Western Alliance for Quality Transportation Construction

2016 Strategic Plan

The Western Alliance for Quality Transportation Construction (WAQTC) is a voluntary organization, whose membership recognizes the advantages of a unified effort leading to significant accomplishments.

The WAQTC is focused in three main areas:

1. Standardization of test methods (WAQTC, AASHTO, ASTM)
2. Accreditation of sampler / testers through the Transportation Technician Qualification Program (TTQP)
3. Working together on national programs of interest including research, training, and technology deployment

MISSION STATEMENT:

Provide leadership in the pursuit of continuously improving quality in transportation construction.

GOALS

To accomplish this mission, the WAQTC has established the following goals:

- **Promote an atmosphere of trust, cooperation, and communication among government agencies and the private sector**
- **Respond in a unified and consistent manner to identified quality improvement needs and new technologies that impact the products we provide**
- **Provide a forum to promote uniform test standards**
- **Provide highly skilled, knowledgeable materials sampling and testing technicians**
- **Provide reciprocity for qualified testing technicians among accredited agencies**

PLAN:

To achieve the goals, the WAQTC has established this strategic plan to guide our efforts and prioritize the expenditure of funding in the coming years. The Executive Board, as defined in the WAQTC By-Laws, will oversee the execution of this plan through its Qualification Advisory Committee (QAC). The Board will review and update this plan annually and prioritize work for the coming year.

Promote an atmosphere of trust, cooperation, and communication among government agencies and the private sector

On-going Activities

- **Update and maintain the WAQTC website**

Long term Goals

- **Development of Presentation Materials**
  Presentations on WAQTC: the benefits of membership, technology transfer opportunities, activity reports, training modules, etc.

Respond in a unified and consistent manner to identified quality improvement needs and new technologies that impact the products we provide

On-going Activities

- **Evaluate training materials every 5-years for content**

  Part of the ongoing QAC effort.

Short term Goal

- **Develop on-line training and identify means to make available as a field reference.**

Provide a forum to promote uniform test standards

On-going Activities

- **Identify proposed modifications or new AASHTO test methods through the QAC.**
  The Executive Board will assign a champion for each proposed new or modified procedure who will track progress of WAQTC proposed changes through the AASHTO process.

The WAQTC has become a powerful influence with the AASHTO SOM and the benefits/costs of this effort and the working committee (QAC) are included in the on-going efforts.

- **Maintain a Field Operating Procedure (FOP) library**
  Standardized FOPs for agencies to use creates consistency in test methods. Agencies do not need to repeat the effort and expense of developing FOPs or state test methods.

Short term Goals

- **Evaluate the need for WAQTC training on equipment calibration, standardization and checks process**

Provide highly skilled, knowledgeable materials sampling and testing technicians

On-going Activities

- **QAC Sub-Committee to Review Exam Question Selection**
  The QAC will develop objectives for the written exam and assign a subcommittee to review question selection.
- **Develop an Exam question 'pool' for each materials discipline**
- **Develop 3-5 New Questions per Year, per Module**
  The QAC will develop new questions for each module each year in an effort to keep written exams fresh and current.
- **Maintain existing WAQTC Instructional Materials**
  Keep Instructional Materials updated to current references and formatting.

Short term Goals

- **Identify exam proctor and trainer qualification requirements**
- **Develop a work plan for training of exam proctors**

Long term Goals

- **Develop Training for Exam Proctors and Develop Trainer Qualification Requirements**
  To standardize the qualification process throughout the member states Exam Proctors will have training on exam oversight and Trainer's will have specific requirements.
- **Develop Electronic Question Database – Randomly Generate Questions**
  Develop enough exam questions that a database can create a randomly generated 'unique' exam for each participant.

- **Evaluate feasibility and ramifications of allowing the use of the training materials and qualification process by other entities.**

Provide reciprocity for certified testing technicians among accredited Agencies

On-going activities

- **Communicate with non-member agencies on the benefits of membership.**

Short term Goals

- **Develop a work plan for Reciprocity Audits of Member Agencies**
- **Develop Roles and Responsibilities guide for QAC and Board members**
  Develop a section for the operations manual establishing roles and responsibilities for members of the QAC and Board, including expectations for appointed members and describing the purpose of the primary meetings. This section will provide background, guidance, and definitions of roles and responsibilities of committee member's.

