

# The relationship between Master Plan Study Planning and NEPA

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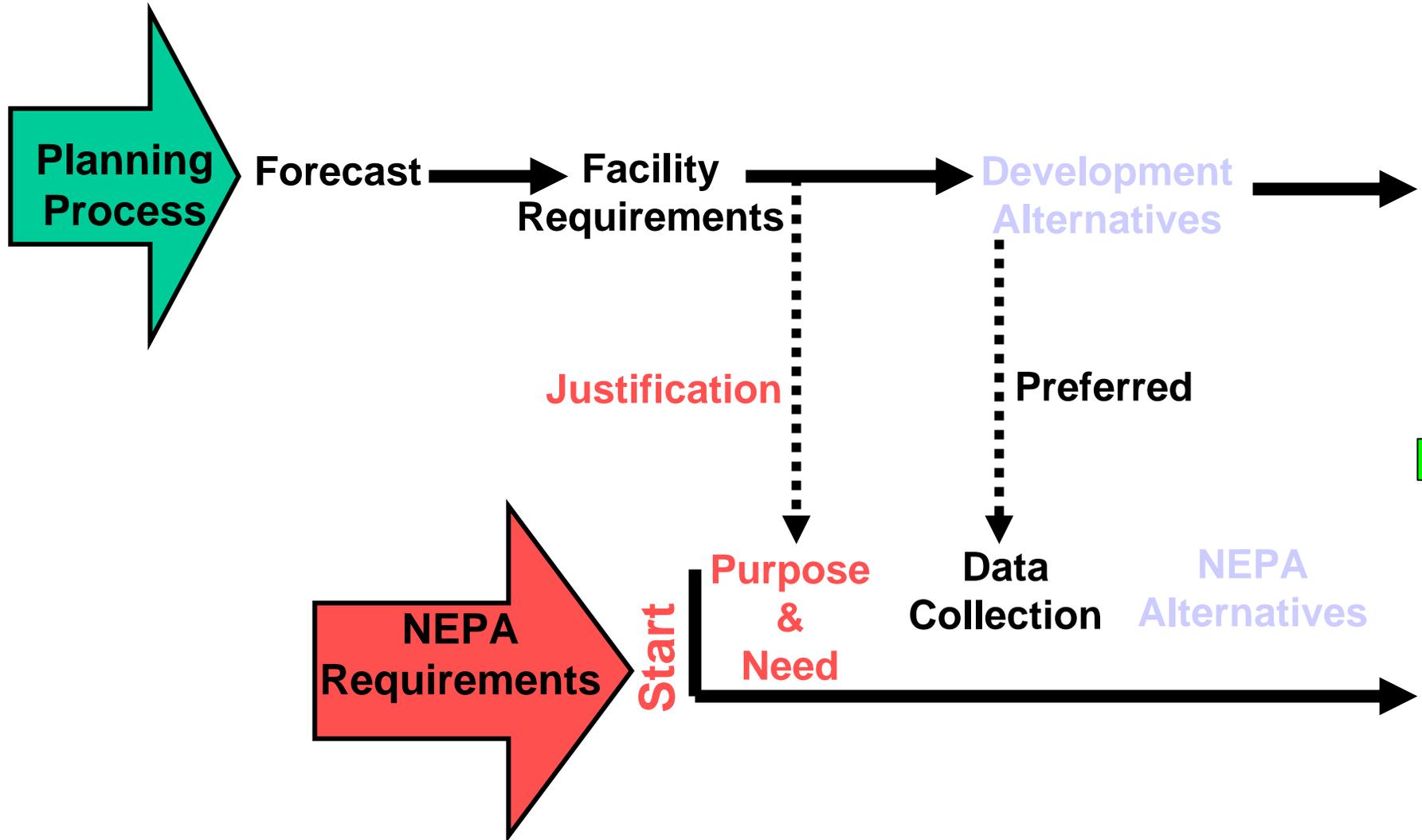
# Overview

- Master Plan Study
- National Environmental Policy Act (NEPA)
- Project Need
- Alternatives Analysis
- Environment
- Helpful Pointers



# Planning Relationship

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# Master Plan Study

- What is a Master Plan?
- Why is a Master Plan Needed?
- Typical Components in a Master Plan?



