SafetyAnalyst

AltIntersectionImport-3.0 Schema Documentation

Developed for

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Schema

Namespace: http://developer.safetyanalyst.org/schema/AltIntersectionImport-3.0
Version: **2009.07.09**

This is the XML Schema for an alternate SafetyAnalyst import data set for intersection, leg and related traffic element data. This schema is a working document generated from SafetyAnalyst data dictionaries. Requests for clarifications, improvements, etc. should be directed to the SafetyAnalyst software development team at ITT. This document will be updated often during the Spring of 2007. Please check the http://developer.safetyanalyst.org web site for the current version. This schema is documented at http://developer.safetyanalyst.org/schema.

Global Elements

Element AltImport

Type: AltImportType
Import Document Root - This element is the alternate import document root. SafetyAnalyst defines two different XML schemas for the importing of data: The Standard Import schema uses a nested element structure that matches the internal representation of the data within the SafetyAnalyst application. The Alternate Import schema (defined in this document) uses a structure where the elements are not nested, making it more closely related to the SafetyAnalyst database tables used to store the data. This less compact form is easier to populate from a relational database.

Element AltIntersection

Type: AltIntersectionType
Intersection - This element defines the intersection inventory data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltLeg, AltMajorRoadTraffic, AltMinorRoadTraffic and AltLegTraffic elements to specify the intersection leg attributes and intersection traffic volumes. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection and GeoDescription elements) in the same import file.

Element AltLeg

Type: AltLegType
Intersection Leg - This element defines the intersection leg inventory data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltIntersection element, which specifies intersection inventory characteristics, and the AltLegTraffic element, which specifies traffic volume on the leg. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection, Leg and GeoDescription elements) in the same import file. NOTE: Leg and leg traffic volume data are required only when major and minor road traffic volume data are not available.

Element AltLegTraffic

Type: AltLegTrafficType
Leg Traffic - This element defines the leg traffic and turn volume data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltIntersection and AltLeg elements, which

specify the intersection and leg inventory characteristics. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection, Leg and GeoDescription elements) in the same import file. NOTE: Leg and leg traffic volume data are required only when major and minor road traffic volume data are not available.

Element AltMajorRoadTraffic

Type: AltMajorRoadTrafficType

Major Road Traffic - This element defines the major road traffic volume data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltIntersection element, which specifies the intersection inventory characteristics. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection and GeoDescription elements) in the same import file. NOTE: Major road traffic volume data are required only when intersection leg data and leg traffic volumes are not available, or when legs cannot be identified as major and minor roads.

Element AltMinorRoadTraffic

Type: AltMinorRoadTrafficType

Minor Road Traffic - This element defines the minor road traffic volume data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltIntersection element, which specifies the intersection inventory characteristics. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection and GeoDescription elements) in the same import file. NOTE: Minor road traffic volume data are required only when intersection leg data and leg traffic volumes are not available, or when legs cannot be identified as major and minor roads.

Global Types

AltImportType (Complex Type)

Import Document Root - This element is the alternate import document root. SafetyAnalyst defines two different XML schemas for the importing of data: The Standard Import schema uses a nested element structure that matches the internal representation of the data within the SafetyAnalyst application. The Alternate Import schema (defined in this document) uses a structure where the elements are not nested, making it more closely related to the SafetyAnalyst database tables used to store the data. This less compact form is easier to populate from a relational database.

Elements

- AltIntersection - subelement instances: 0 or more
- AltMajorRoadTraffic - subelement instances: 0 or more
- AltMinorRoadTraffic - subelement instances: 0 or more
- AltLeg - subelement instances: 0 or more
- AltLegTraffic - subelement instances: 0 or more

Attributes

- **`datasetUnitSystem`** - type: `xs:string`
  Use: optional

Unit System - Unit system associated with the dataset.

