Schema documentation for massdot-itms-events-feed.xsd

february 22, 2019

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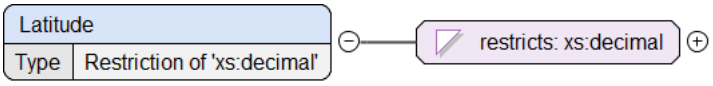
Schema(s)

Main schema massdot-itms-events-feed.xsd

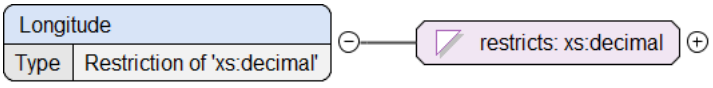
Properties	attribute form default:	unqualified
	element form default:	unqualified

Element(s)

Element latlon / Latitude

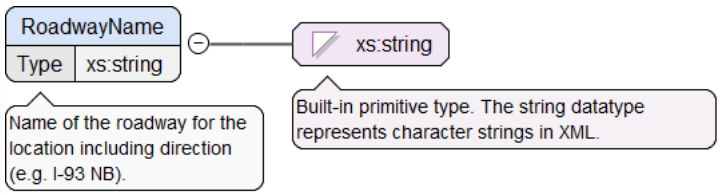
Diagram	
Type	restriction of xs:decimal
Properties	content: simple
Facets	maxInclusive 90 minInclusive -90
Source	<xs:element name="Latitude"> <xs:simpleType> <xs:restriction base="xs:decimal"> <xs:minInclusive value="-90"/> <xs:maxInclusive value="90"/> </xs:restriction> </xs:simpleType> </xs:element>

Element latlon / Longitude

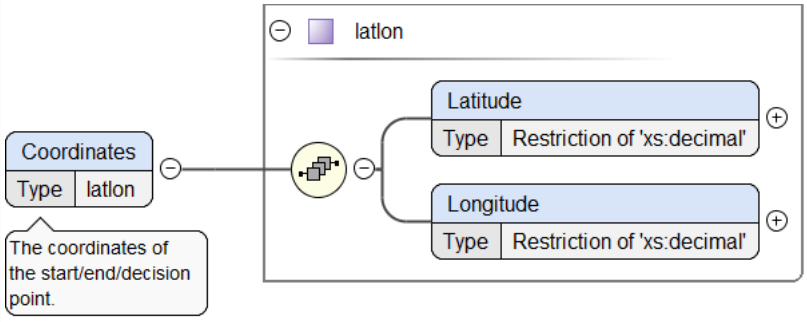
Diagram	
Type	restriction of xs:decimal
Properties	content: simple

Facets	maxInclusive 180 minInclusive -180
Source	<xs:element name="Longitude"> <xs:simpleType> <xs:restriction base="xs:decimal"> <xs:minInclusive value="-180"/> <xs:maxInclusive value="180"/> </xs:restriction> </xs:simpleType> </xs:element>

Element locationPoint / RoadwayName

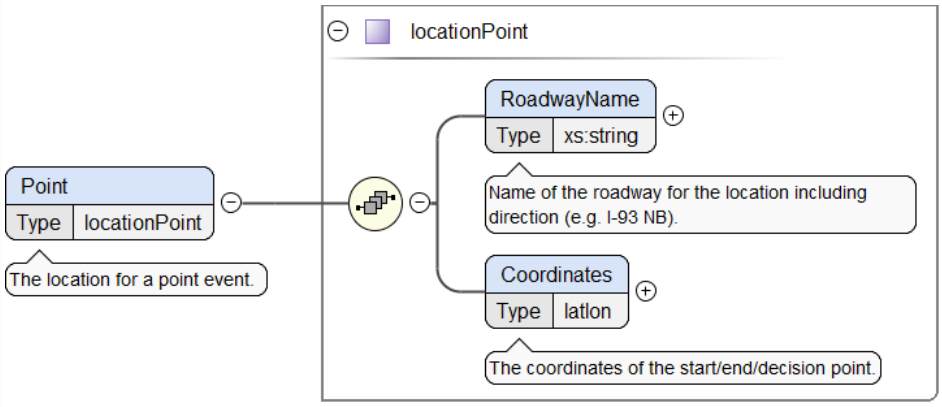
Annotations	Name of the roadway for the location including direction (e.g. I-93 NB).
Diagram	
Type	xs:string
Properties	content: simple
Source	<xs:element name="RoadwayName" type="xs:string"> <xs:annotation> <xs:documentation>Name of the roadway for the location including direction (e.g. I-93 NB).</ xs:documentation> </xs:annotation> </xs:element>

Element locationPoint / Coordinates

Annotations	The coordinates of the start/end/decision point.
Diagram	
Type	latlon
Properties	content: complex
Model	Latitude , Longitude
Children	Latitude, Longitude
Instance	<Coordinates> <Latitude>{1,1}</Latitude> <Longitude>{1,1}</Longitude> </Coordinates>
Source	<xs:element name="Coordinates" type="latlon"> <xs:annotation> <xs:documentation>The coordinates of the start/end/decision point.</xs:documentation> </xs:annotation> </xs:element>

Element eventLocation / Point

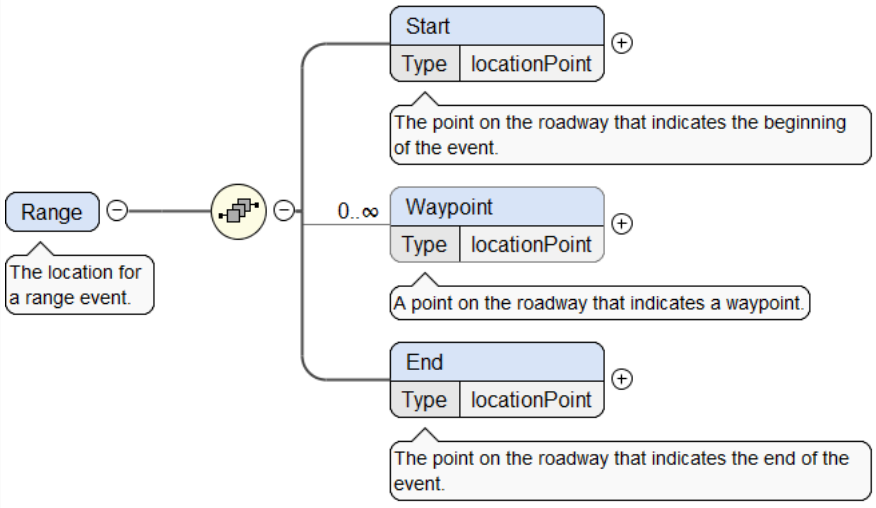
Annotations	The location for a point event.

Diagram	
Type	locationPoint
Properties	content: complex
Model	RoadwayName , Coordinates
Children	Coordinates, RoadwayName

Instance	`<Point>`
	`  <RoadwayName>{1,1}</RoadwayName>`
	`  <Coordinates>{1,1}</Coordinates>`
	`</Point>`

Source	`<xs:element name="Point" type="locationPoint">`
	`  <xs:annotation>`
	`  <xs:documentation>The location for a point event.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element eventLocation / Range

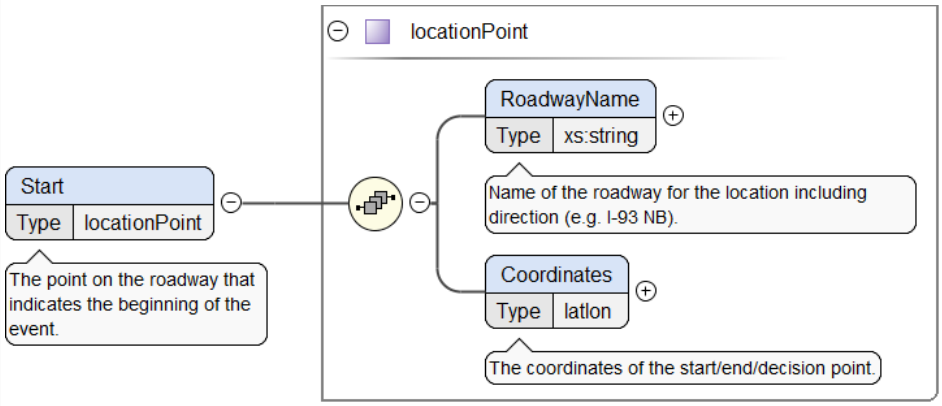
Annotations	The location for a range event.
Diagram	
Properties	content: complex
Model	Start , Waypoint* , End
Children	End, Start, Waypoint

Instance	`<Range>`
	`  <Start>{1,1}</Start>`
	`  <Waypoint>{0,unbounded}</Waypoint>`
	`  <End>{1,1}</End>`
	`</Range>`

Source	`<xs:element name="Range">`
	`  <xs:annotation>`
	`  <xs:documentation>The location for a range event.</xs:documentation>`
	`  </xs:annotation>`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element name="Start" type="locationPoint">`

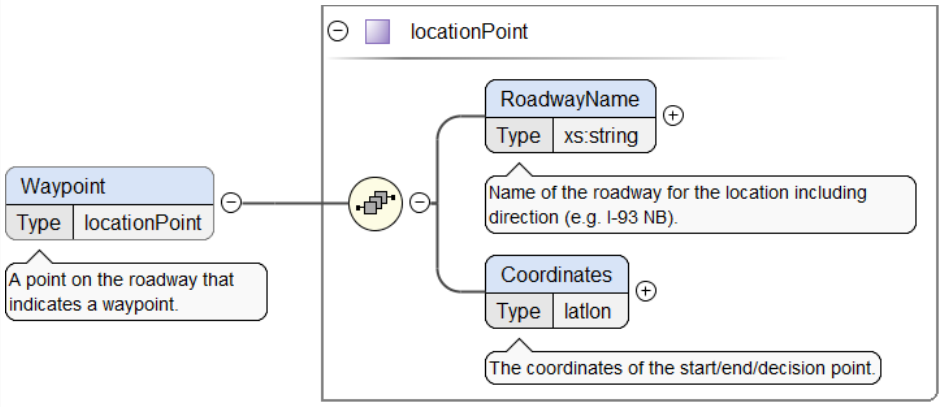
```
        <xs:annotation>
          <xs:documentation>The point on the roadway that indicates the beginning of the event.</
xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="Waypoint" type="locationPoint" minOccurs="0" maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>A point on the roadway that indicates a waypoint.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="End" type="locationPoint">
        <xs:annotation>
          <xs:documentation>The point on the roadway that indicates the end of the event.</
xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Element eventLocation / Range / Start

Annotations	The point on the roadway that indicates the beginning of the event.
Diagram	
Type	locationPoint
Properties	content: complex
Model	RoadwayName , Coordinates
Children	Coordinates, RoadwayName
Instance	<Start> <RoadwayName>{1,1}</RoadwayName> <Coordinates>{1,1}</Coordinates> </Start>
Source	<xs:element name="Start" type="locationPoint"> <xs:annotation> <xs:documentation>The point on the roadway that indicates the beginning of the event.</xs:documentation> </xs:annotation> </xs:element>

Element eventLocation / Range / Waypoint

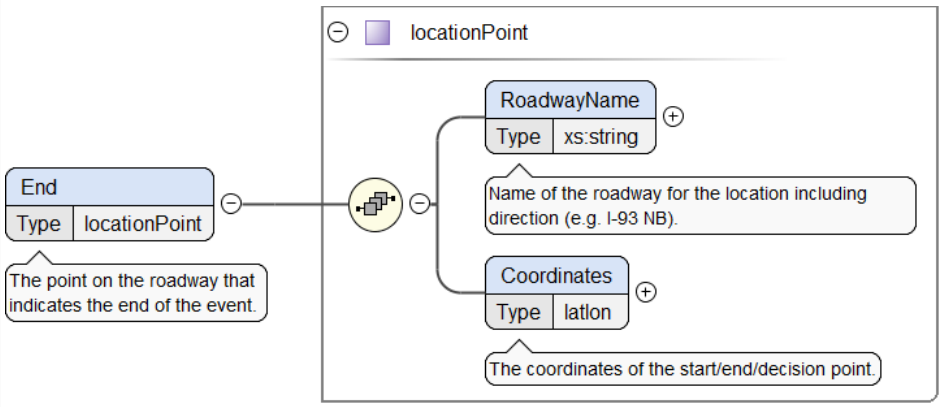
Annotations	A point on the roadway that indicates a waypoint.

Diagram	
Type	locationPoint
Properties	content: complex minOccurs: 0 maxOccurs: unbounded
Model	RoadwayName , Coordinates
Children	Coordinates, RoadwayName

Instance	`<Waypoint>`
	`  <RoadwayName>{1,1}</RoadwayName>`
	`  <Coordinates>{1,1}</Coordinates>`
	`</Waypoint>`

Source	`<xs:element name="Waypoint" type="locationPoint" minOccurs="0" maxOccurs="unbounded">`
	`  <xs:annotation>`
	`  <xs:documentation>A point on the roadway that indicates a waypoint.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

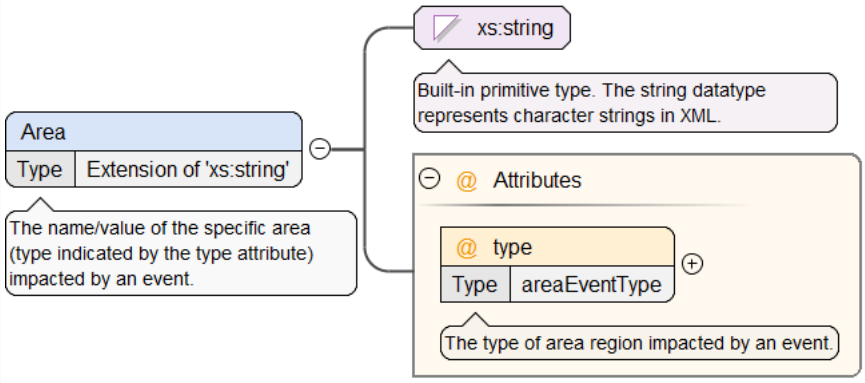
Element eventLocation / Range / End

Annotations	The point on the roadway that indicates the end of the event.
Diagram	
Type	locationPoint
Properties	content: complex
Model	RoadwayName , Coordinates
Children	Coordinates, RoadwayName

Instance	`<End>`
	`  <RoadwayName>{1,1}</RoadwayName>`
	`  <Coordinates>{1,1}</Coordinates>`
	`</End>`

Source	`<xs:element name="End" type="locationPoint">`
	`  <xs:annotation>`
	`  <xs:documentation>The point on the roadway that indicates the end of the event.</`
	`xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element `eventLocation / Area`

Annotations	The name/value of the specific area (type indicated by the type attribute) impacted by an event.
Diagram	
Type	extension of xs:string
Properties	content: complex maxOccurs: unbounded

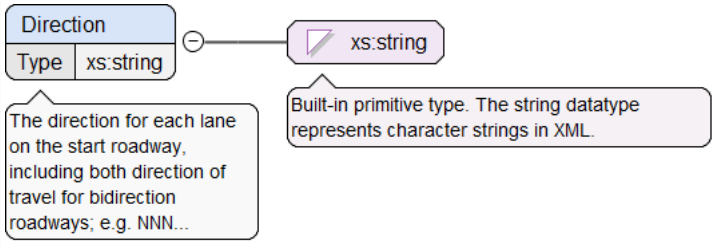
Attributes

QName	Type	Use	
type	areaEventType	required	
	The type of area region impacted by an event.		

Source

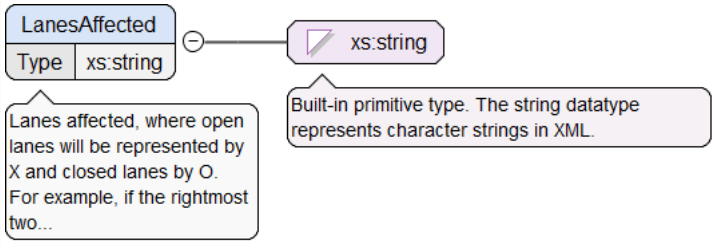
```
<xs:element name="Area" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The name/value of the specific area (type indicated by the type attribute)
 impacted by an event.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:simpleContent>
      <xs:extension base="xs:string">
        <xs:attribute name="type" type="areaEventType" use="required">
          <xs:annotation>
            <xs:documentation>The type of area region impacted by an event.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</xs:element>
```

Element `laneInfo / Direction`

Annotations	The direction for each lane on the start roadway, including both direction of travel for bidirection roadways; e.g. NNN from three northbound lanes and SSSNNN for three southbound lanes and three northbound lanes. The convention is: - For northbound lanes, the first letter indicates the leftmost travel lane, which is closest to the median; - For southbound lanes, the first letter indicates the rightmost lane, which is closest to entry and exit ramps; - For eastbound lanes, the first letter indicates the leftmost travel lane, which is closest to the median; - For westbound lanes, the first letter indicates the rightmost lane, which is closest to entry and exit ramps.
Diagram	
Type	xs:string
Properties	content: simple
Source	`<xs:element name="Direction" type="xs:string">`

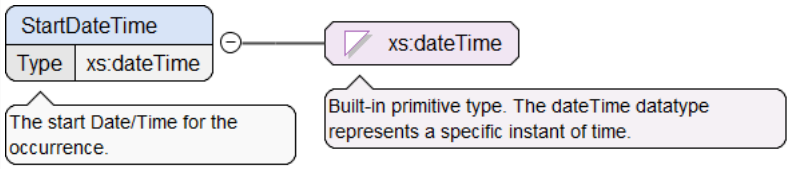
```
  <xs:annotation>
    <xs:documentation>The direction for each lane on the start roadway, including both direction
 of travel for bidirection roadways; e.g. NNN from three northbound lanes and SSSNNN for three
 southbound lanes and three northbound lanes. The convention is: - For northbound lanes, the first
 letter indicates the leftmost travel lane, which is closest to the median; - For southbound lanes,
 the first letter indicates the rightmost lane, which is closest to entry and exit ramps; - For
 eastbound lanes, the first letter indicates the leftmost travel lane, which is closest to the
 median; - For westbound lanes, the first letter indicates the rightmost lane, which is closest to
 entry and exit ramps.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Element laneInfo / LanesAffected

