

CHAPTER 5. AIRPORT PLANNING AND NEPA

500. AIRPORT ACTIONS SUBJECT TO NEPA.

a. General. Paragraphs 9.g(1) – (11) of this Order lists those airport activities that are Federal actions. Before making a decision on these actions, the Office of Airports (ARP) must complete the NEPA process. This process is an independent, Federal decision making process requiring public disclosure of critical planning and environmental information regarding the proposed action and its reasonable alternatives. The approving FAA official uses this information and considers public concerns when making decisions about a proposed airport action.

b. NEPA document choices. The responsible FAA official must clearly identify potential environmental impacts the proposed action and its alternatives may cause. Based on the proposed airport project and its environmental effects, the responsible FAA official decides if the Federal action qualifies as a categorical exclusion or if an environmental assessment (EA) or an environmental impact statement (EIS) is required.¹

501. PROJECT PLANNING AND NEPA. To achieve NEPA's intent, 40 CFR 1501.2 states:

"Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head-off potential conflicts."

a. Environmental factors and planning. Conflicts noted in the regulation could range from community concerns about aircraft noise to an action that poses a legal barrier to ARP approval, such as a Jeopardy Opinion for a Federally-listed endangered species. Since airport planners are responsible for planning projects at their airports, it is critical that they note the requirements of 40 CFR 1501.2. Doing so promotes intensive, scrutiny of reasonable alternatives meeting airport needs while avoiding or reducing potential environmental impacts and conflicts those alternatives could cause (see paragraph 504.d).

b. Early FAA contact is critical. ARP experience shows that delays in the NEPA process may occur when airport planning is not properly conducted. Therefore, during early project planning, it is critical that the airport sponsor critically analyze a project's goal, the data supporting that goal, reasonable ways to achieve the goal, and the environmental issues surrounding the alternatives considered to achieve that goal.

(1) Chapter 5 (Environmental Considerations) of FAA's Advisory Circular (AC) 150/5070-6, *Airport Master Plans*, urges sponsors to work with FAA airport planners and environmental specialists early in project planning. Environmental specialists have knowledge

¹ Chapters 6, 7, and 9 of this Order, respectively, discuss these NEPA documents in detail.

about environmental impacts associated with airport projects and the environmental concerns resource agencies, Tribes, and the public normally present about those projects.

(2) This early contact is intended to identify potential major environmental impacts and concerns early in planning, especially when an airport sponsor proposes a complex or controversial airport action. This step often reduces the probability that airport planning efforts or the subsequent environmental analyses and NEPA document will require time-consuming changes to address planning or environmental issues or concerns not clearly identified early in airport planning.

c. Interdisciplinary approach. To complete this interdisciplinary effort, planners, engineers, and environmental specialists should review maps, aerial photographs, existing permit application records, or other environmental documents containing information on the airport's locale. ARP's Best Practices website² and the AC provide more details on coordinating early airport planning and the environmental process. This early, interdisciplinary approach discussed above should make airport planning and NEPA processes more efficient because it:

(1) Promotes the coordinated consideration of reasonable alternatives under FAA's or the sponsor's authority when the widest range of alternatives exists.

(2) Promotes awareness of environmentally sensitive resources and the special analyses or coordination needed to resolve adverse effects on those resources.

(3) Provides planners and designers with opportunities to change facility plans or develop alternatives that reduce the need for later costly, complex, or delay-inducing changes in project design necessary to protect environmentally sensitive resources. and

(4) Helps ARP and the airport sponsor identify planning and financial issues.

Note: Although this chapter discusses the critical relationship of a master plan and the NEPA process, it is not a substitute for FAA AC, 150/5070-6. The AC provides greater detail on airport planning principles.

502. WHY PLANNING INFORMATION IS IMPORTANT TO THE NEPA PROCESS.

Airport planning information is the backbone of a proposed airport action. As noted earlier, it is critical to complete the NEPA process efficiently and effectively. ARP airport planners are responsible for reviewing the sponsor's proposed actions and alternatives for consistency with FAA's airport planning and design standards. Those planners approve only projects meeting those standards, unless they determine the projects warrant modifications to those standards. The Purpose and Need is developed during the NEPA process after considering FAA's statutory mission and the sponsor's goals and objectives. Among other uses, planning information helps the sponsor or ARP during the NEPA process to:

²http://www.faa.gov/airports_airtraffic/airports/environmental/eis_best_practices/

- a. Define the airport sponsor's proposed project.
- b. Describe the purpose and need and identify reasonable alternatives to address the purpose and need.
- c. Provide analyses of potential environmental impacts the proposed project and its reasonable alternatives could cause. and
- d. Develop the full scope of reasonably foreseeable airport development that is critical to the Federal action's cumulative impact analysis.

