

AIP HANDBOOK

Your Guide to Safety, Standards, and Infrastructure Development



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APPENDIX K - PLANNING

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18 K-1. OVERVIEW

19 This appendix outlines the project eligibility and justification requirements for airport planning studies.
20 These studies support informed decision-making by allowing airport sponsors, planning agencies, and
21 the FAA to evaluate needs, identify deficiencies, and assess alternatives. Planning grants cannot be
22 amended or increased.

23 K-2. GENERAL ELIGIBILITY AND JUSTIFICATION

24 See: 49 U.S.C. §§ [47102\(3\)](#), [47102\(5\)](#), [47110](#), [47134](#), [47136](#), and [47140](#)

25 See also: 14 CFR Parts [139](#) and [150](#)

26 Planning studies may document the need for future airport development. However, any future airport
27 development projects are subject to their own eligibility and justification requirements. For eligibility
28 and justification requirements applicable to all projects funded with AIP, see [Chapter 2, Eligibility &](#)
29 [Justification](#).

30 K-2.1. ELIGIBILITY CRITERIA

31 **TABLE K-2.1. GENERAL ELIGIBILITY REQUIREMENTS FOR PLANNING AND SYSTEM STUDIES**

Item	Description
Sponsor & Planning Authority	The project must be undertaken by an eligible airport sponsor or an eligible planning agency.
Requirements	The study must support a public use airport(s), be consistent with the role of the airport(s) in the National Plan of Integrated Airport Systems (NPIAS) and the Airports Capital Improvement Plan (ACIP) and provide data necessary to inform airport development decisions within the near-term planning period (5 years). The study uses applicable FAA guidance, recommended practices, and criteria to inform airport development needs and provide input into FAA decision-making.
Deliverable	The project must result in an FAA-acceptable or approved deliverable(s), as defined by applicable FAA Orders, Advisory Circulars, and policy guidance.

32 K-2.2. JUSTIFICATION REQUIREMENTS

33 Planning studies should be undertaken when necessary to identify predicted aeronautical demand and
34 to evaluate infrastructure development that may be necessary for design standards, safety, compliance,
35 and capacity as warranted by the circumstances that exist at the airport. The ARP Field Office must
36 determine when a planning study, including a system study, is necessary and justified to support future
37 FAA and sponsor decision-making.

38 Some studies may be updated to reflect changing circumstances. Other follow-on studies may only be
39 updated when included as part of a master plan update (see [Section K-3., Eligible Planning and System](#)
40 [Studies](#) for details).

41 K-2.2.1. SCOPE & ALLOWABLE COSTS

42 Projects must align with the airport's role in the NPIAS and the ACIP.

43 Prior to awarding a grant for a planning study, the FAA must accept:

- 44 ▪ A scope of work (SOW) and associated costs based on a negotiated agreement, and
- 45 ▪ An independent fee estimate (IFE) and sponsor's statement that the costs are reasonable and
46 directly related to the approved SOW.

47 Project planning grants with SOWs that duplicate recently completed FAA-funded planning work, or with
48 a SOW that is already covered by existing studies that remain valid and applicable, are not allowable.

