

## NEPA Environmental Impact Categories

	Air Quality
	Coastal Resource (Barriers and Zones)
	Compatible Land Use
	Construction Impacts
	Department of Transportation Section 4(f) Lands
	Farmlands
	Fish, Wildlife and Plants
Preliminary findings to be overviewed during workshop	→ Floodplains
	Hazardous Material and Solid Waste
	→ Historical, Architectural, Archaeological and Cultural Resources
	Light Emissions and Visual Effects
	Natural Resources and Energy Supply
	→ Noise
	Secondary (Induced) Impacts
	Socioeconomic, Environmental Justice, Children's Health and Safety Risks
	→ Water Quality
	→ Wetlands
	Wild and Scenic Rivers

Source: FAA Order 1050.1E Change 1

### What are the environmental review highlights?

The eighteen environmental categories have been grouped into three classifications: 1) not applicable, 2) no impact anticipated, 3) additional analysis needed. Some of the areas of particular interest that required additional analysis include noise, water resources, historic, archaeological, and floodplains.

### What are the parameters for "significance" in regard to noise impacts?

The FAA requires the use of the most current version of the Integrated Noise Model (INM), presently version 7.0a, to assess potential noise impacts. A significant noise impact would occur if the proposed action will cause noise sensitive areas to experience an increase in noise of Day-Night Level (DNL) of 1.5 dB or more at or above DNL 65 dB noise exposure when compared to the no-action alternative for the same timeframe. The DNL measure includes a 10 db penalty (doubling) for operations at night between 10 p.m. and 7 a.m., when the background noise is the lowest and people tend to be more sensitive to noise events.

### Next Steps

This environmental assessment process offers includes a total of four public information workshops (the last one includes a public hearing to record public comments). Tonight's meeting is the third workshop.

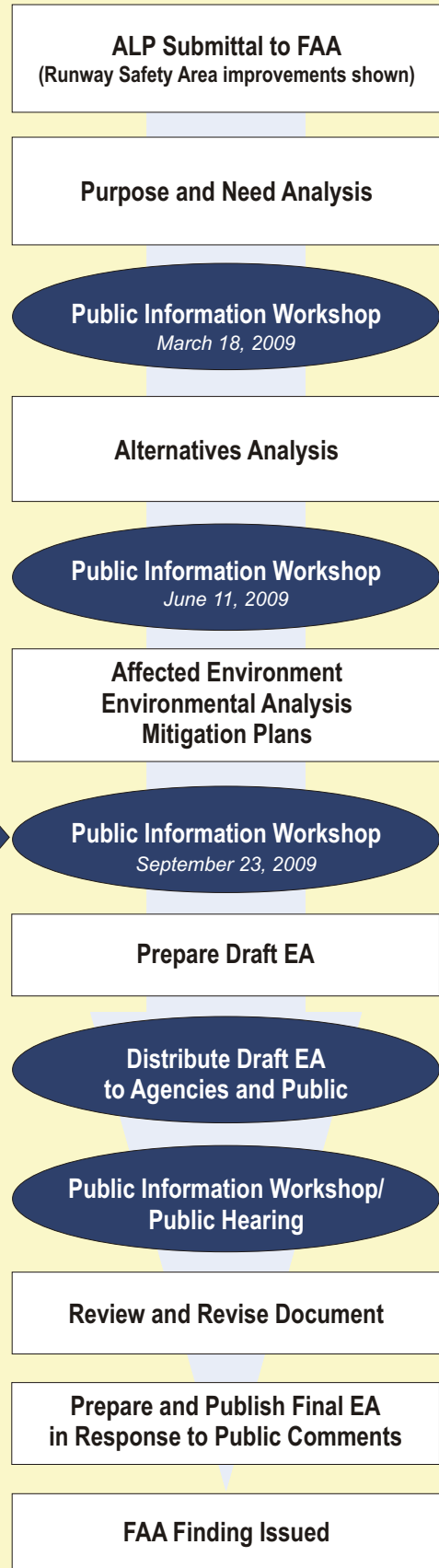
The date and time for the next workshop and hearing have not been set at this time. Meeting announcements will be published in local newspapers and posted on the airport's website at [www.evairport.com](http://www.evairport.com).

