#### NANTUCKET MEMORIAL AIRPORT COMMISSION

#### November 18, 2014 Agenda

- 1. Review and Approve Agenda
- 2. Public Comment
- 3. Update on FY2016 Budget Process
- 4. **111814-1** Commissioner Training FAA Compliance Tom Vick



#### **Public Safety Facility**

1st Floor Meeting Room

4 Fairgrounds Road

3:00 PM

## **Grant Assurances 101**

# Understanding the Airport Compliance Program

Presented to: Nantucket Airport

Commission

By: Thomas Vick, AAE, Compliance &

Land Use Specialist

Date: November 2014



### Why Should I Care?

- Foster a safe, competitive, and fair environment at your airport.
- Avoid informal & formal complaints and investigations.
- Because not understanding the grant assurances can cost your airport A LOT of money!!!

### **Grant Assurances & Obligations**

→ Requires an airport sponsor to agree when accepting Federal financial assistance or land.

→ Are enforced through the Airport Compliance Program.

### Where Do They Come From?

- Civil Aeronautics Act of 1938 (DLAND & DCLA)
- Surplus Property Act of 1944
- Federal Airport Act of 1946 (FAAP)
- Federal Aviation Act of 1958 (FAAct)

- Civil Rights Act of 1964
- Airport & Airway
   Development Program
   of 1970 (ADAP)
- Airport & Airway Improvement Program of 1982 (AIP)

### Where Do They Come From?

- Airport & Airway Safety
   & Capacity Expansion
   Act of 1987
- Airport Noise & Capacity Act of 1990 (ANCA)
- FAA Authorization of 1994
- FAA Reauthorization Act of 1996

- Wendell H. Ford
   Aviation Investment &
   Reform Act for the 21<sup>st</sup>
   Century (AIR 21)
- Century of Aviation Reauthorization Act (Vision 100)

### Where Do You Find Your Obligations?

- → Deeds & Conveyance Agreements
- → Grant Agreements (as mandated by Federal Statute)

#### 39 Federal Grant Assurances

The complaints and investigations generally allege that the airport sponsor has violated one or more of the following:

- #5, Preserving Rights and Powers
- #19, Operation and Maintenance
- #21, Compatible Land Use
- #22, Economic Nondiscrimination
- #23, Exclusive Rights
- #24, Fee and Rental Structure
- #25, Airport Revenue
- #29, Airport Layout Plan



### #5 – Preserving Rights & Powers

- → A sponsor will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in the grant agreement.
- → A sponsor will act promptly to acquire, extinguish, or modify any outstanding rights or claims of rights of others which would interfere with such performance by the sponsor.

### #5 – Preserving Rights & Powers

→ A sponsor will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property.

→ Or, for a noise compatibility program project, the portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in the grant agreement without approval by the secretary.

### #19 - Operation and Maintenance

- → The airport and all facilities which are necessary to serve the aeronautical users of the airport, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state local agencies for maintenance and operation.
- → It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes.

### #19 - Operation and Maintenance

The sponsor will have in effect arrangements for:

- → Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and
- → Promptly notifying airmen of any condition affecting aeronautical use of the airport.

### #20 - Hazard Removal and Mitigation

- → It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by:
- → removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

### #21 - Compatible Land Use

→ It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations.

### #22 - Economic Nondiscrimination

→ It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all:

→ types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.

#### #22 - Economic Nondiscrimination

- → The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.
- → The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

### #23 – Exclusive Rights

→ It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public.

#### #24 - Fee and Rental Structure

→ It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport.

### #25 – Airport Revenues

- → All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport;
- → The local airport system; or other local facilities, which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property.

### #26 - Reports and Inspections

→ It will submit to the secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports available to the public.

### FAA Is Here to Help!

But keep in mind...



Airport Compliance is the adjudicator.

### Thoughts?



### Grant Assurances Airport Sponsors

#### A. General.

- 1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
- 2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
- 3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this grant agreement.

#### B. Duration and Applicability.

- 1. Airport development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor. The terms, conditions and assurances of this grant agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.
- 2. Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor. The preceding paragraph 1 also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.

- 3. Airport Planning Undertaken by a Sponsor. Unless otherwise specified in this grant agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 30, 32, 33, and 34 in section C apply to planning projects. The terms, conditions, and assurances of this grant agreement shall remain in full force and effect during the life of the project.
- C. **Sponsor Certification.** The sponsor hereby assures and certifies, with respect to this grant that:
  - 1. General Federal Requirements. It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance and use of Federal funds for this project including but not limited to the following:

#### **Federal Legislation**

- a. Title 49, U.S.C., subtitle VII, as amended.
- b. Davis-Bacon Act 40 U.S.C. 276(a), et seq. 1
- c. Federal Fair Labor Standards Act 29 U.S.C. 201, et seq.
- d. Hatch Act -5 U.S.C. 1501, et seq.<sup>2</sup>
- e. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 Title 42 U.S.C. 4601, et seq. 12
- f. National Historic Preservation Act of 1966 Section 106 16 U.S.C. 470(f).<sup>1</sup>
- g. Archeological and Historic Preservation Act of 1974 16 U.S.C. 469 through 469c.<sup>1</sup>
- h. Native Americans Grave Repatriation Act 25 U.S.C. Section 3001, et
- i. Clean Air Act, P.L. 90-148, as amended.
- j. Coastal Zone Management Act, P.L. 93-205, as amended.
- k. Flood Disaster Protection Act of 1973 Section 102(a) 42 U.S.C. 4012a.<sup>1</sup>
- 1. Title 49, U.S.C., Section 303, (formerly known as Section 4(f))
- m. Rehabilitation Act of 1973 29 U.S.C. 794.
- n. Civil Rights Act of 1964 Title VI 42 U.S.C. 2000d through d-4.
- o. Age Discrimination Act of 1975 42 U.S.C. 6101, et seq.
- p. American Indian Religious Freedom Act, P.L. 95-341, as amended.
- q. Architectural Barriers Act of 1968 -42 U.S.C. 4151, et seq. 1
- r. Power plant and Industrial Fuel Use Act of 1978 Section 403- 2 U.S.C. 8373.
- s. Contract Work Hours and Safety Standards Act 40 U.S.C. 327, et seq. 1
- t. Copeland Anti kickback Act 18 U.S.C. 874.1
- u. National Environmental Policy Act of 1969 42 U.S.C. 4321, et seq. <sup>1</sup>
- v. Wild and Scenic Rivers Act, P.L. 90-542, as amended.
- w. Single Audit Act of 1984 31 U.S.C. 7501, et seg.<sup>2</sup>
- x. Drug-Free Workplace Act of 1988 41 U.S.C. 702 through 706.

#### **Executive Orders**

Executive Order 11246 - Equal Employment Opportunity<sup>1</sup>

Executive Order 11990 - Protection of Wetlands

Executive Order 11998 - Flood Plain Management

Executive Order 12372 - Intergovernmental Review of Federal Programs

Executive Order 12699 - Seismic Safety of Federal and Federally Assisted New Building Construction<sup>1</sup>

Executive Order 12898 - Environmental Justice

#### **Federal Regulations**

- a. 14 CFR Part 13 Investigative and Enforcement Procedures.
- b. 14 CFR Part 16 Rules of Practice For Federally Assisted Airport Enforcement Proceedings.
- c. 14 CFR Part 150 Airport noise compatibility planning.
- d. 29 CFR Part 1 Procedures for predetermination of wage rates.
- e. 29 CFR Part 3 Contractors and subcontractors on public building or public work financed in whole or part by loans or grants from the United States.<sup>1</sup>
- f. 29 CFR Part 5 Labor standards provisions applicable to contracts covering federally financed and assisted construction (also labor standards provisions applicable to non-construction contracts subject to the Contract Work Hours and Safety Standards Act).<sup>1</sup>
- g. 41 CFR Part 60 Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and federally assisted contracting requirements). 1
- h. 49 CFR Part 18 Uniform administrative requirements for grants and cooperative agreements to state and local governments.<sup>3</sup>
- i. 49 CFR Part 20 New restrictions on lobbying.
- 49 CFR Part 21 Nondiscrimination in federally-assisted programs of the Department of Transportation - effectuation of Title VI of the Civil Rights Act of 1964.
- k. 49 CFR Part 23 Participation by Disadvantage Business Enterprise in Airport Concessions.
- 1. 49 CFR Part 24 Uniform relocation assistance and real property acquisition for Federal and federally assisted programs. 12
- m. 49 CFR Part 26 Participation By Disadvantaged Business Enterprises in Department of Transportation Programs.
- n. 49 CFR Part 27 Nondiscrimination on the basis of handicap in programs and activities receiving or benefiting from Federal financial assistance.<sup>1</sup>
- o. 49 CFR Part 29 Government wide debarment and suspension (nonprocurement) and government wide requirements for drug-free workplace (grants).
- p. 49 CFR Part 30 Denial of public works contracts to suppliers of goods and services of countries that deny procurement market access to U.S. contractors.

q. 49 CFR Part 41 - Seismic safety of Federal and federally assisted or regulated new building construction.<sup>1</sup>

#### Office of Management and Budget Circulars

- a. A-87 Cost Principles Applicable to Grants and Contracts with State and Local Governments.
- b. A-133 Audits of States, Local Governments, and Non-Profit Organizations
  - <sup>1</sup> These laws do not apply to airport planning sponsors.
  - <sup>2</sup> These laws do not apply to private sponsors.
  - <sup>3</sup> 49 CFR Part 18 and OMB Circular A-87 contain requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation and circular shall also be applicable to private sponsors receiving Federal assistance under Title 49, United States Code.

Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in this grant agreement.

#### 2. Responsibility and Authority of the Sponsor.

- a. **Public Agency Sponsor:** It has legal authority to apply for this grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.
- b. **Private Sponsor:** It has legal authority to apply for this grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this grant agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.
- 3. Sponsor Fund Availability. It has sufficient funds available for that portion of the project costs which are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under this grant agreement which it will own or control.

#### 4. Good Title.

a. It, a public agency or the Federal government, holds good title, satisfactory to the Secretary, to the landing area of the airport or site thereof, or will give assurance satisfactory to the Secretary that good title will be acquired.

b. For noise compatibility program projects to be carried out on the property of the sponsor, it holds good title satisfactory to the Secretary to that portion of the property upon which Federal funds will be expended or will give assurance to the Secretary that good title will be obtained.

#### 5. Preserving Rights and Powers.

- a. It will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in this grant agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere with such performance by the sponsor. This shall be done in a manner acceptable to the Secretary.
- b. It will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property shown on Exhibit A to this application or, for a noise compatibility program project, that portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in this grant agreement without approval by the Secretary. If the transferee is found by the Secretary to be eligible under Title 49, United States Code, to assume the obligations of this grant agreement and to have the power, authority, and financial resources to carry out all such obligations, the sponsor shall insert in the contract or document transferring or disposing of the sponsor's interest, and make binding upon the transferee all of the terms, conditions, and assurances contained in this grant agreement.
- c. For all noise compatibility program projects which are to be carried out by another unit of local government or are on property owned by a unit of local government other than the sponsor, it will enter into an agreement with that government. Except as otherwise specified by the Secretary, that agreement shall obligate that government to the same terms, conditions, and assurances that would be applicable to it if it applied directly to the FAA for a grant to undertake the noise compatibility program project. That agreement and changes thereto must be satisfactory to the Secretary. It will take steps to enforce this agreement against the local government if there is substantial non-compliance with the terms of the agreement.
- d. For noise compatibility program projects to be carried out on privately owned property, it will enter into an agreement with the owner of that property which includes provisions specified by the Secretary. It will take steps to enforce this agreement against the property owner whenever there is substantial non-compliance with the terms of the agreement.
- e. If the sponsor is a private sponsor, it will take steps satisfactory to the Secretary to ensure that the airport will continue to function as a publicuse airport in accordance with these assurances for the duration of these assurances.
- f. If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to insure

- that the airport will be operated and maintained in accordance Title 49, United States Code, the regulations and the terms, conditions and assurances in this grant agreement and shall insure that such arrangement also requires compliance therewith.
- g. Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.
- 6. Consistency with Local Plans. The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.
- 7. Consideration of Local Interest. It has given fair consideration to the interest of communities in or near where the project may be located.
- 8. Consultation with Users. In making a decision to undertake any airport development project under Title 49, United States Code, it has undertaken reasonable consultations with affected parties using the airport at which project is proposed.
- 9. Public Hearings. In projects involving the location of an airport, an airport runway, or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.
- 10. Air and Water Quality Standards. In projects involving airport location, a major runway extension, or runway location it will provide for the Governor of the state in which the project is located to certify in writing to the Secretary that the project will be located, designed, constructed, and operated so as to comply with applicable air and water quality standards. In any case where such standards have not been approved and where applicable air and water quality standards have been promulgated by the Administrator of the Environmental Protection Agency, certification shall be obtained from such Administrator. Notice of certification or refusal to certify shall be provided within sixty days after the project application has been received by the Secretary.
- 11. Pavement Preventive Maintenance. With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport,

it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

12. Terminal Development Prerequisites. For projects which include terminal development at a public use airport, as defined in Title 49, it has, on the date of submittal of the project grant application, all the safety equipment required for certification of such airport under section 44706 of Title 49, United States Code, and all the security equipment required by rule or regulation, and has provided for access to the passenger enplaning and deplaning area of such airport to passengers enplaning and deplaning from aircraft other than air carrier aircraft.

#### 13. Accounting System, Audit, and Record Keeping Requirements.

- a. It shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of this grant, the total cost of the project in connection with which this grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984.
- b. It shall make available to the Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the recipient that are pertinent to this grant. The Secretary may require that an appropriate audit be conducted by a recipient. In any case in which an independent audit is made of the accounts of a sponsor relating to the disposition of the proceeds of a grant or relating to the project in connection with which this grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.
- 14. Minimum Wage Rates. It shall include, in all contracts in excess of \$2,000 for work on any projects funded under this grant agreement which involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor, in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a-276a-5), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.
- 15. Veteran's Preference. It shall include in all contracts for work on any project funded under this grant agreement which involve labor, such provisions as are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam

- era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in Section 47112 of Title 49, United States Code. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.
- 16. Conformity to Plans and Specifications. It will execute the project subject to plans, specifications, and schedules approved by the Secretary. Such plans, specifications, and schedules shall be submitted to the Secretary prior to commencement of site preparation, construction, or other performance under this grant agreement, and, upon approval of the Secretary, shall be incorporated into this grant agreement. Any modification to the approved plans, specifications, and schedules shall also be subject to approval of the Secretary, and incorporated into this grant agreement.
- 17. Construction Inspection and Approval. It will provide and maintain competent technical supervision at the construction site throughout the project to assure that the work conforms to the plans, specifications, and schedules approved by the Secretary for the project. It shall subject the construction work on any project contained in an approved project application to inspection and approval by the Secretary and such work shall be in accordance with regulations and procedures prescribed by the Secretary. Such regulations and procedures shall require such cost and progress reporting by the sponsor or sponsors of such project as the Secretary shall deem necessary.
- 18. Planning Projects. In carrying out planning projects:
  - a. It will execute the project in accordance with the approved program narrative contained in the project application or with the modifications similarly approved.
  - b. It will furnish the Secretary with such periodic reports as required pertaining to the planning project and planning work activities.
  - c. It will include in all published material prepared in connection with the planning project a notice that the material was prepared under a grant provided by the United States.
  - d. It will make such material available for examination by the public, and agrees that no material prepared with funds under this project shall be subject to copyright in the United States or any other country.
  - e. It will give the Secretary unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this grant.
  - f. It will grant the Secretary the right to disapprove the sponsor's employment of specific consultants and their subcontractors to do all or any part of this project as well as the right to disapprove the proposed scope and cost of professional services.
  - g. It will grant the Secretary the right to disapprove the use of the sponsor's employees to do all or any part of the project.
  - h. It understands and agrees that the Secretary's approval of this project grant or the Secretary's approval of any planning material developed as part of

this grant does not constitute or imply any assurance or commitment on the part of the Secretary to approve any pending or future application for a Federal airport grant.

#### 19. Operation and Maintenance.

- a. The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary. In furtherance of this assurance, the sponsor will have in effect arrangements for-
  - 1) Operating the airport's aeronautical facilities whenever required;
  - 2) Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and
  - 3) Promptly notifying airmen of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood or other climatic conditions interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.
- b. It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.
- 20. Hazard Removal and Mitigation. It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.
- 21. Compatible Land Use. It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

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#### 22. Economic Nondiscrimination.

