

AIR Hazard Analysis Service Reference Guide



Product Version: 8.0
Release Date: October 2020
Publication Date: October 2020

Copyright

AIR Worldwide Corporation. All rights reserved.

Trademarks

Touchstone is a registered trademark of AIR Worldwide. Touchstone Re, ALERT, and Analyze Re are trademarks of AIR Worldwide. Please refer to the following link for an up-to-date list of AIR trademarks: www.air-worldwide.com/Legal/Trademarks/k.

In accordance with international patent conventions and treaties, if you use these trademarked items in any document you must also include the trademark symbol and prominently acknowledge AIR as the owner of the trademarks.

AIR Worldwide is a Verisk (Nasdaq:VRSK) business.



Internet Explorer and Windows Server are registered trademarks of Microsoft Corporation. SQL Server, Windows, and Excel are trademarks of Microsoft Corporation.

Confidentiality

AIR invests substantial resources in the development of its models, modeling methodologies, and databases. This document contains proprietary and confidential information and is intended for the exclusive use of AIR clients who are subject to the restrictions of the confidentiality provisions set forth in license and other nondisclosure agreements.

Contact Information

AIR is headquartered in Boston with additional offices in North America, Europe, and Asia. For information on our office locations, visit www.air-worldwide.com/About-AIR/Offices/.

If you need assistance in using the software or understanding the information in this document, please contact AIR Worldwide using the appropriate email:

- CATRADERSupport@air-worldwide.com for CATRADER® questions
- TouchstoneSupport@air-worldwide.com for Touchstone® questions
- TouchstoneReSupport@air-worldwide.com for Touchstone Re™ questions
- SoftwareDocumentationFeedback@air-worldwide.com for suggestions or questions regarding the documentation

Revision History

Date	Description
October 2020	Added ZoneWindSpeed2010 , ZoneWindborneDebris2010 , ZoneTerrain2010 , ZoneHighVelocity2010 . Removed B,C zones from FloodZoneFEMA . Added "Post Office" to NearestTarget , HistoryEvents , HistoryEvent , History , Name , Year , Date , SSLFIntensity , SSIntensity , and Distance . Deleted "Water" from SoilType . Changed elevation range from "20-30" to "20-25" to match example. Updated valid ranges for Elevation . Updated description of DistanceToActualCoast .
July 2020	Significant editorial and organizational changes. Updated <i>ZoneWindspeed2010</i> wind speeds.
October 2017	Initial publication for the 7.0 release.

Table of Contents

1 About the AIR Hazard Analysis Service.....	1
2 Available hazard profiles.....	2
3 Create a AIR Hazard Analysis Service request.....	4
Using geocodes in service requests.....	4
About Alquist-Priolo earthquake fault zones.....	4
4 Element lists and examples.....	6
Elements by profile.....	6
Elements by where used.....	8
Request example.....	11
Response example.....	12
5 Element reference.....	20
Addr1 element.....	20
Address element.....	22
Addresses element.....	28
AIR element.....	29
AIRFlood100YR element.....	30
AIRFlood500YR element.....	32
AIRFloodZone element.....	33
Area element.....	35
AreaCode element.....	37
AreaModeled element.....	40
BaseFloodElevation element.....	41
Building element.....	43
CoastalCounty element.....	45
Contact element.....	47
City element.....	48
County element.....	51
Country element.....	53
Cresta element.....	55
Date element.....	56
Depth element.....	57

DirPrefix element.....	59
DirSuffix element.....	60
Distance element.....	62
DistanceToActualCoast element.....	63
DistanceToCoast element.....	65
DistanceToFault element.....	67
Delivery element.....	69
Elevation element.....	71
Entered element.....	73
EventMagnitude element.....	74
Fault element.....	76
FaultLength element.....	78
FaultName element.....	80
Faults element.....	82
Flood100YR element.....	83
Flood500YR element.....	85
FloodZone element.....	87
FloodZoneAIRDistance element.....	88
FloodZoneDistance element.....	90
FloodZoneFEMA element.....	91
FrequencyHail element.....	95
FrequencySLWind element.....	97
FrequencyTornado element.....	100
GeoCode element.....	102
GeocodeMatch element.....	106
GeoPath element.....	109
GeoPoint element.....	112
GroundFailure element.....	114
HazardInformation element.....	116
HazardAnalysis element.....	118
History element.....	119
HistoryEvent element.....	121
HistoryEvents element.....	123
HistoryEventsHail element.....	125
HistoryEventsSLWind element.....	127
HistoryEventsTornado element.....	129
HouseNumber element.....	131

HouseNumberPrefix element.....	132
HouseNumberSuffix element.....	134
HouseSeparator element.....	135
InOut element.....	137
InputAddress element.....	137
InputCity element.....	139
InputCounty element.....	140
InputState element.....	141
InputZip5 element.....	143
Intensity element.....	144
ISORequest element.....	148
ISORequests element.....	150
ISOResponses element.....	152
LandmarkType element.....	155
Landslide element.....	155
Latitude element.....	158
LicenseKey element.....	160
Liquefaction element.....	160
LocationID element.....	162
LocationInformation element.....	163
LoginID element.....	165
Longitude element.....	166
Magnitude element.....	168
Match element.....	169
Matched element.....	171
MatchLevel element.....	173
Message element.....	176
MMI_ <i>n</i> element.....	178
Name element.....	183
NearestFault element.....	185
NearestTarget element.....	187
NumberOfFaults element.....	188
NumberOfHistEvents element.....	190
Options element.....	192
Password element.....	194
ParsedAddr element.....	194
PostalCode element.....	196

PostalCodeModeled element.....	199
ProcessErrors element.....	200
ProcessWarnings element.....	202
Products element.....	203
ProfileEarthquake element.....	206
ProfileFlood element.....	208
ProfileHurricane element.....	210
ProfileTerrorism element.....	212
ProfileThunderstorm element.....	213
ProfileWinterstorm element.....	215
RelRiskCounty element.....	216
RelRiskState element.....	218
Report element.....	220
Reports element.....	225
ReportID element.....	227
RequestHeader element.....	227
ResponseHeader element.....	228
ResultAddress element.....	229
ResultRowAnnualDetail element.....	231
ReturnPeriod element.....	235
Risk element.....	237
Risk100YR element.....	239
Risk250YR element.....	241
RiskAnnual element.....	243
runtimeinformation element.....	245
SnowFrequency element.....	247
SoilType element.....	248
Source element.....	251
SSIntensity element.....	252
SSIfIntensity element.....	253
StateProv element.....	253
StormSurge element.....	256
Street element.....	258
StreetAddress element.....	261
StreetName element.....	262
StreetSuffix element.....	264
Subarea element.....	265

SubareaCode element.....	268
SubareaModeled element.....	270
SurfaceTerrain element.....	272
time element.....	274
Type element.....	275
UserLocationID element.....	276
UniqueMatch element.....	276
ValidateResult element.....	279
ValidatorMatch element.....	280
ValidatorMatchLevel element.....	283
WaterBody element.....	285
WindFrequency element.....	286
Year element.....	287
Zip5 element.....	289
ZipPlus4 element.....	291
ZoneCADOI element.....	292
ZoneHighVelocity element.....	294
ZoneHighVelocity2010 element.....	297
ZoneTerrain element.....	299
ZoneTerrain2010 element.....	301
ZoneWindborneDebris element.....	304
ZoneWindborneDebris2010 element.....	306
ZoneWindSpeed element.....	308
ZoneWindSpeed2010 element.....	310
6 Supporting reference.....	313
Street type abbreviations.....	313
Rural route and highway contract designators.....	319
Building unit codes.....	319
United States state and FIPS codes.....	320
Post office box designators.....	322
California Department of Insurance (DOI) zones.....	322

1 About the AIR Hazard Analysis Service

The AIR Hazard Analysis Service is an AIR web service (AWS) that you can use to determine how susceptible a property is to catastrophes in the United States.

You provide the service with the physical location of the property in the form of an address or latitude and longitude pair. You also provide the service with information about which analyses to run. You can run one or more analyses for a property at a time.

The service returns the analysis results and the information used to compute the results.

2 Available hazard profiles

Here are the available profiles for the AIR Hazard Analysis Service.

Each type of analysis is applicable only to certain regions in the United States. For example, hurricane analyses are not applicable to western states. Consequently, the service returns data for a given analysis type only if the property is in a region where the analysis type applies.

The earthquake, hurricane, severe thunderstorm, and winter storm analysis types are not currently available for Alaska or Hawaii.

Profile	Description	
Hurricane	Specifies the property's susceptibility to the hurricane peril. The analysis also describes the likelihood of storm surge at the property, the historical occurrence of hurricanes at the property, and the distance from the property to the coast.	
Earthquake	Specifies the property's susceptibility to the earthquake peril. The analysis also describes the soil type at the property, whether the property is in a landslide zone, faults near the property, and the likely magnitude of earthquakes near the property.	For properties in California, the analysis provides the information necessary to meet disclosure regulations.
Severe Thunderstorm	Specifies the property's susceptibility to the severe thunderstorm peril and subperils (tornadoes, hailstorms, and straight-line windstorms). The analysis also describes the historical occurrence of the subperils at the property.	
Winter Storm	Specifies the property's susceptibility to the winter storm peril.	

Profile	Description	
Flood	Specifies the property's susceptibility to the flood peril.	
Terrorism	Specifies the terrorism target nearest the property.	

3 Create a AIR Hazard Analysis Service request

The structure of a request is the same for all hazard analysis types.

Use a geocode where possible. See [Using geocodes in service requests](#).

Procedure

1. Copy the [Request example](#) to the application that you use to submit requests.
2. In the [AIR element](#), specify your login credentials.
3. In the [Products element](#) that is a child of the [ISORequest element](#), type HazardAnalysis.
4. In the [Products element](#) that is a child of the [HazardAnalysis element](#), type one or more analysis type separated by commas.

The options are HurricaneHazard, ThunderstormHazard, EarthquakeHazard, FEMAflood, Terrorism, and WinterstormHazard.

5. In the [Options element](#), configure the *geocode*, *returnHighestScore*, and *additionalInfo* attributes.
6. In the [Address element](#), specify as many details about the location as you can.
7. Submit the request.

Using geocodes in service requests

If possible, you should provide a geocode whenever possible to ensure that you generate results for the correct location.

You can provide an address or a geocode for each property when you submit a request. If you provide an address, the service requests the corresponding geocode from the AIR Address Service before running the analysis. The service searches the available geocoding data for the best match to the street address that you supplied. If the street address that you supplied includes errors or omissions, the service may not return the geocode that you intended to generate results for.

You should review the address information returned by the service to confirm that it geocoded the correct street address. If necessary, you can update the address information that you supplied and resubmit your request. For example, if you supplied the incorrect street type, pre-directional, or post-directional for a location, correct the input, and then resubmit the request.

About Alquist-Priolo earthquake fault zones

Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California.

Alquist-Priolo fault rupture zones are defined by the California Department of Conservation, Division of Mines and Geology (DMG). The name is derived from the Alquist-Priolo Earthquake Fault Zoning Act of 1994.

As of June 1, 1998, the California Natural Hazard Disclosure Law requires sellers of property and their agents to provide buyers with a Natural Hazard Disclosure Statement if the property lies in one or more state-mapped hazard areas, including earthquake fault zones.

The presence of an active fault can pose a serious risk of surface rupture, which may cause substantial damage to buildings located in the fault zone. The DMG periodically issues official maps of Alquist-Priolo zones.

4 Element lists and examples

Elements by profile

Here is a list of AIR Hazard Analysis Service elements grouped by profile.

The <ResponseHeader> section includes processing information. The <Reports> section includes the address information for the location included in the analysis and the hazard information you requested.

Profile	Response elements	
Hurricane	Risk100YR element Risk250YR element RiskAnnual element RelRiskCounty element RelRiskState element CoastalCounty element StormSurge element DistanceToCoast element DistanceToActualCoast element Elevation element SurfaceTerrain element HistoryEvent element HistoryEvents element Date element Name element Year element SSIIntensity element SSIIntensity element Distance element ZoneWindSpeed element ZoneWindSpeed2010 element ZoneWindborneDebris element ZoneWindborneDebris2010 element ZoneTerrain element ZoneTerrain2010 element ZoneHighVelocity element ZoneHighVelocity2010 element	
Earthquake	Risk100YR element Risk250YR element RiskAnnual element RelRiskCounty element RelRiskState element MMI_n element	

Profile	Response elements	
	Liquefaction element ZoneCADOI element Landslide element GroundFailure element SoilType element NumberOfFaults element NumberOfHistEvents element NearestFault element Faults element Fault element FaultName element DistanceToFault element FaultLength element EventMagnitude element ReturnPeriod element HistoryEvents element HistoryEvent element History element Name element Year element Date element Magnitude element Distance element Depth element	
Severe Thunderstorm	FrequencyTornado element FrequencyHail element FrequencySLWind element Risk element Risk100YR element Risk250YR element RiskAnnual element RelRiskCounty element RelRiskState element HistoryEvents element HistoryEventsTornado element HistoryEventsHail element HistoryEventsSLWind element HistoryEvent element Year element Date element Distance element Intensity element	
Winter Storm	WindFrequency element SnowFrequency element Risk element Risk100YR element Risk250YR element RiskAnnual element RelRiskCounty	

Profile	Response elements	
	element RelRiskState element	
Flood	Source element FloodZone element FloodZoneAIRDistance element FloodZoneDistance element FloodZoneFEMA element Elevation element BaseFloodElevation element WaterBody element Flood100YR element Flood500YR element AIRFlood100YR element AIRFlood500YR element	
Terrorism	NearestTarget element Distance element LandmarkType element	

Elements by where used

Here are the AIR Hazard Analysis Service elements grouped by their use in requests or responses.

Request elements	Addr1 element Address element Addresses element AIR element City element Country element County element FaultLength element HazardAnalysis element ISORequest element ISORequests element Latitude element LicenseKey element LocationID element LoginID element Longitude element Options element Password element PostalCode element Products element ReportID element RequestHeader element StateProv element Type element UserLocationID element	See Request example .
------------------	--	---------------------------------------

Response elements	Addr1 element Address element AIRFlood100YR element AIRFlood500YR element AIRFloodZone element BaseFloodElevation element Building element City element CoastalCounty element Contact element Country element County element Date element Delivery element Depth element DirPrefix element DirSuffix element Distance element DistanceToActualCoast element DistanceToCoast element DistanceToFault element Elevation element Entered element EventMagnitude element Fault element FaultLength element FaultName element Faults element Flood100YR element Flood500YR element FloodZone element FloodZoneAIRDistance element FloodZoneDistance element FloodZoneFEMA element FrequencyHail element FrequencySLWind element FrequencyTornado element GeoCode element GeocodeMatch element GeoPath element GroundFailure element HazardInformation element History element HistoryEvent element HistoryEvents element HistoryEventsHail element HistoryEventsSLWind element HistoryEventsTornado	See Response example .
-------------------	---	--

element HouseNumber element HouseNumberPrefix element HouseNumberSuffix element HouseSeparator element InOut element InputAddress element InputCity element InputCounty element InputState element InputZip5 element Intensity element ISOResponses element LandmarkType element Landslide element Latitude element Liquefaction element LocationID element LocationInformation element Longitude element Magnitude element Match element Matched element MatchLevel element Message element MMI_n element Name element NearestFault element NearestTarget element NumberOfFaults element NumberOfHistEvents element Options element ParsedAddr element PostalCode element ProcessErrors element ProcessWarnings element ProfileEarthquake element ProfileFlood element ProfileHurricane element ProfileTerrorism element ProfileThunderstorm element ProfileWinterstorm element RelRiskCounty element RelRiskState element Report element ReportID element Reports element ResponseHeader element ResultAddress

	element ReturnPeriod element element Risk element Risk100YR element Risk250YR element RiskAnnual element runtimeinformation element StateProv element StormSurge element Street element StreetName element StreetSuffix element SurfaceTerrain element time element Type element UniqueMatch element UserLocationID element ValidateResult element ValidatorMatch element ValidatorMatchLevel element WaterBody element WindFrequency element Year element Zip5 element ZipPlus4 element ZoneCADOI element ZoneHighVelocity element ZoneHighVelocity2010 element ZoneTerrain element ZoneTerrain2010 element ZoneWindborneDebris element ZoneWindborneDebris2010 element ZoneWindSpeed element ZoneWindSpeed2010 element	
--	---	--

Request example

You can use this example to create new requests.

The service is case sensitive, so requests must include the correct capitalization for elements and attributes.

```
<ISORequests>
  <RequestHeader>
    <AIR>
      <LoginID>YourLogin</LoginID>
      <Password>YourSecretPassword</Password>
      <LicenseKey>YourLicenseKey</LicenseKey>
    </AIR>
  </RequestHeader>
```

```

<ISORequest>
  <Products>HazardAnalysis</Products>
  <HazardAnalysis>

<Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
WinterstormHazard</Products>
  </HazardAnalysis>
  <Addresses>
    <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
    <Address>
      <Latitude></Latitude>
      <Longitude></Longitude>
      <Addr1>100 Main Street</Addr1>
      <City>Seattle</City>
      <StateProv>WA</StateProv>
      <Country>US</Country>
    </Address>
  </Addresses>
</ISORequest>
</ISORequests>

```

Response example

Here is an example of a response to a AIR Hazard Analysis Service request.

```

<ISOResponses>
  <ResponseHeader>
    <AIRTrack>
      <Instance></Instance>
    </AIRTrack>
    <runtimeinformation>
      responseid="1476783114;636428872887964084"
      clientparam="UnknownUserHostAddress">
        <time start="10/6/2017 11:48:06 AM" end="10/6/2017
11:48:08 AM" timespan="2.547" />
        <count reportcount="1" errorcount="0" />
      </runtimeinformation>
    </ResponseHeader>
    <Reports>
      <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
        <AddressProfile>
          <LocationInformation>
            <Entered>
              <Address>
                <Latitude>0</Latitude>
                <Longitude>0</Longitude>
                <Addr1>100 Main Street</Addr1>
                <City>Seattle</City>
                <StateProv>WA</StateProv>
                <Country>US</Country>
                <MatchLevel>3</MatchLevel>
                <County>KING</County>
                <GeoPath AreaLevel2="53"
AreaLevel3="033" />

```

```

        </Address>
    </Entered>
    <Matched>
        <ParsedAddr>
            <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                <Street NumPre="" Num="100" NumSuf=""
Seperator="" Name="MAIN" Type="ST" TypeEx="STREET" PostDir=""
PreDir="" />
                <Building UnitType="" UnitValue=""
FloorValue="" Type="" Name="" />
                <Delivery BoxType="" BoxValue=""
RouteType="" RouteValue="" />
                <Contact Company="" CareOf="" Attn=""
Other="" />
            </Address>
        </ParsedAddr>
        <AddrValidator>
            <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

<ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
            <InputAddress>
                <Addr1>100 MAIN STREET</Addr1>
                <HouseNumberPrefix />
                <HouseSeparator />
                <HouseNumber>100</HouseNumber>
                <HouseNumberSuffix />
                <DirPrefix />
                <StreetName>MAIN</StreetName>
                <StreetSuffix>ST</StreetSuffix>
                <DirSuffix />
                <InputCity>SEATTLE</InputCity>
                <InputCounty />
                <InputState>WA</InputState>
                <InputZip5 />
            </InputAddress>
            <ResultAddress>
                <Addr1>100 S MAIN ST</Addr1>
                <AirStreetID>182926209</
AirStreetID>
                <HouseNumber>100</HouseNumber>
                <DirPrefix>S</DirPrefix>
                <StreetName>MAIN</StreetName>
                <StreetSuffix>ST</StreetSuffix>
                <DirSuffix />
                <County>KING</County>
                <City>SEATTLE</City>
                <CityAlias />
                <StateProv>WA</StateProv>
                <Zip5>98104</Zip5>
                <ZipPlus4 />
            </ResultAddress>
            <Message>No Rows found for given
House Number;House Number out of range;Street Info is in City;Input
ZIP5 is blank;</Message>
        </ValidateResult>
    </ProcessErrors>None</ProcessErrors>
    <ProcessWarnings>None</ProcessWarnings>

```

```

        </AddrValidator>
        <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
        <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"
AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
        <Match>
            <ValidatorMatch name="Match5" value="6" /
>
            <GeocodeMatch name="SegmentImputed"
value="2" />
            <UniqueMatch name="Relaxed_SET3_g2"
value="22" />
            <CL2Match name="Relaxed" value="3" />
        </Match>
    </Matched>
</LocationInformation>
<HazardInformation>
    <ProfileHurricane>
        <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>0-10</RelRiskCounty>
            <RelRiskState>0-10</RelRiskState>
        </Risk>
        <CoastalCounty>No</CoastalCounty>
        <StormSurge>No</StormSurge>
        <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
        <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
        <Elevation>20 - 25</Elevation>
        <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
        <ZoneWindSpeed />
        <ZoneWindborneDebris />
        <ZoneTerrain />
        <ZoneHighVelocity />
        <ZoneWindSpeed2010 />
        <ZoneWindBorneDebris2010 />
        <ZoneTerrain2010 />
        <ZoneHighVelocity2010 />
    </ProfileHurricane>
    <ProfileEarthquake>
        <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
        </Risk>
        <MMI_VI>25.34</MMI_VI>
        <MMI_VII>15.17</MMI_VII>
        <MMI_VIII>5.87</MMI_VIII>
        <MMI_IX>1.61</MMI_IX>
        <MMI_X>0.25</MMI_X>
    </ProfileEarthquake>
</HazardInformation>
</LocationInformation>