AltIntersectionType (Complex Type)

Intersection - This element defines the intersection inventory data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltLeg, AltMajorRoadTraffic, AltMinorRoadTraffic and AltLegTraffic elements to specify the intersection leg attributes and intersection traffic volumes. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection and GeoDescription elements) in the same import file.

Attributes

- **`agencyID`** - type: `xs:string`
  Use: required
  Intersection ID - This item is a unique agency-specific identifier for the intersection.
- **`majorRoadLocSystem`** - type: ENUM_AltLocSystem
  Use: optional
  Location System - This item specifies the location system used for the location of the intersection on the major road.
- **`routeType`** - type: ENUM_RouteType
  Use: optional
  Route Type - The value of this item is the category of the route where the site is located. This item should be included whether it is part of the location identifier or not, as searches may be conducted separately on this item. Additional route type codes may be needed in some states.
- **`routeName`** - type: `xs:string`
  Use: optional
  Route Name - The value of this item is the number or name of the route where the site is located. Where routes overlap, the more important route type and the corresponding lower route number normally take precedence. For routes without numbers, the road or street name should be used. When this item is part of the location system, it is used in matching accidents to roadway segments, creating homogeneous roadway segments, determining contiguous sites for sliding window algorithm, and is displayed in all site lists and output reports. Also, queries to create site lists can use this item as a criterion. This item should be included whether it is part of the location identifier or not, as searches may be conducted separately on this item. All states have a route number associated with specific locations, but the format differs between states.
- **`county`** - type: `xs:string`
  Use: optional
  County - The value of this item identifies the county in which the site is located. When this variable is part of the location system, it is used in matching accidents to roadway segments, creating homogeneous roadway segments, determining contiguous sites for sliding window algorithm, and is displayed in all site lists and output reports. Also, queries to create site lists can use this item as a selection criterion. This variable should be included whether this is part of the location identifier or not, as searches may be conducted separately on this variable. MMUCC recommends the use of the Census FIPS codes, but few states currently use these codes. Instead, each state has its own one, two, or three digit county codes. The use of the codes with which current users are familiar is recommended.

Additionally, each state has its own particular rules for identifying the proper county when a route is in more than one county.

- **`majorRoadSection`** - type: `xs:string`
  Use: optional
  Major Road Section - This item specifies the section identifier when using the Route/Section/Distance or Section/Distance location systems.
- **`majorRoadOffset`** - type: DECIMAL
  Use: required
  Major Road Offset - This item specifies an offset distance value for the appropriate location system. For a Route/Milepost or Route/County/Milepost location system, this value represents a milepost value. For the Route/Section/Distance or Section/Distance location systems, this value represents the distance value.
- **`minorRoadLocSystem`** - type: ENUM_AltLocSystem
  Use: optional
  Minor Road Location System - This item specifies the system used for locating the intersection on the minor road.
- **`minorRoadRouteType`** - type: ENUM_RouteType
  Use: optional
  Minor Road Route Type - This item identifies the category of the route for the minor road at the intersection. This item should be included whether it is part of the location identifier or not, as searches may be conducted separately on this item.
- **`minorRoadRouteName`** - type: `xs:string`
  Use: optional
  Minor Road Route Name - This item is the number or name of the route assigned to the minor road at the intersection. Where routes overlap, the more important route type and the corresponding lower route number normally take precedence. For routes without numbers, the road or street name should be used. When this item is part of the location system, it is used in matching accidents to roadway segments, creating homogeneous roadway segments, determining contiguous sites for sliding window algorithm, and is displayed in all site lists and output reports. Also, queries to create site lists can use this item as a criterion. This item should be included whether it is part of the location identifier or not, as searches may be conducted separately on this item.
- **`minorRoadSection`** - type: `xs:string`
  Use: optional
  Minor Road Section - This item specifies the section identifier when using the Route/Section/Distance or Section/Distance location systems.
- **`minorRoadOffset`** - type: DECIMAL
  Use: optional
  Minor Road Offset - This item specifies an offset distance value for the appropriate location system. For a Route/Milepost or Route/County/Milepost location system, this value represents a milepost value. For the Route/Section/Distance or Section/Distance location systems, this value represents the distance value. value.

