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

february 21, 2019

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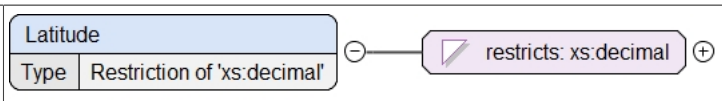
Schema(s)

Main schema massdot-itms-events-feed.xsd

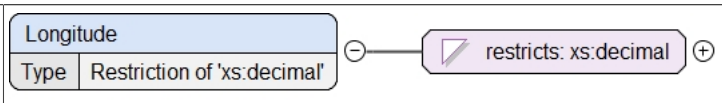
Properties	attribute form default:	unqualified
	element form default:	unqualified

Element(s)

Element latlon / Latitude

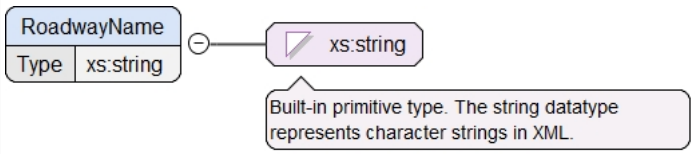
Diagram	
Type	restriction of xs:decimal
Properties	content: simple
Facets	maxInclusive 90 minInclusive -90
Source	<xs:element name="Latitude"> <xs:simpleType> <xs:restriction base="xs:decimal"> <xs:minInclusive value="-90"/> <xs:maxInclusive value="90"/> </xs:restriction> </xs:simpleType> </xs:element>

Element latlon / Longitude

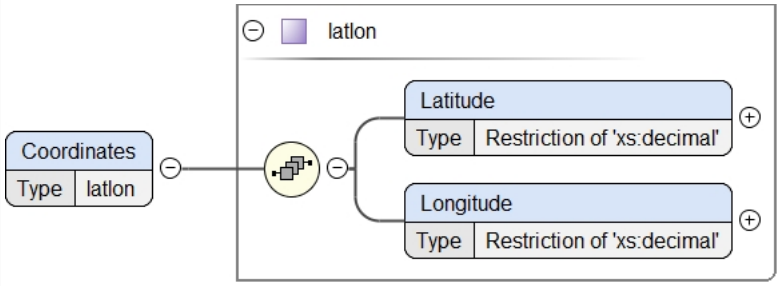
Diagram	
Type	restriction of xs:decimal
Properties	content: simple

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>	

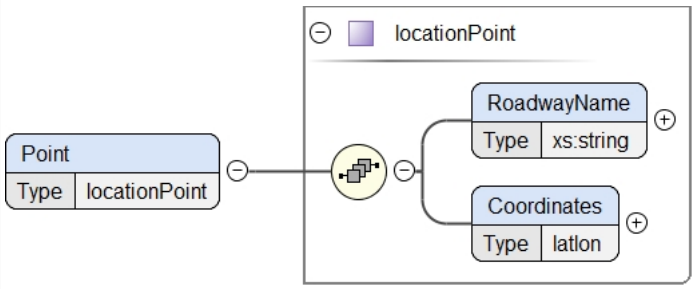
Element locationPoint / RoadwayName

Diagram	
Type	xs:string
Properties	content: simple
Source	<xs:element name="RoadwayName" type="xs:string"/>

Element locationPoint / Coordinates

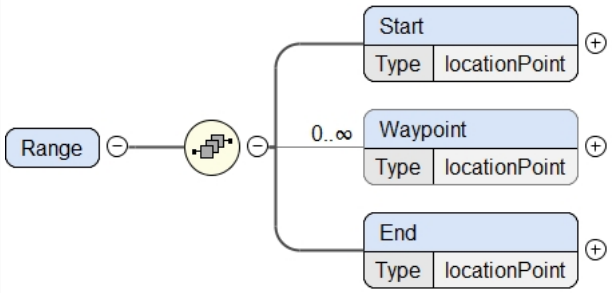
Diagram	
Type	latlon
Properties	content: complex
Model	Latitude , Longitude
Children	Latitude, Longitude
Instance	<Coordinates> <Latitude>{1,1}</Latitude> <Longitude>{1,1}</Longitude> </Coordinates>
Source	<xs:element name="Coordinates" type="latlon"/>

Element eventLocation / Point

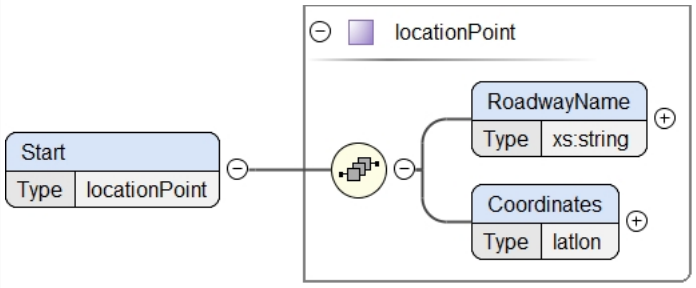
Diagram	
Type	locationPoint
Properties	content: complex

Model	RoadwayName , Coordinates
Children	Coordinates, RoadwayName
Instance	<Point> <RoadwayName>{1,1}</RoadwayName> <Coordinates>{1,1}</Coordinates> </Point>
Source	<xs:element name="Point" type="locationPoint"/>

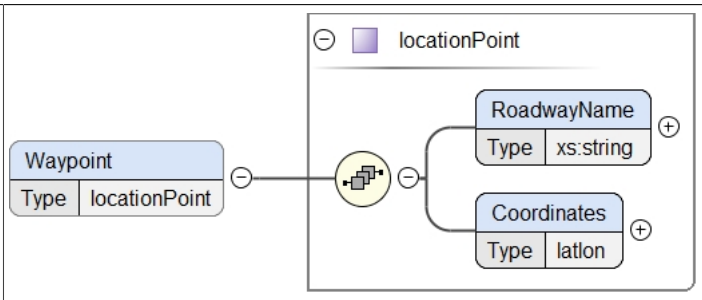
Element eventLocation / Range

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:complexType> <xs:sequence> <xs:element name="Start" type="locationPoint"/> <xs:element name="Waypoint" type="locationPoint" minOccurs="0" maxOccurs="unbounded"/> <xs:element name="End" type="locationPoint"/> </xs:sequence> </xs:complexType> </xs:element>

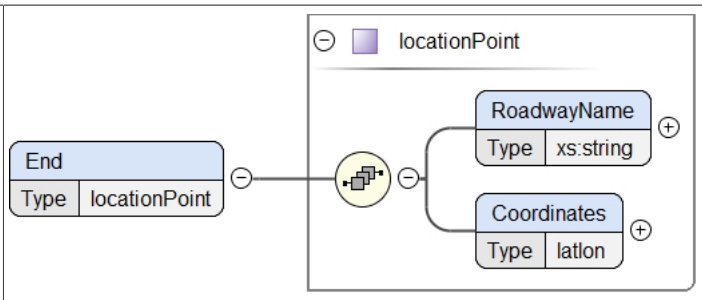
Element eventLocation / Range / Start

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"/>

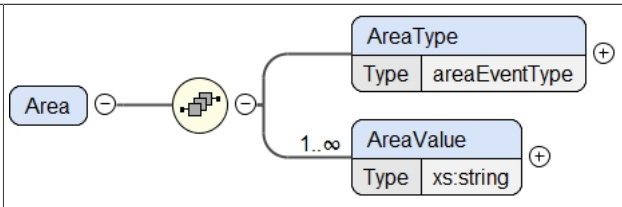
Element eventLocation / Range / Waypoint

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"/>

Element eventLocation / Range / End

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"/>

Element eventLocation / Area

Diagram	
Properties	content: complex
Model	AreaType , AreaValue+
Children	AreaType, AreaValue
Instance	<Area>

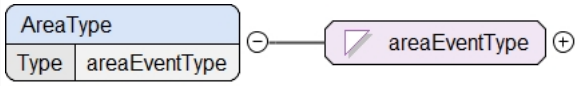
```
  <AreaType>{1,1}</AreaType>
  <AreaValue>{1,unbounded}</AreaValue>
</Area>
```

Source

```
<xs:element name="Area">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="AreaType" type="areaEventType"/>
      <xs:element name="AreaValue" type="xs:string" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Element eventLocation / Area / AreaType

Diagram



Type: areaEventType

Properties

content:	simple

Facets

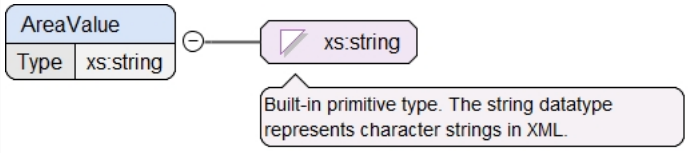
enumeration	TOWN
enumeration	COUNTY
enumeration	SUBDISTRICT
enumeration	DISTRICT
enumeration	STATEWIDE

Source

```
<xs:element name="AreaType" type="areaEventType"/>
```

Element eventLocation / Area / AreaValue

Diagram



Type: xs:string

Properties

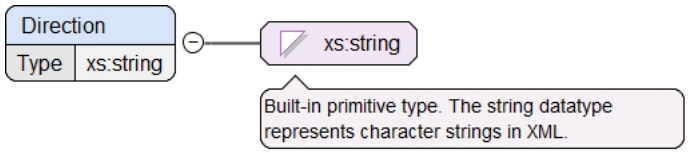
content:	simple
maxOccurs:	unbounded

Source

```
<xs:element name="AreaValue" type="xs:string" maxOccurs="unbounded"/>
```

Element laneInfo / Direction

Diagram



Type: xs:string

Properties

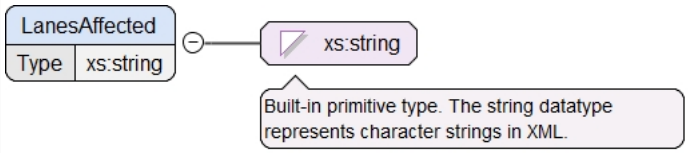
content:	simple

Source