Annotations	Lanes affected, where open lanes will be represented by X and closed lanes by O. For example, if the rightmost two lanes are closed, then the string will be OOOOXX.
Diagram	
Type	xs:string
Properties	content: simple

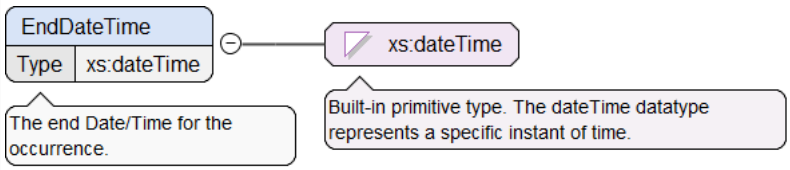
Source	`<xs:element name="LanesAffected" type="xs:string">`
	`  <xs:annotation>`
	`  <xs:documentation>Lanes affected, where open lanes will be represented by X and closed lanes by O. For example, if the rightmost two lanes are closed, then the string will be OOOOXX.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element eventOccurence / StartDateTime

Annotations	The start Date/Time for the occurrence.
Diagram	
Type	xs:dateTime
Properties	content: simple

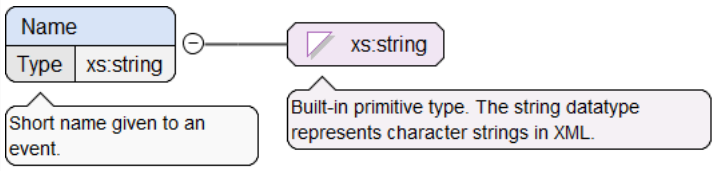
Source	`<xs:element name="StartDateTime" type="xs:dateTime">`
	`  <xs:annotation>`
	`  <xs:documentation>The start Date/Time for the occurrence.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element eventOccurence / EndDateTime

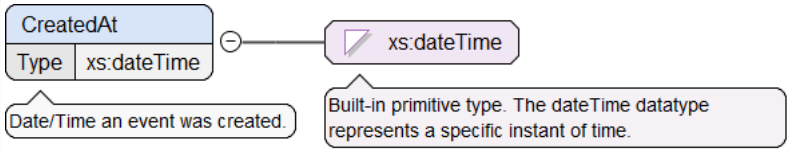
Annotations	The end Date/Time for the occurrence.
Diagram	
Type	xs:dateTime
Properties	content: simple

Source	<xs:element name="EndDateTime" type="xs:dateTime"> <xs:annotation> <xs:documentation>The end Date/Time for the occurrence.</xs:documentation> </xs:annotation> </xs:element>

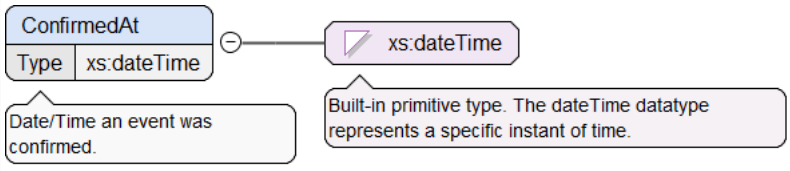
Element event / Name

Annotations	Short name given to an event.
Diagram	
Type	xs:string
Properties	content: simple
Source	<xs:element name="Name" type="xs:string"> <xs:annotation> <xs:documentation>Short name given to an event.</xs:documentation> </xs:annotation> </xs:element>

Element event / CreatedAt

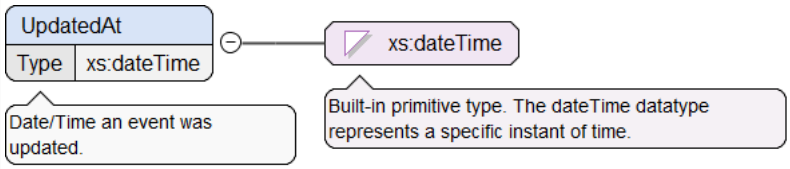
Annotations	Date/Time an event was created.
Diagram	
Type	xs:dateTime
Properties	content: simple
Source	<xs:element name="CreatedAt" type="xs:dateTime"> <xs:annotation> <xs:documentation>Date/Time an event was created.</xs:documentation> </xs:annotation> </xs:element>

Element event / ConfirmedAt

Annotations	Date/Time an event was confirmed.
Diagram	
Type	xs:dateTime
Properties	content: simple
Source	<xs:element name="ConfirmedAt" type="xs:dateTime"> <xs:annotation> <xs:documentation>Date/Time an event was confirmed.</xs:documentation> </xs:annotation> </xs:element>

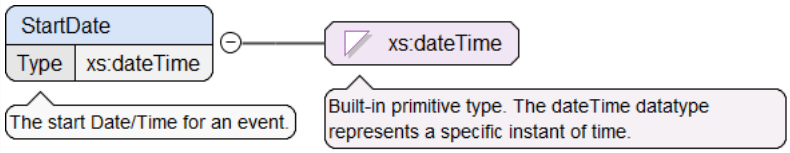
Element event / UpdatedAt

Annotations	Date/Time an event was updated.

Diagram	
Type	xs:dateTime
Properties	content: simple

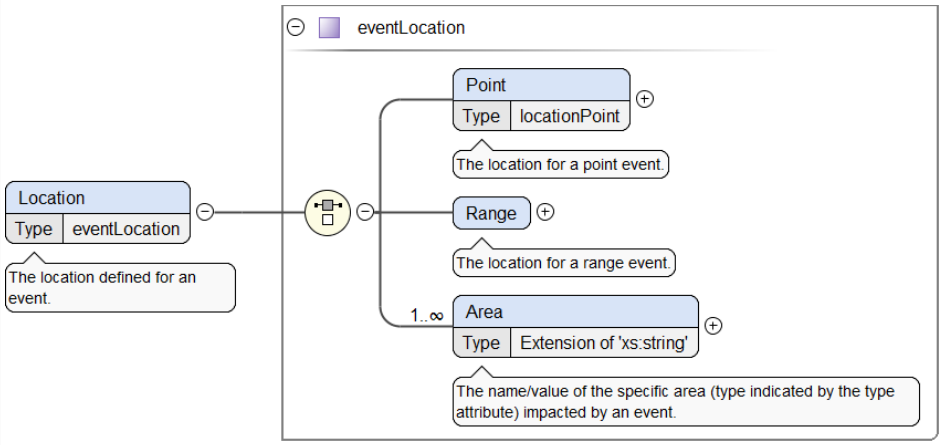
Source	`<xs:element name="UpdatedAt" type="xs:dateTime">`
	`  <xs:annotation>`
	`  <xs:documentation>Date/Time an event was updated.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element event / StartDate

Annotations	The start Date/Time for an event.
Diagram	
Type	xs:dateTime
Properties	content: simple

Source	`<xs:element name="StartDate" type="xs:dateTime">`
	`  <xs:annotation>`
	`  <xs:documentation>The start Date/Time for an event.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element event / Location

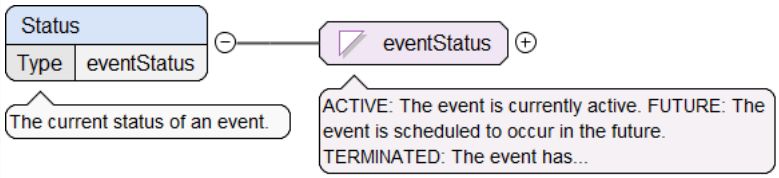
Annotations	The location defined for an event.
Diagram	
Type	eventLocation
Properties	content: complex
Model	Point | Range | Area+
Children	Area, Point, Range

Instance	`<Location>`
	`  <Point>{1,1}</Point>`
	`  <Range>{1,1}</Range>`
	`  <Area type="">{1,unbounded}</Area>`
	`</Location>`

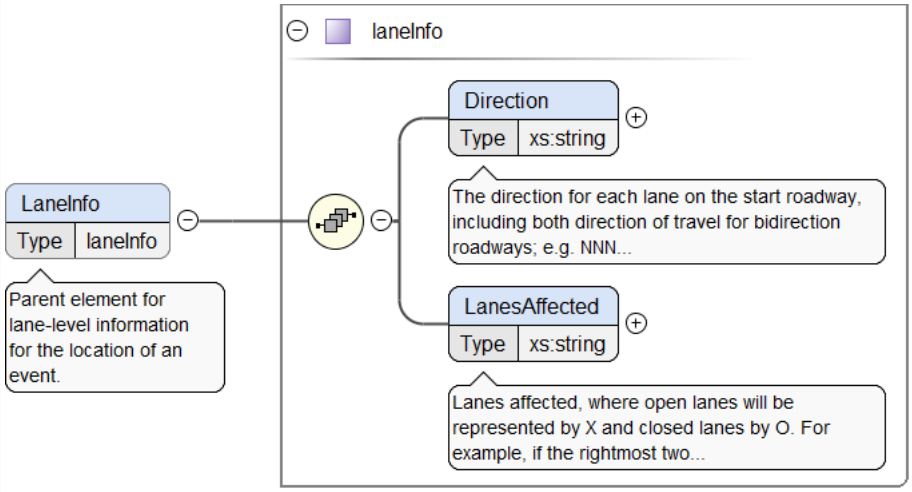
Source	`<xs:element name="Location" type="eventLocation">`
	`  <xs:annotation>`
	`  <xs:documentation>The location defined for an event.</xs:documentation>`
	`  </xs:annotation>`

```
</xs:element>
```

Element event / Status

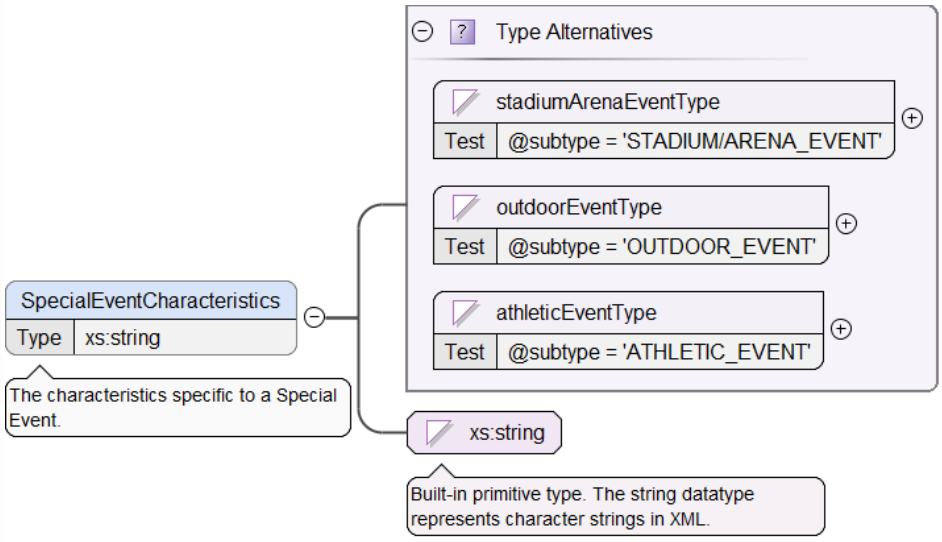
Annotations	The current status of an event.
Diagram	
Type	eventStatus
Properties	content: simple
Facets	enumeration ACTIVE enumeration FUTURE enumeration TERMINATED
Source	<xs:element name="Status" type="eventStatus"> <xs:annotation> <xs:documentation>The current status of an event.</xs:documentation> </xs:annotation> </xs:element>

Element event / LaneInfo

Annotations	Parent element for lane-level information for the location of an event.
Diagram	
Type	laneInfo
Properties	content: complex minOccurs: 0
Model	Direction , LanesAffected
Children	Direction, LanesAffected
Instance	<LaneInfo> <Direction>{1,1}</Direction> <LanesAffected>{1,1}</LanesAffected> </LaneInfo>
Source	<xs:element name="LaneInfo" type="laneInfo" minOccurs="0"> <xs:annotation> <xs:documentation>Parent element for lane-level information for the location of an event.</ xs:documentation> </xs:annotation> </xs:element>

Element specialEventSpecifics / SpecialEventCharacteristics

Annotations	The characteristics specific to a Special Event.

Diagram	
Type	xs:string
Properties	content: simple minOccurs: 0

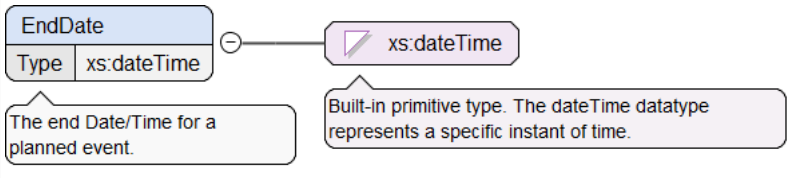
Type Alternatives

Type	Test	XPath default namespace
stadiumArenaEventType	@subtype = 'STADIUM/ARENA_EVENT'	
outdoorEventType	@subtype = 'OUTDOOR_EVENT'	
athleticEventType	@subtype = 'ATHLETIC_EVENT'	
xs:anyAtomicType *[Default Type]*		

Source

```
<xs:element name="SpecialEventCharacteristics" type="xs:string" minOccurs="0">
  <xs:annotation>
    <xs:documentation>The characteristics specific to a Special Event.</xs:documentation>
  </xs:annotation>
  <xs:alternative test="@subtype = 'STADIUM/ARENA_EVENT'" type="stadiumArenaEventType"/>
  <xs:alternative test="@subtype = 'OUTDOOR_EVENT'" type="outdoorEventType"/>
  <xs:alternative test="@subtype = 'ATHLETIC_EVENT'" type="athleticEventType"/>
</xs:element>
```

Element plannedEvent / EndDate

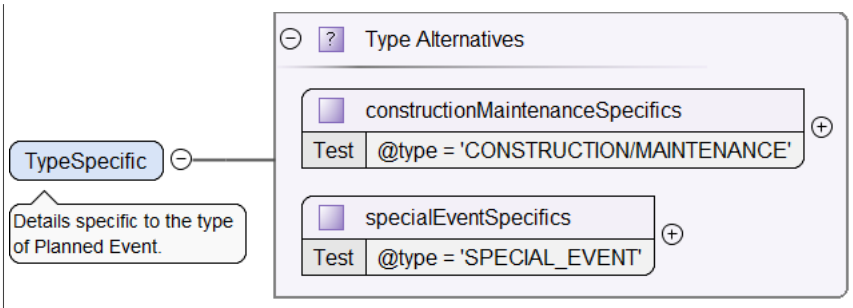
Annotations	The end Date/Time for a planned event.
Diagram	
Type	xs:dateTime
Properties	content: simple