```

```

<MMI_XI>0.02</MMI_XI>
<MMI_XII>0.00</MMI_XII>
<MMI_100YR>5.9</MMI_100YR>
<MMI_200YR>7.1</MMI_200YR>
<MMI_250YR>7.3</MMI_250YR>
<MMI_475YR>8.0</MMI_475YR>
<Liquefaction>High</Liquefaction>
<ZoneCADOI>Not Applicable</ZoneCADOI>
<Landslide />
<GroundFailure>Not Applicable</GroundFailure>
<SoilType>Soft Soil to Firm Soil</SoilType>
<NumberOfFaults>5</NumberOfFaults>
<NumberOfHistEvents>5</NumberOfHistEvents>
<NearestFault>2</NearestFault>
<Faults>
  <Fault>
    <FaultName>Southern Whidbey Island
    fault</FaultName>
    <DistanceToFault>14.05</
  DistanceToFault>
    <FaultLength>55.92</FaultLength>
    <EventMagnitude> 7.32</
  EventMagnitude>
    <ReturnPeriod>3680</ReturnPeriod>
  </Fault>
  <Fault>
    <FaultName>Seattle fault zone
    Northern Trace</FaultName>
    <DistanceToFault> 1.78</
  DistanceToFault>
    <FaultLength>43.50</FaultLength>
    <EventMagnitude> 7.18</
  EventMagnitude>
    <ReturnPeriod>9765</ReturnPeriod>
  </Fault>
  <Fault>
    <FaultName>Seattle fault zone</
    FaultName>
    <DistanceToFault> 2.77</
  DistanceToFault>
    <FaultLength>40.39</FaultLength>
    <EventMagnitude> 6.97</
  EventMagnitude>
    <ReturnPeriod>6119</ReturnPeriod>
  </Fault>
  <Fault>
    <FaultName>Seattle fault zone</
    FaultName>
    <DistanceToFault> 1.78</
  DistanceToFault>
    <FaultLength>43.50</FaultLength>
    <EventMagnitude> 6.97</
  EventMagnitude>
    <ReturnPeriod>5583</ReturnPeriod>
  </Fault>
  <Fault>
    <FaultName>Seattle fault zone</
    FaultName>

```

```

DistanceToFault>      <DistanceToFault> 4.89</
                        <FaultLength>34.18</FaultLength>
EventMagnitude>      <EventMagnitude> 6.93</
                        <ReturnPeriod>5910</ReturnPeriod>
                        </Fault>
</Faults>
<HistoryEvents>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1872</Year>
      <Date>December 15</Date>
      <Magnitude> 7.00</Magnitude>
      <Distance>96.72</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>
  <HistoryEvent>
    <History>
      <Name>Puget Sound,      WA</Name>
      <Year>1949</Year>
      <Date>April 13</Date>
      <Magnitude> 6.80</Magnitude>
      <Distance>32.72</Distance>
      <Depth>43</Depth>
    </History>
  </HistoryEvent>
  <HistoryEvent>
    <History>
      <Name>Nisqually Earthquake</Name>
      <Year>2001</Year>
      <Date>February 28</Date>
      <Magnitude> 6.80</Magnitude>
      <Distance>33.08</Distance>
      <Depth>29</Depth>
    </History>
  </HistoryEvent>
  <HistoryEvent>
    <History>
      <Name>Puget Sound,      WA</Name>
      <Year>1965</Year>
      <Date>April 29</Date>
      <Magnitude> 6.60</Magnitude>
      <Distance>13.92</Distance>
      <Depth>36</Depth>
    </History>
  </HistoryEvent>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1909</Year>
      <Date>January 11</Date>
      <Magnitude> 6.00</Magnitude>
      <Distance>98.16</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>

```

```

    </HistoryEvents>
  </ProfileEarthquake>
  <ProfileThunderstorm>
    <FrequencyTornado>Very Low</FrequencyTornado>
    <FrequencyHail>Very Low</FrequencyHail>
    <FrequencySLWind>Very Low</FrequencySLWind>
    <Risk>
      <Risk100YR>0-5</Risk100YR>
      <Risk250YR>0-5</Risk250YR>
      <RiskAnnual><0.1</RiskAnnual>
      <RelRiskCounty>20-30</RelRiskCounty>
      <RelRiskState>20-30</RelRiskState>
    </Risk>
  <HistoryEvents>
    <HistoryEventsTornado>
      <HistoryEvent>
        <Year>1969</Year>
        <Date>December 12</Date>
        <Distance> 4.89</Distance>
        <Intensity>3</Intensity>
      </HistoryEvent>
      <HistoryEvent>
        <Year>1970</Year>
        <Date>November 24</Date>
        <Distance>35.09</Distance>
        <Intensity>2</Intensity>
      </HistoryEvent>
      <HistoryEvent>
        <Year>1986</Year>
        <Date>May 13</Date>
        <Distance>44.80</Distance>
        <Intensity>2</Intensity>
      </HistoryEvent>
      <HistoryEvent>
        <Year>1962</Year>
        <Date>September 28</Date>
        <Distance> 6.76</Distance>
        <Intensity>1</Intensity>
      </HistoryEvent>
      <HistoryEvent>
        <Year>1971</Year>
        <Date>October 26</Date>
        <Distance>31.97</Distance>
        <Intensity>1</Intensity>
      </HistoryEvent>
    </HistoryEventsTornado>
    <HistoryEventsHail>
      <HistoryEvent>
        <Year>1972</Year>
        <Date>June 8</Date>
        <Distance>13.72</Distance>
        <Intensity>1.3-2.0</Intensity>
      </HistoryEvent>
      <HistoryEvent>
        <Year>1997</Year>
        <Date>September 1</Date>
        <Distance>47.94</Distance>
        <Intensity>1.3-2.0</Intensity>
      </HistoryEvent>
    </HistoryEventsHail>
  </HistoryEvents>

```

```

<HistoryEvent>
  <Year>2006</Year>
  <Date>March 10</Date>
  <Distance>11.39</Distance>
  <Intensity>0.8-1.3</Intensity>
</HistoryEvent>
<HistoryEvent>
  <Year>2006</Year>
  <Date>April 15</Date>
  <Distance>31.89</Distance>
  <Intensity>0.8-1.3</Intensity>
</HistoryEvent>
<HistoryEvent>
  <Year>1985</Year>
  <Date>October 22</Date>
  <Distance>44.41</Distance>
  <Intensity>0.8-1.3</Intensity>
</HistoryEvent>
</HistoryEventsHail>
<HistoryEventsSLWind>
  <HistoryEvent>
    <Year>1956</Year>
    <Date>March 3</Date>
    <Distance> 7.10</Distance>
    <Intensity>70-80</Intensity>
  </HistoryEvent>
  <HistoryEvent>
    <Year>2010</Year>
    <Date>December 14</Date>
    <Distance>14.19</Distance>
    <Intensity>50-60</Intensity>
  </HistoryEvent>
  <HistoryEvent>
    <Year>2010</Year>
    <Date>December 14</Date>
    <Distance> 9.38</Distance>
    <Intensity>50-60</Intensity>
  </HistoryEvent>
  <HistoryEvent>
    <Year>1985</Year>
    <Date>October 22</Date>
    <Distance> 1.59</Distance>
    <Intensity />
  </HistoryEvent>
  <HistoryEvent>
    <Year>1969</Year>
    <Date>December 23</Date>
    <Distance> 2.11</Distance>
    <Intensity />
  </HistoryEvent>
</HistoryEventsSLWind>
</HistoryEvents>
</ProfileThunderstorm>
<ProfileWinterstorm>
  <WindFrequency>Very Low</WindFrequency>
  <SnowFrequency>Very Low</SnowFrequency>
  <Risk>
    <Risk100YR>0-5</Risk100YR>
    <Risk250YR>0-5</Risk250YR>
  </Risk>
</ProfileWinterstorm>

```

```

        <RiskAnnual><0.1</RiskAnnual>
        <RelRiskCounty>20-30</RelRiskCounty>
        <RelRiskState>60-70</RelRiskState>
    </Risk>
</ProfileWinterstorm>
<ProfileFlood>
    <Source>AIR</Source>
    <FloodZone>100-Year</FloodZone>
    <FloodZoneFEMA>AE</FloodZoneFEMA>
    <Elevation>9 - 10</Elevation>
    <FloodZoneDistance>
        <WaterBody>More than 5</WaterBody>
        <Flood100YR>0.030</Flood100YR>
        <Flood500YR>0.040</Flood500YR>
    </FloodZoneDistance>
    <AIRFloodZone>100-Year</AIRFloodZone>
    <FloodZoneAIRDistance>
        <AIRFlood100YR>0.052</Flood100YR>
        <AIRFlood500YR>0.126</Flood500YR>
    </FloodZoneAIRDistance>
    <BaseFloodElevation>8 - 9</
BaseFloodElevation>
    </ProfileFlood>
    <ProfileTerrorism>
        <NearestTarget>TRAIN STATION</NearestTarget>
        <Distance>0.20145692986724237</Distance>
        <LandmarkType>AIR</LandmarkType>
    </ProfileTerrorism>
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

5 Element reference

Addr1 element

Specifies the unparsed street address of the property, including any street numbers, prefixes, and suffixes.

Item	Value	Description
Element name	<i>Addr1</i>	Specifies the unparsed street address of the property, including any street numbers, prefixes, and suffixes..
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Values	The service accepts only unparsed addresses, such as 120 W. Main St..	If you have a parsed address, submit the address to a geocoder such as the AIR Address Service to obtain the corresponding latitude and longitude.
Use	Required if you do not specify the <i>Latitude</i> and <i>Longitude</i> elements.	Whenever possible, you should specify the <i>Latitude</i> and <i>Longitude</i> elements rather than providing the street address. You can use the AIR Address Service to obtain the latitude and longitude.

Request example

```
<ISORequests>
```

```

    <RequestHeader>
      .
      .
      .
    <ISORequest>
      <Products>HazardAnalysis</Products>
      <HazardAnalysis>

<Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
WinterstormHazard</Products>
      </HazardAnalysis>
      <Addresses>
        <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
        <Address>
          <Latitude></Latitude>
          <Longitude></Longitude>
          <Addr1>100 Main Street</Addr1>
          <City>Seattle</City>
          <StateProv>WA</StateProv>
          <Country>US</Country>
        </Address>
      </Addresses>
    </ISORequest>
  </ISORequests>

```

Response example

The response returns the street address you provided in the request.

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
              <GeoPath AreaLevel2="53"
AreaLevel3="033" />
            </Address>
          </Entered>
        <Matched>

```

```

        <ParsedAddr>
            .
            .
            .
        </ParsedAddr>
        <AddrValidator>
            <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

                <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
                <InputAddress>
                    <Addr1>100 MAIN STREET</Addr1>
                    .
                    .
                    .
                </InputAddress>
                <ResultAddress>
                    <Addr1>100 S MAIN ST</Addr1>
                    .
                    .
                    .
                </ResultAddress>
                <Message>No Rows found for given
House Number;House Number out of range;Street Info is in City;Input
ZIP5 is blank;</Message>
            </ValidateResult>
            <ProcessErrors>None</ProcessErrors>
            <ProcessWarnings>None</ProcessWarnings>
        </AddrValidator>
        <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
        <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"
AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
        <Match>
            .
            .
            .
        </Match>
    </Matched>
</LocationInformation>
<HazardInformation>
    .
    .
    .
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Address element

Contains address information for the property.

Item	Value	Description
Element name	<i>address</i>	Contains address information for the property.
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xsd:complexType	An element with this data type may contain other elements.
Request elements	The request may contain some or all of these elements.	Country element or StreetAddress element or City element or Area element or AreaCode element or PostalCode element or Subarea element or SubareaCode element or Cresta element or Latitude element or Longitude element
Response elements	The response may contain some or all of these elements.	Country element or StreetAddress element or City element or Area element or AreaModeled element or AreaCode element or PostalCode element or PostalCodeModeled element or GeoPoint element or Subarea element or SubareaModeled element or SubareaCode element
Usage notes		Whenever possible, you should specify the <i>Latitude</i> and <i>Longitude</i> elements rather than providing the street address. You can use the AIR Address Service to

Item	Value	Description
		obtain the latitude and longitude. If you specify a latitude and longitude, the GeoCode element returns the latitude and longitude you specified. Otherwise, it returns the geocode determined by the web service, and the <i>MatchLevel</i> element specifies the source and accuracy of the geocode.

Attributes

Attribute name	Use	Description
<i>Version</i>	optional	Specifies the AIR Address Service version used to process the request.
<i>Type</i>	optional	Indicates whether the address you submitted is parsed or unparsed.
<i>Addr1</i>	optional	Specifies the street address of the property.

Source

```
<xs:element name="Address" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:choice maxOccurs="unbounded" minOccurs="0">
        <xs:element name="Type" type="xs:string" minOccurs="0" maxOccurs="1" />
        <xs:element name="ReportID" type="xs:string" minOccurs="0" maxOccurs="1" />
        <xs:element name="LocationID" type="xs:string" minOccurs="0" maxOccurs="1" />
        <xs:element name="UserLocationID" type="xs:string" minOccurs="0" maxOccurs="1" />
        <xs:element name="Addr1" type="xs:string" minOccurs="0" maxOccurs="1" />
        <xs:element name="City" type="xs:string" minOccurs="0" maxOccurs="1" />
        <xs:element name="StateProv" type="xs:string" minOccurs="0" maxOccurs="1" />
      </xs:choice>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```

        <xs:element name="County" type="xs:string" minOccurs="0"
maxOccurs="1" />
        <xs:element name="PostalCode" type="xs:string" minOccurs="0"
maxOccurs="1" />
        <xs:element name="Country" type="xs:string" minOccurs="0"
maxOccurs="1" />
        <xs:element name="Latitude" type="xs:string" minOccurs="0"
maxOccurs="1" />
        <xs:element name="Longitude" type="xs:string" minOccurs="0"
maxOccurs="1" />
    </xs:choice>
</xs:sequence>
</xs:complexType>
</xs:element>

```

Source

```

<xsd:element name="Address" xmlns:xsd="http://www.w3.org/2001/
XMLSchema">
    <xsd:complexType>
        <xsd:choice maxOccurs="unbounded" minOccurs="1">
            <xsd:element name="Country" type="xsd:string" />
            <xsd:element name="StreetAddress" type="xsd:string"
minOccurs="0" />
            <xsd:element name="City" type="xsd:string"
minOccurs="0" />
            <xsd:element name="Area" type="xsd:string"
minOccurs="0" />
            <xsd:element name="State" type="xsd:string"
minOccurs="0" />
            <xsd:element name="AreaCode" type="xsd:string"
minOccurs="0" />
            <xsd:element name="PostalCode" type="xsd:string"
minOccurs="0" />
            <xsd:element name="Subarea" type="xsd:string"
minOccurs="0" />
            <xsd:element name="SubareaCode" type="xsd:string"
minOccurs="0" />
            <xsd:element name="CRESTA" type="xsd:string"
minOccurs="0" />
            <xsd:element name="Latitude" type="Geocode"
minOccurs="0" nillable="true" />
            <xsd:element name="Longitude" type="Geocode"
minOccurs="0" nillable="true" />
        </xsd:choice>
    </xsd:complexType>
</xsd:element>

```

Request example

```

<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>

```

```

    <HazardAnalysis>
      <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
      WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>
      <Options geocode="yes" returnHighestScore="yes"
      additionalInfo="no"/>
      <Address>
        <Latitude></Latitude>
        <Longitude></Longitude>
        <Addr1>100 Main Street</Addr1>
        <City>Seattle</City>
        <StateProv>WA</StateProv>
        <Country>US</Country>
      </Address>
    </Addresses>
  </ISORequest>
</ISORequests>

```

Request Example

```

<ISORequests>
  .
  .
  .
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            <ID></ID>
            <RiskCount></RiskCount>
            <YearBuilt></YearBuilt>
          .
          .
          .
          <Address>
            <StreetAddress></StreetAddress>
            <City></City>
            <Area></Area>
            <Subarea></Subarea>
            <PostalCode></PostalCode>
            <Country></Country>
            <Latitude>42.346809</Latitude>
            <Longitude>-71.075202</Longitude>
          </Address>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .

```

```

      .
      .
    </ResponseHeader>
    <Reports>
      <Report ...>
        <AddressProfile>
          <LocationInformation>
            <Entered>
              <Address>
                .
                .
                .
              </Address>
            </Entered>
            <Matched>
              <ParsedAddr>
                <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                  <Street NumPre="" Num="100" NumSuf=""
Seperator="" Name="MAIN" Type="ST" TypeEx="STREET" PostDir=""
PreDir="" />
                  <Building UnitType="" UnitValue=""
FloorValue="" Type="" Name="" />
                  <Delivery BoxType="" BoxValue=""
RouteType="" RouteValue="" />
                  <Contact Company="" CareOf="" Attn=""
Other="" />
                </Address>
              </ParsedAddr>
              <AddrValidator>
                <ValidateResult>
                  .
                  .
                  .
                </ValidateResult>
                <ProcessErrors>None</ProcessErrors>
                <ProcessWarnings>None</ProcessWarnings>
              </AddrValidator>
              <GeoCode .../>
              <GeoPath .../>
              <Match>
                <ValidatorMatch name="Match5" value="6" /
>
                <GeocodeMatch name="SegmentImputed"
value="2" />
                <UniqueMatch name="Relaxed_SET3_g2"
value="22" />
                <CL2Match name="Relaxed" value="3" />
              </Match>
            </Matched>
          </LocationInformation>
          <HazardInformation>
            .
            .
            .

```

Response Example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" version="3.5.0.3"
timespan="4.016" sequence="110" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted=""
ASF.StatusMessage="" ASF.Logfile="">
      <LossAnalysis engine="15.0.0 20130531">
        <Data type="Locations">
          <Locations>
            <Location>
              <ID>Loc06</ID>
              <LocationTerms>
                <LocationTerm>
                  <StrPerils>PWH</StrPerils>
                </LocationTerm>
              </LocationTerms>
              <Address>
                <Country>US</Country>
                <AreaModeled>MA</AreaModeled>
                <PostalCodeModeled>02116</PostalCodeModeled>
                <SubareaModeled>Suffolk</SubareaModeled>
                <GeoPoint>
                  <GeoLat>42.3476066589355</GeoLat>
                  <GeoLong>-71.0762481689453</GeoLong>
                  <MatchLevel>UserSupplied</MatchLevel>
                </GeoPoint>
              </Address>
            </Location>
          </Locations>
        </Data>
      </LossAnalysis>
    </Report>
  </Reports>
</ISOResponses>
```

Addresses element

Contains the *Options* and *Address* elements.

Item	Value	Description
Element name	<i>Addresses</i>	Contains the <i>Options</i> and <i>Address</i> elements..
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.
Data type	xsd:complexType	An element with this data type may contain other elements.

Item	Value	Description
Values	Only one address per request is supported.	

Source

```
<xs:element name="Addresses" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="Options" />
      <xs:element ref="Address" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Request example

```
<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>
      <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
      <Address>
        <Latitude></Latitude>
        <Longitude></Longitude>
        <Addr1>100 Main Street</Addr1>
        <City>Seattle</City>
        <StateProv>WA</StateProv>
        <Country>US</Country>
      </Address>
    </Addresses>
  </ISORequest>
</ISORequests>
```

AIR element

Contains your login credentials for AIR's web services.

Item	Value	Description
Element name	<i>AIR</i>	Contains your login credentials for AIR's web services..
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.

Source

```
<xs:element name="AIR" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:all>
      <xs:element ref="LicenseKey" />
      <xs:element ref="LoginID" />
      <xs:element ref="Password" />
    </xs:all>
  </xs:complexType>
</xs:element>
```

Request example

```
<ISORequests>
  <RequestHeader>
    <AIR>
      <LoginID>YourLogin</LoginID>
      <Password>YourSecretPassword</Password>
      <LicenseKey>YourLicenseKey</LicenseKey>
    </AIR>
  </RequestHeader>
  <ISORequest>
    .
    .
    .
  </ISORequest>
</ISORequests>
```

AIRFlood100YR element

Specifies the distance in miles from the property boundary to an AIR-defined 100-year flood plain.

Item	Value	Description
Element name	<i>AIRFlood100YR</i>	Specifies the distance in miles from the property boundary to an AIR-defined 100-year flood plain.. A 100-year flood plain is an area in which the flood boundary has a 1% or

Item	Value	Description
		greater chance of being equaled or exceeded in a given year. This element is not the same as the <i>Flood100YR</i> element.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Flood	
Values	If the distance is greater than five miles, the service returns <i>More</i> than 5.	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
      <ProfileFlood>
        <Source>AIR</Source>
        <FloodZone>100-Year</FloodZone>
        <FloodZoneFEMA>AE</FloodZoneFEMA>
        <Elevation>9 - 10</Elevation>
        <FloodZoneDistance>
          <WaterBody>More than 5</WaterBody>
          <Flood100YR>0.030</Flood100YR>
          <Flood500YR>0.040</Flood500YR>
        </FloodZoneDistance>
      </ProfileFlood>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

        <AIRFloodZone>100-Year</AIRFloodZone>
        <FloodZoneAIRDistance>
            <AIRFlood100YR>0.052</Flood100YR>
            <AIRFlood500YR>0.126</Flood500YR>
        </FloodZoneAIRDistance>
        <BaseFloodElevation>8 - 9</
BaseFloodElevation>
    </ProfileFlood>
    .
    .
    .
    </HazardInformation>
  </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

AIRFlood500YR element

Specifies the distance in miles from the property boundary to an AIR-defined 500-year flood plain.

Item	Value	Description
Element name	<i>AIRFlood500YR</i>	Specifies the distance in miles from the property boundary to an AIR-defined 500-year flood plain.. A 500-year flood plain is an area in which the flood boundary has a 0.2% or greater chance of being equaled or exceeded in a given year. This element is not the same as the <i>Flood500YR</i> element.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Flood	

Item	Value	Description
Values	If the distance is greater than five miles, the service returns <code>More than 5</code> .	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
          <ProfileFlood>
            <Source>AIR</Source>
            <FloodZone>100-Year</FloodZone>
            <FloodZoneFEMA>AE</FloodZoneFEMA>
            <Elevation>9 - 10</Elevation>
            <FloodZoneDistance>
              <WaterBody>More than 5</WaterBody>
              <Flood100YR>0.030</Flood100YR>
              <Flood500YR>0.040</Flood500YR>
            </FloodZoneDistance>
            <AIRFloodZone>100-Year</AIRFloodZone>
            <FloodZoneAIRDistance>
              <AIRFlood100YR>0.052</Flood100YR>
              <AIRFlood500YR>0.126</Flood500YR>
            </FloodZoneAIRDistance>
            <BaseFloodElevation>8 - 9</
BaseFloodElevation>
          </ProfileFlood>
          .
          .
        </HazardInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

AIRFloodZone element

Specifies the type of AIR flood zone that the property resides in.

Item	Value	Description
Element name	<i>AIRFloodZone</i>	Specifies the type of AIR flood zone that the property resides in.. This element is not the same as the <i>FloodZone</i> element.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Profile	Flood	
Values	100-year, 250-year, 500-year, or no data	100-year = The location is in an AIR 100-year flood zone and has a 1% chance of being flooded in any given year. 250-Year = The location is in an AIR 250-year flood zone and has a .4% chance of being flooded in any given year. 500-year = The location is in an AIR 500-year flood zone and has a .2% chance of being flooded in any given year. - no data = AIR flood zone information is not available for the location.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .

