

Defining & Completing the Planning Process

How Planning Sets the Stage for Project Development

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Federal Aviation
Administration

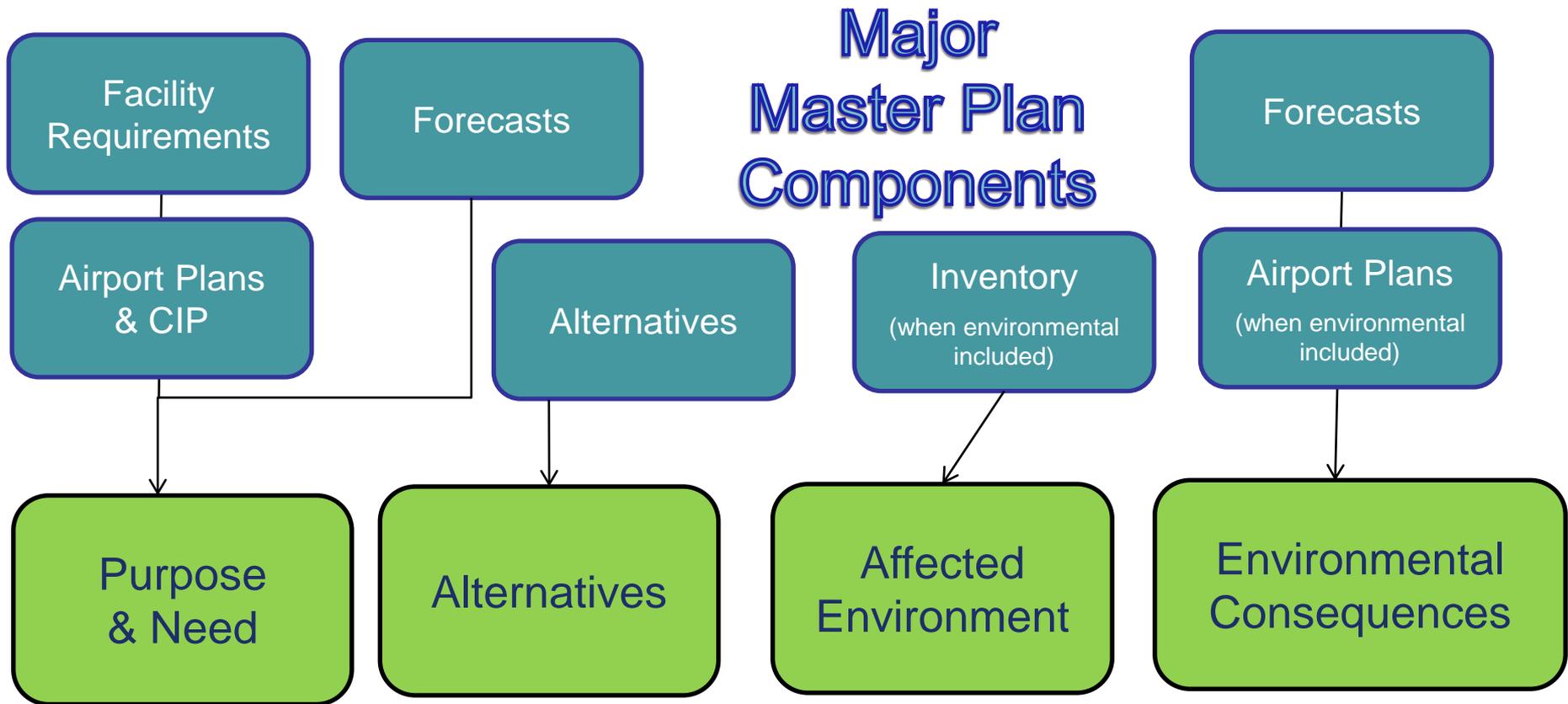


Agenda

- Identify connections between planning & environmental processes
 - Identify when / why the process falls apart during an environmental review
 - Discuss key planning items critical to the NEPA process
- Outline what “planning complete” means
- Identify when it is ripe to start the NEPA process