49 Project design, construction, operations, and implementation efforts are excluded work.

50 Excluded work and costs are not eligible.

51 K-3. ELIGIBLE PLANNING AND SYSTEM STUDIES

52 For scope of work requirements applicable to all AIP-funded projects, see [Chapter 2](#).

53 Relevant Advisory Circulars (ACs) and Orders include, but are not limited to, the current version of:

- 54 ▪ [FAA Order 5090.5, Formulation of the National Plan of Integrated Airport Systems \(NPIAS\) and](#)
55 [Airports Capital Improvement Plan \(ACIP\)](#);
- 56 ▪ [FAA Order 1050.1, FAA National Environmental Policy Act \(NEPA\) Implementing Procedures](#);
- 57 ▪ [FAA Order 5200.11, FAA Airports \(ARP\) Safety Management System \(SMS\)](#);
- 58 ▪ [AC 150/5070-6, Airport Master Plans](#);
- 59 ▪ [AC 150/5000-17, Critical Aircraft and Regular Use Determination](#);
- 60 ▪ [AC 150/5300-13, Airport Design](#);
- 61 ▪ [AC 150/5325-4, Runway Length Requirements for Airport Design](#);
- 62 ▪ [AC 150/5050-8, Environmental Management Systems for Airport Sponsors](#);
- 63 ▪ [AC 150/5060-5, Airport Capacity and Delay](#);
- 64 ▪ [AC 150/5360-13, Airport Terminal Planning](#);
- 65 ▪ [AC 150/5020-1, Noise Control and Compatibility Planning for Airports](#);
- 66 ▪ [AC 150/5200-38, Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife](#)
67 [Hazard Assessments, and Wildlife Hazard Management Plans](#);
- 68 ▪ [AC 150/5335-5, Standardized Method of Reporting Airport Pavement Strength \(PCR\)](#); and
- 69 ▪ [AC 150/5380-7, Airport Pavement Management Program \(PMP\)](#).

70 See the [AC checklist](#) for a list of the latest version of ACs applicable to AIP-funded projects.

71 TABLE K-3.1. ELIGIBLE PLANNING AND SYSTEM STUDIES

Project Type	Requirements, Additional Considerations, & Excluded Work
<p>Aeronautical Surveys <i>Conduct</i></p>	<p>A study to collect standardized, high-accuracy geospatial data for approach and departure design surfaces, terminal instrument procedures (TERPS), one engine inoperative (OEI), runways, and objects for upload to the Airport Data and Information Portal (ADIP) to inform the development of instrument flight procedures (IFPs) as well as obstacle action plans (OAPs).</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ Survey data must be needed to develop new or modify instrument procedures and collect safety critical data such as input to an OAP included with an ALP. ▪ Must result in a set of digital geospatial data that is uploaded to the ADIP. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ Can be a stand-alone study, included in master plan or airport layout plan update with narrative, or included in a state or metropolitan system planning study.
<p>Master Plan; or Airport Layout Plan (ALP) Update with Narrative <i>Develop, Update</i></p>	<p>A comprehensive planning document that identifies the airport’s near-, mid-, and long-term development needed to meet current and future aviation demand.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ The airport must require significant updates to its ALP due to major aeronautical activity changes or considerable physical changes to the airport property that require evaluation in order to inform a sponsor and FAA decision-making. ▪ The planning effort must be conducted at a single airport. ▪ Must result in a full master plan document or an ALP update with narrative report that results in the development of an ALP drawing set, including an Exhibit A Property Inventory Map (if there are existing or planned changes to airport property not currently reflected on the Exhibit A), that is submitted to the ARP Field Office for review and acceptance. ▪ The critical aircraft and, if applicable, aviation demand forecast must be approved by the ARP Field Office. ▪ Only Large and Medium hub airports that are competition plan covered airports may include competition plans. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ Other stand-alone studies may be included in a master plan or master plan update. ▪ Airport certification manuals developed for a newly certificated Part 139 airport and an environmental management system (EMS) at a Large or Medium hub airport are limited to the initial plan only. ▪ A master plan intended to cover multiple sponsor-owned airports requires ARP Headquarters coordination.

Project Type	Requirements, Additional Considerations, & Excluded Work
	<ul style="list-style-type: none"> ▪ A master plan may document the role the airport plays with respect to medical emergencies, evacuations, and emergency or disaster preparedness in the community served by the airport. Any projects identified within the master plan that are associated with these roles must otherwise be eligible and justified. This consideration does not change existing planning policies and does not permit airports to receive AIP funds for non-airport disaster and emergency response planning. ▪ Inclusion of a planning effort after a natural disaster is eligible at primary airports and nonprimary airports designated as Federal Staging Areas (FSA) or as Federal Incident Support Bases (ISB) by the Federal Emergency Management Agency (FEMA). <ul style="list-style-type: none"> ○ Sponsors can incorporate an airport plan to maintain or restart operations after natural disasters like earthquakes, floods, and hurricanes. Sustaining operations means keeping flights running during events, such as using well-drained runways to manage rain. Resuming operations involve recovery after events, like relocating electrical systems to avoid flood damage and speed up recovery. ○ Sponsors applying for funding under this provision must provide the ARP Field Office with their Memorandum of Understanding (MOU) between the airport and FEMA. The ARP Field Office must obtain written concurrence from ARP Headquarters prior to grant programming. <p>Excluded Work:</p> <ul style="list-style-type: none"> ▪ Updates to a Part 139 Airport Certification Manual (ACM). Initial ACM is eligible as a stand-alone study. ▪ Updates to an EMS. ▪ Projects identified on the ALP or included in the plan. ▪ Other airport operational or management studies or documents, business plans, or economic benefit studies, including air service development and marketing studies.
<p>Exhibit A - Property Inventory Map <i>Develop, Update</i></p>	<p>An Exhibit A Property Inventory Map is an inventory of parcels that make up dedicated airport property which indicates how the land was acquired, the funding source for the land, and if the land was conveyed as Federal surplus land or government property. An Exhibit A also includes other detached parcels owned by the sponsor that are dedicated to airport purposes.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ Must result in an Exhibit A Property Inventory Map developed in accordance with Airports Standard Operating Procedure (SOP) 3.00 that is submitted to the ARP Field Office for review and acceptance. <p>Additional Considerations:</p>

