

Wisconsin DOT

1. Briefly summarize your current pavement smoothness requirements.

We currently utilize a spec based upon IRI as the measuring unit for roughness, using the latest generation of non-contact profiling equipment. Most PCC pavements are profiled using lightweight profilers when the project is still closed to traffic. Most HMA pavements are profiled using high speed profilers (with the same measuring technology) to measure profile under traffic.

We have four segment types with different IRI pay specs.

- Type I is pavements that have more than one opportunity to achieve smoothness. Most HMA pavements fall into this category (Milling and multiple lifts). Type 1 segments have an incentive/disincentive IRI spec with the most stringent requirements for the pay model.
- Type II is pavements that only have one opportunity to achieve smoothness. PCC pavements fall into this category. Type II segments have an incentive/disincentive IRI spec with a slightly less stringent values for the pay model.
- Type III is pavement segments that contain structures such as bridges or railroad crossings. There is an incentive-only spec for very good ride on Type III segments. In the future, we hope to work with our structures people to develop a full ride spec for bridges.
- Type IV is our current pilot spec for urban PCC pavements which are loaded with utility fixtures, intersections, etc. While we gather data to determine what the contractors' capabilities are in the urban environment, we are operating this spec on an incentive-only basis for very good ride.

Within each segment (all four types) we also have "localized roughness" criteria as well, which replace the old "bump" requirements from the profilograph specs. For each area where the threshold for localized roughness is exceeded, a penalty is assessed based upon the length and severity of the roughness.

If either segment IRI or localized roughness values exceed prescribed thresholds, corrective action is required (typically grinding for PCC).

2. Do the requirements apply to both PCC and HMA?

Yes.

3. Are you considering changes in the future? (Next 2 to 3 years)

No. We have already made the change to a new generation spec. All we are looking at in the future is tweaking pay tables to reflect industries' ability to construct these various types of pavement segments in the real world.

4. If yes, what indices are you considering using?