- a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.
- b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to-
  - 1) furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and
  - 2) charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.
- c. Each fixed-based operator at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other fixed-based operators making the same or similar uses of such airport and utilizing the same or similar facilities.
- d. Each air carrier using such airport shall have the right to service itself or to use any fixed-based operator that is authorized or permitted by the airport to serve any air carrier at such airport.
- e. Each air carrier using such airport (whether as a tenant, non tenant, or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities directly and substantially related to providing air transportation as are applicable to all such air carriers which make similar use of such airport and utilize similar facilities, subject to reasonable classifications such as tenants or non tenants and signatory carriers and non signatory carriers. Classification or status as tenant or signatory shall not be unreasonably withheld by any airport provided an air carrier assumes obligations substantially similar to those already imposed on air carriers in such classification or status.
- f. It will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees [including, but not limited to maintenance, repair, and fueling] that it may choose to perform.
- g. In the event the sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by commercial aeronautical service providers authorized by the sponsor under these provisions.

- h. The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.
- i. The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.
- 23. Exclusive Rights. It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, the providing of the services at an airport by a single fixed-based operator shall not be construed as an exclusive right if both of the following apply:
  - a. It would be unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide such services, and
  - If allowing more than one fixed-based operator to provide such services b. would require the reduction of space leased pursuant to an existing agreement between such single fixed-based operator and such airport. It further agrees that it will not, either directly or indirectly, grant or permit any person, firm, or corporation, the exclusive right at the airport to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity, and that it will terminate any exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under Title 49, United States Code.
- 24. Fee and Rental Structure. It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for which a grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.

#### 25. Airport Revenues.

a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the

airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport. The following exceptions apply to this paragraph:

- 1) If covenants or assurances in debt obligations issued before September 3, 1982, by the owner or operator of the airport, or provisions enacted before September 3, 1982, in governing statutes controlling the owner or operator's financing, provide for the use of the revenues from any of the airport owner or operator's facilities, including the airport, to support not only the airport but also the airport owner or operator's general debt obligations or other facilities, then this limitation on the use of all revenues generated by the airport (and, in the case of a public airport, local taxes on aviation fuel) shall not apply.
- 2) If the Secretary approves the sale of a privately owned airport to a public sponsor and provides funding for any portion of the public sponsor's acquisition of land, this limitation on the use of all revenues generated by the sale shall not apply to certain proceeds from the sale. This is conditioned on repayment to the Secretary by the private owner of an amount equal to the remaining unamortized portion (amortized over a 20-year period) of any airport improvement grant made to the private owner for any purpose other than land acquisition on or after October 1, 1996, plus an amount equal to the federal share of the current fair market value of any land acquired with an airport improvement grant made to that airport on or after October 1, 1996.
- 3) Certain revenue derived from or generated by mineral extraction, production, lease, or other means at a general aviation airport (as defined at Section 47102 of title 49 United States Code), if the FAA determines the airport sponsor meets the requirements set forth in Sec. 813 of Public Law 112-95.
- b. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit will review, and the resulting audit report will provide an opinion concerning, the use of airport revenue and taxes in paragraph (a), and indicating whether funds paid or transferred to the owner or operator are paid or transferred in a manner consistent with Title 49, United States Code and any other applicable provision of law, including any regulation promulgated by the Secretary or Administrator.
- c. Any civil penalties or other sanctions will be imposed for violation of this assurance in accordance with the provisions of Section 47107 of Title 49, United States Code.

#### 26. Reports and Inspections. It will:

a. submit to the Secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports

- available to the public; make available to the public at reasonable times and places a report of the airport budget in a format prescribed by the Secretary;
- b. for airport development projects, make the airport and all airport records and documents affecting the airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request;
- c. for noise compatibility program projects, make records and documents relating to the project and continued compliance with the terms, conditions, and assurances of this grant agreement including deeds, leases, agreements, regulations, and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request; and
- d. in a format and time prescribed by the Secretary, provide to the Secretary and make available to the public following each of its fiscal years, an annual report listing in detail:
  - 1) all amounts paid by the airport to any other unit of government and the purposes for which each such payment was made; and
  - 2) all services and property provided by the airport to other units of government and the amount of compensation received for provision of each such service and property.
- 27. Use by Government Aircraft. It will make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that
  - a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or
  - b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.
- 28. Land for Federal Facilities. It will furnish without cost to the Federal Government for use in connection with any air traffic control or air navigation activities, or weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein, or rights in buildings of the sponsor as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such

purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

#### 29. Airport Layout Plan.

- It will keep up to date at all times an airport layout plan of the airport a. showing (1) boundaries of the airport and all proposed additions thereto. together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto; (2) the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities; (3) the location of all existing and proposed nonaviation areas and of all existing improvements thereon; and (4) all proposed and existing access points used to taxi aircraft across the airport's property boundary. Such airport layout plans and each amendment, revision, or modification thereof, shall be subject to the approval of the Secretary which approval shall be evidenced by the signature of a duly authorized representative of the Secretary on the face of the airport layout plan. The sponsor will not make or permit any changes or alterations in the airport or any of its facilities which are not in conformity with the airport layout plan as approved by the Secretary and which might, in the opinion of the Secretary, adversely affect the safety, utility or efficiency of the airport.
- b. If a change or alteration in the airport or the facilities is made which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary (1) eliminate such adverse effect in a manner approved by the Secretary; or (2) bear all costs of relocating such property (or replacement thereof) to a site acceptable to the Secretary and all costs of restoring such property (or replacement thereof) to the level of safety, utility, efficiency, and cost of operation existing before the unapproved change in the airport or its facilities except in the case of a relocation or replacement of an existing airport facility due to a change in the Secretary's design standards beyond the control of the airport sponsor.
- 30. Civil Rights. It will comply with 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 funds received from this grant. This assurance obligates the sponsor for the period during which Federal financial assistance is extended to the program, except where Federal financial assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon in which case the assurance obligates the sponsor or any transferee for the longer of the following periods: (a) the period during which the property is used for a purpose for which Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits, or

(b) the period during which the sponsor retains ownership or possession of the property.

#### 31. Disposal of Land.

- For land purchased under a grant for airport noise compatibility purposes, a. including land serving as a noise buffer, it will dispose of the land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time. That portion of the proceeds of such disposition which is proportionate to the United States' share of acquisition of such land will be, at the discretion of the Secretary, (1) reinvested in another project at the airport, or (2) transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order, (1) reinvestment in an approved noise compatibility project, (2) reinvestment in an approved project that is eligible for grant funding under Section 47117(e) of title 49 United States Code, (3) reinvestment in an approved airport development project that is eligible for grant funding under Sections 47114, 47115, or 47117 of title 49 United States Code, (4) transferred to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport, and (5) paid to the Secretary for deposit in the Airport and Airway Trust Fund. If land acquired under a grant for noise compatibility purposes is leased at fair market value and consistent with noise buffering purposes, the lease will not be considered a disposal of the land. Revenues derived from such a lease may be used for an approved airport development project that would otherwise be eligible for grant funding or any permitted use of airport revenue.
- For land purchased under a grant for airport development purposes (other b. than noise compatibility), it will, when the land is no longer needed for airport purposes, dispose of such land at fair market value or make available to the Secretary an amount equal to the United States' proportionate share of the fair market value of the land. That portion of the proceeds of such disposition which is proportionate to the United States' share of the cost of acquisition of such land will, (1) upon application to the Secretary, be reinvested or transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order: (1) reinvestment in an approved noise compatibility project, (2) reinvestment in an approved project that is eligible for grant funding under Section 47117(e) of title 49 United States Code, (3) reinvestment in an approved airport development project that is eligible for grant funding under Sections 47114, 47115, or 47117 of title 49 United States Code, (4) transferred to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport, and (5) paid to the Secretary for deposit in the Airport and Airway Trust Fund.
- c. Land shall be considered to be needed for airport purposes under this assurance if (1) it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and (2) the revenue

- from interim uses of such land contributes to the financial self-sufficiency of the airport. Further, land purchased with a grant received by an airport operator or owner before December 31, 1987, will be considered to be needed for airport purposes if the Secretary or Federal agency making such grant before December 31, 1987, was notified by the operator or owner of the uses of such land, did not object to such use, and the land continues to be used for that purpose, such use having commenced no later than December 15, 1989.
- d. Disposition of such land under (a) (b) or (c) will be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the airport.
- 32. Engineering and Design Services. It will award each contract, or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping or related services with respect to the project in the same manner as a contract for architectural and engineering services is negotiated under Title IX of the Federal Property and Administrative Services Act of 1949 or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport.
- 33. Foreign Market Restrictions. It will not allow funds provided under this grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.
- 34. Policies, Standards, and Specifications. It will carry out the project in accordance with policies, standards, and specifications approved by the Secretary including but not limited to the advisory circulars listed in the Current FAA Advisory Circulars for AIP projects, dated \_\_\_\_\_\_ (the latest approved version as of this grant offer) and included in this grant, and in accordance with applicable state policies, standards, and specifications approved by the Secretary.
- 35. Relocation and Real Property Acquisition. (1) It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 CFR Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B. (2) It will provide a relocation assistance program offering the services described in Subpart C and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 CFR Part 24. (3) It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 CFR Part 24.
- 36. Access By Intercity Buses. The airport owner or operator will permit, to the maximum extent practicable, intercity buses or other modes of transportation to

- have access to the airport; however, it has no obligation to fund special facilities for intercity buses or for other modes of transportation.
- 37. Disadvantaged Business Enterprises. The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR Part 26. The Recipient shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure non discrimination in the award and administration of DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR Part 26, and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under Part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801).
- 38. Hangar Construction. If the airport owner or operator and a person who owns an aircraft agree that a hangar is to be constructed at the airport for the aircraft at the aircraft owner's expense, the airport owner or operator will grant to the aircraft owner for the hangar a long term lease that is subject to such terms and conditions on the hangar as the airport owner or operator may impose.

#### 39. Competitive Access.

- a. If the airport owner or operator of a medium or large hub airport (as defined in section 47102 of title 49, U.S.C.) has been unable to accommodate one or more requests by an air carrier for access to gates or other facilities at that airport in order to allow the air carrier to provide service to the airport or to expand service at the airport, the airport owner or operator shall transmit a report to the Secretary that-
  - 1) Describes the requests;
  - Provides an explanation as to why the requests could not be accommodated; and
  - 3) Provides a time frame within which, if any, the airport will be able to accommodate the requests.
- b. Such report shall be due on either February 1 or August 1 of each year if the airport has been unable to accommodate the request(s) in the six month period prior to the applicable due date.



# **Current FAA Advisory Circulars Required for Use in AIP Funded and PFC Approved Projects**

Updated: 1/25/2012

View the most current versions of these ACs and any associated changes at: <a href="http://www.faa.gov/airports/resources/advisory\_circulars">http://www.faa.gov/airports/resources/advisory\_circulars</a>

NUMBER				
70/7460-1K	Obstruction Marking and Lighting			
150/5000-13A	Announcement of Availability—RTCA Inc., Document RTCA-221, Guidance and Recommended Requirements for Airports Surface Movement Sensors			
150/5020-1	Noise Control and Compatibility Planning for Airports			
150/5070-6B Change 1	Airport Master Plans			
150/5070-7	The Airport System Planning Process			
150/5100-13B	Development of State Standards for Non Primary Airports			
150/5200-28D	Notices to Airmen (NOTAMS) for Airport Operators			
150/5200-30C	Airport Winter Safety and Operations			
150/5200-33B	Hazardous Wildlife Attractants On or Near Airports			
150/5210-5D	Painting, Marking and Lighting of Vehicles Used on an Airport			
150/5210-7D	Aircraft Rescue and Fire Fighting Communications			
150/5210-13C	Airport Water Rescue Plans and Equipment			
150/5210-14B	Aircraft Rescue Fire Fighting Equipment, Tools, and Clothing			
150/5210-15A	Airport Rescue & Firefighting Station Building Design			
150/5210-18A	Systems for Interactive Training of Airport Personnel			

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NUMBER	TITLE				
150/5210-19A	Driver's Enhanced Vision System (DEVS)				
150/5220-10E	Guide Specification for Aircraft Rescue and Firefighting Vehicles				
150/5220-16D	Automated Weather Observing Systems for Non-Federal Applications				
150/5220-17B	Aircraft Rescue and Firefighting (ARFF) Training Facilities				
150/5220-18A	Buildings for Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials				
150/5220-20 Change 1	Airport Snow and Ice Control Equipment				
150/5220-21B	Guide Specification for Lifts Used to Board Airline Passengers With Mobility Impairments				
150/5220-22A	Engineered Materials Arresting System (EMAS) for Aircraft Overruns				
150/5220-23	Frangible Connections				
150/5220-24	Foreign Object Debris Detection Equipment				
150/5300-7B	FAA Policy on Facility Relocations Occasioned by Airport Improvements or Changes				
150/5300-13 Changes 1 - 18	Airport Design				
150/5300-14B	Design of Aircraft Deicing Facilities				
150/5300-16A	General Guidance and Specifications for Aeronautical Surveys: Establishmen of Geodetic Control and Submission to the National Geodetic Survey				
150/5300-17C	General Guidance and Specifications for Aeronautical Survey Airport Imagery Acquisition and Submission to the National Geodetic Survey				
150/5300-18B	General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards				
150/5320-5C Change 1	• • •				
150/5320-6E	Airport Pavement Design and Evaluation				
150/5320-12C Change 8	Measurement, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces				
150/5320-15A Management of Airport Industrial Waste					
	Page 2 of 5				

NUMBER	TITLE				
150/5325-4B	Runway Length Requirements for Airport Design				
150/5335-5B	Standardized Method of Reporting Airport Pavement Strength PCN				
150/5340-1K	Standards for Airport Markings				
150/5340-5C	Segmented Circle Airport Marker System				
150/5340-18F	Standards for Airport Sign Systems				
150/5340-30F	Design and Installation Details for Airport Visual Aids				
150/5345-3G	Specification for L821 Panels for the Control of Airport Lighting				
150/5345-5B	Circuit Selector Switch				
150/5345-7E	Specification for L824 Underground Electrical Cable for Airport Lighting Circuits				
150/5345-10G	Specification for Constant Current Regulators Regulator Monitors				
150/5345-12F	Specification for Airport and Heliport Beacon				
150/5345-13B	Specification for L841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits				
150/5345-26D	Specification for L823 Plug and Receptacle, Cable Connectors				
150/5345-27D	Specification for Wind Cone Assemblies				
150/5345-28G	Precision Approach Path Indicator (PAPI) Systems				
150/5345-39D	FAA Specification L853, Runway and Taxiway Retroreflective Markers				
150/5345-42F	Specification for Airport Light Bases, Transformer Housings, Junction Boxes and Accessories				
150/5345-43F	Specification for Obstruction Lighting Equipment				
150/5345-44J	Specification for Taxiway and Runway Signs				
150/5345-45C	Low-Impact Resistant (LIR) Structures				
150/5345-46D	Specification for Runway and Taxiway Light Fixtures				
150/5345-47C	Specifications for Series to Series Isolation Transformers for Airport Lighting System				
150/5345-49C	Specification L854, Radio Control Equipment				

NUMBER	TITLE			
150/5345-50B	Specification for Portable Runway and Taxiway Lights			
150/5345-51B	Specification for Discharge-Type Flasher Equipment			
150/5345-52A	Generic Visual Glideslope Indicators (GVGI)			
150/5345-53C	Airport Lighting Equipment Certification Program			
150/5345-54B	Specification for L-1884, Power and Control Unit for Land and Hold Short			
150/5345-55A	Specification for L893, Lighted Visual Aid to Indicate Temporary Runway Closure			
150/5345-56B	Specification for L-890 Airport Lighting Control and Monitoring System (ALCMS)			
150/5360-9	Planning and Design of Airport Terminal Facilities at Non-Hub Locations			
150/5360-12E	Airport Signing and Graphics			
150/5360-13 Change 1	Planning and Design Guidance for Airport Terminal Facilities			
150/5360-14	Access to Airports By Individuals With Disabilities			
150/5370-2F	Operational Safety on Airports During Construction			
150/5370-10F	Standards for Specifying Construction of Airports			
150/5370-11B	Use of Nondestructive Testing Devices in the Evaluation of Airport Pavement			
150/5380-6B	Guidelines and Procedures for Maintenance of Airport Pavements			
150/5390-2B	Heliport Design			
150/5395-1	Seaplane Bases			

## THE FOLLOWING ADDITIONAL APPLY TO AIP PROJECTS ONLY

DATED: 1/25/2012

NUMBER	TITLE	
150/5100-14D	Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects	
150/5100-15A	Civil Rights Requirements for the Airport Improvement Program	
150/5100-17 Changes 1 - 6	Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects	
150/5200-37	Introduction to Safety Management Systems (SMS) for Airport Operators	
150/5300-15A	Use of Value Engineering for Engineering Design of Airports Grant Projects	
150/5320-17	Airfield Pavement Surface Evaluation and Rating (PASER) Manuals	
150/5370-6D Changes 1 - 4	Construction Progress and Inspection Report – Airport Grant Program	
150/5370-12A	Quality Control of Construction for Airport Grant Projects	
150/5370-13A	13A Offpeak Construction of Airport Pavements Using Hot-Mix Asphalt	
150/5380-7A	Airport Pavement Management Program	

## THE FOLLOWING ADDITIONAL APPLY TO PFC PROJECTS ONLY

DATED: 1/25/2012

NUMBER	
150/5000-12	Announcement of Availability – Passenger Facility Charge (PFC) Application (FAA Form 5500-1)



AIRPORT COOPERATIVE RESEARCH PROGRAM

Airport Industry Familiarization and Training for Part-Time Airport Policy Makers Sponsored by the Federal Aviation Administration

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<sup>\*</sup>Membership as of November 2011.