```
<xs:element name="Direction" type="xs:string"/>
```

Element laneInfo / LanesAffected

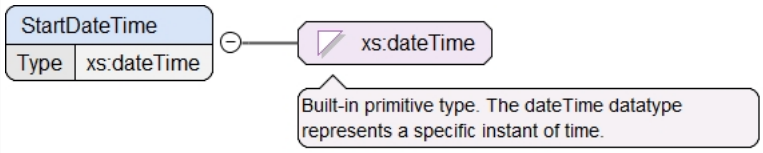
Diagram



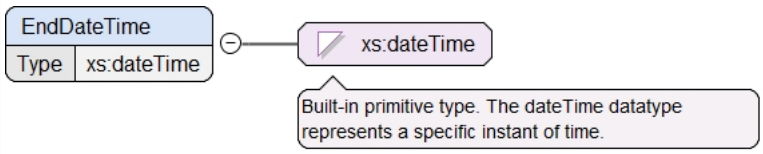
Type: xs:string

Properties	content: simple
Source	`<xs:element name="LanesAffected" type="xs:string"/>`

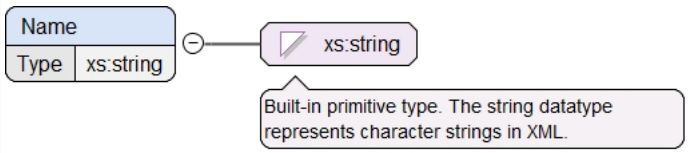
Element eventOccurence / StartDateTime

Diagram	
Type	xs:dateTime
Properties	content: simple
Source	`<xs:element name="StartDateTime" type="xs:dateTime"/>`

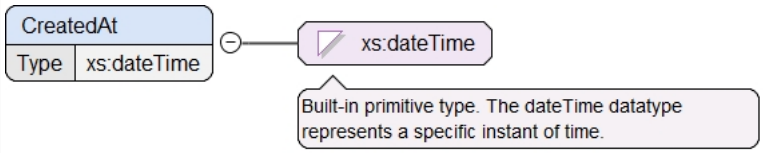
Element eventOccurence / EndDateTime

Diagram	
Type	xs:dateTime
Properties	content: simple
Source	`<xs:element name="EndDateTime" type="xs:dateTime"/>`

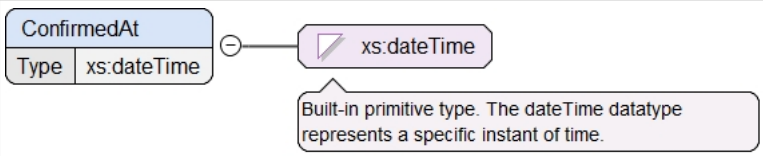
Element event / Name

Diagram	
Type	xs:string
Properties	content: simple
Source	`<xs:element name="Name" type="xs:string"/>`

Element event / CreatedAt

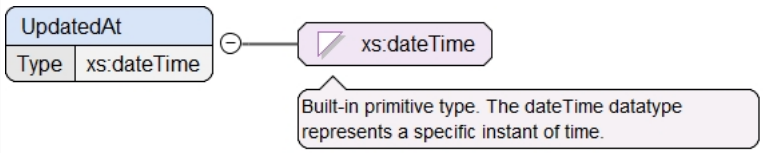
Diagram	
Type	xs:dateTime
Properties	content: simple
Source	`<xs:element name="CreatedAt" type="xs:dateTime"/>`

Element event / ConfirmedAt

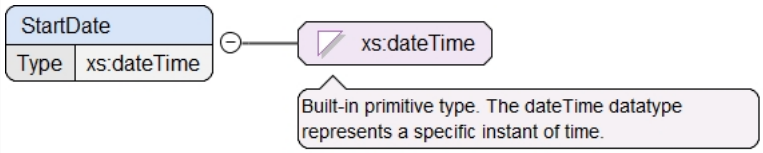
Diagram	

Type	xs:dateTime
Properties	content: simple
Source	`<xs:element name="ConfirmedAt" type="xs:dateTime"/>`

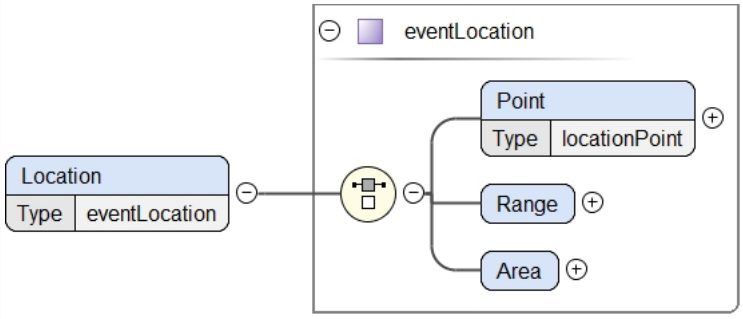
Element event / UpdatedAt

Diagram	
Type	xs:dateTime
Properties	content: simple
Source	`<xs:element name="UpdatedAt" type="xs:dateTime"/>`

Element event / StartDate

Diagram	
Type	xs:dateTime
Properties	content: simple
Source	`<xs:element name="StartDate" type="xs:dateTime"/>`

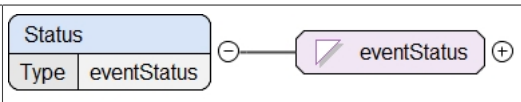
Element event / Location

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>{1,1}</Area>`
	`</Location>`

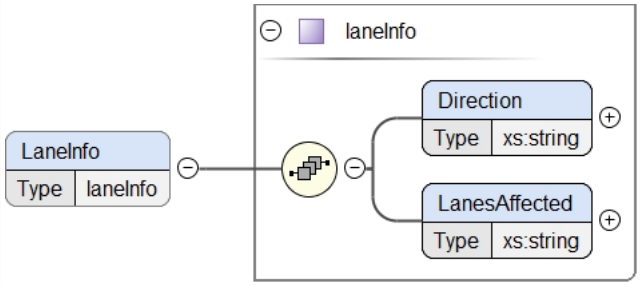
Source	`<xs:element name="Location" type="eventLocation"/>`

Element event / Status

Diagram	

Type	eventStatus
Properties	content: simple
Facets	enumeration: ACTIVE enumeration: FUTURE enumeration: TERMINATED
Source	`<xs:element name="Status" type="eventStatus"/>`

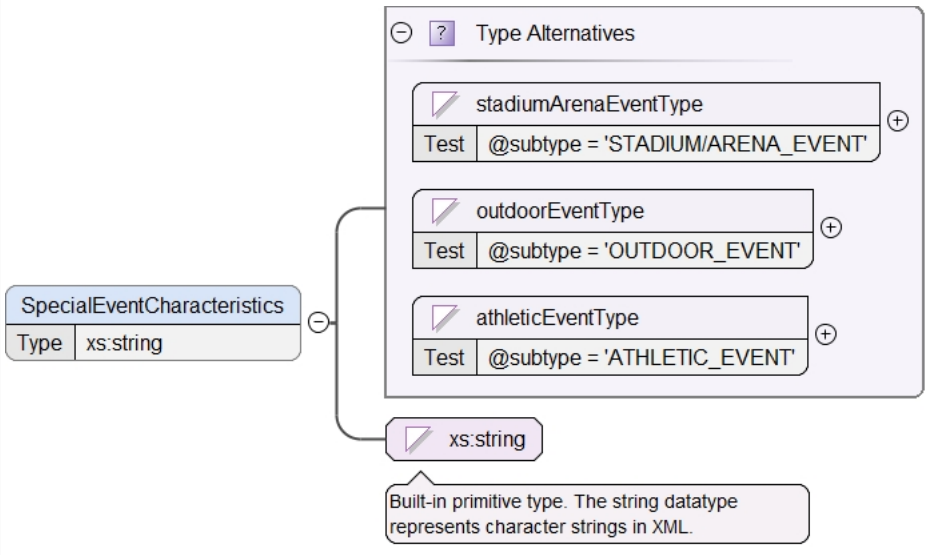
Element event / LaneInfo

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"/>`

Element specialEventSpecifics / SpecialEventCharacteristics

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

Type Alternatives	Type	Test	XPath default namespace
	stadiumArenaEventType	@subtype = 'STADIUM/ARENA_EVENT'	

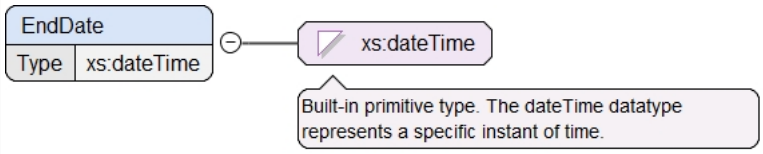
	Type	Test	XPath default namespace
	outdoorEventType	@subtype = 'OUTDOOR_EVENT'	
	athleticEventType	@subtype = 'ATHLETIC_EVENT'	
	xs:anyAtomicType *[Default Type]*		

Source

```
<xs:element name="SpecialEventCharacteristics" type="xs:string" minOccurs="0">
  <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

Diagram



Type: xs:dateTime

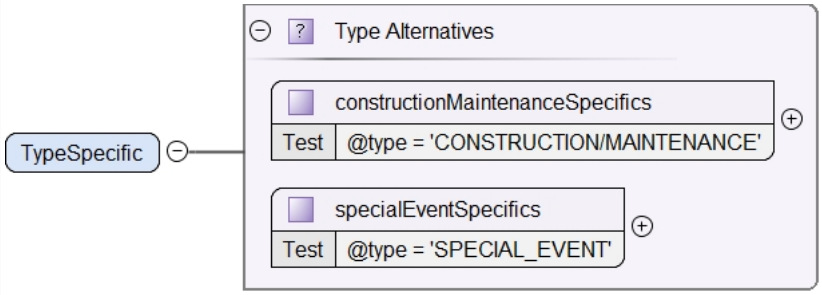
Properties: content: simple

Source

```
<xs:element name="EndDate" type="xs:dateTime"/>
```

Element plannedEvent / TypeSpecific

Diagram



Type Alternatives

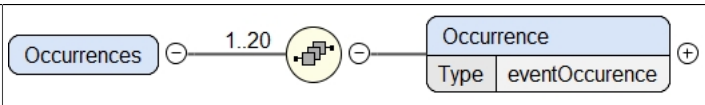
Type	Test	XPath default namespace
constructionMaintenanceSpecifics	@type = 'CONSTRUCTION/MAINTENANCE'	
specialEventSpecifics	@type = 'SPECIAL_EVENT'	

