (0-5 year), medium-term (6-10 year) and long-term (11-20 year) planning periods. System level aviation forecasts that include activity for both FAT and FCH will be developed for the following categories:

- Based aircraft totals and fleet mix;
- Annual general aviation operations (local vs. itinerant); and
- Itinerant general aviation aircraft operational mix.

Airport-specific forecasts for FAT will include the elements listed above as well as the following elements:

- Day/night-time splits of operations;
- Percentage of touch and go operations;
- Annual instrument approaches (AIA's); and

- Peak month, day, and hourly operations.

Forecasting methodologies and techniques to be employed will include, but will not be limited, to:

- Regression analysis;
- Trend analysis and extrapolation;
- Socioeconomic factor comparison;
- Market share analysis;
- Comparison to similar type or nearby airports; and/or
- Analysis of previously generated forecasts.

Product: Recommended 5, 10, and 20-year general aviation activity forecasts for FAT.

Task 6.3 – FAA Forecast Coordination and Approval

Description: The Consultant proposes to obtain FAA forecast approval by:

- Coordinating with the FAA, as necessary, prior to the submission of the forecasts to identify key issues important to the FAA's review. Additional coordination with the FAA may be required if the forecasts are outside of the allowed variance from the TAF. Included is an additional meeting with the FAA in this task to discuss the forecast prior to it being submitted for formal FAA review. (This is in addition to other meetings with FAA previously described.)
- Submitting a draft of the forecast technical memorandum for FAA review and approval following the incorporation of comments from the FAA ADO's project manager.
- Preparing FAA comparison templates in accordance with FAA guidelines contained in Forecasting Aviation Activity by Airport. The recommended annual baseline forecasts prepared in the preceding tasks will be compared with the most recent FAA TAF for the Airport in terms of total enplaned passengers, commercial aircraft operations, and total aircraft operations for the base year consistent with the NEM Update, base year plus 1 year, base year plus 5 years, base year plus 10 years, and 2030 base year plus 15 years.

Product: The FAA forecast template for Airport's submittal to FAA ADO and response to FAA comments, as well as a disposition of FAA comments on the draft forecast technical memorandum.

Task 6.4 – Prepare Future Commercial Aviation Planning Schedules

Description: The Consultant will develop a total of three passenger airline planning schedules for an average day during the peak month associated with three future demand levels, representing 5, 10, and 20-year demand levels. The basis for the future schedules will be published airline schedules for the peak month as determined through coordination with the Airports Department. A matched schedule of arrivals and departures will be prepared. The Consultant will include the following detail in the passenger airline planning schedules:

- Arrivals and departures;
- Origin and destination markets;

- Published airline and operating airline;
- Time of day;
- Equipment type;
- Seat configuration;
- Schedule arrival and departure date;
- Stand time; and
- Estimated passenger load factors by origin and destination.

Product: A spreadsheet with the future schedules for the Airports Department's review and approval.

Task 6.5 – Access and Ground Vehicle Usage

Description: The Airport terminal access road is essentially three lanes onto and off of East Clinton Way that expands to four through-lanes and two standing-lanes separated by a median island. One item of terminal area facilities to be evaluated is the adequacy of the terminal curbside and circulation to support the anticipated levels of passenger activity. The potential for future Airport-related traffic to affect the intersections of East Clinton Way with East McKinley Avenue and North Peach Avenue, North Gateway Boulevard, North Fine Avenue and North Winery Avenue is also a concern. To this end, understanding the level and mix of traffic demand on the roadway access components to the terminal area by roadway segment is important to defining how best to address future demand.

Given the evolutionary nature of transportation to airports (i.e. Transportation Network Companies, or "TNC's") and airport security and vendor permitting requirements, a review of ground vehicle usage and the development of a parking forecast forms the basis of addressing what may be required numerically. This then leads to the definition of how best to configure future access, curb front and parking facilities. Based on the traffic counts, landside simulation model, and passenger forecasts prepared previously, information relative to the usage of the terminal area access roadway, terminal curb front and the terminal area parking facilities will be quantified and projections of future demand will be made based on the anticipated growth in activity over the planning period. Where background is available, projections will be developed for the following:

- Access Road Usage by Type of Vehicle;
- Public Parking Lots Usage (Long-term, Short-term, Rental Car, Valet);
- Employee Parking;
- Arrivals/Departure Curb Parking and Commercial Vehicle Curb Parking;
- Cellphone Lot;
- Service and Delivery Vehicles;
- Ground transportation activities, including TNC's; and
- Access to other Airport facility development areas within the terminal area by volume and mix.

Product: Existing and forecast access and ground vehicle usage for use in subsequent evaluation.

Task 6.6 – Prepare Working Paper #3 – Forecasts

Description: The Consultant will prepare a working paper describing the means, methods, assumptions and results of the activity forecasting effort. The draft will be submitted in

electronic Word and PDF formats to the Airports Department for review and comment. Upon review and response to comments received from the Airports Department, the working paper will be submitted to the FAA and Advisory Committee.

Product: Draft and final working paper, in electronic Word and PDF formats, submitted to the Airports Department and Advisory Committee and posted on the Study website.

ELEMENT 7: FACILITY REQUIREMENTS

This element will utilize the findings of the previous Study efforts to identify the Airport facility and infrastructure improvements needed to meet projected levels of demand, current FAA airfield design standards, and the strategic goals established by the Airports Department. This will effectively be a “gap analysis” to identify recommended Airport improvements over the 20-year planning horizon.

Task 7.1 – Conduct Demand/Capacity Assessment

Description: The existing airfield at Fresno Yosemite International Airport is not anticipated to require extensive improvements to meet operational capacity and, as such, detailed modeling of Airport operations is not included in this task. The FAA's methodology for assessing airfield capacity and delay, as described in the FAA AC 150/5060 5, will be utilized to develop an assessment of the current and future level of airfield capacity and associated aircraft delay at FAT. This analysis will consider the existing airfield configuration, including runway orientation, parallel and exit taxiways, weather conditions, aircraft fleet mix, and current and forecast activity levels for the near-term, medium-term and long-term planning horizons. The analysis will also consider potential impacts as a result of NextGen implementation considering the latest timeline as available from FAA and likely NextGen improvements for FAT. The results of the assessment will be expressed in terms of the hourly and annual service volume of the airfield, minutes of delay per aircraft operation, and total estimated annual delay.

Product: Demand and capacity assessment to be used in the identification, justification and/or prioritization of needed capacity related airfield improvements.

Task 7.2 – Identification of Critical Design Aircraft and FAA Design Standards

Description: Selection of the appropriate critical aircraft, or family grouping of aircraft, establishes the FAA design standards to which the airfield and Airport facilities should be planned and developed. Using the FAA approved activity forecasts and anticipated fleet mix from Task 6 (for passenger carrier, cargo carrier, military, and general aviation operations), the most demanding aircraft or aircraft types will be identified. Depending on the results of this analysis, different design aircraft may be identified for different facilities, such as aprons or taxiways serving only general aviation aircraft.

The determination of critical aircraft (or family), combined with the existing and anticipated instrument approach capability and minimums (as determined through previous discussions with ATCT, Airport and FAA personnel) will be used to establish the FAA airport design standards that will be applied in the evaluation of airfield facility requirements. These standards are defined in FAA AC 150/5300-13A *Airport Design* and include the various airfield dimensional and facility separation requirements, and operational and land use protection zones, needed to maintain a safe and efficient aviation operating environment.