```

```

        .
        </LocationInformation>
        <HazardInformation>
            .
            .
            .
            <ProfileFlood>
                <Source>AIR</Source>
                <FloodZone>100-Year</FloodZone>
                <FloodZoneFEMA>AE</FloodZoneFEMA>
                <Elevation>9 - 10</Elevation>
                <FloodZoneDistance>
                    <WaterBody>More than 5</WaterBody>
                    <Flood100YR>0.030</Flood100YR>
                    <Flood500YR>0.040</Flood500YR>
                </FloodZoneDistance>
                <AIRFloodZone>100-Year</AIRFloodZone>
                <FloodZoneAIRDistance>
                    <AIRFlood100YR>0.052</Flood100YR>
                    <AIRFlood500YR>0.126</Flood500YR>
                </FloodZoneAIRDistance>
                <BaseFloodElevation>8 - 9</
BaseFloodElevation>
            </ProfileFlood>
            .
            .
            .
        </HazardInformation>
    </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Area element

Specifies the abbreviation for the state or other area where the property resides.

Item	Value	Description
Element name	<i>Area</i>	Specifies the abbreviation for the state or other area where the property resides. For a list of abbreviations, see United States state and FIPS codes.
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.

Item	Value	Description
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	2 characters	
Notes		You must specify this element if you do not specify the Latitude element and the Longitude element or the AreaCode element .

Request example

```

<ISORequests>
  .
  .
  .
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            .
            .
            .
            <Address>
              <StreetAddress>100 Main St </StreetAddress>
              <City>Salem</City>
              <Area>MA</Area>
              <PostalCode>03079</PostalCode>
              <Country></Country>
              <Latitude></Latitude>
              <Longitude></Longitude>
            </Address>
          </Location>
        </Locations>
      </Data>
    </LossAnalysis>
  </ISORequest>
  .
</ISORequests>

```

Response example

In the response, the [AreaModeled element](#) specifies the area included in the analysis.

```

<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
</ISOResponses>

```

```

    .
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" ...ASF.LogFile="">
      <LossAnalysis engine="12.0.3 20100826">
        <Data type = "Locations">
          <Locations>
            <Location>
              <ID>LOC06</ID>
              <YearBuilt>1970</Year Built>
              <Address>
                <StreetAddress>100 Main St</
StreetAddress>
                <City>SALEM</City>
                <Area>MA</Area>
                <AreaModeled>NH</AreaModeled>
                <Subarea></Subarea>
                <SubareaModeled>Rockingham</
SubareaModeled>
                <SubareaCode>025</SubareaCode>
                <PostalCode>03079</PostalCode>
                <PostalCodeModeled>03079</
PostalCodeModeled>
                <Country>US</Country>
                <GeoPoint>
                  <GeoLat>42.78189</GeoLat>
                  <GeoLong>-71.229232</GeoLong>
                  <MatchLevel>Exact</MatchLevel>
                </GeoPoint>
              </Address>
            </Location>
          </Locations>
        </Data>
        <ResultSet type="Preset" name="Your Configuration
Package Name">
          <Results>
            .
            .
            .
          </Results>
        </ResultSet>
      </LossAnalysis>
    </Report>
  </Reports>
</ISOResponses>

```

AreaCode element

Specifies the FIPS (Federal Information Processing Standards) numeric code for the state where the property resides.

Item	Value	Description
Element name	<i>AreaCode</i>	Specifies the FIPS (Federal Information

Item	Value	Description
		Processing Standards) numeric code for the state where the property resides. For a list of abbreviations, see United States state and FIPS codes .
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	2 characters	
Notes		You must specify this element if you do not specify the Latitude element and the Longitude element or the Area element .

Request example

```

<ISORequests>
  .
  .
  .
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            .
            .
            .
          <Address>
            <StreetAddress>100 Main St</StreetAddress>
            <City>Salem</City>
            <Area></Area>
            <AreaCode>25</AreaCode>
            <PostalCode>03079</PostalCode>

```

```

        <Country></Country>
        <Latitude></Latitude>
        <Longitude></Longitude>
    </Address>
    .

```

Response example

In the response, the [AreaModeled element](#) specifies the area included in the analysis.

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" ...ASF.LogFile="">
      <LossAnalysis engine="12.0.3 20100826">
        <Data type = "Locations">
          <Locations>
            <Location>
              <ID>LOC06</ID>
              <YearBuilt>1970</Year Built>
              <Address>
                <StreetAddress>100 Main St</
StreetAddress>
                <City>SALEM</City>
                <AreaCode>25</AreaCode>
                <AreaModeled>NH</AreaModeled>
                <SubareaModeled>Rockingham</
SubareaModeled>
                <PostalCode>03079</PostalCode>
                <PostalCodeModeled>03079</
PostalCodeModeled>
                <Country>US</Country>
                <GeoPoint>
                  <GeoLat>42.78189</GeoLat>
                  <GeoLong>-71.229232</GeoLong>
                  <MatchLevel>Exact</MatchLevel>
                </GeoPoint>
              </Address>
            </Location>
          </Locations>
        </Data>
        <ResultSet type="Preset" name="Your Configuration
Package Name">
          <Results>
            .
            .
            .
          </Results>
        </ResultSet>
      </LossAnalysis>
    </Report>
  </Reports>
</ISOResponses>

```

AreaModeled element

Specifies the area included in the analysis.

Item	Value	Description
Name	<i>AreaModeled</i>	Specifies the area included in the analysis. <i>AreaModeled</i> differs from the Area element of the request if the service finds a better area match for the PostalCode element of the request.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Example

```
<ISOResponses>
  .
  .
  .
  <Reports>
    <Report product="LossAnalysis" ...ASF.LogFile="">
      <LossAnalysis engine="12.0.3 20100826">
        <Data type = "Locations">
          <Locations>
            <Location>
              .
              .
              .
              <Address>
                <StreetAddress>100 Main St</
StreetAddress>
                <City>SALEM</City>
                <Area>MA</Area>
                <AreaModeled>NH</AreaModeled>
                <SubareaModeled>Rockingham</
SubareaModeled>
                <PostalCode>03079</PostalCode>
                <PostalCodeModeled>03079</
PostalCodeModeled>
                <Country>US</Country>
                <GeoPoint>
                  .
                  .
```

```

        .
        </GeoPoint>
      </Address>
    </Location>
  </Locations>
</Data>
.
.
.

```

BaseFloodElevation element

Specifies the water elevation in feet of a 100-year flood at the location.

Item	Value	Description
Element name	<i>BaseFlood</i>	Specifies the water elevation in feet of a 100-year flood at the location. Base flood elevation is defined by the Federal Emergency Management Agency (FEMA) as the "<i>water surface elevation corresponding to a flood having a 1% probability of being equaled or exceeded in a given year.</i>" The service assumes that the lowest floor of the building is at the base flood elevation.
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xsd:double	The value space of <i>xsd:double</i> is double (64 bits) floating-point numbers.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Flood	

Item	Value	Description
Length	10 characters maximum	
Values	A range of integers.	For example, 8 – 9 represents a base flood elevation of eight to nine feet.
Default value	–999	A value of –999 indicates unknown elevation.

Request example

```

<ISORequests>
  .
  .
  .
  <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            .
            .
            .
            <Address>
              .
              .
              .
            </Address>
            .
          .
          .
          <Details>
            .
            .
            .
            <BaseFloodElevation>25</
BaseFloodElevation>
            .
            .
            .
          </Details>
          .
          .
          .

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .

```

```

      .
      .
    </ResponseHeader>
    <Reports>
      <Report ...>
        <AddressProfile>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileFlood>
          <Source>AIR</Source>
          <FloodZone>100-Year</FloodZone>
          <FloodZoneFEMA>AE</FloodZoneFEMA>
          <Elevation>9 - 10</Elevation>
          <FloodZoneDistance>
            <WaterBody>More than 5</WaterBody>
            <Flood100YR>0.030</Flood100YR>
            <Flood500YR>0.040</Flood500YR>
          </FloodZoneDistance>
          <AIRFloodZone>100-Year</AIRFloodZone>
          <FloodZoneAIRDistance>
            <AIRFlood100YR>0.052</Flood100YR>
            <AIRFlood500YR>0.126</Flood500YR>
          </FloodZoneAIRDistance>
          <BaseFloodElevation>8 - 9</
BaseFloodElevation>
        </ProfileFlood>
        .
        .
        .
      </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>

```

Building element

Specifies details about the property's location in a building, for example, the floor number and unit type.

Item	Value	Description
Element name	<i>Building</i>	Specifies details about the property's location in a building, for example, the floor number and unit type..
Where used	response	A <i>response</i> returns the analysis results and

Item	Value	Description
		the information used to compute the results.

Attributes

<i>FloorValue</i>	required	The floor number associated with the property
<i>Name</i>	required	Not used
<i>Type</i>	required	Not used
<i>UnitType</i>	required	The postal abbreviation for the unit type
<i>UnitValue</i>	required	The unit number associated with the property

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                <Street NumPre="" Num="100" NumSuf=""
Seperator="" Name="MAIN" Type="ST" TypeEx="STREET" PostDir=""
PreDir="" />
                <Building UnitType="" UnitValue=""
FloorValue="" Type="" Name="" />
                <Delivery BoxType="" BoxValue=""
RouteType="" RouteValue="" />
              </ParsedAddr>
            </Matched>
          </Entered>
        </LocationInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

```

Other="" />
    <Contact Company="" CareOf="" Attn=""
    </Address>
    </ParsedAddr>
    <AddrValidator>
    .
    .
    </AddrValidator>
    .
    .
    </Matched>
    </LocationInformation>
    <HazardInformation>
    .
    .
    </HazardInformation>
    </AddressProfile>
    </Report>
    </Reports>
</ISOResponses>

```

CoastalCounty element

Indicates whether the county that the property resides in abuts the coast.

Item	Value	Description
Element name	<i>CoastalCounty</i>	Indicates whether the county that the property resides in abuts the coast..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	yes or no	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    </ResponseHeader>

```

```

<Reports>
  <Report ...>
    <AddressProfile>
      .
      .
      .
    </LocationInformation>
    <HazardInformation>
      <ProfileHurricane>
        <Risk>
          <Risk100YR>0-5</Risk100YR>
          <Risk250YR>0-5</Risk250YR>
          <RiskAnnual><0.1</RiskAnnual>
          <RelRiskCounty>0-10</RelRiskCounty>
          <RelRiskState>0-10</RelRiskState>
        </Risk>
        <CoastalCounty>No</CoastalCounty>
        <StormSurge>No</StormSurge>
        <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
          <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
          <Elevation>20 - 25</Elevation>
          <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
          <ZoneWindSpeed />
          <ZoneWindborneDebris />
          <ZoneTerrain />
        <ZoneHighVelocity />
          <ZoneWindSpeed2010 />
          <ZoneWindBorneDebris2010 />
          <ZoneTerrain2010 />
        <ZoneHighVelocity2010 />
      </ProfileHurricane>
      <ProfileEarthquake>
        .
        .
        .
      </ProfileEarthquake>
      <ProfileThunderstorm>
        .
        .
        .
      </ProfileThunderstorm>
      <ProfileWinterstorm>
        .
        .
        .
      </ProfileWinterstorm>
      <ProfileFlood>
        .
        .
        .
      </ProfileFlood>
      <ProfileTerrorism>
        .
        .
        .
      </ProfileTerrorism>

```

```

        </HazardInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

Contact element

Specifies contact information for the property.

Item	Value	Description
Element name	<i>Contact</i>	Specifies contact information for the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

<i>Attn</i>	required	The name of a person or department to which mail is directed
<i>CareOf</i>	required	The name of a person or department to which mail is directed
<i>Company</i>	required	The name of the company associated with the address
<i>Other</i>	required	Any additional contact information for the property, such as the name of the person, department, company, or account type associated with the property

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
      timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"

```

```

ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile=""
  <AddressProfile>
    <LocationInformation>
      <Entered>
        <Address>
          .
          .
          .
        </Address>
      </Entered>
      <Matched>
        <ParsedAddr>
          <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
          <Street NumPre="" Num="100" NumSuf=""
Seperator="" Name="MAIN" Type="ST" TypeEx="STREET" PostDir=""
PreDir="" />
          <Building UnitType="" UnitValue=""
FloorValue="" Type="" Name="" />
          <Delivery BoxType="" BoxValue=""
RouteType="" RouteValue="" />
          <Contact Company="" CareOf="" Attn=""
Other="" />
        </Address>
      </ParsedAddr>
    <AddrValidator>
      .
      .
      .
    </AddrValidator>
    .
    .
    .
  </Matched>
</LocationInformation>
<HazardInformation>
  .
  .
  .
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

City element

Specifies the city where the property resides.

Item	Value	Description
Element name	<i>City</i>	Specifies the city where the property resides. The <i>City</i> value of the response will be different than the <i>City</i> value of the

Item	Value	Description
		request if the service finds a better city match for the request <i>PostalCode</i> . You must specify the City Element if you do not specify the <i>Latitude</i> and <i>Longitude</i> elements.
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	30 characters minimum	

Request example

```

<ISORequests>
  .
  .
  .
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            .
            .
            .
            <Address>
              <StreetAddress>1850 Massachusetts
Ave</StreetAddress>
              <City>Boston</City>
              <Area>MA</Area>
              <PostalCode>02139</PostalCode>
              <Country></Country>
              <Latitude></Latitude>
              <Longitude></Longitude>
            </Address>
            .
          </Location>
        </Locations>
      </Data type="Locations">
    </LossAnalysis>
  </ISORequest>
  .
</ISORequests>

```

Request example

```

<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
    WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>
      <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
      <Address>
        <Latitude></Latitude>
        <Longitude></Longitude>
        <Addr1>100 Main Street</Addr1>
        <City>Seattle</City>
        <County>King</County>
        <StateProv>WA</StateProv>
        <Country>US</Country>
      </Address>
    </Addresses>
  </ISORequest>
</ISORequests>

```

Response example

```

<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
    WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>
      <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
      <Address>
        <Latitude></Latitude>
        <Longitude></Longitude>
        <Addr1>100 Main Street</Addr1>
        <City>Seattle</City>
        <County>King</County>
        <StateProv>WA</StateProv>
        <Country>US</Country>
      </Address>
    </Addresses>
  </ISORequest>
</ISORequests>

```

```

        </Address>
      </Addresses>
    </ISORequest>
  </ISORequests>

```

County element

Specifies the county where the property resides.

Item	Value	Description
Element name	<i>County</i>	Specifies the county where the property resides..
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Response values	The response returns the state you provided in the <i>County</i> element of the request or the state included in the analysis.	When <i>County</i> is a child element of <i>Address</i> , the response value is the state you provided in the <i>StateProv</i> element of the request. When <i>County</i> is a child element of the <i>ResultAddress</i> element and you set the <i>additionalInfo</i> attribute to <i>true</i> , the response value is the state the service included in the analysis.

Request example

```

<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

```

```

<Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
WinterstormHazard</Products>
  </HazardAnalysis>
  <Addresses>
    <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
    <Address>
      <Latitude></Latitude>
      <Longitude></Longitude>
      <Addr1>100 Main Street</Addr1>
      <City>Seattle</City>
      <County>King</County>
      <StateProv>WA</StateProv>
      <Country>US</Country>
    </Address>
  </Addresses>
</ISORequest>
</ISORequests>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
              <GeoPath AreaLevel2="53"
AreaLevel3="033" />
            </Address>
          </Entered>
          <Matched>
            .
            .
            .
          </Matched>
        </LocationInformation>
        <HazardInformation>

```

```

      .
      .
      .
    </HazardInformation>
  </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Country element

Specifies the country where the property resides as a 2-character abbreviation or numeric code.

Item	Value	Description
Element name	<i>Country</i>	Specifies the country where the property resides as a 2-character abbreviation or numeric code. Currently, the service supports only properties in the United States.
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	2 characters	
Default value	US	

Request example

```

<ISORequests>
  .
  .
  .
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
    </LossAnalysis>
  </ISORequest>
</ISORequests>

```

```

<Data type="Locations">
  <Locations>
    <Location>
      .
      .
      .
      <Address>
        <StreetAddress/>
        <City></City>
        <Area></Area>
        <PostalCode></PostalCode>
        <Country>1</Country>
        <Latitude>34.195854</Latitude>
        <Longitude>-79.792534</Longitude>
      </Address>
      <LocationTerms Items="1">
        .
        .
        .
      </LocationTerms>
    </Details>
  </Locations>
</Data>

```

Request example

```

<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
    WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>
      <Options geocode="yes" returnHighestScore="yes"
      additionalInfo="no"/>
      <Address>
        <Latitude></Latitude>
        <Longitude></Longitude>
        <Addr1>100 Main Street</Addr1>
        <City>Seattle</City>
        <County>King</County>
        <StateProv>WA</StateProv>
        <Country>US</Country>
      </Address>
    </Addresses>
  </ISORequest>
</ISORequests>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
              <GeoPath AreaLevel2="53"
AreaLevel3="033" />
            </Address>
          </Entered>
          <Matched>
            .
            .
            .
          </Matched>
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        </HazardInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

Cresta element

Contains the CRESTA code for the location.

Item	Value	Description
Element name	<i>Cresta</i>	Contains the CRESTA code for the location. CRESTA codes identify country-specific zones for

Item	Value	Description
		the uniform and detailed reporting of exposure data, typically related to natural hazards.
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Date element

Specifies the month and day that a historical event affecting the property occurred.

Item	Value	Description
Element name	<i>Date</i>	Specifies the month and day that a historical event affecting the property occurred..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane, Earthquake, Severe Thunderstorm	

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
```

```

      .
      .
      .
    </LocationInformation>
    <HazardInformation>
      <ProfileHurricane>
        .
        .
        .
      </ProfileHurricane>
      <ProfileEarthquake>
        .
        .
        .
        <HistoryEvents>
          <HistoryEvent>
            <History>
              <Name>Unnamed</Name>
              <Year>1872</Year>
              <Date>December 15</Date>
              <Magnitude> 7.00</Magnitude>
              <Distance>96.72</Distance>
              <Depth>N/A</Depth>
            </History>
          </HistoryEvent>
          <HistoryEvent>
            .
            .
            .
          </HistoryEvent>
        </HistoryEvents>
      </ProfileEarthquake>
    </HazardInformation>
  </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Depth element

Specifies the depth in miles of the epicenter of the corresponding historical earthquake.

Item	Value	Description
Element name	<i>Depth</i>	Specifies the depth in miles of the epicenter of the corresponding historical earthquake..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Item	Value	Description
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Earthquake	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          <ProfileHurricane>
            .
            .
            .
          </ProfileHurricane>
          <ProfileEarthquake>
            .
            .
            .
            <HistoryEvents>
              <HistoryEvent>
                <History>
                  <Name>Puget Sound, WA</Name>
                  <Year>1949</Year>
                  <Date>April 13</Date>
                  <Magnitude> 6.80</Magnitude>
                  <Distance>32.72</Distance>
                  <Depth>43</Depth>
                </History>
              </HistoryEvent>
              <HistoryEvent>
                .
                .
                .
              </HistoryEvent>
            </HistoryEvents>
          </ProfileEarthquake>
            .
            .

```

```

        .
    </HazardInformation>
  </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

DirPrefix element

Specifies the postal abbreviation for the directional prefix found to the left of the street name.

Item	Value	Description
Element name	<i>DirPrefix</i>	Specifies the postal abbreviation for the directional prefix found to the left of the street name..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Example	For the street address 100 North Main St, the <i>DirPrefix</i> value is N.	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ... >
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          
```

```

</Entered>
<Matched>
  <ParsedAddr>
    .
    .
    .
  </ParsedAddr>
  <AddrValidator>
    <ValidateResult>
      <AttemptedAt>Match5</AttemptedAt>

<ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
  <InputAddress>
    <Addr1>100 MAIN STREET</Addr1>
    <HouseNumberPrefix />
    <HouseSeparator />
    <HouseNumber>100</HouseNumber>
    <HouseNumberSuffix />
    <DirPrefix />
    .
    .
    .
  </InputAddress>
  .
  .
  .

```

DirSuffix element

Specifies the postal abbreviation for the directional prefix found to the right of the street name.

Item	Value	Description
Element name	<i>DirSuffix</i>	Specifies the postal abbreviation for the directional prefix found to the right of the street name..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Example	For the street address 100 Main St North, the <i>DirSuffix</i> value is N.	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
          </Matched>
          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>
            <Addr1>100 MAIN STREET</Addr1>
            <HouseNumberPrefix />
            <HouseSeparator />
            <HouseNumber>100</HouseNumber>
            <HouseNumberSuffix />
            <DirPrefix />
            <StreetName>MAIN</StreetName>
            <StreetSuffix>ST</StreetSuffix>
            <DirSuffix />
            .
            .
            .
          </InputAddress>
          <ResultAddress>
            <Addr1>100 S MAIN ST</Addr1>
            <AirStreetID>182926209</
AirStreetID>
            <HouseNumber>100</HouseNumber>
            <DirPrefix>S</DirPrefix>
            <StreetName>MAIN</StreetName>
            <StreetSuffix>ST</StreetSuffix>
            <DirSuffix />
            .
            .
            .
          </ResultAddress>
        .
        .
        .
      </Report ...>
    </Reports>
  </ISOResponses>

```

Distance element

Specifies the distance from the property to a point, based on the profile.