Source

```
<xs:element name="TypeSpecific">
  <xs:alternative test="@type = 'CONSTRUCTION/MAINTENANCE'" type="constructionMaintenanceSpecifics"/
>
  <xs:alternative test="@type = 'SPECIAL_EVENT'" type="specialEventSpecifics"/>
</xs:element>
```

Element plannedEvent / Occurrences

Diagram



Properties: content: complex

Model: Occurrence

Children: Occurrence

Instance

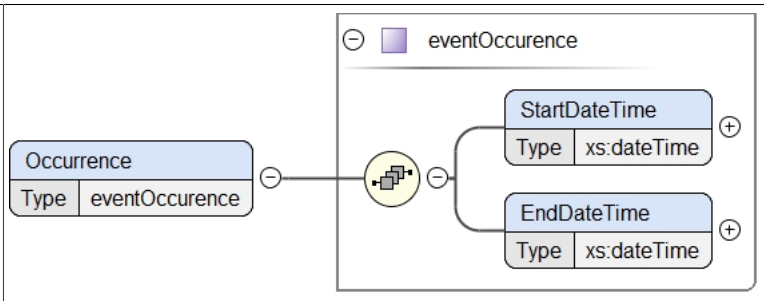
```
<Occurrences>
  <Occurrence>{1,1}</Occurrence>
</Occurrences>
```

Source

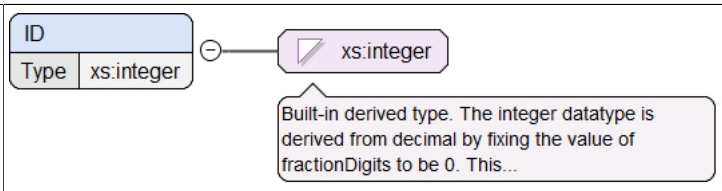
```
<xs:element name="Occurrences">
  <xs:complexType>
    <xs:sequence maxOccurs="20">
      <!-- NOTE arbitrary cap -->
```

```
      <xs:element name="Occurrence" type="eventOccurence"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

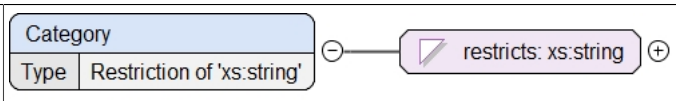
Element plannedEvent / Occurrences / Occurrence

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"/>

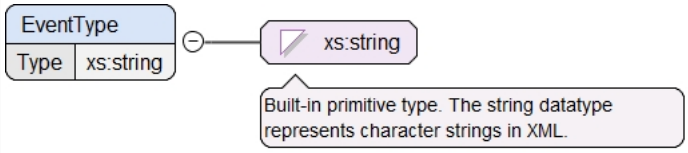
Element advisoryWatchWarningCharacteristics / ID

Diagram	
Type	xs:integer
Properties	content: simple
Source	<xs:element name="ID" type="xs:integer"/>

Element advisoryWatchWarningCharacteristics / Category

Diagram	
Type	restriction of xs:string
Properties	content: simple
Facets	enumeration ADVISORY enumeration WATCH enumeration WARNING
Source	<xs:element name="Category"> <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>

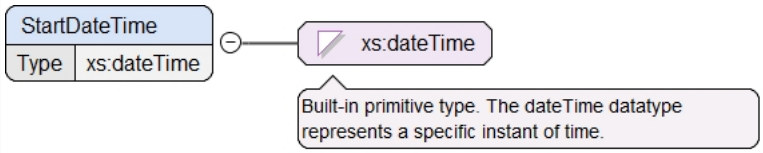
Element advisoryWatchWarningCharacteristics / EventType

Diagram	
Type	xs:string
Properties	content: simple
Source	`<xs:element name="EventType" type="xs:string"/>`

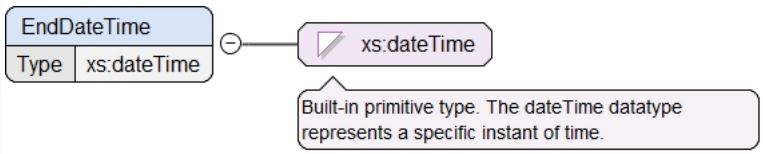
Element advisoryWatchWarningCharacteristics / Location

Diagram	
Properties	maxOccurs: unbounded
Source	`<xs:element name="Location" maxOccurs="unbounded"/>`

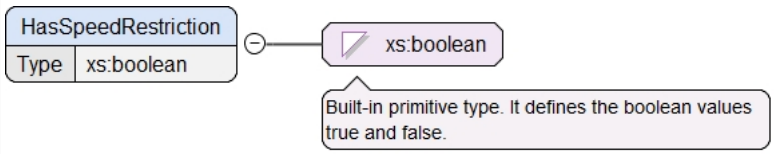
Element advisoryWatchWarningCharacteristics / StartDateTime

Diagram	
Type	xs:dateTime
Properties	content: simple
Source	`<xs:element name="StartDateTime" type="xs:dateTime"/>`

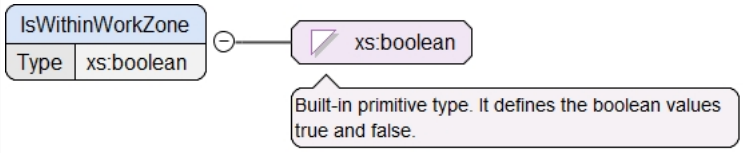
Element advisoryWatchWarningCharacteristics / EndDateTime

Diagram	
Type	xs:dateTime
Properties	content: simple
Source	`<xs:element name="EndDateTime" type="xs:dateTime"/>`

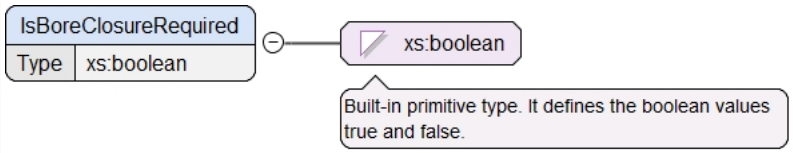
Element roadwayTrafficCharacteristics / HasSpeedRestriction

Diagram	
Type	xs:boolean
Properties	content: simple
Source	`<xs:element name="HasSpeedRestriction" type="xs:boolean"/>`

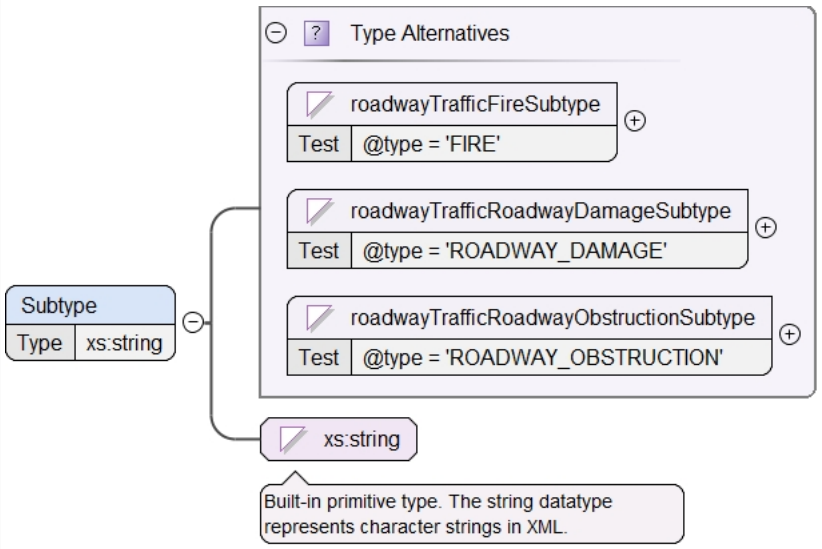
Element roadwayTrafficCharacteristics / IsWithinWorkZone

Diagram	
Type	xs:boolean
Properties	content: simple
Source	`<xs:element name="IsWithinWorkZone" type="xs:boolean"/>`

Element roadwayTrafficCharacteristics / IsBoreClosureRequired

Diagram	
Type	xs:boolean
Properties	content: simple
Source	`<xs:element name="IsBoreClosureRequired" type="xs:boolean"/>`

Element roadwayTrafficSpecifics / Subtype

Diagram	
Type	xs:string
Properties	content: simple

Type Alternatives

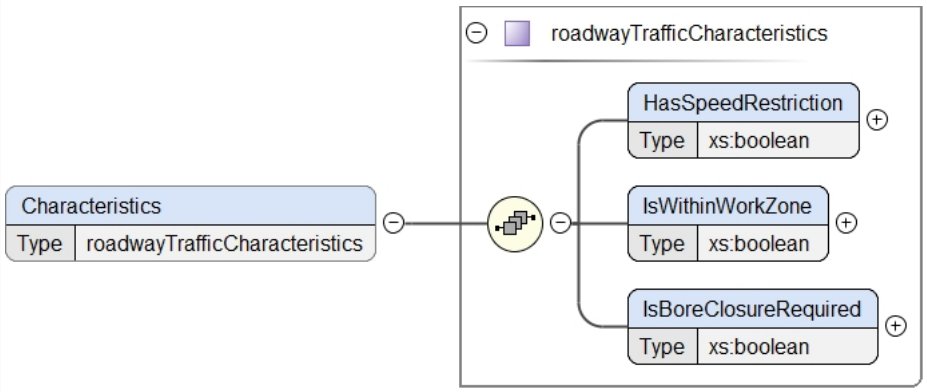
Type	Test	XPath default namespace
roadwayTrafficFireSubtype	@type = 'FIRE'	
roadwayTrafficRoadwayDamageSubtype	@type = 'ROADWAY_DAMAGE'	
roadwayTrafficRoadwayObstructionSubtype	@type = 'ROADWAY_OBSTRUCTION'	
xs:anyAtomicType *[Default Type]*		

Source

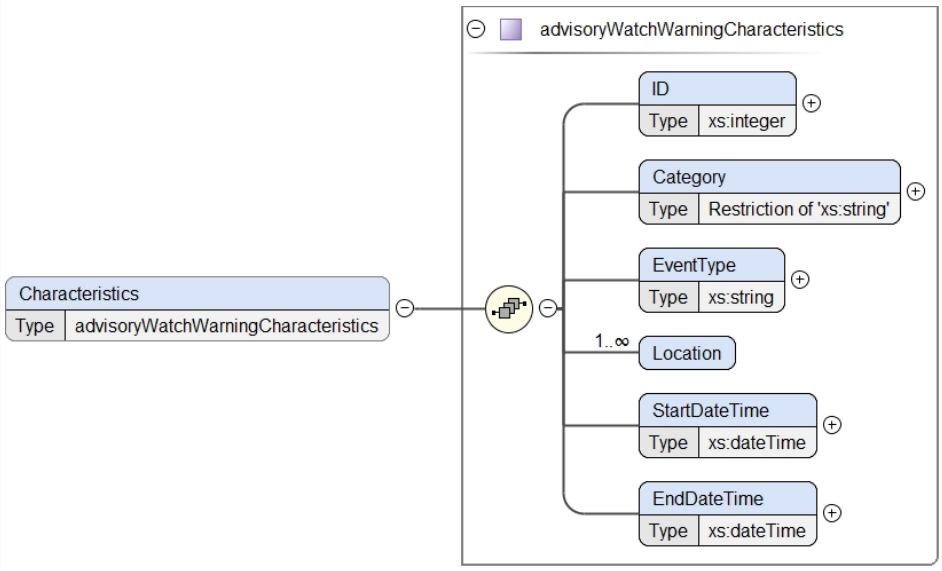
```
<xs:element name="Subtype" type="xs:string">
  <xs:alternative test="@type = 'FIRE'" type="roadwayTrafficFireSubtype"/>
  <xs:alternative test="@type = 'ROADWAY_DAMAGE'" type="roadwayTrafficRoadwayDamageSubtype"/>
  <xs:alternative test="@type = 'ROADWAY_OBSTRUCTION'"
 type="roadwayTrafficRoadwayObstructionSubtype"/>
```

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

Element roadwayTrafficSpecifics / Characteristics

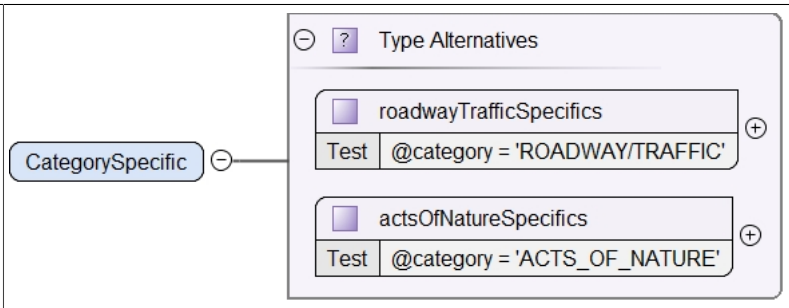
Diagram	
Type	roadwayTrafficCharacteristics
Properties	content: complex minOccurs: 0
Model	HasSpeedRestriction , IsWithinWorkZone , IsBoreClosureRequired
Children	HasSpeedRestriction, IsBoreClosureRequired, IsWithinWorkZone
Instance	<Characteristics> <HasSpeedRestriction>{1,1}</HasSpeedRestriction> <IsWithinWorkZone>{1,1}</IsWithinWorkZone> <IsBoreClosureRequired>{1,1}</IsBoreClosureRequired> </Characteristics>
Source	<xs:element name="Characteristics" type="roadwayTrafficCharacteristics" minOccurs="0"/>

Element actsOfNatureSpecifics / Characteristics

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"/>

Element unplannedEvent / CategorySpecific

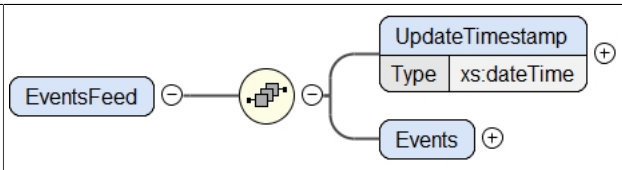
Diagram	

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

Source

