**TITLE: Near Road Air Quality Research**

**BACKGROUND**New federal regulations require state and local agencies to monitor near-roadway emissions and quantitatively assess potential for air quality impacts (“hot-spots”). State DOTs need to understand the implications of the new near-road data being collected; develop analysis methods and expertise to complete hot-spot modeling; and implement effective mitigation. Many states are unable to internally address all of the new emissions modeling and measurement requirements with existing resources. State DOTs need help meeting new near-road air quality analysis requirements and responding to stakeholder requests for information about near-road air pollution.

Currently, there is no forum dedicated to facilitating information and technology transfer related to near-road pollution issues. A pooled fund would allow for coordinated sharing of critical research developments, evaluation techniques, and study results to reduce overall costs and promote project delivery. It would provide a unique venue for collaboration between state DOTs and FHWA to clarify near-road emissions challenges, prioritize research needs, discourage redundant individual state efforts, and to quickly initiate research that develops solutions that meet the needs of multiple states. The benefit of a pooled fund is that it can be more dynamic and flexible than other research mechanisms, which allows research products to be developed quickly in response to changing regulations and modeling requirements.

**OBJECTIVES**

The following are initial objectives of this pooled fund effort:

* Create a “roadmap” that clarifies current state of the practice and outlines and prioritizes research needs.
* To provide expertise and research that supports states with near-road and related air quality issues.
* Provide a forum for states to collaborate on issues and develop strategies and research priorities for addressing critical near-roadway air quality issues. This forum will promote technology transfer between states and prevent duplication of research efforts.
* Conduct priority near-road air quality research that benefits the state of knowledge and shares new information and technologies.
* Augments limited resources to help state DOTs meet the new air quality regulations and promote project delivery.

**SCOPE OF WORK**

Member agencies will develop and prioritize the research inquires that are conducted throughout the project. Some initial tasks that are suggested include but are not limited to:

1. Synthesize routine and special study near-road pollution data and information; summarize completed and on-going research; prioritize information gaps and needs; assess situations with potential for near-road impact.

1. Design and create the web-based infrastructure to discuss near-road air quality issues and share related information;
2. Evaluate and compare line source dispersion modeling approaches against measured concentration data.
3. Develop best practices for near-roadway air quality modeling (e.g., meteorological data collection and use) and disseminate via workshops and training.
4. Develop screening protocols to reduce project or operational scenario analyses with non- substantive impacts.
5. Evaluate mitigation strategies (e.g., noise wall, land use plan, and pavement option impacts on near-road air quality).

**SPONSORING AGENCY CONTACT**

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**LEAD STATE/AGENCY**

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**COMMITMENTS REQUIRED** –

$250,000

**DURATION** – 36 months

**MINIMUM STATE COMMITMENT**

$250,000.

**START YEAR –** FFY 2013

**DATE SOLICITATION EXPIRES** –June 30, 2013

**ATTACHMENTS** –None

**COMMENTS** States are invited to participate with a minimum participation at $10,000 a year for three years each.