Noise Issues in the Re-evaluation **Process and Design-Build Projects**

As you know....

- The 23 CFR 772 Final Rule dated July 13, 2010 "grandfathered" the following projects:
 - Projects for which the original environmental document was signed by the effective date of the final rule effective July 13, 2011.
 - Projects with re-valuations approved prior to July 13, 2011.

So....what happens after July 13, 2011?

- Environmental documents and re-evaluations not approved on or prior to that date have to meet the new final rule.
- This means updating the noise studies following the requirements of the final rule.
- If previous noise studies were done using old noise models, they have to be re-done using TNM (as per 2005 rule).

Statement of Likelihood

- For noise impacted areas requiring abatement consideration, the environmental document contains a Statement of Likelihood as required by the final rule.
- The Statement of Likelihood identifies locations where noise impacts are predicted to occur and where feasible and reasonable noise abatement is likely to be provided contingent upon certain conditions.

Conditions:

- Noise analyses during final design supports the need, feasibility and reasonableness of providing abatement
- Community input supporting types, heights, and locations of the noise barrier(s)
- Safety and engineering aspects as related to the road user and the adjacent property owner have been reviewed and any conflicts or issues resolved

Design Phase

- Final plans include:
 - Noise barriers included in the Statement of Likelihood – no changes
 - In the case of Design-Build projects, noise barriers are in the final plans or concept plans included with the RFP
- Noise barriers re-analyzed in design and determined to be reasonable and feasible are considered environmental commitments that will be carried out through construction.

Design Changes & Re-evaluations

- DBB projects if substantial changes are made during design....a re-valuation should be performed – including a new noise study if applicable.
- Florida Design-Build guidelines: Prior to the authorization of Design-Build projects a review of the environmental impacts and commitments shall be made.
- If a major design change is proposed after the authorization of a Design-Build project, then a written re-evaluation must be prepared including a new noise study if applicable

Design-Build

Issues:

- One of the first things the Design-Build teams tackle is making changes to the design so noise barriers "disappear".
- DOT responsible for preparing environmental documentation including re-evaluations.
- Needed consistent process to evaluate design changes especially those affecting noise abatement.

Re-evaluation – Noise Issues

- New noise analysis indicates:
 - design changes result in new impacted receptors
 - design changes affect the height and length of previously committed barriers
 - design changes require new barriers
 - design changes eliminate barriers
- Original noise analysis performed:
 - under previous versions of 23 CFR 772
 - older noise models

Need guidance on how to address differences between results of previous noise studies and those performed under re-evaluations, especially for Design-Build projects.

Proposed Process

- Developed in agreement FHWA Florida Division
- Substantial change in design:
 - Re-evaluation:
 - Using latest version of 23 CFR 772
 - TNM 2.5
- Comparison between results of previous commitments and results of new analysis:
 - If new analysis results in- <u>new receptors</u> being impacted or previously identified <u>barriers should be longer all taller</u> consider new or dimensionally different (larger) barriers.
 - If new analysis results in previously identified receptors no longer qualify for noise abatement consider providing barriers previously committed to, use public involvement methodologies to convey information and input.
 - Elimination of previously identified abatement use public involvement methodologies to convey information to affected communities and obtain input and add language to the re-evaluation.