# What is Master Plan?

- Plan for the short (5 years)-, medium (10 years)-, and long-term (20 years) development of an airport
  - Supports modernization of existing airports
  - Contains the details, logic, and justification for the plan
- Problem solving document
  - Focus the direction of the airport
  - Guidelines for future development to meet demand
- Forms the basis for follow-on work
  - Environmental processing, Benefit/Cost Analyses, etc.
- Graphically depicts future development
  - Airport Layout Plan (ALP)
  - Shows existing physical layout and future development

# Why is a Master Plan Needed?

- Develops the airport in a safe and efficient manner
- **Provides a process which may avoid the need to redo planning in NEPA, resulting in less delay in the completion of needed development**
- End result is an Airport Layout Plan (ALP)



# Components of a Master Plan

- Pre-Planning
- Existing Conditions
- **Aviation Forecasts-FAA Approval**
- **Facility Requirements**
- **Alternatives Analysis**
- **Environmental Features**
- Financial Analysis
- Airport Layout Plan- FAA Approval
- Local Planning
- Community Involvement



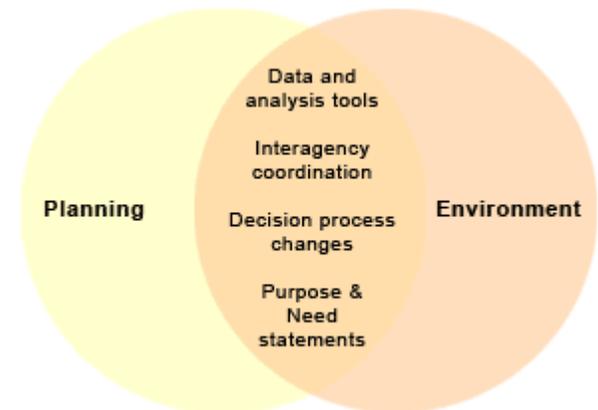
# Why NEPA?

- Applies only to the Federal Government
- Establishes an interdisciplinary approach
- Documentation of analysis
- Requires public involvement
- Promotes informed decision-making



