What And Why?

WHAT DOES THIS PROJECT HOPE TO ACHIEVE?	WHY ARE WE DOING THIS PROJECT?
Take advantage of Performance-Based Navigation by implementing RNAV procedures that will help improve the efficiency of the airspace in the Columbus Airspace	**The existing Columbus arrival procedures do not take full advantage of modern technology.**
Improve the predictability of air traffic flows by adding RNAV STARs and transitions to/from airport runways to modern RNP approach procedures.	Current procedures do not have precise guidance to and from each runway. This requires controllers to use techniques such as vectoring and speed control to ensure safe vertical and lateral separation between arrival and departure aircraft. These techniques result in a lack of predictability and high workloads for controllers and pilots, along with inefficient approaches.
Improve the segregation of arrivals and departures in the airspace by designing RNAV STARs and RNPs that can be used independently to/from the regions Airports and where practical, include optimized descent profiles	Constraints associated with military airspace and near by Airports result in complex interactions between arrival and departure flows. This requires controllers to carefully observe aircraft activity along the nearby or crossing flight routes ensuring standard separation is maintained.
Improve flexibility in transitioning traffic between enroute and terminal area airspace and between terminal area airspace and the runways by increasing the number of entry points, available transitions and overall number of RNAV STARs and introduce RNP procedures	Flexibility in the management of the Columbus airspace is affected by a limited number of entry points. This constrains efficiency in the airspace and requires multiple traffic flows to merge before aircraft arrive at and depart the Columbus area.

TERMINOLOGY

RNAV	RNP	STAR
Area Navigation	Required navigation performance	Standard Terminal Arrival Route

Environmental Study Process

Consideration of a Proposed Action under the National Environmental Policy Act (NEPA)

NEPA requires that the FAA evaluate the environmental and related social and economic effects of a proposed action.

Preliminary Technical Review
FAA conducts an internal technical review before deciding to consider moving forward with an environmental review.

Preliminary Environmental Review
FAA conducts an internal environmental review to evaluate any potential environmental concerns.

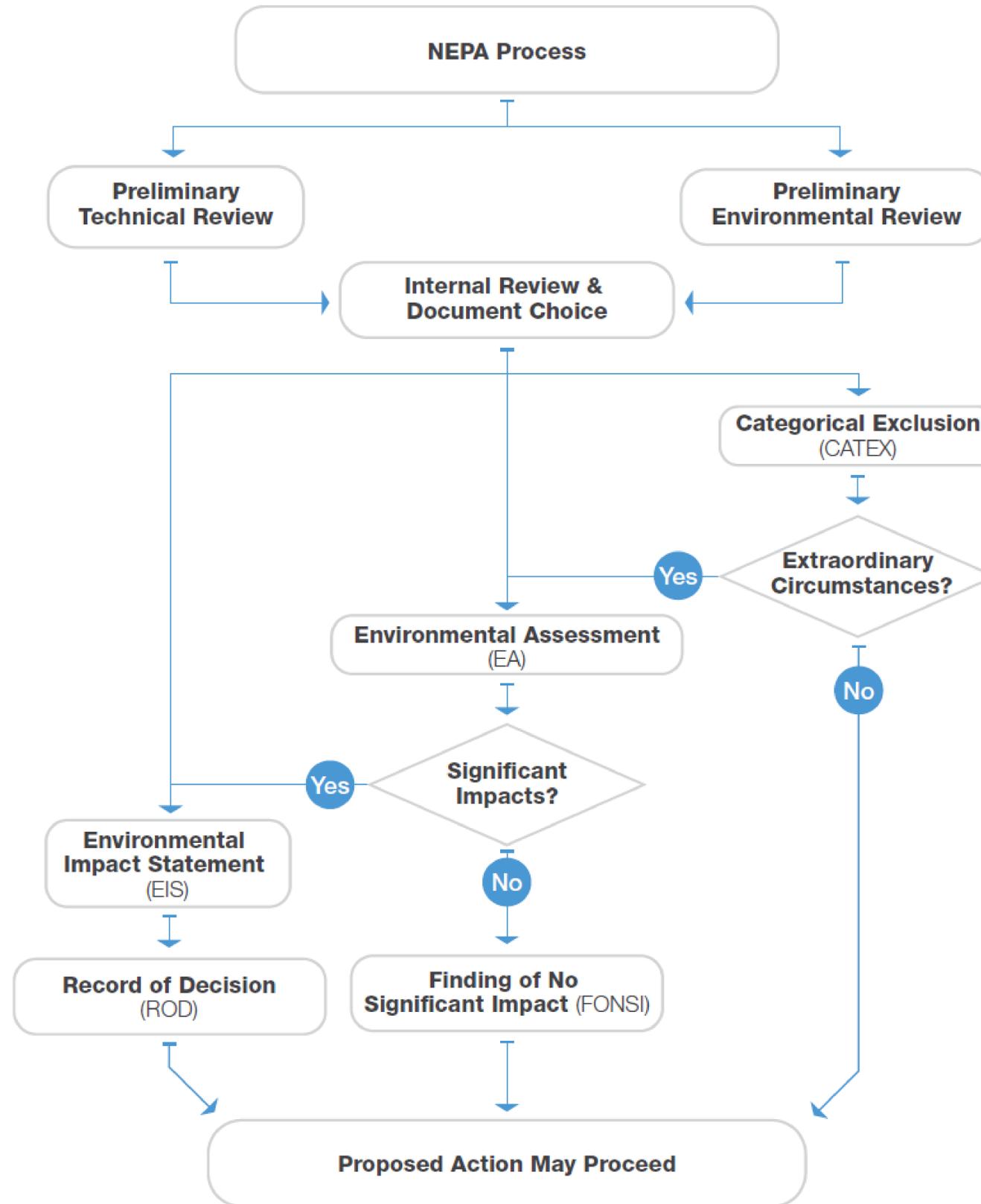**Internal Review and choice of appropriate level of NEPA review**
Internal analysis such as the noise screening reports as well as input from the public are used to assist the FAA in determining the appropriate level of NEPA review to conduct.