Item	Value	Description
Element name	<i>Distance</i>	Specifies the distance from the property to a point, based on the profile..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane, Earthquake, Severe Thunderstorm, Terrorism	
Values	This element specifies a distance that differs based on the profile.	- For a historical hurricane, it shows the distance from the property boundary to the storm track. - For a historical earthquake, it shows the distance from the property boundary to the point on the ground that is directly above the origin or epicenter of the earthquake. - For a severe thunderstorm, it shows the distance from the property boundary to the center of the storm. - For a terrorism target, it shows the distance from the property boundary to the target.

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
```

```

      .
      .
    </ResponseHeader>
    <Reports>
      <Report ...>
        <AddressProfile>
          <LocationInformation>
            .
            .
            .
          </LocationInformation>
          <HazardInformation>
            .
            .
            .
          <ProfileTerrorism>
            <NearestTarget>TRAIN STATION</NearestTarget>
            <Distance>0.20145692986724237</Distance>
            <LandmarkType>AIR</LandmarkType>
          </ProfileTerrorism>
        </HazardInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

DistanceToActualCoast element

Specifies the distance to the coast in actual miles.

Item	Value	Description
Element name	<i>DistanceToActualCoast</i>	Specifies the distance to the coast in actual miles. If the distance is greater than 25 miles, the service returns <code>Greater than 25 miles</code> .
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        <ProfileHurricane>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>0-10</RelRiskCounty>
            <RelRiskState>0-10</RelRiskState>
          </Risk>
          <CoastalCounty>No</CoastalCounty>
          <StormSurge>No</StormSurge>
          <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
          <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
          <Elevation>20 - 25</Elevation>
          <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
          <ZoneWindSpeed />
          <ZoneWindborneDebris />
          <ZoneTerrain />
          <ZoneHighVelocity />
          <ZoneWindSpeed2010 />
          <ZoneWindBorneDebris2010 />
          <ZoneTerrain2010 />
          <ZoneHighVelocity2010 />
        </ProfileHurricane>
        <ProfileEarthquake>
          .
          .
          .
        </ProfileEarthquake>
        <ProfileThunderstorm>
          .
          .
          .
        </ProfileThunderstorm>
        <ProfileWinterstorm>
          .
          .
          .
        </ProfileWinterstorm>
        <ProfileFlood>

```

```

        .
        .
        .
        </ProfileFlood>
        <ProfileTerrorism>
        .
        .
        .
        </ProfileTerrorism>
    </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

DistanceToCoast element

Specifies the distance in miles from the property to the effective coast, which AIR computes.

Item	Value	Description
Element name	<i>DistanceToCoast</i>	Specifies the distance in miles from the property to the effective coast, which AIR computes.. The effective coast is part of the coastline that AIR models and indicates where a hurricane's behavior changes from behavior over water to behavior over land. The effective coastline accounts for how wind speeds are affected near a given section of coastline. For example, a location in a wooded or highly developed section of the coastline might experience a lower windspeed than another location in a flat or open area of the coast, even if the two locations are the same distance from the actual coastline.

Item	Value	Description
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	0 - 500 feet or 500 - 1,000 feet or 1,000 - 1,500 feet or 1,500 - 2,000 feet or 2,000 - 2,500 feet or 2,500 feet - 1 mile or 1 - 2 miles or 2 - 3 miles or 3 - 4 miles or 4 - 5 miles or 5 - 10 miles or 10 - 15 miles or 15 - 20 miles or 20 - 25 miles or 25 - 50 miles or Greater than 50 miles	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        <ProfileHurricane>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>0-10</RelRiskCounty>
            <RelRiskState>0-10</RelRiskState>
          </Risk>
          <CoastalCounty>No</CoastalCounty>
        </ProfileHurricane>
      </HazardInformation>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

        <StormSurge>No</StormSurge>
        <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
        <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
        <Elevation>20 - 25</Elevation>
        <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
        <ZoneWindSpeed />
        <ZoneWindborneDebris />
        <ZoneTerrain />
        <ZoneHighVelocity />
        <ZoneWindSpeed2010 />
        <ZoneWindBorneDebris2010 />
        <ZoneTerrain2010 />
        <ZoneHighVelocity2010 />
        </ProfileHurricane>
        <ProfileEarthquake>
        .
        .
        .
        </ProfileEarthquake>
        <ProfileThunderstorm>
        .
        .
        .
        </ProfileThunderstorm>
        <ProfileWinterstorm>
        .
        .
        .
        </ProfileWinterstorm>
        <ProfileFlood>
        .
        .
        .
        </ProfileFlood>
        <ProfileTerrorism>
        .
        .
        .
        </ProfileTerrorism>
        </HazardInformation>
        </AddressProfile>
    </Report>
</Reports>
</ISOResponses>

```

DistanceToFault element

Specifies the distance in miles from the property to the corresponding fault.

Item	Value	Description
Element name	<i>DistanceToFault</i>	Specifies the distance in miles from the property to the corresponding fault..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:decimal	
Profile	Earthquake	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
          <MMI_250YR>7.3</MMI_250YR>
          <MMI_475YR>8.0</MMI_475YR>
          <Liquefaction>High</Liquefaction>
          <ZoneCADOI>Not Applicable</ZoneCADOI>
          <LandSlide />
          <GroundFailure>Not Applicable</GroundFailure>
        </ProfileEarthquake>
      </Report ...>
    </Reports>
  </ISOResponses>

```

```

    <SoilType>Soft Soil to Firm Soil</SoilType>
    <NumberOfFaults>5</NumberOfFaults>
    <NumberOfHistEvents>5</NumberOfHistEvents>
    <NearestFault>2</NearestFault>
    <Faults>
      <Fault>
        <FaultName>Southern Whidbey Island
        <DistanceToFault>14.05</
        <FaultLength>55.92</FaultLength>
        <EventMagnitude> 7.32</
        <ReturnPeriod>3680</ReturnPeriod>
      </Fault>
      .
      .
      .
    </Faults>
    <HistoryEvents>
      <HistoryEvent>
        <History>
          <Name>Unnamed</Name>
          <Year>1872</Year>
          <Date>December 15</Date>
          <Magnitude> 7.00</Magnitude>
          <Distance>96.72</Distance>
          <Depth>N/A</Depth>
        </History>
      </HistoryEvent>
      .
      .
      .
    </HistoryEvents>
  </ProfileEarthquake>
  .
  .
  .

```

Delivery element

Specifies delivery box and route information for the property.

Item	Value	Description
Element name	<i>Delivery</i>	Specifies delivery box and route information for the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

<i>BoxType</i>	required	The postal abbreviation for the mail delivery box type
<i>BoxValue</i>	required	The mail delivery box number
<i>RouteType</i>	required	The postal abbreviation for the delivery route type
<i>RouteValue</i>	required	The delivery route number

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                <Street NumPre="" Num="100" NumSuf=""
Seperator="" Name="MAIN" Type="ST" TypeEx="STREET" PostDir=""
PreDir="" />
                <Building UnitType="" UnitValue=""
FloorValue="" Type="" Name="" />
                <Delivery BoxType="" BoxValue=""
RouteType="" RouteValue="" />
                <Contact Company="" CareOf="" Attn=""
Other="" />
              </Address>
            </ParsedAddr>
          <AddrValidator>
            .
            .
            .
          </AddrValidator>
        
```

```

      .
      .
    </Matched>
  </LocationInformation>
  <HazardInformation>
    .
    .
    .
  </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Elevation element

Specifies the elevation of the property in feet above mean sea level.

Item	Value	Description
Element name	<i>Elevation</i>	Specifies the elevation of the property in feet above mean sea level..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	Less than 1 1 - 2 2 - 3 3 - 4 4 - 5 5 - 6 6 - 7 7 - 8 8 - 9 9 - 10 10 - 12 12 - 14 14 - 16 16 - 18 18 - 20 20 - 25 25 - 30 30 - 35 35 - 40 40 - 45 45 - 50 50 - 75 75 - 100 100 - 150 150 - 200 200 - 250 250 - 300 300 - 350 350 - 400 400 - 450 450 - 500 500 - 750 750 - 1000 Greater than 1000	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .

```

```

      .
    </ResponseHeader>
    <Reports>
      <Report ...>
        <AddressProfile>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          <ProfileHurricane>
            <Risk>
              <Risk100YR>0-5</Risk100YR>
              <Risk250YR>0-5</Risk250YR>
              <RiskAnnual><0.1</RiskAnnual>
              <RelRiskCounty>0-10</RelRiskCounty>
              <RelRiskState>0-10</RelRiskState>
            </Risk>
            <CoastalCounty>No</CoastalCounty>
            <StormSurge>No</StormSurge>
            <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
              <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
              <Elevation>20 - 25</Elevation>
              <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
              <ZoneWindSpeed />
              <ZoneWindborneDebris />
              <ZoneTerrain />
            <ZoneHighVelocity />
              <ZoneWindSpeed2010 />
              <ZoneWindBorneDebris2010 />
              <ZoneTerrain2010 />
            <ZoneHighVelocity2010 />
          </ProfileHurricane>
          <ProfileEarthquake>
            .
            .
            .
          </ProfileEarthquake>
          <ProfileThunderstorm>
            .
            .
            .
          </ProfileThunderstorm>
          <ProfileWinterstorm>
            .
            .
            .
          </ProfileWinterstorm>
          <ProfileFlood>
            .
            .
            .
          </ProfileFlood>
          <ProfileTerrorism>
            .
            .

```

```

        .
      </ProfileTerrorism>
    </HazardInformation>
  </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Entered element

Contains the address data that you supplied in the request.

Item	Value	Description
Element name	<i>Entered</i>	Contains the address data that you supplied in the request..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Source

```

<xs:element name="Entered" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="Address" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
            </Address>
          </Entered>
        </LocationInformation>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

                                <MatchLevel>3</MatchLevel>
                                <County>KING</County>
                                <GeoPath AreaLevel2="53"
AreaLevel3="033" />
                                </Address>
                                </Entered>
                                <Matched>
                                .
                                .
                                .
                                </Matched>
                                </LocationInformation>
                                <HazardInformation>
                                .
                                .
                                .
                                </HazardInformation>
                                </AddressProfile>
                                </Report>
                                </Reports>
</ISOResponses>

```

EventMagnitude element

Specifies the characteristic magnitude of earthquakes that occur on the corresponding fault as a value on the Moment scale.

Item	Value	Description
Element name	<i>EventMagnitude</i>	Specifies the characteristic magnitude of earthquakes that occur on the corresponding fault as a value on the Moment scale..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:decimal	
Profile	Earthquake	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>

```

```

<Report ...>
  <AddressProfile>
    <LocationInformation>
      .
      .
    </LocationInformation>
    <HazardInformation>
      .
      .
    <ProfileEarthquake>
      <Risk>
        <Risk100YR>0-5</Risk100YR>
        <Risk250YR>5-10</Risk250YR>
        <RiskAnnual>0.1</RiskAnnual>
        <RelRiskCounty>90-100</RelRiskCounty>
        <RelRiskState>90-100</RelRiskState>
      </Risk>
      <MMI_VI>25.34</MMI_VI>
      <MMI_VII>15.17</MMI_VII>
      <MMI_VIII>5.87</MMI_VIII>
      <MMI_IX>1.61</MMI_IX>
      <MMI_X>0.25</MMI_X>
      <MMI_XI>0.02</MMI_XI>
      <MMI_XII>0.00</MMI_XII>
      <MMI_100YR>5.9</MMI_100YR>
      <MMI_200YR>7.1</MMI_200YR>
      <MMI_250YR>7.3</MMI_250YR>
      <MMI_475YR>8.0</MMI_475YR>
      <Liquefaction>High</Liquefaction>
      <ZoneCADOI>Not Applicable</ZoneCADOI>
      <LandSlide />
      <GroundFailure>Not Applicable</GroundFailure>
      <SoilType>Soft Soil to Firm Soil</SoilType>
      <NumberOfFaults>5</NumberOfFaults>
      <NumberOfHistEvents>5</NumberOfHistEvents>
      <NearestFault>2</NearestFault>
      <Faults>
        <Fault>
          <FaultName>Southern Whidbey Island
        fault</FaultName>
          <DistanceToFault>14.05</
        DistanceToFault>
          <FaultLength>55.92</FaultLength>
          <EventMagnitude> 7.32</
        EventMagnitude>
          <ReturnPeriod>3680</ReturnPeriod>
        </Fault>
        .
        .
      </Faults>
      <HistoryEvents>
        <HistoryEvent>
          <History>
            <Name>Unnamed</Name>
            <Year>1872</Year>
            <Date>December 15</Date>

```

```

        <Magnitude> 7.00</Magnitude>
        <Distance>96.72</Distance>
        <Depth>N/A</Depth>
      </History>
    </HistoryEvent>
    .
    .
    .
  </HistoryEvents>
</ProfileEarthquake>
.
.
.

```

Fault element

Contains information about one active fault near the property.

Item	Value	Description
Element name	<i>Fault</i>	Contains information about one active fault near the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Profile	Earthquake	

Source

```

<xs:element name="Fault" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="FaultName" />
      <xs:element ref="DistanceToFault" />
      <xs:element ref="FaultLength" />
      <xs:element ref="EventMagnitude" />
      <xs:element ref="ReturnPeriod" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
  
```

```

      .
      .
    </ResponseHeader>
    <Reports>
      <Report ...>
        <AddressProfile>
          <LocationInformation>
            .
            .
            .
          </LocationInformation>
          <HazardInformation>
            .
            .
            .
          <ProfileEarthquake>
            <Risk>
              <Risk100YR>0-5</Risk100YR>
              <Risk250YR>5-10</Risk250YR>
              <RiskAnnual>0.1</RiskAnnual>
              <RelRiskCounty>90-100</RelRiskCounty>
              <RelRiskState>90-100</RelRiskState>
            </Risk>
            <MMI_VI>25.34</MMI_VI>
            <MMI_VII>15.17</MMI_VII>
            <MMI_VIII>5.87</MMI_VIII>
            <MMI_IX>1.61</MMI_IX>
            <MMI_X>0.25</MMI_X>
            <MMI_XI>0.02</MMI_XI>
            <MMI_XII>0.00</MMI_XII>
            <MMI_100YR>5.9</MMI_100YR>
            <MMI_200YR>7.1</MMI_200YR>
            <MMI_250YR>7.3</MMI_250YR>
            <MMI_475YR>8.0</MMI_475YR>
            <Liquefaction>High</Liquefaction>
            <ZoneCADOI>Not Applicable</ZoneCADOI>
            <LandSlide />
            <GroundFailure>Not Applicable</GroundFailure>
            <SoilType>Soft Soil to Firm Soil</SoilType>
            <NumberOfFaults>5</NumberOfFaults>
            <NumberOfHistEvents>5</NumberOfHistEvents>
            <NearestFault>2</NearestFault>
            <Faults>
              <Fault>
                <FaultName>Southern Whidbey Island
                <DistanceToFault>14.05</
                <FaultLength>55.92</FaultLength>
                <EventMagnitude> 7.32</
                <ReturnPeriod>3680</ReturnPeriod>
              </Fault>
              .
              .
              .
            </Faults>
            <HistoryEvents>
              <HistoryEvent>

```

```

        <History>
          <Name>Unnamed</Name>
          <Year>1872</Year>
          <Date>December 15</Date>
          <Magnitude> 7.00</Magnitude>
          <Distance>96.72</Distance>
          <Depth>N/A</Depth>
        </History>
      </HistoryEvent>
      .
      .
      .
    </HistoryEvents>
  </ProfileEarthquake>
  .
  .
  .

```

FaultLength element

Specifies the length of the corresponding fault in miles.

Item	Value	Description
Element name	<i>FaultLength</i>	Specifies the length of the corresponding fault in miles..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:decimal	
Profile	Earthquake	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
        </HazardInformation>
      </Report ...>
    </Reports>
  </ISOResponses>

```

```

.
.
<ProfileEarthquake>
  <Risk>
    <Risk100YR>0-5</Risk100YR>
    <Risk250YR>5-10</Risk250YR>
    <RiskAnnual>0.1</RiskAnnual>
    <RelRiskCounty>90-100</RelRiskCounty>
    <RelRiskState>90-100</RelRiskState>
  </Risk>
  <MMI_VI>25.34</MMI_VI>
  <MMI_VII>15.17</MMI_VII>
  <MMI_VIII>5.87</MMI_VIII>
  <MMI_IX>1.61</MMI_IX>
  <MMI_X>0.25</MMI_X>
  <MMI_XI>0.02</MMI_XI>
  <MMI_XII>0.00</MMI_XII>
  <MMI_100YR>5.9</MMI_100YR>
  <MMI_200YR>7.1</MMI_200YR>
  <MMI_250YR>7.3</MMI_250YR>
  <MMI_475YR>8.0</MMI_475YR>
  <Liquefaction>High</Liquefaction>
  <ZoneCADOI>Not Applicable</ZoneCADOI>
  <LandSlide />
  <GroundFailure>Not Applicable</GroundFailure>
  <SoilType>Soft Soil to Firm Soil</SoilType>
  <NumberOfFaults>5</NumberOfFaults>
  <NumberOfHistEvents>5</NumberOfHistEvents>
  <NearestFault>2</NearestFault>
  <Faults>
    <Fault>
      <FaultName>Southern Whidbey Island
      <DistanceToFault>14.05</
      <FaultLength>55.92</FaultLength>
      <EventMagnitude> 7.32</
      <ReturnPeriod>3680</ReturnPeriod>
    </Fault>
    .
    .
    .
  </Faults>
  <HistoryEvents>
    <HistoryEvent>
      <History>
        <Name>Unnamed</Name>
        <Year>1872</Year>
        <Date>December 15</Date>
        <Magnitude> 7.00</Magnitude>
        <Distance>96.72</Distance>
        <Depth>N/A</Depth>
      </History>
    </HistoryEvent>
    .
    .
    .
  </HistoryEvents>

```

```

</ProfileEarthquake>
.
.
.

```

FaultName element

Specifies the name of an active fault near the property.

Item	Value	Description
Element name	<i>FaultName</i>	Specifies the name of an active fault near the property. If a year appears in the name, then an earthquake along the entire length of the fault occurred in that year.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Earthquake	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
          </Risk>
        </ProfileEarthquake>
      </Report ...>
    </Reports>
  </ISOResponses>

```

```

        <Risk250YR>5-10</Risk250YR>
        <RiskAnnual>0.1</RiskAnnual>
        <RelRiskCounty>90-100</RelRiskCounty>
        <RelRiskState>90-100</RelRiskState>
    </Risk>
    <MMI_VI>25.34</MMI_VI>
    <MMI_VII>15.17</MMI_VII>
    <MMI_VIII>5.87</MMI_VIII>
    <MMI_IX>1.61</MMI_IX>
    <MMI_X>0.25</MMI_X>
    <MMI_XI>0.02</MMI_XI>
    <MMI_XII>0.00</MMI_XII>
    <MMI_100YR>5.9</MMI_100YR>
    <MMI_200YR>7.1</MMI_200YR>
    <MMI_250YR>7.3</MMI_250YR>
    <MMI_475YR>8.0</MMI_475YR>
    <Liquefaction>High</Liquefaction>
    <ZoneCADOI>Not Applicable</ZoneCADOI>
    <LandSlide />
    <GroundFailure>Not Applicable</GroundFailure>
    <SoilType>Soft Soil to Firm Soil</SoilType>
    <NumberOfFaults>5</NumberOfFaults>
    <NumberOfHistEvents>5</NumberOfHistEvents>
    <NearestFault>2</NearestFault>
    <Faults>
        <Fault>
            <FaultName>Southern Whidbey Island
            <DistanceToFault>14.05</
            <FaultLength>55.92</FaultLength>
            <EventMagnitude> 7.32</
            <ReturnPeriod>3680</ReturnPeriod>
        </Fault>
        .
        .
        .
    </Faults>
    <HistoryEvents>
        <HistoryEvent>
            <History>
                <Name>Nisqually Earthquake</Name>
                <Year>2001</Year>
                <Date>February 28</Date>
                <Magnitude> 6.80</Magnitude>
                <Distance>33.08</Distance>
                <Depth>29</Depth>
            </History>
        </HistoryEvent>
        .
        .
        .
    </HistoryEvents>
</ProfileEarthquake>
.
.
.

```

Faults element

Contains up to five *Fault* elements.

Item	Value	Description
Element name	<i>Faults</i>	Contains up to five <i>Fault</i> elements..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.
Profile	Earthquake	

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
        </ProfileEarthquake>
      </Report ...>
    </Reports>
  </ISOResponses>
```

```

<MMI_200YR>7.1</MMI_200YR>
<MMI_250YR>7.3</MMI_250YR>
<MMI_475YR>8.0</MMI_475YR>
<Liquefaction>High</Liquefaction>
<ZoneCADOI>Not Applicable</ZoneCADOI>
<LandSlide />
<GroundFailure>Not Applicable</GroundFailure>
<SoilType>Soft Soil to Firm Soil</SoilType>
<NumberOfFaults>5</NumberOfFaults>
<NumberOfHistEvents>5</NumberOfHistEvents>
<NearestFault>2</NearestFault>
<Faults>
  <Fault>
    <FaultName>Southern Whidbey Island
    <DistanceToFault>14.05</
    <FaultLength>55.92</FaultLength>
    <EventMagnitude> 7.32</
    <ReturnPeriod>3680</ReturnPeriod>
  </Fault>
  .
  .
  .
</Faults>
<HistoryEvents>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1872</Year>
      <Date>December 15</Date>
      <Magnitude> 7.00</Magnitude>
      <Distance>96.72</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>
  .
  .
  .
</HistoryEvents>
</ProfileEarthquake>
.
.
.

```

Flood100YR element

Specifies the distance in miles from the property boundary to a 100-year flood plain.

Item	Value	Description
Element name	<i>Flood100YR</i>	Specifies the distance in miles from the property boundary to a 100-year flood plain..