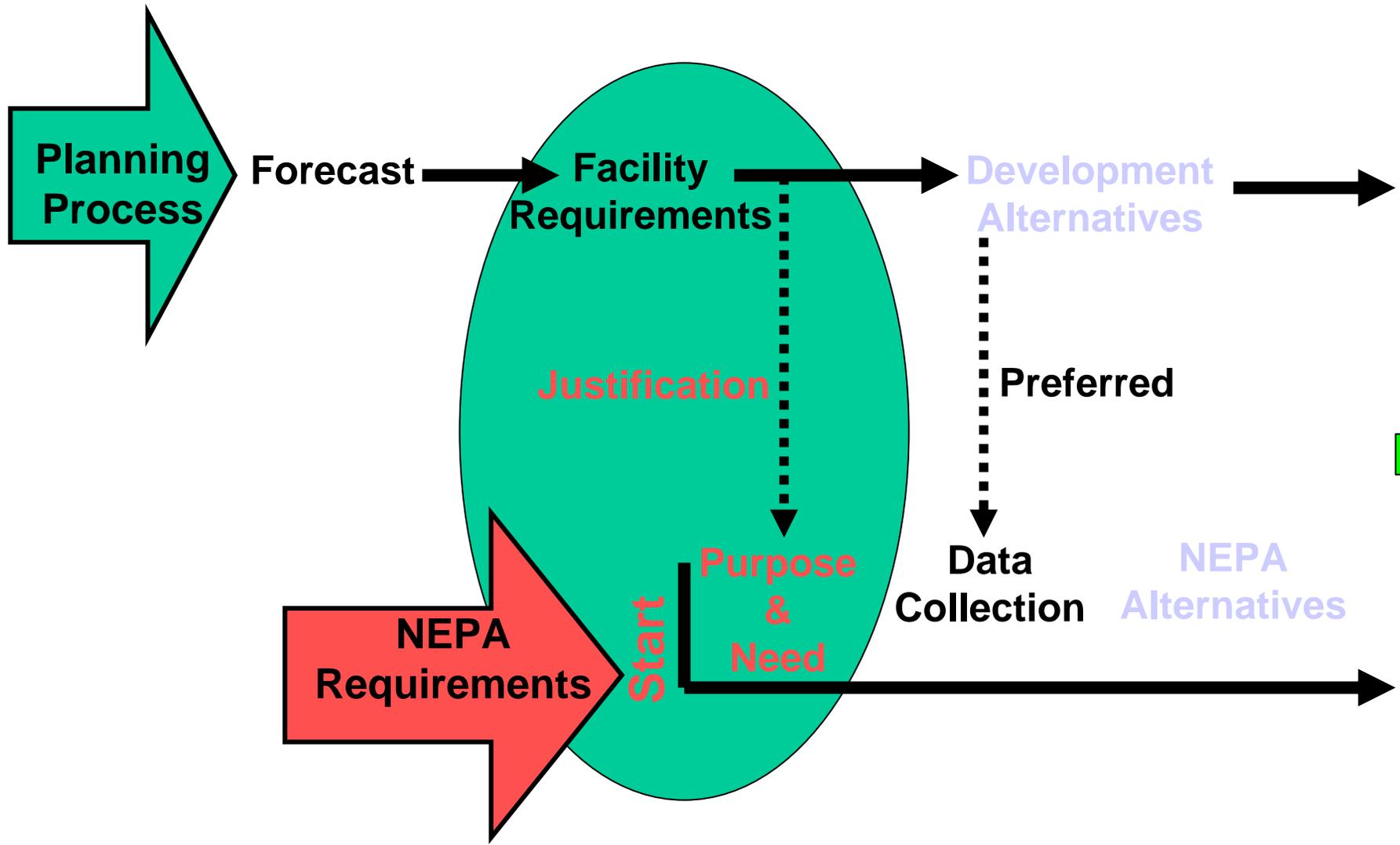
# Components of NEPA

- **Purpose and Need**
- **Alternatives Analysis**
- **Affected Environment**
- **Environmental Consequences**
  
- Mitigation
  
- Coordination



# Need

# Environmental



# Establishing Need- Master Plan

- Develop a Preliminary Need Statement
  - Aviation Problem
    - Why does the airport need to solve the problem?
    - Findings

Facility Requirement - Abilities of the existing airport

- Demand Level Triggers
- Extent of new facilities needed
- What is the base case?



# Purpose and Need- NEPA

- Answers why here and why now
- Description of the problem or need to be addressed.
- Includes supporting information
- Identifies objectives that are to be achieved
- Does not include preferred alternative

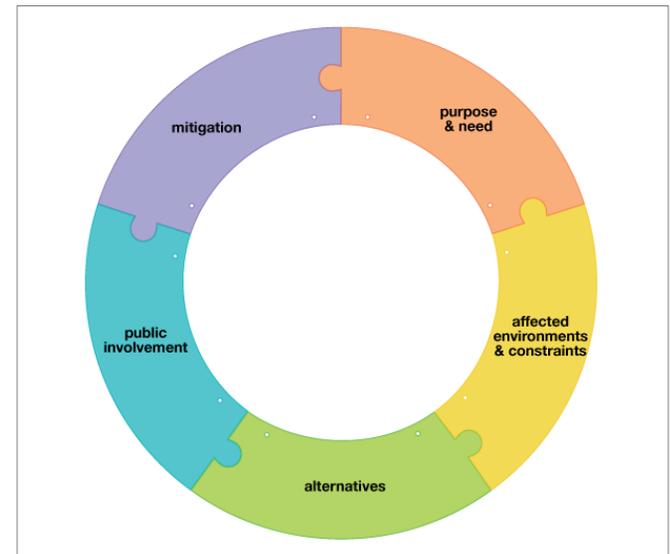


# Example Need in a Master Plan

- Allowing for unconstrained growth the runway and taxiway will need to be able to expand to accommodate 100 percent of large aircraft at 60 percent of useful load
- According to FAA AC 150/5325-4b the future length of the primary runway should be at least 5405 feet long
- Critical Design Aircraft consist of Cessna Grand Caravan, King Air 200, 90, Cessna Citation