Extraordinary Circumstances
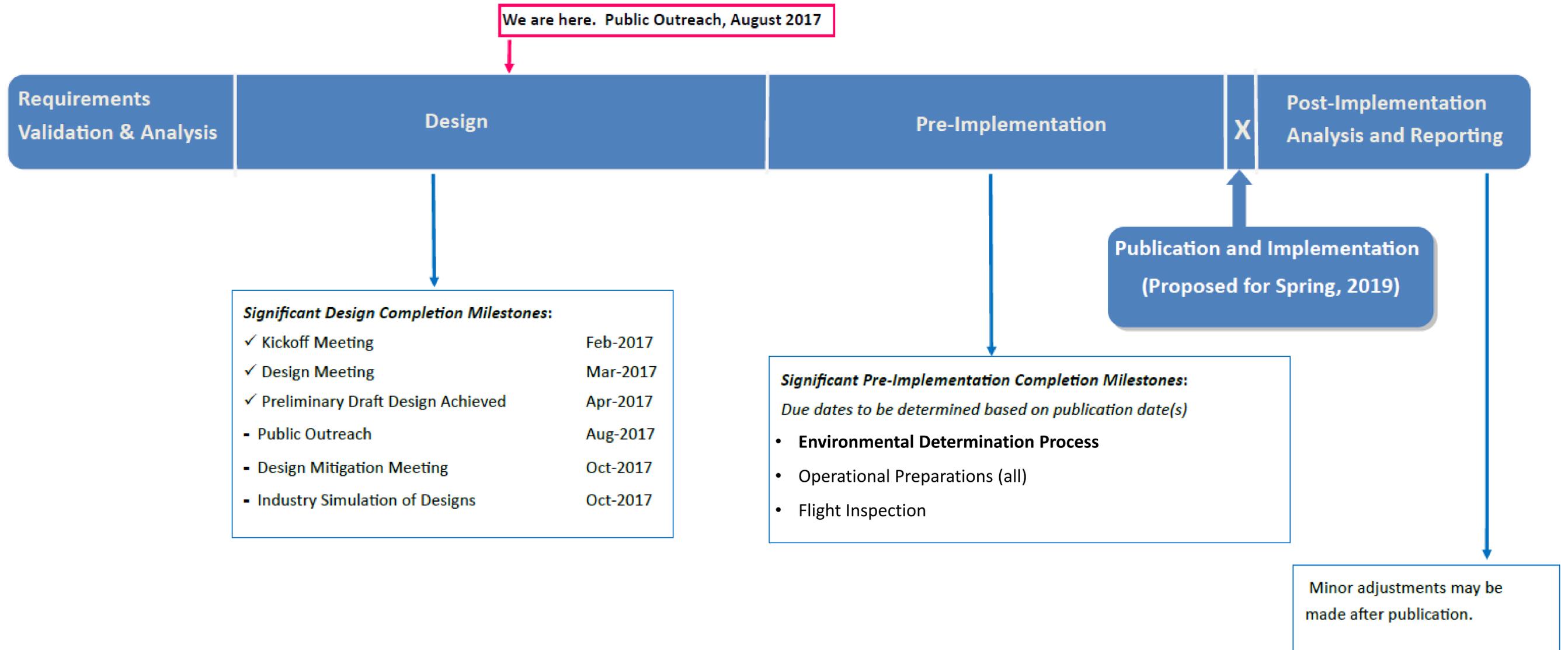Paragraph 5-2 of FAA Order 1050.1F identifies the range of factors which define Extraordinary Circumstances.

Significant Impacts
The FAA uses thresholds that serve as specific indicators of significant impact for some environmental impact categories. FAA proposed actions that would result in impacts at or above these thresholds require the preparation of an EIS, unless impacts can be reduced below threshold levels.

Flowchart:
- NEPA Process
  - → Preliminary Technical Review
  - → Preliminary Environmental Review
  - → Internal Review & Document Choice
    - → Categorical Exclusion (CATEX) → Extraordinary Circumstances?
      - Yes → Environmental Assessment (EA)
      - No → Proposed Action May Proceed
    - → Environmental Assessment (EA) → Significant Impacts?
      - Yes → Environmental Impact Statement (EIS) → Record of Decision (ROD) → Proposed Action May Proceed
      - No → Finding of No Significant Impact (FONSI) → Proposed Action May Proceed