Intersection - Feature 251

**BEGSECNM**

**Begin Roadway Section MP Description**

**Roadside:** C  
**Feature Type:** Point  
**Interlocking:** Yes  

**Definition/Background:** Identifies the geographical location of the roadway whether it begins at an intersection or does not begin at an intersection. If the roadway does not begin at an intersection, then record the description of the physical location of the beginning milepoint so that it can be located. If possible, place a permanent physical marker in the field identifying the BMP, such as 1) permanent paint 2) survey nail marker or 3) thermoplastic.

**Responsible Party for Data Collection:** District Planning

**Required For:** All roadways

**Who/What uses this Information:** Central Planning, District Planning, Safety

**How to Gather this Data:** Record the name of the intersecting roadway or boundary at the beginning milepoint of the roadway being inventoried/coded. Refer to Feature 114 for standard naming convention guidelines. Effective March 2008.

**NOTE:** If the street sign is missing, or if the street name is unknown, or if the street is determined to be unnamed, then code "unsigned."

**Special Situations:** If the beginning roadway section milepoint name occurs at an intersection, then INTSDIRx Intersection Direction must also be coded.

**Value for BMP Description:** 20 Bytes: Xxxxxxxxxxxxxxxxxxxxxxx

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**ENDSECNM**

**End Roadway Section MP Description**

**Roadside:** C  
**Feature Type:** Point  
**Interlocking:** Yes  

**Definition/Background:** Identifies the geographical location of the roadway whether it ends at an intersection or does not end at an intersection. If the roadway does not end at an intersection, then record the description of the physical location of the ending milepoint so that it can be located. If possible, place a permanent physical marker in the field identifying the EMP, such as 1) permanent paint 2) survey nail marker or 3) thermoplastic.

**Responsible Party for Data Collection:** District Planning

**Required For:** All roadways

**Who/What uses this Information:** Central Planning, District Planning, Safety

**How to Gather this Data:** Record the name of the intersecting roadway or boundary at the end of the section. Refer to Feature 114 for standard naming convention guidelines.

**NOTE:** If the street sign is missing, or if the street name is unknown, or if the street is determined to be unnamed, then code "unsigned."

**Special Situations:** If the ending roadway section milepoint name occurs at an intersection, then INTSDIRx Intersection Direction must also be coded.

**Value for EMP Description:** 20 Bytes: Xxxxxxxxxxxxxxxxxxxxxxxxxx
**Intersection - Feature 251**

**Owning Office:** Planning TranStat

**INTSDIRx**

**Intersection Direction (x=1-9)**

- **Roadside:** C
- **Feature Type:** Point
- **Interlocking:** Yes

### Definition/Background:
Denotes the name of the intersecting roadway or cross streets. Effective October 2011.

### Responsible Party for Data Collection:
District Planning

### Required For:
All roadways

### Who/What uses this Information:
Central Planning, District Planning, Safety

### How to Gather this Data:
First, determine the angle of intersection, choose the appropriate characteristic name INTSDIR1 through INTSDIR9, then code the intersecting roadway name. The intersection directions are based on the degrees of angle to the roadway being inventoried/coded. Code 1 through code 6 are for roadways that terminate at the intersection. Code 7 through code 9 are for roadways that cross and continue through the intersection.

#### Minimum Coding Requirements for Urbanized Areas: Effective September 2013.
- It has controls, i.e. stop sign, stop bar, traffic signal, or yield sign.

#### Minimum Coding Requirements for Rural Areas: Effective September 2013.
- It is paved or has any type of posted signage.

If the Safety Office requests a roadway be added to RCI, then code the name they provide, but field verify the milepoint. This will assist law enforcement when describing crash locations.

Business entrances may be collected as prescribed under HPMS Feature 118 ATGOTHR. Effective October 2011.

Refer to Feature 114 for standard naming convention guidelines.

### NOTE:
If the street sign is missing, or if the street name is unknown, or if the street is determined to be unnamed, then code it as “unsigned.”

### Special Situations:
If two side roads on opposite sides are separated by 50 feet or less along the roadway, consider it one intersection with the milepoint between the two opposing side roads. Use engineering judgment to determine “midpoint.” Consolidating these very close roadways helps to eliminate over coding. Use the USPS standard street suffixes.