Connecting Planning & Environmental Processes



Major NEPA Environmental Components



Connecting Planning & Environmental Processes

- **When / Why the process falls apart during an environmental review**
 - Incomplete / stale planning
 - Poorly justified projects
 - Sponsor / consultant challenges
 - Staff changes
 - Not understanding environmental requirements are non-negotiable
 - Local politics
 - Viewing NEPA as a separate process
 - “It’s the sponsor’s document”
 - Sponsor expectations
 - Project drift
 - Concept changes / inconsistencies
 - Inability to fully define what the project is or isn’t
 - Time passage
 - Changing project variables (e.g. economics, industry dynamics, FAA guidance)
 - Changes in FAA staffing &/or project oversight



Connecting Planning & Environmental Processes

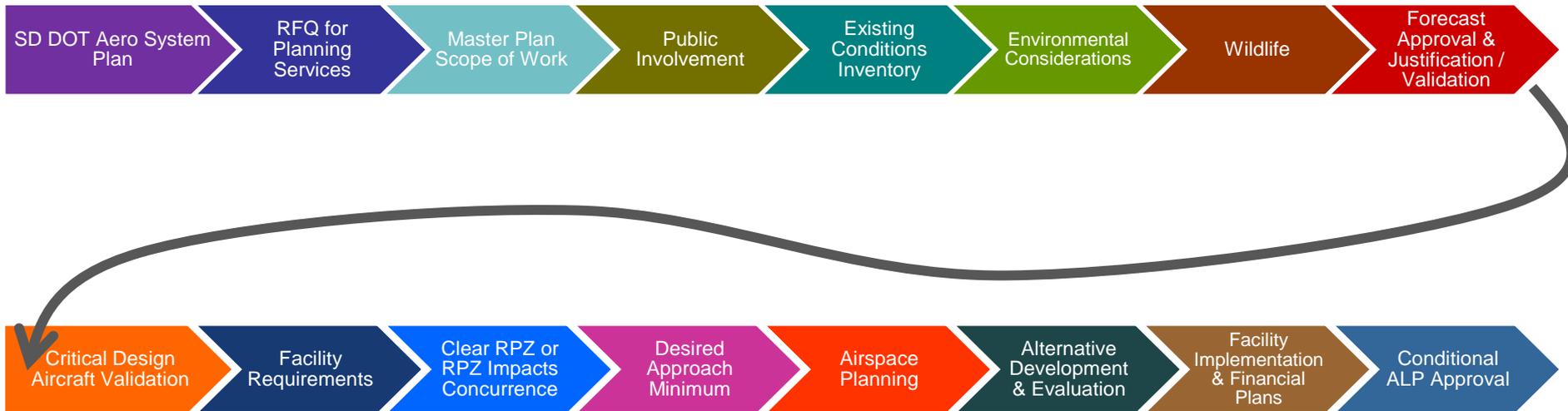
- **Order 5050.4B (Section 503) addresses airport planning information critical to the NEPA process**

1. Inventory of existing conditions & facilities
2. ALP showing proposed development
3. Planned project linkages versus independent utility
4. Aircraft operation & enplanement forecasts
5. Design aircraft & fleet mix to accommodate forecasts
6. Airport's existing capacity to accommodate forecasts
7. Facility requirements needed to accommodate forecasts
8. Timing & phasing of projected necessary airport development
9. Runway utilization & flight tracks
10. Airspace analysis

These items are necessary to determine when planning is complete!



What Does Planning Complete Mean?



What Does Planning Complete Mean?



- **State/ADO role (CIP Meetings)**

- Evaluate grant application for eligibility
- Participate in work group meetings
- Review & comment on draft & final plans



What Does Planning Complete Mean?



- **RFQ for Planning Services (consultant selection)**
 - Determine duration – 5 years is the maximum
 - Single project (planning) vs. reasonably, foreseeable projects
 - Specifically include aerial imagery & AGIS in the RFQ’s list of projects
- **Master Plan Scope of Work**
 - Start with an outline
 - Identify problems to solve & opportunities to pursue
 - Include tasks to ensure conformance with ALP & Exhibit A SOPs
 - Obtain FAA approval prior to executing contract
 - Scope of work – coordinate with FAA early
 - Fees – develop & submit to FAA after FAA approves scope of work



What Does Planning Complete Mean?



