

## Inertial Profiler Quality (IPQ) Pooled-Fund Study Charter

### 1. Guiding Principles

The goal of the IPQ Pooled-Fund Study (IPQ Study) is to assemble states and the Federal Highway Administration (FHWA) to (1) identify data integrity and quality issues with inertial profilers; (2) suggest approaches to addressing identified problems; (3) initiate and monitor projects intended to address identified problems; (4) disseminate results; and (5) assist in solution deployment.

### 2. Scope

The IPQ Pooled-Fund Study is intended to serve as a forum for the participants to identify and address operational issues that are common among various inertial profilers. The Study will focus on quality of data issues that arise from the use and operation of inertial profilers. Within these broad topic areas, the following are offered as examples issues that might be addressed within the intended scope:

- Implementation of American Association of State and Highway Transportation Officials (AASHTO) Provision Protocols for Inertial Profilers.
- Inertial profiler certification procedures.
- Establishing a reference profile.
- Certification course(s).
- Operator procedures and training i.e. NHI Course 131100 "Pavement Smoothness: Factors Affecting Inertial Profiler Measurements Used For Construction Quality Control".
- Components: i.e. Accelerometers.
- Software i.e. FHWA ProVAL – "Profile Viewer and Analyzer Software".
- System performance monitoring, evaluation, and reporting.
- Contracting and procurement practices and issues.
- The use of inertial profilers for construction quality control and quality assurance as per Title 23 Code of Federal Regulations Section 637.205.
- Bridging Filters.

### 3. Projects

Ultimately, the purpose for bringing agencies together is to initiate projects that address inertial profiler operational issues. Projects may focus on conducting research that addresses issues, or on disseminating information about issues and solutions. One key to the success of the IPQ Pooled-Fund Study will be identification of projects that are of wide interest among the Study participants. To ensure achievement of this objective, consensus support will be the foremost criterion for project selection. The definition and selection of projects will be the product of consensus building. When all participants cannot agree on particular projects, project definition will focus on identification of a subset of projects that, taken as a whole, are of interest to all participants.

The projects that are undertaken on behalf of this pooled fund effort will not limit their focus to one specific ride quality index. The Ride Number (RN) index will be included in the evaluation processes of all projects.

Four stages of a project life cycle are: (1) identification of needs, (2) prioritization of needs and selection of projects, (3) project initiation and oversight, and (4) dissemination or implementation of project results. Each of the stages in the life cycle of a project will be discussed separately.

### **3.1 Identify Needs**

Sources of needs will be FHWA contacts with Study members, and FHWA contacts with LTPP inertial profile operators. The FHWA will synthesize the results of these contacts and prepare a brief synopsis that will be mailed to each Study participant, and to individuals that contributed information to the synopsis.

### **3.2 Prioritize and Select Projects**

This is the second stage in which Study participants select the project(s) to conduct. This stage will take place during a two-day annual meeting of the Members. Comments on the FHWA synopsis, and a summary of the synopsis will be presented at the meeting. A list of potential projects will be part of the synopsis. Members will be invited to make presentations at the meeting, and discussion following these presentations may result in revisions to the list of potential projects.

Following the discussion of issues a prioritization process will be undertaken. In this process, Members will rank order all of the projects (e.g., 1<sup>st</sup> priority, 2<sup>nd</sup> priority, and 3<sup>rd</sup> priority, with no ties) that appeal to their perception of research needs. Points will be assigned based on these rankings, and the highest-ranking issues will be marked for further development and exploration. The rankings will be subject to discussion and revision to encourage a consensus among Members. In particular, where diversity among Members appears to result in extreme differences in rankings (e.g., the highest priority issue of one group of participants is the lowest priority issue among another group), consensus-building techniques will be used to ensure that the perceived needs of all groups are accommodated.

Following initial prioritization of proposed projects, those projects that appear to have the most support will be designated for further evaluation and development. Breakout groups will be formed, one for each project that the Members elect. Each breakout group will prepare brief project summary that includes the following information:

- Statement of problem.
- Proposed approach.
- Products.
- Users or customers for products.
- Implementation or results dissemination plan.
- Rough order of magnitude cost estimate that includes person hours and other charges.
- Summary of in-kind support and proposed funding support from sources.
- Approximate schedule for major milestones.

Each summary will be documented on a two-page form to be provided by FHWA. The summaries are intended to clearly state the purpose and products of the proposed projects, and to enable the Members to evaluate of the feasibility of completing the project within available resources. After reviewing the project summaries prepared by the breakout groups, the Members will rank-order the projects in the same manner as in the initial prioritization. Project sponsors, participants who are most interested in a particular project will be identified. This step is intended to ensure that there is strong commitment to particular projects. When more than

one project is being considered for selection, this step can be used to assess which projects will best distribute interest across projects. Projected costs are compared to available resources. Assuming that one or more projects can be performed within available resources, proposed projects will be put forward for the consensus support of the Members. Resource constraints or project support considerations may result in a re-prioritization of projects by the members. The final step in project selection is to form Project committees for projects selected for execution. These committees will assist in further development of projects, and provide high-level project oversight. It is anticipated that project sponsors will serve on the project committee of their projects.