Product: Documentation of critical aircraft and FAA design standards to be used for the subsequent evaluation of Airport facility needs.

Task 7.3 – Airfield Facilities

Description: Using the results of the previous Study elements, the ability of the airfield facilities to meet projected activity levels over the course of the 20-year planning horizon will be evaluated. Facility requirement needs will be based upon accepted airport planning criteria (FAA AC 150/5300-13 and other FAA advisory guidance), industry standards, the FAA approved forecast of aviation activity, and the Airports Department’s strategic goals for the Airport. Airfield needs to be assessed include:

- Runway length, width, and affiliated shoulder and blast pad requirements;
- Operational improvements for improved runway/taxiway utilization/capacity;
- Pavement strength;
- Taxiway requirements including conformity with geometry standards set forth in AC 150/5300.13A, Change 1, Chapter Four;
- FAA separation and protection area standards;
- Lighting and marking requirements;
- Navigational aids both ground based and satellite based; and
- FAR Part 77 & TERPS surface considerations.

Product: Detailed description of all Airport facilities required to meet aviation demands at the Airport through the 20-year planning period.

Task 7.4 – Passenger Terminal Facilities

Description: The Consultant will prepare terminal facility requirements using a combination of non-visual terminal simulation modeling (CAST Terminal®) and spreadsheet models informed by International Air Transport Association (IATA) and Airport Cooperative Research Program (ACRP) standards. This approach allows a detailed assessment of facilities requirements that incorporates level-of-service metrics for passenger wait times, queuing and other dynamic processes. The requirements will be prepared for each of the three future levels of activity associated with the future flight schedules. This assessment will also identify any issues associated with the configuration, functional use, traffic flow, and customer experience issues related to functional areas within the terminal.

Requirements will include:

- Aircraft parking positions (contact gates and remain-overnight positions);
- Airline ticketing positions (kiosks, staffed, ticketing offices);
- Security screening checkpoint lanes and space allocation;
- Checked baggage screening devices (including future in-line EDS baggage conveyor system);
- Passenger hold rooms and airline clubs;
- Outbound baggage handling staging positions/bag make-up areas;
- Baggage claim device linear frontage/number of devices;
- Concessions (food, gifts & news, business centers, etc.);
- Federal Inspection Services(FIS) / Customs and Border Protection (CBP);

- Primary inspection booths and queue area.
- International baggage claim linear frontage / number of devices.
- Baggage recheck positions.
- Public circulation and restrooms;
- Other terminal space (administration, utilities, etc.); and
- Transportation services (rental cars, shuttles, taxis, TNC's, etc.).

Airline ticketing, security checkpoint, and FIS/CBP requirements will be estimated using CAST Terminal® whereas the remainder of the requirements will be assessed using spreadsheet models. FIS/CBP design standards will also be utilized.

A limited terminal building code analysis will be prepared for the purpose of determining the maximum allowable area of each building that makes up the terminal building complex. The analysis will confirm the construction type and other factors that are required to calculate total allowable building area. This information will be used to evaluate options for remodel, replacement and expansion of terminal building components to meet future passenger forecast demands. This information is required to accurately cost estimate and evaluate terminal building expansion alternatives to meet the passenger forecast demands.

Product: The Consultant will prepare a memorandum summarizing the terminal requirements analysis, including a tabular summary of space and facilities requirements for key functional areas, and charts depicting passenger and baggage flows, and expected level-of-service, i.e. queues, and wait times by time of day.

Task 7.5 – Passenger Terminal Curbside Facilities

Description: The Consultant will prepare terminal curbside requirements using a macroscopic curbside simulation modeling tools (i.e., QATAR) and ACRP standards. This approach provides for a detailed assessment of requirements that reflect desired level-of-service standards, allow for adequate roadway operations, and accommodate forecast roadway traffic volumes.

The requirements will be prepared for each of the three future levels of airline passenger activity associated with the future flight schedules. Requirements will include:

- Length of curbsides required for forecast peak hour enplaning and deplaning passengers;
- Number of standing, maneuver, and through lanes needed on the curbside roadways;
- Location and number of cross-walks (to include review of pedestrian volumes related to safety and throughput); and
- Preliminary allocation of space required for private vehicles, courtesy vehicles, taxicabs, TNC's, scheduled buses/vans, and other commercial vehicles.

Product: The Consultant will prepare a memorandum summarizing the terminal curbside requirements analysis including a tabular summary of number of curbside lanes and lengths, and charts depicting potential allocation of curbside space for the departures and arrivals curbside areas for each passenger activity level.

Task 7.6 – Surface Transportation and Parking Facilities

Description: Projections of future landside requirements will be developed based on projected growth in enplanements. On-airport roadways and ground access requirements will be discussed in terms of number of traffic lanes needed, weaving distances, dedicated turn lanes, access points, intersection congestion, and level of service. For local and state roadways serving the Airport, the Consultant will discuss off-Airport roadway needs with the agency responsible for the alignment (e.g. Caltrans, Fresno County, and City of Fresno). The evaluation of off-Airport roads will be in general terms of capacity, access points, level of service, programmed improvements, and the potential effect future Airport activity may have on those roads.

Parking, curbside and rental car requirements will also be based on projected enplanements, however, consideration will be given to emerging trends in for-hire transportation such as the TNC's. Requirements for the following landside and parking elements will be addressed:

- Public parking by product type (e.g. short vs. long-term);
- Rental car facilities including ready-return, prep/maintenance, storage;
- Access roadways and circulation;
- Cashier plaza requirements;
- Commercial vehicle requirements; and
- Curbside capacity and circulation.

The landside simulation model will be utilized to determine and validate the requirements for ground transportation services.

Parking information will be also be gathered from other airports to provide a benchmarking analysis of how FAT compares to commercial service airports of similar size and those in close proximity to FAT for purposes of analyzing the future needs. Available transaction data on parking from the Airports Department will be obtained as it is noted that the parking lot utilization at FAT is high on a per enplanement basis. Benchmarking information will include the number of parking spaces within walking distance of the terminal, parking rates, number of ready and return spaces, landside revenue/enplanement, etc.

Product: A landside, roadway and parking facility program for the near-term, medium-term and long-term planning horizons.

Task 7.7 – General Aviation Facilities

Description: Using industry standard methodology for assessing general aviation demand and capacity, and employing accepted dimensional planning factors from FAA and ACRP guidance, an evaluation of current and future demand versus current general aviation facility capacity will be completed. Existing and historic information contained in the Caltrans "General Aviation System Needs Assessment (GASNA)" and the most recent "California Aviation System Plan" will be incorporated, as appropriate. Facility requirements will be expressed in terms of gross area, linear feet or other basic units as excess or deficient capacity. This assessment will quantify future development items needed to maintain an adequate level of service, function, and operation at the Airport. General aviation facilities to be addressed include:

- Aircraft apron and tiedown area;
- Aircraft storage hangar area by hangar type (conventional and T-hangars);

- Fixed Base Operator (FBO) facilities;
- Access and vehicle parking areas; and
- FBO/Government contracts that serve non-ANG aircraft.

Product: A description and tabular listing of general aviation facility improvements anticipated to be necessary over the near-term, medium-term and long-term and long-term planning horizons.