```
<xs:element name="CategorySpecific">
  <xs:alternative test="@category = 'ROADWAY/TRAFFIC'" type="roadwayTrafficSpecifics"/>
  <xs:alternative test="@category = 'ACTS_OF_NATURE'" type="actsOfNatureSpecifics"/>
</xs:element>
```

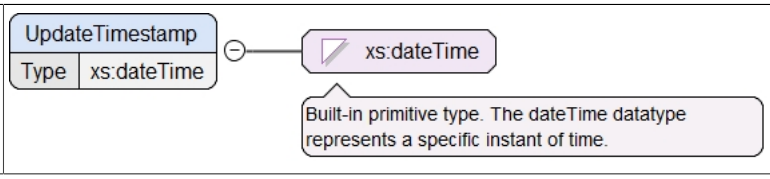
Element EventsFeed

Diagram	
Properties	content: complex
Model	UpdateTimestamp , Events
Children	Events, UpdateTimestamp
Instance	<EventsFeed> <UpdateTimestamp>{1,1}</UpdateTimestamp> <Events>{1,1}</Events> </EventsFeed>

Source

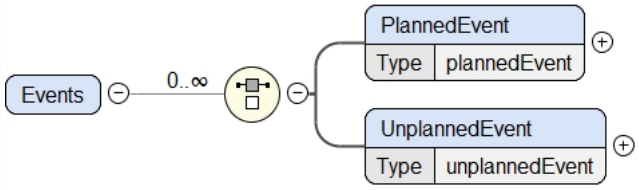
```
<xs:element name="EventsFeed">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="UpdateTimestamp" type="xs:dateTime"/>
      <xs:element name="Events">
        <xs:complexType>
          <xs:choice minOccurs="0" maxOccurs="unbounded">
            <xs:element name="PlannedEvent" type="plannedEvent"/>
            <xs:element name="UnplannedEvent" type="unplannedEvent"/>
          </xs:choice>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Element EventsFeed / UpdateTimestamp

Diagram	

Type	xs:dateTime
Properties	content: simple
Source	`<xs:element name="UpdateTimestamp" type="xs:dateTime"/>`

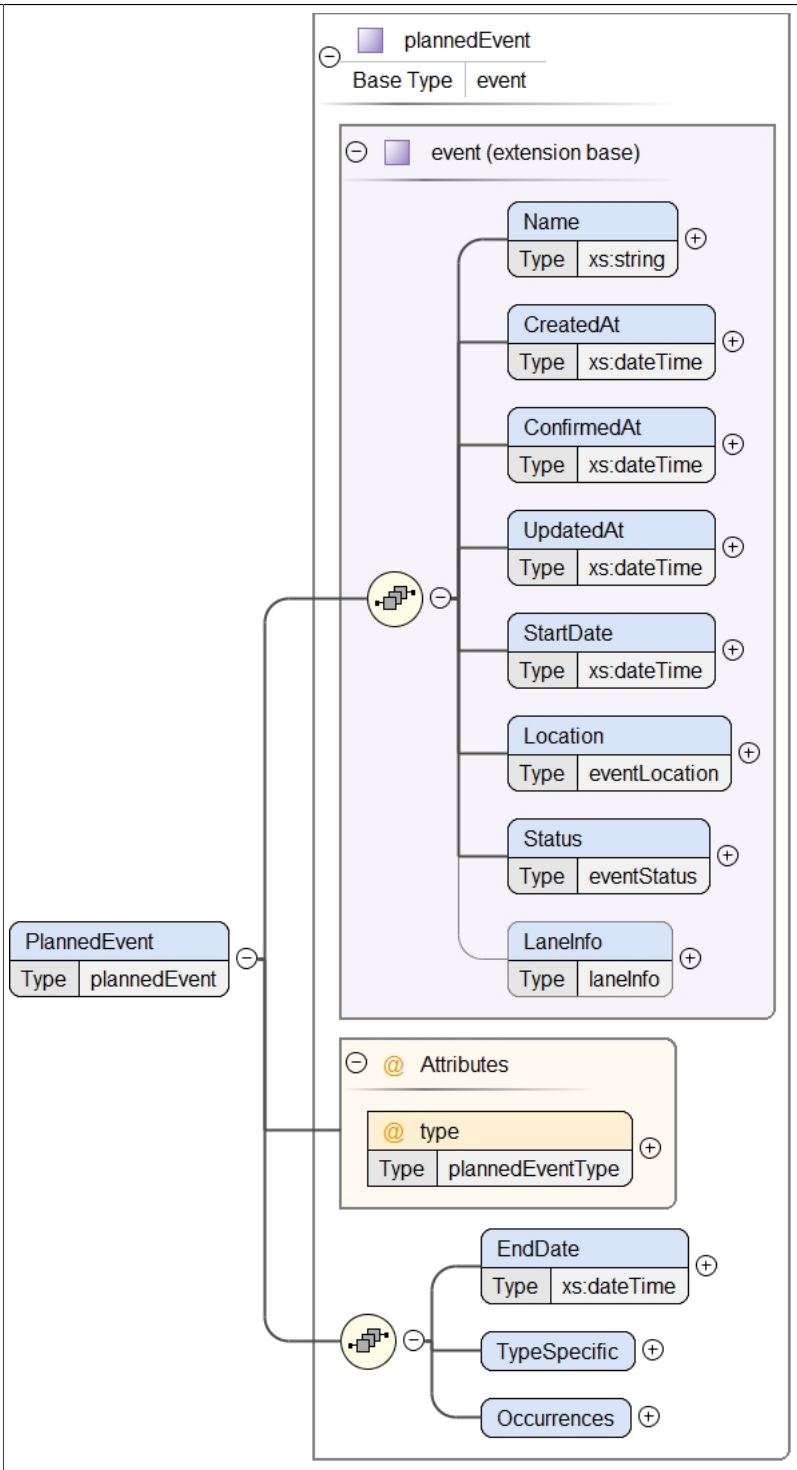
Element EventsFeed / Events

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:complexType>`
	`  <xs:choice minOccurs="0" maxOccurs="unbounded">`
	`  <xs:element name="PlannedEvent" type="plannedEvent"/>`
	`  <xs:element name="UnplannedEvent" type="unplannedEvent"/>`
	`  </xs:choice>`
	`  </xs:complexType>`
	`</xs:element>`