- **Public input obtained on needs & vision for the airport**
 - Engage FAA, SD DOT Aero, the public & key resource agencies throughout the planning process
 - FAA will engage tribal governments as appropriate
 - Keys to success – share info & build understanding
 - Near-term & long-term aeronautical need
 - Sponsor’s awareness of environmental resources on or near the airport
 - Alternatives to meet aeronautical need & avoid resource impacts



What Does Planning Complete Mean?



- **Public input obtained on needs & vision for the airport (continued)**
 - Provide meaningful notice for how the public can be informed & stay informed
 - Consider inviting most objecting public to be part of committee(s) – receiving input & building understanding sooner is better than later!
 - Meeting notices
 - Consider personal invites to adjacent landowners most affected
 - Don't bury "meeting invites" or public hearings only in the public notice section of the paper
 - Consider buying an advertisement to notice meetings
 - Consider having the newspaper work with the sponsor to write an article to notice meetings



What Does Planning Complete Mean?



- **Existing Conditions Inventory**
 - Airfield
 - Landside facilities
 - Operation counts
 - User needs
 - Airport users
 - Area businesses
 - Part 77 & TERPs obstructions



What Does Planning Complete Mean?



- **Environmental Considerations**

- Built & natural environment
- Existing & planned adjacent land uses & local & airport zoning

- **Wildlife Review**

- Wildlife Hazard Site Visit (WHSV) – an approximate 1-3 day on-site evaluation conducted during a period of time concurrent with significant seasonal wildlife movements
- Wildlife Hazard Assessment (WHA) – an approximate 1 year-long evaluation may be required if the WHSV determines more significant problems are present or if a “triggering” event occurred at a general aviation airport (i.e., strike, etc.)
- Wildlife Hazard Management Plan (WHMP) is the product resulting from a WHSV or WHA that identifies efforts to minimize or eliminate problem(s)
- FAA’s role
 - WHSV or WHA must be accepted by FAA prior to developing a WHMP
 - WHMP is approved by FAA



What Does Planning Complete Mean?



- **Forecasts – Valid forecast(s) & resulting demand of aircraft operations & enplanements**
 - FAA approval required based on consideration of
 - FAA accepted methodologies
 - Consistent with the Terminal Area Forecast (TAF)
 - Update based aircraft status on [BasedAircraft.com](https://www.faa.gov/aircraft) to feed info reported on the Airport Master Record (5010)
- **Critical Design Aircraft – FAA reviews & validates aircraft & fleet mix to accommodate forecasts & meet demand**



What Does Planning Complete Mean?



Reaching agreement on the critical design aircraft designation is VERY import – it drives all geometric requirements & impacts how the vision identified in the planning process can be implemented

- Runway design group
- Taxiway design group
- Airport reference code

A-I less than 12,500 lbs. (small)

- Beech Baron 55
- Beech Bonanza
- Cessna 150
- Cessna 172
- Piper Archer
- Piper Seneca



B-I less than 12,500 lbs. (small)

- Beech Baron 58
- Beech King Air 100
- Cessna 402
- Cessna 421
- Piper Navajo
- Piper Cheyenne
- Cessna Citation I



B-II less than 12,500 lbs. (small)

- Super King Air 200
- Cessna 441
- DHC Twin Otter



B-I, II greater than 12,500 lbs.

- Super King Air 300
- Beech 1900
- Jetstream 31
- Falcon 10, 20, 50
- Falcon 200, 900
- Citation II, III, IV, V
- Embraer 120
- Gulfstream I



A-III, B-III

- DHC Dash 7
- DHC Dash 8, Q-300, 400
- DC-3
- Convair 580
- Fairchild F-27
- ATR 72
- ATP




What Does Planning Complete Mean?



Reaching agreement on the critical design aircraft designation is VERY import – it drives all geometric requirements & impacts how the vision identified in the planning process can be implemented

- Runway design group
- Taxiway design group
- Airport reference code

C-I, D-I

- Lear 25, 35, 55
- Israel Westwind
- HS 125



C-II, D-II

- Gulfstream II, III, IV
- Canadair 600
- Canadair Regional Jet
- Lockheed JetStar
- Super King Air 350



C-III, D-III

- Boeing Business Jet
- B 727-200
- B 737-300 Series
- MD-80, DC-9
- Fokker 70, 100
- A319, A320
- Gulfstream V
- Global Express



C-IV, D-IV

- B-757
- B-767
- DC-8-70
- DC-10
- MD-11
- L1011



D-V

- B-747 Series
- B-777





What Does Planning Complete Mean?