- **agencySiteSubtype** - type: `xs:string`
  Use: optional
  Agency Site Subtype - This item is used to indicate the agency-specified classification of the facility (site subtype). This item is optional and should be used only for those site subtypes represented in an agency's data that are not supported by SafetyAnalyst.
- **gisID** - type: `xs:string`
  Use: optional
  GIS Identifier - This item is an identifier used to link this intersection to its corresponding representation in an external GIS. The value of this item is not processed or interpreted by SafetyAnalyst.
- **altRouteNames** - type: `xs:string`
  Use: optional
  Alternate Route Names - This item represents the other route number(s) for a section of roadway where overlapping routes share the same physical section of roadway. Each alternate route number includes the alternate route type as a concatenated prefix. Multiple alternate route designations are separated with a vertical bar (|) character.
- **majorRoadName** - type: `xs:string`
  Use: optional
  Major Road Name - The value of this item is displayed only on site information screens. The value of is the name of the road on which the site is located. If the site is located on a numbered route, but the road or street also has a name, the route number should appear in the route name and the name of the road should appear here. Some agencies do not have data on the road for street names for numbered routes and may choose not to use this field.
- **minorRoadName** - type: `xs:string`
  Use: optional
  Minor Road Name - The name of the minor road(s) at the intersection.
- **majorRoadDirection** - type: ENUM_majorRoadDirection
  Use: optional
  Major Road Direction - The designated direction of the major roadway. This is not necessarily a compass direction. For example, the direction of a state designated north-south highway must be either northbound or southbound even though a short segment of the highway or the approach to the intersection may have an east-west orientation.
- **majBeginInfluenceZone** - type: LONG_DIST
  Use: optional
  Beginning Influence Zone - Major Road - The beginning search limit for auxiliary intersection accidents, expressed as distance in miles (or kilometers)(from intersection reference point towards beginning of major road).
- **minBeginInfluenceZone** - type: LONG_DIST
  Use: optional
  Beginning Influence Zone - Minor Road - The beginning search limit for auxiliary intersection accidents, expressed as distance in miles (or kilometers) (from intersection reference point towards beginning of minor road).

- **majEndInfluenceZone** - type: LONG_DIST
  Use: optional
  End Influence Zone - Major Road - The ending search limit for auxiliary intersection accidents, expressed as distance in miles (or kilometers) (from intersection reference point towards end of major road).
- **minEndInfluenceZone** - type: LONG_DIST
  Use: optional
  End Influence Zone - Minor Road - The ending search limit for auxiliary intersection accidents, expressed as distance in miles (or kilometers) (from intersection reference point towards end of minor road).
- **district** - type: `xs:string`
  Use: optional
  District - The value of this item is the designation of the subdivision of the highway agency responsible for maintenance of the site. This item is necessary for the selection of geographical areas in network screening. For use in input and output, it may be desirable to have a look up table of district names associated with the district numbers.
- **city** - type: `xs:string`
  Use: optional
  City/Town - The value of this item is the city/town in which the site is located. This item should be included for searching purposes.
- **jurisdiction** - type: ENUM_jurisdiction
  Use: optional
  Jurisdiction - The value of this item indicates the primary agency responsible for the site.
- **areaType** - type: ENUM_areaType
  Use: optional
  Area Type - This item characterizes the area in which the site is located.
- **intersectionType1** - type: ENUM_intersectionType1Enum
  Use: optional
  Intersection Type Level 1 - The type of intersection at which two or more roadways intersect at grade. If an agency using SafetyAnalyst does not distinguish between Tee and Y intersections, all three-leg intersections should be classified as Tees (category 1).
- **trafficControl1** - type: ENUM_trafficControl1
  Use: optional
  Traffic Control Type at Intersection Level 1 - The type of traffic control device at the intersection. This category may be used for purposes of an advanced search, and categories listed in Traffic Control Type at Intersection Level 2 may be derived from this data item.
- **offsetIntersection** - type: ENUM_offsetIntersection
  Use: optional
  Offset Intersection - Indicates whether the cross streets intersect the major road at the same location or whether there is some separation or distance between the centerlines of the cross streets.
- **offsetDistance** - type: SHORT_DIST
  Use: optional