Element EventsFeed / Events / PlannedEvent

Diagram	
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

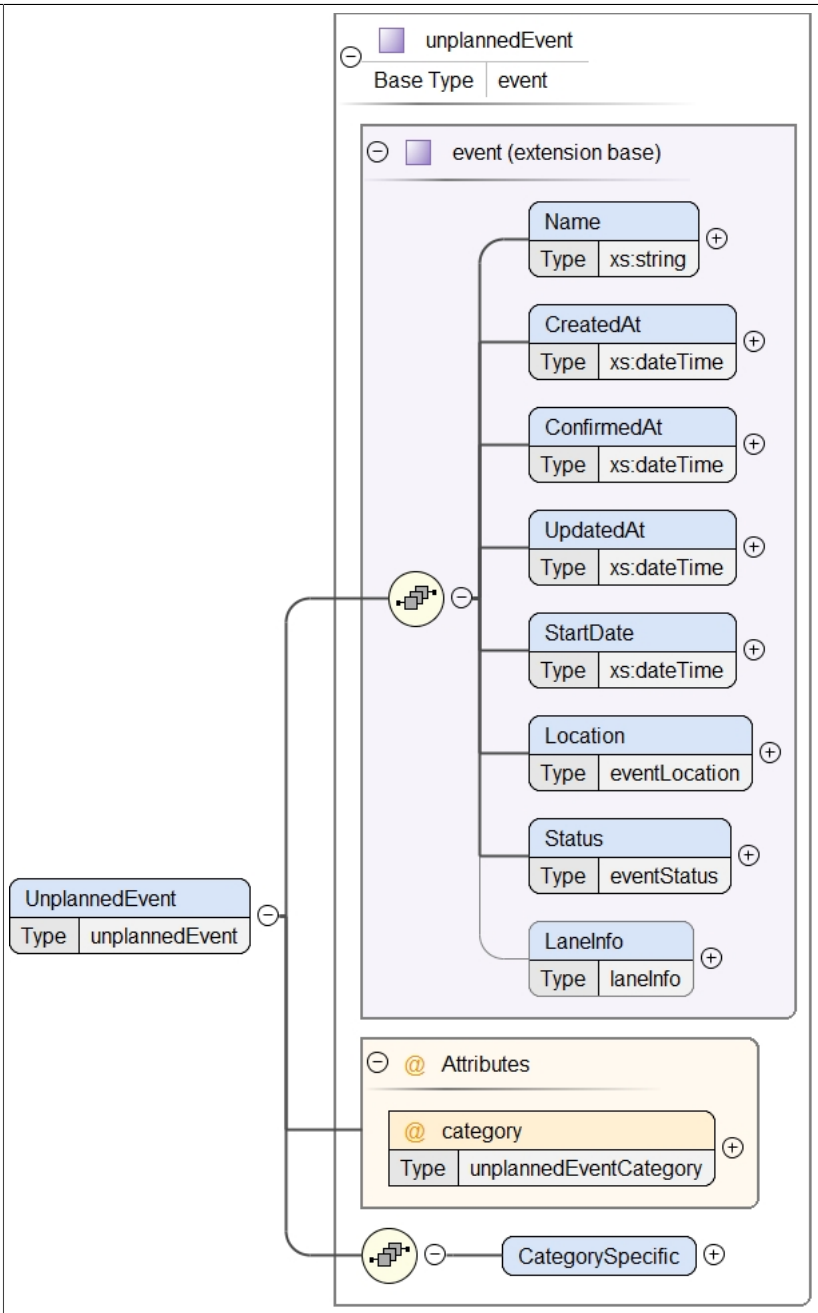
QName	Type	Use
type	plannedEventType	required

Source

```
<xs:element name="PlannedEvent" type="plannedEvent"/>
```

Element EventsFeed / Events / UnplannedEvent

Diagram



Type: unplannedEvent

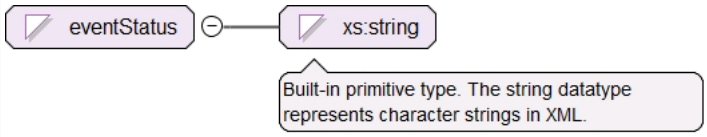
Type hierarchy:

- event

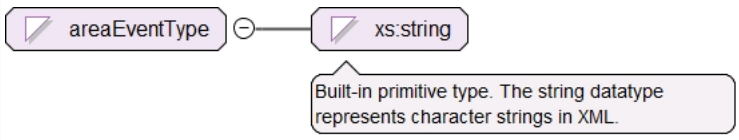
	• unplannedEvent
Properties	content: complex
Model	Name , CreatedAt , ConfirmedAt , UpdatedAt , StartDate , Location , Status , LaneInfo{0,1} , CategorySpecific
Children	CategorySpecific, ConfirmedAt, CreatedAt, LaneInfo, Location, Name, StartDate, Status, UpdatedAt
Instance	<UnplannedEvent category=""> <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
Source	<xs:element name="UnplannedEvent" type="unplannedEvent"/>

Simple Type(s)

Simple Type `eventStatus`

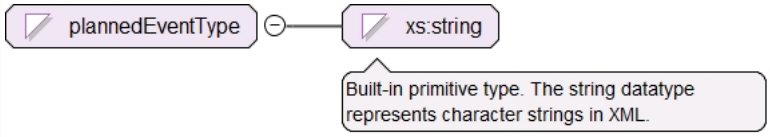
Diagram	
Type	restriction of xs:string
Facets	enumeration ACTIVE enumeration FUTURE enumeration TERMINATED
Used by	Element event/Status
Source	<xs:simpleType name="eventStatus"> <xs:restriction base="xs:string"> <xs:enumeration value="ACTIVE"/> <xs:enumeration value="FUTURE"/> <xs:enumeration value="TERMINATED"/> </xs:restriction> </xs:simpleType>

Simple Type `areaEventType`

Diagram	
Type	restriction of xs:string
Facets	enumeration TOWN enumeration COUNTY enumeration SUBDISTRICT enumeration DISTRICT enumeration STATEWIDE
Used by	Element eventLocation/Area/AreaType
Source	<xs:simpleType name="areaEventType"> <xs:restriction base="xs:string"> <xs:enumeration value="TOWN"/> <xs:enumeration value="COUNTY"/>

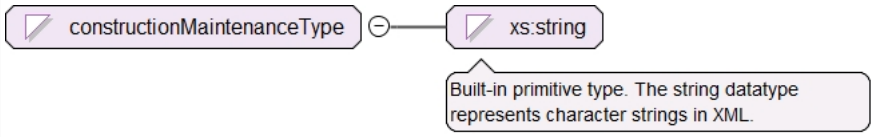
```
    <xs:enumeration value="SUBDISTRICT"/>
    <xs:enumeration value="DISTRICT"/>
    <xs:enumeration value="STATEWIDE"/>
  </xs:restriction>
</xs:simpleType>
```

Simple Type `plannedEventType`

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

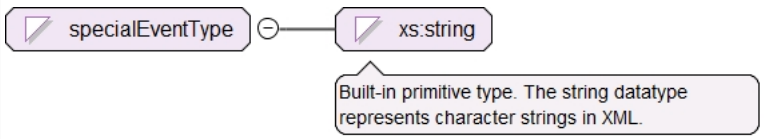
Source	`<xs:simpleType name="plannedEventType">`
	`  <xs:restriction base="xs:string">`
	`  <xs:enumeration value="CONSTRUCTION/MAINTENANCE"/>`
	`  <xs:enumeration value="SPECIAL_EVENT"/>`
	`  </xs:restriction>`
	`</xs:simpleType>`

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

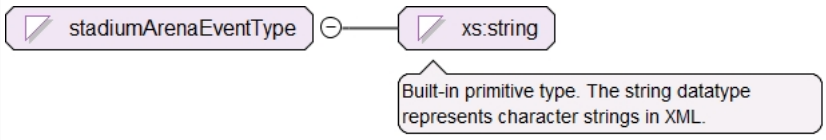
	enumeration	TRAINING/DRILL
	enumeration	OTHER
Used by	Attribute	specialEventSpecifics/@subtype

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

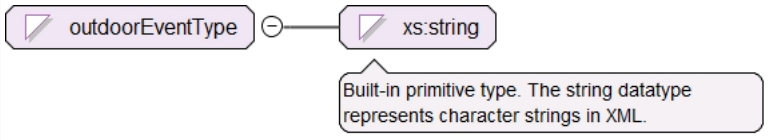
enumeration	PAVILION_EVENT
enumeration	GILLETTE_STADIUM_EVENT
enumeration	BCEC_EVENT
enumeration	OTHER

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

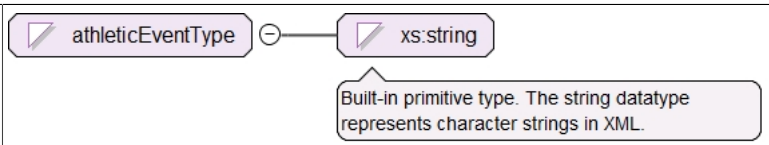
enumeration	AIRSHOW
enumeration	FIREWORKS_DISPLAY
enumeration	MOVIE_FILMING
enumeration	GENERAL_OUTDOOR_EVENT

