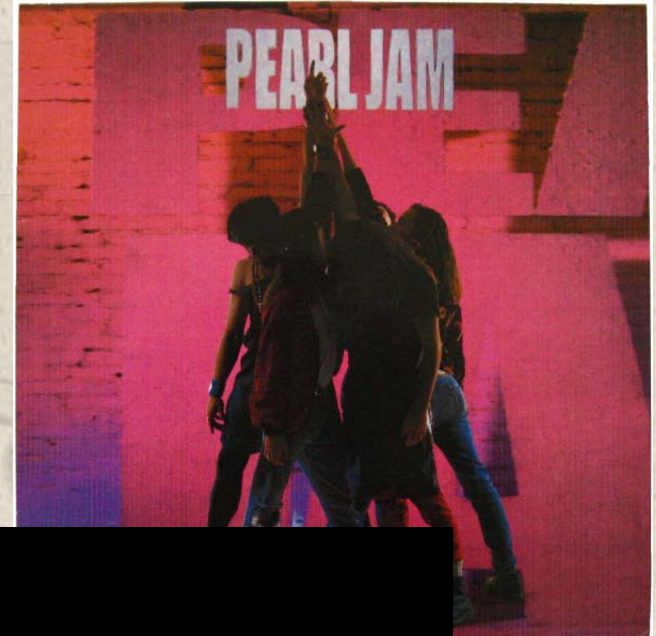
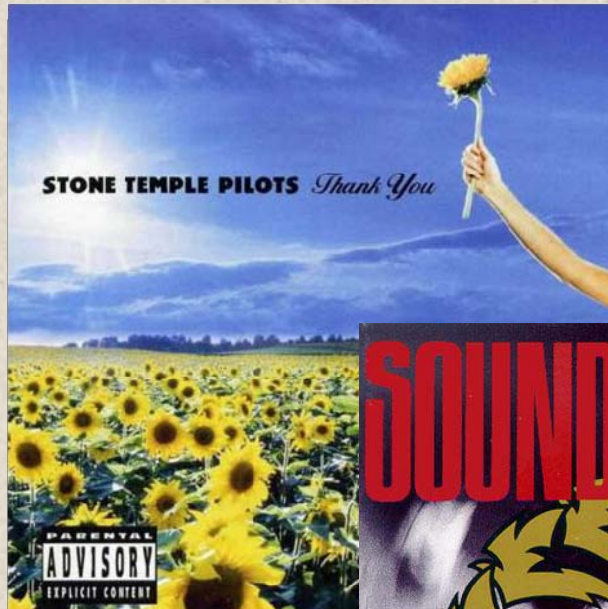
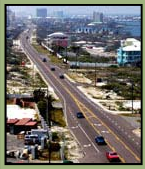


DISTRICT 3 ETAT MEETING

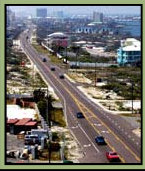
Alternative Analysis Process



“ALTERNATIVE”



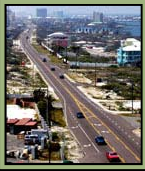
NIRVANA



“ALTERNATIVE”

Development and evaluation of different solutions, be they by location (alignments), design (typical sections), or technique (top-down) which involves unresolved conflicts concerning uses of available resources.





TO *ALT.* OR NOT TO *ALT.*

Class of Action

Federal:

Type 1 Categorical Exclusions and Programmatic Exclusions - **Probably not**

Type 2 Categorical Exclusions - **Maybe**

Environmental Assessment/FONSI (EA) - **Probably**

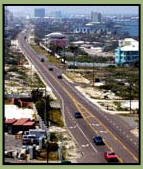
Environmental Impact Statement (EIS) - **Definitely**

State:

Non-Major State Actions - **Probably not**

State Environmental Impact Report (SEIR) – **Depends**

Most CEQ/FHWA guidance relates only to the evaluation of alternatives in an EIS



TO *ALT.* OR NOT TO *ALT.*

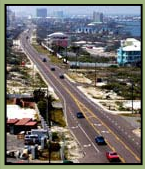
Environmental Assessment

The CEQ NEPA regulations and the NEPA statute provide a general guideline. The regulation at 40 CFR 1508.9(b) describes the contents of an EA and states that alternatives shall be included as required by NEPA Section 102(2)E. "(E) study, develop, and describe *appropriate* alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."