Task 7.8 – Airport Support Facilities

Description: Using input related to the adequacy or inadequacy of specific Airport support facilities and applying relevant space planning criteria, various Airport support facilities will be reviewed as to their current ability to adequately and efficiently meet the current and anticipated demands associated with their specific role. Facility requirements will be expressed in terms of gross area, linear feet, or other basic units as excess or deficient capacity. This assessment will quantify future development items needed to maintain an adequate level of service, function, and operation at the Airport. Facilities to be assessed consist of the following:

- Airport Maintenance – maintenance repair shops, equipment storage, material storage areas, administrative space;
- Fuel Storage/Supply – expansion capability, tank capacity vs. demand by fuel type, reserve in event of supply disruption;
- Cargo Facilities (Belly and Dedicated Freight) – truck docks, vehicle parking, equipment storage, specialized capabilities (e.g. refrigeration, security screening) processing space;
- ARFF – vehicle bays, index requirements, equipment and materials storage space, personnel spaces, vehicles by type, age and life expectancy; and
- Ground Service Equipment – storage and maintenance space (this may be associated with leased airline space or common support space in the terminal area). Alternative fuel GSE needs will also be assessed in this section.

Product: A description of Airport support facility improvements anticipated to be necessary over the near-term, medium-term and long-term and long-term planning horizons.

Task 7.9 – Utility Systems Infrastructure

Description: Utilizing accepted planning criteria, this task will generally compare existing and programmed utility systems serving the Airport (water, sanitary sewer, storm drain, gas, electric and communications) and identify the adequacy or inadequacy of each component to support anticipated Airport development. This includes analyzing areas of the Airport that are unserved or under-served that could support aviation related or other commercial type development.

Product: A description of utility system improvements anticipated to be necessary to support Airport growth over the near-term, medium-term and long-term and long-term planning horizons.

Task 7.10 – Airspace Protection

Description: Using the aerial survey data obtained in **Element 3**, along with any known obstacle/obstruction information provided by the FAA and/or the Airports Department, an evaluation of existing and potential penetrations to the Part 77 Imaginary Surfaces and

Threshold Siting Surfaces (per AC 150/5300-13A) will be performed. Areas of concern will be noted and documented. The Consultant will work with Airports Department staff to understand the ongoing airspace protection program and any local or state regulations or zoning ordinances that strive to prevent or minimize potential airspace related adverse impacts to the Airport. The “California Airport Land Use Planning Handbook” (Caltrans Division of Aeronautics, October 2011) will be referenced in this evaluation. The results of this analysis will support the evaluation of any recommended runway related geometry or approach capability improvements. This information will also be used in the subsequent development of the Airspace and Inner Approach sheets of the ALP drawing set. Impact of Government development (ANG) on airspace protection – need to discuss.

Product: Documentation of airspace obstacles and areas of airspace protection concern.

ELEMENT 8: SUSTAINABILITY PLANNING

The Airports Department prepared a “Sustainability Management Plan” (SMP) in 2012. The SMP included a baseline assessment of several resource categories, established corresponding sustainability goals, and outlined an implementation and monitoring plan to achieve those goals. This element will review the Airport’s progress on those goals, identify new opportunities, and if deemed prudent, recommendations for adjustments to the SMP will be made.

Task 8.1 – Sustainability Program Review and New Opportunities

Description: The Consultant will work with the Airports Department to assess FAT’s progress on the existing sustainability goals across each of the areas identified in the SMP: air emissions, energy, water conservation, water quality, noise, landscape management, solid waste and recycling, indoor environmental quality, hazardous materials, surface transportation management, socioeconomics and outreach, and sustainable sites and land use compatibility. We will summarize progress made in each category and lessons learned. We will then use the information to update action plans in the context of the overall MPU and current local conditions and initiatives.

As required by FAA Modernization and Reform Act of 2012 (Public Law 112-95), an analysis of existing solid waste recycling programs and the identification of methods to minimize the generation of airport solid waste at the Airport, consistent with applicable State and local recycling laws, will be conducted. The analysis will be performed per the FAA’s “Guidance on Airport Recycling, Reuse and Waste Reduction Plans” (September 2014, APP-400). This analysis will not include a waste audit and does not address hazardous wastes, but will address the following issues related to municipal solid waste and construction and demolition solid waste recycling at the Airport:

- Minimizing the generation of solid waste at the Airport;
- Operation and maintenance requirements associated with waste recycling;
- Review of waste management contracts; and
- Potential cost savings or revenue generation.

Product: Review and recommendations for the ongoing implementation of the Fresno Yosemite Airport Sustainability Management Plan.

Task 8.2 – Prepare Working Paper #4 – Facility Requirements & Sustainability

Description: The Consultant will prepare a working paper summarizing the results of the facility requirements and sustainability evaluations. This will be focused on the Airport facilities needed to meet projected activity levels, FAA design standards and the Airports Department's strategic goals. The draft will be submitted in electronic Word and PDF formats to the Airports Department for review and comment. Upon response to any comments received, the working paper will be posted on the Study website and provided to the Advisory Committee. The information in this working paper will be used in subsequent elements of the MPU and will ultimately become a chapter of the final MPU document.

Product: Draft and final working paper, in electronic Word and PDF formats, submitted to the Airports Department and Advisory Committee and posted on the Study website.

ELEMENT 9: ALTERNATIVES DEVELOPMENT AND EVALUATION

On the basis of the facility requirements identified in the preceding task, along with the established Airport Vision and Airports Department's strategic goals, this effort will prepare alternative development scenarios for those improvements which may have multiple viable configurations or locations. The first level of alternatives development and screening will focus on individual facility or functional area options. These individual options will be evaluated on measures that are appropriate for that improvement as indicated in the following tasks. These resultant individual recommendations will then be formed into no more than three integrated development alternatives that will be subject to a more detailed evaluation. The Airports Department will assist in the development and review of the consolidated concepts, including the establishment of the evaluation criteria and weighting. The evaluation of integrated alternatives will result in the recommend development plan will form the basis of the ALP and MPU capital development program.

Task 9.1 – Preliminary Land Use Planning

Description: The Consultant will review existing land uses within and immediately adjacent to the Airport boundary. Using current municipal land use data, aerial photography, and site observations, general land use areas will be classified, and the amount of land devoted to each of the land use categories will be quantified. This task will assess the availability of Airport land relative to the identified facility requirements. Utilizing the results from the various sizing analyses completed under the prior tasks, general land acreage requirements will be identified for the various Airport functional areas (i.e. airfield, terminal, landside/ground access/multi-modal, general aviation, cargo, maintenance, parking, access, stormwater management, etc.). The purpose of this task is to determine whether additional land is needed to accommodate the long-range facility requirements and where those uses should be located. If additional land is required, the assessment will identify the more desirable and/or most feasible off-Airport expansion areas that should be considered from a highest and best land use perspective. The development of land use alternatives will give consideration to functional adjacencies and historic Airport land use and development patterns. This will begin as an un-constrained analysis, assuming that there are no insurmountable barriers to the expansion of Airport property.

Areas of Airport property that may no longer be needed for aeronautical use, airspace protection, or noise mitigation will also be identified. Any such areas will be evaluated for potential redevelopment or re-use to support additional revenue generating non-aeronautical or commercial development.

Working with the Airports Department, up to three viable alternative land use strategies will be developed that take into consideration physical, environmental, political, cost, and other constraints. Objectives include determining the mix of land uses that best optimizes total revenue and return on investment, regional/local community integration, and retaining the flexibility required by the Airports Department to respond to future redevelopment opportunities. The Airports Department will assist with a qualitative evaluation of the alternatives focused on the ability to meet the established strategic goals and Airport vision, and a recommended overall on-airport land use plan will be selected.