Project Type	Requirements, Additional Considerations, & Excluded Work
	<ul style="list-style-type: none"> ▪ Can be a stand-alone study or included in a master plan or ALP update with narrative. FAA did not previously interpret the term “airport planning” to make Exhibit A Property Inventory Maps eligible as stand-alone projects, however 49 U.S.C. § 47102(5) allows the FAA to use its discretion to set the requirements for planning projects. The FAA notes that Exhibit A documents contribute to planning by demonstrating that the sponsor has adequate property rights to support future development at the airport.
<p>Drainage Study</p> <p><i>Conduct, Update</i></p>	<p>A study to evaluate and plan stormwater systems to safely collect, convey, and discharge runoff in a manner that protects airfield pavements, facilities, and operations.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ Drainage study must be necessary to support a drainage project or comply with Federal law. ▪ Must result in a plan to address drainage issues. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ May assess the entire airfield or specific parts. ▪ Future efforts may be required to support future airport development.
<p>Energy Management Plan (EMP)</p> <p><i>Develop</i></p>	<p>A plan that assesses the airport’s current and future energy power requirements.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ Sponsor must certify that no safety projects will be deferred to develop the EMP. ▪ Must result in a completed EMP. ▪ AIP is limited to reimbursement of the eligible plan costs. ▪ Requires coordination with the ARP Field Office. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ Plans may evaluate current and future energy power requirements including heating and cooling, power for on-road airport vehicles and ground support equipment, gate electrification, electric aircraft charging, and vehicles and equipment used to transport passengers and employees between the airport and limited nearby facilities. ▪ May also include assessing the existing energy infrastructure condition, location, and capacity, including base load and backup to power.
<p>Environmental Impact Statement (EIS)</p> <p><i>Conduct</i></p>	<p>A stand-alone environmental study that is clear, concise, and appropriately detailed to provide decision-makers and the public with a discussion of any significant environmental impacts associated with a proposed action and reasonable alternatives.</p> <p>Requirements:</p>

Project Type	Requirements, Additional Considerations, & Excluded Work
	<ul style="list-style-type: none"> ▪ An EIS is conducted when required by NEPA and special purpose laws to support airport development. ▪ Cost must align to the scope of environmental review, alternatives analysis, identification of mitigation measures, public involvement activities, preparation of the document and technical appendices, and coordination with state and Federal agencies. ▪ An EIS must result in a Finding of No Significant Impact (FONSI) or a Record of Decision (ROD). <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ An Environmental Assessment (EA) or Categorical Exclusion (CatEX) is to be included under an eligible development project. ▪ Follow-on efforts must be approved by the ARP Field Office. <p>Excluded Work:</p> <ul style="list-style-type: none"> ▪ Use of the sponsor’s force account when the FAA is responsible for performing or procuring work. ▪ Environmental mitigation.
<p>New Airport Feasibility and Site Selection Studies</p> <p><i>Conduct</i></p>	<p>A planning project necessary to determine if criteria are met for a new airport worksite in the NPIAS due to a direct, logical, and obvious need for a replacement, supplemental, or additional airport based on existing conditions.</p> <p>A new airport feasibility study, which considers if a new airport is needed and justified, determines if the airport:</p> <ul style="list-style-type: none"> ▪ Is predicted to be financially viable, demonstrated by the financial plan, which is included as part of the study; and ▪ Can meet applicable design standards and performance goals. <p>A new airport site selection study evaluates potential locations to identify a site that safely and efficiently accommodates aviation operations while meeting design standards and airspace, environmental, and land use compatibility requirements.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ New airport feasibility study requirements: <ul style="list-style-type: none"> ○ Conducts benefit cost analysis (BCA) if being developed for capacity, and ○ Results in documentation needed to determine if an airport site selection study should be pursued. ▪ New airport site selection study requirements: <ul style="list-style-type: none"> ○ Results in a viable recommendation for the airport’s physical location, and ○ Requires approval by ARP Headquarters. <p>Additional Considerations:</p>