### Comments

Your input is very important to this process. Comment forms are available in the meeting area. These may either be filled out tonight or can be returned until **October 2, 2009** to:

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## Environmental Assessment Process



Opportunities for Review and Comment



## Environmental Assessment Runway Safety Area Improvements

### Public Information Workshop

September 23, 2009

#### What is the purpose of tonight's meeting?

Tonight's meeting is the third of four public information workshops to be held during the Environmental Assessment process for runway safety area (RSA) improvements. The purpose of this workshop is to present the full range of alternatives, including no-action options, and the highlights of environmental findings associated with the alternatives. Tonight's meeting is also an opportunity for the public to offer comments.

Recommendations for the proposed improvements to the primary runway were identified as part of the update to the 20-year Master Plan for Evansville Regional Airport, completed in 2007. The Evansville-Vanderburgh Airport Authority District is conducting an Environmental Assessment to determine the potential impacts of the proposed actions.

#### What is the reason for runway improvements?

The purpose of the Proposed Action by Evansville-Vanderburgh Airport Authority District (Sponsor) is to provide the airport with improvements which meet Federal Aviation Administration design standard criteria, to enhance the operating safety conditions at the Airport and to allow the Airport to achieve its airfield goals. The need is to remove nonstandard runway safety areas and reclaim full use of the primary runway length because it currently does not meet the design criteria for the critical aircraft at the Airport.

#### Why are the primary runway improvements seen as critical?

Compliance with the RSA design standards will increase the margin of safety at the airport. Per Federal Aviation Administration (FAA) compliance requirements, all practicable RSA improvements are to be completed by the end of FY 2015. Several years of construction are necessary to accomplish the airfield improvements needed to provide compliant RSAs on Runway 4-22. Thus, the development program needs to begin now in order to meet the FAA deadline.

#### Why is the primary runway length seen as critical?

The full primary runway length is not available today. Because of this, existing air carriers are operating under load constraints imposed by obstructions located southwest of the primary runway. Any further reduction of the runway length will threaten the airport's ability to retain air carriers.

#### What is an RSA?

RSAs must meet specific object clearing, grading, and load bearing requirements to enhance safety by providing cleared areas. RSAs should be graded and free of any structures, traverse ways, roads, railroads, and parking areas. In addition, the RSA improves accessibility for fire-fighting and rescue equipment during emergencies.

The RSA enhances safety by providing cleared areas to significantly minimize personal injury and damage to an aircraft in the event of an overshoot, undershoot, or veer-offs. They also provide improved accessibility for fire-fighting and rescue equipment during emergencies.

### How has the full range of runway alternatives been developed?

The consulting team reviewed the alternatives considered to meet RSA requirements during the 2007 Airport Master Plan and then developed other reasonable alternatives for analysis. From the outset of the environmental assessment process, the consulting team asked the public to provide input during the public information workshops. Additional alternatives were developed to reflect public input.

The Airport Authority and consulting team committed to listen and look at any additional reasonable alternative and to consider if there is a solution that makes better sense while addressing purpose and need for the primary runway improvements. As a result, four additional runway alternatives were added for study after the second workshop.

Two no-action options have also been included in the analysis. Runway Alternative 1 is the do-nothing alternative that would be in place until 2015; Runway Alternative 2 is the simplest do-nothing alternative that would be put into place after 2015. The National Environmental Protection Act (NEPA) requires that the do-nothing alternatives be carried through the study process to provide a baseline for comparison to any build alternatives under consideration.