Offset Distance - Indicates the offset distance between the centerlines of the intersecting legs (minor road) at the intersection. When the intersection legs are not offset, the value of this data item should be zero.

- **`growthFactor`** - Use: optional
  Growth Factor - The value of this item is the fixed annual rate of increase at which traffic volume is expected to grow (i.e., represents exponential growth). A growth factor less than 1.0 indicates negative growth (decline) while a growth factor greater than 1.0 indicates positive growth. A growth factor of 1.0 indicates no growth (no change positive or negative). Growth factors must be greater than zero. A growth factor of 2.0 represents a doubling of traffic every year. Thus, if the volume is 2000 vpd in year 2001, a growth factor of 2.0 will yield expected volumes of 4000 vpd in 2002 and 8000 vpd in 2003. A growth factor of 0.5 represents a halving of traffic every year. Thus, if the volume is 2000 vpd in year 2001, a growth factor of 0.5 will yield expected volumes of 1000 vpd in 2002 and 500 vpd in 2003. Growth factors can also be used to extrapolate backwards in time. Thus, the previous example using a factor of 0.5 will yield 4000 vpd in 2000 and 8000 vpd in 1999.
- **`openedToTraffic`** - type: `xs:string`
  Use: optional
  Date Opened to Traffic - This item is the date at which the site was opened to traffic. This date should be provided for all sites that were constructed (or reconstructed to current form) during the period for which SafetyAnalyst data are available. For roadway segments, intersections, or ramps that have been open to traffic through the entire period for which SafetyAnalyst data are available, this field should be blank. SafetyAnalyst supports several common date formats for importing and exporting date values. However, you can specify a custom format for this date item if one of the default formats does not match the date format in your data. Custom date formats must be specified in the Data Management Tool prior to importing your data.
- **`corridor`** - type: `xs:string`
  Use: optional
  Corridor - This item is a unique identifier to link multiple roadway segments, intersections, and ramps together to perform corridor analyses.
- **`comment`** - type: `xs:string`
  Use: optional
  Comment - An optional comment for the intersection.

AltLegTrafficType (Complex Type)

Leg Traffic - This element defines the leg traffic and turn volume data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltIntersection and AltLeg elements, which specify the intersection and leg inventory characteristics. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection, Leg and GeoDescription elements) in the same import file. NOTE: Leg and leg traffic volume data are required only when major and minor road traffic volume data are not available.

Attributes

- **`agencyID`** - type: `xs:string`
  Use: required

Associated Agency Intersection Identifier - This item is a unique agency-specific identifier for the intersection.

- **`legID`** - type: ENUM_legID
  Use: required
  Associated Leg Identifier - An internal enumeration.
- **`calendarYear`** - type: `xs:gYear`
  Use: required
  Year - The value of this item is the calendar year which the associated traffic data are applicable.
- **`aadtVPD`** - type: VOLUME_DAY
  Use: required
  AADT - The value of this item is the annual average daily traffic (AADT) for the associated inventory element. For roadway segments, this is the average number of vehicles passing through a segment from both directions of the mainline route for all days of a specified year. For intersections, this is the average number of vehicles passing through an intersection from both directions of the major or minor roadways for all days of a specified year. For ramps, this is the average number of vehicles traversing the ramp in one direction for all days of a specified year.
- **`throughVolume`** - type: VOLUME_HOUR
  Use: optional
  Thru Volume - Indicates the average number of vehicles exiting this leg that travel straight through the intersection, expressed as either vehicles per day or, an hourly volume. If this data item is expressed as an hourly volume, the volume should reflect the peak or design hourly volume.
- **`leftTurnVolume`** - type: VOLUME_HOUR
  Use: optional
  Lt-Turn Volume - Indicates the average number of vehicles exiting this leg that turn left onto a cross street, expressed as either vehicles per day or, an hourly volume. If this data item is expressed as an hourly volume, the volume should reflect the peak or design hourly volume.
- **`rightTurnVolume`** - type: VOLUME_HOUR
  Use: optional
  Rt-Turn Volume - Indicates the average number of vehicles exiting this leg that turn right onto a cross street, expressed as either vehicles per day or, an hourly volume. If this data item is expressed as an hourly volume, the volume should reflect the peak or design hourly volume.