# Purpose and Need under NEPA

- Current airport configuration does not provide ability for the critical design aircraft to operate at sixty percent of useful load
- Existing runway does not meet FAA ACs for Class B II Aircraft for runway length
- Critical design aircraft that regularly use the airport consist of Cessna Grand Caravan, King Air 200, 90, Cessna Citation. Data supported by interviews with FBOs, letters from Corporate users (included in appendices)



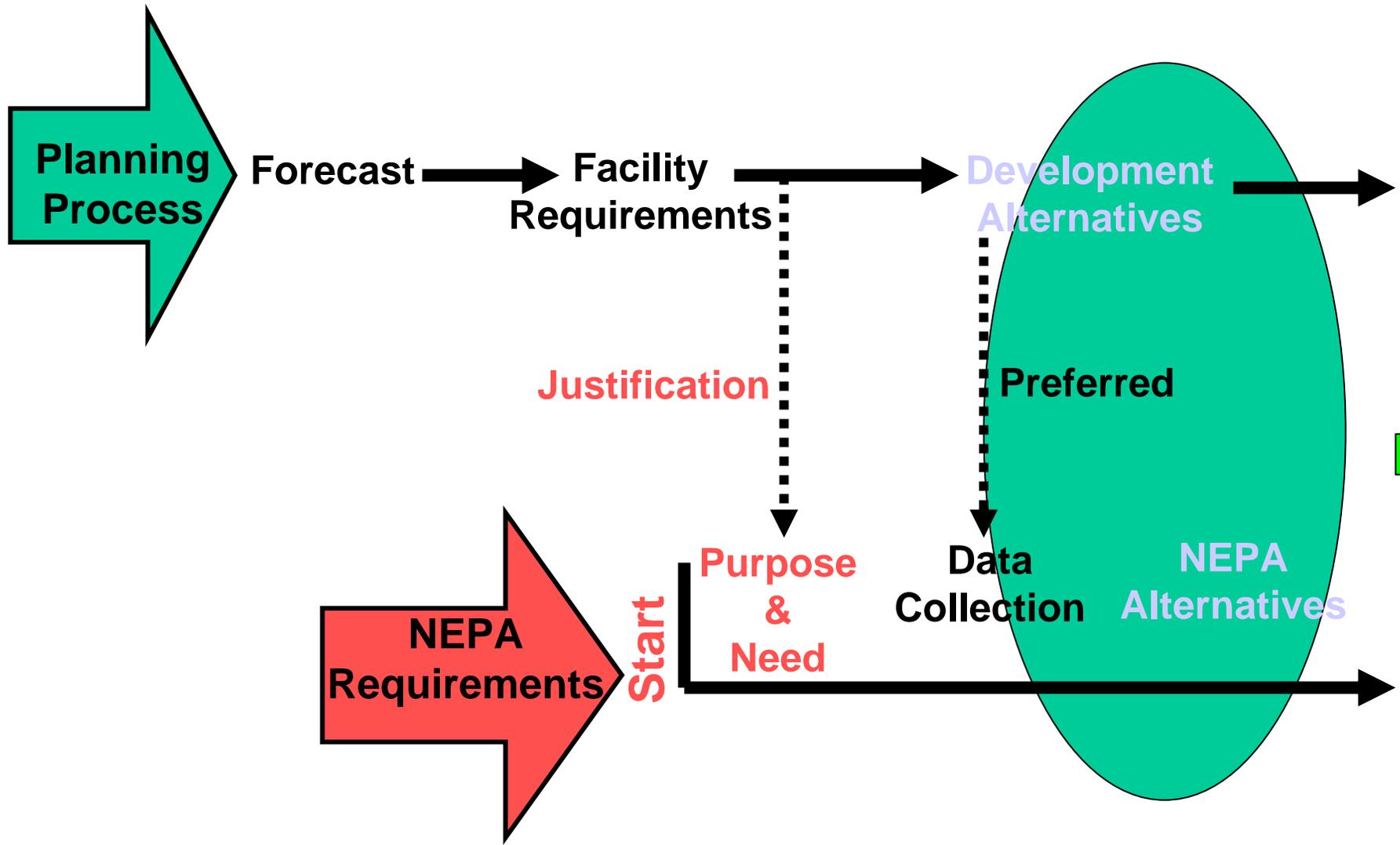
# Major Points

- Master Plan contains the desired solution in the needs statement
- NEPA does not include the solution in the Purpose and Need statement
- Forecast versus ripe for decision making
- Both require supporting information/data



