



U.S. Department
of Transportation

Federal Highway
Administration

Memorandum

Subject: **INFORMATION:** Use of Quality Price
Adjustments in Federal-Aid Highway
Construction

Date: March 30, 2023

From: Brian Fouch
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Date: 2023.03.30 12:55:46 -0400

In Reply Refer To:
HICP-20 and HICP-50

To: Directors of Field Service
Division Administrators

This memorandum is intended to assist owner-agencies in the development and use of quality price adjustment clauses, and to provide Division staff with general information to assess those clauses prior to their use on Federal-Aid highway construction. Except for any statutes or regulations cited, the contents of this document do not have the force and effect of law and are not meant to bind the States or the public in any way. This memorandum is intended only to provide information regarding existing requirements under the law or agency policies. This memorandum replaces the prior memorandum on this topic titled “*Technical Guidance for Price Adjustment Clauses for Quality*,” issued January 24, 1992.

The means and methods which a contracting agency uses to assess the quality of a product provided by the contractor are generally included in the specifications for that product. As defined in 23 CFR 637.203, “*quality assurance*” (QA) is “[a]ll those planned and systematic actions necessary to provide confidence that a product or service will satisfy given requirements for quality.” Quality assurance specifications generally include statistically based acceptance plans, require contractor quality control testing, and have provisions for pay adjustments based on the degree of compliance with specified requirements.

FHWA encourages contracting agencies to establish a clear relationship to infrastructure performance in their price adjustment provisions so that they are achieving increased performance when they are paying incentives and recouping costs proportionally for reduced performance. FHWA has traditionally endorsed the use of incentive provisions for improved quality that range up to approximately five percent of the unit bid price, provided the incentive is based on readily measured physical properties that reflect improved performance.

In developing quality price adjustment provisions, responses to the following questions should be obtained and analyzed:

- What quality characteristics are considered to be critical?
- How are these quality characteristics tested/measured?
- To what degree does each quality characteristic influence performance?
- What price adjustment, if any, should be applied to these quality characteristics?

For each quality characteristic, the owner agency must develop an agreed upon method of taking and evaluating measurements to determine the degree of acceptability of material or construction (23 CFR 637.205 and 23 CFR 635.115). This methodology defines the lot size (i.e., the maximum amount of work that will be judged at a time), sample size, sampling procedure, testing method, process for judging the acceptability of the test results, and payment provisions. In addition, using contractor QC tests in the acceptance decision requires independent agency verification sampling and testing to validate the quality of the materials (per 23 CFR 637 Subpart B) which is particularly important when incentive clauses are used. This has been a continuing area of challenge and emphasis for the QA program.

A quality price adjustment provision must include a pay schedule that should use one of two methods to adjust the unit price. In the first method, usually referred to as a continuous schedule, the pay factor is determined by one or more equations. The second method, which is typically referred to as a stepped schedule, uses a table that defines the pay factor based on the degree of conformance to requirements. FHWA encourages the use of a continuous schedule since it is less susceptible to fraud.

Quality price adjustments may be based on one or more physical properties. When a contracting agency determines that several quality characteristics contribute to a product's longevity, the agency should adjust the pay factor to reflect this. Additional resources available to the Divisions and State departments of transportation include:

- The FHWA Percent-within-Limits Workshop, which may be requested through the Resource Center Pavement and Materials Team
- NHI 134001: Principles and Applications of Highway Construction Specifications
- FHWA-RD-02-095: Optimal Procedures for QA Specifications

Questions about guidance in this memo may be referred to Jennifer Balis, HICP-20, or Jeff Withee, HICP-50.