AltLegType (Complex Type)

Intersection Leg - This element defines the intersection leg inventory data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltIntersection element, which specifies intersection inventory characteristics, and the AltLegTraffic element, which specifies traffic volume on the leg. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection, Leg and GeoDescription elements) in the same import file. NOTE: Leg and leg traffic volume data are required only when major and minor road traffic volume data are not available.

Attributes

- **`agencyID`** - type: `xs:string`
  Use: required

Associated Agency Intersection Identifier - This item is a unique agency-specific identifier for the intersection.

- **`legID`** - type: ENUM_legID
  Use: required
  Leg ID - An internal enumeration.
- **`legType`** - type: ENUM_legType
  Use: optional
  Type - The value of this item specifies the major/minor road classification of this leg relative to the other legs in the intersection. The Not Valid enumeration value is provided to support import data sets where the number of legs in the data is fixed. Non-existent legs may be denoted using the Not Valid value.
- **`legDirection`** - type: ENUM_legDirectionEnum
  Use: optional
  Direction - Indicates the directional approach of the intersecting leg.
- **`legNumThruLane`** - type: `xs:int`
  Use: optional
  Thru Lanes - Number of through lanes on the approach to the intersection. This count includes all lanes with through movement (including through and left-turn lanes; through and right-turn lanes; through, left-turn, and right-turn lanes; and left-turn and right-turn lanes at three leg intersections) but not exclusive turn lanes.
- **`legNumLeftTurnLane`** - type: `xs:int`
  Use: optional
  Lt-Turn Lanes - The number of exclusive left-turn lanes on the approach.
- **`legNumRightTurnLane`** - type: `xs:int`
  Use: optional
  Rt-Turn Lanes - The number of exclusive right-turn lanes on the approach.
- **`legMedianType`** - type: ENUM_legMedianType
  Use: optional
  Median Type - The characterization of the area separating opposing traffic lanes.
- **`leftTurnPhasing`** - type: ENUM_leftTurnPhasingEnum
  Use: optional
  Left-Turn Phasing - Characterizes the type of left-turn phasing provided on the approach. For an unsignalized intersection, the left-turn phasing code should be Not applicable.
- **`postedSpeed`** - type: SPEED
  Use: optional
  Speed Limit - The value of this item is the authorized posted speed limit. If differing speed limits exist for passenger cars and trucks, this field should contain the passenger car speed limit. If no speed limit is posted, the speed limit that applies as a matter of law should be used. For intersection legs, this is the posted speed limit on the approach to the intersection.
- **`turnProhibitions`** - type: ENUM_turnProhibitions
  Use: optional
  Turn Prohibitions - Characterizes the turn restrictions for vehicles leaving the approach.

- **`operationWay`** - type: ENUM_operationWay
  Use: optional
  Operation - Indicates whether or not the intersection approach serves one-way or two-way traffic.

AltMajorRoadTrafficType (Complex Type)

Major Road Traffic - This element defines the major road traffic volume data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltIntersection element, which specifies the intersection inventory characteristics. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection and GeoDescription elements) in the same import file. NOTE: Major road traffic volume data are required only when intersection leg data and leg traffic volumes are not available, or when legs cannot be identified as major and minor roads.