Product: Preliminary on-airport land use plan to guide the development and evaluation of subsequent facility alternatives.

Task 9.2 – Identify and Evaluate Airfield Alternatives

Description: The Consultant will formulate preliminary airfield development alternatives that will address needed runway and taxiway development throughout the planning horizon and beyond. Schematic concept drawings and narrative descriptions will be provided for each concept. This task will be conducted simultaneously with the following tasks, to ensure that only options with the highest potential for integration with the other Airport functional areas are brought forward for evaluation. It is anticipated that the preliminary airfield alternatives will be evaluated on the following factors:

- Operational benefits;
- Environmental considerations (including noise);
- Implementation costs/feasibility;
- Construction/phasing issues;
- Community acceptance; and
- Airspace and FAA standards considerations.

Product: Recommended airfield layout for meeting existing and forecast runway and taxiway facility needs.

Task 9.3 - Identify and Evaluate Terminal Alternatives

Description: Utilizing the terminal space programs developed in prior tasks, the Consultant will develop up to three concept design alternatives for the future development of the terminal complex. Terminal alternatives will be coordinated with the alternatives developed for other facilities such as parking, access, commercial apron space, and others, as needed. The design concepts will be developed to:

- Provide terminal plans that offer operational flexibility;
- Incorporate future technological improvements associated with airline and terminal operations;
- Incorporate sustainable architectural design; and
- Accommodate other on-going Airport projects.

Working with the Airports Department, the Consultant will develop qualitative evaluation criteria to assess each alternative and a recommended concept design solution will be identified. The evaluation criteria will likely include:

- The ability to satisfy long term passenger and aircraft demands and anticipated activity;
- Ability to meet landside (curbside, parking and rental car) demand while retaining customer convenience, operational efficiency and cost effectiveness;
- Level of new construction vs. incorporation and reuse of existing terminal facilities;
- The ability to facilitate enhanced concessions and potential revenue production;
- Maximize financial return on un-used or under-used areas within the terminal (if applicable);
- Evaluate the constructability of the concept alternatives (must maintain airport operations at all times);
- Integration of FIS facilities with the terminal building, including arrivals and departures (design aircraft gate/holdroom to allow secure arrivals through the FIS facility and departure of standard screened passengers);
- The ability to satisfy long-term needs with regard to utilities, infrastructure;
- Order-of-magnitude costs associated with each of the terminal alternatives; and
- The ability to accommodate future expansion of the terminal complex.

Product: A recommended terminal design solution for meeting the anticipated passenger activity levels, with phasing solutions identified specifically to address near term and long-term needs.

Task 9.4 – Identify and Evaluate Surface Transportation and Parking Alternatives

Description: This task will evaluate the desirability, feasibility, and benefits of improved ground access, terminal curbside, parking, and rental car options. Due to the relatively constrained nature of the existing terminal parking, an important component of this task will be to assess a variety of vehicular parking concepts, including on-site structures, on-airport remote parking, and other potentially viable options. These alternative strategies will be coordinated with the other facility options general land use and terminal improvements. The previously prepared landside simulation model will be used to evaluate the surface alternatives. The evaluation will address:

- General description of the improvements, including potential roadway alignments (as needed);
- Order-of-magnitude costs;
- Impact on revenue and operating expenses;
- Potential funding sources and probability assessment of funding being available;
- Customer service benefits (e.g., travel time, user cost, convenience);
- Operational efficiency during peaking conditions unique to FAT;
- Implementation and phasing factors; and
- Non-Airport traffic impacts.

Working with Airports Department, a determination will be made as to which of these improvements will be included as integral components of the overall Airport development program. As appropriate, access and circulation needs will also be evaluated for on-Airport areas outside the terminal area.

Product: Recommended parking and access solutions for meeting the anticipated passenger activity levels and maintaining a high level of customer service with phasing solutions identified specifically to address near term and long-term needs.

Task 9.5 – Identify and Evaluate General Aviation Alternatives

Description: In concert with the preliminary land use planning, development concepts for the general aviation area/s will be prepared to address anticipated demand and to provide flexibility in meeting potential tenant needs. The alternatives will generally address form, function, design standards and facility needs for the following items:

- Corporate hangar development and supporting elements (parking, apron, etc.);
- T-Hangar area expansion or development of new T-Hangar areas;
- Expansion or development of new based and/or itinerant general aviation apron areas;
- FBO facility expansion;
- Landside and airside access; and
- Potential new general aviation tenant opportunities.

These alternatives will be evaluated on the basis of their efficiency in meeting identified demand by facility type and user characteristics, ability to group like tenants in the same general areas, engineering factors and enabling projects, ease of implementation, probable costs, operational efficiency, access, and environmental considerations. Working with the Airports Department staff and major tenants, this will lead to the identification of a recommended general aviation development concept. Once the preferred alternative is identified, other configurations that could provide development flexibility for varying tenant needs (i.e. small aircraft, large aircraft, etc.) will be identified. A refined set of alternative configurations will identify examples of the general aviation development areas.

Product: Recommended configuration of general aviation area/s for meeting the anticipated based and transient aircraft operator, tenant and service provider needs.

Task 9.6 – Identify and Evaluate Support Facility Alternatives

Description: Alternatives to address specific support facility needs will be prepared and evaluated. It is anticipated that this effort will generally focus on the location, but possibly also the configuration, of needed support facilities. The alternatives will be evaluated based on practicality and efficiency measures as well as ease of implementation, optimized land use, environmental considerations, and development costs. This task will be conducted in concert with evaluation of land use, airfield, terminal, access, and general aviation planning, as appropriate. The location of Aircraft Rescue and Fire Fighting (ARFF) facilities is known to be a current issue and will be a priority topic in this task. Other facilities that could be addressed include:

- Air cargo facilities (belly and dedicated freight);
- Airport fuel farm;
- Airport maintenance and storage;
- Air Traffic Control Tower (ATCT); and
- Ground Service Equipment (GSE) storage and maintenance.

Product: Recommended support facility plans.

Task 9.7 – Consolidate Individual Recommendations into Integrated Development Concepts

Description: Recommended development options for the individual components of Fresno Yosemite International Airport will be integrated into not more than three Airport-wide overall development concepts. Using labor and materials price data from recent Airport and local construction projects, as well as cost indices such as the Dodge Report and others, preliminary cost estimates for each Airport development concept will be developed. These preliminary cost estimates will provide additional information for selecting preferred development alternatives for the Airport.

Product: Up to three viable integrated Airport Development concepts and associated probable cost estimates.

Task 9.8 – Selection and Refinement of Recommended Airport Development Concept

Description: The Airports Department, along with the Advisory Committee, will assist with the evaluation and selection of the integrated development concept that best meets the established Airport vision and strategic goals. This recommended concept will become the basis for the remainder of the MPU planning process.

One of the Advisory Committee meetings will be devoted to reviewing and gaining stakeholder input on the individual and integrated development alternatives. Following this review, a work session will be held with the Airports Department to evaluate the alternatives and select the preferred concept. The integrated concepts will be evaluated on criteria agreed upon by the Airports Department that will likely include:

- Passenger/customer convenience;
- Optimized land use;
- Order-of-magnitude development and operating costs;
- Engineering feasibility and ease of construction;
- Environmental and sustainability considerations;
- Community integration;
- Operational efficiency;
- Long-term flexibility/expandability; and
- Commercial/ancillary development opportunities.

