

**ITEM - PAVEMENT SMOOTHNESS (\*)**

The final asphaltic concrete pavement surface shall be evaluated for smoothness as specified in Contracts and Specifications Stored Specifications "109PAVSM."

The following values shall be used in the Incentive/Disincentive Formulas for this project:

XX = \_\_

YY = \_\_

IC = \$\_\_\_\_\_

DC = \$\_\_\_\_\_

The following values must also be used:

CV = \_\_

\*\* Use one of the following, as appropriate:

MAX = \_\_\_\_\_ or LMAX = \_\_\_\_\_

The existing pavement has the following smoothness values (IRI inches per mile). \*\*\*

[This information will be provided to Contracts and Specifications as soon as available.

The most current (20\_\_) Pavement Management inventory data indicates an average existing pavement smoothness of \_\_\_\_ IRI inches/mile.]

DESIGNER:

See Page 2 of 2 for IRI Smoothness Criteria.

- \* Fill in the appropriate surface type:
  - ACFC (407)
  - AR-ACFC (414)
  - AR-AC (413)
  - AR-AC [EP] (415)
  - AC (406)
  - AC (409)
  - AC (416)
  - AC (417)

- \*\* **MAX** = a single dollar amount specified as the maximum smoothness incentive for the project.  
**LMAX** = a dollar amount per tested lane-mile.
- \*\*\* Do not provide existing pavement smoothness information for reconstruction and new Construction projects.

### IRI SMOOTHNESS CRITERIA<sup>1</sup>

#### New Construction:

Target (TV) = 41

XX = 39; YY = 43

(DC) = 1,200

Incentive Constant (IC) = 3,750

Disincentive Constant

#### New Construction (Urban; Speed Limit < 55 MPH; Curb & Gutter):

Target (TV) = 55

XX = 53; YY = 65

(DC) = 1,200

CV = 86

Incentive Constant (IC) = 2,700

Disincentive Constant

#### Divided Highways and similar roads with at least two leveling operations and final lift is an FC:

Target (TV) = 39

XX = 37; YY = 49

(DC) = 1,200

Incentive Constant (IC) = 2,700

Disincentive Constant

#### All Highways with one leveling operation of an FC:

Target (TV) = (0.6) x (Average existing smoothness)

Upper limit of TV = 68

XX = TV – 2; YY = TV + 10

(DC) = 1,200

Lower limit of TV = 45

Incentive Constant (IC) = 2,700

Disincentive Constant

#### All Highways with mill and FC:

Target (TV) = (0.6) x (Average existing smoothness)

Upper limit of TV = 57

XX = TV – 2; YY = TV + 10

(DC) = 1,200

Lower limit of TV = 40

Incentive Constant (IC) = 2,700

Disincentive Constant

#### Non-Divided highways with at least two leveling operations and final lift is an FC:<sup>2</sup>

Target (TV) = 48

XX = 46; YY = 58

(DC) = 1,200

Incentive Constant (IC) = 2,700

Disincentive Constant

#### Non-Divided highways with at least two leveling operations when the final lift is not an FC:<sup>2</sup>

Target (TV) = 51

XX = 49; YY = 61  
(DC) = 1,200

Incentive Constant (IC) = 2,700

Disincentive Constant

**Non-Divided highways with one leveling operation (not an FC):<sup>2</sup>**

Target (TV) = 65

XX = 63; YY = 72  
(DC) = 1,200

Incentive Constant (IC) = 2,700

Disincentive Constant

**Correction Value (CV) = TV + 45** [Except for New Construction (Urban; Speed Limit < 55 MPH; Curb & Gutter)]

**Maximum (CV) = 100**

**MAX:** A single dollar amount which is determined and specified as the maximum smoothness incentive possible for the project.

**LMAX:** New Construction ≤ \$11,000 per tested lane-mile ( ≤ \$1.56 /SY)

2 leveling operations ≤ \$9,000 per tested lane-mile ( ≤ \$1.28 /SY)

1 leveling operations ≤ \$7,000 per tested lane-mile ( ≤ \$0.99 /SY)

**NOTES:**

- 1** - TV, XX, and YY values may need to be adjusted for a specific project based on the work being done, roadway geometrics, and the existing smoothness levels. When FC is shown, it indicates either an AR-ACFC or ACFC. Special provisions will only show the values for XX, YY, IC, DC, CV, and MAX or LMAX. Determination of existing smoothness level and the resulting TV, XX, and YY values are done prior to contract and shall not be subject to adjustment or dispute after project award.
- 2** - For these categories, if projects are in curb & gutter sections, and/or raised median, and the speed limit is less than 55 MPH, the TV, XX, and, YY values may be increased by 4 at the discretion of the pavement designer.