Attributes

- **`agencyID`** - type: `xs:string`
  Use: required
  Associated Agency Intersection Identifier - This item is a unique agency-specific identifier for the intersection.
- **`calendarYear`** - type: `xs:gYear`
  Use: required
  Year - The value of this item is the calendar year which the associated traffic data are applicable.
- **`aadtVPD`** - type: VOLUME_DAY
  Use: required
  AADT - The value of this item is the annual average daily traffic (AADT) for the associated inventory element. For roadway segments, this is the average number of vehicles passing through a segment from both directions of the mainline route for all days of a specified year. For intersections, this is the average number of vehicles passing through an intersection from both directions of the major or minor roadways for all days of a specified year. For ramps, this is the average number of vehicles traversing the ramp in one direction for all days of a specified year.
- **`comment`** - type: `xs:string`
  Use: optional
  Comment - An optional comment for the traffic volume data at this site.

AltMinorRoadTrafficType (Complex Type)

Minor Road Traffic - This element defines the minor road traffic volume data for import using the SafetyAnalyst alternate schema. This element is designed to be used in conjunction with the AltIntersection element, which specifies the intersection inventory characteristics. This element cannot be mixed with elements of the SafetyAnalyst standard schema (specifically the Intersection and GeoDescription elements) in the same import file. NOTE: Minor road traffic volume data are required only when intersection leg data and leg traffic volumes are not available, or when legs cannot be identified as major and minor roads.

Attributes

- **`agencyID`** - type: `xs:string`
  Use: required

Associated Agency Intersection Identifier - This item is a unique agency-specific identifier for the intersection.

- **`calendarYear`** - type: `xs:gYear`
  Use: required
  Year - The value of this item is the calendar year which the associated traffic data are applicable.
- **`aadtVPD`** - type: VOLUME_DAY
  Use: required
  AADT - The value of this item is the annual average daily traffic (AADT) for the associated inventory element. For roadway segments, this is the average number of vehicles passing through a segment from both directions of the mainline route for all days of a specified year. For intersections, this is the average number of vehicles passing through an intersection from both directions of the major or minor roadways for all days of a specified year. For ramps, this is the average number of vehicles traversing the ramp in one direction for all days of a specified year.
- **`comment`** - type: `xs:string`
  Use: optional
  Comment - An optional comment for the traffic volume data at this site.

DECIMAL (Simple Type)

Represents a unitless or mixed unit decimal value

ENUM_AltLocSystem (Simple Type)

Based on `xs:string`.

Code **`A`** - Route/Milepost: Route/milepost location system
Code **`B`** - Route/County/Milepost: Route/county/milepost location system
Code **`C`** - Route/Section/Distance: Route/section/distance location system
Code **`D`** - Section/Distance: Section/distance location system

ENUM_areaType (Simple Type)

Based on `xs:string`.

Code **`R`** - Rural: Rural area type
Code **`U`** - Urban: Urban area type
Code **`X`** - Unknown: Unknown area type

ENUM_intersectionType1Enum (Simple Type)

Based on `xs:string`.

Code **`0`** - Other: Two or more roadways intersect at grade in an other intersection type
Code **`1`** - Tee intersection: Two or more roadways intersect at grade in a Tee intersection
Code **`2`** - Y intersection: Two or more roadways intersect at grade in a Y intersection
Code **`3`** - Four-leg intersection: Two or more roadways intersect at grade in a four-leg intersection

Code **4** - Traffic circle/roundabout: Two or more roadways intersect at grade in a traffic circle or roundabout

Code **5** - Multileg intersection, five or more legs: Two or more roadways intersect at grade in a multileg intersection of five or more legs

Code **99** - Unknown: Two or more roadways intersect at grade in an unknown intersection type

ENUM_jurisdiction (Simple Type)

Based on `xs:string`.