Source

```
<xs:element name="EndDate" type="xs:dateTime">
  <xs:annotation>
    <xs:documentation>The end Date/Time for a planned event.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Element plannedEvent / TypeSpecific

Annotations	Details specific to the type of Planned Event.

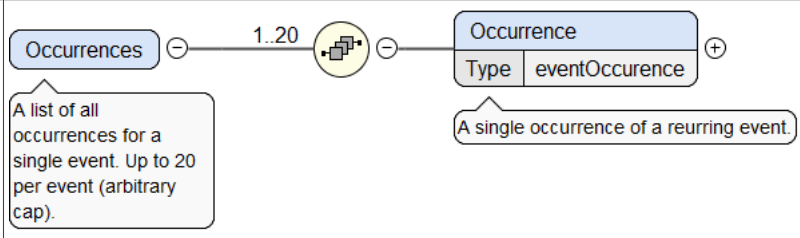
Diagram	

Type Alternatives	Type	Test	XPath default namespace
	constructionMaintenanceSpecifics	@type = 'CONSTRUCTION/MAINTENANCE'	
	specialEventSpecifics	@type = 'SPECIAL_EVENT'	

Source

```
<xs:element name="TypeSpecific">
  <xs:annotation>
    <xs:documentation>Details specific to the type of Planned Event.</xs:documentation>
  </xs:annotation>
  <xs:alternative test="@type = 'CONSTRUCTION/MAINTENANCE'" type="constructionMaintenanceSpecifics"/
>
  <xs:alternative test="@type = 'SPECIAL_EVENT'" type="specialEventSpecifics"/>
</xs:element>
```

Element plannedEvent / Occurrences

Annotations	A list of all occurrences for a single event. Up to 20 per event (arbitrary cap).
Diagram	
Properties	content: complex
Model	Occurrence
Children	Occurrence

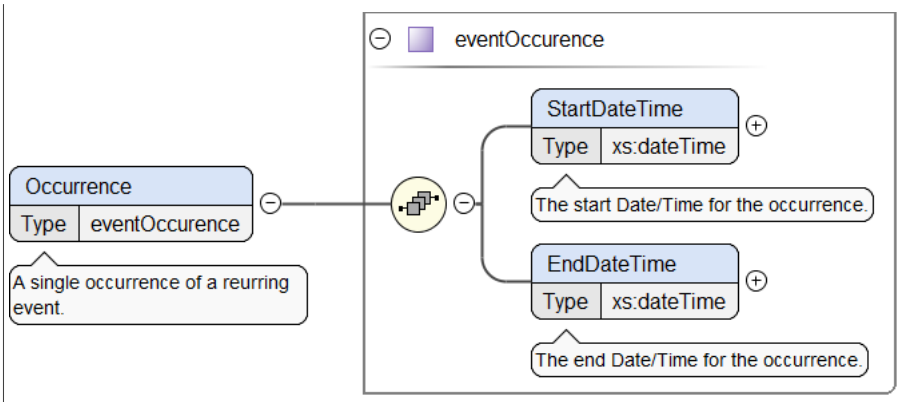
Instance	`<Occurrences>`
	`  <Occurrence>{1,1}</Occurrence>`
	`</Occurrences>`

Source

```
<xs:element name="Occurrences">
  <xs:annotation>
    <xs:documentation>A list of all occurrences for a single event. Up to 20 per event (arbitrary
 cap).</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence maxOccurs="20">
      <xs:element name="Occurrence" type="eventOccurence">
        <xs:annotation>
          <xs:documentation>A single occurrence of a reurring event.</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Element plannedEvent / Occurrences / Occurrence

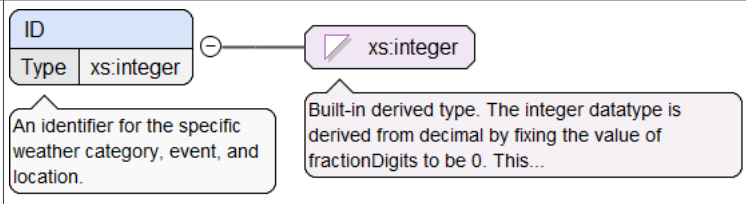
Annotations	A single occurrence of a reurring event.

Diagram	
Type	eventOccurence
Properties	content: complex
Model	StartDateTime , EndDateTime
Children	EndDateTime, StartDateTime

Instance	`<Occurrence>`
	`  <StartDateTime>{1,1}</StartDateTime>`
	`  <EndDateTime>{1,1}</EndDateTime>`
	`</Occurrence>`

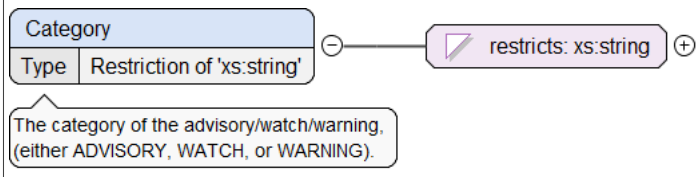
Source	`<xs:element name="Occurrence" type="eventOccurence">`
	`  <xs:annotation>`
	`  <xs:documentation>A single occurrence of a reurring event.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element advisoryWatchWarningCharacteristics / ID

Annotations	An identifier for the specific weather category, event, and location.
Diagram	
Type	xs:integer
Properties	content: simple

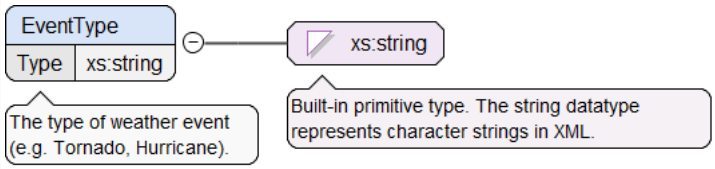
Source	`<xs:element name="ID" type="xs:integer">`
	`  <xs:annotation>`
	`  <xs:documentation>An identifier for the specific weather category, event, and location.</`
	`xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element advisoryWatchWarningCharacteristics / Category

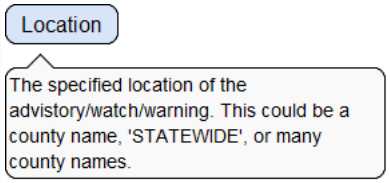
Annotations	The category of the advisory/watch/warning, (either ADVISORY, WATCH, or WARNING).	
Diagram		
Type	restriction of xs:string	
Properties	content: simple	
Facets	enumeration	ADVISORY
	enumeration	WATCH

	enumeration WARNING
Source	<xs:element name="Category"> <xs:annotation> <xs:documentation>The category of the advisory/watch/warning, (either ADVISORY, WATCH, or WARNING).</xs:documentation> </xs:annotation> <xs:simpleType> <xs:restriction base="xs:string"> <xs:enumeration value="ADVISORY"/> <xs:enumeration value="WATCH"/> <xs:enumeration value="WARNING"/> </xs:restriction> </xs:simpleType> </xs:element>

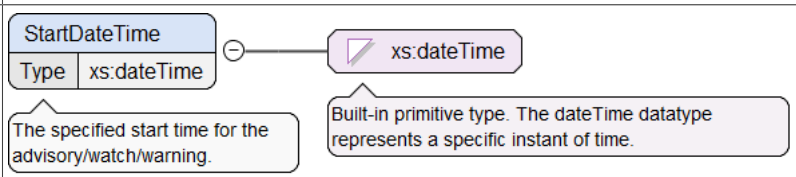
Element advisoryWatchWarningCharacteristics / EventType

Annotations	The type of weather event (e.g. Tornado, Hurricane).
Diagram	
Type	xs:string
Properties	content: simple
Source	<xs:element name="EventType" type="xs:string"> <xs:annotation> <xs:documentation>The type of weather event (e.g. Tornado, Hurricane).</xs:documentation> </xs:annotation> </xs:element>

Element advisoryWatchWarningCharacteristics / Location

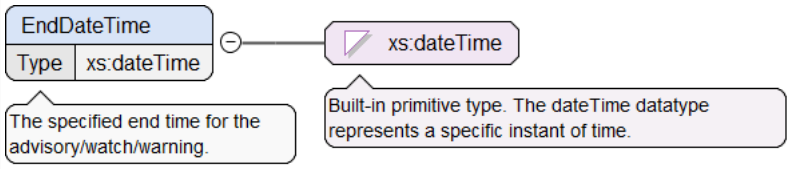
Annotations	The specified location of the advistory/watch/warning. This could be a county name, 'STATEWIDE', or many county names.
Diagram	
Properties	maxOccurs: unbounded
Source	<xs:element name="Location" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The specified location of the advistory/watch/warning. This could be a county name, 'STATEWIDE', or many county names.</xs:documentation> </xs:annotation> </xs:element>

Element advisoryWatchWarningCharacteristics / StartDateTime

Annotations	The specified start time for the advisory/watch/warning.
Diagram	
Type	xs:dateTime
Properties	content: simple
Source	<xs:element name="StartDateTime" type="xs:dateTime">

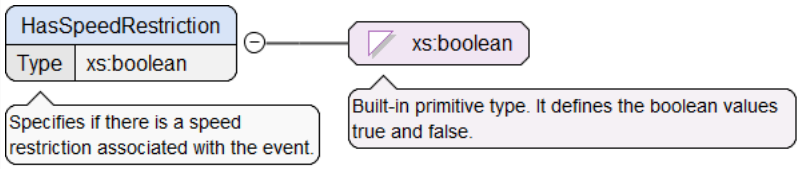
```
  <xs:annotation>
    <xs:documentation>The specified start time for the advisory/watch/warning.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Element advisoryWatchWarningCharacteristics / EndDateTime

Annotations	The specified end time for the advisory/watch/warning.
Diagram	
Type	xs:dateTime
Properties	content: simple

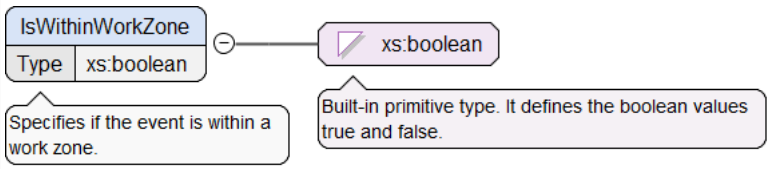
Source	`<xs:element name="EndDateTime" type="xs:dateTime">`
	`  <xs:annotation>`
	`  <xs:documentation>The specified end time for the advisory/watch/warning.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element roadwayTrafficCharacteristics / HasSpeedRestriction

Annotations	Specifies if there is a speed restriction associated with the event.
Diagram	
Type	xs:boolean
Properties	content: simple

Source	`<xs:element name="HasSpeedRestriction" type="xs:boolean">`
	`  <xs:annotation>`
	`  <xs:documentation>Specifies if there is a speed restriction associated with the event.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

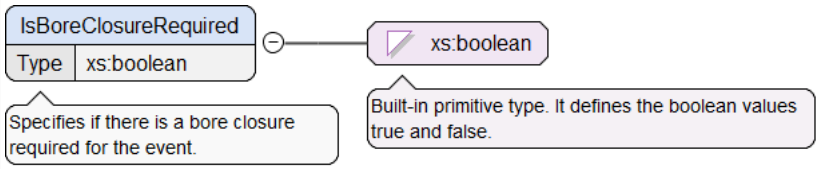
Element roadwayTrafficCharacteristics / IsWithinWorkZone

Annotations	Specifies if the event is within a work zone.
Diagram	
Type	xs:boolean
Properties	content: simple

Source	`<xs:element name="IsWithinWorkZone" type="xs:boolean">`
	`  <xs:annotation>`
	`  <xs:documentation>Specifies if the event is within a work zone.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

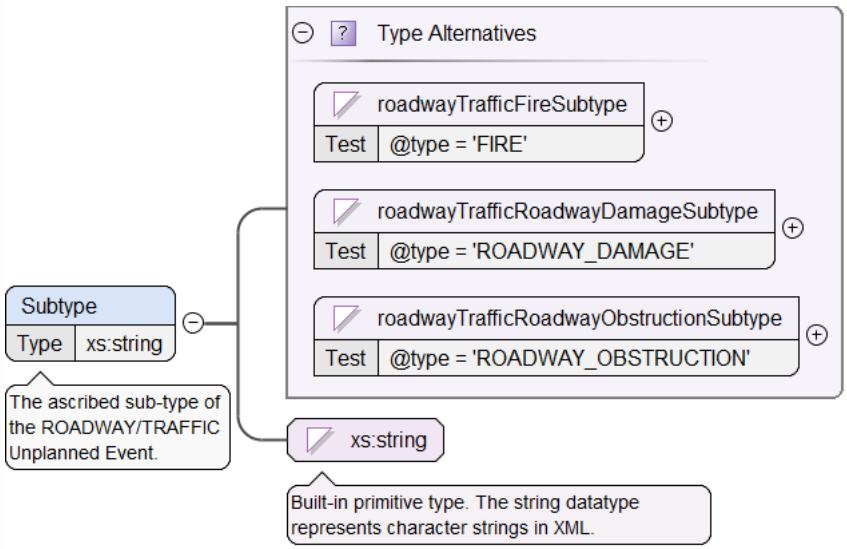
Element roadwayTrafficCharacteristics / IsBoreClosureRequired

Annotations	Specifies if there is a bore closure required for the event.

Diagram	
Type	xs:boolean
Properties	content: simple

Source	`<xs:element name="IsBoreClosureRequired" type="xs:boolean">`
	`  <xs:annotation>`
	`  <xs:documentation>Specifies if there is a bore closure required for the event.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element roadwayTrafficSpecifics / Subtype

Annotations	The ascribed sub-type of the ROADWAY/TRAFFIC Unplanned Event.
Diagram	
Type	xs:string
Properties	content: simple

Type Alternatives

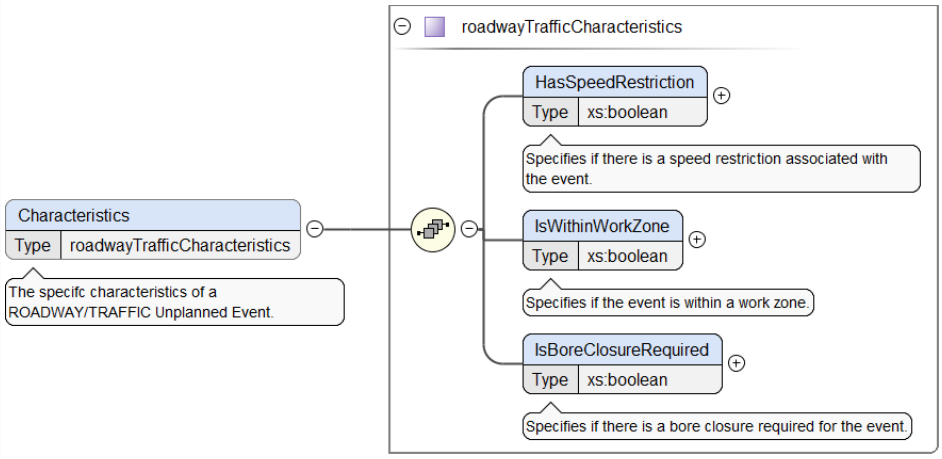
Type	Test	XPath default namespace
roadwayTrafficFireSubtype	@type = 'FIRE'	
roadwayTrafficRoadwayDamageSubtype	@type = 'ROADWAY_DAMAGE'	
roadwayTrafficRoadwayObstructionSubtype	@type = 'ROADWAY_OBSTRUCTION'	
xs:anyAtomicType *[Default Type]*		

Source