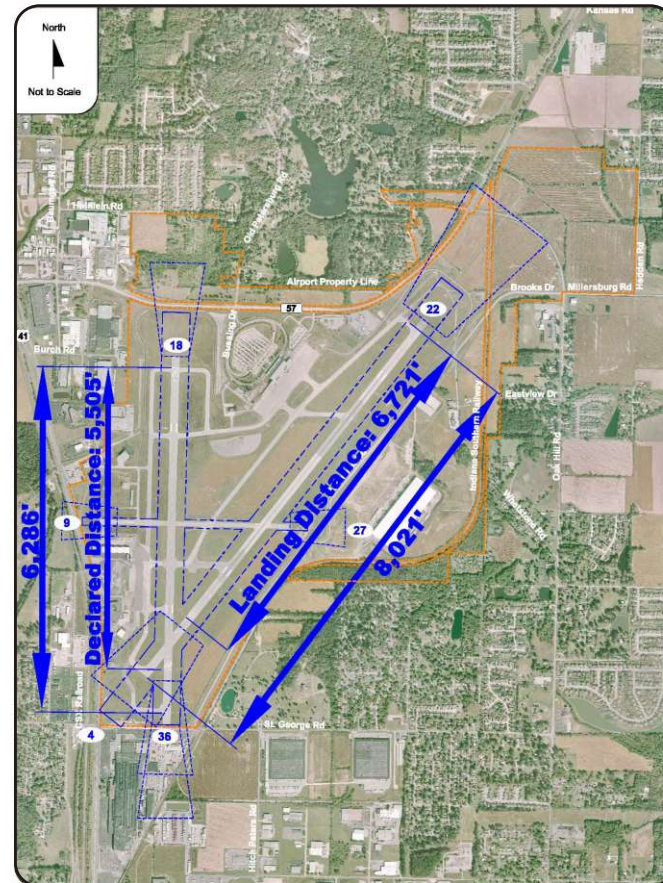
### Which alternatives require rail and roadway realignment?

Any alternative that shifts the Runway 22 threshold to the northeast requires the rail realignment; thus, Runway Alternatives 4, 5, 6, 9, 10, 11, and 12 require the rail realignment. Because of the FAA's current runway grading standards (up/down slope of the runway), any shift in the runway to the northeast would require the last ¼ of the runway to be lowered and consequently will provide insufficient clearance for aircraft over the railroad in its current location.

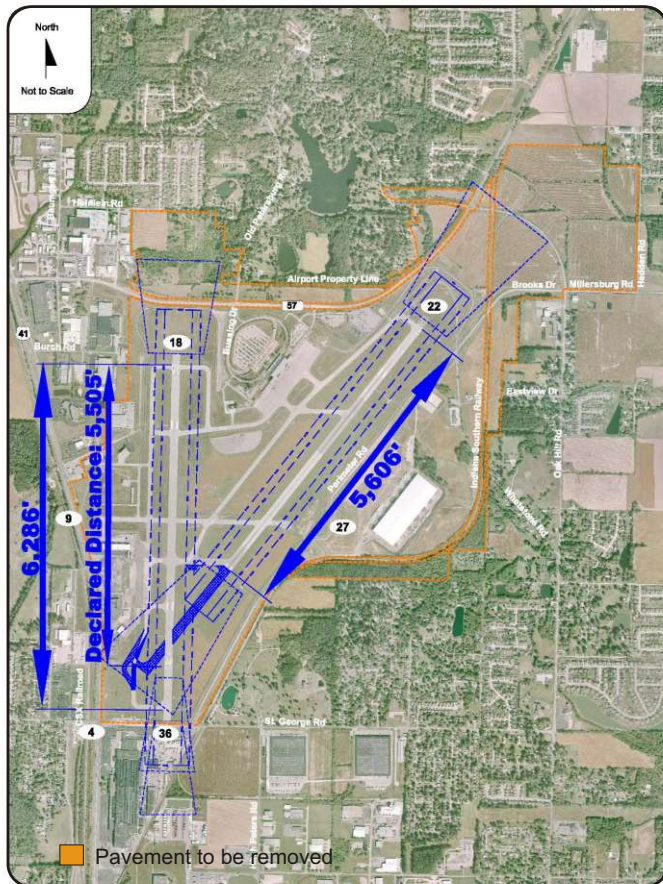
Any alternative that shifts the Runway 22 threshold to the northeast within 1,500' of Oak Hill Road will require a roadway realignment; thus, Runway Alternatives 5, 6, 9, 10, 11, and 12 require roadway realignments. Any alternative that includes improvements to the southwest will require a roadway realignment of St. George Road and/or U.S. Highway 41; thus, Runway Alternatives 3, 4 and 7 also require roadway realignments.