503. AIRPORT PLANNING INFORMATION CRITICAL TO THE NEPA PROCESS.

a. Important airport planning data. Because they influence impact analyses, some of the most important planning data for NEPA purposes include:

- (1) An inventory of existing conditions and facilities.
- (2) An airport layout plan (ALP) showing proposed development.
- (3) Planned project linkages versus independent utility.
- (4) Aircraft operation and enplanement (boarding passengers) forecasts.³
- (5) The design aircraft and fleet mix to accommodate those forecasts.
- (6) The airport's existing capacity to accommodate those forecasts.
- (7) Facility requirements needed to accommodate those forecasts.
- (8) Timing and phasing of the projected necessary airport development.
- (9) Runway utilization and flight tracks. and
- (10) An airspace analysis.

b. The need for current, technical information. Current, technically acceptable planning information is critical to airport planning and accurate, efficient environmental analyses and document preparation. Failure to provide this information causes the problems listed in paragraph 503.(b)(1) – (3). Airport sponsors, ARP, and consultants must ensure that planning information is technically valid, based on accepted assumptions and methods, and current

³ Refer to paragraph 504.b for acceptable deviation limits between a sponsor's forecasts and FAA's Terminal Area Forecasts.

operational and/or passenger forecasts. This helps the sponsor and ARP determine that proposed facilities, their costs, and their potential environmental effects are warranted, and that they are based on accurate airport operation or enplanement forecasts. Paragraph 504.b discusses this further.

(1) If data are not current or technically acceptable, the proposed project and reasonable alternatives or the analyses related to them will need to be modified.

(2) Updating these data so they accurately reflect an airport's needs often requires repeating earlier, costly environmental analyses that were based on outdated or technically insufficient information.

(3) This duplication and the lost time it requires delay FAA's decision making process, the airport sponsor's schedule, and the airport's ability to efficiently meet air projected transportation needs.

c. Noise. Noise from airport projects is often the public's primary concern. Therefore, a master plan addressing proposed airport development should consider whether the proposed project would increase noise impacts over noise sensitive land uses around the airport (see paragraph 9.n of this Order). If so, then the master plan should highlight these potential impacts.⁴ (See paragraph 706.g(3) for information about incorporating Part 150 noise mitigation in a proposed action).

d. Evaluate and adjust planning as needed. Proposed Federal actions should be evaluated and adjusted continually as planners and environmental specialists collect more information during the planning process. This will promote the accuracy, efficiency, and effectiveness of the subsequent NEPA process.

504. KEY MASTER PLAN STEPS THAT AID THE NEPA PROCESS. An airport sponsor developing a master plan that accurately reflects needed airport improvements should focus on the following steps.

a. Meet with ARP regional or district office personnel. Early in a project's planning phase, the airport sponsor and its planners should meet with the appropriate ARP regional or district office's planners and environmental specialists. As noted in paragraph 501, this early coordination allows ARP staff to view the initial, conceptual plan and highlight potential environmental issues airport planners need to consider. Information exchanged among the sponsor, planning consultants, and environmental specialists fosters effective, efficient airport planning. It also promotes completing the subsequent NEPA process in a timely, efficient manner.

⁴ Noise exposure maps and noise compatibility plans prepared under 14 CFR Part 150 provide valuable information about an airport's present and future noise levels and land uses exposed to those levels in the airport vicinity.

b. Develop good aviation forecasts. The sponsor's airport planners should establish valid aviation forecasts and the forecasts' resulting airfield demands to aid in efficient environmental analyses. As noted in paragraph 503, accurate, current aviation forecasts are the "backbones" to efficient, accurate environmental analyses. Forecasts that are too high or too low will jeopardize the NEPA and decision making processes by affecting environmental and funding decisions. Planners should prepare aviation forecasts that use FAA-accepted methods supported by available data, and that are consistent with FAA's Terminal Area Forecast (TAF). Forecasts should be within 10 percent of the TAF for the 5-year analytical period and within 15 percent for the 10-year analytical period.⁵ Forecasts not meeting these criteria require consultation with planners at regional or district Airports offices and perhaps, forecast specialists at FAA headquarters. This consultation is necessary to determine if another forecast is needed for airport planning and NEPA purposes.