<sup>\*</sup>Membership as of July 2011.

#### AIRPORT COOPERATIVE RESEARCH PROGRAM

# **ACRP** REPORT 58

# Airport Industry Familiarization and Training for Part-Time Airport Policy Makers

Delta Airport Consultants, Inc. Richmond, VA

Subscriber Categories
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#### AIRPORT COOPERATIVE RESEARCH PROGRAM

Airports are vital national resources. They serve a key role in transportation of people and goods and in regional, national, and international commerce. They are where the nation's aviation system connects with other modes of transportation and where federal responsibility for managing and regulating air traffic operations intersects with the role of state and local governments that own and operate most airports. Research is necessary to solve common operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the airport industry. The Airport Cooperative Research Program (ACRP) serves as one of the principal means by which the airport industry can develop innovative near-term solutions to meet demands placed on it.

The need for ACRP was identified in *TRB Special Report 272: Airport Research Needs: Cooperative Solutions* in 2003, based on a study sponsored by the Federal Aviation Administration (FAA). The ACRP carries out applied research on problems that are shared by airport operating agencies and are not being adequately addressed by existing federal research programs. It is modeled after the successful National Cooperative Highway Research Program and Transit Cooperative Research Program. The ACRP undertakes research and other technical activities in a variety of airport subject areas, including design, construction, maintenance, operations, safety, security, policy, planning, human resources, and administration. The ACRP provides a forum where airport operators can cooperatively address common operational problems.

The ACRP was authorized in December 2003 as part of the Vision 100-Century of Aviation Reauthorization Act. The primary participants in the ACRP are (1) an independent governing board, the ACRP Oversight Committee (AOC), appointed by the Secretary of the U.S. Department of Transportation with representation from airport operating agencies, other stakeholders, and relevant industry organizations such as the Airports Council International-North America (ACI-NA), the American Association of Airport Executives (AAAE), the National Association of State Aviation Officials (NASAO), and the Air Transport Association (ATA) as vital links to the airport community; (2) the TRB as program manager and secretariat for the governing board; and (3) the FAA as program sponsor. In October 2005, the FAA executed a contract with the National Academies formally initiating the program.

The ACRP benefits from the cooperation and participation of airport professionals, air carriers, shippers, state and local government officials, equipment and service suppliers, other airport users, and research organizations. Each of these participants has different interests and responsibilities, and each is an integral part of this cooperative research effort.

Research problem statements for the ACRP are solicited periodically but may be submitted to the TRB by anyone at any time. It is the responsibility of the AOC to formulate the research program by identifying the highest priority projects and defining funding levels and expected products.

Once selected, each ACRP project is assigned to an expert panel, appointed by the TRB. Panels include experienced practitioners and research specialists; heavy emphasis is placed on including airport professionals, the intended users of the research products. The panels prepare project statements (requests for proposals), select contractors, and provide technical guidance and counsel throughout the life of the project. The process for developing research problem statements and selecting research agencies has been used by TRB in managing cooperative research programs since 1962. As in other TRB activities, ACRP project panels serve voluntarily without compensation.

Primary emphasis is placed on disseminating ACRP results to the intended end-users of the research: airport operating agencies, service providers, and suppliers. The ACRP produces a series of research reports for use by airport operators, local agencies, the FAA, and other interested parties, and industry associations may arrange for workshops, training aids, field visits, and other activities to ensure that results are implemented by airport-industry practitioners.

#### **ACRP REPORT 58**

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## FOREWORD

By Michael R. Salamone Staff Officer Transportation Research Board

Few airports have adequate budgets with which to develop a method to familiarize part-time policy-making leadership and key policy stakeholders on the myriad issues that affect airport policy decisions. Many airports are unable to send part-time commissioners, board members, new policy leaders, or other policy-related stakeholders to conferences or seminars to learn and discuss the regulatory or national-political framework within which airports must operate. The FAA, responsible for providing regulatory oversight for all airports, cannot interpret all nuances of their regulations to fit individual airport governance, purpose, or motivation models. It is understood that part-time airport policy leadership may not need to know all of this information to the same degree of those who are working full-time within the airport, terminal, or airfield environment. *ACRP Report 58* provides an overview of policy issues affecting airport administrative and operational decisions and provides airport policy leaders, stakeholders, and policy-related decision makers a common framework to understand administrative and operational necessity, thereby helping them make better informed policy decisions.

ACRP Report 58 addresses 20 topics germane to airport management organized into four broad subject areas: (1) general—things policy makers should know about their role, their duties, and basic information about airports; (2) the airport—topics related to the airport, including what is on the airport, who uses it, how it is operated, how it is planned for future growth, and how its neighbors are protected; (3) financial—airport budgets, capital improvement financing, and other financial aspects of the airport business; and (4) rules—the many rules and regulations that govern airport activities.

A typical familiarization and training program for a new policy maker generally includes an orientation briefing about the airport organization, a report of airport issues, and a tour of airport facilities and activities. ACRP provides a primer report of issues affecting the airport industry as well as a customizable orientation program in the form of a Microsoft PowerPoint presentation.

The PowerPoint presentation can be downloaded from http://www.trb.org/Main/Blurbs/166244.aspx.

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Note: Many of the photographs, figures, and tables in this report have been converted from color to grayscale for printing. The electronic version of the report (posted on the Web at www.trb.org) retains the color versions.

# **CHAPTER 1**

## Introduction

The administration and governance of an airport can prove quite challenging to a newly appointed policy maker or an airport manager without previous airport experience. While many serving in these roles possess some aviation experience or business background, few assume these positions with a broad understanding of the myriad of issues that affect the operation, maintenance, and development of aviation facilities.

In order to be effective and engaged, it is vital for an airport policy maker to understand the scope and magnitude of federal, state, and local issues that affect and influence the delivery of aviation services in their communities. This document is designed to offer policy makers and administrators with a concise, yet thorough, overview of these broad issues in order to provide context and orientation to their roles and responsibilities. Moreover, it serves as a means to underscore the fact that effective policy makers generally embrace the value of their airport and willingly serve as an advocate for its mission and success. This advocacy occurs in concert with the need for policy makers to support airport management; to understand, expect, and acknowledge the need for sound fundamental business practices in the delivery of airport services; and to garner an appreciation and respect for the many rules and regulations that govern airport activities.

A typical familiarization and training program for a new policy maker generally includes an orientation briefing about the airport, a primer report of airport issues, and a tour of airport facilities and activities. This document provides an overall orientation program as well as primer report. In addition, airport industry groups, such as the American Association of Airport Executives, Airports Council International, and state aviation organizations, help orient new policy makers through conferences and special programs.

# How this Document is Organized

This document consists of four elements:

• A **primer** addressing 20 issues germane to airport management organized into four broad subject areas:

General — things policy makers should know about their roles, their duties, and basic information about airports;

The Airport — issues related to one airport, including what is on the airport, who uses it, how it is operated, how it is planned for future growth, and how its neighbors are protected;

Financial — airport budgets, capital improvement financing, and other financial aspects of the airport business;

Rules — the many rules and regulations that govern airport activities.

- Reference material to enable the reader to obtain additional information on aviation and airport issues (Appendix A).
- **Acronyms** often used in the airport industry (Appendix B).
- A **proposed outline** for a briefing that an airport administrator might use to provide orientation material to new policy makers and/or other key stakeholders (Appendix C).

This document is structured to be user-friendly with each issue discussed in two to four pages under headings entitled: Key Point, Discussion, and Application. The Key Point section offers a quick statement of the issue being reviewed while the Discussion element offers a broad overview of the issue. The purpose of the Application section is to provide suggestions for further learning as well as tips on how to apply what one has learned. There are several issues where certain concepts overlap other issue papers. In these instances the reader will find cross-references to other issue papers. The tabs along the sides of each issue paper help the reader locate other papers within the document.

For purposes of the primer, the term "part-time policy maker" refers to those persons not directly involved in the full-time management of airports, and includes airport board/commission/authority members, advisory groups, city councils, county boards, economic development boards, elected officials, and other key participants in airport policy discussions. The term "airport manager" refers to the manager, director, or the staff that provides day-to-day oversight and direction of the airport.

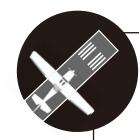
The terms "airport owner", "airport sponsor", and "airport operator" are used interchangeably in this document. When airport owners receive state or federal grants for airport development, they are typically referred to as an airport "sponsor." "Airport operator" refers to the airport owner's role in the many aspects of airfield operations.

# CHAPTER 2 ISSUE PAPERS



## **GENERAL**

- 1. The Roles of Airport Policy Maker and Airport Manager
- 2. Principles of Governance
- 3. Partners and Relationships
- 4. Your Airport in Context
- 5. Understanding and Conveying the Value of Your Airport
- 6. A Pilot's Perspective of the Airport



## THE AIRPORT

- 7. Basic Elements of Your Airport
- 8. Your Airport in Action
- 9. What It Takes to Operate Your Airport
- 10. Planning and Developing Your Airport
- 11. Protecting and Preserving the Airport and Its Environs
- 12. National Issues with Local Significance



## **FINANCIAL**

- 13. Sources and Uses of Operating Funds
- 14. Funding Capital Improvements
- 15. Your Airport as a Business
- 16. Purchasing Goods and Services for Your Airport
- 17. Use of Airport Revenue



## **RULES**

- 18. What's Expected of Airport Tenants and Users
- 19. Complying with Federal Grant Assurances
- 20. Alternate Uses and Restrictions of Your Airport



# 1. The Roles of Airport Policy Maker and Airport Manager

## **Key Point**

Successful airports are characterized by an effective working relationship between airport policy makers and management. In this context, it is important that policy makers understand and appreciate the respective roles and responsibilities of each. In general, policy makers establish broad goals and objectives for management to accomplish. In turn, airport management implements programs aimed at achieving these goals and objectives while operating the airport on a day-to-day basis.

## Discussion

In the United States, it is typical for a city, county, or other public body to own and operate public airports. The appointed officials of these entities serve as airport policy makers often organized as an airport board, commission, authority, or local governing body.



Typical roles and responsibilities of the policy-making body and airport management are shown below:

Governing Body/Policy Maker	Airport Management/Manager	
Establishes policy	Implements policy	
Sets goals	Runs the airport day-to-day	
Identifies strategies for fulfilling the vision	Reports to the governing body	
Executes contracts	Operates the airport safely and efficiently	
Serves as airport advocate	Maintains the airport and its facilities	
Approves plans and programs	Prepares financial plans	
Assigns and oversees the airport manager's responsibilities	Oversees public relations	
Selects consultants and service providers	Makes provisions for passengers and the public	
	Recommends and enforces rules and regulations	
	Oversees planning and construction projects	
	Secures new business	

Airport policy-making boards generally have several documents that govern their activities, including:

- Bylaws rules of order and protocol for documenting official acts;
- Contracts and ordinances defines the board's relationship with the airport users and tenants;
- Rules and regulations outline the board's relationship with airport users not otherwise bound by contracts and ordinances (see Issue Paper Rules # 18: What's Expected of Airport Tenants and Users);
- Job descriptions position descriptions for airport staff;
- Code of ethics establishes policies as required by local/state law regarding the conduct of board members; defines conflicts of interest; and
- Annual budget outlines anticipated revenues and expenditures.

## **Application**

Effective airport policy makers:

- ✓ Serve as airport advocates who understand and communicate the value of the airport to the community (see Issue Paper- General # 5: Understanding and Conveying the Value of Your Airport);
- ✓ Direct and support airport management;
- ✓ Are cognizant of the key financial information about their airport;
- ✓ Understand and have a tolerance for the myriad of federal, state, and local regulations; and
- ✓ Respect the board's governing principles (see Issue Paper- General # 2: Principles of Governance).



# 2. Principles of Governance

## **Key Point**

Members of airport governing bodies are charged with adhering to basic fundamental democratic principles of governance. These principles enable policy makers to effectively discharge their fiduciary duties, maintain public trust, and ensure that both individual actions and decisions, made as a whole, are at all times ethical and conform to both criminal and civil law.

#### Discussion

Airport governing bodies develop and adopt a "Code of Ethics" to govern their personal conduct, deliberations, and

actions as a whole. Governing bodies also adopt policies and procedures for the conduct of their meetings. These measures are affirmed each calendar or fiscal year by recorded formal action.

In addition to broad-based principles of governance, states and localities have laws that govern how public officials are to conduct themselves. These laws promote accountability and transparency by allowing the general public to be fully informed about the actions of the governing body, with public access provided to how decisions are made and how funding is allocated. While they may vary by state and locality, local laws generally address the following:

- Obligations and expectations associated with the discharge of duties;
- Prohibited conduct including the acceptance of gifts and favors;
- Restrictions on the acquisition and use of real estate;
- Conflict of interest disclosures related to financial holdings and interests;
- Freedom of Information Act (FOIA) requirements for advertising meeting dates and locations, conduct of meetings, and retention/release of public records and documents.

In addition to basic principles of governance, policy makers should be aware of the many rules and regulations that govern airport activities. See Issue Papers 18-20 for a discussion of many of these.



#### **Risks and Liabilities**

Public entities and those that serve them are exposed to certain risks and liabilities. Newly appointed policy makers especially may not understand their responsibilities or their liability if they or the policy-making body take improper actions. Typical claims brought against a public entity, its employees, and volunteers are for alleged or actual breach of duty, neglect, error, misstatement, or omission in the course of public duties. These might relate to award of contracts, employee termination, an aircraft accident, or any other activity under the purview of the airport owner, policy-making board, or airport management. Insurance companies offer protection for individuals from this exposure.

Recommended practices that policy makers can take to help limit their liability include:

- Act within the authority granted by the governing documents and relevant statutes;
- Avoid all conflicts of interest. This includes disclosing conflicts of interest and recusing oneself from participating in a vote where the member has a conflict of interest;
- Attend the meetings of the policy-making body (board/commission, authority, etc.). Absence from a board meeting does not necessarily release one from the responsibility for decisions made. A pattern of absence may increase an individual's liability because they cannot demonstrate a dedication to the obligations of the position;
- Stay informed about issues and deal with them in a timely manner. Board members are often more at risk for taking no action than for taking the wrong action for the right reasons;
- Ensure a record of all votes. It also helps to show when the board made serious consideration of an action before the action was taken;
- · Make a record with respect to all issues that arise at meetings. This includes attaching experts' reports and counsel opinions to minutes of the meeting;
- Ensure the policy-making board keeps comprehensive and up-to-date personnel policies; and
- Review and understand financial statements and ensure employment and income taxes are paid.

## Application

- ✓ Request that airport management and legal counsel provide an overview of the ethics and laws related to your role as a policy maker;
- ✓ Anticipate ethical issues such as:

Can I accept a gift from a major airport tenant? Can we keep the public away from the upcoming controversial board meeting?

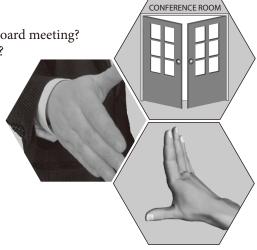
Can we award a small marketing contract to the mayor's brother?

✓ Additional information sources:

The American Association of Airport Executives (AAAE) Code of Ethics:

www.aaae.org/membership/codeofethics.cfm

The National Association of Counties (NACO) Code of Ethics: http://www.naco.org/Counties/Pages/CodeofEthics.aspx

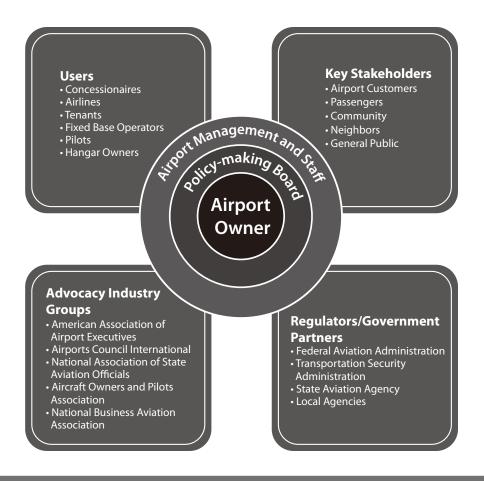




## 3. Partners and Relationships

#### **Key Point**

Airports are typically owned and operated by local governments; however, it is not a lonely endeavor. State aviation agencies, the Federal Aviation Administration (FAA), the Transportation Security Administration (TSA), and airport industry groups are strong partners that provide technical guidance, set important standards, and in some cases help fund capital development. States, FAA, and TSA also regulate and control many aspects of aviation and airports. In addition to these organizations, there are many individual and stakeholder groups that airports impact. Local airport policy makers should have an awareness of the airport's relationships with these partners and stakeholders.