Project Type	Requirements, Additional Considerations, & Excluded Work
	<ul style="list-style-type: none"> ▪ Follow-on planning efforts require independent justification. <p>Excluded Work:</p> <ul style="list-style-type: none"> ▪ Land acquisition or environmental studies needed to support a new airport.
<p>Pavement Management Plan (PMP) <i>Develop, Update</i></p>	<p>A PMP or pavement study evaluates the Pavement Condition Index (PCI) and / or Pavement Classification Rating (PCR), along with the performance and life cycle requirements of airfield pavements to ensure safe aircraft operations.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ Must result in a completed PMP and / or PCR study. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ Can be a stand-alone study or included in a master plan or ALP update with narrative. ▪ PMPs at multiple airports can be developed as a state or metropolitan system planning study. ▪ Sponsors must update the PMP through a detailed inspection at least annually, although a sponsor may extend the update frequency to triennially if a more comprehensive survey is used. These regular updates are not AIP-eligible.
<p>Privatization Study <i>Conduct</i></p>	<p>A pre-development planning study that supports the Airport Investment Partnership Program (AIPP) and evaluates the financial, operational, and regulatory feasibility of transferring airport operations to a private entity. Results in a study covering one or all three of the following: financial, legal, and procurement.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ The sponsor must have expressed interest in the AIPP and communicated this in writing to the ARP Field Office. ▪ A privatization planning study must result in an AIPP application. ▪ If the FAA determines a BCA is required prior to approving an AIPP application, that BCA must be included. The data collection needed to support the BCA is an eligible cost. ▪ Requires ARP Headquarters coordination. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ Pre-development planning costs cannot exceed \$750,000 per application or proposed application.
<p>Recycling Plan <i>Develop</i></p>	<p>A solid waste recycling plan evaluates airport waste streams and identifies strategies to reduce, reuse, and recycle materials generated by airport operations.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ If the sponsor does not have a solid waste recycling plan, the initial plan development is eligible.

Project Type	Requirements, Additional Considerations, & Excluded Work
	<ul style="list-style-type: none"> ▪ The plan must be consistent with applicable state and local recycling laws. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ Initial plan can be a stand-alone study. Future efforts must be included under a master plan or ALP update with narrative.
<p>Safety Management System (SMS) <i>Prepare</i></p>	<p>An SMS implementation plan identifies a realistic strategy for developing SMS at an airport. The SMS manual documents the policies, procedures, and processes used to systematically identify, assess, and manage safety risks at an airport.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ If an airport does not currently have an SMS program and desires to proactively manage risks, prevent accidents, and ensure regulatory compliance by identifying hazards before they cause harm, initial preparation of the SMS manual and implementation plan is eligible. ▪ Costs associated with the initial acquisition of software designed to support SMS implementation, consistent with the SOW, are capped at \$50,000 per sponsor. ▪ Requires ARP Headquarters coordination. <p>Excluded Work:</p> <ul style="list-style-type: none"> ▪ Costs associated with maintaining or updating a current plan are operational and not eligible. ▪ Costs associated with implementation, hiring, and training airport personnel.
<p>System Studies <i>Conduct, Update</i></p>	<p>State, regional, and metropolitan aviation system studies evaluate existing and future airport roles, aeronautical demand, capacity, and constraints.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ Must result in a study to support coordinated planning across a broader aviation network. ▪ The ARP Field Office must determine when a system study is necessary and justified and must approve the SOW. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ May include aeronautical surveys for all runways, PMPs, initial PCRs for all AIP-eligible pavements, and other elements approved by the ARP Field Office. ▪ May include an acoustical study for the purpose of conducting aircraft counts. The number of airports covered in the study must be identified, and the study must name the airports included.
<p>Wildlife Hazard Assessment (WHA) and Management Plan (WHMP)</p>	<p>A WHA or site visit is used to evaluate the presence, behavior, and attractants of wildlife on and near an airport; to identify risks to aircraft operations; and to identify the need for an assessment.</p> <p>Requirements:</p>