Code **1** - Federal maintained: Primary agency responsible for maintaining is Federal

Code **2** - State maintained: Primary agency responsible for maintaining is State

Code **3** - County maintained: Primary agency responsible for maintaining is County

Code **4** - Local maintained: Primary agency responsible for maintaining is Local

Code **5** - Other maintained: Primary agency responsible for maintaining is other

Code **6** - Township maintained: Primary agency responsible for maintaining is Township

Code **99** - Unknown: Primary agency responsible for maintaining is unknown

ENUM_leftTurnPhasingEnum (Simple Type)

Based on `xs:string`.

Code **1** - Protected left-turn: Protected left-turn phasing provided on the approach

Code **2** - Protected/permitted left-turn: Protected/permitted left-turn phasing provided on the approach

Code **3** - Permitted left-turn: Permitted left-turn phasing provided on the approach

Code **4** - No left-turn phase: No left-turn phasing provided on the approach

Code **98** - Not applicable: Phasing is not applicable on the approach

Code **99** - Unknown: Unknown phasing provided on the approach

ENUM_legDirectionEnum (Simple Type)

Based on `xs:string`.

Code **EB** - EB approach: Directional approach of the intersecting leg is eastbound

Code **NB** - NB approach: Directional approach of the intersecting leg is northbound

Code **SB** - SB approach: Directional approach of the intersecting leg is southbound

Code **WB** - WB approach: Directional approach of the intersecting leg is westbound

Code **X** - Unknown: Directional approach of the intersecting leg is unknown

ENUM_legID (Simple Type)

Based on `xs:string`.

Code **1** - Leg 1: Leg 1

Code **2** - Leg 2: Leg 2

Code **3** - Leg 3: Leg 3

Code **4** - Leg 4: Leg 4
Code **5** - Leg 5: Leg 5
Code **6** - Leg 6: Leg 6

ENUM_legMedianType (Simple Type)

If a median is present, but its type is unknown, the median type should be classified as other divided. Based on `xs:string`.

Code **0** - Other: Intersection median type is classified as other
Code **1** - Raised median with curb : Intersection median type is a raised median with curb
Code **2** - Depressed median: Intersection median type is a depressed median
Code **3** - Flush paved median [at least 4 ft in width]: Intersection median type is a flush paved median, at least 4 ft in width
Code **4** - Other divided: Intersection median type is classified as other divided
Code **5** - Undivided: Intersection median type is undivided
Code **99** - Unknown: Intersection median type is unknown

ENUM_legType (Simple Type)

Based on `xs:string`.

Code **1** - Major road, increasing milepost direction: Major road approach in the primary increasing milepost direction
Code **2** - Major road, decreasing milepost direction: Major road approach in the secondary or decreasing milepost direction
Code **3** - Minor road, increasing milepost direction: Minor road approach to right of the primary or increasing milepost direction
Code **4** - Minor road, decreasing milepost direction: Minor road approach to left of the primary or increasing milepost direction
Code **98** - Not Valid: Not valid, e.g., 4th (unused) leg of a three-legged intersection
Code **99** - Unknown: Unknown

ENUM_majorRoadDirection (Simple Type)

Based on `xs:string`.

Code **EW** - East-west: Designated direction is east-west
Code **NS** - North-south: Designated direction is north-south
Code **X** - Unknown: Designated direction is unknown

ENUM_offsetIntersection (Simple Type)

Based on `xs:string`.

Code **N** - No, the intersecting legs are not offset: Intersection legs are not offset
Code **X** - Unknown: Unknown intersection leg offset condition
Code **Y** - Yes, the intersecting legs are offset: Offset intersection

ENUM_operationWay (Simple Type)

Based on `xs:string`.