### **3.3 Project Initiation and Oversight**

Following the meeting at which the members select projects, the FHWA will prepare a detailed project plan for each project. If a project requires a contract, then the project plan will be suitable for incorporation in a request for proposals and/or a statement of work. Detailed project plans will be distributed to all Members, and Members may request revisions to the plan. The project committee will review the plan and resolve outstanding issues prior to implementation of the plan. The Project Committee may participate in proposal review and contractor selection. Project committee members will be apprized of project progress relative to the project plan. Should substantial revisions to a project plan or contract be required after a project has commenced, all Members will be so advised. The project committee will also participate in review of contract deliverables.

### **3.4 Implement/Disseminate Results**

The implementation stage of the life cycle begins with a presentation of the final project product to the Members. Although a general implementation plan will be part of the original project white paper, and should be expanded in the project plan, implementation plans need to be reviewed and revised when the project is complete and before actual implementation occurs. The Members may elect to fund implementation as a separate project. Alternatively, the FHWA may assume implementation responsibility as part of its role in promoting ITS solutions.

## **4. Governance**

This draft Charter provides rules governing the IPQ Pooled-Fund Study membership, voting privileges, management, policies and procedures, fiscal management, and program management. This draft is being circulated among participating states. The participating states are invited to comment and recommend changes to the draft. FHWA will compile responses to the draft and distribute them to the participants along with a revised draft that reflects consensus recommendations of the states. The charter review process will iterate if there are significant discrepancies among the participating states. Otherwise, the charter will be submitted for approval of participating states.

### **4.1 Membership**

Membership shall consist of the participating states and the FHWA<sup>1</sup>. Participation or interaction is anticipated to include, or be coordinated with, the appropriate committee's of organizations such as AASHTO, TRB, etc.

---

<sup>1</sup>FHWA support is from the National Resource Centers, the Office of Infrastructure and the Office of Operations Research & Development. The Turner-Fairbank Highway Research Center is providing technical support under the auspices of the Long Term Pavement Performance (LTPP) program. The Federal Lands Highway Program is providing technical support.

#### **4.2 Voting Privileges**

Each Member (at the inception, each State<sup>2</sup> and the FHWA) shall have one vote. Whenever the IPQ Pooled-Fund Study must make a decision regarding project approval, project funding, or a when the decision cannot be made by consensus, then a vote of the Members shall be taken. Votes will be decided by two-thirds majority of the assembled participants. A quorum of three-fourths of the Members is required for either votes or consensus decisions.

#### **4.3 Policies and Procedures**

The Members will adopt policies and procedures as they deem appropriate, and shall select a Chair and Vice-chair.

#### **4.4 Funding**

Pooled funding will be derived from contributions received from participating entities. For Members that utilize pooled SP&R funds, uniform treatment of funding is assured under existing FHWA mechanisms.

#### **4.5 Appointments**

The participants are responsible for creating and terminating various committees or other organizational units as required to satisfy Project requirements.

#### **4.6 Budget and Work Plans**

The participants will approve a budget and Project work plans.

#### **4.7 Amendments**

Amendments to the Charter shall be by four-fifths vote of the voting membership. Any member may propose amendments. A Quorum (three-fourths of members) must be present for a vote of the membership. In the event that a Quorum is not present, then the Members shall be polled.

### **5. Program Administration**

As part of its contribution to the Study, the FHWA National Resource Center - Chicago will serve as Program Administrator and administer IPQ Pooled-Fund Study resources under the direction of the participant members.

#### **5.1 General Support**

Under direction of the participants, or a project committee delegated by the participants, the Program Administrator will draft RFPs and coordinate the proposal review process. The participants, or their delegated project committee, shall appoint a majority of members to committees reviewing RFPs or otherwise selecting consultants to perform IPQ Pooled-Fund Study projects.

---

<sup>2</sup>Includes the District of Columbia.

## **5.2 Contract Administration**

The Program Administrator will distribute RFPs, prepare contract documents, and perform other functions related to contract administration and management. Under direction of the participants or their delegated project committee, the Program Administrator will ensure that contracts, schedules, work plans, and project descriptions are followed. The Program Administrator will be responsible for day-to-day quality control and evaluation, recommendations regarding preparation of contract documents, change order requests, and authorization of progress payments. The Program Administrator is responsible for providing contract progress reports to the participants or their delegated project committee. The Program Administrator will distribute project progress reports to the participants at least quarterly, and will respond to participant comments or inquiries regarding progress reports within 30 days of receipt.

## **5.3 Management Budget**

The Program Administrator is responsible for administering a management budget that may include travel and per diem payments for active participants or their designated representatives. Per Diem and travel shall be administered in a manner consistent with the prevailing per diem and travel policies of the participating entity to which the traveler belongs.

## **6. Program Members**

For the purposes of charter ratification, membership shall consist of the FHWA and states that have committed funding to the IPQ Pooled Fund Study. Additional states may become participants by committing funds at a level deemed appropriate by the participants.

Members of non-committed States may be invited when their knowledge of expertise is desired or needed.