c. Conduct a facility inventory. Planners should conduct a facility inventory and determine if existing facilities can meet forecast airside and/or landside demands. If they cannot, the airport sponsor may need to enhance or expand present facilities or build new ones. Reviewing ALPs and forecast activity data is an efficient way to complete this inventory.

d. Develop alternatives. Reasonable alternatives are feasible ways to achieve a project's purpose (FAA Order 1050.1E, paragraph 506e). As noted below, the range of reasonable alternatives during an airport sponsor's master planning process is different than the range of alternatives needed for the NEPA process.

(1) During the airport master planning process. Airport sponsors and their planners consider various ways of solving an airport's problems before FAA begins its formal NEPA process. According to Chapter 5 of AC 150/5070-6B, the sponsor, its planners, and FAA airport planners, during project master planning, should consider safe, efficient alternatives within the airport sponsor's or FAA's jurisdiction. When developing these alternatives, FAA environmental specialists should advise the sponsor and the planners about obvious, sensitive environmental resources in the airport vicinity. This step highlights the need for the sponsor and planners to consider alternative project layouts or designs that could eliminate or reduce environmental impacts when the widest range of layout or design options exists.

(2) During the NEPA purposes. When developing reasonable alternatives for NEPA purposes, the scope of alternatives must include the alternatives noted above and those reasonable alternatives outside the airport sponsor's and FAA's jurisdiction (40 CFR 1502.14(c)). Consequently, these alternatives, "...include those [alternatives] that are practical or feasible ways from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant."⁶

⁵December 23, 2004, memorandum from the Director, Airport Planning and Programming, entitled *Revision to Guidance on Review and Approval of Aviation Forecasts*.

⁶CEQ's *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, Question 2a.

e. Identity a proposed action. Sometimes a sponsor selects a reasonable alternative as the “proposed action” early in project planning. Early identification of the proposed action depends on the problem the sponsor is trying to solve and the problem’s complexity. If the airport has inadequate apron space or an emergency vehicle building is needed, the sponsor may have little difficulty identifying the proposed action. Conversely, if the airport lacks sufficient runway capacity or a new airport is necessary, the range of reasonable alternatives may be varied and complex. Here, the sponsor may not be able to identify a proposed action during the planning process.

505. ARP RESPONSIBILITIES. Close coordination among the airport sponsor, its planning consultant, and FAA encourages thoughtful, responsible airport planning. ARP airport planners, engineers, and environmental specialists should work closely with the sponsor’s airport planners early in project planning. This effort will help planners prepare well-developed airport projects that consider environmental factors in project planning. Such projects enhance ARP’s ability to later meet substantive Federal environmental requirements applicable to a proposed action and its reasonable alternatives.

506. FAA’S ENVIRONMENTAL REVIEW PROCESS. The responsible FAA official should determine the environmental review the proposed action requires. The official should do so after working with the airport sponsor’s planners to use the interdisciplinary approach discussed in this chapter.

a. Categorical exclusion. The responsible FAA official may categorically exclude an airport action when the official finds:

(1) The proposed action is listed in FAA Order 1050.1E, paragraphs 307 through 312 (or Chapter 6, Tables 6-1 and 6-2 of this Order), and

(2) Extraordinary circumstances in paragraph 304 of that order (or Chapter 6, Table 6-3 of this Order) do not require an EA or EIS.

b. Environmental assessment (EA). The responsible FAA official should inform the airport sponsor to prepare an EA when:

(1) The official determines that extraordinary circumstances applicable to a normally categorically excluded action suggest an EA is needed. or

(2) The action is not listed in Chapter 6, Tables 6-1 or 6-2 and, therefore, normally requires an EA at a minimum.

c. Environmental impact statement (EIS). The responsible FAA official should begin preparing an EIS when:

(1) The proposed action normally requires an EIS (see paragraph 903).

(2) An EA indicates that the approving FAA official cannot issue a Finding of No Significant Impact (FONSI) because the proposed action is likely to cause significant environmental effects that cannot be mitigated below significance thresholds. or

(3) ARP experience shows an action addressed in an EA would cause significant environmental impacts.

507. – 599. RESERVED.