#### Discussion

Users, stakeholders, and industry groups all influence airport operations and plans. Correspondingly, state aviation agencies, the FAA, and TSA exert the greatest influence on airports and are more fully described below.

**States** generally have a staff dedicated to airport and aviation support — typically a department, division, or aeronautics agency. Many states have a formal grant program and can assist local airports with planning, maintenance, construction, land acquisition, terminal development, security projects, and some or all of the local financial share of federal grants. Some states also license airports based on state standards.

**FAA** is the federal agency charged with the regulation and safety of civil aviation. FAA's primary roles and responsibilities include:

- Operating the air navigation and air traffic control systems (owning facilities on some airports);
- Administering a multi-billion dollar Airport Improvement Program for the planning and development of airports (see Issue Paper # 14 Financial: Funding Capital Improvements);
- Certifying pilots, aircraft, and commercial airports;
- Maintaining standards for development of airports;
- Regulating air travel;
- Publishing the National Plan of Integrated Airport Systems (NPIAS); and
- Promoting environmental compatibility of aircraft, flight procedures, airport operations, and airport development.

Airports primarily interface with an FAA Airports District Office or Regional Airports Division on most issues. FAA's Air Traffic Organization often assists with matters related to navigational aids, air traffic control, and development of instrument flight procedures.

**TSA** is the federal agency responsible for overseeing aviation security and issues rules and regulations for airports serving commercial air carrier and cargo operations. Although there are no similar regulations for general aviation airports, TSA has published guidelines for these facilities.

A primary feature of airport relationships is the span of control and authority vested in these government organizations. The following table provides examples of federal, state, and local government control and oversight:

State and Local Control	Federal Control	
Airport ordinances and resolutions	Navigable airspace (exclusive control)	
Zoning and land use	Aircraft, pilot, and airport certification	
Building codes	Aircraft noise standards	
Rules and regulations	Regulation of airports	
Minimum standards	Regulation of pilots and aircraft	
Taxes and impact fees	Noise abatement and mitigation	

## **Application**

- ✓ Become familiar with the state aviation organization and know how it can help.
- ✓ Work with the airport manager to understand key relationships, especially FAA.



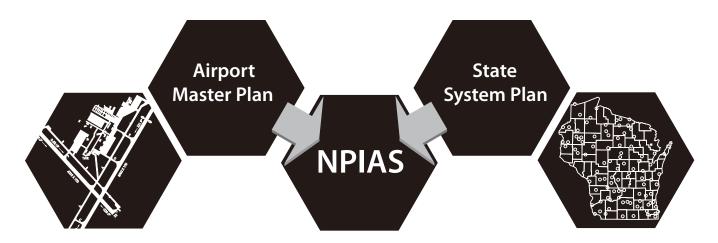
# 4. Your Airport in Context

## **Key Point**

The National Airspace System (NAS) is a complex collection of air navigation and air traffic control facilities, systems, equipment, and airports located throughout the United States. The U.S. Congress recognized the importance of ensuring that all communities and citizens have access to air transportation by establishing the NAS and provides funding for its ongoing development, operation, and maintenance.

#### Discussion

The NAS includes approximately 500 commercial service airports and 2,800 public-use general aviation airports located across the nation as designated by the FAA in the NPIAS. Airports included in the NPIAS are eligible for federal financial assistance through the FAA-administered Airport Improvement Program (AIP). AIP grants provide much of the funding for airport capital improvement projects that enhance capacity, safety, and security, preserve existing infrastructure, and mitigate environmental impacts.



Airports are classified in the NPIAS as follows:

- Commercial service scheduled airline service with more than 2,500 passengers annually;
- Primary airports commercial service airports with more than 10,000 passengers annually. Primary airports also are classified as large, medium, small, and non-hub based on their percentage of the nation's passengers;
- General aviation minimal or no scheduled airline service, boarding less than 2,500 passengers annually; and
- Reliever general aviation airports specially designated to reduce congestion at nearby busy primary airports.

An airport's classification plays an important part in how FAA allocates funding for airport development under its grant program (see Issue Paper#14 – Financial: Funding Capital Improvements).

FAA identifies the following basic principles of the NPIAS. Many of these are based on law and are reflected in FAA's programs, regulations, and policies. The NPIAS holds that airports should be:

- Safe and efficient, located at optimum sites, and developed and maintained to appropriate standards;
- Affordable to both users and government, relying primarily on user fees, and placing minimal burden on the general revenues of federal, state, and local governments;
- Flexible and expandable, able to meet increased demand and to accommodate new aircraft types;
- Permanent, with assurance that they will remain open for aeronautical use over the long-term;
- Compatible with surrounding communities, maintaining a balance between the needs of aviation and the requirements of residents in neighboring areas.

An old phrase among airport managers is that "If you have seen one airport, you have seen ONE airport!" This is intended to express the uniqueness of all airports, a fact that adds to the challenge of managing and leading public aviation facilities. Airports can vary significantly relative to airport activity, infrastructure needs, and airspace requirements. Some states develop a state airport system plan that may group airports based on their roles, geographical areas of influence, and infrastructure needs. The state system plan will help guide state aviation officials in making resource and funding decisions.

## **Application**

- ✓ Learn how well your airport meets the basic goals of the NPIAS.
- ✓ Learn about your airport's current and planned classification and how that relates to FAA grant funding.
- ✓ Find out if your state has a system plan and learn about your airport's role within that plan.
- ✓ Become familiar with how your airport compares with other nearby airports.



# 5. Understanding and Conveying the Value of Your Airport

## **Key Point**

The value of an airport to a community can be significant because it provides access to the national airspace system and serves the needs of businesses, the flying public, emergency medical activities, aerial firefighting, aerial agriculture, search and rescue operations, law enforcement, and other uses. An airport generates considerable direct and indirect economic value to a community by generating jobs, services, and taxes. Promoting the airport in the community, making the public aware of its value, and generally building good relations with stakeholders is critical to the airport's successful operation.

#### Discussion

## The Value of an Airport

Commercial service airports obviously provide great value to the airlines and their customers. However, both commercial service and general aviation airports provide access to the national air system for a wide range of general aviation uses including:

- aerial agricultural applications
- aerial firefighting
- · aerial mapping
- · air ambulance
- air taxi/passengers ondemand
- air tours
- business/corporate uses
- damage assessments

- delivery of fresh food
- · disaster relief
- drug enforcement
- emergency medical service
- external load hoisting
- flight instruction
- · forestry management
- government use
- overnight packages

- personal/recreation
- pest control
- power line inspections
- search and rescue
- · sight-seeing
- traffic advisory
- transporting human organs
- weather observations
- · wildlife management

#### All airports:

Attract businesses. The airport is an important element in the attraction and retention of businesses. It serves as a gateway for the community by providing air access for business and corporate activities.

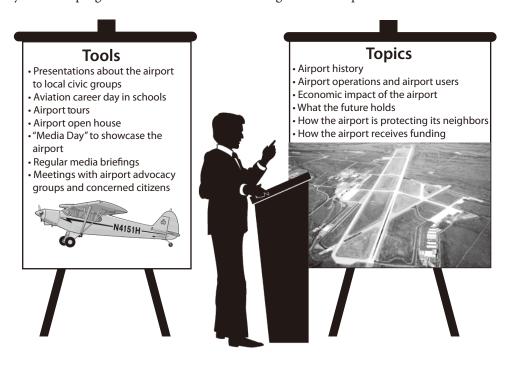
*Support aviation-related firms and businesses.* The airport supports businesses that provide aviation-related services. These businesses employ people, pay taxes, and attract visitors.

*Serve individual needs.* The airport provides air access to the local community for emergency airlift, personal recreation, business, or commercial purposes.

The National Business Aviation Association reported in 2010 that business aviation contributes \$150 billion to U.S. economic output and employs more than 1.2 million people. Many local governments and states have undertaken economic impact studies for their airports. These studies assist with strategic economic investment decisions, evaluation of airport expansion alternatives, and informing decisions about land use and commercial projects in the vicinity of the airport. They also support public relations programs for educating policy makers, airport users, and the general public about the economic value of the airport.

## **Promoting the Airport**

Promoting the airport within the community and building a positive relationship with local media are essential to achieving success for your airport. Public relations activities not only communicate the airport's vision, goals, and value, but also address potential negative opinions of the airport and aid with addressing emergency situations when they arise. Effective community outreach programs often include the following tools and topics:



## **Application**

- ✓ Educate yourself about the airport's vision, the value of the airport, and who uses it.
- ✓ Share information with others about the value of the airport.
- ✓ Build a relationship with local airport advocacy groups, concerned citizens, airport neighborhood groups, and locally elected officials.
- ✓ Learn who local, state, and federal decision makers are and be prepared to work with the airport manager to promote your airport's needs to these individuals.
- ✓ See publications and websites from airport industry groups.



# 6. A Pilot's Perspective of the Airport

### **Key Point**

Pilots are the most important users of an airport; therefore, it is important to understand their perspective primarily as it relates to the adequacy of the airport's infrastructure and how its layout and systems contribute to their flying experience. These systems include the runway(s), runway approach procedures in poor visibility conditions, air traffic control and communications systems, and other support systems for the pilot.

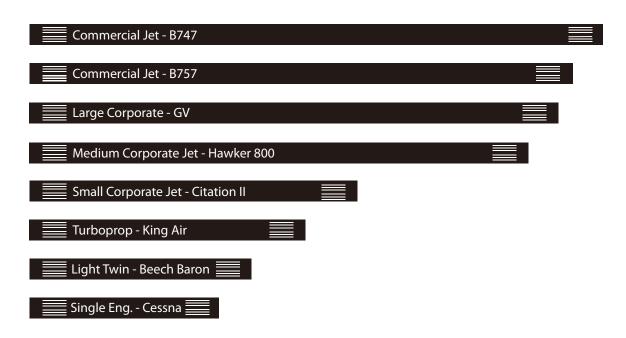
#### Discussion

## The Runway

The airway system and airports can be particularly confusing for non-pilots, but a policy maker should know that the rules of the sky are integrally linked to the design criteria for airports and the specific categories of aircraft they serve. Once a particular aircraft type or class is documented as "routinely" using an airport (more than 500 annual combined aircraft takeoffs and landings) then that aircraft or family of aircraft represents the "critical design aircraft" for airport development — specifically the runway and airfield geometry.

Pilots understand the performance characteristics of their aircraft and will review the runway's length, width, and pavement strength to ensure their flight operations will be safe. Common terminology that pilots and air traffic controllers use relative to runways are "preferred" and "primary" runways. The primary runway is normally the one that is longest and/or has the best navigational aid capability. The preferred runway is often the primary runway but might be another runway based on the pilot's location on the airfield and wind conditions.

Airport management works with the FAA to monitor airport activity and periodically updates the Airport Layout Plan (ALP) to meet the demand. The required runway length is a typical topic of discussion tied directly to the critical design aircraft. The following graphic depicts the relative runway length requirements for takeoff of specific aircraft, ranging from 3,000 to 12,000 feet.





Runway Approach During Poor Visibility



Air Traffic Control and Pilot Communications

# Runway Approach Capability During Poor Visibility

Pilots cannot land on runways during poor visibility conditions unless they are appropriately licensed and the runway has an instrument approach procedure. These procedures are published by the FAA and achieved with the help of navigational equipment such as a localizer, full instrument landing system, or satellite based procedures.

# Air Traffic Control and Pilot Communications

Some airports have an air traffic control tower (ATCT) where ATCT staff communicates with pilots to ensure aircraft are properly separated when taking off or landing. When there is no ATCT or it is closed, pilots use a Common Traffic Advisory Frequency to communicate with one another. Airport staff also advise pilots of unusual conditions such as closed taxiways or runways by issuing Notices to Airmen.

## A Pilot's Perspective on Airport Safety

Airport staff, engineers, and planners can help provide a safe environment for pilots by having good airfield signage and marking that meets FAA standards, by eliminating confusing or complex geometry on the airfield, and providing takeoff and landing paths free of obstructions. Examples of complex geometry that can create runway incursions are when several taxiways and one or more runways meet at one intersection.

## Application

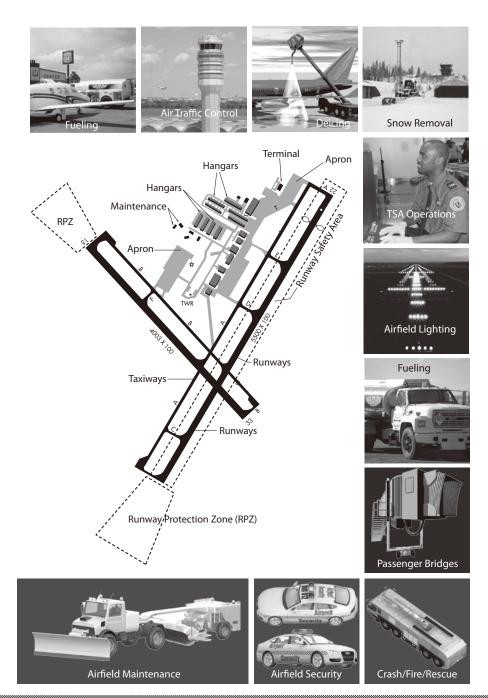
- ✓ Talk to pilots that use your airport to find out their views about how safe and efficient your airport is and what improvements may be needed.
- ✓ Learn more about a pilot's view from the Aeronautical Information Manual: http://www.faa.gov/air\_traffic/publications/ATPubs/AIM/aim.pdf.



# 7. Basic Elements of Your Airport

## **Key Point**

An airport's infrastructure is often discussed in terms of landside and airside facilities. The airside of an airport is planned, developed, and managed to accommodate the movement of aircraft around the airport as well as to and from the air. The landside of an airport is planned, developed, and managed to accommodate the movement of ground-based vehicles, passengers and cargo, parking lots, garages, entrance roads, and non-secure areas. The basic elements of small general aviation airports are obviously much different than large commercial service airports. Following is a diagram depicting the basic airside elements of an airport:



## Discussion



The airport owner ensures landside features such as access roads, circulatory roads, and auto parking are of sufficient capacity and are appropriately maintained to meet passenger and customer needs. Other features seen on the landside of an airport include both aviation and non-aviation related businesses, support buildings, and facilities.

Terminal areas provide the critical link between the airside of the airport and ground access. The terminal area provides the facilities and processes to efficiently move passengers, crew, and cargo onto and off aircraft. There are many different commercial building layout configurations used around the

country. When airports experience growth, some terminal buildings are expanded, whereas it may be necessary to build new terminal areas at other airports. Typical components of a commercial terminal building include curbside activities, ticketing, concessions, baggage handling, passenger screening/security, concourses, holding areas, gates, and jetways to aircraft. A typical general aviation terminal building will include a service counter, waiting area, pilot's lounge, flight planning, and a conference room.

Airside and airfield components of an airport include aircraft parking areas, taxiways, runways, lighting systems, signage, marking, and navigational and visual aids. Pavement edge lighting and airfield signs provide directional and situational guidance to pilots. In addition, facilities that aid in the safe operation of the airport are located on or close to the airfield, such as aircraft rescue fire fighting (ARFF) facilities, snow removal, aircraft deicing stations, fuel facilities, and weather reporting equipment.



There are also important land features such as runway protection zones (RPZs) in the approaches to runways to help protect people and property from

aircraft operations. Airport owners should own adequate land interest in the RPZs to keep them free of development not compatible with airports. Areas around the runways and taxiways that are designed to accommodate aircraft that overrun, undershoot, or veer off the pavements create another safety feature.

The size of runways and taxiways are determined largely by the critical aircraft performance characteristics at the airport's elevation and hottest average temperature. Small general aviation airports at lower elevations typically may have a 4,000-foot long runway. A medium size general aviation airport, possibly classified as a reliever airport, may have a runway of 5,500 feet or more that enables it to service small business jets. Commercial air carrier runways serving large aircraft on long range flights might be 9,000 feet in length. The weight and gear configuration of the aircraft using the airport dictate the required pavement structure and thickness.

## **Application**

- ✓ Tour the basic elements of both the landside and airside of your airport.
- ✓ Become familiar with what it takes to operate the airport (see Issue Paper #9 The Airport: What It Takes to Operate Your Airport).
- ✓ See your ALP to become familiar with your airport's layout.