What alternatives should be developed and studied will have to be decided on a case-by-case basis.

Other laws and Executive Orders may require additional alternatives be investigated, such as Section 4(f), Section 404, and the Executive Orders on wetlands, floodplains and environmental justice. Agency policy may also factor in. For example, FHWA policy states that Federal-aid highway projects should avoid, to the extent practicable, incorporating right-of-way that contains hazardous wastes.

There's a longstanding debate over whether or not alternatives need to be included in an EA. As with many things NEPA, it depends. NEPA scholars generally point to a provision in the NEPA law – 102(2)(E) – as the controlling requirement for including alternatives in an EA. In some cases it is required, but perhaps not in every case. There is general agreement that the no-build / no-action alternative should be included in the analysis of a proposal in an EA.

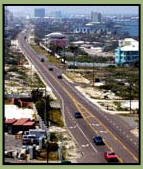


TO *ALT.* OR NOT TO *ALT.*

Coordination is Key!

- **Planning Agency**
- **FDOT**
- **FHWA**
- **Resource Agencies *as appropriate***

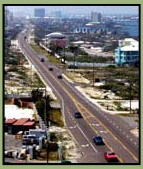




WHAT IS THIS ALT. THING?

- **Alternative analysis is one of the essential elements of NEPA decision making.**
- **Development of alternatives has to be based on something tangible and related to the purpose and need of the action.**
- **If there are solutions that meet the purpose and need then consider them as reasonable alternatives. CEQ guidance states:**

“Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense...”
- **As a part of determining reasonable alternatives, the project’s purpose and need is considered and an analysis of the study area completed.**



WHAT IS THIS ALT. THING?

Range of Alternatives

See 40 Questions and Answers (<http://nplnews.com/toolbox/nepakit/nepa40q&a.htm>)

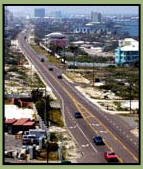
What is meant by "range of alternatives" as referred to in Sec. 1505.1(e)?

A. The phrase "range of alternatives" refers to the alternatives discussed in environmental documents. It includes all reasonable alternatives, which must be rigorously explored and objectively evaluated, as well as those other alternatives, which are eliminated from detailed study with a brief discussion of the reasons for eliminating them. Section 1502.14. A decision maker must not consider alternatives beyond the range of alternatives discussed in the relevant environmental documents. Moreover, a decision maker must, in fact, consider all the alternatives discussed in an EIS. Section 1505.1(e).

1b. How many alternatives have to be discussed when there is an infinite number of possible alternatives?

A. For some proposals there may exist a very large or even an infinite number of possible reasonable alternatives. For example, if you have a 20 mile wide corridor that can fit an infinite number of alternatives from 0 to 100 percent of the corridor. This may be where 10 alternatives are developed as representative alternatives. When there are potentially a very large number of alternatives, only a reasonable number of examples, covering the full spectrum of alternatives, must be analyzed and compared in the EIS. What constitutes a reasonable range of alternatives depends on the nature of the proposal and the facts in each case.

Representative Alternatives



WHAT IS THIS ALT. THING?

The evaluation of alternatives should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public. In this section agencies shall:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their elimination.**
- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.**
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.**
- (d) Include the alternative of no action.**
- (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.**
- (f) Include appropriate mitigation measures not already included in the proposed action or alternatives.**



WHEN TO ALT.?

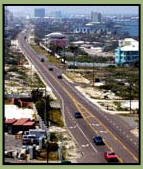
Integrating Planning and NEPA

Earlier is better but it can be problematic

- **Purpose and Need** – got one? Is it approved?
- **Public Feedback** – got public input?
- **Agency Feedback** – got agency input?
- **Available Data** – what do you know? Do the experts agree that you know that?
- **Plan Consistency** – consistent? By what measure?

Will these alternatives be reasonable?

Will they be representative?