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



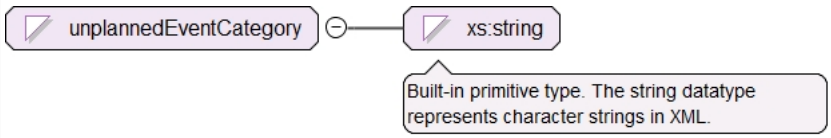
Type	restriction of xs:string	
Facets	enumeration	MARATHON
	enumeration	ROAD_RACE
	enumeration	BIKE_RACE
	enumeration	CHARITY_WALK

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



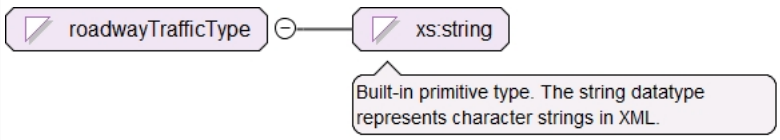
Type	restriction of xs:string	
Facets	enumeration	ROADWAY/TRAFFIC
	enumeration	ACTS_OF_NATURE
Used by	Attribute	unplannedEvent/@category

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

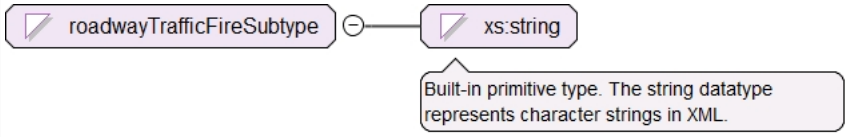
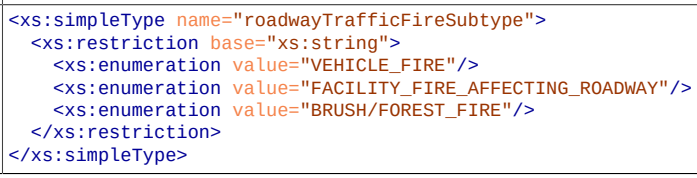


Type	restriction of xs:string	
Facets	enumeration	CRASH
	enumeration	DISABLED_MOTOR_VEHICLE
	enumeration	FIRE
	enumeration	ROADWAY_DAMAGE
	enumeration	ROADWAY_OBSTRUCTION
	enumeration	CONGESTION
	enumeration	GENERAL_ROADWAY/TRAFFIC
Used by	Attribute	roadwayTrafficSpecifics/@type

Source

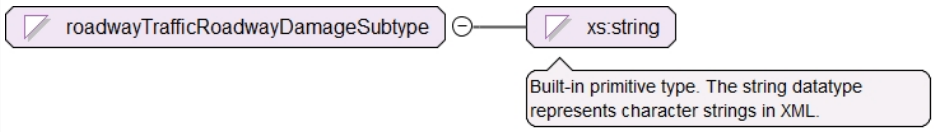
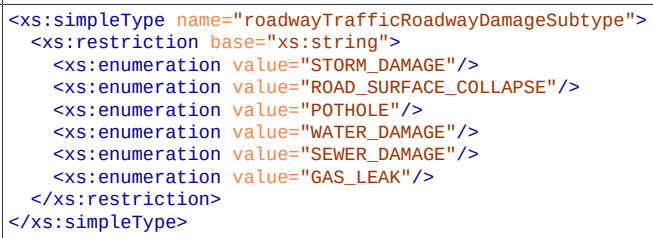
```
<xs:simpleType name="roadwayTrafficType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="CRASH"/>
    <xs:enumeration value="DISABLED_MOTOR_VEHICLE"/>
    <xs:enumeration value="FIRE"/>
    <xs:enumeration value="ROADWAY_DAMAGE"/>
    <xs:enumeration value="ROADWAY_OBSTRUCTION"/>
    <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_AFFECTING_ROADWAY enumeration BRUSH/FOREST_FIRE
Source	

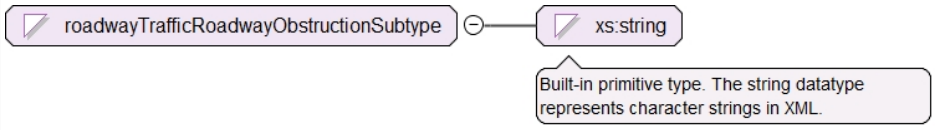
```
<xs:simpleType name="roadwayTrafficFireSubtype">
  <xs:restriction base="xs:string">
    <xs:enumeration value="VEHICLE_FIRE"/>
    <xs:enumeration value="FACILITY_FIRE_AFFECTING_ROADWAY"/>
    <xs:enumeration value="BRUSH/FOREST_FIRE"/>
  </xs:restriction>
</xs:simpleType>
```

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	

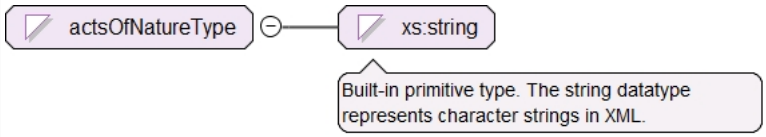
```
<xs:simpleType name="roadwayTrafficRoadwayDamageSubtype">
  <xs:restriction base="xs:string">
    <xs:enumeration value="STORM_DAMAGE"/>
    <xs:enumeration value="ROAD_SURFACE_COLLAPSE"/>
    <xs:enumeration value="POTHOLE"/>
    <xs:enumeration value="WATER_DAMAGE"/>
    <xs:enumeration value="SEWER_DAMAGE"/>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

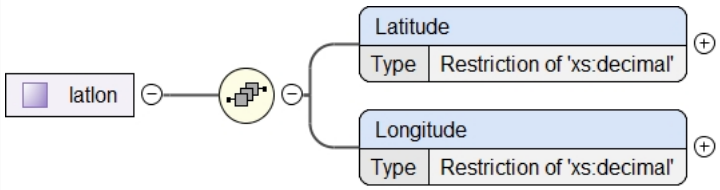
	enumeration	GENERAL_OBSTRUCTION/DE- BRIS
Source	<xs:simpleType name="roadwayTrafficRoadwayObstructionSubtype"> <xs:restriction base="xs:string"> <xs:enumeration value="FALLEN_TREES"/> <xs:enumeration value="DOWNED_SIGN"/> <xs:enumeration value="DOWNED_UTILITY_POLE"/> <xs:enumeration value="DOWNED_POWER_LINE"/>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

Simple Type `actsOfNatureType`

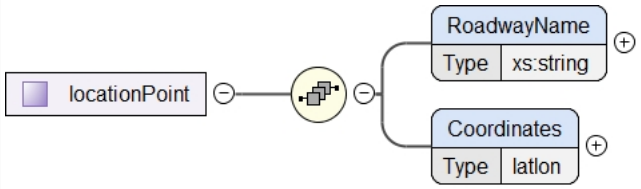
Diagram		
Type	restriction of xs:string	
Facets	enumeration	LOCAL_WEATHER_EVENT
	enumeration	ADVISORY/WATCH/WARNING
Used by	Attribute	actsOfNatureSpecifics/@type
Source	<xs:simpleType name="actsOfNatureType"> <xs:restriction base="xs:string"> <xs:enumeration value="LOCAL_WEATHER_EVENT"/> <xs:enumeration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

Complex Type(s)

Complex Type `latlon`

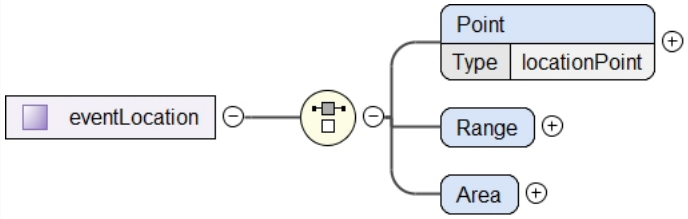
Diagram		
Used by	Element	locationPoint/Coordinates
Model	Latitude , Longitude	
Children	Latitude, Longitude	
Source	<xs:complexType name="latlon"> <xs:sequence> <xs:element name="Latitude"> <xs:simpleType> <xs:restriction base="xs:decimal"> <xs:minInclusive value="-90"/> <xs:maxInclusive value="90"/>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

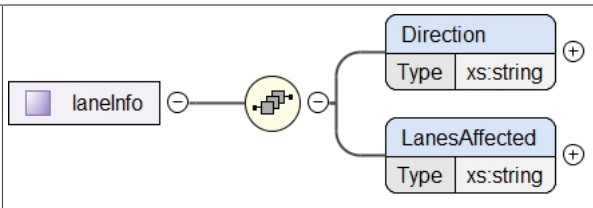
Source	`<xs:complexType name="locationPoint">`
	`  <xs:sequence>`
	`  <xs:element name="RoadwayName" type="xs:string"/>`
	`  <xs:element name="Coordinates" type="latlon"/>`
	`  </xs:sequence>`
	`</xs:complexType>`

Complex Type `eventLocation`

Diagram	
Used by	Element event/Location
Model	Point | Range | Area
Children	Area, Point, Range

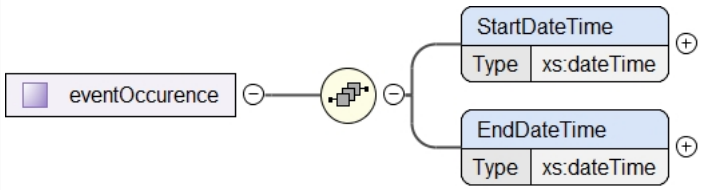
Source	`<xs:complexType name="eventLocation">`
	`  <xs:choice>`
	`  <xs:element name="Point" type="locationPoint"/>`
	`  <xs:element name="Range">`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element name="Start" type="locationPoint"/>`
	`  <xs:element name="Waypoint" type="locationPoint" minOccurs="0" maxOccurs="unbounded"/>`
	`  <xs:element name="End" type="locationPoint"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`  </xs:element>`
	`  <xs:element name="Area">`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element name="AreaType" type="areaEventType"/>`
	`  <xs:element name="AreaValue" type="xs:string" maxOccurs="unbounded"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`  </xs:element>`
	`  </xs:choice>`
	`</xs:complexType>`