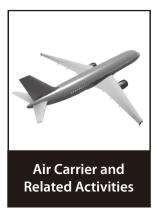
# 8. Your Airport in Action

## **Key Point**

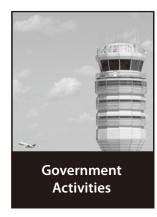
Airports possess their own unique financial, political, operational, and environmental challenges. Some are small and fairly calm while others are large and bustling with activity for much of the day. Although unique as standalone entities, all airports link communities to the national air transportation network and are seen as places of action and commerce since their primary role is to safely transport people and cargo.

#### Discussion

Airport activities can be separated into four broad categories.









**Air carriers**, whether an airline or cargo carrier, decide which markets they serve by weighing projected revenue to be generated against the estimated cost of providing service. Airlines focus on the size of the actual and potential market, fuel costs, landing fees, counter and office rentals, and costs associated with launching service in a new community.

General aviation services are usually provided by a fixed-base operator (FBO). An FBO may be a private enterprise or city/county/state owned. FBOs generally offer fuel, oil, and aircraft maintenance services. Full-service FBOs offer a variety of other revenue generating services such as aircraft rentals and sales, charter flights, pilot training, and specialty maintenance. FBOs also typically provide an area in their facility for flight planning, weather briefings, and a computer terminal for automated flight activities. In addition to FBOs, some airports have Specialized Aviation Service Operators (SASOs) which offer a single or complementary service such as aircraft rental and flight training.

**Government activities** on an airport may include air traffic control, maintenance of navigational equipment, passenger security, customs, and federal inspection. At some airports, air traffic control may be handled by a private company rather than FAA employees.

See Issue Paper # 9 – The Airport: What it Takes to Operate Your Airport for information about **airport owner activities** relative to operating the airport. Air carrier airports and a few general aviation airports have on-site aircraft rescue and fire fighting capability, with associated personnel. They also may have on-site snow removal equipment, de-icing capability, and maintenance operations.

The table below illustrates the wide variety of services and activities typically found at an airport. As shown, these activities vary based upon the size and type of airport. Smaller air carrier airports may not have all of the activities shown and some general aviation airports may have more services than shown, while some of the federal activities may be limited to only certain airports.

Type of Activity/ Service	Air Carrier Airport (Large Hub/ International)	Air Carrier Airport (Small)	General Aviation Airport (Busy/Reliever)	General Aviation Airport (Small)
Airlines	✓	✓		
Passenger terminal	✓	✓		
General aviation terminal	✓	✓	✓	
Food service	✓	✓	✓	
Taxis on site	✓	✓		
Concession shops	✓	✓		
Charter service	✓	✓	✓	
Fixed-base operator full-service	✓	✓	✓	
Fixed-base operator minor service				✓
Cargo facilities	✓	✓		
Flight training	✓	✓	✓	
Medivac facilities	✓	✓		
Air traffic control	✓	✓	✓	
Federal customs/ inspection	✓			
Federal passenger security operations	✓	✓		
Airport rescue and fire fighting operations	✓	<b>√</b>		
Airport maintenance on-site	✓	✓		
Snow removal/ de-icing	<b>√</b>			

## Application

✓ Tour your airport to become aware of its activities, services, and tenants.



# 9. What It Takes to Operate Your Airport

### **Key Point**

The complexity of operating an airport obviously varies depending upon the type and size of airport. Large commercial service airports may have an organization with full staffs handling *finance, administration, planning and engineering, landside operations, terminal building operations, and airside operations*. Small general aviation airports may handle all of these functions with very few people. A primary goal for all airports is to have an effective operations program that generally focuses on airfield safety, security, maintenance, and emergency preparedness.

#### Discussion



Just as pilots are required to receive an FAA certificate demonstrating their "competency," certain airports are required to do the same. Federal Aviation Regulations (FAR) Part 139 outlines these "competency" requirements and applies to airports that serve scheduled air carrier aircraft with more than nine seats or unscheduled air carrier operations in aircraft with more than 30 seats. Elements of **all** airport safety programs should focus on operational airfield safety and include the condition and adequacy of several airfield elements, as shown in the Sample Inspection Checklist on the following page.

The most costly requirement of FAR Part 139 is the provision of aircraft rescue and firefighting services. The FAA regulation specifies minimum equipment, how quickly this equipment and personnel must respond to an emergency, and minimum training for firefighters. FAA staff perform a periodic inspection of certificated airports and a simulated emergency ARFF drill to determine if the staff and equipment can meet the required response time.

In addition to the regulatory requirements for certificated airports, **all** airports should maintain and operate a safe airport. This is best done in the course of daily operations of the airport, with a process that includes:



Other elements of a good airport operations program include a communications protocol with the airport traffic control tower staff (if there is one), a program to prevent runway incursions, management of wildlife hazards, issuance of notices to airmen when needed, personnel training, and noise abatement procedures.

#### Sample Inspection Checklist

	Sa	mple I	nspection Checklist		
Date:	Day:		✓ Satisfactory		
Time:	Inspector:		X Unsatisfactory		
FACILITIES	CONDITION	<b>✓</b>	FACILITIES	CONDITION	✓
	Pavement lip over 3"		Fueling operations	Fencing/gates/signs	
	Hole 5" diam, 3" deep		1 0.	Fuel marking	
Pavement areas	Cracks/spalling/bumps		-	Fire extinguishers	
	FOD: gravel/debris/etc.		1	Grounding clips	
	Rubber deposits		1	Fuel leaks/vegetation	
	Ponding/edge dams		Snow and ice	Surface conditions	
	Ruts/humps/erosion			Snowbank clearance	
Safety areas	Drainage/construction			Lights and signs obscured	
	Objects/frangible bases			NAVAIDS/fire access	
	Visible/standard		Construction	Barricades/lights	
Marking and signs	Hold lines/signs			Equipment parking	
	Frangible signs		ARFF	Equipment/crew avail.	
Lighting	Obscured/dirty/faded			Communications/alarm	
	Damaged/missing		Public protection	Fencing/gates	
	Inoperative			Signs	
	Faulty aim/adjustment		Wildlife hazards	Dead birds	
Navigational aids	Rotating beacon			Flocks of birds/animals	
	Wind indicators		Obstructions	Obstruction lights	
	Runway end ID lights			Cranes/trees	
	Visual approach indicator				

Part 139 certificated airports are required to have an *emergency plan*; however, **all** airports should have a plan for how to handle emergencies. The plan should be coordinated closely with other regional emergency plans and agencies. Emergencies can range from an aircraft incident to a natural disaster.

Similar to the safety requirements of airports, the TSA has specific regulatory requirements for the secure operation of air carrier airports. These include controlling access to the airport operations area, perimeter security, and law enforcement. The airport owner outlines the security program and procedures in an Airport Security Manual that is approved by TSA. TSA also provides advisory information for security of general aviation airports.



# **Application**

✓ Request that airport management provide an overview of the airport's operations programs and emergency plan.



# 10. Planning and Developing Your Airport

## **Key Point**

When developing the physical elements of your airport, it is important to have a thoughtful, comprehensive, and well-coordinated plan to guide growth aligned with the airport's vision. An ALP is the document that depicts your airport's 20-year plan for growth. The ALP depicts the existing and proposed airport land uses and infrastructure and is sometimes prepared as part of an airport master planning process. Airport sponsors also prepare an airport capital improvement plan (ACIP) that outlines the cost, funding, and timing for each capital item. The ACIP is often in a spreadsheet format, while the ALP shows the proposed development in a graphic/drawing format. The FAA requires an airport sponsor to maintain a current ALP as a condition to receiving federal grant assistance. The FAA and state funding agencies also require submission of an annual ACIP, typically covering the next five years of projects. The ACIP is updated at least annually, while the ALP is updated as frequently as active development is being undertaken, but typically every five years.

#### Discussion

The typical process for airport development is to plan the project or development, assess its potential environmental impacts, design the project, and then construct it. Development of the ACIP normally parallels this process. As new or more detailed information is available, the funding plan may change.



# **Airport Master Plans**

Some airport owners prepare or update a comprehensive airport master plan with significant public and community involvement. The primary elements of an airport master plan include:

- inventory of existing facilities;
- development of 20 year forecast of aviation activity;
- identification of facility requirements to meet anticipated aviation activity;
- consideration of alternatives;
- overview of environmental impacts;
- analysis of financial feasibility;
- preparation of an ALP, showing the 20-year proposed development.

Master plans also consider state or regional system plans which assist with understanding how the airport fits in a larger region or area, both now and in the future.

## **Airport Layout Plans**

An ALP is important because it serves as:

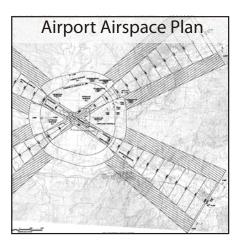
- A guide to what, where, and when certain facilities should go on an airport;
- A blueprint for airport land use and development in accordance with FAA criteria;
- A **public record** of future and present aeronautical requirements;
- A tool to facilitate discussions with the FAA about Airport Improvement Program grant funds.

The ALP shows runways, taxiways, aprons, buildings, navigation aids, pertinent safety clearances, and anticipated timing for each proposed facility. While use of the term "ALP" typically refers to the primary drawing sheet, the ALP actually consists of an entire set of drawings which includes:

- **Airport Layout Plan Drawing** existing and proposed facilities (the primary drawing);
- Terminal Area Plan enlarged view of terminals, aprons, hangars, and auto access/parking;
- Airport Airspace Plan protected "imaginary" surfaces in airspace surrounding the airport;
- Land Use Map existing and future land use on and around airport property; and
- **Airport Property Map** airport property boundary, inner parcels, and adjacent properties. Includes acquisition history, existing and proposed easements, and future land acquisition.









When FAA approves an ALP it is concurring with the airport owner's plan for airport development. The plan generally meets FAA geometric design criteria; however, this does not mean FAA concurs with the funding of proposed development. The FAA also considers the overall utility and efficiency of the proposed layout when reviewing the ALP. The airport land will be effectively used to meet aeronautical demand and revenue needs, and the existing/proposed airfield is of sufficient capacity and an efficient layout.

The airport sponsor must develop, operate, and maintain the airport in accordance with the latest approved ALP. FAA or state approval of an ALP is not a commitment that they will fund the development shown on the ALP. Also, they will often "conditionally" approve an ALP pending final completion of environmental documents and issuance of a finding of no significant environmental impact.

# Airport Capital Improvement Plan (ACIP)

The ACIP is the primary tool for systematically identifying, prioritizing, and assigning funds to support development and capital needs for an airport. The FAA relies on the ACIP to serve as the basis for the distribution of limited grant funds under the AIP. A sponsor's ACIP represents their five-year program for planning and development at their airport.

An ACIP is important because it serves as:

- A guide for FAA, state, airport, and other agencies to evaluate funding needs;
- A **resource** for FAA when evaluating an airport's needs versus those of an entire region;
- A **tool** for FAA and the state to effectively plan and program funding over the long term;
- A necessary **instrument** for applying for FAA and most state grant funds.

For more discussion about types of actual funding, see Issue Paper #14 – Financial: Funding Capital Improvements.

# **Environmental Impacts**

Prior to undertaking a project, the airport is responsible for ensuring that it is in compliance with applicable environmental laws, regulations, and processes. FAA requirements for addressing environmental impacts are based on federal law and regulations and require one of three types of documentation of a project's environmental impacts and mitigation, including:

- 1. Categorical exclusion (example project: apron overlay);
- 2. Environmental assessment (example project: runway extension at a general aviation airport); and
- 3. Environmental impact statement (example project: new air carrier runway at a large hub airport).

FAA prescribes in detail how to prepare these documents. A project's impact is normally examined relative to up to sixteen environmental impact categories, including:

- air quality,
- noise,
- hazardous materials,
- wetlands,
- fish and wildlife,
- prime farmland, and
- historical, architectural, cultural significance.

In addition, there may be unique local, state, and regional environmental review requirements. The environmental approval process can take much longer than anticipated because of these many impact categories, as well as the required coordination with local, state, and federal agencies, and public involvement.

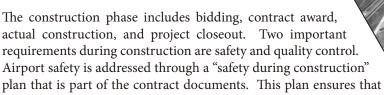


# **Project Design and Construction**

Assuming projects are consistent with an approved ALP and have environmental approval and funding for construction is fairly certain, sponsors normally proceed with preparation of detailed design documents and project construction. There are specific federal requirements for how these services

are procured (see Issue Paper # 16 – Financial: Purchasing Goods and Services for Your Airport).

The design process typically includes selection of a consultant, a predesign conference, design review meetings with the airport owner and key airport stakeholders, an engineer's report, and preparation of construction plans and specifications.



contractor personnel and equipment stay away from active runways and taxiways. Quality control of the construction is normally addressed through appropriate resident inspection and testing of construction materials. For example, pavement materials and earthwork are tested to ensure what is actually placed meets specifications. There is also a final inspection at the completion of the project where airport, state, and federal officials confirm the project is complete and associated grants can be administratively closed.

Safety

Design

**Progress** 

Monitoring

Construction

- ✓ Become familiar with the airport's vision and its ALP.
- ✓ Keep your ACIP real. It should not be a wish-list, but rather a realistic, achievable plan based on demonstrated need.
- ✓ Embrace a goal to always meet safety standards when developing the airport.
- ✓ Be a responsible steward of the environment.



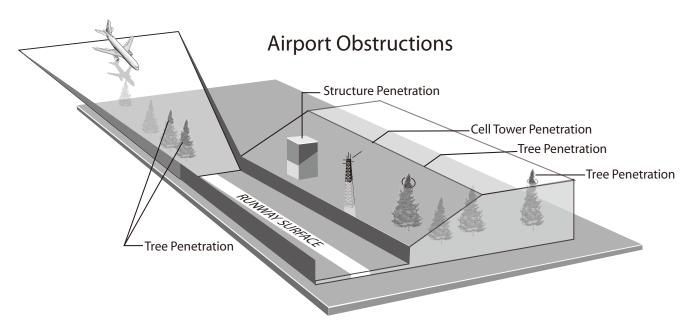
# 11. Protecting and Preserving the Airport and Its Environs

# **Key Point**

It is common for a community to develop around an airport and encroach on the land and airspace that is often critical to the airport's longterm viability. Prevention of incompatible uses around the airport is critical because of their potential to impact airport operations and vice versa. Primary tools available to local governments to prevent incompatible development include zoning, land use plans, ordinances, building permits, and land acquisition.

#### Discussion

The three areas of primary concern for both the protection and safety of an airport are height of objects (typically called "obstructions"), aircraft noise impacts, and hazards created by the presence of wildlife.



#### **Obstructions**

Tall objects such as cell towers, water tanks, wind farms, or trees that penetrate airspace where aircraft fly are obviously not appropriate. FAA's Regulation Part 77, Objects Affecting Navigable Airspace, defines "imaginary surfaces" that generally should be kept free of penetrations. One of these imaginary surfaces is the approach slope to the runway threshold.

Both zoning and the building permitting process are used to help prevent tall objects around airports. FAA may also deem a proposed object a hazard, which in most cases will halt the issuance of a building permit. A common form of zoning associated with airports is the development of an airport zoning ordinance. These are typically sponsored by local municipalities or state statute. When feasible, they should include both height and land use restrictions to adequately protect the airport, safe movement of aircraft, and persons that live or work in the vicinity of the airport. Proponents of proposed structures near airports are required to obtain FAA approval prior to construction. Local governments should institute a process where this coordination is done early in the planning process.

#### Noise

Considerable progress has been made over the past 20 years to reduce aircraft engine noise; however, this issue remains as a point of controversy between airports and their neighbors. The public is concerned not only about the total amount of noise to which it is exposed, it is also concerned about the number of flights that pass over their home, the individual noise levels emitted from aircraft, the time of day or night aircraft pass over, and the aircraft's height in proximity to the ground. Through a federal Interagency Committee on noise, FAA selected 65 day-night noise level (DNL) as the threshold of significance. DNL is a composite rating of noise that considers nighttime aircraft noise as normally more of a nuisance than day-time noise. This DNL rating includes consideration of the noise of multiple aircraft takeoffs and landings, with those at night counting 10 times those in the day. Many airports have prepared noise maps that identify the DNL contours for their airport. Communities use these noise maps to guide the adoption of responsible land use plans and zoning to protect both the airport and its neighbors.

Techniques used to mitigate aircraft noise impacts include:

- Work with FAA to modify flight track location to overfly corridors of compatible land use;
- Establish voluntary runway use programs, maximizing certain runways and flight tracks when weather and activity permit;
- Manage time and location of aircraft engine run-up operations; and
- Acquire or soundproof noise-impacted properties such as residences, churches, and schools.