# Alternatives

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# Alternatives Analysis- Master Plan

- Intended to identify all alternatives that the FAA/sponsor can do to meet the need as defined in the Facility Requirements Chapter
- Development of alternatives should begin to consider the environment. The master plan may aid in the formulation of purpose and need for future environmental documents
- Master plan not intended to establish single alternative for NEPA evaluation, but will establish sponsor's preferred alternative. This alternative will be shown on the future ALP sheet

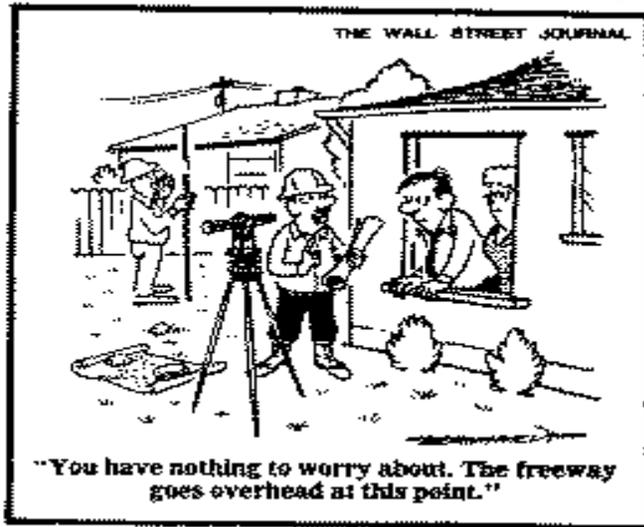
# Alternatives Analysis- NEPA

- Based on purpose and needs statement
- Addresses objectives outline
- Must have no action alternative
- Includes all reasonable alternatives for consideration.
- Can include preferred alternative