Long term Goals

- **Reciprocity Audits of Member States**
  Develop a manual and program for auditing the WAQTC member organizations to ensure qualification criteria are being adhered to within the program.
- **Increase reciprocity to states outside of membership**
- **Operations Manual for WAQTC**

2016 Planned Work

The following work was prioritized by the Executive Committee for 2015:

1. Continue work on 'on-going' activities
2. Evaluate existing training materials for needed improvements / updates
3. Develop Roles and Responsibilities guide for QAC and Executive Board members
4. Identify exam proctor and trainer qualification requirements
5. Develop a work plan for training of exam proctors
6. Support task force work on online training
7. Evaluate the need for WAQTC training on equipment calibration, standardization and checks process
8. Develop a work plan for Reciprocity Audits of Member Agencies

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- **Develop an Field Operating Procedure (FOP) library**
  Standardized FOPs for agencies to use will create consistency in test methods. Agencies will not need to repeat the effort and expense of developing FOPs or state test methods.

AASHTO revisions:

- **R 67; Sampling Asphalt Mixtures after Compaction (Obtaining Cores) –** Formerly WAQTC TM 11; Obtaining Cores, has been adopted by AASHTO as a full standard.
- **T 99; Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in) Drop –** Revised test method extensively and included the former T 224; Correction for Coarse Particles in the Soil Compaction Test as an annex.
- **T 121; Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete** – Include dampening the measure in the procedure
- **T 180; Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in) Drop –** Revised test method extensively and included the former T 224; Correction for Coarse Particles in the Soil Compaction Test as an annex.
- **T 224; Correction for Coarse Particles in the Soil Compaction Test –** Discontinued, it is now included in T 99 and T 180 as an annex.
- **T 265, Laboratory Determination of Moisture Content of Soils –** Introduced missing information to determine 'constant mass'
- **T 309; Temperature of Freshly Mixed Portland Cement Concrete –** A new AASHTO procedure submitted by WAQTC, and developed from the original WAQTC TM 10.
- **T 329; Moisture Content of Asphalt Mixtures by Oven Method –** Added revisions in Note 1 and a correction to the equation for constant mass
- **T 355; In-Place Density of Asphalt Mixtures by Nuclear Methods** – Formerly WAQTC TM 8; In-place Density of HMA by Nuclear Methods, has been adopted by AASHTO as a full standard.

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Appendix: 2014 Completed Items

- **Develop Marketing Brochure**
  A marketing brochure will be developed and posted on the WAQTC website. The brochure will be provided to other selected officials to market the organization to non-member agencies.

AASHTO revisions:

- **T 22, Compressive Strength of Cylindrical Concrete Specimens** – Added perpendicularity language for 4 by 8 cylinders and definitions for types of fracture
- **T 248, Reducing Samples of Aggregate to Testing Size** – Added *Combined Coarse and Fine Aggregate* to method selection

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Appendix: 2013 Completed Items

- Develop Work Plan for FOP Library

AASHTO revisions:

- **T 84, Specific Gravity and Absorption of Fine Aggregate** – Revised to reduce conflicts / redundancies.
- **T 85, Specific Gravity and Absorption of Coarse Aggregate** – Revised to include a 're-soak' when material is dried past SSD. Revised to reduce conflicts / redundancies.
- **T 119, Slump of Hydraulic Cement Concrete** – Revised to match other fresh concrete testing methods: 'rod … so that the strokes penetrate approximately 25 mm [1 in.] into the underlying layer.'
- **T 152, Air Content of Freshly Mixed Concrete by the Pressure Method** – Contributed to revision of Section 8.
- **T 231, Capping Cylindrical Concrete Specimens** – Contributed to revision in 6.2.1.

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Appendix: 2012 Completed Items

Training Materials Goals:

- PowerPoint Presentations used in technician training were revised with new pictures, video, and templates.
- Asphalt 2 module developed adding an FOP for AAASHTO T 312 Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor and WAQTC TM 13 Volumetric Properties of Hot Mix Asphalt (HMA).

Re-Development of Existing WAQTC Instructional Materials

- Re-design / redevelop the existing WAQTC instructional and testing materials.

AASHTO revisions:

- **T 166, Bulk Specific Gravity (G_{mb}) of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface-Dry Specimens** – incorporated G_{mb}
- **T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)** – incorporated G_{mm}
- **T 275, Bulk Specific Gravity (G_{mb}) of Compacted Hot Mix Asphalt (HMA) Using Paraffin-Coated Specimens** – incorporated G_{mb}
- **T 308, Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method** – editorial correction
- **T 312, Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor** – Revised to more adequately include plant-produced mix.