```
<xs:element name="Subtype" type="xs:string">
  <xs:annotation>
    <xs:documentation>The ascribed sub-type of the ROADWAY/TRAFFIC Unplanned Event.</
xs:documentation>
  </xs:annotation>
  <xs:alternative test="@type = 'FIRE'" type="roadwayTrafficFireSubtype"/>
  <xs:alternative test="@type = 'ROADWAY_DAMAGE'" type="roadwayTrafficRoadwayDamageSubtype"/>
  <xs:alternative test="@type = 'ROADWAY_OBSTRUCTION'"
 type="roadwayTrafficRoadwayObstructionSubtype"/>
</xs:element>
```

Element roadwayTrafficSpecifics / Characteristics

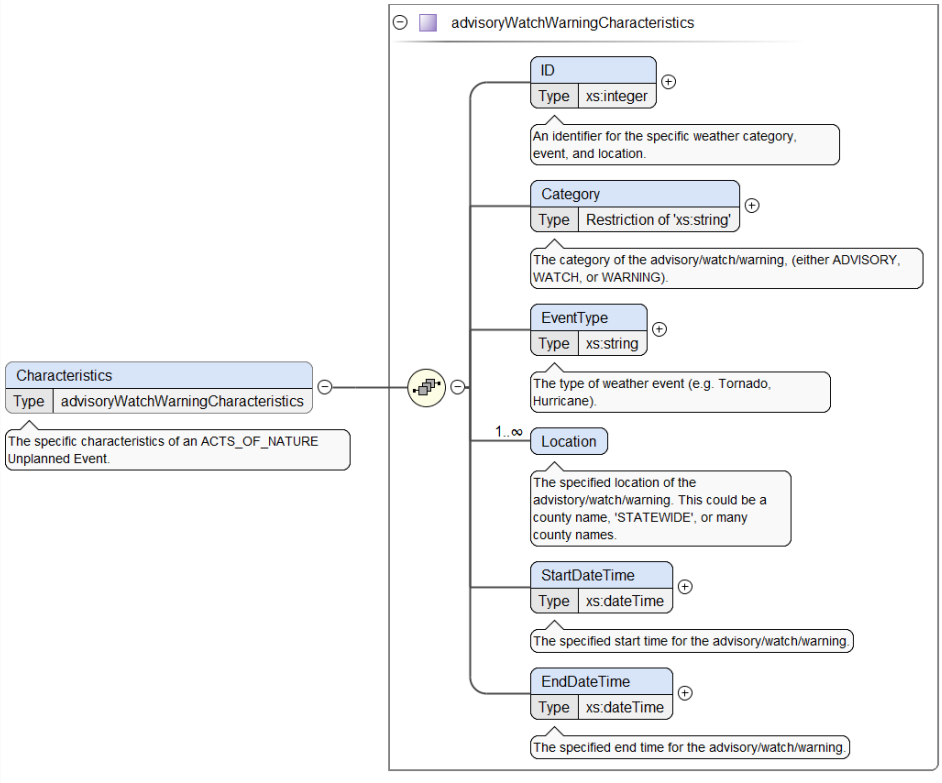
Annotations	The specifc characteristics of a ROADWAY/TRAFFIC Unplanned Event.

Diagram	
Type	roadwayTrafficCharacteristics
Properties	content: complex minOccurs: 0
Model	HasSpeedRestriction , IsWithinWorkZone , IsBoreClosureRequired
Children	HasSpeedRestriction, IsBoreClosureRequired, IsWithinWorkZone

Instance	`<Characteristics>`
	`  <HasSpeedRestriction>{1,1}</HasSpeedRestriction>`
	`  <IsWithinWorkZone>{1,1}</IsWithinWorkZone>`
	`  <IsBoreClosureRequired>{1,1}</IsBoreClosureRequired>`
	`</Characteristics>`

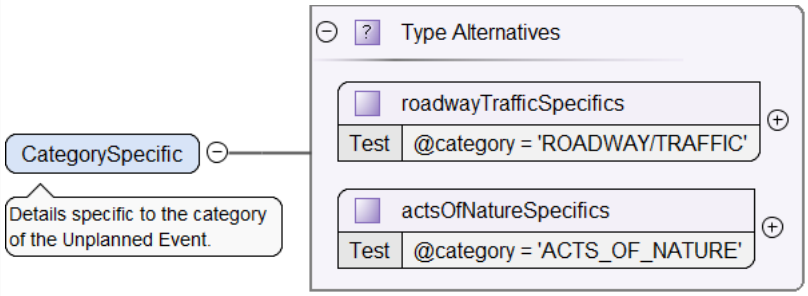
Source	`<xs:element name="Characteristics" type="roadwayTrafficCharacteristics" minOccurs="0">`
	`  <xs:annotation>`
	`  <xs:documentation>The specifc characteristics of a ROADWAY/TRAFFIC Unplanned Event.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element actsOfNatureSpecifics / Characteristics

Annotations	The specific characteristics of an ACTS_OF_NATURE Unplanned Event.
Diagram	

Type	advisoryWatchWarningCharacteristics
Properties	content: complex minOccurs: 0
Model	ID , Category , EventType , Location+ , StartDateTime , EndDateTime
Children	Category, EndDateTime, EventType, ID, Location, StartDateTime
Instance	<Characteristics> <ID>{1,1}</ID> <Category>{1,1}</Category> <EventType>{1,1}</EventType> <Location>{1,unbounded}</Location> <StartDateTime>{1,1}</StartDateTime> <EndDateTime>{1,1}</EndDateTime> </Characteristics>
Source	<xs:element name="Characteristics" type="advisoryWatchWarningCharacteristics" minOccurs="0"> <xs:annotation> <xs:documentation>The specific characteristics of an ACTS_OF_NATURE Unplanned Event.</ xs:documentation> </xs:annotation> </xs:element>

Element unplannedEvent / CategorySpecific

Annotations	Details specific to the category of the Unplanned Event.
Diagram	

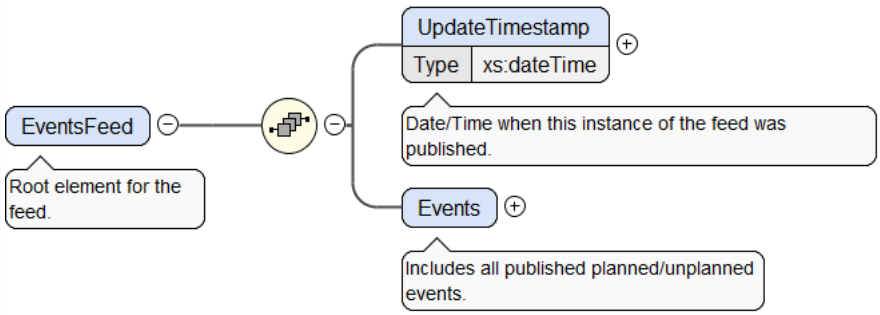
Type Alternatives

Type	Test	XPath default namespace
roadwayTrafficSpecifics	@category = 'ROADWAY/TRAFFIC'	
actsOfNatureSpecifics	@category = 'ACTS_OF_NATURE'	

Source

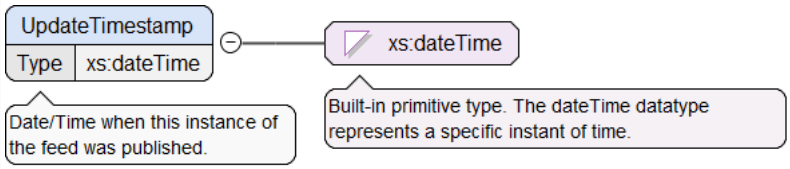
```
<xs:element name="CategorySpecific">
  <xs:annotation>
    <xs:documentation>Details specific to the category of the Unplanned Event.</xs:documentation>
  </xs:annotation>
  <xs:alternative test="@category = 'ROADWAY/TRAFFIC'" type="roadwayTrafficSpecifics"/>
  <xs:alternative test="@category = 'ACTS_OF_NATURE'" type="actsOfNatureSpecifics"/>
</xs:element>
```

Element EventsFeed

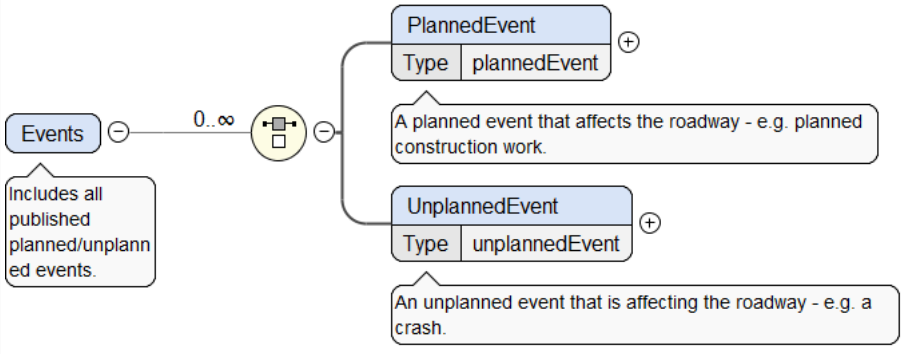
Annotations	Root element for the feed.
Diagram	
Properties	content: complex
Model	UpdateTimestamp , Events
Children	Events, UpdateTimestamp
Instance	<EventsFeed> <UpdateTimestamp>{1,1}</UpdateTimestamp>

	<Events>{1,1}</Events> </EventsFeed>
Source	<xs:element name="EventsFeed"> <xs:annotation> <xs:documentation>Root element for the feed.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="UpdateTimestamp" type="xs:dateTime"> <xs:annotation> <xs:documentation>Date/Time when this instance of the feed was published.</ xs:documentation> </xs:annotation> </xs:element> <xs:element name="Events"> <xs:annotation> <xs:documentation>Includes all published planned/unplanned events.</xs:documentation> </xs:annotation> <xs:complexType> <xs:choice minOccurs="0" maxOccurs="unbounded"> <xs:element name="PlannedEvent" type="plannedEvent"> <xs:annotation> <xs:documentation>A planned event that affects the roadway - e.g. planned construction work.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="UnplannedEvent" type="unplannedEvent"> <xs:annotation> <xs:documentation>An unplanned event that is affecting the roadway - e.g. a crash.</ xs:documentation> </xs:annotation> </xs:element> </xs:choice> </xs:complexType> </xs:element> </xs:sequence> </xs:complexType> </xs:element>

Element EventsFeed / UpdateTimestamp

Annotations	Date/Time when this instance of the feed was published.
Diagram	
Type	xs:dateTime
Properties	content: simple
Source	<xs:element name="UpdateTimestamp" type="xs:dateTime"> <xs:annotation> <xs:documentation>Date/Time when this instance of the feed was published.</xs:documentation> </xs:annotation> </xs:element>

Element EventsFeed / Events

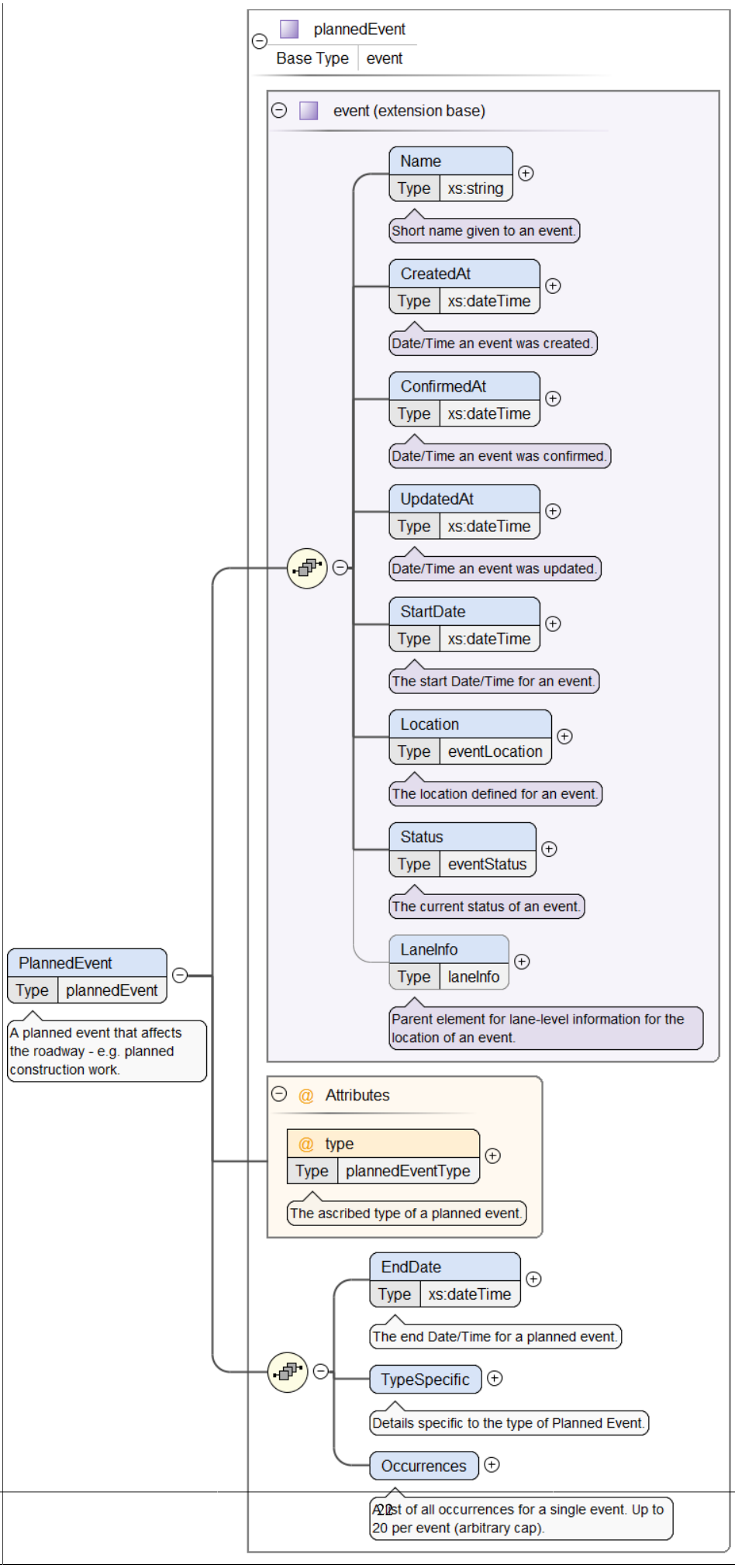
Annotations	Includes all published planned/unplanned events.
Diagram	

Properties	content: complex
Model	PlannedEvent | UnplannedEvent
Children	PlannedEvent, UnplannedEvent
Instance	<Events> <PlannedEvent type="">{1,1}</PlannedEvent> <UnplannedEvent category="">{1,1}</UnplannedEvent> </Events>
Source	<xs:element name="Events"> <xs:annotation> <xs:documentation>Includes all published planned/unplanned events.</xs:documentation> </xs:annotation> <xs:complexType> <xs:choice minOccurs="0" maxOccurs="unbounded"> <xs:element name="PlannedEvent" type="plannedEvent"> <xs:annotation> <xs:documentation>A planned event that affects the roadway - e.g. planned construction work.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="UnplannedEvent" type="unplannedEvent"> <xs:annotation> <xs:documentation>An unplanned event that is affecting the roadway - e.g. a crash.</xs:documentation> </xs:annotation> </xs:element> </xs:choice> </xs:complexType> </xs:element>

Element EventsFeed / Events / PlannedEvent

Annotations	A planned event that affects the roadway - e.g. planned construction work.

Diagram


plannedEvent
Base Type
event
event (extension base)
Name
Type
xs:string
Short name given to an event.
CreatedAt
Type
xs:dateTime
Date/Time an event was created.
ConfirmedAt
Type
xs:dateTime
Date/Time an event was confirmed.
UpdatedAt
Type
xs:dateTime
Date/Time an event was updated.
StartDate
Type
xs:dateTime
The start Date/Time for an event.
Location
Type
eventLocation
The location defined for an event.
Status
Type
eventStatus
The current status of an event.
LaneInfo
Type
laneInfo
Parent element for lane-level information for the location of an event.
PlannedEvent
Type
plannedEvent
A planned event that affects the roadway - e.g. planned construction work.
Attributes
type
Type
plannedEventType
The ascribed type of a planned event.
EndDate
Type
xs:dateTime
The end Date/Time for a planned event.
TypeSpecific
Details specific to the type of Planned Event.
Occurrences
A list of all occurrences for a single event. Up to 20 per event (arbitrary cap).

Type	plannedEvent
Type hierarchy	• event • plannedEvent
Properties	content: complex
Model	Name , CreatedAt , ConfirmedAt , UpdatedAt , StartDate , Location , Status , LaneInfo{0,1} , EndDate , TypeSpecific , Occurrences
Children	ConfirmedAt, CreatedAt, EndDate, LaneInfo, Location, Name, Occurrences, StartDate, Status, TypeSpecific, UpdatedAt

Instance