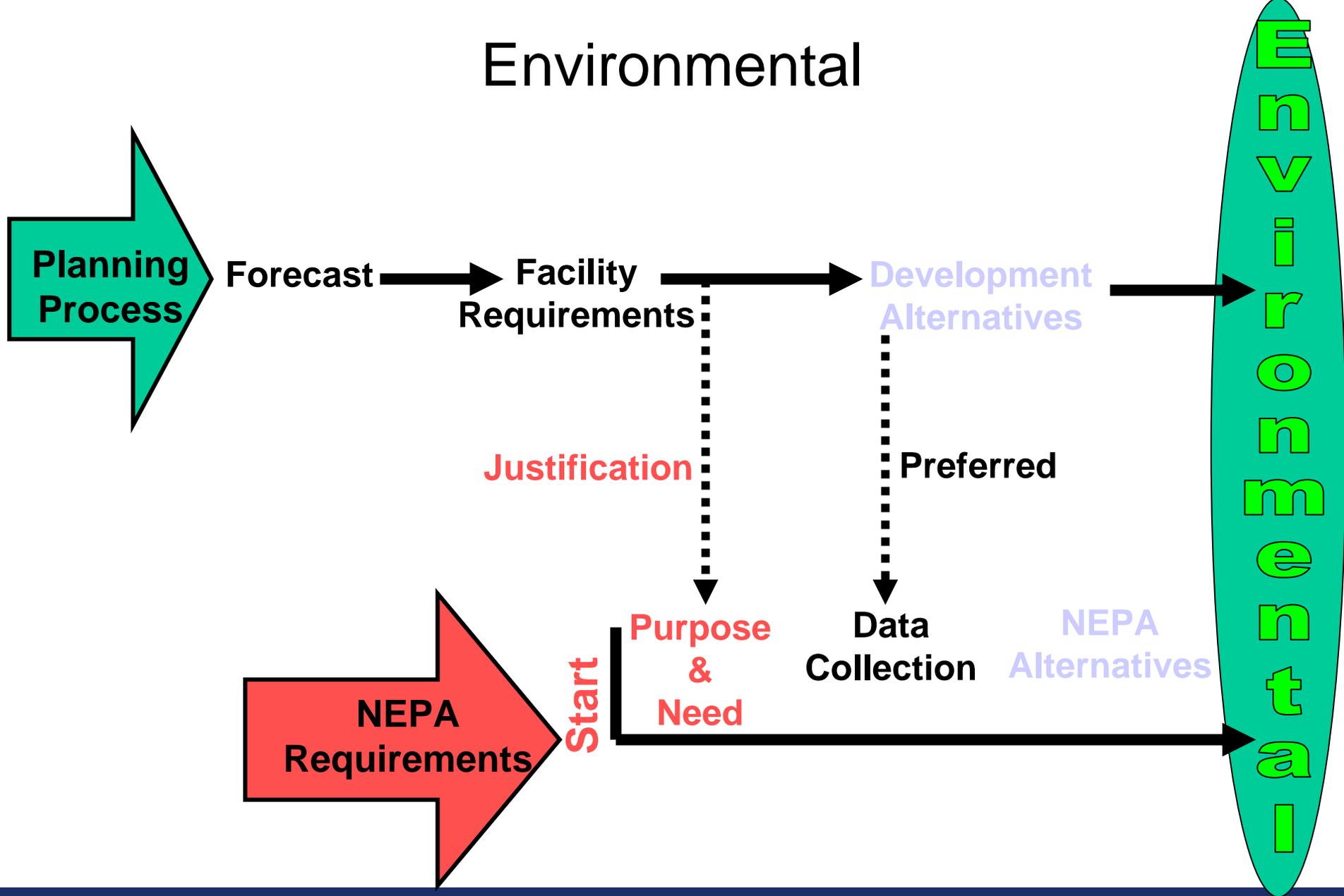


# Major Points

- NEPA requires all reasonable alternative to be carried through the planning/analysis process
- Master Plan does require alternatives analysis but only the preferred to be carried forward
- NEPA requires “no action alternative”
- Both are based on a purpose and need for project



# Environmental



# Environmental-Master Plan

- Helps determine if additional alternatives are needed
- Define future environmental coordination and analysis for NEPA work scope development
- Properly understand anticipated costs of design so that AIP grants can be properly requested within grant cycle
- The overview is not intended to substitute for the “Affected Environment” section of the NEPA document



# Environment-NEPA

- Much more detail required than master plan
- Establishes environmental baseline for impact analysis (affected environment)
- Requires 3 different types of impact analysis-
  - Direct, indirect and cumulative (environmental consequences)



# Major Points

- Master plan requires “awareness” of potential environmental features/issues
- NEPA requires a more in-depth analysis
- Can affect alternative development
- Sponsors should know the landscape of their airport



# Databases

- Enviromapper- [EPA.Gov/enviro](http://EPA.Gov/enviro)
- Window to my environment- [EPA.Gov/enviro/wme](http://EPA.Gov/enviro/wme)
  - Access to EPA monitoring, water quality, watersheds, questionnaire that will aid in directing you to other Federal and State agencies

# What is required from you...

- A **strong** purpose and need;
- A **clear** justification;
- **Reasonable alternatives considered**;
- Know the **environmental features in the project area for your airport** and surrounding area
- Accurately Identify **potential impacts**;
- **Early Coordination!**



# Pre-Planning Steps

- Partnership between the sponsor and the FAA
- Information on scoping
  - Establish goals and objectives
- Level of effort
  - Full master plan versus an master plan update or ALP update
- Purpose oriented planning
  - Is there a specific issue or problem?
- Support of other interested groups
  - Who needs to be involved?