The preferred concept will then be refined, as needed, to address any stakeholder input or other concerns related function, costs, environmental/community impacts, and schedule. This task may result in the need to revise or modify the earlier individual facility recommendations and if so, the rationale for the refinement will be documented.

Product: An overall integrated and refined development concept that will be carried forward as the recommended Airport development plan.

Task 9.9 - Prepare Working Paper #5 – Alternatives

Description: The Consultant will prepare a working paper which will provide up-to-date information in tabular, narrative, and graphic format describing the evaluation of development alternatives and the identification of the recommended Airport development concept. The draft will be submitted in electronic Word and PDF formats to the Airports Department for review and comment. Upon review and response to comments received from the Airports Department, the working paper will be posted on the Study website and provided to the Advisory Committee. The information in this working paper will be used in subsequent elements of the MPU and will ultimately become a chapter of the final MPU document.

Product: Draft and final working paper, in electronic Word and PDF formats, submitted to the Airports Department and Advisory Committee and posted on the Study website.

ELEMENT 10: ENVIRONMENTAL CONSIDERATIONS

This element will provide an overview of the Airport's potential environmental effects associated with the implementation of the recommended Airport development plan. This effort will also identify any future National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA) and permitting actions that may be required to implement the recommendations.

Task 10.1 – Discussion of Potential Environmental Effects

Description: Building upon the inventory of environmental and community resources from Element 5, and the identification of environmental concerns from the evaluation of development alternatives, an overview of the potential environmental effects associated with the recommended Airport development plan will be prepared. This overview will be developed from readily available information and no field investigations are accounted for in this effort. The level of analysis for the overview is intended to be broad-based and not distinctly quantitative in nature, but will address potential effects in terms of the environmental impact categories defined in FAA Order 1050.1F *Policies and Procedures for Considering Environmental Impacts*, FAA Order 5050.4B *NEPA Implementing Instructions for Airport Actions*, and the FAA *Environmental Desk Reference for Airport Actions*. These categories include:

- Noise (refer also to the following paragraph);
- Compatible Land Use;
- Social Impacts and Environmental Justice;
- Induced Socioeconomic Impacts;
- Air Quality;
- Water Quality;
- Department of Transportation Act, Section 4(f);
- Historic, Archaeological and Cultural Resources;
- Biotic Communities (including Flora and Fauna);
- Endangered and Threatened Species of Flora and Fauna;
- Wetlands and Waters of the U.S.;
- Floodplains;
- Coastal Resources and Coastal Zone Management;
- Wild and Scenic Rivers;
- Farmland;

- Energy Supply and Natural Resources;
- Light Emissions and Visual Impacts;
- Solid Waste Impacts;
- Construction Impacts; and
- Contamination/Hazardous Materials.

It is understood that the Airports Department is in the process of updating 14 CFR Part 150 NEM for FAT. The consultant leading that effort (HMMH) is also on the Consultant Team for this MPU. This will allow for the most current information to be efficiently coordinated between both studies. Potential noise impacts related to the recommended development will be assessed based on the noise contours calculated for the current and long-term forecast of fleet mix and activity levels. Noise contours will be presented for the CNEL 60, 65, 70 and 75 levels and overlaid on a land use base map. Contours will be developed using the most current version of the FAA-approved Airport Environmental Design Tool (AEDT).

Product: A narrative describing the potential environmental effects associated with the implementation of the recommended Airport development plan.

Task 10.2 – NEPA, CEQA and Permitting Requirements

Description: As a federally “obligated airport” (i.e. receiving federal Airport Improvement Program [AIP] funding assistance), development on the Airport is subject to NEPA requirements. As a local government agency and owner of the Airport, the City of Fresno is also responsible for complying with CEQA. Both of these environmental protection related Acts have procedural, interagency coordination and public involvement requirements that will apply to various components of the recommended Airport development plan. Certain projects within that plan may have also have specific environmental type permitting requirements. These requirements will be identified to provide a more complete picture of the implementation steps, costs and timing necessary to enact the various recommendations.

Product: Narrative or tabular information describing the federal, state and local environmental approval and permitting actions associated with the implementation of the recommended Airport development plan.

Task 10.3 - Prepare Working Paper #6 – *Environmental Considerations*

Description: The Consultant will prepare a working paper which will provide up-to-date information in tabular, narrative, and graphic format describing the various environmental and sustainability issues related to the implementation of the recommended Airport development concept and ongoing operation of the Airport. The draft will be submitted in electronic Word and PDF formats to the Airports Department for review and comment. Upon review and response to comments received from the Airports Department, the working paper will be posted on the Study website and provided to the Advisory Committee. The information in this working paper will be used in subsequent elements of the MPU and will ultimately become a chapter of the final MPU document.

Product: Draft and final working paper, in electronic Word and PDF formats, submitted to the Airports Department and Advisory Committee and posted on the Study website.

ELEMENT 11: FACILITIES IMPLEMENTATION AND PHASING PLAN

Task 11.1 – Define Individual Development Projects

Description: Individual planning, land acquisition, and capital development projects that make up the recommended development plan will be identified. This will become the basis for the MPU's Capital Improvement Program (CIP) schedule and cost estimates.

Product: Tabular listing of individual development projects making up the overall Airport development plan.

Task 11.2 – Estimates of Probable Cost

Description: Building upon the previous order-of-magnitude cost estimates developed for the evaluation of alternatives, and using labor and materials price data from recent Airport construction projects, construction industry sources such as the Dodge Report and project cost data from the FAA, the Consultant will determine costs for each project in the CIP, including design, engineering, administrative, professional services, construction costs and contingency factors. Such cost opinions are intended to be used for planning purposes only and will not be the result of detailed engineering design and analysis.

Product: Preliminary cost estimates for the individual development projects making up the overall Airport development plan.

Task 11.3 – Determine Project Phasing and Airport Development Schedule

Description: The individual development projects will be organized into near-term, medium-term and long-term phases. The timing of projects will take into consideration necessary enabling projects that are required prior to the initiation of another development activity, such as environmental approvals and permitting requirements. As such, individual development projects will be phased based on the need to have facilities in place in advance of the design level of activity. This will help maintain customer satisfaction and ensure maximum project lifespan. The phasing process will be an iterative process with the financial feasibility analysis (**Task 12**) to ensure that the CIP is both implementable and economically feasible.

Product: Phased development schedule for the improvements proposed as a part of recommended Airport development plan.

Task 11.4 - Prepare Draft Capital Improvement Program (CIP)

Description: The Consultant will prepare a draft Airport CIP incorporating the phased projects and cost estimates from the previous tasks with other projects (e.g. equipment acquisitions, facility maintenance) that may already be programmed in the Airport's official working CIP. This effort includes identifying anticipated funding sources and their respective participation in terms of the FAA AIP and/or Passenger Facility Charge (PFC) program and other state, local and third party funding partners. This draft CIP will be carried forward into the financial model and feasibility analysis to be performed in a subsequent element.

Product: Draft Capital Improvement Program reflecting the recommended Airport development plan.

ELEMENT 12: FINANCIAL FEASIBILITY ANALYSIS

Task 12.1 – Financial Model Modifications

Description: The Airport's financial model will be modified to reflect the current characteristics of the Airport. The model will incorporate business information, financial data, and lease terms for major tenants. Additionally, the Consultant will review and coordinate assumptions with the Airports Department, including, but not limited to, assumptions regarding Airport revenues, entitlement grants, discretionary grants, state grants, and revenue bond proceeds. The Airport's rate methodology and use and lease agreements will be evaluated, as well as any anticipated changes to the extent such changes are likely to impact future financial capacity.