```
<PlannedEvent type="">
  <Name>{1,1}</Name>
  <CreatedAt>{1,1}</CreatedAt>
  <ConfirmedAt>{1,1}</ConfirmedAt>
  <UpdatedAt>{1,1}</UpdatedAt>
  <StartDate>{1,1}</StartDate>
  <Location>{1,1}</Location>
  <Status>{1,1}</Status>
  <LaneInfo>{0,1}</LaneInfo>
  <EndDate>{1,1}</EndDate>
  <TypeSpecific>{1,1}</TypeSpecific>
  <Occurrences>{1,1}</Occurrences>
</PlannedEvent>
```

Attributes

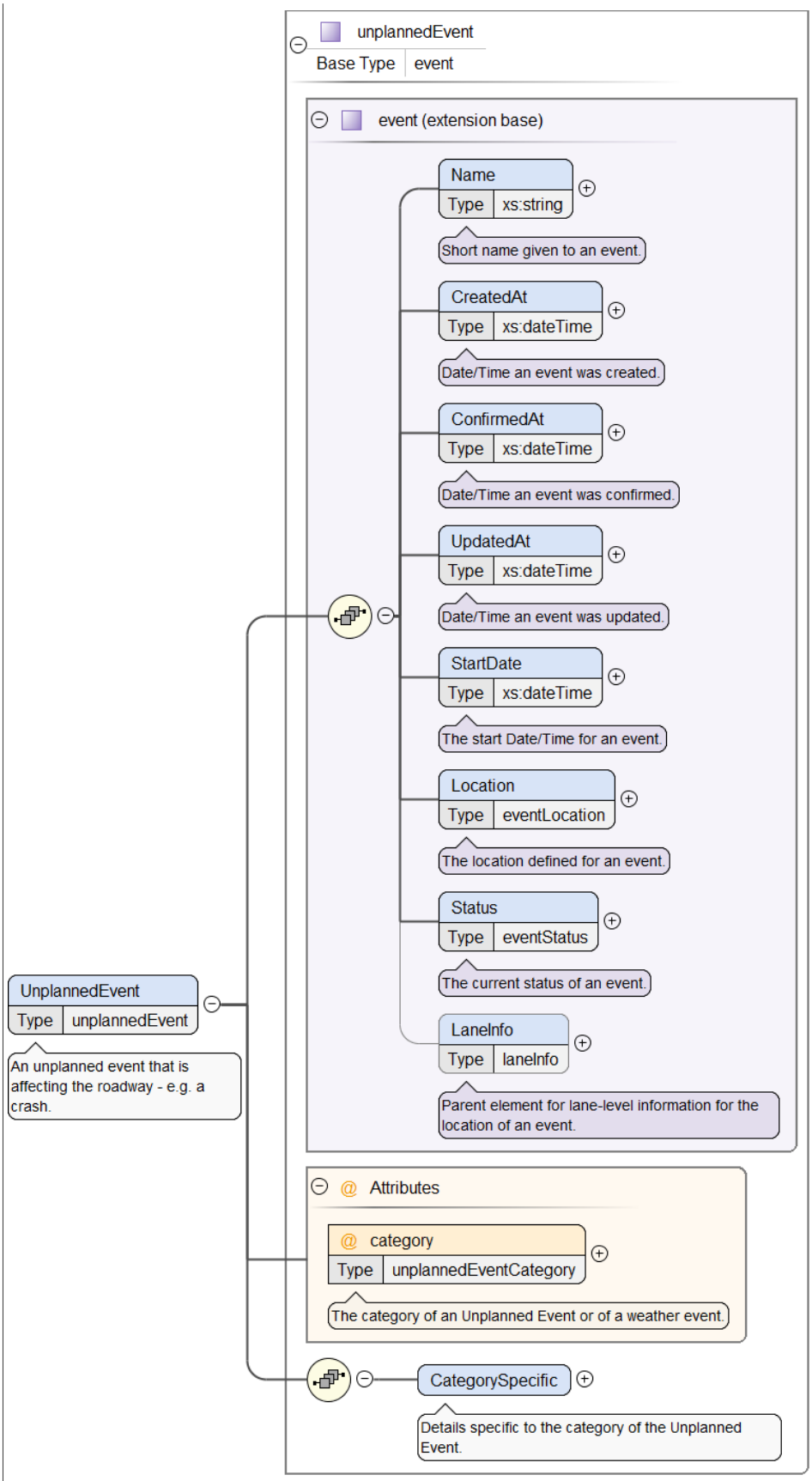
QName	Type	Use	
type	plannedEventType	required	
	The ascribed type of a planned event.		

Source

```
<xs:element name="PlannedEvent" type="plannedEvent">
  <xs:annotation>
    <xs:documentation>A planned event that affects the roadway - e.g. planned construction work.</
xs:documentation>
  </xs:annotation>
</xs:element>
```

Element EventsFeed / Events / UnplannedEvent

Annotations	An unplanned event that is affecting the roadway - e.g. a crash.

Diagram	
Type	unplannedEvent
Type hierar-chy	• event • unplannedEvent

Properties	content: complex
Model	Name , CreatedAt , ConfirmedAt , UpdatedAt , StartDate , Location , Status , LaneInfo{0,1} , CategorySpecific
Children	CategorySpecific, ConfirmedAt, CreatedAt, LaneInfo, Location, Name, StartDate, Status, UpdatedAt

Instance

```
<UnplannedEvent category="">
  <Name>{1,1}</Name>
  <CreatedAt>{1,1}</CreatedAt>
  <ConfirmedAt>{1,1}</ConfirmedAt>
  <UpdatedAt>{1,1}</UpdatedAt>
  <StartDate>{1,1}</StartDate>
  <Location>{1,1}</Location>
  <Status>{1,1}</Status>
  <LaneInfo>{0,1}</LaneInfo>
  <CategorySpecific>{1,1}</CategorySpecific>
</UnplannedEvent>
```

Attributes

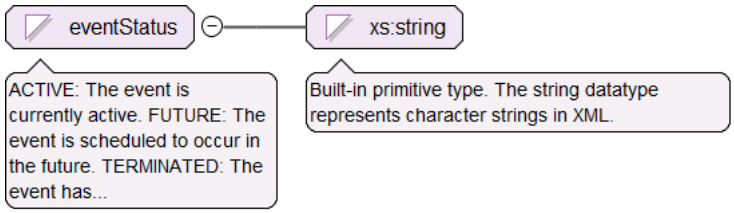
QName	Type	Use	
category	unplannedEventCategory	required	
	The category of an Unplanned Event or of a weather event.		

Source

```
<xs:element name="UnplannedEvent" type="unplannedEvent">
  <xs:annotation>
    <xs:documentation>An unplanned event that is affecting the roadway - e.g. a crash.</
xs:documentation>
  </xs:annotation>
</xs:element>
```

Simple Type(s)

Simple Type `eventStatus`

Annotations	ACTIVE: The event is currently active. FUTURE: The event is scheduled to occur in the future. TERMINATED: The event has been terminated.
Diagram	
Type	restriction of xs:string

Facets

enumeration	ACTIVE
enumeration	FUTURE
enumeration	TERMINATED

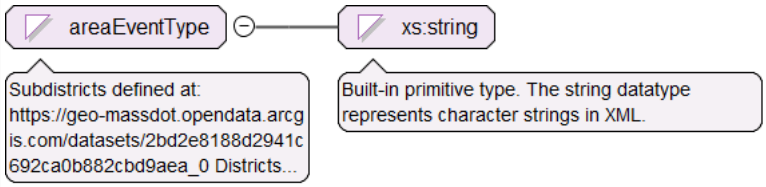
Used by	Element event/Status

Source