# Local Planning Group

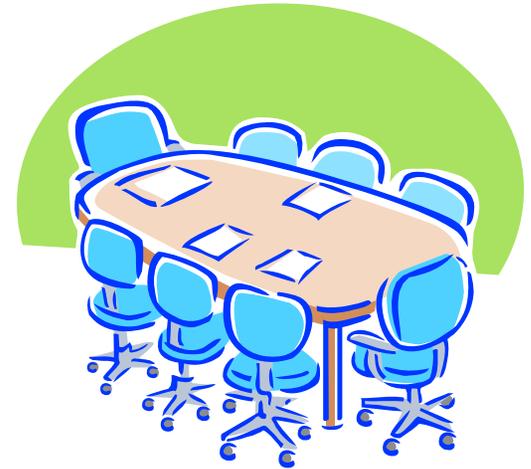
- Provide consistency between community and airport planning
- Allows airport sponsor to voice interests in land use planning and surface access



- Local Planners benefit by learning airport needs and how airport promotes community access
- Airport Sponsor should emphasize to local officials the importance of zoning for airport compliance land use and height limits

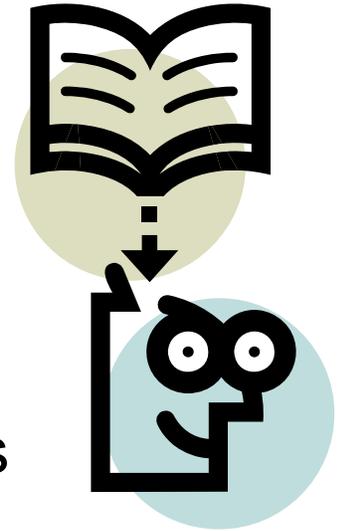
# Project Coordination is Critical

- Sponsor
- Consultant
- ADO Planner
- ADO Environmental Specialist
- ADO Project Manager
- Resource and Regulatory Agencies



# Readability

- Consistent message and facts
- Project consistent throughout
- Clear and logical
- Define acronyms, terminology, and concepts
- Have someone else read it through before sending it to FAA even if it is a Draft copy



# Helpful Hints!

- Set schedule, deadlines, and milestones
- Use scope of work as roadmap
- Allow adequate time for review
- Be realistic!
- Coordinate regularly



# Help Us Help You- Aka Your Responsibilities

## Sponsor

- Know your issue and the problem, then your project
- Don't change proposal in mid-stream
- Make sure your forecasts are approved
- Get involved
  - Review your document
  - Ask questions



# Help Us Help You- Aka Your Responsibilities

## Consultant

- If you're not sure, ask!
- Don't try to do our job for us, tell us if you think we need to do something
- Designate or hire an editor
- Perform QA/QC before submittal
- Don't do a brain dump
- Verify your sponsor's project need



# Help Us Help You- Aka Your Responsibilities

## State Aviation Agencies

- Keep us informed of state initiatives
- Keep State System Plans up-to-date
- Keep importance of aviation before the Legislature