Code **1** - One-way road or street: Roadway serves one-way traffic
Code **2** - Two-way road or street: Roadway serves two-way traffic
Code **3** - One direction of travel for a divided highway: Roadway serves one direction of travel for a divided highway
Code **99** - Unknown: Roadway serves unknown traffic

ENUM_RouteType (Simple Type)

Based on `xs:string`.

Code **BL** - Business loop: Route category business loop
Code **BR** - Business route: Route category business route
Code **CR** - County road: Route category county road
Code **I** - Interstate: Route category interstate
Code **L** - Local road: Route category local road
Code **O** - Other: Route category other
Code **SP** - Spur route: Route category spur route
Code **SR** - State route: Route category state route
Code **TR** - Township road: Route category township road
Code **US** - US route: Route category US route
Code **X** - Unknown: Route category unknown

ENUM_trafficControl1 (Simple Type)

Based on `xs:string`.

Code **1** - No control: No Traffic control at intersection
Code **10** - Other non-signalized: Traffic control at intersection consists of other non-signalized
Code **11** - Signals pre timed (2 phase): Traffic control at intersection consists of signals pre timed (2 phase)
Code **12** - Signals pre timed (multi-phase): Traffic control at intersection consists of signals pre timed (multi-phase)

Code **13** - Signals semi-actuated (2 phase): Traffic control at intersection consists of signals semi-actuated (2

phase)
Code **14** - Signals semi-actuated (multi-phase): Traffic control at intersection consists of signals semi-actuated (multi-phase)
Code **15** - Signals fully actuated (2 phase): Traffic control at intersection consists of signals fully actuated (2 phase)

Code **16** - Signals fully actuated (multi-phase): Traffic control at intersection consists of signals fully actuated (multi-phase)
Code **17** - Other signalized: Traffic control at intersection consists of other defined signalized
Code **18** - Roundabout: Traffic control at intersection consists of roundabout
Code **2** - Stop signs on cross street only : Traffic control at intersection consists of stop signs on cross street only
Code **3** - Stop signs on mainline only: Traffic control at intersection consists of stop signs on mainline only
Code **4** - All-way stop signs: Traffic control at intersection consists of all-way stop signs
Code **5** - Two-way flasher (red on cross street): Traffic control at intersection consists of two-way flasher (red on cross street)
Code **6** - Two-way flasher (red on mainline): Traffic control at intersection consists of two-way flasher (red on mainline)
Code **7** - All-way flasher (red on all): Traffic control at intersection consists of all-way flasher (red on all)
Code **8** - Yield signs on cross street only: Traffic control at intersection consists of yield signs on cross street only
Code **9** - Yield signs on mainline only: Traffic control at intersection consists of yield signs on mainline only
Code **99** - Unknown: Unknown traffic control at intersection

ENUM_turnProhibitions (Simple Type)

Based on `xs:string`.

Code **1** - No left turns any time: No left turns any time for vehicles leaving the approach
Code **2** - No left turns during specific times: No left turns any time for vehicles leaving the approach
Code **3** - No right turns any time: No left turns any time for vehicles leaving the approach
Code **4** - No right turns during specific times: No left turns any time for vehicles leaving the approach
Code **5** - No U turns: No U turns for vehicles leaving the approach
Code **6** - Other: Other type for vehicles leaving the approach
Code **98** - No turn prohibitions: No turn prohibitions for vehicles leaving the approach
Code **99** - Unknown: Unknown type for vehicles leaving the approach

LONG_DIST (Simple Type)

Represents a distance measurement in miles or kilometers. Based on `xs:double`.
>=0

SHORT_DIST (Simple Type)

Represents a distance measurement in feet or meters. Based on `xs:double`.
>=0

SPEED (Simple Type)

Represents a velocity in miles per hour or kilometers per hour. Based on `xs:double`.

>=0

VOLUME_DAY (Simple Type)

Represents a traffic volume in vehicles per day. Based on `xs:int`.

>=0

VOLUME_HOUR (Simple Type)

Represents a traffic volume in vehicles per hour. Based on `xs:int`.

>=0