```
<xs:simpleType name="eventStatus">
  <xs:annotation>
    <xs:documentation>ACTIVE: The event is currently active. FUTURE: The event is scheduled to occur
 in the future. TERMINATED: The event has been terminated.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="ACTIVE"/>
    <xs:enumeration value="FUTURE"/>
    <xs:enumeration value="TERMINATED"/>
  </xs:restriction>
</xs:simpleType>
```

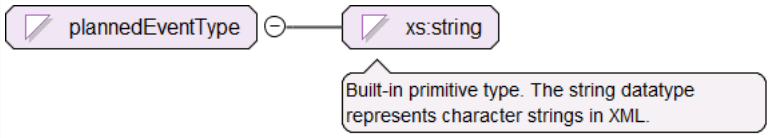
Simple Type `areaEventType`

Annotations	Subdistricts defined at: https://geo-massdot.opendata.arcgis.com/datasets/2bd2e8188d2941c692ca0b882cbd9aea_0 Districts defined at: https://geo-massdot.opendata.arcgis.com/datasets/3399393a72f3424082dc5974f001cad8_0

Diagram	
Type	restriction of xs:string
Facets	enumeration TOWN enumeration COUNTY enumeration SUBDISTRICT enumeration DISTRICT enumeration STATEWIDE
Used by	Attribute eventLocation/Area/@type

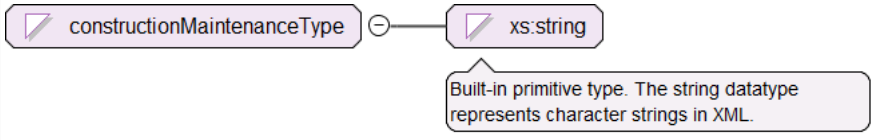
Source	`<xs:simpleType name="areaEventType">`
	`<xs:annotation>`
	`<xs:documentation>Subdistricts defined at: https://geo-massdot.opendata.arcgis.com/datasets/2bd2e8188d2941c692ca0b882cbd9aea_0 Districts defined at: https://geo-massdot.opendata.arcgis.com/datasets/3399393a72f3424082dc5974f001cad8_0</xs:documentation>`
	`</xs:annotation>`
	`<xs:restriction base="xs:string">`
	`<xs:enumeration value="TOWN"/>`
	`<xs:enumeration value="COUNTY"/>`
	`<xs:enumeration value="SUBDISTRICT"/>`
	`<xs:enumeration value="DISTRICT"/>`
	`<xs:enumeration value="STATEWIDE"/>`
	`</xs:restriction>`
	`</xs:simpleType>`

Simple Type `plannedEventType`

Diagram	
Type	restriction of xs:string
Facets	enumeration CONSTRUCTION/MAINTENANCE enumeration SPECIAL_EVENT
Used by	Attribute plannedEvent/@type

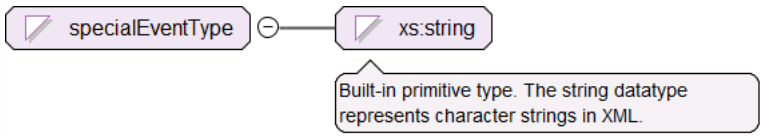
Source	`<xs:simpleType name="plannedEventType">`
	`<xs:restriction base="xs:string">`
	`<xs:enumeration value="CONSTRUCTION/MAINTENANCE"/>`
	`<xs:enumeration value="SPECIAL_EVENT"/>`
	`</xs:restriction>`
	`</xs:simpleType>`

Simple Type `constructionMaintenanceType`

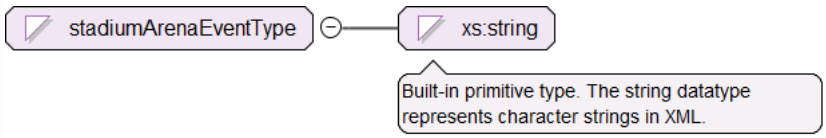
Diagram	
Type	restriction of xs:string
Facets	enumeration ROADWAY_ACTIVITY enumeration BRIDGE_ACTIVITY enumeration TUNNEL_ACTIVITY enumeration FACILITY_ACTIVITY enumeration UTILITY_ACTIVITY

Used by	Attribute	constructionMaintenanceSpecifics/@subtype
Source	<xs:simpleType name="constructionMaintenanceType"> <xs:restriction base="xs:string"> <xs:enumeration value="ROADWAY_ACTIVITY"/> <xs:enumeration value="BRIDGE_ACTIVITY"/> <xs:enumeration value="TUNNEL_ACTIVITY"/> <xs:enumeration value="FACILITY_ACTIVITY"/> <xs:enumeration value="UTILITY_ACTIVITY"/> </xs:restriction> </xs:simpleType>	

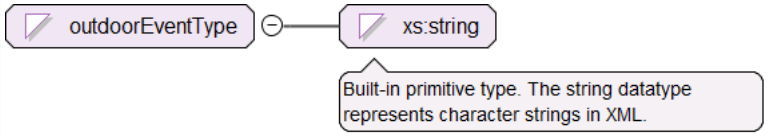
Simple Type `specialEventType`

Diagram		
Type	restriction of xs:string	
Facets	enumeration	STADIUM/ARENA_EVENT
	enumeration	OUTDOOR_EVENT
	enumeration	VIP_VISIT
	enumeration	ATHLETIC_EVENT
	enumeration	FUNERAL_PROCESSION
	enumeration	TRAINING/DRILL
	enumeration	OTHER
Used by	Attribute	specialEventSpecifics/@subtype
Source	<xs:simpleType name="specialEventType"> <xs:restriction base="xs:string"> <xs:enumeration value="STADIUM/ARENA_EVENT"/> <xs:enumeration value="OUTDOOR_EVENT"/> <xs:enumeration value="VIP_VISIT"/> <xs:enumeration value="ATHLETIC_EVENT"/> <xs:enumeration value="FUNERAL_PROCESSION"/> <xs:enumeration value="TRAINING/DRILL"/> <xs:enumeration value="OTHER"/> </xs:restriction> </xs:simpleType>	

Simple Type `stadiumArenaEventType`

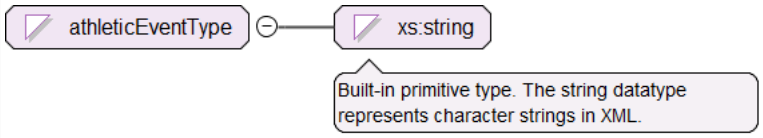
Diagram		
Type	restriction of xs:string	
Facets	enumeration	PAVILION_EVENT
	enumeration	GILLETTE_STADIUM_EVENT
	enumeration	BCEC_EVENT
	enumeration	OTHER
Source	<xs:simpleType name="stadiumArenaEventType"> <xs:restriction base="xs:string"> <xs:enumeration value="PAVILION_EVENT"/> <xs:enumeration value="GILLETTE_STADIUM_EVENT"/> <xs:enumeration value="BCEC_EVENT"/> <xs:enumeration value="OTHER"/> </xs:restriction> </xs:simpleType>	

Simple Type `outdoorEventType`

Diagram	
Type	restriction of xs:string
Facets	enumeration AIRSHOW enumeration FIREWORKS_DISPLAY enumeration MOVIE_FILMING enumeration GENERAL_OUTDOOR_EVENT

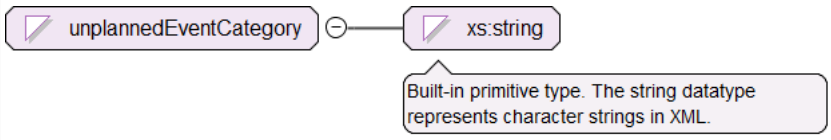
Source	`<xs:simpleType name="outdoorEventType">`
	`  <xs:restriction base="xs:string">`
	`  <xs:enumeration value="AIRSHOW"/>`
	`  <xs:enumeration value="FIREWORKS_DISPLAY"/>`
	`  <xs:enumeration value="MOVIE_FILMING"/>`
	`  <xs:enumeration value="GENERAL_OUTDOOR_EVENT"/>`
	`  </xs:restriction>`
	`</xs:simpleType>`

Simple Type `athleticEventType`

Diagram	
Type	restriction of xs:string
Facets	enumeration MARATHON enumeration ROAD_RACE enumeration BIKE_RACE enumeration CHARITY_WALK

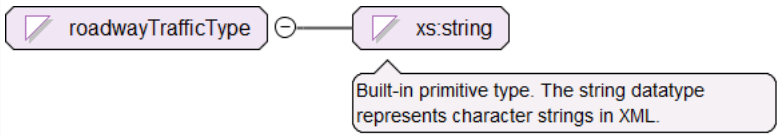
Source	`<xs:simpleType name="athleticEventType">`
	`  <xs:restriction base="xs:string">`
	`  <xs:enumeration value="MARATHON"/>`
	`  <xs:enumeration value="ROAD_RACE"/>`
	`  <xs:enumeration value="BIKE_RACE"/>`
	`  <xs:enumeration value="CHARITY_WALK"/>`
	`  </xs:restriction>`
	`</xs:simpleType>`

Simple Type `unplannedEventCategory`

Diagram	
Type	restriction of xs:string
Facets	enumeration ROADWAY/TRAFFIC enumeration ACTS_OF_NATURE
Used by	Attribute unplannedEvent/@category

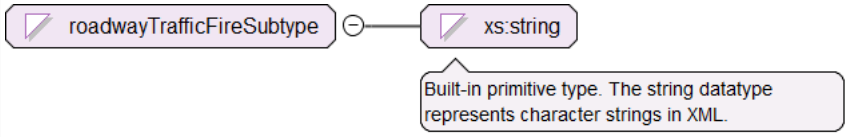
Source	`<xs:simpleType name="unplannedEventCategory">`
	`  <xs:restriction base="xs:string">`
	`  <xs:enumeration value="ROADWAY/TRAFFIC"/>`
	`  <xs:enumeration value="ACTS_OF_NATURE"/>`
	`  </xs:restriction>`
	`</xs:simpleType>`

Simple Type `roadwayTrafficType`

Diagram	
Type	restriction of xs:string
Facets	enumeration CRASH enumeration DISABLED_MOTOR_VEHICLE enumeration FIRE enumeration ROADWAY_DAMAGE enumeration ROADWAY_OBSTRUCTION enumeration CONGESTION enumeration GENERAL_ROADWAY/TRAFFIC
Used by	Attribute roadwayTrafficSpecifics/@type

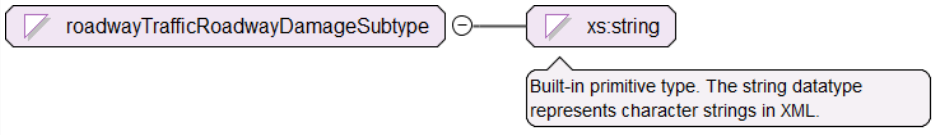
Source	`<xs:simpleType name="roadwayTrafficType">`
	`<xs:restriction base="xs:string">`
	`<xs:enumeration value="CRASH"/>`
	`<xs:enumeration value="DISABLED_MOTOR_VEHICLE"/>`
	`<xs:enumeration value="FIRE"/>`
	`<xs:enumeration value="ROADWAY_DAMAGE"/>`
	`<xs:enumeration value="ROADWAY_OBSTRUCTION"/>`
	`<xs:enumeration value="CONGESTION"/>`
	`<xs:enumeration value="GENERAL_ROADWAY/TRAFFIC"/>`
	`</xs:restriction>`
	`</xs:simpleType>`

Simple Type `roadwayTrafficFireSubtype`

Diagram	
Type	restriction of xs:string
Facets	enumeration VEHICLE_FIRE enumeration FACILITY_FIRE_AFFEC- TING_ROADWAY enumeration BRUSH/FOREST_FIRE

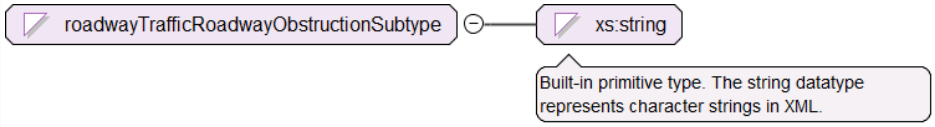
Source	`<xs:simpleType name="roadwayTrafficFireSubtype">`
	`<xs:restriction base="xs:string">`
	`<xs:enumeration value="VEHICLE_FIRE"/>`
	`<xs:enumeration value="FACILITY_FIRE_AFFECTING_ROADWAY"/>`
	`<xs:enumeration value="BRUSH/FOREST_FIRE"/>`
	`</xs:restriction>`
	`</xs:simpleType>`

Simple Type `roadwayTrafficRoadwayDamageSubtype`

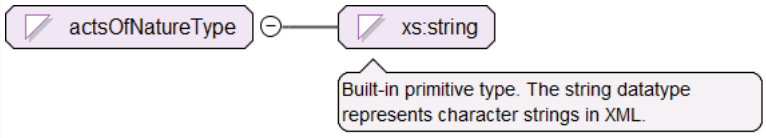
Diagram	
Type	restriction of xs:string
Facets	enumeration STORM_DAMAGE enumeration ROAD_SURFACE_COLLAPSE enumeration POTHOLE

	enumeration	WATER_DAMAGE
	enumeration	SEWER_DAMAGE
	enumeration	GAS_LEAK
Source	<xs:simpleType name="roadwayTrafficRoadwayDamageSubtype"> <xs:restriction base="xs:string"> <xs:enumeration value="STORM_DAMAGE"/> <xs:enumeration value="ROAD_SURFACE_COLLAPSE"/> <xs:enumeration value="POTHOLE"/> <xs:enumeration value="WATER_DAMAGE"/> <xs:enumeration value="SEWER_DAMAGE"/> <xs:enumeration value="GAS_LEAK"/> </xs:restriction> </xs:simpleType>	

Simple Type roadwayTrafficRoadwayObstructionSubtype

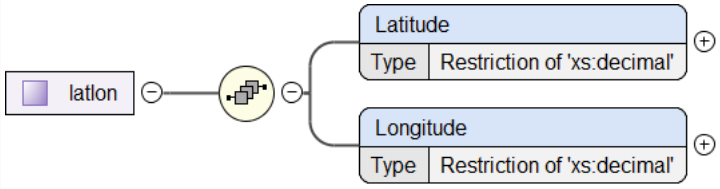
Diagram		
Type	restriction of xs:string	
Facets	enumeration	FALLEN_TREES
	enumeration	DOWNED_SIGN
	enumeration	DOWNED_UTILITY_POLE
	enumeration	DOWNED_POWER_LINE
	enumeration	DOWNED_CABLES
	enumeration	CRASH_INVESTIGATION_WORK
	enumeration	GENERAL_OBSTRUCTION/DE- BRIS
Source	<xs:simpleType name="roadwayTrafficRoadwayObstructionSubtype"> <xs:restriction base="xs:string"> <xs:enumeration value="FALLEN_TREES"/> <xs:enumeration value="DOWNED_SIGN"/> <xs:enumeration value="DOWNED_UTILITY_POLE"/> <xs:enumeration value="DOWNED_POWER_LINE"/> <xs:enumeration value="DOWNED_CABLES"/> <xs:enumeration value="CRASH_INVESTIGATION_WORK"/> <xs:enumeration value="GENERAL_OBSTRUCTION/DEBRIS"/> </xs:restriction> </xs:simpleType>	

Simple Type actsOfNatureType

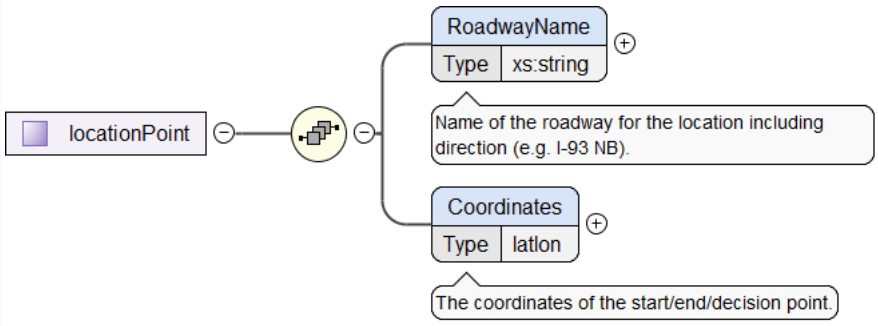
Diagram		
Type	restriction of xs:string	
Facets	enumeration	LOCAL_WEATHER_EVENT
	enumeration	ADVISORY/WATCH/WARNING
Used by	Attribute	actsOfNatureSpecifics/@type
Source	<xs:simpleType name="actsOfNatureType"> <xs:restriction base="xs:string"> <xs:enumeration value="LOCAL_WEATHER_EVENT"/> <xs:enumeration value="ADVISORY/WATCH/WARNING"/> </xs:restriction> </xs:simpleType>	

Complex Type(s)

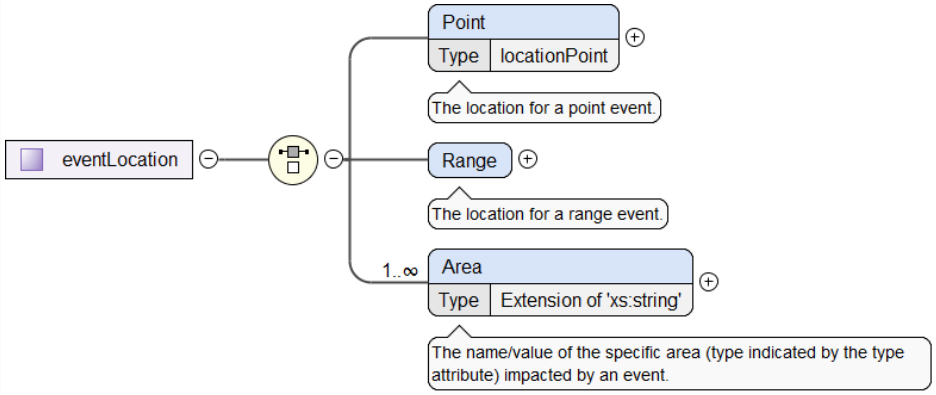
Complex Type `latlon`

Diagram	
Used by	Element locationPoint/Coordinates
Model	Latitude , Longitude
Children	Latitude, Longitude
Source	<xs:complexType name="latlon"> <xs:sequence> <xs:element name="Latitude"> <xs:simpleType> <xs:restriction base="xs:decimal"> <xs:minInclusive value="-90"/> <xs:maxInclusive value="90"/> </xs:restriction> </xs:simpleType> </xs:element> <xs:element name="Longitude"> <xs:simpleType> <xs:restriction base="xs:decimal"> <xs:minInclusive value="-180"/> <xs:maxInclusive value="180"/> </xs:restriction> </xs:simpleType> </xs:element> </xs:sequence> </xs:complexType>

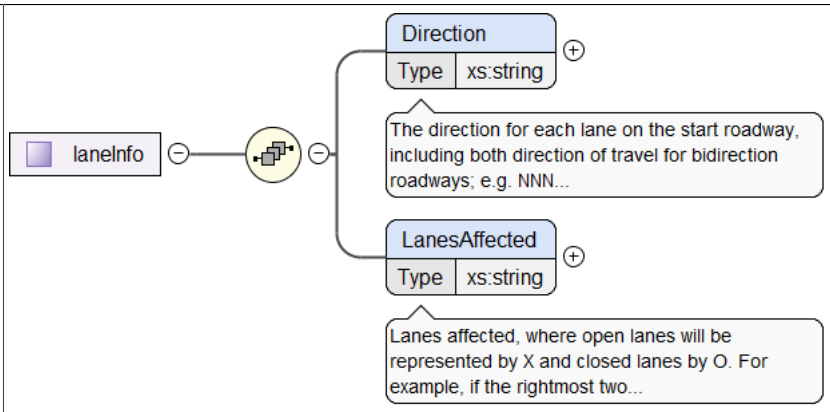
Complex Type `locationPoint`

Diagram	
Used by	Elements eventLocation/Point, eventLocation/Range/End, eventLocation/Range/Start, eventLocation/Range/Way-point
Model	RoadwayName , Coordinates
Children	Coordinates, RoadwayName
Source	<xs:complexType name="locationPoint"> <xs:sequence> <xs:element name="RoadwayName" type="xs:string"> <xs:annotation> <xs:documentation>Name of the roadway for the location including direction (e.g. I-93 NB).</xs:documentation> </xs:annotation> </xs:element> <xs:element name="Coordinates" type="latlon"> <xs:annotation> <xs:documentation>The coordinates of the start/end/decision point.</xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType>

Complex Type `eventLocation`

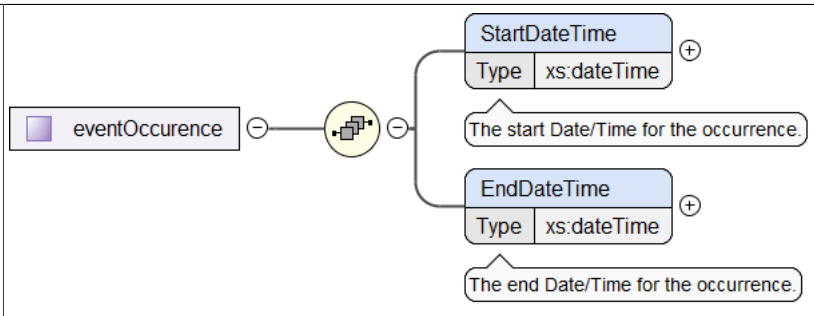
Diagram	
Used by	Element event/Location
Model	Point | Range | Area+
Children	Area, Point, Range
Source	<xs:complexType name="eventLocation"> <xs:choice> <xs:element name="Point" type="locationPoint"> <xs:annotation> <xs:documentation>The location for a point event.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="Range"> <xs:annotation> <xs:documentation>The location for a range event.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="Start" type="locationPoint"> <xs:annotation> <xs:documentation>The point on the roadway that indicates the beginning of the event.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="Waypoint" type="locationPoint" minOccurs="0" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>A point on the roadway that indicates a waypoint.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="End" type="locationPoint"> <xs:annotation> <xs:documentation>The point on the roadway that indicates the end of the event.</xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType> </xs:element> <xs:element name="Area" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The name/value of the specific area (type indicated by the type attribute) impacted by an event.</xs:documentation> </xs:annotation> <xs:complexType> <xs:simpleContent> <xs:extension base="xs:string"> <xs:attribute name="type" type="areaEventType" use="required"> <xs:annotation> <xs:documentation>The type of area region impacted by an event.</xs:documentation> </xs:annotation> </xs:attribute> </xs:extension> </xs:simpleContent> </xs:complexType> </xs:element> </xs:choice> </xs:complexType>

Complex Type `laneInfo`

Diagram	
Used by	Element event/LaneInfo
Model	Direction , LanesAffected
Children	Direction, LanesAffected

Source	`<xs:complexType name="laneInfo">`
	`<xs:sequence>`
	`<xs:element name="Direction" type="xs:string">`
	`<xs:annotation>`
	`<xs:documentation>`The direction for each lane on the start roadway, including both direction of travel for bidirection roadways; e.g. NNN from three northbound lanes and SSSNNN for three southbound lanes and three northbound lanes. The convention is: - For northbound lanes, the first letter indicates the leftmost travel lane, which is closest to the median; - For southbound lanes, the first letter indicates the rightmost lane, which is closest to entry and exit ramps; - For eastbound lanes, the first letter indicates the leftmost travel lane, which is closest to the median; - For westbound lanes, the first letter indicates the rightmost lane, which is closest to entry and exit ramps.`</xs:documentation>`
	`</xs:annotation>`
	`</xs:element>`
	`<xs:element name="LanesAffected" type="xs:string">`
	`<xs:annotation>`
	`<xs:documentation>`Lanes affected, where open lanes will be represented by X and closed lanes by O. For example, if the rightmost two lanes are closed, then the string will be OOOOXX.`</xs:documentation>`
	`</xs:annotation>`
	`</xs:element>`
	`</xs:sequence>`
	`</xs:complexType>`

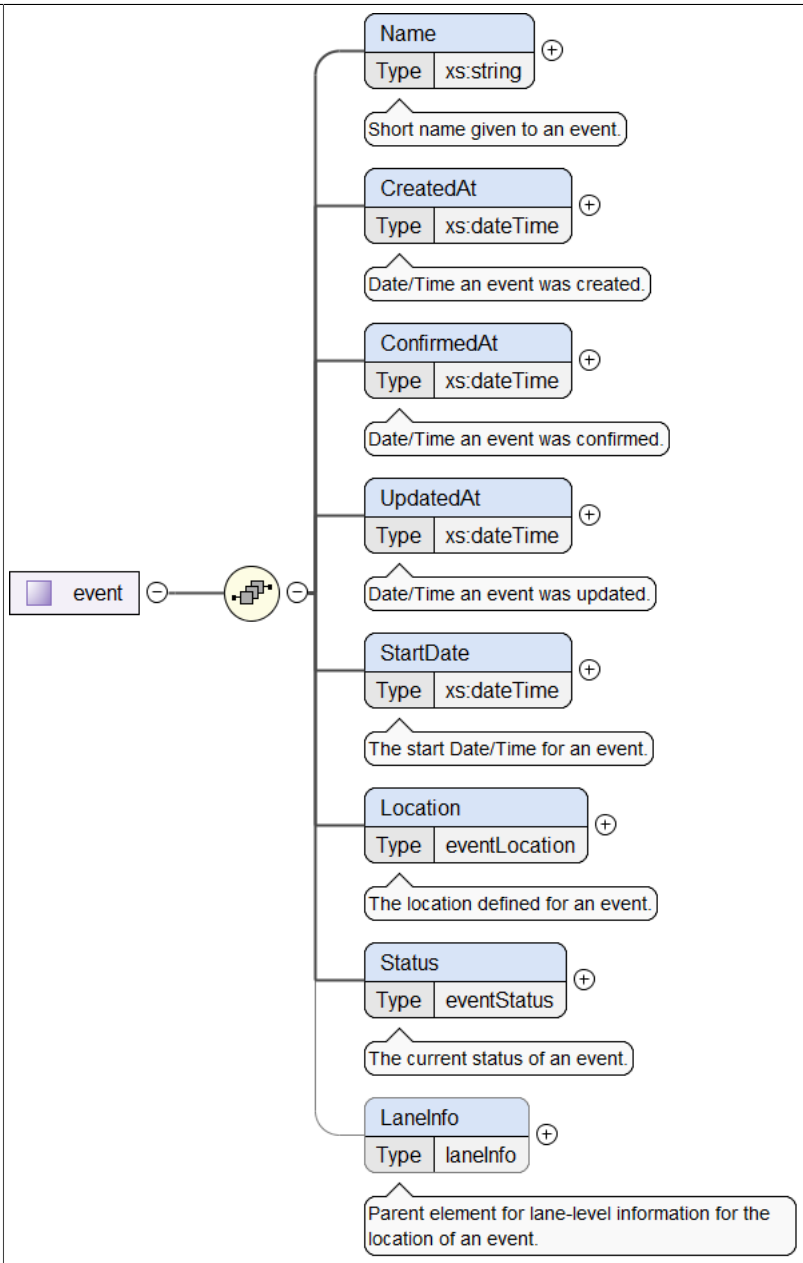
Complex Type `eventOccurence`

Diagram	
Used by	Element plannedEvent/Occurrences/Occurrence
Model	StartDateTime , EndDateTime
Children	EndDateTime, StartDateTime

Source	`<xs:complexType name="eventOccurence">`
	`<xs:sequence>`
	`<xs:element name="StartDateTime" type="xs:dateTime">`
	`<xs:annotation>`
	`<xs:documentation>`The start Date/Time for the occurrence.`</xs:documentation>`
	`</xs:annotation>`
	`</xs:element>`
	`<xs:element name="EndDateTime" type="xs:dateTime">`
	`<xs:annotation>`
	`<xs:documentation>`The end Date/Time for the occurrence.`</xs:documentation>`