# Other Helpful Hints

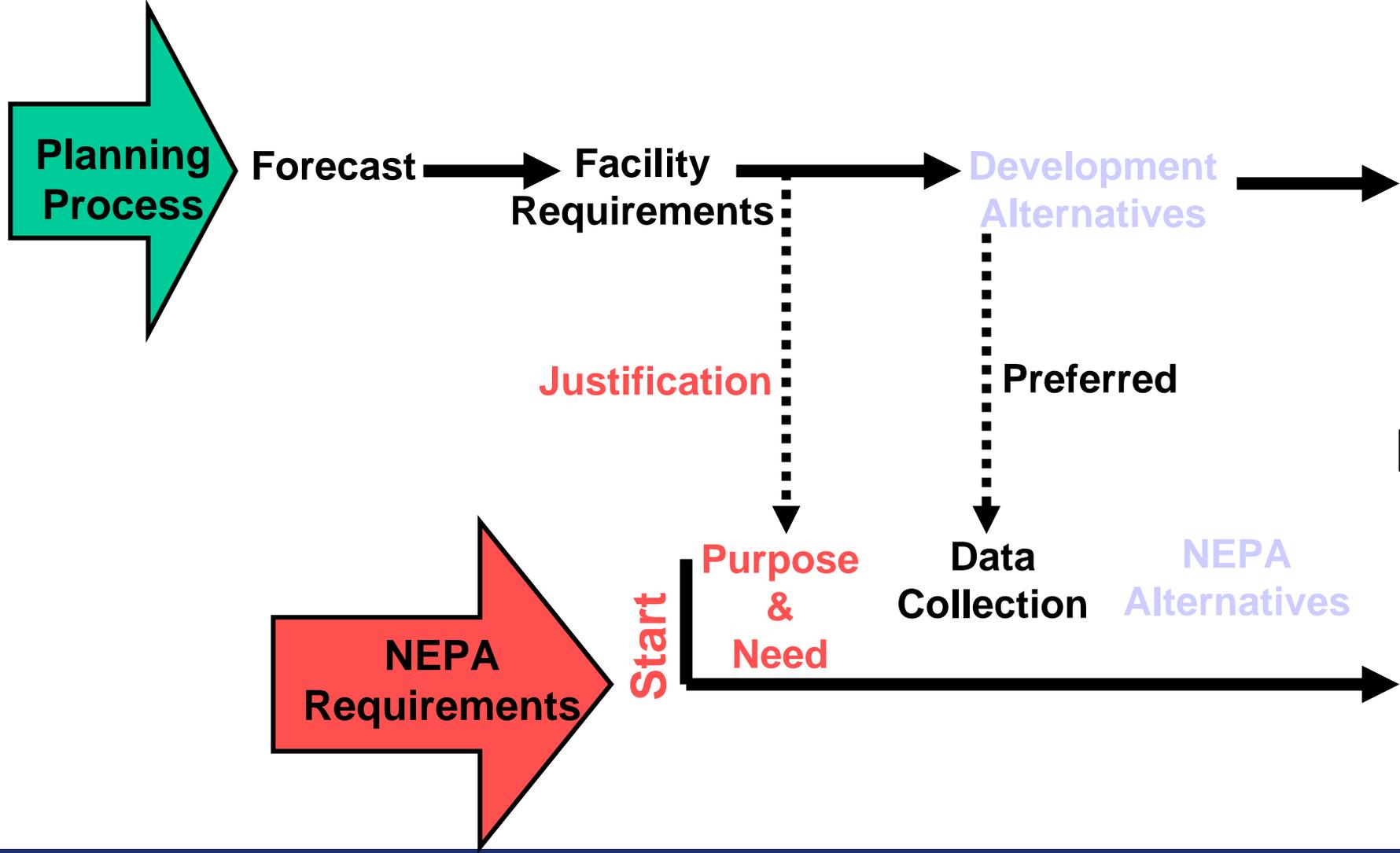


## Things That Make a Project Flow Quickly

- A well-developed State System Plan that provides adequate justification for projects
- An up-to-date Master Plan that includes FAA approvable forecasts
- A well-developed Airport Development Plan justifying a project based on design standards
- Letters from current or prospective tenants justifying the project through 500 annual operations of a critical aircraft

# Planning Relationship

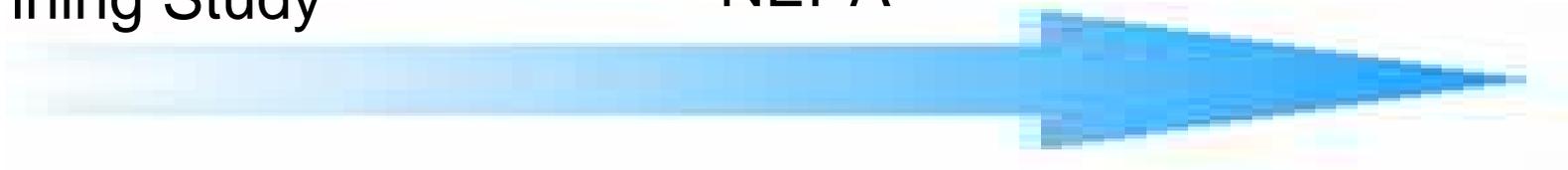
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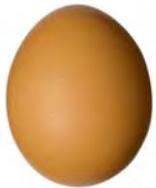
# Is Really This

Master  
Planning Study

NEPA



Planning Continuum



# Or This!





Questions?



Federal Aviation  
Administration