## Do Nothing Alternatives for Baseline

### Runway Alternative 1 No Action (existing conditions until 2015)



### Runway Alternative 2 No Action – FAA Resolves RSA Deficiencies (existing conditions after 2015)



## Alternatives Under Study

### Runway Alternatives

- 1 – No Action (existing conditions until 2015)
- 2 – FAA Resolves RSA Deficiencies (existing conditions after 2015)
- 3 – Runway 4-22 Remains In-place
- 4 – Runway 4-22 Minimal Shift to Northeast
- 5 – Runway 4-22 Shifts Northeast Based on Taxiway Relocation
- 6 – Runway 4-22 Shifts Northeast (Alternative from 2007 Master Plan)
- 7 – Runway 4-22 Shifts Southwest
- 8 – Extend Runway 18-36 and Shorten Runway 4-22
- 9 – Runway 4-22 Shifts Northeast and EMAS Installed on Both Ends of Runway 4-22
- 10 – Runway 4-22 Shifts Northeast with Partial Taxiway to the East and EMAS Installed on Runway 22 End
- 11 – Runway 4-22 Shifts Northeast with Full Parallel Taxiway to the East and EMAS Installed on Runway 22 End
- 12 – Relocate Runway 4-22 to the Northeast

### Indiana Southern Railroad Realignment

Only one railroad relocation alternative was found to meet the specific design criteria provided by Indiana Southern Railroad and the existing conditions at the Rexam facility to the north.

### Oak Hill Road Realignment Alternatives

- 1 – No Action (existing conditions)
- 2 – No Action – close Oak Hill Road and use other roads
- 3 – Connects with S.R. 57 via Hedden Road
- 4 – Connects with S.R. 57 via tunnel
- 5 – Connects with S.R. 57 at new T-intersection
- 6 – Connects with S.R. 57 at Beaumont Drive
- 7 – Connects with Kansas Road
- 8A – Connects with S.R. 57 at new T-intersection and a new clean intersection with Millersburg Road
- 8B – Connects with S.R. 57 at Beaumont Drive and a new clean intersection with Millersburg Road
- 8C – Connects with Kansas Road and a new clean intersection with Millersburg Road

### S.R. 57 Realignment Alternatives

Two alternatives were developed for realigning S.R. 57– one option is shown in Roadway Alternative 4 where a tunnel is to be used; a second minimal realignment is shown in runway alternatives where Runway 4-22 and parallel taxiway shift to the northeast.

### What screening process was used to determine the alternatives carried forward for environmental analysis?

The screening process considers four primary factors: 1) whether or not the alternative meets the purpose and need, 2) its operational feasibility, 3) its relative cost, and 4) its extraordinary environmental consequences. The new alternatives have been screened using the same criteria as the initial alternatives presented at the second workshop. So long as there is a practicable alternative that meets the current FAA design standards for RSAs, alternatives incorporating design modifications or anything other than a standard RSA are not acceptable.

Roadway realignments are enabling projects needed for 8 of the 12 runway alternatives under study. Roadway realignments will be screened using three primary factors: 1) operational feasibility, 2) relative cost, and 3) extraordinary environmental consequences. In addition to considering public input, the consulting team is working closely with the Indiana Department of Transportation, the City, the County, the Metropolitan Planning Organization and other local agencies and stakeholders to gather data needed for this screening process.

### Does EMAS meet the RSA standards?

In FAA Advisory Circular *Engineered Materials Arresting Systems (EMAS) for Aircraft Overrun*, it is stated "Runway safety area standards cannot be modified or waived...A continuous evaluation of all practicable alternatives for improving each sub-standard RSA is required. FAA Order 5200.8, *Runway Safety Area Program*, explains the evaluation process."

In FAA Order 5200.8, *Runway Safety Area Program*, it is stated "At any time, when it is not practicable to obtain a safety area that meets current standards, consideration should be given to enhancing the safety of the area beyond the runway end..."

### What safety issues are considered during the screening process?

When comparing the runway alternatives to meet FAA design standards, a number of operational aspects have been considered. Perhaps one of the most obvious has been considering opportunities to limit runway crossings and runway incursions.

As a part of the Safety Management System (SMS) for the FAA Air Traffic Organization, a safety panel is anticipated to review any changes that are introduced in the national aviation system. The Airport Authority has requested that the FAA schedule this panel to review the study findings.

Any roadway realignment will be designed and constructed to the current standards of the controlling state or local agency.