A land use could be deemed incompatible due to noise sensitivity or due to the need to keep certain areas surrounding an airport clear of structures and congregations of people. RPZs (see Issue Paper #7 – The Airport: Basic Elements of Your Airport) protect people and property on the ground. These areas are located at the end of each runway and the airport owner should hold sufficient property interest to achieve and maintain the area clear of all incompatible land use, objects, and activities.



### Wildlife Hazards

Activities on or near the airport that attract wildlife such as deer and birds should be avoided or managed to prevent aircraft hazards. Many airports use fencing and employ vegetation practices to keep out land animals. FAA has specific guidelines for the management and location of bird attractants such as landfills and water areas. FAA's airport safety experts can advise airport management about policy and practices related to wildlife hazards. Local zoning codes should be amended to reduce or restrict wildlife attractants such as ponds in the vicinity of the airport.

# **Project Assessments**

Federal law generally requires the airport sponsor to identify and mitigate any environmental impacts caused by proposed airport development projects. The airport owner works directly with FAA staff to ensure this requirement is met.

# **Application**

✓ Learn what measures your local government has taken regarding land use planning and zoning around the airport.





# 12. National Issues with Local Significance

#### **Key Point**

Proposed or changing federal programs, regulations, and Congressional actions hold the potential for profound financial and operational impacts on airports. While airport governing bodies are focused on issues specific to their facility, it is essential that they have a basic knowledge about pending national legislative and regulatory matters and new programs germane to aviation and airports. Keeping informed on emerging national issues and how they may affect local operations is essential for all policy makers in order for them to govern effectively.

#### Discussion

Some of the significant national issues that hold the potential to have the greatest local impact are:

- Sustainable funding for airport development and use of federal aviation tax revenues. Many airports depend heavily on federal funding for activities such as airport development, federal operation and maintenance of air traffic control systems and navigational aids, and airport security. The lack of sustainable funding for these types of activities would negatively impact many airports. Local policy makers need to be aware of the current status of the federal authorization for aviation taxes, revenue and programs, as well as the annual appropriation of funding.
- FAA, TSA, and other federal agency legislation, regulations, and policies. There are often proposed changes to federal law, regulations, and policies relative to airport operations and development.
  - These typically involve safety, security, or environmental requirements that may impact airports. Local policy makers need to be aware of proposed or pending changes that may impact their local airport.
- FAA management of the Air Traffic Control System and transition toward satellite-based navigation. This "next generation" navigation system is referred to as NextGen and is a transformation of the entire aviation system to a satellite-based system capable of handling future aviation demand. The airport system from the runway, to the taxiway, apron, gate, terminal, and access from the air will benefit from the NextGen transition. Airports will see increased safety, greater design flexibility, better use of existing capacity, and reduced environmental impact. Local policy makers should become aware of how NextGen is impacting their airport, both currently and in the future.











• Trends in aircraft development and their impact on airport operations and airport development. Just as aircraft have evolved from the Wright Flyer to jets, industry continues to develop new aircraft types. These may range from very light jets to very large wide-bodied aircraft. Airport planners stay abreast of these changes since they impact the existing and future infrastructure needs of airports. Local policy makers need to work with airport management and anticipate how these changes might impact the operational and infrastructure requirements for their airport.



Airport staffs typically engage their Congressional representatives in discussions on these and other pertinent issues through correspondence and on-site briefings about how federal legislative or regulatory actions will impact local airports. In addition, many airports rely on organizations such as the American Association of Airport Executives (AAAE), Airports Council International (ACI), National Association of Counties (NACO), and National League of Cities to provide relevant documents, data, and status reports on both legislative and regulatory decisions. This interface provides Congressional representatives and federal agencies with insights and information they need to make appropriate and informed decisions. In the end, it is vital that local airport policy makers take every opportunity to engage their Congressional representatives to provide them with information on how the decisions they make on broad national aviation issues will impact their local constituents.

- ✓ Remain aware of national issues that impact local airport operations. Attend conference sessions where these issues are discussed. Also, review information and positions of industry groups on these matters.
- ✓ See the AAAE Federal Affairs website: <a href="http://www.aaae.org/federal\_affairs/">http://www.aaae.org/federal\_affairs/</a>.



# 13. Sources and Uses of Operating Funds

## **Key Point**

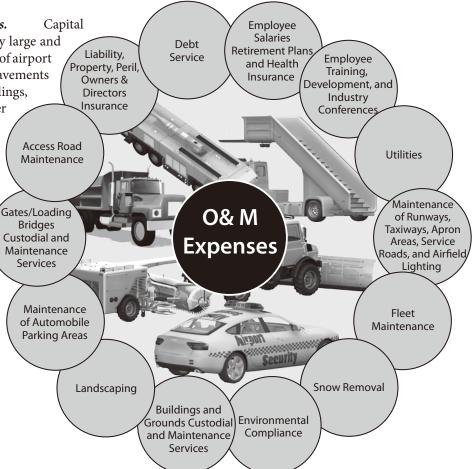
To ensure the effective and efficient delivery of aviation services to the community they serve, airport governing bodies develop and implement financial management policies and procedures, including an annual operating budget, for operating expenditures and revenues. While the size and type of airport generally dictate the scope and scale of the operating budget, the governing body should review and evaluate financial records on an ongoing basis. This review should include appropriate oversight of airport finances and a comparison of actual performance to the adopted budget. Equally important is the need to retain a qualified financial expert (internal/external auditors) to conduct an annual review of the airport's financial records and activities to ensure compliance with generally accepted accounting principles, state and local financial audit requirements, and federal grant assurances and obligations.

#### Discussion

Airport expenses normally fall into two areas:

Capital improvement expenses. Cap improvement expenses are generally large and relate to improvement or expansion of airport infrastructure, such as airfield pavements and lighting systems, terminal buildings, equipment, and land (see Issue Paper #14 – Financial: Funding Capital Improvements).

Operation and maintenance expenses (O&M). O&M costs normally occur on a regular basis and are required to maintain the current operations of the airport.



#### Sources of airport **revenue** include:

- Airfield landing fees, aircraft parking, and fuel flowage;
- Terminal concessions restaurants, travel services, specialty shops, amusements, automobile parking, hotels, and ground transportation;
- Airline leases all areas leased by the airlines;
- Other leases fixed-base operators, governmental units, industrial areas, cargo operators, and non-aeronautical leases;
- Non-operating revenue sale or lease of properties owned by the airport but not needed for airport operations, interest earned on investments, local taxes, and federal/state grants; and
- Airport resources such as sub-surface mineral rights.

As a recipient of federal grant-in-aid funding, airport operators are obligated to:

- Establish aeronautical rates and charges at a level such that the facility is as self-sufficient as possible. Nonetheless, rates charged to users for airport premises and facilities are generally set to ensure that the revenues derived from such use cover the airport's cost of providing the service and are used exclusively for airport operations;
- Use airport-generated revenue for airport purposes (see Issue Paper #17 Financial: Use of Airport Revenue).

- ✓ Become familiar with your airport's annual budget, specifically how it generates revenue and its major expenditures.
- ✓ Be prepared to make tough decisions during difficult times.
- ✓ Be aware of your annual audit process.
- ✓ DO NOT illegally use airport revenue for non-airport expenses. Anticipate being pressured to do otherwise.
- ✓ Recognize that an airport is a business and managing a well-thought budget is very important (see Issue Paper #15 Financial: Your Airport as a Business).



# 14. Funding Capital Improvements

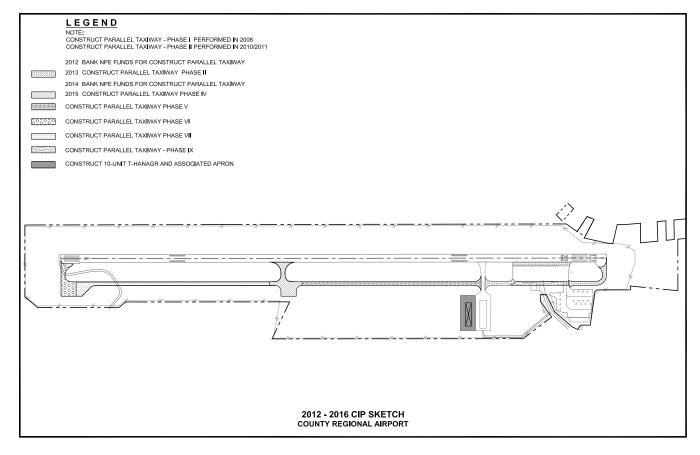
### **Key Point**

Proposed funding for the implementation of an airport's capital improvement program is outlined in the airport's ACIP. Airport development funding is principally provided through:

- FAA AIP grants;
- State grants;
- Passenger Facility Charge (PFC) revenues (commercial airports only);
- Third party private financing;
- Issuance of bonds or other forms of debt; and
- Local and/or airport reserve funds.

Each of these programs has its own requirements. The primary prerequisites for federal grants are that the work is legally eligible for federal funding, justified based on actual need, consistent with an approved ALP, and complete funding is expected to be available. Execution of capital plans are multi-year endeavors requiring extensive planning, coordination, and review by federal, state, and local agencies. The scope and magnitude of airport capital programs vary significantly based upon the identified needs of the specific airport.

#### Sample ACIP Sketch



#### Discussion

## Airport Capital Improvement Plan

Airport sponsors prepare an ACIP that outlines the cost, type of funding, and timing for each capital item. The FAA and state funding agencies require submission of an annual ACIP, typically covering five years of projects. The ACIP is the primary tool for systematically identifying, prioritizing, and assigning funds to critical airport development. The FAA relies on the ACIP to serve as the basis for the distribution of limited grant funds under the AIP.

## **AIP**

The FAA provides grants to airports through the AIP. Important elements of the AIP include:

- 1. Source of Funds: Funding is derived from user fees (e.g. passenger ticket taxes and fuel taxes) that are established by Congress and flow to the Federal Aviation Trust Fund. In addition to establishing the type and level of aviation user fees, Congress also enacts legislation that establishes annual authorization and appropriation levels for distribution of AIP funds. The FAA utilizes these legislative directives to make grant awards to airport sponsors.
- 2. NPIAS Inclusion: In order to receive an AIP grant, an airport must be included in the NPIAS.
- **3.** *AIP Eligibility:* The project must be eligible under the law. AIP grants are used for the planning and development of airports including infrastructure, land acquisition, and noise compatibility programs. AIP funds cannot be used for airport operating expenses. The following table provides examples of the types of AIP eligible and ineligible projects:

Eligible Projects	Ineligible Projects	
Runway construction/rehabilitation	Maintenance equipment and vehicles	
Taxiway construction/rehabilitation	Offices and office equipment	
Apron construction/rehabilitation	Fuel farms (with some exceptions)	
Airport marking, lighting, and signage	Decorative landscaping	
Airport regulatory safety/security projects	Artwork	
Airfield drainage	Aircraft hangars (with some exceptions)	
Land acquisition	Industrial park development	
Automated aviation weather observation and reporting	Marketing plans	
systems		
Some navigational aids	Training	
Aviation planning studies	Maintenance or repairs of buildings	
Environmental impact studies	Movable furniture	
Runway safety area improvements	Employee salaries	
Airport layout plans	Employee parking lots	
Access roads located on airport property	Roads not exclusively for airport purposes	
Removal of airport hazards	Non-public aircraft aprons	

4. Airport Layout Plan Consistency: AIP grant work items are required to be consistent with an FAA approved ALP, have undergone a thorough environmental impact review, and must conform to federal standards for the design and construction of airport improvement and/or acquisition of land or equipment (see Issue Paper #10 – The Airport: Planning and Developing Your Airport).



- **5. Demonstration of Need:** Projects must be justified based on actual need. For example, a project to lengthen a runway should be based on a demonstrated need of at least 500 annual combined takeoffs and landings by the critical aircraft that needs the longer runway. The purpose of AIP is not to support a goal of "build it and they will come," but rather to meet current demand.
- 6. Type of Funds: Both commercial and general aviation airports receive entitlement grant funds and can also compete for discretionary funds. FAA entitlement grants for commercial airports are based on the number of enplaned passengers as well as the volume of cargo generated at the airport. Funding for general aviation airports is based on the amount of development that an airport has identified within the NPIAS. In the year 2010, the maximum entitlement amount a general aviation airport could obtain was \$150,000 per year. General aviation airports can also compete for AIP grants through state apportionment allocations. Each state receives an apportionment for general aviation airports based on the size and population of the state. Discretionary funds are generally awarded based on project priorities, with required safety and security needs receiving the highest ranking and consideration.
- 7. **Grant Assurances:** Upon acceptance of an AIP grant, an airport sponsor pledges to adhere to a number of assurances as a condition for receiving federal funds. These assurances represent a binding legal agreement between the federal government and the airport sponsor (see Issue Paper # 19 Rules: Complying with Federal Grant Assurances).

The AIP is administered by FAA's Office of Airports through a regional Airports Division or Airports District Office. In fiscal year 2010, 10 states, under a special Congressionally approved provision, administered the AIP program in lieu of the FAA. These "block grant" states include Georgia, Illinois, Michigan, Missouri, New Hampshire, North Carolina, Pennsylvania, Tennessee, Texas, and Wisconsin.

#### **State Grants**

Most states offer an airport grant-in-aid program to provide matching funds for AIP allocations. In addition, some have robust grant programs that provide funding assistance for such items as airfield/building maintenance projects and other initiatives typically not eligible for federal aid.

## Passenger Facility Charge (PFC) Program

Commercial airports are permitted to assess a fee on passengers known as a passenger facility charge (PFC). The airport sponsor must apply to the FAA for the authorization to impose and use PFC revenues and they generally range from \$3 to \$4.50 per flight segment with a maximum PFC of \$18.00 per roundtrip ticket. Airlines collect PFCs through the ticketing process and transmit collected funds to airport sponsors to finance construction of airport improvements.

# Third Party Private Financing

Provided an airport's enabling legislation authorizes such activity, third-party financing of airport improvements is also available to provide needed infrastructure to support aviation activity. This form of financing typically involves the lease of airport land to a private entity for construction and operation of aircraft hangars, automobile parking areas, or cargo handling facilities. Private developers construct the facilities at little or no cost to the airport in accordance with standards developed by the airport. At the end of the land lease, the facility reverts to the ownership of the airport sponsor.

#### Issuance of Bonds or Other Forms of Debt

The issuance of bonds is the single largest source of funding for airport improvements; however, generally only large and medium hub commercial service airports can undertake this form of financing. These larger facilities generate sufficient revenues to fund operations and retire the debt service resulting from the issuance of the bonds, unlike small, non-hub and general aviation airports.

For smaller airports, it is possible to obtain debt financing for projects by "piggy-backing" local general obligation bond issues if the local governing body will allow the airport to participate. Finally, commercial loans and/or "pooled" projects sponsored through state-backed programs also may be available.

# **Local Funds and Airport Revenue**

In some instances, the local governing body allocates resources from its general funds to support airport improvement projects. However, the availability of these funds can be limited given the scarcity of local funds, competition from other needs in the community, and opposition from citizen interest groups.

Commercial airports generate revenue for capital projects from landing fees, airport leases, concessions, and automobile parking fees. Primary sources of revenue for general aviation airports are fuel flowage fees, hangar land leases, FBO leases, agricultural leases, and other non-aeronautical leases; however, revenues derived from these activities normally do not exceed the cost of operating the airport and are therefore not available for capital improvement projects.

- ✓ Recognize that the total demand for AIP resources far exceeds available funds. Work with FAA to seek funding for projects but be realistic and acknowledge the eligibility and justification requirements of AIP.
- ✓ Develop a well-thought and reasonable ACIP for development of your airport.
- ✓ Become familiar with your state airport capital improvement funding program and learn how it complements AIP and how it can assist when AIP funds are not available.



# 15. Your Airport as a Business

# **Key Point**

Airports operate in an environment extensively regulated by federal, state, and local governmental agencies and possess a host of characteristics that mirror public utilities. However, it is important that policy makers understand and affirm the need to employ good business practices to achieve success in the delivery of aviation services to the public. These practices are discussed below, but are generally driven by the airport's vision, mission, and strategic plan.

#### Discussion

A typical business process includes the following:

Vision Mission Strategic Annual Goals Annual Budget

**Vision.** Visions vary of course, but many focus on the airport being seen as the front door to the community, a gateway to the world, and a premier provider of customer service.

Mission. A typical airport mission might be to serve the aviation needs of the community, safely and efficiently.

**Strategic Plan.** A good strategic plan establishes the direction and priorities of the airport. The depth of an airport's strategic plan normally varies depending upon its size and challenges, but the elements of this plan generally include those shown to the right.

**Annual Goals.** Broad objectives and goals typically flow from the individual tasks included in the airport's strategic plans.