Item	Value	Description
		A 100-year flood plain is an area in which the flood boundary has a 1% or greater chance of being equaled or exceeded in a given year. This element is not the same as the <i>AIRFlood100YR</i> element.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Flood	
Values	If the distance is greater than five miles, the service returns <i>More than 5</i> .	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
      <ProfileFlood>
        <Source>AIR</Source>
        <FloodZone>100-Year</FloodZone>
        <FloodZoneFEMA>AE</FloodZoneFEMA>
        <Elevation>9 - 10</Elevation>
        <FloodZoneDistance>

```

```

        <WaterBody>More than 5</WaterBody>
        <Flood100YR>0.030</Flood100YR>
        <Flood500YR>0.040</Flood500YR>
    </FloodZoneDistance>
    <AIRFloodZone>100-Year</AIRFloodZone>
    <FloodZoneAIRDistance>
        <AIRFlood100YR>0.052</Flood100YR>
        <AIRFlood500YR>0.126</Flood500YR>
    </FloodZoneAIRDistance>
    <BaseFloodElevation>8 - 9</
BaseFloodElevation>
    </ProfileFlood>
    .
    .
    </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Flood500YR element

Specifies the distance in miles from the property boundary to a 500-year flood plain.

Item	Value	Description
Element name	<i>Flood500YR</i>	Specifies the distance in miles from the property boundary to a 500-year flood plain.. A 500-year flood plain is an area in which the flood boundary has a 0.2% or greater chance of being equaled or exceeded in a given year. This element is not the same as the <i>AIRFlood500YR</i> element.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Flood	

Item	Value	Description
Values	A number between 0 and 4	If the distance is greater than five miles, the service returns More than 5.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
      <ProfileFlood>
        <Source>AIR</Source>
        <FloodZone>100-Year</FloodZone>
        <FloodZoneFEMA>AE</FloodZoneFEMA>
        <Elevation>9 - 10</Elevation>
        <FloodZoneDistance>
          <WaterBody>More than 5</WaterBody>
          <Flood100YR>0.030</Flood100YR>
          <Flood500YR>0.040</Flood500YR>
        </FloodZoneDistance>
        <AIRFloodZone>100-Year</AIRFloodZone>
        <FloodZoneAIRDistance>
          <AIRFlood100YR>0.052</Flood100YR>
          <AIRFlood500YR>0.126</Flood500YR>
        </FloodZoneAIRDistance>
        <BaseFloodElevation>8 - 9</
BaseFloodElevation>
      </ProfileFlood>
      .
      .
    </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>

```

FloodZone element

Specifies the type of flood zone that the property resides in.

Item	Value	Description
Element name	<i>FloodZone</i>	Specifies the type of flood zone that the property resides in.. This element is not the same as the <i>AIRFloodZone</i> element.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Flood	
Values	A value from this list.	• <i>Outside</i> = The property is not in a flood zone. • <i>100-year</i> = The property is in a 100-year flood zone. • <i>500-Year</i> = The property is in a 500-year flood zone. • <i>Water Body</i> = The property is very close to the water. • <i>No data</i> = The service could not obtain flood hazard information for the property. • <i>Unknown</i> = The property is in Flood Zone D. Flood Zone D applies to areas that have possible but undetermined flood hazards because analyses of flood hazards have been conducted.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
      <ProfileFlood>
        <Source>AIR</Source>
        <FloodZone>100-Year</FloodZone>
        <FloodZoneFEMA>AE</FloodZoneFEMA>
        <Elevation>9 - 10</Elevation>
        <FloodZoneDistance>
          <WaterBody>More than 5</WaterBody>
          <Flood100YR>0.030</Flood100YR>
          <Flood500YR>0.040</Flood500YR>
        </FloodZoneDistance>
        <AIRFloodZone>100-Year</AIRFloodZone>
        <FloodZoneAIRDistance>
          <AIRFlood100YR>0.052</Flood100YR>
          <AIRFlood500YR>0.126</Flood500YR>
        </FloodZoneAIRDistance>
        <BaseFloodElevation>8 - 9</
BaseFloodElevation>
      </ProfileFlood>
      .
      .
      .
    </HazardInformation>
  </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

FloodZoneAIRDistance element

Contains the *AIRFlood100YR* and *Flood500YR* elements.

Item	Value	Description
Element name	<i>FloodZoneAIRDistance</i>	Contains the <i>AIRFlood100YR</i> and <i>Flood500YR</i> elements. .

Item	Value	Description
		The elements specify the distance to the nearest AIR-defined flood hazards.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.
Profile	Flood	

Source

```
<xs:element name="AIRFloodZoneDistance" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="AIRFlood100YR" />
      <xs:element ref="AIRFlood500YR" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
      <ProfileFlood>
        <Source>AIR</Source>
        <FloodZone>100-Year</FloodZone>
        <FloodZoneFEMA>AE</FloodZoneFEMA>
        <Elevation>9 - 10</Elevation>
        <FloodZoneDistance>
          <WaterBody>More than 5</WaterBody>
          <Flood100YR>0.030</Flood100YR>
```

```

        <Flood500YR>0.040</Flood500YR>
      </FloodZoneDistance>
      <AIRFloodZone>100-Year</AIRFloodZone>
      <FloodZoneAIRDistance>
        <AIRFlood100YR>0.052</Flood100YR>
        <AIRFlood500YR>0.126</Flood500YR>
      </FloodZoneAIRDistance>
      <BaseFloodElevation>8 - 9</
BaseFloodElevation>
    </ProfileFlood>
    .
    .
    .
  </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

FloodZoneDistance element

Contains the WaterBody, Flood100YR, and Flood500YR elements. These elements specify the distance to the nearest flood hazards.

Item	Value	Description
Element name	<i>FloodZoneDistance</i>	Contains the WaterBody, Flood100YR, and Flood500YR elements. These elements specify the distance to the nearest flood hazards..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.
Profile	Flood	

Source

```

<xs:element name="FloodZoneDistance" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="WaterBody" />
      <xs:element ref="Flood100YR" />
      <xs:element ref="Flood500YR" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
          <ProfileFlood>
            <Source>AIR</Source>
            <FloodZone>100-Year</FloodZone>
            <FloodZoneFEMA>AE</FloodZoneFEMA>
            <Elevation>9 - 10</Elevation>
            <FloodZoneDistance>
              <WaterBody>More than 5</WaterBody>
              <Flood100YR>0.030</Flood100YR>
              <Flood500YR>0.040</Flood500YR>
            </FloodZoneDistance>
            <AIRFloodZone>100-Year</AIRFloodZone>
            <FloodZoneAIRDistance>
              <AIRFlood100YR>0.052</Flood100YR>
              <AIRFlood500YR>0.126</Flood500YR>
            </FloodZoneAIRDistance>
            <BaseFloodElevation>8 - 9</
BaseFloodElevation>
          </ProfileFlood>
          .
          .
          .
        </HazardInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

FloodZoneFEMA element

Specifies the FEMA flood zone that the property resides in.

Item	Value	Description
Element name	<i>FloodZoneFEMA</i>	Specifies the FEMA flood zone that the property resides in..
Where used	response	A <i>response</i> returns the analysis results and

Item	Value	Description
		the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Flood	

Values

The flood zone may be one of the following.

Zone	Definition	More info
100IC	An area where the 100-year flooding is contained within the channel banks and the channel is too narrow to show to scale.	An arbitrary channel width of 3 meters is shown. Base Flood Elevations are not shown in this area, although they may be reflected on the corresponding profile.
500IC	An area where the 500-year flooding is contained within the channel banks and the channel is too narrow to show to scale.	An arbitrary channel width of 3 meters is shown.
A	An area inundated by 100-year flooding, for which no Base Flood Elevations have been determined.	
A99	An area inundated by 100-year flooding, for which no Base Flood Elevations have been determined.	This is an area to be protected from the 100-year flood by a Federal flood protection system under construction.
AE	An area inundated by 100-year flooding, for which Base Flood Elevations have been determined.	
AH	An area inundated by 100-year flooding (usually an area of ponding), for which Base Flood Elevations have been determined; .	Flood depths range from 1 to 3 feet.
ANI	An area that is located within a community or county that is not mapped on any published FIRM.	
AO	An area inundated by 100-year flooding (usually sheet flow on sloping terrain), for which average depths have been determined.	Flood depths range from 1 to 3 feet.

Zone	Definition	More info
AOVEL	An alluvial fan inundated by 100-year flooding (usually sheet flow on sloping terrain), for which average flood depths and velocities have been determined.	Flood depths range from 1 to 3 feet.
AR	An area inundated by flooding, for which Base Flood Elevations or average depths have been determined.	This is an area that was previously, and will again, be protected from the 100-year flood by a Federal flood protection system whose restoration is Federally funded and underway.
D	An area of undetermined but possible flood hazards.	
FPQ	An area designated as a "Flood Prone Area" on a map prepared by USGS and the Federal Insurance Administration.	This area has been delineated based on available information on past floods. This is an area inundated by 100-year flooding for which no Base Flood Elevations have been determined.
FWIC	An area where the floodway is contained within the channel banks and the channel is too narrow to show to scale.	An arbitrary channel width of 3 meters is shown. Base Flood Elevations are not shown in this area, although they may be reflected on the corresponding profile.
IN	An area designated as within a "Special Flood Hazard Area" (or SFHA) on a FIRM.	This is an area inundated by 100-year flooding for which Base Flood Elevations or velocity may have been determined. No distinctions are made between the different flood hazard zones that may be included within the SFHA. These may include Zones A, AE, AO, AH, A99, AR, V, or VE.
OUT	An area designated as outside a "Special Flood Hazard Area" (or SFHA) on a FIRM.	This is an area that: • is inundated by 500-year flooding, or • is inundated by 100-year flooding with average depths of less than 1 foot, or • that has drainage areas less than 1 square mile, or • is protected by levees from 100-year flooding, or

Zone	Definition	More info
		is determined to be outside the 100- and 500-year floodplains No distinctions are made between these different conditions. These may include both shaded and unshaded areas of Zone X.
UNDES	A body of open water, such as a pond, lake ocean, etc., located within a community's jurisdictional limit, that has no defined flood hazard.	
V	An area inundated by 100-year flooding with velocity hazard (wave action). No Base Flood Elevations have been determined.	
VE	An area inundated by 100-year flooding with velocity hazard (wave action). Base Flood Elevations have been determined.	
X	Zones B, C, and X are low-risk areas that are outside the 100- and 500-year floodplains or are protected by levees.	These zones have a 1% annual change of sheet flow flooding where average depths are less than one foot, and 1% annual chance of stream flooding where the drainage area is less than 1 square mile. There are no base flood elevations or depths in these zones.
X500	An area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 100-year flooding.	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>

```

```

      .
      .
      .
    </LocationInformation>
    <HazardInformation>
      .
      .
      .
    <ProfileFlood>
      <Source>AIR</Source>
      <FloodZone>100-Year</FloodZone>
      <FloodZoneFEMA>AE</FloodZoneFEMA>
      <Elevation>9 - 10</Elevation>
      <FloodZoneDistance>
        <WaterBody>More than 5</WaterBody>
        <Flood100YR>0.030</Flood100YR>
        <Flood500YR>0.040</Flood500YR>
      </FloodZoneDistance>
      <AIRFloodZone>100-Year</AIRFloodZone>
      <FloodZoneAIRDistance>
        <AIRFlood100YR>0.052</Flood100YR>
        <AIRFlood500YR>0.126</Flood500YR>
      </FloodZoneAIRDistance>
      <BaseFloodElevation>8 - 9</
BaseFloodElevation>
    </ProfileFlood>
      .
      .
      .
    </HazardInformation>
  </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

FrequencyHail element

Specifies the frequency of hailstorms that have historically affected the property.

Item	Value	Description
Element name	<i>FrequencyHail</i>	Specifies the frequency of hailstorms that have historically affected the property.. AIR computes the frequency using historical data from the Global Reanalysis Project Data Set maintained by the National Center for Environmental Prediction (NCEP) and the National Center for Atmospheric Research (NCAR) in cooperation with the

Item	Value	Description
		World Meteorological Organization (WMO). Furthermore, AIR simulates hundreds of individual historical storms to capture the vertical elements in the storms that lead to damaging factors. AIR then uses a stochastic ensemble to extend the data and assess the occurrence of hailstorms.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Severe Thunderstorm	
Values	Very High or High or Moderate or Low or Very low	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileThunderstorm>
          <FrequencyTornado>Very Low</FrequencyTornado>
          <FrequencyHail>Very Low</FrequencyHail>
        </ProfileThunderstorm>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

<FrequencySLWind>Very Low</FrequencySLWind>
<Risk>
  <Risk100YR>0-5</Risk100YR>
  <Risk250YR>0-5</Risk250YR>
  <RiskAnnual><0.1</RiskAnnual>
  <RelRiskCounty>20-30</RelRiskCounty>
  <RelRiskState>20-30</RelRiskState>
</Risk>
<HistoryEvents>
  <HistoryEventsTornado>
    <HistoryEvent>
      <Year>1969</Year>
      <Date>December 12</Date>
      <Distance> 4.89</Distance>
      <Intensity>3</Intensity>
    </HistoryEvent>
    .
    .
  </HistoryEventsTornado>
  <HistoryEventsHail>
    <HistoryEvent>
      <Year>1972</Year>
      <Date>June 8</Date>
      <Distance>13.72</Distance>
      <Intensity>1.3-2.0</Intensity>
    </HistoryEvent>
    .
    .
  </HistoryEventsHail>
  <HistoryEventsSLWind>
    <HistoryEvent>
      <Year>1956</Year>
      <Date>March 3</Date>
      <Distance> 7.10</Distance>
      <Intensity>70-80</Intensity>
    </HistoryEvent>
    .
    .
  </HistoryEventsSLWind>
</HistoryEvents>
</ProfileThunderstorm>
.
.
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

FrequencySLWind element

Specifies the frequency of stright-line windstorms that have historically affected the property.

Item	Value	Description
Element name	<i>FrequencySLWind</i>	Specifies the frequency of stright-line windstorms that have historically affected the property.. AIR computes the frequency using historical data from the Global Reanalysis Project Data Set maintained by the National Center for Environmental Prediction (NCEP) and the National Center for Atmospheric Research (NCAR) in cooperation with the World Meteorological Organization (WMO). Furthermore, AIR simulates hundreds of individual historical storms to capture the vertical elements in the storms that lead to damaging factors. AIR then uses a stochastic ensemble to extend the data and assess the occurrence of straight-line windstorms.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Severe Thunderstorm	
Values	Very high High Moderate Low Very low	

Response example

```
<ISOResponses>
  <ResponseHeader>
```

```

.
.
.
</ResponseHeader>
<Reports>
  <Report ...>
    <AddressProfile>
      <LocationInformation>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
      <ProfileThunderstorm>
        <FrequencyTornado>Very Low</FrequencyTornado>
        <FrequencyHail>Very Low</FrequencyHail>
        <FrequencySLWind>Very Low</FrequencySLWind>
        <Risk>
          <Risk100YR>0-5</Risk100YR>
          <Risk250YR>0-5</Risk250YR>
          <RiskAnnual><0.1</RiskAnnual>
          <RelRiskCounty>20-30</RelRiskCounty>
          <RelRiskState>20-30</RelRiskState>
        </Risk>
        <HistoryEvents>
          <HistoryEventsTornado>
            <HistoryEvent>
              <Year>1969</Year>
              <Date>December 12</Date>
              <Distance> 4.89</Distance>
              <Intensity>3</Intensity>
            </HistoryEvent>
            .
            .
            .
          </HistoryEventsTornado>
          <HistoryEventsHail>
            <HistoryEvent>
              <Year>1972</Year>
              <Date>June 8</Date>
              <Distance>13.72</Distance>
              <Intensity>1.3-2.0</Intensity>
            </HistoryEvent>
            .
            .
            .
          </HistoryEventsHail>
          <HistoryEventsSLWind>
            <HistoryEvent>
              <Year>1956</Year>
              <Date>March 3</Date>
              <Distance> 7.10</Distance>
              <Intensity>70-80</Intensity>
            </HistoryEvent>
            .
            .

```

```

        .
        </HistoryEventsSLWind>
    </HistoryEvents>
</ProfileThunderstorm>
.
.
    </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

FrequencyTornado element

Specifies the frequency of tornadoes that have historically affected the property.

Item	Value	Description
Element name	<i>FrequencyTornado</i>	Specifies the frequency of tornadoes that have historically affected the property.. AIR computes the frequency using historical data from the Global Reanalysis Project Data Set maintained by the National Center for Environmental Prediction (NCEP) and the National Center for Atmospheric Research (NCAR) in cooperation with the World Meteorological Organization (WMO). Furthermore, AIR simulates hundreds of individual historical storms to capture the vertical elements in the storms that lead to damaging factors. AIR then uses a stochastic ensemble to extend the data and assess the occurrence of tornadoes.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Item	Value	Description
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Severe Thunderstorm	
Values	Very High or High or Moderate or Low or Very Low	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileThunderstorm>
          <FrequencyTornado>Very Low</FrequencyTornado>
          <FrequencyHail>Very Low</FrequencyHail>
          <FrequencySLWind>Very Low</FrequencySLWind>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>20-30</RelRiskCounty>
            <RelRiskState>20-30</RelRiskState>
          </Risk>
          <HistoryEvents>
            <HistoryEventsTornado>
              <HistoryEvent>
                <Year>1969</Year>
                <Date>December 12</Date>
                <Distance> 4.89</Distance>
                <Intensity>3</Intensity>
              </HistoryEvent>
              .
              .
            </HistoryEventsTornado>
            <HistoryEventsHail>
              <HistoryEvent>

```

```

        <Year>1972</Year>
        <Date>June 8</Date>
        <Distance>13.72</Distance>
        <Intensity>1.3-2.0</Intensity>
    </HistoryEvent>
    .
    .
    .
</HistoryEventsHail>
<HistoryEventsSLWind>
    <HistoryEvent>
        <Year>1956</Year>
        <Date>March 3</Date>
        <Distance> 7.10</Distance>
        <Intensity>70-80</Intensity>
    </HistoryEvent>
    .
    .
    .
</HistoryEventsSLWind>
</HistoryEvents>
</ProfileThunderstorm>
.
.
.
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

GeoCode element

Specifies the latitude and longitude of the property and information about how the service processed the geocode.

Item	Value	Description
Element name	<i>GeoCode</i>	Specifies the latitude and longitude of the property and information about how the service processed the geocode..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

Item	Value	Description
Attribute name	<i>Confidence</i>	

Item	Value	Description
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>Latitude</i>	Specifies the latitude used by the service
Data type	xs:decimal	
Use	optional	

Item	Value	Description
Attribute name	<i>Longitude</i>	Specifies the longitude used by the service
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>MatchLevel</i>	Specifies the name of the match level the service obtained for the geocode. See GeocodeMatch element .
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Item	Value	Description
Attribute name	<i>MatchNorm</i>	Specifies the numerical value that corresponds to the match level the service obtained for the geocode. See GeocodeMatch element .
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>MaximumError</i>	

Item	Value	Description
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>MeanError</i>	
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>Vendor</i>	Specifies the vendor that supplied the geocode. The vendor is AIR by default.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Item	Value	Description
Attribute name	<i>DoAreacode</i>	
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
```

```

        <StateProv>WA</StateProv>
        <Country>US</Country>
        <MatchLevel>3</MatchLevel>
        <County>KING</County>
        <GeoPath AreaLevel2="53"
AreaLevel3="033" />
        </Address>
    </Entered>
    <Matched>
        <ParsedAddr>
            .
            .
            .
        </ParsedAddr>
        <AddrValidator>
            <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

<ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
            <InputAddress>
                <Addr1>100 MAIN STREET</Addr1>
                .
                .
                .
            </InputAddress>
            <ResultAddress>
                <Addr1>100 S MAIN ST</Addr1>
                .
                .
                .
            </ResultAddress>
            <Message>No Rows found for given
House Number;House Number out of range;Street Info is in City;Input
ZIP5 is blank;</Message>
            </ValidateResult>
            <ProcessErrors>None</ProcessErrors>
            <ProcessWarnings>None</ProcessWarnings>
        </AddrValidator>
        <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
        <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"
AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
        <Match>
            .
            .
            .
        </Match>
    </Matched>
</LocationInformation>
<HazardInformation>
    .
    .
    .
</HazardInformation>
</AddressProfile>
</Report>

```

```
</Reports>
</ISOResponses>
```

GeocodeMatch element

Specifies the match level the service obtained for the geocode.

Item	Value	Description
Element name	<i>GeocodeMatch</i>	Specifies the match level the service obtained for the geocode..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

This element takes two attributes: *name* (data type `xs:string`) and *value* (data type `xs:integer`).

Item	Value	Description
Attribute name	<i>name</i>	Specifies the name of the match level.
Data type	<code>xs:string</code>	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	
Values	A value from the list.	<code>None</code> = The service cannot determine the geocode. <code>User Supplied</code> = The user provided the Latitude and Longitude values in the request. <code>Exact</code> = The match is of the highest precision. <code>Zip9</code> = The service puts the geocode at the center of the nine-digit postal code, which is a small area. The center may be the geometric center or the center of population mass, depending on the data source. <code>Segment Imputed</code> = The service puts the geocode at the correct house segment on the correct street. The service may also put the geocode on the correct side of street. <code>Street Imputed</code> = The service puts the geocode at an estimated location

Item	Value	Description
		on the correct street. The service matches at this level when the house number that you supplied is not on the street that you supplied. • <i>Street Centroid</i> = The service puts the geocode on the street's center line at the house number halfway between the smallest and largest house number on the street. • <i>Postal Centroid</i> = The service puts the geocode at the center of the five-digit postal code. • <i>City Centroid</i> = The service puts the geocode at the center of the city. • <i>County Centroid</i> = The service puts the geocode at the center of the county.

Item	Value	Description
Attribute name	<i>value</i>	Specifies the numerical value that corresponds to the match level.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	
Values	An integer between -1 and 9, inclusive	• -1 = none • 0 = exact • 1 = Zip9 • 2 = Segment Imputed • 3 = Street Imputed • 4 = Street Centroid • 5 = Postal Centroid • 6 = City Centroid • 7 = County Centroid • 9 = User-supplied

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
```

```

<Reports>
  <Report ...>
    <AddressProfile>
      <LocationInformation>
        <Entered>
          <Address>
            .
            .
            .
          </Address>
        </Entered>
        <Matched>
          <ParsedAddr>
            .
            .
            .
          </ParsedAddr>
          <AddrValidator>
            <ValidateResult>
              <AttemptedAt>Match5</AttemptedAt>
            </ValidateResult>
          </AddrValidator>
          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>
            .
            .
            .
          </InputAddress>
          <ResultAddress>
            .
            .
            .
          </ResultAddress>
          <Message>...</Message>
        </ValidateResult>
        <ProcessErrors>None</ProcessErrors>
        <ProcessWarnings>None</ProcessWarnings>
      </Matched>
    </LocationInformation>
    <GeoCode .../>
    <GeoPath .../>
    <Match>
      <ValidatorMatch name="Match5" value="6" /
    </Match>
    <GeocodeMatch name="SegmentImputed"
  </Report ...>
  </AddressProfile>
  </Reports>

```

GeoPath element

Contains address and geographical information used in the analysis.