The Consultant will conduct one meeting with the Airports Department to kick-off this financial analysis element. In conjunction with the kick-off meeting, the Consultant will work with City and Airports Department staff to assemble the data and information required to conduct the financial analysis (including historical financial information, details of the Airport's existing CIP, PFC approvals, etc.).

Product: The deliverables for this task are a summary of the kickoff meeting and the modified financial model submitted to the Airports Department for review and concurrence.

Task 12.2 – Financial Capacity Analysis

Description: The financial capacity of the Airport to fund future improvements related to the recommended development plan will be established as a baseline in the master planning process. In this task, the total funding available for capital projects will be estimated using agreed upon assumptions regarding debt service and airline payments per passenger. The Airport's financial capacity will be related to the aviation demand forecast.

As a part of this analysis, the Airport's key metrics will be compared to those of industry peers. This benchmarking effort will inform decisions regarding the impact of alternative capital investments. The key metric will be related to airline payments per enplaned passenger. The Consultant will consider impacts associated with funding FCH improvements on the ability to fund projects at FAT, if any. The Consultant will conduct one meeting with the Airports Department as part of Task 12.2.

Product: The deliverable for this task will be a brief memorandum summarizing the financial capacity analysis, distributed to the Airports Department for review and concurrence.

Task 12.3 – Financial Plan

Description: This task will establish a financial plan for the recommended Airport development program. It will identify the sources and uses of funds necessary for financing projects included in the Airport's near-term capital plan, the recommended development

program identified in the master planning process, and other appropriate renewal and replacement reserve for projects.

An analysis of the funding alternatives for the development program will include the following:

- Analysis of the effects of the CIP on airline revenues (airline payments per enplaned passenger);
- Assessment of the potential for federal funds for the CIP (e.g., AIP, discretionary funds, FAA letters of intent, Transportation Security Administration funding);
- Assessment of the PFC eligibility of the projects identified in the CIP, and investigate the potential for leveraging PFCs not already committed;
- Assessment of additional methods of enhancing the financial capacity; and
- Exploration of the use of non-traditional funding, grants, loans, and sources of other assistance.

The Consultant will conduct one meeting with the Airports Department as part of Task 12.3 to review the draft financial plan.

Product: Draft financial plan for the recommended Airport development program.

Task 12.4 – Prepare Working Paper #7 – *Financial Feasibility Analysis*

Description: The Consultant will prepare a draft working paper describing the process and results of the financial analysis of the recommended Airport development program. The draft will be submitted in electronic Word and PDF formats to the Airports Department for review and comment. Upon review and response to comments, the working paper will be posted on the Study website and provided to the Advisory Committee. This working paper will ultimately become a chapter of the final MPU document.

Product: Draft and final working paper, in electronic Word and PDF formats, submitted to the Airports Department and Advisory Committee and posted on the Study website.

ELEMENT 13: AIRPORT LAYOUT PLAN DRAWING SET

This element of the Study will produce an updated Airport Layout Plan (ALP) drawing set for the Fresno Yosemite International Airport that reflects the recommended development plan resulting from this MPU Study. The ALP set will be produced in both digital (CAD and PDF) and hard copy versions. The new aerial survey and imagery obtained under **Element 3** of this Study will form the basis. Other sources of information used in the preparation of the ALP drawing set will include the previous ALP provided by the Airports Department (dated May 2015), previous Airport master plan reports, USGS mapping, legal descriptions, existing available property surveys, local and regional government mapping, FAA databases, and any other secondary sources, as appropriate.

The drawing set will be prepared in accordance with the requirements of FAA Standard Operating Procedure (SOP) 2.0 “Checklist for Review and Approval of Airport Layout Plans” and SOP 3.0 “Checklist for Review of Exhibit “A” Airport Property Inventory Maps”. These checklists will be filled out and used to guide the development and quality control review of the various ALP drawings. The checklist will also be submitted to the FAA at each stage of the ALP review

process. The FAA design standards and development criteria reflected within the drawing set will be in accordance with FAA AC 150/5300-13A *Airport Design*, Change 1. The ALP drawing set will be provided to the FAA in both electronic and hard copy formats as required for their multi-level review and approval. The drawing set will include the following 15 sheets which are briefly described in the following tasks:

- Cover Sheet
- Airport Data Sheet
- Airport Layout Plan
- Declared Distances Runway 11L-29R
- Terminal Area Plan
- General Aviation Area Plan
- Cargo Area Plan
- Airport Airspace Plan and Profile
 - Precision approach through 10,000 feet
 - Precision approach 10,000 to 50,000 feet
- Inner Portion of the Approach Surface Drawings
 - Runway 11R-29L
 - Runway 11L-29R
- Runway Departure Surfaces Drawings
 - Runway 11R-29L
 - Runway 11L-29R
- Land Use Drawing, including the 65 DNL/CNEL contour
- Consolidated Utility Plan
- Airport Property Inventory Map / Exhibit "A"

Task 13.1 - Cover Sheet

This sheet will include applicable information such as the name and location of the Airport and sponsor, location and vicinity maps, an index of drawings contained within the set and the date of the set.

Task 13.2 – Airport Data Sheet

This sheet will include tabular information to supplement information of existing and future conditions that are graphically displayed and noted on the ALP. This information includes such items as general Airport information, airfield and runway classifications, navigational aids and approach capabilities, weather and crosswind coverage, declared distances and operational limitations, and any conditions on the Airport that do not meet current FAA standards and will identify the planned disposition.

Task 13.3 – Airport Layout Plan

The ALP sheet will depict existing physical features of the Airport, along with existing and proposed airport facilities, and applicable FAA safety and design standards. Property boundaries, terrain and development immediately adjacent to the Airport are also shown. This sheet will also contain signature blocks for City and FAA approval. This sheet forms the basis for FAA funding approval.

Task 13.4 – Specific Area Plans (Terminal, General Aviation, Cargo)

These will be larger scale, or “zoomed in” views of specific areas on the Airport that generally serve common uses and where the depiction of those facilities may not be readily discernible on the ALP sheet due to graphic scale. By zooming in, more detail in regards to configuration, terrain and physical features, circulation, and design standards will be able to be depicted. The area plans identified for FAT include the Terminal Area, the General Aviation Area, and the Cargo Area. Depending on the ultimate recommendations for these areas, these could entail three or more total drawings sheets.

Task 13.5 – Airspace Drawing

The Airport airspace drawing will provide a large scale view of the extents of the existing and future 14 CFR Part 77 Imaginary [Airspace Protection] Surfaces. The base mapping for this drawing is typically U.S. Geographical Survey (USGS) Topographic Quadrangle Maps. Both plan and profile views will be provided. Due to the precision instrument approach capability at FAT, the Part 77 Approach Surface extends for a total distance of 50,200 feet from the applicable runway end. This will likely require multiple drawing sheets to depict the extents. Objects identified as obstacles to the Part 77 surfaces, through the previous airspace analysis task or noted on readily available FAA resources, will be depicted and documented in tabular form and their recommended disposition will also be noted.

Task 13.6 – Inner Portion of the Approach Surface Drawings

These drawings will provide a close-in view of the Part 77 Approach Surfaces (to an elevation of approximately 100 feet above the runway end) for each runway end at FAT. The area depicted off of each runway approximately corresponds with the Runway Protection Zones (RPZs). The base mapping for this drawing will be the aerial imagery and topographic survey obtained under **Element 3** of this Study. Two drawings will be prepared, one for each runway, and both plan and profile views of the inner approach area will be provided. Objects identified as obstacles to the Part 77 surfaces, through the previous airspace analysis task or noted on readily available FAA resources, will be depicted and documented in tabular form along with their recommended disposition.