Annual Budget. Budgets focus on expenses and revenues (see Issue Paper # 13 – Financial: Sources and Uses of Operating Funds). Policy makers need to understand the importance of striving to ensure that the airport operations be as financially self-sufficient as possible. Not only is this objective founded in sound business practice, the FAA mandates this in the assurances made part of its grant agreements (see Issue Paper # 19 – Rules: Complying with Federal Grant Assurances).

Business
Plan

Land Use
Plan

Strategic
Plan

Airport
Master Plan
Plan

Plan

Air Service
Plan
Plan

## **Airport Business Practices**

**Airport Rates and Charges.** Establishing nondiscriminatory rates and charges for use of airport facilities and amenities on fair and reasonable terms and conditions is not only a good business practice but is mandated by the FAA for those airports accepting AIP grants. Other principles of airport rate-making procedures as dictated by the FAA include:

- Using revenue derived from the airport solely for airport capital and operating costs (see Issue Paper #17 Financial: Use of Airport Revenue);
- Charging fair market value for non-aeronautical use of airports; and
- Being aware that federal law and policies on reasonableness of fees and economic discrimination do not apply to non-aeronautical uses.

**Performance Measurement.** Many airports establish standards and then measure performance. Customer service is an example of one such activity. Benchmarking is also a common practice, especially for large airports, to help determine how it is performing relative to other peer airports. By conducting surveys and measuring performance, the governing body is ensuring, to the greatest extent possible, that the highest quality aviation services are provided to the public.

Rules and Regulations and Minimum Standards. The adoption and use of airport minimum standards, rules, and regulations and leasing policies clearly define and clarify roles, responsibilities, expectations, and obligations to those seeking to conduct business or utilize airport property (see Issue Paper #18 – Rules: What's Expected of Airport Tenants and Users).

**Human Resource Plan.** A good business plan will normally include elements related to human resources and staffing needs. This plan focuses on the need to provide continuous learning and professional development of airport staff as well as employment of other best management practices.

**Transparency.** Enactment and employment of basic business practices are also necessary in order for the airport governing body to conduct its business in the most transparent and responsible manner possible. Codifying policies and procedures for accounting practices, the procurement of goods and services, and acceptable avenues for investment of airport funds ensures that the general public as well as management staff and members of the airport's governing body clearly understand how the airport conducts its affairs.

- ✓ Become familiar with the business practices your airport employs.
- ✓ Embrace the principles noted above and support airport management in its daily implementation of them.
- ✓ Support development and training of staff, even with tight budgets.
- ✓ Compare your airport's business practices to other airports of similar size and with similar goals.



# 16. Purchasing Goods and Services for Your Airport

# **Key Point**

Airports purchase a wide array of supplies, services, equipment, and even land. Because public funds are expended for these items, state and local laws and regulations have been established to govern how these purchases are made. Correspondingly, federal regulations (49CFR Part 18) dictate the award of design engineering contracts, construction contracts, land acquisition procedures, and equipment purchased through the AIP. Those charged with making decisions about procurement need to be aware of these regulations.

#### Discussion

Basic procurement principles airports follow include:

- · Purchase quality goods and services;
- Obtain best possible prices for goods and services;
- Deliver goods and services when and where needed;
- Assure a continuing supply of needed goods and services; and
- Give suppliers a fair opportunity to compete.

#### Goods

State and local procurement requirements generally govern the purchase of airport supplies and other goods needed for the day-to-day operation of the airport.

# **Architecture/Engineering Consultant Services**

It is the sponsor's responsibility to ensure qualified technical resources are used for airport architectural, engineering, and planning services. For most capital projects and studies, consultants are typically utilized due to the technical nature of the work and the fact that most airports lack sufficient in-house resources. The design and planning of airports require specialized experience and qualifications. Consultants are normally contracted for planning studies, preparation of environmental reviews, project design, and construction administration.

The cost of consultant services is an allowable cost under AIP and most state programs, provided the costs are associated with an eligible planning, development, or equipment project, and the consultant services are procured in accordance with federal and state procurement regulations. For AIP and most state programs,

selection of architectural and engineering services must be qualification-based, with fees for services negotiated after selection is made. Selections based on cost proposals are not permitted if AIP participation in the cost of consultant services is desired.

#### Construction

Construction contractors are normally selected through an openly advertised process per local law to seek the lowest qualified bidder. There are exceptions to this for projects with minor, inexpensive scopes of work. Also, in some instances, a pre-qualification process may be used whereby contractors submit their experience and qualifications in order to be eligible to submit a price-based bid. This is typically used for large critical projects. Large projects are sometimes procured under non-traditional methods. An example of this might be where one firm receives a contract to design and construct the project.

# Procuring Professional Services

Publish Request for Qualifications

Evaluate based on selection criteria (not cost)

Short-list/Interview/ Select

Receive project scope and cost proposal from selected consultant

(Perform Independent

Fee Analysis)

Negotiate

**Award Contract** 

Construction contractors need to be properly licensed and bonded and must comply with the construction plans and specifications developed for the project. The construction plans show the project requirements in a graphic form, while the specifications describe in greater detail the requirements of the materials to be used, testing/quality assurance methods, how work is measured and accepted for payment, schedule/time, and employee wage rates requirements.

Projects funded under AIP are developed in accordance with FAA policies, standards, and specifications. FAA has the responsibility of determining whether or not all construction work accomplished under the AIP is in accordance with federal standards.

## Equipment

Equipment needed on an airport to ensure its safe operation is eligible for AIP or state funding. Suppliers are solicited through an open bidding process with award made to the lowest qualified bidder. Examples of equipment used on an airport to ensure its safe operation include snow removal equipment and vehicles, aircraft rescue and fire-fighting (ARFF) equipment and vehicles, and airport lighting equipment. Acquisition of these items must meet applicable FAA and state standards, and be necessary as demonstrated by snow removal plans, applicable ARFF index, etc.

#### Land

Procedures established in the Uniform Acquisition and Relocation Act govern how an airport sponsor acquires property through AIP. These procedures include:

- Establishing through an appraisal process the fair market value of the property to be acquired before negotiations with the landowner are conducted;
- Conducting an environmental audit of the proposal property and including results in the appraisal report;
- Taking the land through condemnation should negotiations fail to secure an agreement; and
- Providing an adequate relocation assistance program for those residents and businesses displaced by the acquisition as is obligated under the Uniform Act.

# **Businesses on Your Airport**

Other services such as FBOs, rental car agencies, food service tenants, and other concessionaires, are typically competitively bid and procured based on the highest qualified bid. The airport receives rent, payment, or a share of revenue for these types of services.

# Disadvantaged Business Enterprises (DBE)

In order to receive AIP funding, an airport must have a DBE program that establishes goals for minority/disadvantaged business participation in AIP-funded projects and procurements, as well as all concessions (even though AIP funds are not utilized for concessions).

- ✓ Be very conscious of the fact that federal/state programs and the law specify procurement requirements, which are to be followed by the airport in purchasing goods and services.
- ✓ See FAA Advisory Circular 150/5100-14 for more information about the selection of architectural, engineering, and planning consultant services for airport grant projects.



# 17. Use of Airport Revenue

#### **Key Point**

It is critical that policy makers for your airport understand that once an airport receives grant-in-aid funding through the AIP, federal law prohibits using airport-generated revenue for non-airport uses. Use of airport revenue in this fashion is referred to as revenue diversion because airport-generated funds are being used for purposes other than airport capital or operating costs.

Revenue diversion is the use of airport revenue for purposes other than airport capital or operating costs. With the exception of a few grandfathered situations, revenue diversion violates federal law.

## Discussion

#### Airport revenue includes:

- Fees, rents, charges, or other payments received by the airport sponsor;
- Proceeds from the sale or disposal of airport property;
- Revenue received from sponsor activities at the airport; and
- State and local aviation fuel taxes in effect after December 30, 1987.

Revenue generated by a tenant in the normal course of that tenant's business is the tenant's revenue, not airport revenue. The airport sponsor's revenue from the tenant's occupancy and business rights is normally paid in the form of fees, rentals, lease agreements, etc. and is considered to be airport revenue. Revenue generated from natural resources such as subsurface minerals is considered to be airport revenue; however, contact the local FAA Airports office for specific policy.

#### FAA policy and federal law identify several specific examples of permitted uses of airport revenue including:

- Capital development of airport facilities;
- General operating costs of the airport;
- Operating costs such as the promotion of public and industry awareness of the airport's facilities and services; and
- Operating costs for the promotion of new air service and competition at the airport, but not directly subsidizing air carrier operations.

#### FAA policy and the law identify specific examples of revenue diversion, such as:

- Direct or indirect payment by the airport that exceeds the fair and reasonable value of those services and facilities provided to the airport;
- Inconsistent or inequitable costs allocated to the airport by a local governing body providing services to the airport;
- General economic development;

- Marketing and promotion unrelated to airport operations;
- Rental of land to, or use of land by, the airport sponsor for non-aeronautical purposes at less than fair market value rent;
- Impact fees assessed by any governmental body that exceeds the value of services or facilities provided by the airport;
- Use of airport funds to support community (non-airport) activities, participate in community events, or use airport property for commercial purposes; and
- Direct subsidy of air carrier operations. Prohibited direct subsidies do not include waivers of fees or discounted landing or other fees during a promotional period. However, the airport owner must offer the same promotional fee, waiver, or discount to all similarly situated users of the airport willing to provide the same type and level of new service consistent with the promotional offering.

There are many other examples of permitted and prohibited uses of airport revenue. Local FAA offices can assist airport sponsors to better understand the legal requirements relative to the use of airport revenue. FAA can also advise about the few grandfathered situations where certain airports are legally permitted to divert revenue from the airport.

- ✓ Be careful. From time to time, you will be approached by local officials or constituents to use airport-generated revenue for non-airport purposes. This is generally illegal.
- ✓ For further reference, see Chapter 15, FAA Airport Compliance Manual, Order 5190.6B, September2009: http://www.faa.gov/airports/resources/publications/orders/compliance 5190 6/media/5190 6b chap15.pdf.



# 18. What's Expected of Airport Tenants and Users

## **Key Point**

Airport owners should establish and enforce rules and regulations in order to ensure the safe, orderly, and efficient operation of their airport. These measures should apply to all persons using the airport. Also, airport owners should establish minimum standards for commercial aeronautical activities conducted at the airport. Utilization of these tools promotes uniform rates and charges for aeronautical activities on the airport, makes good business sense, and positively contributes to airport safety, quality of services, and compliance with the federal prohibition against exclusive rights.

#### Discussion

Airport rules and regulations and minimum standards:

- promote safety in all airport activities;
- maintain higher quality of service for airport users;
- protect airport users from unlicensed and unauthorized products and services;
- promote orderly development of airport land;
- prevent disputes between aeronautical providers and reduces potential complaints;
- protect the airport owner by ensuring service providers maintain
  a minimum level of insurance coverage, thereby reducing the airport owner's liability.



Following are some basic topics airport owners should consider when developing airport rules and regulations.



✓ Removal of Disabled Aircraft

✓ Non-Airworthy Aircraft

√ Wreckage

✓ Aircraft Registration and Operating Rules

√ Use of Hangars

✓ Personal Conduct on Airport Premises

✓ Access Control

✓ Courtesy Vehicles

√ Limos, Taxis, Vehicles/Pedestrians

✓ Hazardous Materials and Liquids

√ Self-Fueling Regulations

✓ Environmental Restrictions

√ Insurance Requirements

√ Flying Clubs, Skydiving

√ Aerial Advertising

✓ Agricultural Operations

✓ Minimum Standards for Commercial Activities



#### Minimum Standards

Airports should publish minimum standards for commercial aeronautical activities. These normally include leasehold size, building/hangar sizes, hours of operation, and requirements for personnel, equipment, and insurance. Standards should:

- Impose conditions that ensure safe and efficient operation of the airport;
- Be reasonable, not unjustly discriminatory, attainable, uniformly applied, and reasonably protect the investment of providers of aeronautical services who meet minimum standards;
- Be relevant to the activity to which they apply;
- Provide opportunity for newcomers who meet minimum standards to offer their aeronautical services within the market demand for such service.

## **Special Considerations**

**Airport owner as provider of services.** The airport owner may elect to provide any or all of the aeronautical services at an airport; however, these services are often best provided by profit-motivated private enterprises. The exceptions are usually those cases in which an airport owner elects to provide fuel service or aircraft parking. If it does so, it may not refuse to permit an air carrier, air taxi, flight school, or individuals to fuel their own aircraft with their own personnel and equipment.

**Insurance.** One of the many important requirements that an airport sponsor must consider when developing minimum standards is insurance requirements for commercial aeronautical service providers. Policies typically cover three areas: hangar keeper's liability, premises, and product liability.

**Non-aeronautical activities.** There is no requirement to include non-aeronautical activities in minimum standards since those activities are not covered by federal grant assurances.

**Saying "No".** Airport owners may deny airport users the opportunity to conduct specific aeronautical activities because of safety or efficiency; however, such determinations generally require FAA concurrence prior to imposing such restrictions.

**Disputes.** Occasionally, disputes relating to the application of minimum standards will occur. While the FAA does have a process established to adjudicate formal complaints of unjust discrimination, it is in the best interest of the airport owner and tenant to work to resolve the issue locally, or consider mediation.

**Through-the-fence activities.** A through-the-fence operation is when an entity on property adjoining the airport has direct access to airport facilities. FAA discourages these operations and the airport owner is under no obligation to allow them. They have the potential to undermine minimum standards and can jeopardize the airport's ability to meet federal grant assurances regarding safety and economic self-sufficiency.

- ✓ Become familiar with your airport's rules and regulations and minimum standards for commercial aeronautical activities. If there are none, consider working with the airport manager to adopt them.
- ✓ Make sure your airport rules and regulations and minimum standards are reasonable and non-discriminatory to aeronautical services.



# 19. Complying with Federal Grant Assurances

#### **Key Point**

Airport sponsors must make certain assurances to the federal government when federal grant funds are received. These assurances are part of the contract between the FAA and the airport sponsor and are based on federal law.

The airport owner agrees to accept certain obligations in exchange for federal money or land. Airport owners risk loss of future federal funds and civil action if they fail to comply with these obligations.

#### Discussion

Typical federal grant agreements contain over 30 assurances. Below are a few of the more important ones that relate to the use, operation, and maintenance of the airport. These remain in effect throughout the useful life of the facilities, normally 20 years. Obligations related to the funding of land acquisition remain in force in perpetuity. See Issue Paper 14 – Financial: Funding Capital Improvements for more information about how to get grant funds and what kinds of projects are eligible. These grant assurances are found within the specific grant agreements retained in the airport office and the local FAA office that administers the grants.

**Exclusive Rights Prohibition.** Do not grant or permit any exclusive right to conduct any aeronautical activity at the airport, such as sale of aviation fuel, air taxi and charter operations, aircraft storage, etc. However, the airport sponsor as airport owner may provide these activities exclusively.

Maintenance of the Airport. Preserve and maintain the airport in a safe and serviceable condition.

**Operation of the Airport.** Operate the airport in a safe manner and for the benefit of the public.

**Protection of Approaches.** Prevent the growth or establishment of obstructions (e.g., trees, cell towers, buildings, etc.) to the aircraft approaches to the extent reasonably possible (see Issue Paper #11 – The Airport: Protecting and Preserving the Airport and Its Environs).



**Compatible Land Use.** Take appropriate action, to the greatest extent possible, to restrict the use of lands in the vicinity of the airport to activities and purposes that are compatible with normal aeronautical operations (see Issue Paper #11 – The Airport: Protecting and Preserving the Airport and Its Environs).

**Availability on Fair and Reasonable Terms.** Operate the airport for the use and benefit of the public and make it available to all types, kinds, and classes of aeronautical activity on fair and reasonable terms and without unjust discrimination (see Issue Paper #18 – Rules: What's Expected of Airport Tenants and Users).

Adherence to the ALP. Develop, operate, and maintain the airport in accordance with the latest approved ALP (see Issue Paper 10 – The Airport: Planning and Developing Your Airport). In addition, airport land shown on the latest property map (referred to by FAA as an "Exhibit A" property Map) cannot be disposed of or encumbered without prior FAA approval.

**Use of Airport Revenue.** Use all airport revenues for the capital or operating costs of the airport. If the airport is owned by a municipal agency instead of an authority, separate accounts are required for audit purposes (see Issue Paper 17 – Financial: Use of Airport Revenue for a more complete discussion of this important grant assurance).

**Fee and Rental Structure.** Maintain a fee and rental structure for airport facilities and services to make the airport as self-sustaining as possible. This must be fair market value for non-aeronautical activities.

**Pavement Preventive Maintenance.** Implement a proactive and responsible pavement maintenance–management program to maximize the useful life of all federally funded airfield pavement areas. These programs ensure maximum life expectancy for pavements so scarce dollars can be effectively utilized.