Complex Type `laneInfo`

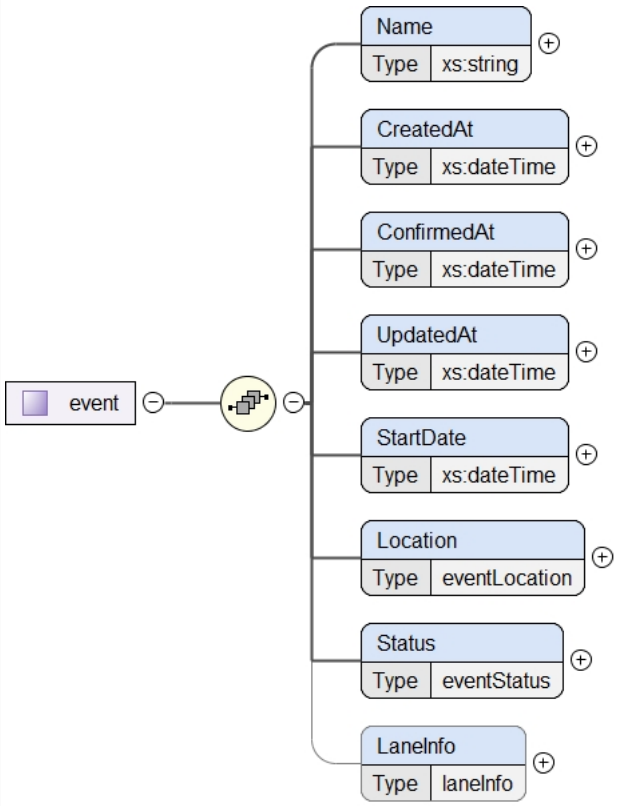
Diagram	

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:element name="LanesAffected" type="xs:string"/> </xs:sequence> </xs:complexType>

Complex Type eventOccurence

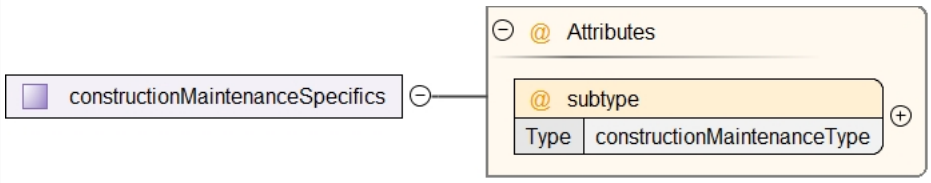
Diagram	
Used by	Element plannedEvent/Occurrences/Occurrence
Model	StartDateTime , EndDateTime
Children	EndDateTime, StartDateTime
Source	<xs:complexType name="eventOccurence"> <xs:sequence> <xs:element name="StartDateTime" type="xs:dateTime"/> <xs:element name="EndDateTime" type="xs:dateTime"/> </xs:sequence> </xs:complexType>

Complex Type event

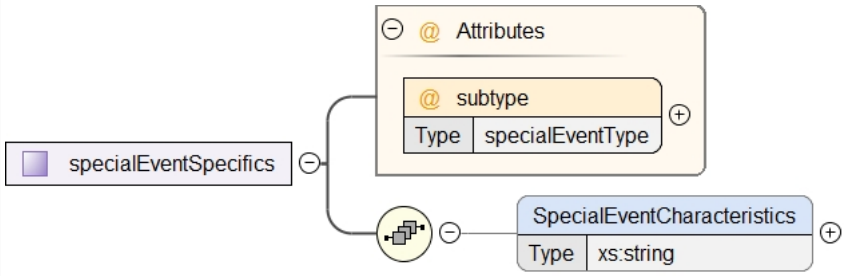
Diagram	
Used by	Complex Types plannedEvent, unplannedEvent
Model	Name , CreatedAt , ConfirmedAt , UpdatedAt , StartDate , Location , Status , LaneInfo{0,1}

Children	ConfirmedAt, CreatedAt, LaneInfo, Location, Name, StartDate, Status, UpdatedAt
Source	<xs:complexType name="event"> <xs:sequence> <xs:element name="Name" type="xs:string"/> <xs:element name="CreatedAt" type="xs:dateTime"/> <xs:element name="ConfirmedAt" type="xs:dateTime"/> <xs:element name="UpdatedAt" type="xs:dateTime"/> <xs:element name="StartDate" type="xs:dateTime"/> <xs:element name="Location" type="eventLocation"/> <xs:element name="Status" type="eventStatus"/> <xs:element name="LaneInfo" type="laneInfo" minOccurs="0"/> </xs:sequence> </xs:complexType>

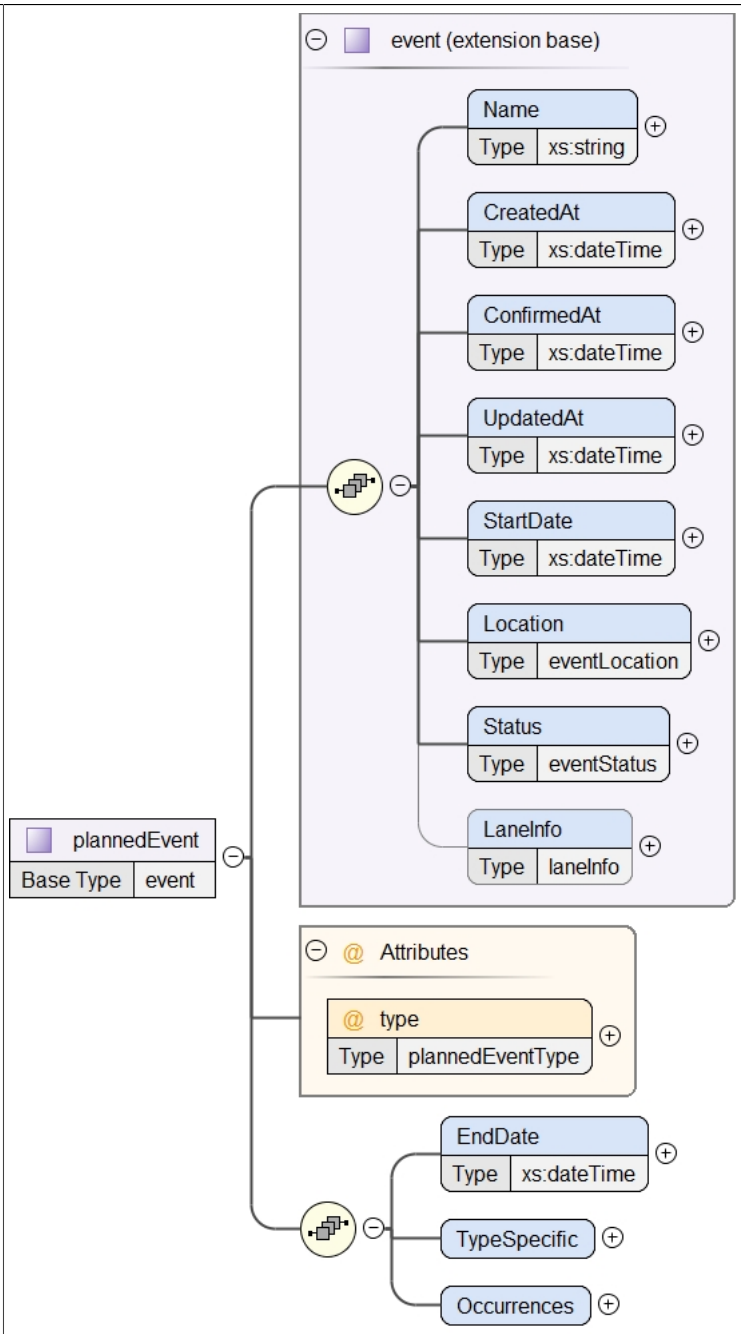
Complex Type `constructionMaintenanceSpecifics`

Diagram	
Attributes	**QName** / **Type** / **Use** **subtype** / constructionMaintenanceType / required
Source	<xs:complexType name="constructionMaintenanceSpecifics"> <xs:attribute name="subtype" type="constructionMaintenanceType" use="required"/> </xs:complexType>

Complex Type `specialEventSpecifics`

Diagram	
Model	SpecialEventCharacteristics{0,1}
Children	SpecialEventCharacteristics
Attributes	**QName** / **Type** / **Use** **subtype** / specialEventType / required
Source	<xs:complexType name="specialEventSpecifics"> <xs:sequence> <xs:element name="SpecialEventCharacteristics" type="xs:string" minOccurs="0"> <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:complexType>

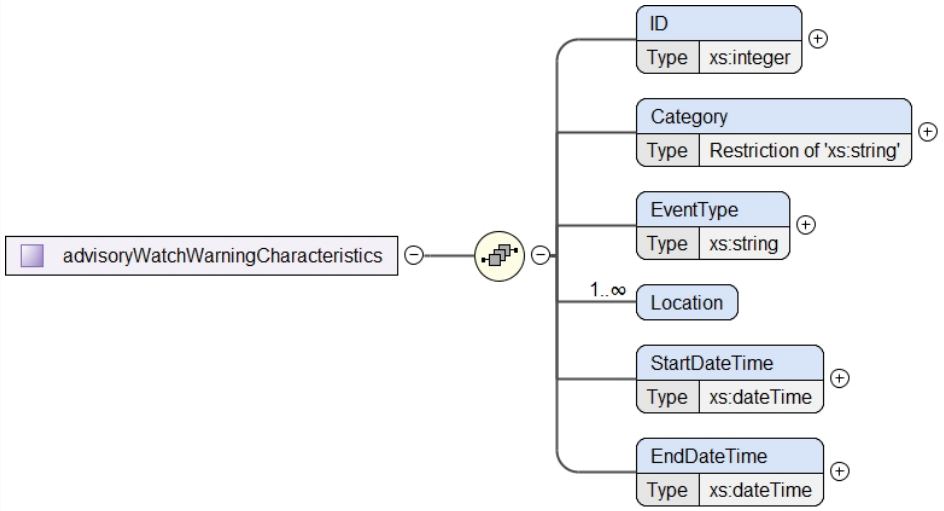
Complex Type `plannedEvent`

Diagram	
Type	extension of event
Type hierarchy	• event • plannedEvent
Used by	Element EventsFeed/Events/PlannedEvent
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
Attributes	**QName** | **Type** | **Use** **type** | plannedEventType | required