ALT. TERMINOLOGY

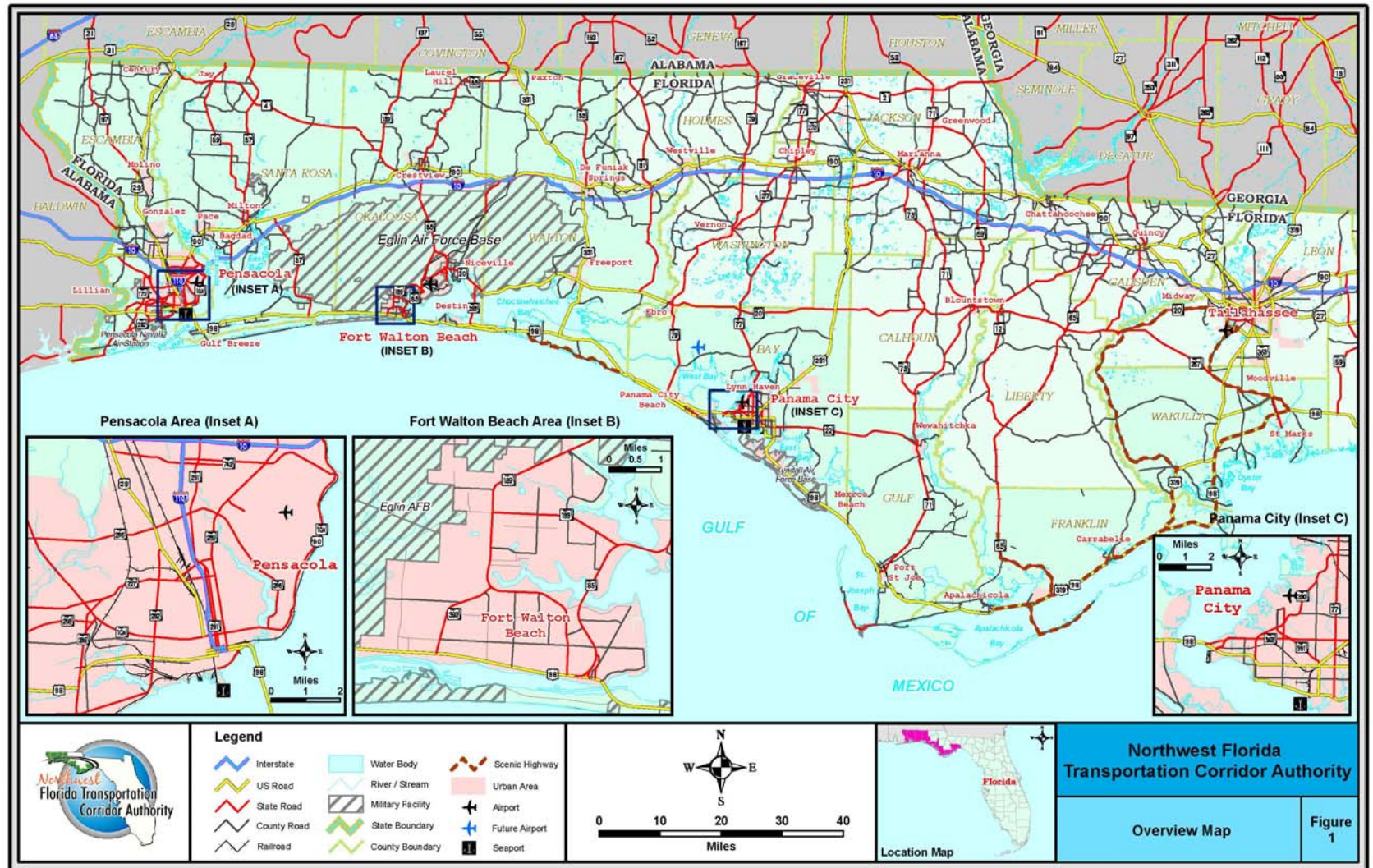
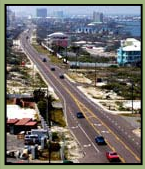
Corridor – A general path for the location of a roadway which is much wider than the actual footprint of the roadway (known as the right-of-way). A corridor is often at least twice as wide as the footprint of the roadway that is to be designed within it. Typically a corridor is 500 to 1000 feet wide.