Task 13.7 – Runway Departure Surface Drawings

While FAA departure surface requirements (as detailed in AC 150/5300-13A) only apply to designated instrument departure runways, the FAA recommends that they be evaluated for all runway ends, particularly those that serve turbine powered aircraft. For those reasons, an analysis will be prepared for each runway. If possible, due to the proximity of the runway ends, a single drawing depicting both runways will be prepared, however, two separate drawings may become necessary. The base mapping for this drawing will be the aerial imagery and topographic survey obtained under Element 3 of this Study. Significant objects within the departure surface limits, as defined by SOP 2.0, will be identified and documented in tabular form along with their recommended disposition.

Task 13.8 – Land Use Drawing

The Land Use drawing will depict on- and off-Airport land uses and zoning for the area around the Airport, extending to include land within the 60 and 65 CNEL noise contours developed in a previous task. The ALP will serve as the base map for the Land Use

drawing. Off-Airport land uses will be depicted by generalized categories (e.g., agriculture, residential, institutional, recreational, industrial, and commercial, etc.) and on-Airport land by aviation related use categories (e.g. Airport Operations Area, general aviation development area, terminal development area, aviation related development, commercial revenue support, etc.). Existing and any future Airport boundaries will be identified.

Task 13.9 – Consolidated Utility Plan

This drawing will document the inventory of major utility systems within airport property as described in Section 5.2 along with any utility easements identified through the preparation of the Property Inventory Map. Any utility system improvements recommended as a result of the MPU process, or those needed to support future facility development, will also be identified. The drawing will be prepared in the same format, and on the same base map, as the other sheets in the ALP Drawing Set.

Task 13.10 – Airport Property Inventory Map / Exhibit “A”

The existing Airport Property Map will be updated to reflect the recommended Airport development plan arising from this MPU Study that may include any significant airfield improvements, land acquisition/easement requirements, or potential land release opportunities. The Property Map will be updated following the guidance in FAA SOP 3.0 and Advisory Circular 150/5100-17, *Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects*. Deed and title research will be performed to ensure accurate data is obtained to meet FAA’s SOP requirements and checklist. A boundary survey will also be conducted to provide the information for this drawing.

Task 13.11 – Submittal and Review of Preliminary Draft ALP Drawing Set

Once a draft version of each of the preceding ALP sheets have been prepared, a complete preliminary draft ALP drawing set will be submitted to the Airports Department for review. Upon resolution of any comments, the draft set will then be submitted to the FAA for review. At this point, a work session with appropriate Airports Department and FAA ADO personnel will be held to ensure a mutual understanding of the recommended Airport development plan and resolve any technical ALP issues in advance of uploading the ALP to the FAA’s Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) website and concurrent FAA “line of business” review (refer to **Task 15.2**).

Product: Preliminary draft ALP drawing set and Airports Department/FAA review and work session.

ELEMENT 14: UPDATED INFORMATION FOR AIRPORT’S GENERAL PLAN AND ENVIRONS PLAN

This element entails the preparation of updated information to supplement the Airport’s General Plan and Environs Plan (also referred to as the Airport Land Use Compatibility Plan). The latest adopted Fresno Yosemite International Airport Land Use Compatibility Plan is dated August 30, 2012.

Task 14.1 – Update 2012 Land Use Compatibility Plan Elements

Description: Several elements of the 2012 Land Use Compatibility Plan will be updated to reflect new information from this MPU. These elements include the following:

- Airport Influence Area map to include 60 CNEL contours and Safety Compatibility Zones 1 through 5;
- Planning Status section;
- ALP drawings; and
- Airport activity section.

Product: Updated elements of the 2012 Land Use Compatibility Plan.

ELEMENT 15:FINAL DOCUMENTS – SUBMITTAL AND APPROVAL

This element entails the preparation, review, approval and production of the final MPU report and Airport Layout Plan drawing set.

Task 15.1 - Draft Final Master Plan Report and Executive Summary Brochure

Description: Upon review of all draft working papers and the incorporation of appropriate revisions, a draft-final Master Plan Report will be prepared. An Executive Summary Brochure will also be developed to summarize the findings and recommendations of the Study effort. The Executive Summary will be designed to function as a standalone product that the Airports Department can distribute and is anticipated to be not more than 16 pages, designed and printed in brochure format.

The draft documents will be submitted in hard copy and electronic Word and PDF formats to the Airports Department for review and comment. Upon review and response to comments received from the Airports Department, the documents will be submitted to the FAA in hard copy and electronic format for their review. The documents will also be posted on the Study website and provided to the Advisory Committee in electronic format.

Product: Draft-final Master Plan report and Executive Summary in hard copy and electronic format. Five (5) hard copies of the report and 250 Executive Summary Brochures will be provided as well as an electronic file in PDF format.

Task 15.2 – Draft Submittal, Final Approval and Production of the ALP Drawing Set

Description: Following resolution of any comments on the preliminary draft ALP set, a revised draft ALP set will be submitted to the FAA. As required by SOP 2.0, *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)* dated October 1, 2013; the draft ALP and corresponding “review checklist” will be uploaded by the Consultant on behalf of the Airports Department to the FAA’s OE/AAA online system in PDF format.

The FAA Airports Division and other lines of business within the OE/AAA system will conduct its review. Agency comments will be consolidated by the responsible FAA project manager and forwarded to the Airports Department as a final FAA comment letter which will include an airspace determination addressing any potential impacts to navigable airspace.

Upon resolution of any agency comments, the ALP set will be ready for the Airports Department's final approval and/or adoption. Up to eight (8) hard copies of the final ALP drawing set will be provided to the City for signature. These will then be forwarded to the FAA ADO for their final approval signature/stamp. Signed hard copies will be re-distributed to the FAA and Airports Department. The signed ALP sheet will be electronically scanned and added to the electronic PDF version of the final ALP drawing set for recordation and use by the City.

Product: Revised draft ALP set uploaded to FAA OE/AAA website and hard copy and electronic final versions of the approved and signed ALP drawing set.

Task 15.3 – Final MPU Report

Description: Upon resolution of any comments on the draft MPU report and draft ALP drawing set, a final MPU report will be printed. Up to fifteen (15) hard copies of the final report will be provided. In addition, two (2) CDs containing the electronic files of the MPU and ALP drawing set will be provided to the Airports Department. The final electronic files will be provided in their native format including Word, Excel, and AutoCAD, as well as in PDF.

Product: Final MPU report (15 hard copies) and two CDs with native electronic files and Word and PDF formats of the final document and ALP drawing set.

Exhibit B

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno ("CITY")
and Kimley-Horn and Associates, Inc. ("CONSULTANT")
Master Plan Update for Fresno Yosemite International Airport
PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
2. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto). If personal automobile coverage is used, the CITY, its officers, officials, employees, agents and volunteers are to be listed as additional insureds.
3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
4. Professional Liability (Errors and Omissions) and Cyber Liability (Privacy and Data breach) insurance appropriate to CONSULTANT'S profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to CITY, its officers, officials, employees, agents and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

1. **COMMERCIAL GENERAL LIABILITY:**
 - (i) \$1,000,000 per occurrence for bodily injury and property damage;
 - (ii) \$1,000,000 per occurrence for personal and advertising injury;
 - (iii) \$2,000,000 aggregate for products and completed operations; and,

Exhibit B

FYI-B FedFund Generic Total Fee (09-23-16)

- (iv) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.