Project Type	Requirements, Additional Considerations, & Excluded Work
<p><i>Conduct</i></p>	<ul style="list-style-type: none"> ▪ Per FAA Policy, necessary to address safety concerns at: <ul style="list-style-type: none"> ○ General aviation airports with 100 or more based jet aircraft, and with over 75,000 annual operations, and ○ 14 CFR Part 139 airports. ▪ Future efforts must be justified based on new risks. ▪ Results in a WHMP when a need is determined by a WHA. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ When a wildlife hazard is present and documented, generally both a WHA and a WHMP are done within the same grant. A WHMP is also eligible as a stand-alone grant as long as it is based on a recent FAA approved WHA or site visit. ▪ Failure to implement an existing plan does not justify a second wildlife hazard assessment (WHA) or site visit. <p>Excluded Work:</p> <ul style="list-style-type: none"> ▪ Wildlife hazard mitigation projects.
<p>Zero-Emission Vehicles (ZEV) Management Plan</p> <p><i>Conduct</i></p>	<p>This plan assesses the existing and future infrastructure requirements of the airport related to ZEV vehicles and infrastructure.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ The FAA will give sponsors who apply for project funding under the ZEV Program priority consideration for selection if they provide their long-term ZEV management plan with their ZEV Program application. <p>Additional Considerations:</p> <ul style="list-style-type: none"> ▪ Initial plan can be a stand-alone study or as part of a master plan. Future efforts must be included under a master plan or ALP update with narrative.
<p>Miscellaneous Studies</p> <p><i>Conduct, Update</i></p>	<p>A miscellaneous study may be used to conduct a new or update an existing terminal area narrative report, site selection study for a certain type of eligible project (e.g., terminal building, tower or new runway), or an airport-wide obstruction survey when the project has not yet been deemed eligible and justified.</p> <p>Requirements:</p> <ul style="list-style-type: none"> ▪ Must be necessary to address specific standards, safety, compliance, capacity, or a future development need that cannot be addressed in another type of study. ▪ Requires ARP Headquarters coordination. ▪ Future efforts require independent justification. <p>Other Eligible Stand-Alone Projects:</p> <ul style="list-style-type: none"> ▪ <u>Airport Certification Manual (ACM)</u>: Only the initial ACM developed for newly certificated Part 139 airport is eligible.

Project Type	Requirements, Additional Considerations, & Excluded Work
	<ul style="list-style-type: none"> ▪ <u>Environmental Management System (EMS)</u>: Only the initial development of the EMS program is eligible. The airport must be a Medium or Large hub airport. The sponsor certifies in writing to the ARP Field Office that the EMS complies with <u>AC 150/5050-8</u> at project completion.

72 **K-4. RELATED PROJECTS**

73 The projects in this section are not eligible for planning and system study purposes; however, references
 74 to related projects that may be eligible are provided as applicable.

75 **TABLE K-4.1. RELATED PROJECTS**

Project Type	When Scope of Work Includes	See Appendix
Aeronautical Surveys	AGIS data	B, Aircraft Operational Surfaces
		C, Airfield Infrastructure
		F, Lighting, Signage, & Markings
		G, NAVAIDs
Environmental	Mitigation	D, Environmental & Energy
	Zero Emissions Vehicles and Infrastructure	D, Environmental & Energy
New Airports	Replacement or supplemental, or additional airports	H, New Airport
Noise	Mitigation	I, Noise
	Part 150 Noise Studies	I, Noise

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