```
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Complex Type event

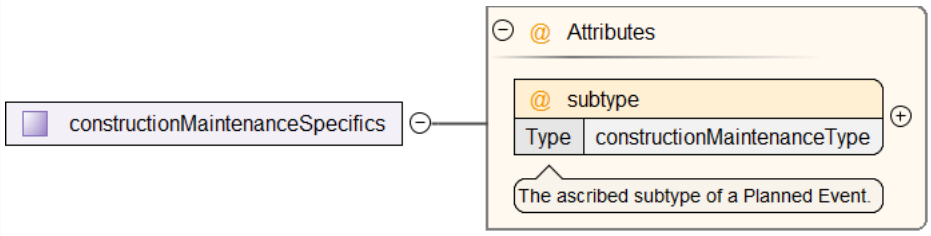
Diagram	
Used by	Complex Types plannedEvent, unplannedEvent
Model	Name , CreatedAt , ConfirmedAt , UpdatedAt , StartDate , Location , Status , LaneInfo{0,1}
Children	ConfirmedAt, CreatedAt, LaneInfo, Location, Name, StartDate, Status, UpdatedAt

Source	`<xs:complexType name="event">`
	`<xs:sequence>`
	`<xs:element name="Name" type="xs:string">`
	`<xs:annotation>`
	`<xs:documentation>Short name given to an event.</xs:documentation>`
	`</xs:annotation>`
	`</xs:element>`
	`<xs:element name="CreatedAt" type="xs:dateTime">`
	`<xs:annotation>`
	`<xs:documentation>Date/Time an event was created.</xs:documentation>`
	`</xs:annotation>`
	`</xs:element>`
	`<xs:element name="ConfirmedAt" type="xs:dateTime">`

```
      <xs:annotation>
        <xs:documentation>Date/Time an event was confirmed.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="UpdatedAt" type="xs:dateTime">
      <xs:annotation>
        <xs:documentation>Date/Time an event was updated.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="StartDate" type="xs:dateTime">
      <xs:annotation>
        <xs:documentation>The start Date/Time for an event.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="Location" type="eventLocation">
      <xs:annotation>
        <xs:documentation>The location defined for an event.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="Status" type="eventStatus">
      <xs:annotation>
        <xs:documentation>The current status of an event.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="LaneInfo" type="laneInfo" minOccurs="0">
      <xs:annotation>
        <xs:documentation>Parent element for lane-level information for the location of an event.</
xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Complex Type `constructionMaintenanceSpecifics`

Diagram



Attributes

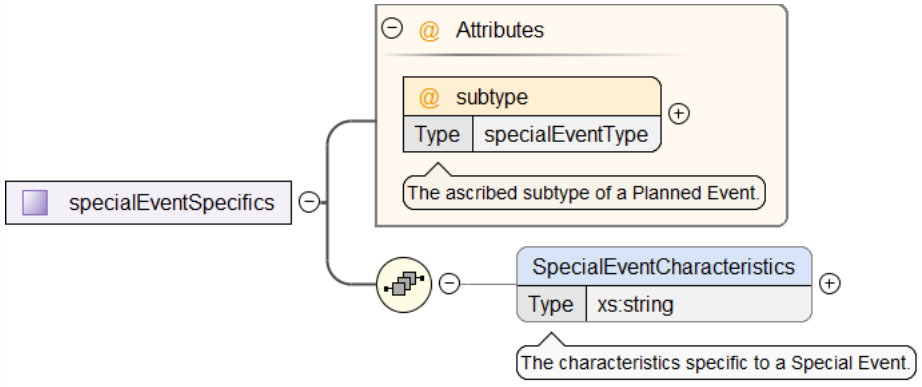
QName	Type	Use	
subtype	constructionMaintenanceType	required	
	The ascribed subtype of a Planned Event.		

Source

```
<xs:complexType name="constructionMaintenanceSpecifics">
  <xs:attribute name="subtype" type="constructionMaintenanceType" use="required">
    <xs:annotation>
      <xs:documentation>The ascribed subtype of a Planned Event.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
```

Complex Type `specialEventSpecifics`

Diagram



Model

SpecialEventCharacteristics{0,1}

Children: SpecialEventCharacteristics

Attributes:

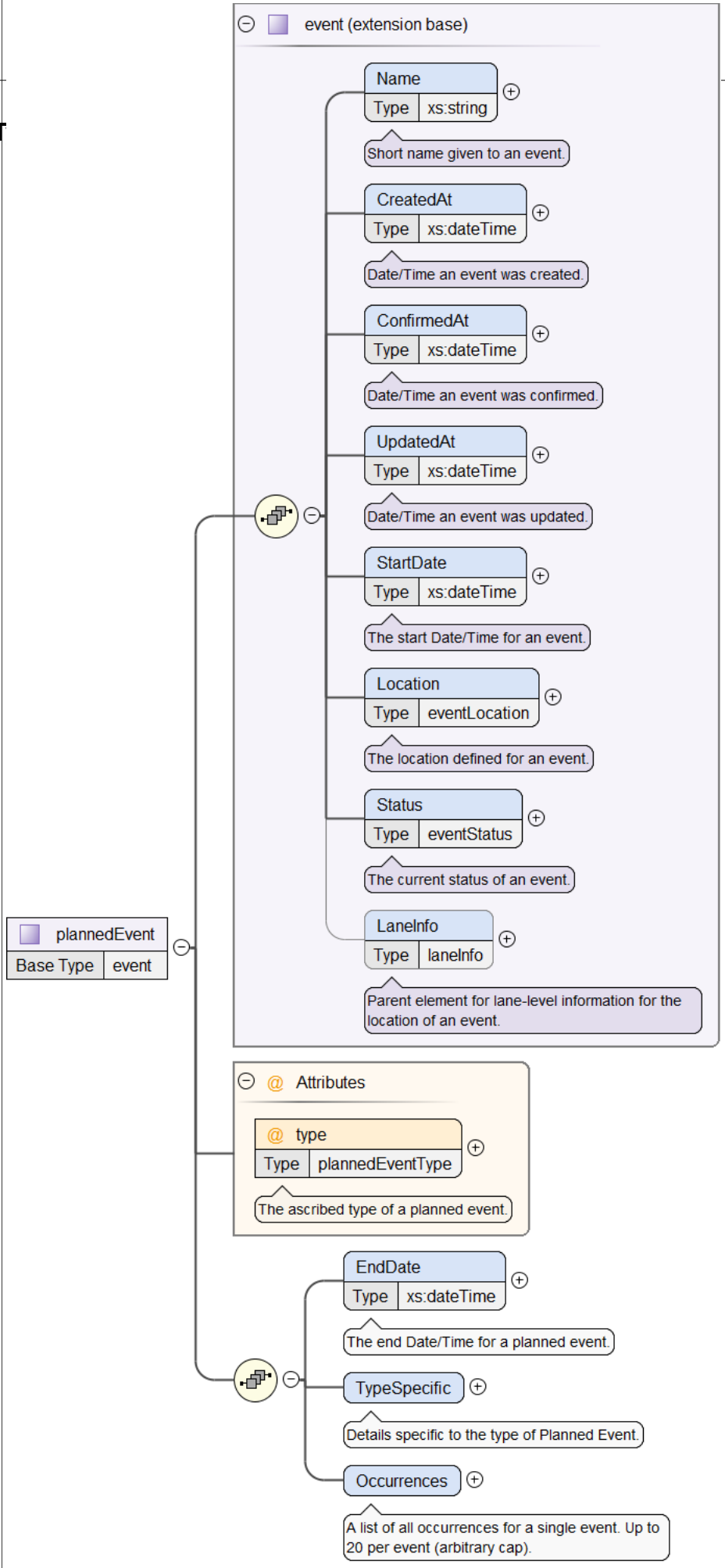
QName	Type	Use	
subtype	specialEventType	required	
	The ascribed subtype of a Planned Event.		

Source:

```
<xs:complexType name="specialEventSpecifics">
  <xs:sequence>
    <xs:element name="SpecialEventCharacteristics" type="xs:string" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The characteristics specific to a Special Event.</xs:documentation>
      </xs:annotation>
      <xs:alternative test="@subtype = 'STADIUM/ARENA_EVENT'" type="stadiumArenaEventType"/>
      <xs:alternative test="@subtype = 'OUTDOOR_EVENT'" type="outdoorEventType"/>
      <xs:alternative test="@subtype = 'ATHLETIC_EVENT'" type="athleticEventType"/>
    </xs:element>
  </xs:sequence>
  <xs:attribute name="subtype" type="specialEventType" use="required">
    <xs:annotation>
      <xs:documentation>The ascribed subtype of a Planned Event.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
```

Diagram

Complex T

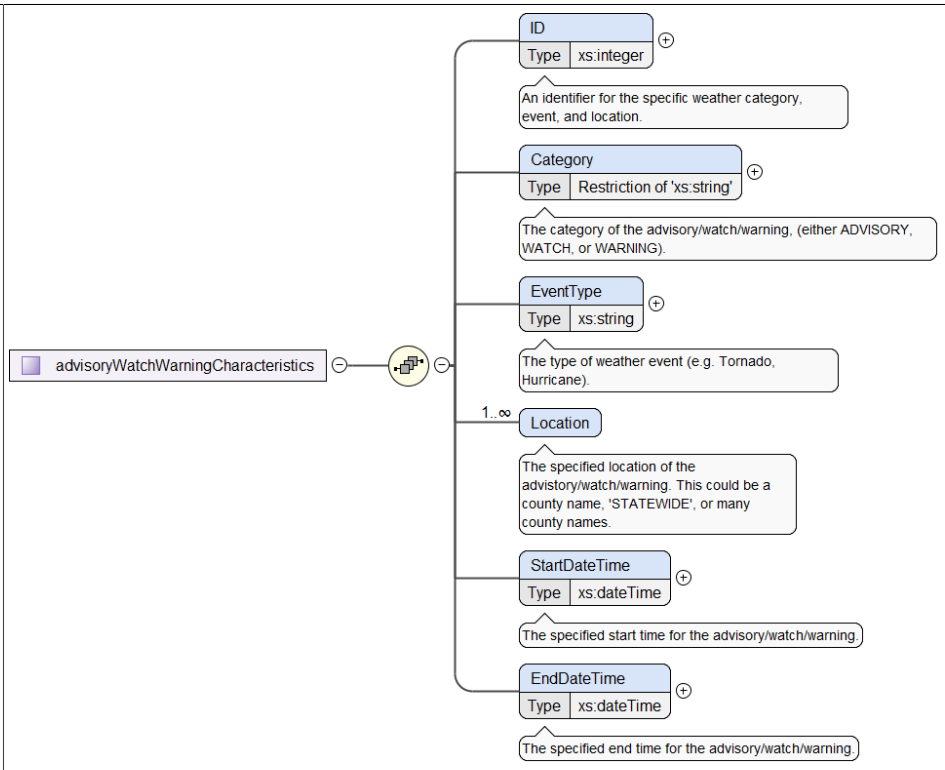


<table>
<tr><td>Type</td><td>extension of event</td></tr>
<tr><td>Type hierarchy</td><td>• event
• plannedEvent</td></tr>
<tr><td>Used by</td><td>Element EventsFeed/Events/PlannedEvent</td></tr>
<tr><td>Model</td><td>Name , CreatedAt , ConfirmedAt , UpdatedAt , StartDate , Location , Status , LaneInfo{0,1} , EndDate , TypeSpecific , Occurrences</td></tr>
<tr><td>Children</td><td>ConfirmedAt, CreatedAt, EndDate, LaneInfo, Location, Name, Occurrences, StartDate, Status, TypeSpecific, UpdatedAt</td></tr>
<tr><td>Attributes</td><td>
<table>
<tr><th>QName</th><th>Type</th><th>Use</th><th></th></tr>
<tr><td>type</td><td>plannedEventType</td><td>required</td><td></td></tr>
<tr><td></td><td colspan="3">The ascribed type of a planned event.</td></tr>
</table>
</td></tr>
<tr><td>Source</td><td>

```
<xs:complexType name="plannedEvent">
  <xs:complexContent>
    <xs:extension base="event">
      <xs:sequence>
        <xs:element name="EndDate" type="xs:dateTime">
          <xs:annotation>
            <xs:documentation>The end Date/Time for a planned event.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="TypeSpecific">
          <xs:annotation>
            <xs:documentation>Details specific to the type of Planned Event.</xs:documentation>
          </xs:annotation>
          <xs:alternative test="@type = 'CONSTRUCTION/MAINTENANCE'"
 type="constructionMaintenanceSpecifics"/>
          <xs:alternative test="@type = 'SPECIAL_EVENT'" type="specialEventSpecifics"/>
        </xs:element>
        <xs:element name="Occurrences">
          <xs:annotation>
            <xs:documentation>A list of all occurrences for a single event. Up to 20 per event
 (arbitrary cap).</xs:documentation>
          </xs:annotation>
          <xs:complexType>
            <xs:sequence maxOccurs="20">
              <xs:element name="Occurrence" type="eventOccurence">
                <xs:annotation>
                  <xs:documentation>A single occurrence of a reurring event.</xs:documentation>
                </xs:annotation>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
      <xs:attribute name="type" type="plannedEventType" use="required">
        <xs:annotation>
          <xs:documentation>The ascribed type of a planned event.</xs:documentation>
        </xs:annotation>
      </xs:attribute>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

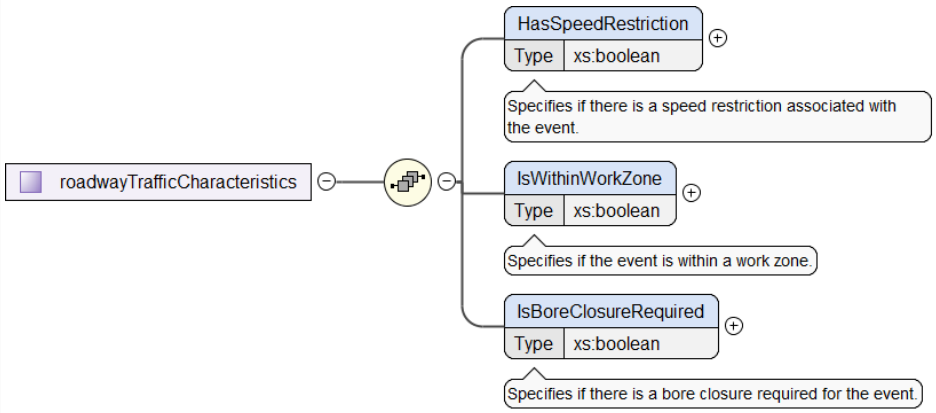
</td></tr>
</table>

Complex Type advisoryWatchWarningCharacteristics

Diagram	
Used by	Element actsOfNatureSpecifics/Characteristics
Model	ID , Category , EventType , Location+ , StartDateTime , EndDateTime
Children	Category, EndDateTime, EventType, ID, Location, StartDateTime
Source
```
<xs:complexType name="advisoryWatchWarningCharacteristics">
  <xs:sequence>
    <xs:element name="ID" type="xs:integer">
      <xs:annotation>
        <xs:documentation>An identifier for the specific weather category, event, and location.</
xs:documentation>
      </xs:annotation>
    </xs:element>
    <!-- ensure this is described in the docs -->
    <xs:element name="Category">
      <xs:annotation>
        <xs:documentation>The category of the advisory/watch/warning, (either ADVISORY, WATCH, or
 WARNING).</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="ADVISORY"/>
          <xs:enumeration value="WATCH"/>
          <xs:enumeration value="WARNING"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="EventType" type="xs:string">
      <xs:annotation>
        <xs:documentation>The type of weather event (e.g. Tornado, Hurricane).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="Location" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>The specified location of the advistory/watch/warning. This could be a
 county name, 'STATEWIDE', or many county names.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="StartDateTime" type="xs:dateTime">
      <xs:annotation>
        <xs:documentation>The specified start time for the advisory/watch/warning.</
xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="EndDateTime" type="xs:dateTime">
```
 |