Alignment – A specific path for the location of a roadway which is the exact width of the footprint of the roadway (known as the right-of-way). An alignment is typically designed within the corridor boundaries and can be up to and sometimes more than 300 feet wide.

Alternative – when you have several different options for the location (*or design*) of a proposed action they are called alternatives. An alternative can be used to identify an *alternative* corridor, an *alternative* alignment, or an *alternative* design.

Transportation
Decision Making

GETTING YOUR ALT. ON!





GETTING YOUR ALT. ON!

How will you create your alternatives?

Methodology

Avoid fatally flawed solutions

What data will you use to avoid and minimize impacts?

Coordinate with resource agencies to determine critical resources.

Appropriate and up to date data.

Reasonable and Representative?

Coordination and feedback = better documentation

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Decision Making



EVALUATING YOUR ALTS.!

1. Establish Issues for Evaluating Alternatives

Purpose and Need

Natural Environmental Impacts

Social and Physical Environmental Impact

Costs

Public Preference

2. Establish Criteria for each Issue

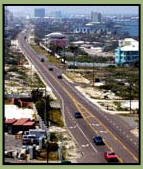
P&N – Traffic, Connectivity, Hurricane Evac.

Natural – Wetlands, Species, Habitat Ranking

Social – Historic, Relocations, Env. Justice

Physical – Noise, Air, Contamination

Costs – ROW, Mitigation, Construction



EVALUATING YOUR ALTS.!

3. Define your Data Sets

P&N: Traffic = LOS? Hurricane Evac. = travel times?

Natural: Wetlands = NWI?, Species = FNAI?

Social: Historical = MSF?, Env. Justice = Census?

Physical: Contamination = FGDL? Noise = Isopleths?

4. Define your Evaluation Technique

Ranking

Weighting

Scoring

5. Determine if Unique Analyses are Needed

Archeological & Historical Probability Assessment

Interpretive Wetland Delineation

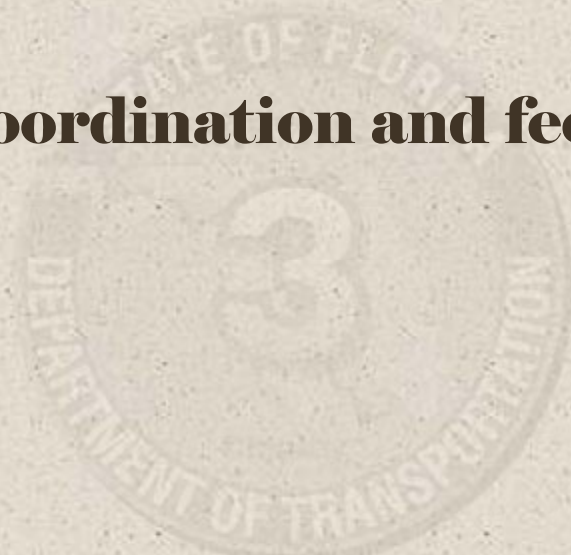


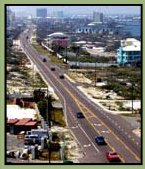
EVALUATING YOUR ALTS.!

6. Submit Steps 1-5 to your Lead Agency and ETAT

7. Revise Steps 1-5 Based on Feedback and Perform Evaluation

Coordination and feedback = better documentation!





ELIMINATE YOUR ALTS.!

Completion of the Alternatives Evaluation Process should

- **Determine alternatives for further Evaluation or identify preferred alt.**
- **Be the basis of documentation for eliminating alternatives.**
- **Submit results to lead and cooperating agencies...**

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SUMMARY

- **Determine what level of alternative evaluation is needed.**

Coordinate and Document

- **Determine when to begin developing alternatives**
- **Develop methodology for creating alternatives**

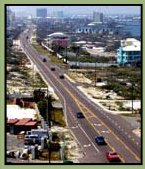
Coordinate and Document

- **Create alternatives and develop methodology for evaluation**

Coordinate and Document

- **Evaluate alternatives and narrow down options for further evaluation or identify preferred.**

Coordinate and Document



QUESTIONING YOUR ALT.?

Questions?



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