- ✓ Become familiar with the formal grant assurances with which airport sponsors agree to comply when accepting federal grant funds. Your airport manager or the FAA Airports District Office can provide the full text of the current assurances. They also can be found in the AIP Handbook, Order 5100.38.
- ✓ Anticipate from time to time having to say "no" to proposals that conflict with the grant assurances. Examples:
  - » Spending airport revenue to help build or operate the city's animal control facility;
  - » Giving a local businessperson exclusive right to sell fuel at the airport;
  - » Deeding airport land over to a third party without FAA approval;
  - » Deeding airport land to a furniture company and not receiving fair market value.



# 20. Alternate Uses and Restrictions of Your Airport

# **Key Point**

Airport policy makers are sometimes asked to consider restricting the use of the airport or to disallow certain activities. Policy makers are also sometimes asked to approve the use of airport land and/or facilities for purposes not clearly related to its purpose as an airport. A key consideration that a policy maker must make in considering these proposals is whether or not the questionable use or restriction is aeronautical or non-aeronautical in nature. Generally, aeronautical uses should not be restricted unless clearly for safety or efficiency reasons. Also, non-aeronautical use of airport land and facilities may be warranted for revenue generation provided FAA first approves the use, fair market value is received, and the use is consistent with the FAA approved airport layout plan.

#### Discussion

# **Airport Restrictions**

The sponsor of any airport developed with federal financial assistance is required to operate the airport for the use and benefit of the public and to make it available to all types, kinds, and classes of aeronautical activity on reasonable terms and without unjust discrimination. However, the sponsor may prohibit or limit any non-aeronautical use, and even aeronautical use, if the restriction is reasonable and necessary for the safe operation of the airport or necessary to serve civil aviation needs of the public. The FAA, not the airport owner, maintains the authority to approve or disapprove aeronautical restrictions based on safety and/or efficiency at federally obligated airports.

Many attempts have been made to restrict unwanted aeronautical operations, but an airport owner must ensure such restrictions are reasonable limitations consistent with FAA policy. Although the airport owner may not be able to prohibit the activity, there are specific actions (i.e., specify voluntary times of operations, charge reasonable use fees, require appropriate insurance, etc.) the airport can take to better manage the activities.

Some of the types of aeronautical uses that airport owners consider or are asked to consider restricting include:

- Aircraft perceived to be excessively noisy or large;
- Nighttime aircraft operations;
- Parachute jumping;
- Ultralight vehicle operations;
- Banner towing; and
- Glider operations.





Generally, airports cannot restrict certain aircraft perceived to be noisy, nor can they restrict nighttime operations. There are complex regulatory requirements for doing this and one should contact FAA's Airports District Office or FAA Regional Airports Division before considering such action. Some airport owners have been successful in getting pilots to voluntarily restrict flying to certain times of day or to use certain flight tracks. Again, one should contact FAA when considering this.

# Alternative Uses of Airport Land and Facilities

Airport owners have been successful in attracting and managing non-aeronautical uses of airport property and facilities, helping to generate revenue, and remaining within FAA policy guidelines. An airport may not be closed for purposes of non-aeronautical events such as a county fair, sports car rally, or similar event, but if the event incorporates promotion of aviation or does not restrict normal airport operations, then much greater latitude is available.

Some examples of allowable airport-promotion events with non-aeronautical uses:

- Combining auto shows or related events with an airshow;
- · Hosting a fly-in event along with other community activities; and
- Renting a hangar for community or private events with proper airfield and aircraft security ensured.

- ✓ Support airport management in situations where it makes sense to disallow non-aeronautical use of the airport.
- ✓ Anticipate airport neighbors asking if the airport can be closed at night or closed on the weekend. The short answer is "no."

# Appendices

# **Appendix A: The Aviation Library**

A large library of documents exist to help direct and guide airport activities. In addition to local and state resources, there are federal regulations, advisory circulars, and orders, and industry group publications. Information about these follows.

#### Local

Useful information at the local level includes:

- The airport's layout plan and master plan;
- The airport's rules and regulations;
- The airport's minimum standards; and
- Local ordinances and land use plan.

#### State

Several state aviation offices have published guidance and websites that provide useful information regarding aviation airport programs.

#### **Federal**

An extensive set of federal regulations govern aviation activities, including airports, pilots, general aviation, and airlines. These are found in the U.S. Code of Federal Regulations (CFR). The CFR is broken into various titles that in turn are divided into Parts. All federal regulations can be found on the web at http://www.gpoaccess.gov/cfr.

The following are some of the most frequently referenced regulations:

Title 14 Part 1	Definitions and Abbreviations	
Title 14 Part 77	Objects Affecting Navigable Airspace	
Title 14 Part 91	General Operating and Flight Rules	
Title 14 Part 121	Air Carrier Certification	
Title 14 Part 135	Operating Requirements for Commuter and On-Demand Aircraft	
Title 14 Part 139	Certification and Operations: Land Airports Serving Certain Air Carriers	
Title 14 Part 150	Airport Noise Compatibility Planning	
Title 49 Part 18	Uniform Administrative Requirements for Grants	
Title 49 Part 1542	Airport Security	

The FAA makes available a series of advisory circulars (ACs) to help persons understand and apply standards for the planning, operation, maintenance, design, and construction of airports. The ACs specific to airports are compiled into the "150" series of ACs. They can be found on the FAA website at http://www.faa.gov/airports/. A few often used ones are:

150/5100-14	Architectural Engineering, and Planning Consultant Services for Airport Grant Projects	
150/5190-5	Exclusive Rights and Minimum Standards for Commercial Aeronautical Activities	
150/5300-13	Airport Design	

FAA uses orders to provide guidance and set forth policy and procedures to be used in the administration of their programs. Although orders are generally to help FAA internal staff, they are available to the public. A few of the most useful ones relative to airport programs are:

Order 5050.4	National Environmental Policy Act Implementing Instructions for Airport Actions	
Order 5100.38	Airport Improvement Program Handbook	
Order 5190.6	FAA Airport Compliance Manual	

# **Aviation Industry Groups**

Aviation industry groups such as the AAAE and the Aircraft Owners and Pilots Association (AOPA) have published helpful guidance for airports. One example is AOPA's *Guide for Airport Advocates*.

# Airport Cooperative Research Program (ACRP)

In addition to this primer on airport issues for the part-time policy maker, ACRP has published several useful reports and guidebooks. Their publications may be found at http://www.trb.org/ACRP/Public.

#### Examples are:

Report 15	Aircraft Noise: A Toolkit for Managing Community Expectations	
Report 16	Guidebook for Managing Small Airports	
Report 18	Passenger Air Service Development Techniques	
Report 28	Marketing Guidebook for Small Airports	
Report 32	Guidebook for Addressing Aircraft/Wildlife Hazards at General Aviation Airports	

# Appendix B: ACRONYMS - The Language of Airports

Someone new to the business of airports can quickly get frustrated with the sea of acronyms. It is common to hear or read something like: "FAA's ADO says the EA, FONSI, ACIP, and ALP need to be finished before they can approve PFC or AIP funds for the ILS, RPZ land, and RWY project." Below are some of the more common acronyms that are used.

- **ACIP Airport Capital Improvement Plan.** An airport owner's representation of the funding and prioritization of their multi-year (normally three to five years) program for planning and development at their airport.
- **AIP Airport Improvement Program.** A program that provides financial grants-in-aid for airport development projects such as runways, taxiways, aircraft parking aprons, terminal buildings, and land acquisition associated with airport development including runway protection zones and approach protection.
- **ALP Airport Layout Plan.** A plan (drawings) for an airport showing boundaries and proposed additions to all areas owned or controlled by the sponsor for airport purposes, the location and nature of existing and proposed airport facilities and structures, and the location on the airport of existing and proposed non-aviation areas and improvements thereon.
- **AOA Airport Operations Area.** Those areas inside the airport boundaries that directly support aircraft and airport operations, including both movement and non-movement areas.
- **ARFF Aircraft Rescue and Firefighting.** A special category of firefighting that involves the response, hazard mitigation, evacuation, and possible rescue of passengers and crew of an aircraft involved in an airport ground emergency.
- **ATCT Airport Traffic Control Tower or Air Traffic Control Tower.** The facility used by personnel to control air traffic at the airport.
- **DBE Disadvantaged Business Enterprise.** A federal program developed to ensure firms owned and controlled by minorities may take part in contracts supported with federal funds.
- **DNL Day-Night Noise Level.** Sound level measured in relative intensity of sound, or decibels (dB), on the "A" weighted scale (dBA). This scale most closely approximates the response characteristics of the human ear to sound. The higher the number on the scale, the louder is the sound. DNL represents noise exposure events over a 24-hour period. To account for human sensitivity to noise between the hours of 10 p.m. and 7 a.m., noise events occurring during these hours receive a "penalty" when the DNL is calculated. Each nighttime event is measured as if 10 daytime events occurred.
- **EA Environmental Assessment.** An assessment of the environmental effects of a proposed action for which federal financial assistance is being requested or for which federal authorization is required. The EA serves as the basis for the FAA's environmental impact statement or finding of no significant impact.
- **EIS Environmental Impact Statement.** A document prepared under the requirements of the National Environmental Policy Act of 1969. The EIS represents a federal agency's evaluation of the effect of a proposed action on the environment.
- **EMAS Engineered Materials Arresting System.** Materials of closely controlled strength and density placed at the end of a runway to stop or greatly slow an aircraft that overruns the runway. A commonly used material is a lightweight, crushable concrete. When an aircraft rolls into an EMAS arrestor bed, the tires of the aircraft sink into the lightweight concrete and the aircraft is decelerated by having to roll through the material.
- **FAA Federal Aviation Administration.** The United States Department of Transportation's agency for aviation. In addition to regulating airports, aircraft manufacturing and parts certification, aircraft operation, and pilot certification ("licensing"), the FAA operates air traffic control, purchases and maintains navigation equipment, certifies airports, and aids airport development, among other activities.
- **FBO Fixed-Base Operator.** A business operating at an airport that provides aircraft services to the general pubic, including but not limited to: sale of fuel and oil; aircraft sales, rental, maintenance, and repair; parking and tie-down or storage of aircraft; flight instruction; air taxi/charter operations; and specialty services, such as instrument and avionics maintenance, painting, overhaul, aerial application, aerial photography, aerial hoists, or pipeline patrol.
- **FONSI Finding of No Significant Impact.** An administrative determination by the FAA that a proposed action by the airport sponsor will have no significant impact on the environment.

- **FSDO Flight Standards District Office.** An FAA field office serving an assigned geographic area and staffed with flight standards personnel who serve the aviation industry and the general public on matters relating to the certification and operation of air carrier and general aviation aircraft. Activities include general surveillance of operational safety, certification of airmen and aircraft, accident prevention, investigation, and enforcement.
- **GA General Aviation.** All civil aviation (excluding military) except that classified as air carrier or air taxi. The types of aircraft typically used in general aviation activities vary from multi-engine jet aircraft to single-engine piston aircraft.
- **GPS Global Positioning System.** Satellite-based navigation system operated by the Department of Defense, providing extremely accurate position, time, and speed information to civilian and military users. Based on a "constellation" of 24 satellites, GPS will replace ground based navigation systems (e.g., VHF omnidirectional range, instrument landing system) as the primary worldwide air navigation system in the 21st century.
- **IFR Instrument Flight Rules.** A set of regulations and procedures permitting qualified and current IFR pilots to penetrate clouds and low-visibility conditions. Aircraft must be equipped with radio and navigation instruments operating under air traffic control flight plans and clearances. Flights are monitored and traffic separated by air traffic control usually by radar. (See VFR.)
- **ILS Instrument Landing System.** A precision instrument approach system utilizing radio transmitters at the runway ends that provide precise descent and course guidance to the runway, permitting aircraft to land during periods of low ceilings or poor visibility.
- **NAS National Airspace System.** A complex collection of air navigation and air traffic control facilities, systems, equipment, and airports located throughout the United States.
- **NAVAID Navigation** Aid. A device or process to help with navigation.
- **NEPA National Environmental Policy Act.** One of the federal laws that outlines policies to protect our environment. It establishes policy, sets goals, and provides a means for carrying out policy. Further, the NEPA process makes sure that environmental information is available to public officials and citizens before decisions are made and actions are taken on development projects.
- **NPIAS National Plan of Integrated Airport Systems.** An FAA plan that identifies existing and proposed airports significant to national air transportation and thus eligible to receive Federal grants under the Airport Improvement Program (AIP). It also includes cost estimates for needed development of each airport.
- **PAPI Precision Approach Path Indicator.** A lighting system that provides the pilot with a safe and accurate glide slope on final approach to the runway.
- PFC Passenger Facility Charge. Fees that commercial airports charge passengers to help fund FAA-approved projects.
- **RPZ Runway Protection Zone.** A trapezoidal area at ground level at the end of a runway, intended to be kept free of obstructions and any uses that might cause a congregation of persons.
- **RSA Runway Safety Area.** A cleared, drained, graded, and preferably turfed area symmetrically located about the runway which, under normal conditions, is capable of supporting snow removal, firefighting, and rescue equipment and of accommodating the occasional passage of aircraft without causing major damage to the aircraft.
- **RWY Runway.** A defined rectangular area on a land airport prepared for the landing and takeoff run of aircraft along its length. Runways are normally numbered in relation to their magnetic direction, rounded off to the nearest 10 degrees, e.g., Runway 01, Runway 25.
- **TSA Transportation Security Administration.** The federal agency charged with protecting the nation's transportation systems to ensure freedom of movement for people and commerce.
- **VFR Visual Flight Rules.** A defined set of FAA regulations covering operation of aircraft primarily by visual reference to the horizon (for aircraft control) and see-and-avoid procedures (for traffic separation). VFR weather minimums for controlled airspace require at least a 1,000-foot ceiling and three miles visibility except for "special VFR" clearances to operate "clear of clouds."

# Appendix C: Suggested Outline of an Airport Orientation Briefing

- 1. Airport History and Mission Statement
- 2. Organizational Structure
- 3. Charter/By-Laws/Enabling Legislation
- 4. Finances/Budget
  - Income Sources: Airlines/General Aviation/Parking/etc.
  - Expenses
  - Reserves
  - Bonds/Debt
- 5. Capital Improvement Funding
  - FAA
  - State
  - Local
  - PFC
- 6. Airport Statistics, Forecasts, and Activity
  - Passengers
  - Fuel Sales
  - · Operations
  - Service Area
  - Information About Airlines/FBO Services/Terminal Services
  - Top Destinations
- 7. Projects Now and the Future
  - Planning the Airport Layout Plan
  - 5 Year ACIP Review
  - Procedure for award of contracts
  - Procurement of professional services
- 3. Operations
  - ARFF
  - Snow Removal
  - Security
- 9. Role of Airport Policy Maker and Airport Management Staff
- 10. Homework/Take Home Items
  - Annual Financial Report
  - Executive Summary Master Plan
  - Minutes of Board Meetings
  - Enabling Legislation
  - Board Members List
  - Mission Statement
  - ACRP Primer Report

Follow the briefing with an airport tour.

Abbreviations and acronyms used without definitions in TRB publications:

American Association of Airport Executives AAAE AASHO American Association of State Highway Officials

AASHTO American Association of State Highway and Transportation Officials

ACI-NA Airports Council International-North America **ACRP** Airport Cooperative Research Program

Americans with Disabilities Act ADA

APTA American Public Transportation Association ASCE American Society of Civil Engineers American Society of Mechanical Engineers ASME ASTM American Society for Testing and Materials

ATA Air Transport Association ATA American Trucking Associations

CTAA Community Transportation Association of America

**CTBSSP** Commercial Truck and Bus Safety Synthesis Program

DHS Department of Homeland Security

DOE Department of Energy

**EPA** Environmental Protection Agency Federal Aviation Administration FAA **FHWA** Federal Highway Administration

**FMCSA** Federal Motor Carrier Safety Administration

FRA Federal Railroad Administration FTA Federal Transit Administration

HMCRP Hazardous Materials Cooperative Research Program IEEE Institute of Electrical and Electronics Engineers Intermodal Surface Transportation Efficiency Act of 1991 ISTEA

Institute of Transportation Engineers ITE

NASA National Aeronautics and Space Administration NASAO National Association of State Aviation Officials **NCFRP** National Cooperative Freight Research Program National Cooperative Highway Research Program **NCHRP** NHTSA National Highway Traffic Safety Administration

NTSB National Transportation Safety Board

Pipeline and Hazardous Materials Safety Administration **PHMSA** Research and Innovative Technology Administration RITA

SAE Society of Automotive Engineers

SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act:

A Legacy for Users (2005)

Transit Cooperative Research Program **TCRP** 

TEA-21 Transportation Equity Act for the 21st Century (1998)

TRB Transportation Research Board

TSA Transportation Security Administration U.S.DOT United States Department of Transportation