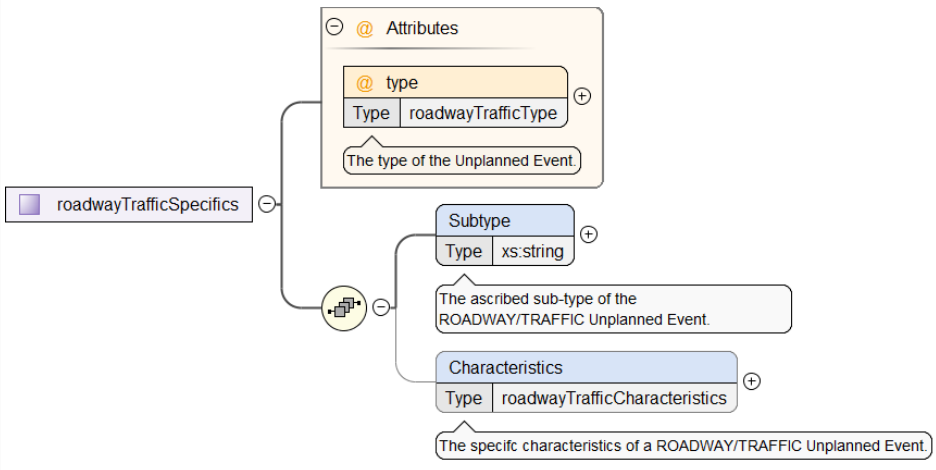
```
      <xs:annotation>
        <xs:documentation>The specified end time for the advisory/watch/warning.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

Complex Type `roadwayTrafficCharacteristics`

Diagram	
Used by	Element roadwayTrafficSpecifics/Characteristics
Model	HasSpeedRestriction , IsWithinWorkZone , IsBoreClosureRequired
Children	HasSpeedRestriction, IsBoreClosureRequired, IsWithinWorkZone

Source	`<xs:complexType name="roadwayTrafficCharacteristics">`
	`  <xs:sequence>`
	`    <xs:element name="HasSpeedRestriction" type="xs:boolean">`
	`      <xs:annotation>`
	`        <xs:documentation>Specifies if there is a speed restriction associated with the event.</xs:documentation>`
	`      </xs:annotation>`
	`    </xs:element>`
	`    <xs:element name="IsWithinWorkZone" type="xs:boolean">`
	`      <xs:annotation>`
	`        <xs:documentation>Specifies if the event is within a work zone.</xs:documentation>`
	`      </xs:annotation>`
	`    </xs:element>`
	`    <xs:element name="IsBoreClosureRequired" type="xs:boolean">`
	`      <xs:annotation>`
	`        <xs:documentation>Specifies if there is a bore closure required for the event.</xs:documentation>`
	`      </xs:annotation>`
	`    </xs:element>`
	`  </xs:sequence>`
	`</xs:complexType>`

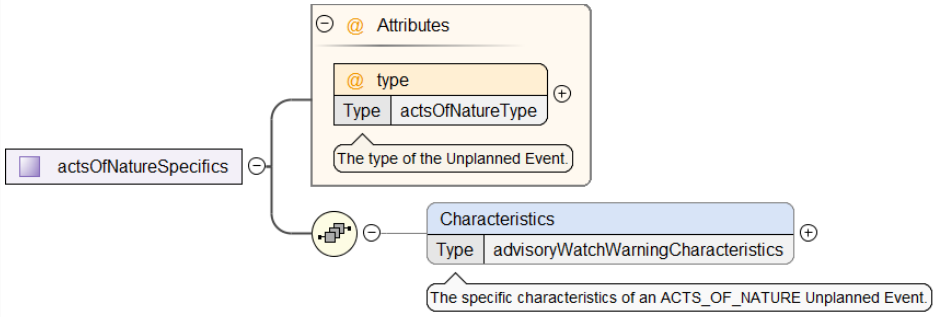
Complex Type `roadwayTrafficSpecifics`

Diagram	

Model	Subtype , Characteristics{0,1}
Children	Characteristics, Subtype
Attributes	**QName** / **Type** / **Use** **type** / roadwayTrafficType / required The type of the Unplanned Event.

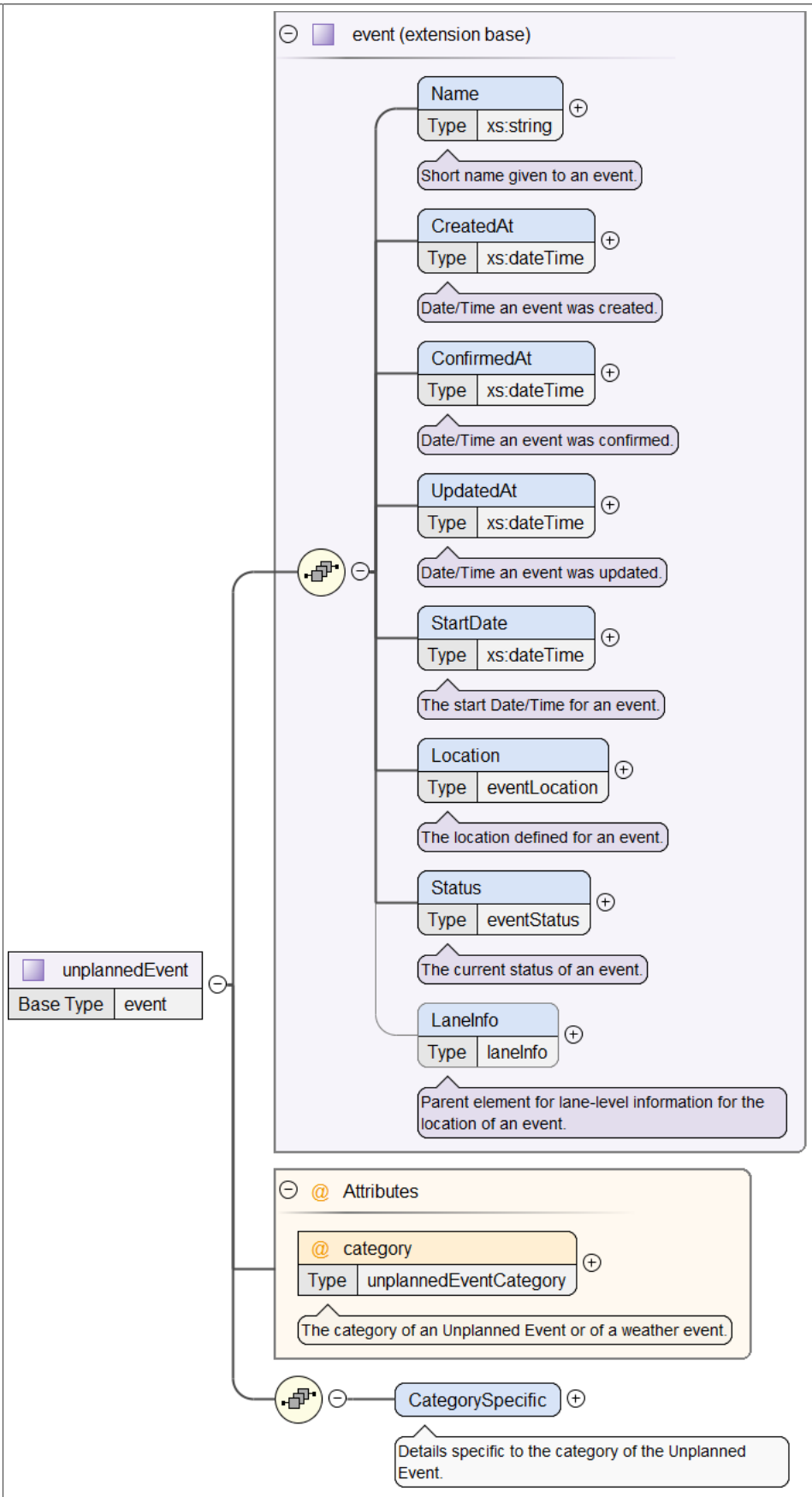
```
<xs:complexType name="roadwayTrafficSpecifics">
  <xs:sequence>
    <xs:element name="Subtype" type="xs:string">
      <xs:annotation>
        <xs:documentation>The ascribed sub-type of the ROADWAY/TRAFFIC Unplanned Event.</
xs:documentation>
      </xs:annotation>
      <xs:alternative test="@type = 'FIRE'" type="roadwayTrafficFireSubtype"/>
      <xs:alternative test="@type = 'ROADWAY_DAMAGE'" type="roadwayTrafficRoadwayDamageSubtype"/>
      <xs:alternative test="@type = 'ROADWAY_OBSTRUCTION'"
 type="roadwayTrafficRoadwayObstructionSubtype"/>
    </xs:element>
    <xs:element name="Characteristics" type="roadwayTrafficCharacteristics" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The specifc characteristics of a ROADWAY/TRAFFIC Unplanned Event.</
xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
  <xs:attribute name="type" type="roadwayTrafficType" use="required">
    <xs:annotation>
      <xs:documentation>The type of the Unplanned Event.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
```

Complex Type `actsOfNatureSpecifics`

Diagram	
Model	Characteristics{0,1}
Children	Characteristics
Attributes	**QName** / **Type** / **Use** **type** / actsOfNatureType / required The type of the Unplanned Event.

```
<xs:complexType name="actsOfNatureSpecifics">
  <xs:sequence>
    <xs:element name="Characteristics" type="advisoryWatchWarningCharacteristics" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The specific characteristics of an ACTS_OF_NATURE Unplanned Event.</
xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
  <xs:attribute name="type" type="actsOfNatureType" use="required">
    <xs:annotation>
      <xs:documentation>The type of the Unplanned Event.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
```

Complex Type unplannedEvent

Diagram	
Type	extension of event

Type hierarchy	• event • unplannedEvent
Used by	Element EventsFeed/Events/UnplannedEvent
Model	Name , CreatedAt , ConfirmedAt , UpdatedAt , StartDate , Location , Status , LaneInfo{0,1} , CategorySpecific
Children	CategorySpecific, ConfirmedAt, CreatedAt, LaneInfo, Location, Name, StartDate, Status, UpdatedAt
Attributes	**QName** **Type** **Use** **category** unplannedEventCategory required The category of an Unplanned Event or of a weather event.
Source	<xs:complexType name="unplannedEvent"> <xs:complexContent> <xs:extension base="event"> <xs:sequence> <xs:element name="CategorySpecific"> <xs:annotation> <xs:documentation>Details specific to the category of the Unplanned Event.</xs:documentation> </xs:annotation> <xs:alternative test="@category = 'ROADWAY/TRAFFIC'" type="roadwayTrafficSpecifics"/> <xs:alternative test="@category = 'ACTS_OF_NATURE'" type="actsOfNatureSpecifics"/> </xs:element> </xs:sequence> <xs:attribute name="category" type="unplannedEventCategory" use="required"> <xs:annotation> <xs:documentation>The category of an Unplanned Event or of a weather event.</xs:documentation> </xs:annotation> </xs:attribute> </xs:extension> </xs:complexContent> </xs:complexType>

Attribute(s)

Attribute `eventLocation / Area / @type`

Annotations	The type of area region impacted by an event.	
Type	areaEventType	
Properties	use:	required
Facets	enumeration	TOWN
	enumeration	COUNTY
	enumeration	SUBDISTRICT
	enumeration	DISTRICT
	enumeration	STATEWIDE
Used by	Element	eventLocation/Area
Source	<xs:attribute name="type" type="areaEventType" use="required"> <xs:annotation> <xs:documentation>The type of area region impacted by an event.</xs:documentation> </xs:annotation> </xs:attribute>	

Attribute `constructionMaintenanceSpecifics / @subtype`

Annotations	The ascribed subtype of a Planned Event.	
Type	constructionMaintenanceType	
Properties	use:	required
Facets	enumeration	ROADWAY_ACTIVITY
	enumeration	BRIDGE_ACTIVITY
	enumeration	TUNNEL_ACTIVITY
	enumeration	FACILITY_ACTIVITY
	enumeration	UTILITY_ACTIVITY

Used by	Complex Type	constructionMaintenanceSpecifics
Source	<xs:attribute name="subtype" type="constructionMaintenanceType" use="required"> <xs:annotation> <xs:documentation>The ascribed subtype of a Planned Event.</xs:documentation> </xs:annotation> </xs:attribute>	

Attribute `specialEventSpecifics / @subtype`

Annotations	The ascribed subtype of a Planned Event.	
Type	specialEventType	
Properties	use:	required
Facets	enumeration	STADIUM/ARENA_EVENT
	enumeration	OUTDOOR_EVENT
	enumeration	VIP_VISIT
	enumeration	ATHLETIC_EVENT
	enumeration	FUNERAL_PROCESSION
	enumeration	TRAINING/DRILL
	enumeration	OTHER
Used by	Complex Type	specialEventSpecifics
Source	<xs:attribute name="subtype" type="specialEventType" use="required"> <xs:annotation> <xs:documentation>The ascribed subtype of a Planned Event.</xs:documentation> </xs:annotation> </xs:attribute>	

Attribute `plannedEvent / @type`

Annotations	The ascribed type of a planned event.	
Type	plannedEventType	
Properties	use:	required
Facets	enumeration	CONSTRUCTION/MAINTENANCE
	enumeration	SPECIAL_EVENT
Used by	Complex Type	plannedEvent
Source	<xs:attribute name="type" type="plannedEventType" use="required"> <xs:annotation> <xs:documentation>The ascribed type of a planned event.</xs:documentation> </xs:annotation> </xs:attribute>	

Attribute `roadwayTrafficSpecifics / @type`

Annotations	The type of the Unplanned Event.	
Type	roadwayTrafficType	
Properties	use:	required
Facets	enumeration	CRASH
	enumeration	DISABLED_MOTOR_VEHICLE
	enumeration	FIRE
	enumeration	ROADWAY_DAMAGE
	enumeration	ROADWAY_OBSTRUCTION
	enumeration	CONGESTION
	enumeration	GENERAL_ROADWAY/TRAFFIC
Used by	Complex Type	roadwayTrafficSpecifics
Source	<xs:attribute name="type" type="roadwayTrafficType" use="required"> <xs:annotation>	

```
    <xs:documentation>The type of the Unplanned Event.</xs:documentation>
  </xs:annotation>
</xs:attribute>
```

Attribute actsOfNatureSpecifics / @type

Annotations	The type of the Unplanned Event.
Type	actsOfNatureType
Properties	use: required
Facets	enumeration LOCAL_WEATHER_EVENT enumeration ADVISORY/WATCH/WARNING
Used by	Complex Type actsOfNatureSpecifics
Source	<xs:attribute name="type" type="actsOfNatureType" use="required"> <xs:annotation> <xs:documentation>The type of the Unplanned Event.</xs:documentation> </xs:annotation> </xs:attribute>

Attribute unplannedEvent / @category

Annotations	The category of an Unplanned Event or of a weather event.
Type	unplannedEventCategory
Properties	use: required
Facets	enumeration ROADWAY/TRAFFIC enumeration ACTS_OF_NATURE
Used by	Complex Type unplannedEvent
Source	<xs:attribute name="category" type="unplannedEventCategory" use="required"> <xs:annotation> <xs:documentation>The category of an Unplanned Event or of a weather event.</xs:documentation> </xs:annotation> </xs:attribute>