Item	Value	Description
Element name	<i>GeoPath</i>	Contains address and geographical information used in the analysis..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

Item	Value	Description
Attribute name	<i>AreaLevel1</i>	Specifies the country that corresponds to the geocode. A value of 1 represents the United States.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>AreaLevel2</i>	Specifies the FIPS code for the state that corresponds to the geocode.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>AreaLevel3</i>	Specifies the FIPS code for the county that corresponds to the geocode.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>AreaLevel4</i>	Specifies the ZIP code that corresponds to the geocode.

Item	Value	Description
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>AreaScheme</i>	Specifies the hierarchy of geographic resolutions defined for the part of the world where the geocode is located. For example, the area scheme for the U.S. specifies that locations are defined by a country, state, county, and ZIP code.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	optional	

Item	Value	Description
Attribute name	<i>City</i>	Specifies the city that corresponds to the geocode.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Item	Value	Description
Attribute name	<i>County</i>	Specifies the county that corresponds to the geocode.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Item	Value	Description
Attribute name	<i>GUID</i>	Specifies the globally unique identifier (GUID) that corresponds to the geocode.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Item	Value	Description
Attribute name	<i>PostalCode</i>	Specifies the five-digit ZIP code that corresponds to the geocode.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Item	Value	Description
Attribute name	<i>State</i>	Specifies the state that corresponds to the geocode.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
              <GeoPath AreaLevel2="53"
AreaLevel3="033" />
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              .
              .
            </ParsedAddr>
          <AddrValidator>
            <ValidateResult>
              <AttemptedAt>Match5</AttemptedAt>

```

```

<ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
  <InputAddress>
    <Addr1>100 MAIN STREET</Addr1>
    .
    .
  </InputAddress>
  <ResultAddress>
    <Addr1>100 S MAIN ST</Addr1>
    .
    .
  </ResultAddress>
  <Message>No Rows found for given
House Number;House Number out of range;Street Info is in City;Input
ZIP5 is blank;</Message>
  </ValidateResult>
  <ProcessErrors>None</ProcessErrors>
  <ProcessWarnings>None</ProcessWarnings>
</AddrValidator>
  <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
  <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"
AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
  <Match>
    .
    .
  </Match>
</Matched>
</LocationInformation>
<HazardInformation>
  .
  .
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

GeoPoint element

Contains information about the geocode of a location included in the loss analysis.

Item	Value	Description
Element name	<i>GeoPoint</i>	Contains information about the geocode of a location included in the loss analysis. The service obtains the latitude from the

Item	Value	Description
		<i>Longitude</i> and <i>Longitude</i> elements of the request or from the AIR Address Service if you supplied a street address rather than a geocode. See Using geocodes in service requests .
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```
<xs:element name="GeoPoint" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:choice maxOccurs="unbounded">
      <xs:element ref="GeoLat" />
      <xs:element ref="GeoLong" />
      <xs:element ref="MatchLevel" />
      <xs:element ref="Status" />
    </xs:choice>
  </xs:complexType>
</xs:element>
```

Example

```
<ISOResponses>
  <ResponseHeader>
    <AIRTrack>
      .
      .
      .
    </AIRTrack>
    <runtimeinformation>
      .
      .
      .
    </runtimeinformation>
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" version="3.5.0.3"
timespan="4.016" sequence="110" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted=""
ASF.StatusMessage="" ASF.Logfile="">
      <LossAnalysis engine="15.0.0 20130531">
```

```

        <Data type="Locations">
          <Locations>
            <Location>
              <ID>Loc06</ID>
              <LocationTerms>
                <LocationTerm>
                  <StrPerils>PWH</StrPerils>
                </LocationTerm>
              </LocationTerms>
              <Address>
                <Country>US</Country>
                <AreaModeled>MA</AreaModeled>
                <PostalCodeModeled>02116</
PostalCodeModeled>
                <SubareaModeled>Suffolk</
SubareaModeled>
                <GeoPoint>
                  <GeoLat>42.3476066589355</
GeoLat>
                  <GeoLong>-71.0762481689453</
GeoLong>
                  <MatchLevel>UserSupplied</
MatchLevel>
                </GeoPoint>
              </Address>
            </Location>
          </Locations>
        </Data>
      .

```

GroundFailure element

For locations in California, indicates whether the property is in an Alquist-Priolo fault rupture zone.

Item	Value	Description
Element name	<i>GroundFailure</i>	For locations in California, indicates whether the property is in an Alquist-Priolo fault rupture zone. See About Alquist-Priolo earthquake fault zones .
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Item	Value	Description
Profile	Earthquake	
Values	Yes, No, or Not Applicable	• Yes = The property is an Alquist-Priolo fault rupture zone. • No = The property is in California, but is not in an Alquist-Priolo fault rupture zone. • Not Applicable = The property is not in California.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
          <MMI_250YR>7.3</MMI_250YR>
          <MMI_475YR>8.0</MMI_475YR>
          <Liquefaction>High</Liquefaction>
          <ZoneCADOI>Not Applicable</ZoneCADOI>
        </ProfileEarthquake>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

        <Landslide />
        <GroundFailure>Not Applicable</GroundFailure>
        <SoilType>Soft Soil to Firm Soil</SoilType>
        <NumberOfFaults>5</NumberOfFaults>
        <NumberOfHistEvents>5</NumberOfHistEvents>
        <NearestFault>2</NearestFault>
        <Faults>
            <Fault>
                <FaultName>Southern Whidbey Island
            fault</FaultName>
                <DistanceToFault>14.05</
DistanceToFault>
                <FaultLength>55.92</FaultLength>
                <EventMagnitude> 7.32</
EventMagnitude>
                <ReturnPeriod>3680</ReturnPeriod>
            </Fault>
            .
            .
            .
        </Faults>
        <HistoryEvents>
            <HistoryEvent>
                <History>
                    <Name>Unnamed</Name>
                    <Year>1872</Year>
                    <Date>December 15</Date>
                    <Magnitude> 7.00</Magnitude>
                    <Distance>96.72</Distance>
                    <Depth>N/A</Depth>
                </History>
            </HistoryEvent>
            .
            .
            .
        </HistoryEvents>
    </ProfileEarthquake>
    .
    .
    .

```

HazardInformation element

Contains the hazard profiles that are relevant to the property.

Item	Value	Description
Element name	<i>HazardInformation</i>	Contains the hazard profiles that are relevant to the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Source

```

<xs:element name="HazardInformation" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:all>
      <xs:element ref="ProfileHurricane" minOccurs="0"
maxOccurs="1" />
      <xs:element ref="ProfileEarthquake" minOccurs="0"
maxOccurs="1" />
      <xs:element ref="ProfileThunderstorm" minOccurs="0"
maxOccurs="1" />
      <xs:element ref="ProfileFlood" minOccurs="0" maxOccurs="1" />
      <xs:element ref="ProfileTerrorism" minOccurs="0"
maxOccurs="1" />
      <xs:element ref="ProfileWinterstorm" minOccurs="0"
maxOccurs="1" />
    </xs:all>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          <ProfileHurricane>
            .
            .
            .
          </ProfileHurricane>
          <ProfileEarthquake>
            .
            .
            .
          </ProfileEarthquake>
          <ProfileThunderstorm>
            .
            .
            .
          </ProfileThunderstorm>
          <ProfileWinterstorm>
            .
            .
            .
          </ProfileWinterstorm>
        </HazardInformation>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

        <ProfileFlood>
        .
        .
        </ProfileFlood>
        <ProfileTerrorism>
        .
        .
        </ProfileTerrorism>
    </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

HazardAnalysis element

Contains the *Product* element.

Item	Value	Description
Element name	<i>HazardAnalysis</i>	Contains the <i>Product</i> element..
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.

Source

```

<xs:element name="HazardAnalysis" type="Products" xmlns:xs="http://
www.w3.org/2001/XMLSchema" />

```

Request example

```

<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>
      <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
      <Address>
        <Latitude></Latitude>
        <Longitude></Longitude>
        <Addr1>100 Main Street</Addr1>
        <City>Seattle</City>

```

```

        <County>King</County>
        <StateProv>WA</StateProv>
        <Country>US</Country>
    </Address>
</Addresses>
</ISORequest>
</ISORequests>

```

History element

Contains information about one historical hurricane or earthquake that affected the property.

Item	Value	Description
Element name	<i>History</i>	Contains information about one historical hurricane or earthquake that affected the property. .
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Profile	Hurricane, Earthquake	

Source

```

<xs:element name="History" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="Name" />
      <xs:element ref="Year" minOccurs="0" />
      <xs:element ref="Date" minOccurs="0" />
      <xs:choice minOccurs="0">
        <xs:element ref="Magnitude" />
        <xs:element ref="InOut" />
        <xs:sequence>
          <xs:element ref="SSLFIntensity" />
          <xs:element ref="SSIntensity" />
        </xs:sequence>
      </xs:choice>
      <xs:element ref="Distance" />
      <xs:element ref="Depth" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .

```

```

      .
      .
    </ResponseHeader>
    <Reports>
      <Report ...>
        <AddressProfile>
          <LocationInformation>
            .
            .
            .
          </LocationInformation>
          <HazardInformation>
            .
            .
            .
          <ProfileEarthquake>
            <Risk>
              <Risk100YR>0-5</Risk100YR>
              <Risk250YR>5-10</Risk250YR>
              <RiskAnnual>0.1</RiskAnnual>
              <RelRiskCounty>90-100</RelRiskCounty>
              <RelRiskState>90-100</RelRiskState>
            </Risk>
            <MMI_VI>25.34</MMI_VI>
            <MMI_VII>15.17</MMI_VII>
            <MMI_VIII>5.87</MMI_VIII>
            <MMI_IX>1.61</MMI_IX>
            <MMI_X>0.25</MMI_X>
            <MMI_XI>0.02</MMI_XI>
            <MMI_XII>0.00</MMI_XII>
            <MMI_100YR>5.9</MMI_100YR>
            <MMI_200YR>7.1</MMI_200YR>
            <MMI_250YR>7.3</MMI_250YR>
            <MMI_475YR>8.0</MMI_475YR>
            <Liquefaction>High</Liquefaction>
            <ZoneCADOI>Not Applicable</ZoneCADOI>
            <LandSlide />
            <GroundFailure>Not Applicable</GroundFailure>
            <SoilType>Soft Soil to Firm Soil</SoilType>
            <NumberOfFaults>5</NumberOfFaults>
            <NumberOfHistEvents>5</NumberOfHistEvents>
            <NearestFault>2</NearestFault>
            <Faults>
              <Fault>
                <FaultName>Southern Whidbey Island
                <DistanceToFault>14.05</
                <FaultLength>55.92</FaultLength>
                <EventMagnitude> 7.32</
                <ReturnPeriod>3680</ReturnPeriod>
              </Fault>
              .
              .
              .
            </Faults>
            <HistoryEvents>
              <HistoryEvent>

```

```

        <History>
          <Name>Unnamed</Name>
          <Year>1872</Year>
          <Date>December 15</Date>
          <Magnitude> 7.00</Magnitude>
          <Distance>96.72</Distance>
          <Depth>N/A</Depth>
        </History>
      </HistoryEvent>
      .
      .
      .
    </HistoryEvents>
  </ProfileEarthquake>
  .
  .
  .

```

HistoryEvent element

Contains information about one historical event that affected the property.

Item	Value	Description
Element name	<i>HistoryEvent</i>	Contains information about one historical event that affected the property. .
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Profile	Hurricane, Earthquake, Severe Thunderstorm	

Source

```

<xs:element name="HistoryEvent" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:choice>
      <xs:element ref="History" />
      <xs:sequence>
        <xs:element ref="Year" />
        <xs:element ref="Date" />
        <xs:element ref="Distance" />
        <xs:element ref="Intensity" />
      </xs:sequence>
    </xs:choice>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
          <MMI_250YR>7.3</MMI_250YR>
          <MMI_475YR>8.0</MMI_475YR>
          <Liquefaction>High</Liquefaction>
          <ZoneCADOI>Not Applicable</ZoneCADOI>
          <Landslide />
          <GroundFailure>Not Applicable</GroundFailure>
          <SoilType>Soft Soil to Firm Soil</SoilType>
          <NumberOfFaults>5</NumberOfFaults>
          <NumberOfHistEvents>5</NumberOfHistEvents>
          <NearestFault>2</NearestFault>
          <Faults>
            <Fault>
              <FaultName>Southern Whidbey Island
            fault</FaultName>
              <DistanceToFault>14.05</
DistanceToFault>
              <FaultLength>55.92</FaultLength>
              <EventMagnitude> 7.32</
EventMagnitude>
              <ReturnPeriod>3680</ReturnPeriod>
            </Fault>
          .

```

```

      .
      .
    </Faults>
    <HistoryEvents>
      <HistoryEvent>
        <History>
          <Name>Unnamed</Name>
          <Year>1872</Year>
          <Date>December 15</Date>
          <Magnitude> 7.00</Magnitude>
          <Distance>96.72</Distance>
          <Depth>N/A</Depth>
        </History>
      </HistoryEvent>
      .
      .
    </HistoryEvents>
  </ProfileEarthquake>
  .

```

HistoryEvents element

Contains a list of HistoryEvent elements. Each HistoryEvent Element contains information about one historical event.

Item	Value	Description
Element name	<i>HistoryEvents</i>	Contains a list of HistoryEvent elements. Each HistoryEvent Element contains information about one historical event.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.
Profile	Hurricane, Earthquake, Severe Thunderstorm	

Source

```

<xs:element name="HistoryEvents" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:choice>
      <xs:element ref="HistoryEvent" minOccurs="0"
maxOccurs="unbounded" />
      <xs:sequence>
        <xs:element ref="HistoryEventsTornado" minOccurs="0" />

```

```

        <xs:element ref="HistoryEventsHail" minOccurs="0" />
        <xs:element ref="HistoryEventsSLWind" minOccurs="0" />
    </xs:sequence>
</xs:choice>
</xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
          <MMI_250YR>7.3</MMI_250YR>
          <MMI_475YR>8.0</MMI_475YR>
          <Liquefaction>High</Liquefaction>
          <ZoneCADOI>Not Applicable</ZoneCADOI>
          <Landslide />
          <GroundFailure>Not Applicable</GroundFailure>
          <SoilType>Soft Soil to Firm Soil</SoilType>
          <NumberOfFaults>5</NumberOfFaults>
          <NumberOfHistEvents>5</NumberOfHistEvents>
          <NearestFault>2</NearestFault>
          <Faults>
            <Fault>
              <FaultName>Southern Whidbey Island
            </Fault>
          </Faults>
        </ProfileEarthquake>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

DistanceToFault>
    <DistanceToFault>14.05</
    <FaultLength>55.92</FaultLength>
    <EventMagnitude> 7.32</
EventMagnitude>
    <ReturnPeriod>3680</ReturnPeriod>
  </Fault>
  .
  .
  .
</Faults>
<HistoryEvents>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1872</Year>
      <Date>December 15</Date>
      <Magnitude> 7.00</Magnitude>
      <Distance>96.72</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>
  .
  .
  .
</HistoryEvents>
</ProfileEarthquake>
.

```

HistoryEventsHail element

Contains information about hailstorms associated with historical severe thunderstorms that affected the property.

Item	Value	Description
Element name	<i>HistoryEventsHail</i>	Contains information about hailstorms associated with historical severe thunderstorms that affected the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Profile	Severe Thunderstorm	

Source

```

<xs:element name="HistoryEventsHail" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence minOccurs="0">
      <xs:element maxOccurs="unbounded" ref="HistoryEvent" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

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

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileThunderstorm>
          <FrequencyTornado>Very Low</FrequencyTornado>
          <FrequencyHail>Very Low</FrequencyHail>
          <FrequencySLWind>Very Low</FrequencySLWind>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>20-30</RelRiskCounty>
            <RelRiskState>20-30</RelRiskState>
          </Risk>
          <HistoryEvents>
            <HistoryEventsTornado>
              <HistoryEvent>
                <Year>1969</Year>
                <Date>December 12</Date>
                <Distance> 4.89</Distance>
                <Intensity>3</Intensity>
              </HistoryEvent>
              .
              .
              .
            </HistoryEventsTornado>
            <HistoryEventsHail>
              <HistoryEvent>
                <Year>1972</Year>
                <Date>June 8</Date>
                <Distance>13.72</Distance>
                <Intensity>1.3-2.0</Intensity>
              </HistoryEvent>
              .
              .
              .
            </HistoryEventsHail>
            <HistoryEventsSLWind>
```

```

        <HistoryEvent>
            <Year>1956</Year>
            <Date>March 3</Date>
            <Distance> 7.10</Distance>
            <Intensity>70-80</Intensity>
        </HistoryEvent>
        .
        .
    </HistoryEventsSLWind>
</HistoryEvents>
</ProfileThunderstorm>
.
.
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

HistoryEventsSLWind element

Contains information about straight-line windstorms associated with historical severe thunderstorms that affected the property.

Item	Value	Description
Element name	<i>HistoryEventsSLWind</i>	Contains information about straight-line windstorms associated with historical severe thunderstorms that affected the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Profile	Severe Thunderstorm	

Source

```

<xs:element name="HistoryEventsSLWind" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
    <xs:complexType>
        <xs:sequence minOccurs="0">
            <xs:element maxOccurs="unbounded" ref="HistoryEvent" />
        </xs:sequence>
    </xs:complexType>
</xs:element>

```

Response example

```
<ISOResponses>
```

```

<ResponseHeader>
  .
  .
  .
</ResponseHeader>
<Reports>
  <Report ...>
    <AddressProfile>
      <LocationInformation>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
      <ProfileThunderstorm>
        <FrequencyTornado>Very Low</FrequencyTornado>
        <FrequencyHail>Very Low</FrequencyHail>
        <FrequencySLWind>Very Low</FrequencySLWind>
        <Risk>
          <Risk100YR>0-5</Risk100YR>
          <Risk250YR>0-5</Risk250YR>
          <RiskAnnual><0.1</RiskAnnual>
          <RelRiskCounty>20-30</RelRiskCounty>
          <RelRiskState>20-30</RelRiskState>
        </Risk>
        <HistoryEvents>
          <HistoryEventsTornado>
            <HistoryEvent>
              <Year>1969</Year>
              <Date>December 12</Date>
              <Distance> 4.89</Distance>
              <Intensity>3</Intensity>
            </HistoryEvent>
            .
            .
            .
          </HistoryEventsTornado>
          <HistoryEventsHail>
            <HistoryEvent>
              <Year>1972</Year>
              <Date>June 8</Date>
              <Distance>13.72</Distance>
              <Intensity>1.3-2.0</Intensity>
            </HistoryEvent>
            .
            .
            .
          </HistoryEventsHail>
          <HistoryEventsSLWind>
            <HistoryEvent>
              <Year>1956</Year>
              <Date>March 3</Date>
              <Distance> 7.10</Distance>
              <Intensity>70-80</Intensity>
            </HistoryEvent>
            .
          </HistoryEventsSLWind>
        </HistoryEvents>
      </ProfileThunderstorm>
    </AddressProfile>
  </Report ...>
</Reports>

```

```

        .
        .
        </HistoryEventsSLWind>
      </HistoryEvents>
    </ProfileThunderstorm>
    .
    .
    .
  </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

HistoryEventsTornado element

Contains information about tornadoes associated with historical severe thunderstorms that affected the property.

Item	Value	Description
Element name	<i>HistoryEventsTornado</i>	Contains information about tornadoes associated with historical severe thunderstorms that affected the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Profile	Severe Thunderstorm	

Source

```

<xs:element name="HistoryEventsTornado" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence minOccurs="0">
      <xs:element maxOccurs="unbounded" ref="HistoryEvent" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>

```

```

<LocationInformation>
.
.
.
</LocationInformation>
<HazardInformation>
.
.
.
<ProfileThunderstorm>
  <FrequencyTornado>Very Low</FrequencyTornado>
  <FrequencyHail>Very Low</FrequencyHail>
  <FrequencySLWind>Very Low</FrequencySLWind>
  <Risk>
    <Risk100YR>0-5</Risk100YR>
    <Risk250YR>0-5</Risk250YR>
    <RiskAnnual><0.1</RiskAnnual>
    <RelRiskCounty>20-30</RelRiskCounty>
    <RelRiskState>20-30</RelRiskState>
  </Risk>
  <HistoryEvents>
    <HistoryEventsTornado>
      <HistoryEvent>
        <Year>1969</Year>
        <Date>December 12</Date>
        <Distance> 4.89</Distance>
        <Intensity>3</Intensity>
      </HistoryEvent>
      .
      .
      .
    </HistoryEventsTornado>
    <HistoryEventsHail>
      <HistoryEvent>
        <Year>1972</Year>
        <Date>June 8</Date>
        <Distance>13.72</Distance>
        <Intensity>1.3-2.0</Intensity>
      </HistoryEvent>
      .
      .
      .
    </HistoryEventsHail>
    <HistoryEventsSLWind>
      <HistoryEvent>
        <Year>1956</Year>
        <Date>March 3</Date>
        <Distance> 7.10</Distance>
        <Intensity>70-80</Intensity>
      </HistoryEvent>
      .
      .
      .
    </HistoryEventsSLWind>
  </HistoryEvents>
</ProfileThunderstorm>
.
.
.

```

```

        </HazardInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

HouseNumber element

Specifies the main house number of the property.