Source	`<xs:complexType name="plannedEvent">`
	`  <xs:complexContent>`
	`  <xs:extension base="event">`
	`  <xs:sequence>`

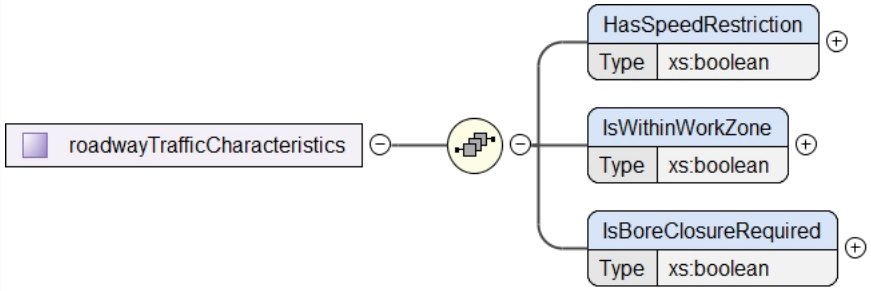
```
        <xs:element name="EndDate" type="xs:dateTime"/>
        <xs:element name="TypeSpecific">
          <xs:alternative test="@type = 'CONSTRUCTION/MAINTENANCE'"
 type="constructionMaintenanceSpecifics"/>
          <xs:alternative test="@type = 'SPECIAL_EVENT'" type="specialEventSpecifics"/>
        </xs:element>
        <xs:element name="Occurrences">
          <xs:complexType>
            <xs:sequence maxOccurs="20">
              <!-- NOTE arbitrary cap -->
              <xs:element name="Occurrence" type="eventOccurence"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
      <xs:attribute name="type" type="plannedEventType" use="required"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Complex Type `advisoryWatchWarningCharacteristics`

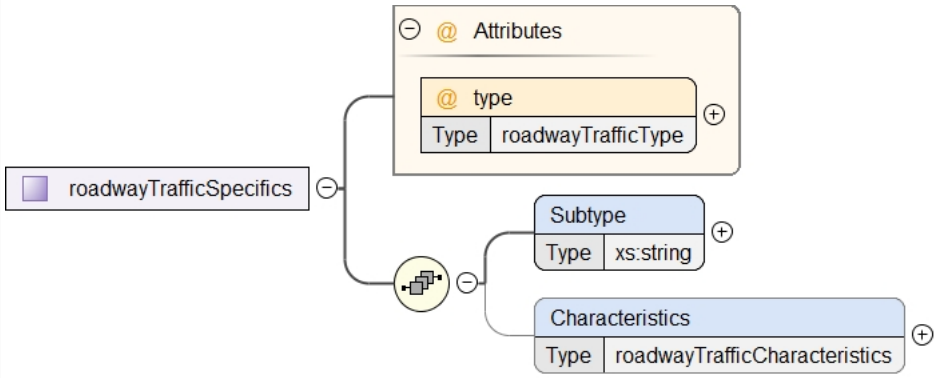
Diagram	
Used by	Element actsOfNatureSpecifics/Characteristics
Model	ID , Category , EventType , Location+ , StartDateTime , EndDateTime
Children	Category, EndDateTime, EventType, ID, Location, StartDateTime

Source	`<xs:complexType name="advisoryWatchWarningCharacteristics">`
	`  <xs:sequence>`
	`    <xs:element name="ID" type="xs:integer"/>`
	`    <!-- ensure this is described in the docs -->`
	`    <xs:element name="Category">`
	`      <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:element name="Location" maxOccurs="unbounded"/>`
	`    <!-- county name, 'STATEWIDE', or many county names -->`
	`    <xs:element name="StartDateTime" type="xs:dateTime"/>`
	`    <xs:element name="EndDateTime" type="xs:dateTime"/>`
	`  </xs:sequence>`
	`</xs:complexType>`

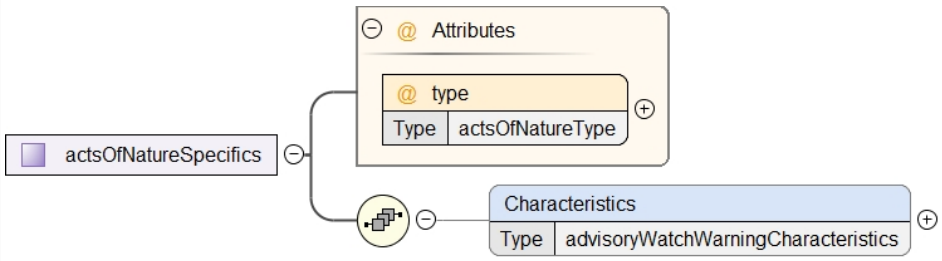
Complex Type `roadwayTrafficCharacteristics`

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:element name="IsWithinWorkZone" type="xs:boolean"/> <xs:element name="IsBoreClosureRequired" type="xs:boolean"/> </xs:sequence> </xs:complexType>

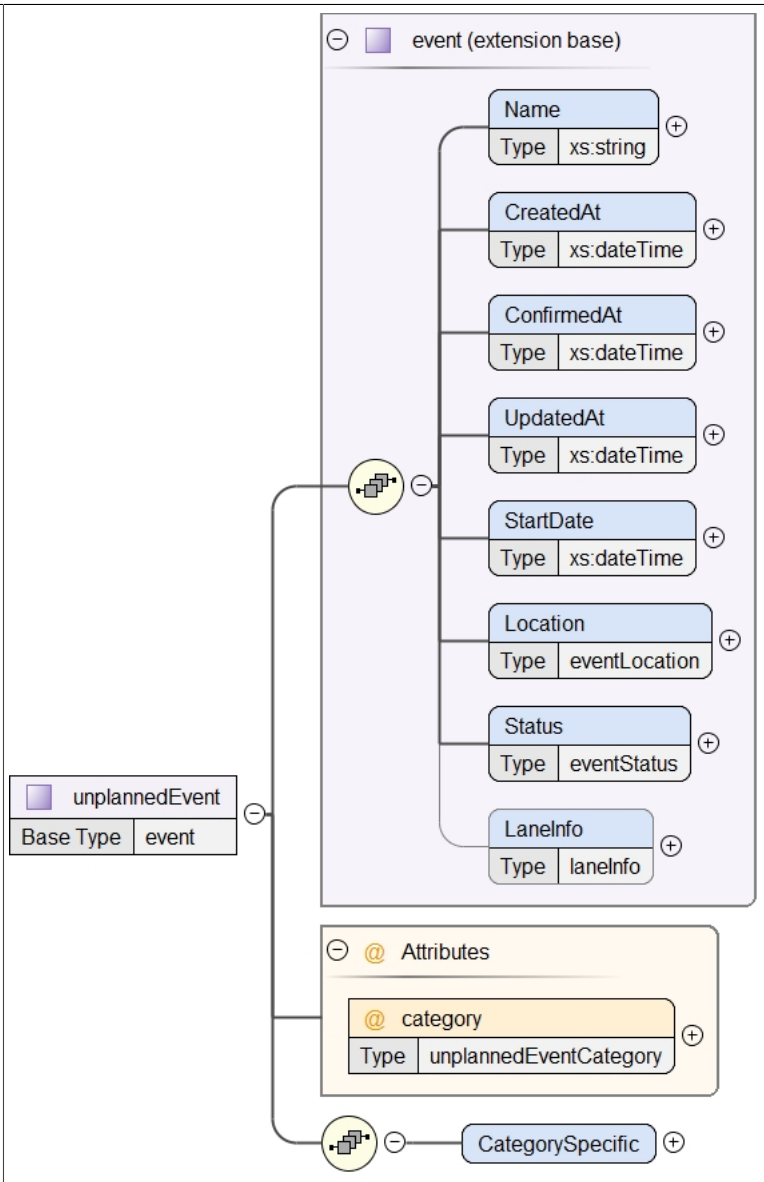
Complex Type `roadwayTrafficSpecifics`

Diagram	
Model	Subtype , Characteristics{0,1}
Children	Characteristics, Subtype
Attributes	**QName** / **Type** / **Use** **type** / roadwayTrafficType / required
Source	<xs:complexType name="roadwayTrafficSpecifics"> <xs:sequence> <xs:element name="Subtype" type="xs:string"> <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:sequence> <xs:attribute name="type" type="roadwayTrafficType" use="required"/> </xs:complexType>

Complex Type `actsOfNatureSpecifics`

<table>
<tr><td>Diagram</td><td> 
</td></tr>
<tr><td>Model</td><td>Characteristics{0,1}</td></tr>
<tr><td>Children</td><td>Characteristics</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>actsOfNatureType</td><td>required</td><td></td></tr>
</table></td></tr>
<tr><td>Source</td><td><pre>
<xs:complexType name="actsOfNatureSpecifics">
  <xs:sequence>
    <xs:element name="Characteristics" type="advisoryWatchWarningCharacteristics" minOccurs="0"/>
  </xs:sequence>
  <xs:attribute name="type" type="actsOfNatureType" use="required"/>
</xs:complexType>
</pre></td></tr>
</table>

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

Source

```
<xs:complexType name="unplannedEvent">
  <xs:complexContent>
    <xs:extension base="event">
      <xs:sequence>
        <xs:element name="CategorySpecific">
          <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:extension>
  </xs:complexContent>
```

```
</xs:complexType>
```

Attribute(s)

Attribute `constructionMaintenanceSpecifics / @subtype`

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"/>`	

Attribute `specialEventSpecifics / @subtype`

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"/>`	

Attribute `plannedEvent / @type`

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"/>`	

Attribute `roadwayTrafficSpecifics / @type`

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"/>	

Attribute `actsOfNatureSpecifics / @type`

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"/>	

Attribute `unplannedEvent / @category`

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"/>	