For ramps, code the ramp’s 8-digit roadway ID, the direction of travel, whether it is an on ramp or an off ramp, then a short descriptor. Effective July 2013.

**Descriptor codes are:**

- AG = agricultural station
- SERV = service plaza
- WEIGH = weigh station
- REST = rest area
- TOLL = toll plaza

**Coding examples for ramps:**
- 99009111 WB ON
- 99009112 EB OFF
- 99009113SB ON AG
- 99009116WB OFF REST
- 99009119SB OFF SERV
- 99009123EB ON TOLL
- 99009128NB ON WEIGH

Full descriptions of the ramps will be stored in Feature 114.

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**Characteristic** | **Intersecting Roadway** | **Tolerance**
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INTSDIR1 | 135° Left | Between 113° - 157°
INTSDIR2 | 90° Left | Between 68° - 112°
INTSDIR3 | 45° Left | Between 23° - 67°
INTSDIR4 | 45° Right | Between 23° - 67°
INTSDIR5 | 90° Right | Between 68° - 112°
INTSDIR6 | 135° Right | Between 113° - 157°
INTSDIR7 | 135° Left and 45° Right | Between 113° - 157° and 23° - 67°
INTSDIR8 | 90° Left and 90° Right | Between 68° - 112° and 68° - 112°
INTSDIR9 | 45° Left and 135° Right | Between 23° - 67° and 113° - 157°
**Special Cases:** Coding intersecting roadways that occur at a 90 degree (90°) turn of the inventoried roadway: In these special situations, the available intersection codes for collecting intersecting roadways do not handle that leg of the intersection that continues straight ahead. The recommended method is to inventory all the legs of the intersection in such a manner so that the 90 degree (90°) turn intersections can be drawn and represented on the SLD by coding the intersecting legs at these points from a projected 45 degree (45°) diagonal, so that there are no zero degree (0°) codes used for any intersecting roadways. Using this method, the intersecting roadways are collected at either a 45 degree (45°) or a 135 degree (135°) direction from the projected diagonal as the inventoried roadway makes the 90 degree (90°) turn. If the inventoried roadway makes a turn at a “4-way” intersection, collect both intersecting roadways at the intersection. When plotted on the SLD, these legs will be represented at right angles to each other, and there will be sufficient space on the SLD so the intersections are not drawn on top of each other.

**NOTE:** Also code Feature 220 NCPINT (Non-curve Point of Intersection) to denote the change in the direction of the inventory roadway, i.e. 90° turn.

**Value for Intersection Roadway Name:** 20 Bytes: XXXXXXXXXXXXXXXXXXXXX
INTERSECTION Surface Type (x=1-9)

Roadside: C  Feature Type: Point  Interlocking: Yes

**NOTE:** Effective December 2012. This characteristic is optional and collected at the District’s discretion.

**Definition/Background:** The intersection surface type determines how well merging maneuvers occur at the termination of lane drops; where the tangent section of the roadway and entrance acceleration allow for a smooth, safe transition. Intersections of grade or cross slope should be gently rounded to improve vehicle operation. Pavement generally should be sloped toward the intersection corners to provide super-elevation for turning maneuvers and to promote proper drainage.

**Responsible Party for Data Collection:** District Planning

**Required For:** All functionally classified roadways on the SHS and major roadway intersections on HPMS standard sample sections, including Active Off the SHS

**Who/What uses this Information:** District and District Work Program

**How to Gather this Data:** Record the surface type of the intersecting roadway up to 30 feet from the edge of the inventoried roadway or from the right of way line, whichever is less. The only concern is the point of connection of the intersecting roadway and how it interacts with the mainline, not the entire composition of the intersecting roadway itself. Effective October 2011.

**Codes:**

- A – Asphaltic Concrete
- B – Brick
- C – Portland Cement Concrete
- O – Other

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- O - Other

**Effective June 2010**

**Updated October 2011**

A – Asphaltic Concrete

B – Brick

C – Portland Cement Concrete

O – Other