Item	Value	Description
Element name	<i>HouseNumber</i>	Specifies the main house number of the property. .
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Example	For the street address A-100 Main St, the <i>HouseNumber</i> value is 100.	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
          </Matched>
          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>

```

```

        <Addr1>100 MAIN STREET</Addr1>
        <HouseNumberPrefix />
        <HouseSeparator />
        <HouseNumber>100</HouseNumber>
        <HouseNumberSuffix />
        <DirPrefix />
        <StreetName>MAIN</StreetName>
        <StreetSuffix>ST</StreetSuffix>
        <DirSuffix />
        .
        .
        .
    </InputAddress>
    <ResultAddress>
        <Addr1>100 S MAIN ST</Addr1>
        <AirStreetID>182926209</
AirStreetID>
        <HouseNumber>100</HouseNumber>
        <DirPrefix>S</DirPrefix>
        <StreetName>MAIN</StreetName>
        <StreetSuffix>ST</StreetSuffix>
        <DirSuffix />
        .
        .
        .
    </ResultAddress>
    .
    .

```

HouseNumberPrefix element

Specifies the numbers or letters found to the left of the main house number.

Item	Value	Description
Element name	<i>HouseNumberPrefix</i>	Specifies the numbers or letters found to the left of the main house number..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Example	For the street address A-100 Main St, the <i>HouseNumberPrefix</i> value is A.	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

                <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
                <InputAddress>
                  <Addr1>A-100 MAIN STREET</Addr1>
                  <HouseNumberPrefix>A</HouseNumberPrefix>
                  <HouseSeparator />
                  <HouseNumber>100</HouseNumber>
                  <HouseNumberSuffix />
                  <DirPrefix />
                  <StreetName>MAIN</StreetName>
                  <StreetSuffix>ST</StreetSuffix>
                  <DirSuffix />
                  .
                  .
                  .
                </InputAddress>
                <ResultAddress>
                  <Addr1>100 S MAIN ST</Addr1>
                  <AirStreetID>182926209</AirStreetID>
                  <HouseNumber>100</HouseNumber>
                  <DirPrefix>S</DirPrefix>
                  <StreetName>MAIN</StreetName>
                  <StreetSuffix>ST</StreetSuffix>
                  <DirSuffix />
                  .
                  .
                  .
                </ResultAddress>
              .
              .
              .
            </ValidateResult>
          </AddrValidator>
        </Matched>
      </LocationInformation>
    </Report ...>
  </Reports>
</ISOResponses>

```

HouseNumberSuffix element

Specifies the numbers or letters found to the right of the main house number.

Item	Value	Description
Element name	<i>HouseNumberSuffix</i>	Specifies the numbers or letters found to the right of the main house number..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Example	For the street address range 1200-1230 Main St, the <i>HouseNumberSuffix</i> value is 1230, and the service parses the number using information in the database.	

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          <Matched>
            <ParsedAddr>
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
          </Matched>
        </LocationInformation>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>
```

```

Addr1>
HouseNumberSuffix>
AirStreetID>

<Addr1>1200-1230 MAIN STREET</
<HouseNumberPrefix/>
<HouseSeparator />
<HouseNumber>100</HouseNumber>
<HouseNumberSuffix>1230</
<DirPrefix />
<StreetName>MAIN</StreetName>
<StreetSuffix>ST</StreetSuffix>
<DirSuffix />
.
.
.
</InputAddress>
<ResultAddress>
  <Addr1>100 S MAIN ST</Addr1>
  <AirStreetID>182926209</
  <HouseNumber>100</HouseNumber>
  <DirPrefix>S</DirPrefix>
  <StreetName>MAIN</StreetName>
  <StreetSuffix>ST</StreetSuffix>
  <DirSuffix />
  .
  .
  .
</ResultAddress>
.
.
.

```

HouseSeparator element

Specifies the character that separates the main house number in an address from the prefix or suffix.

Item	Value	Description
Element name	<i>HouseSeparator</i>	Specifies the character that separates the main house number in an address from the prefix or suffix..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Example	For example, for the street address 56-58	

Item	Value	Description
	Elm Street, the <i>HouseSeparator</i> value is -.	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
          </Matched>
        </LocationInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

<ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
  <InputAddress>
    <Addr1>56-58 ELM STREET</Addr1>
    <HouseNumberPrefix/>
    <HouseSeparator>-</HouseSeparator>
    <HouseNumber>100</HouseNumber>
    <HouseNumberSuffix>1230</HouseNumberSuffix>
    <DirPrefix />
    <StreetName>MAIN</StreetName>
    <StreetSuffix>ST</StreetSuffix>
    <DirSuffix />
    .
    .
    .
  </InputAddress>
  <ResultAddress>
    <Addr1>100 S MAIN ST</Addr1>
    <AirStreetID>182926209</AirStreetID>
    <HouseNumber>100</HouseNumber>
    <DirPrefix>S</DirPrefix>
    <StreetName>MAIN</StreetName>
    <StreetSuffix>ST</StreetSuffix>
    <DirSuffix />
    .
  </ResultAddress>
</ValidatorMatchLevel>

```

```

      .
      .
    </ResultAddress>

```

InOut element

Item	Value	Description
Element name	<i>InOut</i>	.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

InputAddress element

Contains the address information that you supplied in the request.

Item	Value	Description
Element name	<i>InputAddress</i>	Contains the address information that you supplied in the request..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="InputAddress" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:all>
      <xs:element ref="Type" minOccurs="0" />
      <xs:element ref="Addr1" minOccurs="0" />
      <xs:element ref="HouseNumberPrefix" minOccurs="0" />
      <xs:element ref="HouseSeparator" minOccurs="0" />
      <xs:element ref="HouseNumber" minOccurs="0" />
      <xs:element ref="HouseNumberSuffix" minOccurs="0" />
      <xs:element ref="DirPrefix" minOccurs="0" />
      <xs:element ref="StreetName" minOccurs="0" />
    
```

```

<xs:element ref="StreetSuffix" minOccurs="0" />
<xs:element ref="DirSuffix" minOccurs="0" />
<xs:element ref="InputCity" minOccurs="0" />
<xs:element ref="City" minOccurs="0" />
<xs:element ref="InputState" minOccurs="0" />
<xs:element ref="StateProv" minOccurs="0" />
<xs:element ref="InputZip5" minOccurs="0" />
<xs:element ref="PostalCode" minOccurs="0" />
<xs:element ref="Country" minOccurs="0" />
<xs:element ref="Latitude" minOccurs="0" />
<xs:element ref="Longitude" minOccurs="0" />
<xs:element ref="MatchLevel" minOccurs="0" />
<xs:element ref="InputCounty" minOccurs="0" />
</xs:all>
</xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        <Matched>
          <ParsedAddr>
            .
            .
            .
          </ParsedAddr>
          <AddrValidator>
            <ValidateResult>
              <AttemptedAt>Match5</AttemptedAt>
            </ValidateResult>
          </AddrValidator>
        </Matched>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

      .
      .
      .
    </ResultAddress>
  .

```

InputCity element

Specifies the city that you supplied in the request.

Item	Value	Description
Element name	<i>InputCity</i>	Specifies the city that you supplied in the request..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                .
                .
                .
              </Address>
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

```

```

<ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
  <InputAddress>
    <Addr1>100 MAIN STREET</Addr1>
    <HouseNumberPrefix />
    <HouseSeparator />
    <HouseNumber>100</HouseNumber>
    <HouseNumberSuffix />
    <DirPrefix />
    <StreetName>MAIN</StreetName>
    <StreetSuffix>ST</StreetSuffix>
    <DirSuffix />
    <InputCity>SEATTLE</InputCity>
    <InputCounty />
    <InputState>WA</InputState>
    <InputZip5 />
  </InputAddress>

```

InputCounty element

Specifies the county that you supplied in the request.

Item	Value	Description
Element name	<i>InputCounty</i>	Specifies the county that you supplied in the request..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Values	This value will be empty for reverse-geocoded locations.	Reverse geocoding is the process of looking up geographic information based on a user-supplied geocode.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>

```

```

<LocationInformation>
  <Entered>
    <Address>
      .
      .
    </Address>
  </Entered>
  <Matched>
    <ParsedAddr>
      <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
      .
      .
    </Address>
  </ParsedAddr>
  <AddrValidator>
    <ValidateResult>
      <AttemptedAt>Match5</AttemptedAt>

  <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
    <InputAddress>
      <Addr1>100 MAIN STREET</Addr1>
      <HouseNumberPrefix />
      <HouseSeparator />
      <HouseNumber>100</HouseNumber>
      <HouseNumberSuffix />
      <DirPrefix />
      <StreetName>MAIN</StreetName>
      <StreetSuffix>ST</StreetSuffix>
      <DirSuffix />
      <InputCity>SEATTLE</InputCity>
      <InputCounty />
      <InputState>WA</InputState>
      <InputZip5 />
    </InputAddress>
    .
    .
    .

```

InputState element

Specifies the state that you supplied in the request.

Item	Value	Description
Element name	<i>InputState</i>	Specifies the state that you supplied in the request..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line

Item	Value	Description
		feeds, carriage returns, and tab characters.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                .
                .
                .
              </Address>
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
            <InputAddress>
              <Addr1>100 MAIN STREET</Addr1>
              <HouseNumberPrefix />
              <HouseSeparator />
              <HouseNumber>100</HouseNumber>
              <HouseNumberSuffix />
              <DirPrefix />
              <StreetName>MAIN</StreetName>
              <StreetSuffix>ST</StreetSuffix>
              <DirSuffix />
              <InputCity>SEATTLE</InputCity>
              <InputCounty />
              <InputState>WA</InputState>
              <InputZip5 />
            </InputAddress>
            .
            .

```

InputZip5 element

Specifies the five-digit zip code that you supplied in the request.

Item	Value	Description
Element name	<i>InputZip5</i>	Specifies the five-digit zip code that you supplied in the request..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                .
                .
                .
              </Address>
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

              <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
            </InputAddress>
              <Addr1>100 MAIN STREET</Addr1>
              <HouseNumberPrefix />
              <HouseSeparator />
            </ValidateResult>
          </AddrValidator>
        </Matched>
      </Report ...>
    </Reports>
  </ISOResponses>
```

```

<HouseNumber>100</HouseNumber>
<HouseNumberSuffix />
<DirPrefix />
<StreetName>MAIN</StreetName>
<StreetSuffix>ST</StreetSuffix>
<DirSuffix />
<InputCity>SEATTLE</InputCity>
<InputCounty />
<InputState>WA</InputState>
<InputZip5 />
</InputAddress>

```

Intensity element

Specifies the intensity of a tornado, hailstorm, or straight-line windstorm associated with a historical severe thunderstorm that affected the property.

Item	Value	Description
Element name	<i>Intensity</i>	Specifies the intensity of a tornado, hailstorm, or straight-line windstorm associated with a historical severe thunderstorm that affected the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Severe Thunderstorm	

Values

Subperil	Intensity value	Description
Tornado	0	The tornado is an F-0 on the Fujita scale, which corresponds to 40–72 mile per hour winds. Properties may experience light damage.
Tornado	1	The tornado is an F-1 on the Fujita scale, which corresponds to 73–112 mile per hour

Subperil	Intensity value	Description
		winds. Properties may experience moderate damage.
Tornado	2	The tornado is an F-2 on the Fujita scale, which corresponds to 113–157 mile per hour winds. Properties may experience considerable damage.
Tornado	3	The tornado is an F-3 on the Fujita scale, which corresponds to 158–206 mile per hour winds. Properties may experience severe damage.
Tornado	4	The tornado is an F-4 on the Fujita scale, which corresponds to 207–260 mile per hour winds. Properties may experience devastating damage.
Tornado	5	The tornado is an F-5 on the Fujita scale, which corresponds to 261–318 mile per hour winds. Properties may experience incredible damage.
Hailstorm	<0.8	The hailstones are less than .8 inches in diameter.
Hailstorm	0.8-1.3	The hailstones are between .8 inches and 1.3 inches in diameter.
Hailstorm	1.3-2.0	The hailstones are between 1.3 inches and 2.0 inches in diameter.
Hailstorm	2.0-3.0	The hailstones are between 2.0 inches and 3.0 inches in diameter.

Subperil	Intensity value	Description
Hailstorm	3.0-4.0	The hailstones are between 3.0 inches and 4.0 inches in diameter.
Hailstorm	≥ 4	The hailstones are greater than 4.0 inches in diameter.
Straight-Line Winds	0-30	The winds are less than 30 miles per hour.
Straight-Line Winds	30-40	The winds are between 30 and 40 miles per hour.
Straight-Line Winds	40-50	The winds are between 40 and 50 miles per hour.
Straight-Line Winds	50-60	The winds are between 50 and 60 miles per hour.
Straight-Line Winds	60-70	The winds are between 60 and 70 miles per hour.
Straight-Line Winds	70-80	The winds are between 70 and 80 miles per hour.
Straight-Line Winds	80-90	The winds are between 80 and 90 miles per hour.
Straight-Line Winds	90-100	The winds are between 90 and 100 miles per hour.
Straight-Line Winds	100-110	The winds are between 100 and 110 miles per hour.
Straight-Line Winds	110-120	The winds are between 110 and 120 miles per hour.
Straight-Line Winds	120-130	The winds are between 120 and 130 miles per hour.
Straight-Line Winds	130-140	The winds are between 130 and 140 miles per hour.
Straight-Line Winds	140-150	The winds are between 140 and 150 miles per hour.
Straight-Line Winds	≥ 150	The winds are greater than 150 miles per hour.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileThunderstorm>
          <FrequencyTornado>Very Low</FrequencyTornado>
          <FrequencyHail>Very Low</FrequencyHail>
          <FrequencySLWind>Very Low</FrequencySLWind>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>20-30</RelRiskCounty>
            <RelRiskState>20-30</RelRiskState>
          </Risk>
          <HistoryEvents>
            <HistoryEventsTornado>
              <HistoryEvent>
                <Year>1969</Year>
                <Date>December 12</Date>
                <Distance> 4.89</Distance>
                <Intensity>3</Intensity>
              </HistoryEvent>
              .
              .
            </HistoryEventsTornado>
            <HistoryEventsHail>
              <HistoryEvent>
                <Year>1972</Year>
                <Date>June 8</Date>
                <Distance>13.72</Distance>
                <Intensity>1.3-2.0</Intensity>
              </HistoryEvent>
              .
              .
            </HistoryEventsHail>
            <HistoryEventsSLWind>
              <HistoryEvent>
                <Year>1956</Year>
                <Date>March 3</Date>
                <Distance> 7.10</Distance>

```

```

        <Intensity>70-80</Intensity>
      </HistoryEvent>
      .
      .
    </HistoryEventsSLWind>
  </HistoryEvents>
</ProfileThunderstorm>
.
.
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

ISORequest element

Contains the *Products* , *HazardAnalysis*, and *Addresses* and *LossAnalysis* elements.

Item	Value	Description
Element name	<i>ISORequest</i>	Contains the <i>Products</i> , <i>HazardAnalysis</i> , and <i>Addresses</i> and <i>LossAnalysis</i> elements.
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.

Source

```

<xsd:element name="ISORequest" xmlns:xsd="http://www.w3.org/2001/
XMLSchema">
  <xsd:complexType>
    <xsd:sequence>
      <xsd:element ref="Products" />
      <xsd:element ref="LossAnalysis" />
    </xsd:sequence>
  </xsd:complexType>
</xsd:element>

```

Source

```

<xs:element name="ISORequest" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="Products">
        <xs:sequence>
          <xs:element ref="HazardAnalysis" />
          <xs:element ref="Addresses" />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>

```

```

    </xs:complexContent>
  </xs:complexType>
</xs:element>

```

Request example

```

<ISORequests>
  <RequestHeader>
    .
    .
  </RequestHeader>
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            .
            .
            .
            <Address>
              .
              .
            </Address>
            <LocationTerms Items="1">
              <LocationTerm>
                .
                .
              </LocationTerm>
            </LocationTerms>
            <Details>
              .
              .
            </Details>
          </Location>
        </Locations>
      </Data>
      <ResultSet type="Preset" name="Your Configuration Package
Name"/>
    </LossAnalysis>
  </ISORequest>
</ISORequests>

```

Request example

```

<ISORequests>
  <RequestHeader>
    .
    .

```

```

    <ISORequest>
      <Products>HazardAnalysis</Products>
      <HazardAnalysis>

<Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
WinterstormHazard</Products>
      </HazardAnalysis>
      <Addresses>
        <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
        <Address>
          <Latitude></Latitude>
          <Longitude></Longitude>
          <Addr1>100 Main Street</Addr1>
          <City>Seattle</City>
          <County>King</County>
          <StateProv>WA</StateProv>
          <Country>US</Country>
        </Address>
      </Addresses>
    </ISORequest>
  </ISORequests>

```

ISORequests element

Contains the *RequestHeader* and *ISORequest* elements.

Item	Value	Description
Element name	<i>ISORequests</i>	Contains the <i>RequestHeader</i> and <i>ISORequest</i> elements. ISORequests is the root element for requests to the AIR Hazard Analysis Servicesingle-location and single-contract loss analysis service requests.
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.

Source

```

<xs:element name="ISORequests" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="RequestHeader" />
      <xs:element ref="ISORequest" />
    </xs:sequence>
  </xs:complexType>

```

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

Request example

```
<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
    WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>
      <Options geocode="yes" returnHighestScore="yes"
      additionalInfo="no"/>
      <Address>
        <Latitude>25.926777</Latitude>
        <Longitude>-80.342367</Longitude>
        <Addr1> </Addr1>
        <City></City>
        <County></County>
        <StateProv></StateProv>
        <Country></Country>
      </Address>
    </Addresses>
  </ISORequest>
</ISORequests>
```

Request example

```
<ISORequests>
  <RequestHeader>
    <AIR>
      .
      .
      .
    </AIR>
  </RequestHeader>
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            .
            .
            .
          <Address>
            .
            .
          
```

```

        .
    </Address>
    <LocationTerms Items="1">
        <LocationTerm>
            .
            .
            .
        </LocationTerm>
    </LocationTerms>
    <Details>
        .
        .
        .
    </Details>
</Location>
</Locations>
</Data>
<ResultSet type="Preset" name="Your Configuration Package
Name"/>
</LossAnalysis>
</ISORequest>
</ISORequests>

```

ISOResponses element

Contains the *ResponseHeader* and *Reports* elements. *ISOResponses* is the root element for responses.

Item	Value	Description
Element name	<i>ISOResponses</i>	Contains the <i>ResponseHeader</i> and <i>Reports</i> elements. <i>ISOResponses</i> is the root element for responses.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="ISOResponses" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="ResponseHeader" />
      <xs:element ref="Reports" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileThunderstorm>
          <FrequencyTornado>Very Low</FrequencyTornado>
          <FrequencyHail>Very Low</FrequencyHail>
          <FrequencySLWind>Very Low</FrequencySLWind>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>20-30</RelRiskCounty>
            <RelRiskState>20-30</RelRiskState>
          </Risk>
          <HistoryEvents>
            <HistoryEventsTornado>
              <HistoryEvent>
                <Year>1969</Year>
                <Date>December 12</Date>
                <Distance> 4.89</Distance>
                <Intensity>3</Intensity>
              </HistoryEvent>
              .
              .
            </HistoryEventsTornado>
            <HistoryEventsHail>
              <HistoryEvent>
                <Year>1972</Year>
                <Date>June 8</Date>
                <Distance>13.72</Distance>
                <Intensity>1.3-2.0</Intensity>
              </HistoryEvent>
              .
              .
            </HistoryEventsHail>
            <HistoryEventsSLWind>
              <HistoryEvent>
                <Year>1956</Year>
                <Date>March 3</Date>
                <Distance> 7.10</Distance>

```

```

                <Intensity>70-80</Intensity>
            </HistoryEvent>
            .
            .
            .
        </HistoryEventsSLWind>
    </HistoryEvents>
</ProfileThunderstorm>
.
.
.
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" ...ASF.LogFile="">
      <LossAnalysis engine="12.0.3 20100826">
        <Data type = "Locations">
          <Locations>
            .
            .
            .
          </Locations>
        </Data>
        <ResultSet type="Preset" name="Your Configuration
Package Name">
          .
          .
          .
          <StrPerils>PAL+PWH+PWX</StrPerils>
          <Results>
            <AnnualSummaries>
              .
              .
              .
            </AnnualSummaries>
            <AnnualDetails>
              .
              .
              .
            </AnnualDetails>
          </Results>
        </ResultSet>
      </LossAnalysis>
    </Report>
  </Reports>
</ISOResponses>

```

LandmarkType element

Specifies the source that defines the value of the *NearestTarget* element as a terrorist target.

Item	Value	Description
Element name	<i>LandmarkType</i>	Specifies the source that defines the value of the <i>NearestTarget</i> element as a terrorist target..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Terrorism	

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileTerrorism>
          <NearestTarget>TRAIN STATION</NearestTarget>
          <Distance>0.20145692986724237</Distance>
          <LandmarkType>AIR</LandmarkType>
        </ProfileTerrorism>
      </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>
```

Landslide element

For locations in California, indicates whether the property is in a landslide zone.

Item	Value	Description
Element name	<i>Landslide</i>	For locations in California, indicates whether the property is in a landslide zone.. A landslide zone is an area that has a high potential for earthquake-induced slope failures or has experienced a landslide triggered by a historical earthquake. If a property is not in a seismic zone, the service does not return a value. In seismic zones, areas with loose, weak soils or on steep slopes are most susceptible to earthquake-induced landslides.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Earthquake	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
        </HazardInformation>
      </Report ...>
    </Reports>
  </ISOResponses>

```

```

    .
    <ProfileEarthquake>
      <Risk>
        <Risk100YR>0-5</Risk100YR>
        <Risk250YR>5-10</Risk250YR>
        <RiskAnnual>0.1</RiskAnnual>
        <RelRiskCounty>90-100</RelRiskCounty>
        <RelRiskState>90-100</RelRiskState>
      </Risk>
      <MMI_VI>25.34</MMI_VI>
      <MMI_VII>15.17</MMI_VII>
      <MMI_VIII>5.87</MMI_VIII>
      <MMI_IX>1.61</MMI_IX>
      <MMI_X>0.25</MMI_X>
      <MMI_XI>0.02</MMI_XI>
      <MMI_XII>0.00</MMI_XII>
      <MMI_100YR>5.9</MMI_100YR>
      <MMI_200YR>7.1</MMI_200YR>
      <MMI_250YR>7.3</MMI_250YR>
      <MMI_475YR>8.0</MMI_475YR>
      <Liquefaction>High</Liquefaction>
      <ZoneCADOI>Not Applicable</ZoneCADOI>
      <LandSlide />
      <GroundFailure>Not Applicable</GroundFailure>
      <SoilType>Soft Soil to Firm Soil</SoilType>
      <NumberOfFaults>5</NumberOfFaults>
      <NumberOfHistEvents>5</NumberOfHistEvents>
      <NearestFault>2</NearestFault>
      <Faults>
        <Fault>
          <FaultName>Southern Whidbey Island
          <DistanceToFault>14.05</
          <FaultLength>55.92</FaultLength>
          <EventMagnitude> 7.32</
          <ReturnPeriod>3680</ReturnPeriod>
        </Fault>
        .
        .
        .
      </Faults>
      <HistoryEvents>
        <HistoryEvent>
          <History>
            <Name>Unnamed</Name>
            <Year>1872</Year>
            <Date>December 15</Date>
            <Magnitude> 7.00</Magnitude>
            <Distance>96.72</Distance>
            <Depth>N/A</Depth>
          </History>
        </HistoryEvent>
        .
        .
        .
      </HistoryEvents>
    </ProfileEarthquake>

```

Latitude element

Specifies the latitude of the property.