2. **COMMERCIAL AUTOMOBILE LIABILITY:**

\$1,000,000 per accident for bodily injury and property damage.

3. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.

4. **EMPLOYER'S LIABILITY:**

- (i) \$1,000,000 each accident for bodily injury;
- (ii) \$1,000,000 disease each employee; and,
- (iii) \$1,000,000 disease policy limit.

5. **PROFESSIONAL LIABILITY** (Errors and Omissions):

- (i) \$2,000,000 per claim/occurrence; and,
- (ii) \$4,000,000 policy aggregate.

6. **CYBER LIABILITY** insurance with limits of not less than:

- (i) \$2,000,000 per claim/occurrence; and,
- (ii) \$4,000,000 policy aggregate

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY, its officers, officials, employees, agents and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY'S Risk Manager or his/her designee. At the option of the CITY'S Risk Manager or his/her designee, either:

- (i) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents and volunteers; or
- (ii) CONSULTANT shall provide a financial guarantee, satisfactory to CITY'S Risk Manager or his/her designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

1. CITY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations by use of ISO Form CG 20 10 11 85 or both CG 20 10 10 01 and CG 20 37 10 01 or by an executed manuscript insurance company endorsement providing additional insured status as broad as that contained in ISO Form CG 20 10 11 85.
2. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
3. For any claims relating to this Agreement, CONSULTANT'S insurance coverage shall be primary insurance with respect to the CITY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents and volunteers shall be excess of CONSULTANT'S insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY, its officers, officials, employees, agents and volunteers.

The Cyber Liability insurance shall cover claims involving privacy violations, information theft, damage to or destruction of electronic information, intentional and/or unintentional release of private information (including credit monitoring costs), alteration of electronic information, extortion and network security. Such coverage is required only if any products and/or services related to information technology (including hardware and/or software) are provided to Insured and for claims involving any professional services for which Consultant is engaged with the City for such length of time as necessary to cover any and all claims

If the Professional (Errors and Omissions) and Cyber Liability insurance policy(ies) is written on a claims-made form:

1. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.

Exhibit B

2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.
4. A copy of the claims reporting requirements must be submitted to CITY for review.
5. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty (30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of these policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY,

Exhibit B

CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

SUBCONTRACTORS - If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein and CONSULTANT shall ensure that CITY, its officers, officials, employees, agents and volunteers are additional insureds. The subcontractors' certificates and endorsements shall be on file with CONSULTANT and CITY prior to the commencement of any work by the subcontractor.

Exhibit C

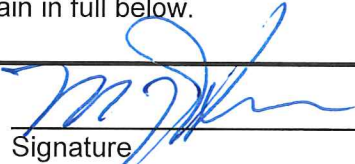
DISCLOSURE OF CONFLICT OF INTEREST

Master Plan Update for Fresno Yosemite International Airport
PROJECT TITLE

		YES*	NO
1	Are you currently in litigation with the City of Fresno or any of its agents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Do you represent any firm, organization or person who is in litigation with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Do you currently represent or perform work for any clients who do business with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Are you or any of your principals, managers or professionals, owners or investors in a business which does business with the City of Fresno, or in a business which is in litigation with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Are you or any of your principals, managers or professionals, related by blood or marriage to any City of Fresno employee who has any significant role in the subject matter of this service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Do you or any of your subcontractors have, or expect to have, any interest, direct or indirect, in any other contract in connection with this Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
* If the answer to any question is yes, please explain in full below.			

Explanation: _____

Additional page(s) attached.



Signature _____

26 Sept 2016

Date

Michael J. Hermann

(name)

Kimley-Horn and Associates, Inc

(company)

7740 N. 16th Street

(address)

Phoenix AZ 85020

(city state zip)

Exhibit D

ASSURANCES

**Consultant Service Agreement between City of Fresno ("CITY")
and Kimley-Horn and Associates, Inc. ("CONSULTANT")**

A. I. P. PROJECT NO. [AIP number(s)]

Master Plan Update at Fresno Yosemite International Airport
PROJECT TITLE

During the performance of this Agreement (hereinafter referred to as "contract" or "contract documents"), CONSULTANT, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows (hereinafter, "CITY" is referred to as "Sponsor"):

A. CIVIL RIGHTS ACT OF 1964, TITLE VI – CONSULTANT CONTRACTUAL REQUIREMENTS

1. Compliance with Regulations. The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

2. Nondiscrimination. The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

4. Information and Reports. The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the Sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance. In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

- a. Withholding of payments to the contractor under the contract until the contractor complies, and/or
- b. Cancellation, termination, or suspension of the contract, in whole or in part.

6. Incorporation of Provisions. The contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

B. AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS

The contractor assures that it will comply with pertinent statutes, Executive Orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport Sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport Sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

C. DISADVANTAGED BUSINESS ENTERPRISES

In the event that the Sponsor has established a Disadvantaged Business Enterprises (DBE) participation goal for the Project which is the subject of this contract, contractor shall comply with all applicable DBE requirements of 49 CFR Part 26. The DBE participation may be composed of any combination of firms certified as DBEs in accordance with 49 CFR Part 26. The contractor shall comply with Sponsor's DBE Program and subcontract with those firms as previously submitted to Sponsor (on form provided by Sponsor) on the contractor's list of disadvantaged businesses to meet the DBE participation goal for this Project. If the contractor intends to subcontract a portion

of the services to be performed hereunder, the contractor shall affirmatively seek out DBEs that are potential subcontractors, suppliers, or consultants, and actively solicit their interest, capability and prices. Any questions concerning Disadvantaged Business Enterprise (DBE) issues shall be addressed to DBE Program staff at Telephone No. (559) 498-4071 or Fax No. (559) 621-1182.

1. Contract Assurance (§26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

2. Prompt Payment (§26.29) - The contractor agrees to pay each subcontractor under this contract for satisfactory performance of its contract no later than 10 days from the receipt of each payment the contractor receives from Sponsor. The contractor agrees further to return any retainage payments to each subcontractor within 10 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Sponsor. This clause applies to both DBE and non-DBE subcontractors.

D. LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

1. No Federal appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the contractor shall complete and submit Standard Form-LLL, "Disclosure of Lobby Activities," in accordance with its instructions.

E. ACCESS TO RECORDS AND REPORTS

The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

F. BREACH OF CONTRACT TERMS AND TERMINATION OF CONTRACT

Any violation or breach of terms of this contract on the part of the contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this contract. The duties and obligations imposed by the contract documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

1. The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.

2. If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.

3. If the termination is due to failure to fulfill the contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor shall be liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.

4. If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this clause.

5. The rights and remedies of the Sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

G. RIGHTS TO INVENTIONS

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

H. TRADE RESTRICTION CLAUSE

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

(i) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);

(ii) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is

owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

(iii) has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the Sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

I. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

The contractor certifies, by submission of its proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations,

proposals, contracts, and subcontracts. Where the contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to its proposal.

J. BAN ON TEXTING AND DRIVING

The contractor shall adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers, including policies to ban text messaging while driving when performing any work for, or on behalf of, the Federal government. The contractor further agrees to conduct workplace safety initiatives commensurate with the size of its business, such as establishing rules or programs that prohibit text messaging while driving and education, awareness and other outreach to employees about the safety risks associated with texting while driving.