- **Evaluate the airport's existing capacity to accommodate forecasts**
 - Are existing conditions adequate to address future needs?
 - Identify deficiencies
- **Facility Requirements – FAA concurrence obtained based on existing & forecasted needs**
 - Near-Term – submit justification identifying & documenting actual need for the specific project
 - Why is the project needed within the next 5 years?
 - Why can't existing infrastructure accommodate demand?
 - Long-Term – identify anticipated 20-year needs



What Does Planning Complete Mean?



- **New or modified land use in Runway Protection Zone (RPZ) requires FAA concurrence**
 - An airfield project (e.g. runway extension, runway shift)
 - A change in the critical design aircraft that increases the RPZ dimensions
 - A new or revised instrument approach procedure that increases the RPZ dimensions
 - A local development proposal in the RPZ (either new or reconfigured)



What Does Planning Complete Mean?



- **No triggering event – consider in planning process whether an existing RPZ with an encroachment could be brought into compliance**
- **Triggering event**
 - Conforming RPZ proposed – ALP vision demonstrates a reasonable ability to provide a clear RPZ
 - Proposed RPZ impact – RPZ Alternative Analysis required
 - Near-Term (i.e. within 5 years) – ADO, Regional & Headquarters' concurrence required
 - Long-Term (i.e. within 6-20 years) – ADO review required & analysis documented in Master Plan; concurrence required prior to or with environmental document preparation



What Does Planning Complete Mean?



- **Approach Minimums**
 - Evaluate adequacy & appropriateness of published approaches
 - Determine future needs & their impact on existing NAVAIDS
 - Consider Part 77 & TERPs impacts
- **Runway utilization & flight tracks uses**
 - Noise modeling
 - Assist with determining IFR demand
 - Identify potential conflicts with other nearby airports
 - Identify left or right hand traffic patterns
- **Obstruction Evaluation / Airport Airspace Analysis (OE/AAA)**
 - Process case through online system
 - Shadow study if air traffic control tower is proposed
 - Coordination with other FAA lines of business
 - Air Traffic
 - Tech Ops
 - Flight Procedures
 - Flight Standards

What impact does your project have on the National Airspace System (NAS)?



What Does Planning Complete Mean?



- **Complete alternative analysis examining & documenting the least environmentally damaging alternative**
 - FAA & SD DOT Aeronautics planning staff work together with the sponsor to determine the range of alternatives that exist
 - Include the following in analysis
 - Alternatives meeting aeronautical need
 - Consider long-term needs when identifying alternatives to meet near-term need
 - Alternatives representing good tradeoffs between meeting aeronautical need & avoiding / minimizing environmental impacts
 - Consider practicable, possible, or prudent alternatives to avoid specially-protected resources
 - Consider conceptual mitigation to reduce unavoidable environmental effects if no practicable, possible, or prudent alternative exists
 - Alternatives unlikely to be selected when a protected resource will be impacted
 - No-build alternative



What Does Planning Complete Mean?



- **Completed alternative analysis examining & documenting the least environmentally damaging alternative (continued)**
 - What are the tradeoffs between the alternatives?
 - Document each alternative's ability to
 - Meet demand & conform to standards
 - Avoid or minimize impacts to built & natural environment
 - Be economically viable
 - Be acceptable to the public
 - Receive political approval



What Does Planning Complete Mean?



- **Facility Implementation & Financial Plans – identify**
 - Timing & phasing of projected, necessary airport development
 - Planned projects & related triggering events
 - Projects that should be sequenced together
 - Develop a reasonable funding plan, including how the sponsor will provide their local share
 - Update CIP
- **Conditional ALP Approval**
 - Shows proposed development
 - Airspace analysis completed



When is it Ripe to Start NEPA?

- **FAA determines**

- Planning process is complete & strong foundation exists for the project(s)
 - Purpose & need
 - Justification
- Project is AIP eligible – grant can be issued after scope of work is accepted
 - Must occur prior to contract being executed
- Scope of work for NEPA document is acceptable prior to executing contract between sponsor & consultant



Questions



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