Item	Value	Description
Element name	<i>Latitude</i>	Specifies the latitude of the property.
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Data type	geocode simple type	
Length	16 characters minimum	

Request example

In the request,

- Specify a latitude and longitude instead of a street address wherever possible. See [Using geocodes in service requests](#).
- You must specify the *Latitude* element if you do not specify the *Addr1* element.
- For latitudes south of the equator, you must specify a negative number.

```
<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysisLossAnalysis</Products>
    <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>
      <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
      <Address>
        <Latitude>25.926777</Latitude>
        <Longitude>-80.342367</Longitude>
```

```

        <Addr1> </Addr1>
        <City></City>
    <County></County>
        <StateProv></StateProv>
        <Country></Country>
    </Address>
</Addresses>
</ISORequest>
</ISORequests>

```

Response example

The response will return the value you provide.

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
              <GeoPath AreaLevel2="53"
AreaLevel3="033" />
            </Address>
          </Entered>
          <Matched>
            .
            .
            .
          </Matched>
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        </HazardInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

LicenseKey element

Specifies your license key for AIR's web services.

Item	Value	Description
Element name	<i>LicenseKey</i>	Specifies your license key for AIR's web services. If you need login credentials, contact your AIR representative.
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	20 characters maximum	

Request xample

```
<ISORequests>
  <RequestHeader>
    <AIR>
      <LoginID>YourLogin</LoginID>
      <Password>YourSecretPassword</Password>
      <LicenseKey>YourLicenseKey</LicenseKey>
    </AIR>
  </RequestHeader>
  <ISORequest>
    .
    .
    .
  </ISORequest>
</ISORequests>
```

Liquefaction element

Specifies the likelihood of the soil at the property behaving like a liquid in underground movement conditions.

Item	Value	Description
Element name	<i>Liquefaction</i>	Specifies the likelihood of the soil at the property behaving like a liquid in underground movement conditions..

Item	Value	Description
		AIR computes liquefaction potential using standard methodologies employed by the California Department of Conservation, Division of Mines and Geology (DMG) and United States Geological Survey (USGS).
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Earthquake	
Values	Very high or High or Moderate or Low or Very low	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
        </ProfileEarthquake>
      </Report ...>
    </Reports>
  </ISOResponses>

```

```

</Risk>
<MMI_VI>25.34</MMI_VI>
<MMI_VII>15.17</MMI_VII>
<MMI_VIII>5.87</MMI_VIII>
<MMI_IX>1.61</MMI_IX>
<MMI_X>0.25</MMI_X>
<MMI_XI>0.02</MMI_XI>
<MMI_XII>0.00</MMI_XII>
<MMI_100YR>5.9</MMI_100YR>
<MMI_200YR>7.1</MMI_200YR>
<MMI_250YR>7.3</MMI_250YR>
<MMI_475YR>8.0</MMI_475YR>
<Liquefaction>High</Liquefaction>
<ZoneCADOI>Not Applicable</ZoneCADOI>
<LandSlide />
<GroundFailure>Not Applicable</GroundFailure>
<SoilType>Soft Soil to Firm Soil</SoilType>
<NumberOfFaults>5</NumberOfFaults>
<NumberOfHistEvents>5</NumberOfHistEvents>
<NearestFault>2</NearestFault>
<Faults>
  <Fault>
    <FaultName>Southern Whidbey Island
    <DistanceToFault>14.05</
    <FaultLength>55.92</FaultLength>
    <EventMagnitude> 7.32</
    <ReturnPeriod>3680</ReturnPeriod>
  </Fault>
  .
  .
  .
</Faults>
<HistoryEvents>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1872</Year>
      <Date>December 15</Date>
      <Magnitude> 7.00</Magnitude>
      <Distance>96.72</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>
  .
  .
  .
</HistoryEvents>
</ProfileEarthquake>
.

```

LocationID element

Specifies a location ID.

Item	Value	Description
Element name	<i>LocationID</i>	Specifies a location ID..
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

LocationInformation element

Contains the address information that you provided in the request and the address information used by the service.

Item	Value	Description
Element name	<i>LocationInformation</i>	Contains the address information that you provided in the request and the address information used by the service..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```
<xs:element name="LocationInformation" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="Entered" />
      <xs:element ref="Matched" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                <Street NumPre="" Num="100" NumSuf=""
Seperator="" Name="MAIN" Type="ST" TypeEx="STREET" PostDir=""
PreDir="" />
                <Building UnitType="" UnitValue=""
FloorValue="" Type="" Name="" />
                <Delivery BoxType="" BoxValue=""
RouteType="" RouteValue="" />
                <Contact Company="" CareOf="" Attn=""
Other="" />
              </Address>
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

                <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
                <InputAddress>
                  .
                  .
                  .
                </InputAddress>
                <ResultAddress>
                  .
                  .
                  .
                </ResultAddress>
                <Message>...;</Message>
              </ValidateResult>
              <ProcessErrors>None</ProcessErrors>
              <ProcessWarnings>None</ProcessWarnings>
            </AddrValidator>
            <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
            <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"

```

```

AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
    <Match>
        <ValidatorMatch name="Match5" value="6" /
    >
        <GeocodeMatch name="SegmentImputed"
value="2" />
        <UniqueMatch name="Relaxed_SET3_g2"
value="22" />
        <CL2Match name="Relaxed" value="3" />
    </Match>
</Matched>
</LocationInformation>
<HazardInformation>
.
.
.
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

LoginID element

Specifies your login identifier for AIR's web services.

If you need login credentials, contact your AIR representative.

Item	Value	Description
Element name	<i>LoginID</i>	Specifies your login identifier for AIR's web services.
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	20 characters maximum	

Request example

```

<ISORequests>
  <RequestHeader>
    <AIR>
      <LoginID>YourLogin</LoginID>
      <Password>YourSecretPassword</Password>
      <LicenseKey>YourLicenseKey</LicenseKey>
    </AIR>
  </RequestHeader>
  <ISORequest>

```

```

      .
      .
      .
    </ISORequest>
  </ISORequests>

```

Longitude element

Specifies the longitude of the property.

Item	Value	Description
Element name	<i>Longitude</i>	Specifies the longitude of the property.
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	16 characters maximum	

Request example

In the request,

- Specify a latitude and longitude instead of a street address wherever possible. See [Using geocodes in service requests](#).
- You must specify the *Longitude* element if you do not specify the *Addr1StreetAddress* element.
- For latitudes west of the Greenwich meridian, you must specify a negative number.

```

<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>

```

```

        <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
        <Address>
            <Latitude>25.926777</Latitude>
            <Longitude>-80.342367</Longitude>
            <Addr1> </Addr1>
            <City></City>
            <County></County>
            <StateProv></StateProv>
            <Country></Country>
        </Address>
    </Addresses>
</ISORequest>
</ISORequests>

```

Response example

The response returns the value you provide, but the *GeoCode* element specifies the longitude used by the service.

```

<ISOResponses>
    <ResponseHeader>
        .
        .
        .
    </ResponseHeader>
    <Reports>
        <Report ...>
            <AddressProfile>
                <LocationInformation>
                    <Entered>
                        <Address>
                            <Latitude>0</Latitude>
                            <Longitude>0</Longitude>
                            <Addr1>100 Main Street</Addr1>
                            <City>Seattle</City>
                            <StateProv>WA</StateProv>
                            <Country>US</Country>
                            <MatchLevel>3</MatchLevel>
                            <County>KING</County>
                            <GeoPath AreaLevel2="53"
AreaLevel3="033" />
                        </Address>
                    </Entered>
                    <Matched>
                        .
                        .
                        .
                    </Matched>
                </LocationInformation>
                <HazardInformation>
                    .
                    .
                    .
                </HazardInformation>
            </AddressProfile>
        </Report>
    </Reports>

```

</ISOResponses>

Magnitude element

Specifies the magnitude of a historical earthquake as a value on the Moment scale.

Item	Value	Description
Element name	<i>Magnitude</i>	Specifies the magnitude of a historical earthquake as a value on the Moment scale..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:decimal	
Profile	Earthquake	

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
```

```

<MMI_100YR>5.9</MMI_100YR>
<MMI_200YR>7.1</MMI_200YR>
<MMI_250YR>7.3</MMI_250YR>
<MMI_475YR>8.0</MMI_475YR>
<Liquefaction>High</Liquefaction>
<ZoneCADOI>Not Applicable</ZoneCADOI>
<Landslide />
<GroundFailure>Not Applicable</GroundFailure>
<SoilType>Soft Soil to Firm Soil</SoilType>
<NumberOfFaults>5</NumberOfFaults>
<NumberOfHistEvents>5</NumberOfHistEvents>
<NearestFault>2</NearestFault>
<Faults>
  <Fault>
    <FaultName>Southern Whidbey Island
    <DistanceToFault>14.05</
  </Fault>
  <FaultLength>55.92</FaultLength>
  <EventMagnitude> 7.32</
  <ReturnPeriod>3680</ReturnPeriod>
</Fault>
.
.
.
</Faults>
<HistoryEvents>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1872</Year>
      <Date>December 15</Date>
      <Magnitude> 7.00</Magnitude>
      <Distance>96.72</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>
  .
  .
  .
</HistoryEvents>
</ProfileEarthquake>
.

```

Match element

Indicates the accuracy of the match between the address that you supplied in the request and the address used by the service.

Item	Value	Description
Element name	<i>Match</i>	Indicates the accuracy of the match between the address that you supplied in the request and the address used by the service..

Item	Value	Description
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:decimal	

Source

```
<xs:element name="Match" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="ValidatorMatch" />
      <xs:element ref="GeocodeMatch" />
      <xs:element ref="UniqueMatch" />
      <xs:element ref="CL2Match" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                .
                .
                .
              </Address>
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
          </Matched>
          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>
            .
          </InputAddress>
        </LocationInformation>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>
```

```

        .
        .
        </InputAddress>
        <ResultAddress>
        .
        .
        </ResultAddress>
        <Message>...</Message>
    </ValidateResult>
    <ProcessErrors>None</ProcessErrors>
    <ProcessWarnings>None</ProcessWarnings>
</AddrValidator>
<GeoCode .../>
<GeoPath .../>
<Match>
    <ValidatorMatch name="Match5" value="6" /
>
    <GeocodeMatch name="SegmentImputed"
value="2" />
    <UniqueMatch name="Relaxed_SET3_g2"
value="22" />
    <CL2Match name="Relaxed" value="3" />
</Match>
</Matched>
</LocationInformation>
<HazardInformation>
    .
    .
    .
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Matched element

Contains information about the address used by the service.

Item	Value	Description
Element name	<i>Matched</i>	Contains information about the address used by the service. The AIR Hazard Analysis Service uses the AIR Address Service to find a match for the address that you supplied in the request.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:decimal	

Source

```

<xs:element name="Matched" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:all>
      <xs:element ref="AddrValidator" />
      <xs:element ref="GeoCode" />
      <xs:element ref="GeoPath" />
      <xs:element ref="Match" />
      <xs:element ref="ParsedAddr" minOccurs="0" />
    </xs:all>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                .
                .
                .
              </Address>
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
            <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
            <InputAddress>
              .
              .
              .
            </InputAddress>
            <ResultAddress>
              .
              .
              .
            </ResultAddress>
          </Matched>
        </LocationInformation>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

        <Message>...</Message>
    </ValidateResult>
    <ProcessErrors>None</ProcessErrors>
    <ProcessWarnings>None</ProcessWarnings>
</AddrValidator>
<GeoCode .../>
<GeoPath .../>
<Match>
    <ValidatorMatch name="Match5" value="6" /
>
    <GeocodeMatch name="SegmentImputed"
value="2" />
    <UniqueMatch name="Relaxed_SET3_g2"
value="22" />
    <CL2Match name="Relaxed" value="3" />
</Match>
</Matched>
</LocationInformation>
<HazardInformation>
.
.
.
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

MatchLevel element

Specifies the level of accuracy of the *GeoLat* and *GeoLong* elements.

Item	Value	Description
Element name	<i>MatchLevel</i>	Specifies the level of accuracy of the <i>GeoLat</i> and <i>GeoLong</i> elements.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Values	An integer between 0 and 11, inclusive.	0 = Exact 1 = POBox 2 = ZIP9 3 = RelaxedAddress 4 = PostCodeCentroid 5 = StreetCentroid 6 = CityCentroid

Item	Value	Description
		• 7 = CountyCentroid • 8 = None • 9 = UserSupplied If you supplied a geocode in the the <i>Latitude</i> and <i>Longitude</i> elements of the request, <i>MatchLevel</i> is <i>UserSupplied</i> (9). • 10 = Country • 11 = County

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
              <GeoPath AreaLevel2="53"
AreaLevel3="033" />
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>
            <Addr1>100 MAIN STREET</Addr1>
            .

```

```

        .
        .
    </InputAddress>
    <ResultAddress>
        <Addr1>100 S MAIN ST</Addr1>
        .
        .
    </ResultAddress>
    <Message>No Rows found for given
House Number;House Number out of range;Street Info is in City;Input
ZIP5 is blank;</Message>
    </ValidateResult>
    <ProcessErrors>None</ProcessErrors>
    <ProcessWarnings>None</ProcessWarnings>
</AddrValidator>
    <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
    <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"
AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
    <Match>
        .
        .
    </Match>
    </Matched>
</LocationInformation>
<HazardInformation>
    .
    .
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Response example

```

<ISOResponses>
    .
    .
    .
    <Reports>
        <Report product="LossAnalysis" ....ASF.LogFile="">
            <LossAnalysis engine="12.0.3 20100826">
                <Data type = "Locations">
                    <Locations>
                        <Location>
                            .
                            .
                            .
                        </Address>

```

```

StreetAddress>
    <StreetAddress>131 Dartmouth St</
    <City>BOSTON</City>
    <Area>MA</Area>
    <AreaModeled>MA</AreaModeled>
    <SubareaModeled>Suffolk</
SubareaModeled>
    <PostalCode>02116</PostalCode>
    <PostalCodeModeled>02116</
PostalCodeModeled>
    <Country>US</Country>
    <GeoPoint>
        <GeoLat>42.346809</GeoLat>
        <GeoLong>-71.075202</GeoLong>
        <MatchLevel>Exact</MatchLevel>
    </GeoPoint>
    </Address>
    </Location>
    </Locations>
</Data>
.

```

Message element

Indicates whether the service found the address you specified in the request.

Item	Value	Description
Element name	<i>Message</i>	Indicates whether the service found the address you specified in the request..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>

```

```

        <Address>
          <Latitude>0</Latitude>
          <Longitude>0</Longitude>
          <Addr1>100 Main Street</Addr1>
          <City>Seattle</City>
          <StateProv>WA</StateProv>
          <Country>US</Country>
          <MatchLevel>3</MatchLevel>
          <County>KING</County>
          <GeoPath AreaLevel2="53"
AreaLevel3="033" />
        </Address>
      </Entered>
      <Matched>
        <ParsedAddr>
          .
          .
          .
        </ParsedAddr>
        <AddrValidator>
          <ValidateResult>
            <AttemptedAt>Match5</AttemptedAt>
          </ValidateResult>
          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>
            <Addr1>100 MAIN STREET</Addr1>
            .
            .
            .
          </InputAddress>
          <ResultAddress>
            <Addr1>100 S MAIN ST</Addr1>
            .
            .
            .
          </ResultAddress>
          <Message>No Rows found for given
House Number;House Number out of range;Street Info is in City;Input
ZIP5 is blank;</Message>
        </AddrValidator>
        <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
        <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"
AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
        <Match>
          .
          .
          .
        </Match>
      </Matched>
    </LocationInformation>
    <HazardInformation>
      .

```

```

      .
      </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>

```

MMI_n element

Specifies the likelihood of a given Modified Mercalli Intensity (MMI) from an earthquake.

Item	Value	Description
Element name	MMI_n	Specifies the likelihood of a given Modified Mercalli Intensity (MMI) from an earthquake.. The <i>MMI_VI</i>, <i>MMI_VII</i>, <i>MMI_VIII</i>, <i>MMI_IX</i>, <i>MMI_X</i>, <i>MMI_XI</i>, and <i>MMI_XII</i> elements specify the likelihood that the earthquake MMI value indicated in the element name will occur within the next 30 years. For example, the value of <i>MMI_VI</i> indicates the likelihood that an earthquake MMI value of VI will occur in the next 30 years. The <i>MMI_100YR</i>, <i>MMI_200YR</i>, <i>MMI_250YR</i>, and <i>MMI_475YR</i> elements specify the probable maximum earthquake intensity within the time period indicated in the element name. For example, the value of <i>MMI_100YR</i> indicates the probable maximum MMI of an earthquake within a 100-year period.

Item	Value	Description
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:decimal	
Profile	Earthquake	
Values	These are values for MMI_ <i>n</i> , where <i>n</i> is a Roman numeral from this list.	• I = People do not feel any movement. • II = A few people might notice movement if they are at rest or on the upper floors of tall buildings. • III = Many people indoors feel movement. Hanging objects swing back and forth. People outdoors might not realize that an earthquake is occurring. • IV = Most people indoors feel movement. Hanging objects swing. Dishes, windows and doors rattle. The earthquake feels like a heavy truck hitting the walls. A few people outdoors may feel movement. Parked cars rock. • V = Almost everyone feels movement. Sleeping people are awakened. Doors swing open or close. Dishes are broken. Pictures on the wall move. Small objects move or are turned over. Trees might shake. Liquids might spill out of open containers.

Item	Value	Description
		• VI = Everyone feels movement. People have trouble walking. Objects fall from shelves. Pictures fall off walls. Furniture moves. Plaster in walls might crack. Trees and bushes shake. Damage is slight in poorly built buildings. No structural damage. • VII = People have difficulty standing. Drivers feel their cars shaking. Some furniture breaks. Loose bricks fall from buildings. Damage is slight to moderate in well-built buildings; considerable in poorly built buildings. • VIII = Drivers have trouble steering. Houses that are not bolted down might shift on their foundations. Tall structures such as towers and chimneys might twist and fall. Well-built buildings suffer slight damage. Poorly built structures suffer severe damage. Tree branches break. Hillsides might crack if the ground is wet. Water levels in wells might change. • IX = Well-built buildings suffer considerable damage. Houses that are not bolted down move off their foundations. Some underground pipes are broken.

Item	Value	Description
		The ground cracks. Reservoirs suffer serious damage. • X = Most buildings and their foundations are destroyed. Some bridges are destroyed. Dams are seriously damaged. Large landslides occur. Water is thrown on the banks of canals, rivers, lakes. The ground cracks in large areas. Railroad tracks are bent slightly. • XI = Most buildings collapse. Some bridges are destroyed. Large cracks appear in the ground. Underground pipelines are destroyed. Railroad tracks are badly bent. • XII = Almost everything is destroyed. Objects are thrown into the air. The ground moves in waves or ripples. Large amounts of rock may move.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>

```

```

.
.
.
<ProfileEarthquake>
  <Risk>
    <Risk100YR>0-5</Risk100YR>
    <Risk250YR>5-10</Risk250YR>
    <RiskAnnual>0.1</RiskAnnual>
    <RelRiskCounty>90-100</RelRiskCounty>
    <RelRiskState>90-100</RelRiskState>
  </Risk>
  <MMI_VI>25.34</MMI_VI>
  <MMI_VII>15.17</MMI_VII>
  <MMI_VIII>5.87</MMI_VIII>
  <MMI_IX>1.61</MMI_IX>
  <MMI_X>0.25</MMI_X>
  <MMI_XI>0.02</MMI_XI>
  <MMI_XII>0.00</MMI_XII>
  <MMI_100YR>5.9</MMI_100YR>
  <MMI_200YR>7.1</MMI_200YR>
  <MMI_250YR>7.3</MMI_250YR>
  <MMI_475YR>8.0</MMI_475YR>
  <Liquefaction>High</Liquefaction>
  <ZoneCADOI>Not Applicable</ZoneCADOI>
  <Landslide />
  <GroundFailure>Not Applicable</GroundFailure>
  <SoilType>Soft Soil to Firm Soil</SoilType>
  <NumberOfFaults>5</NumberOfFaults>
  <NumberOfHistEvents>5</NumberOfHistEvents>
  <NearestFault>2</NearestFault>
  <Faults>
    <Fault>
      <FaultName>Southern Whidbey Island
      <DistanceToFault>14.05</
      <FaultLength>55.92</FaultLength>
      <EventMagnitude> 7.32</
      <ReturnPeriod>3680</ReturnPeriod>
    </Fault>
    .
    .
    .
  </Faults>
  <HistoryEvents>
    <HistoryEvent>
      <History>
        <Name>Unnamed</Name>
        <Year>1872</Year>
        <Date>December 15</Date>
        <Magnitude> 7.00</Magnitude>
        <Distance>96.72</Distance>
        <Depth>N/A</Depth>
      </History>
    </HistoryEvent>
    .
    .
    .

```

```

        </HistoryEvents>
    </ProfileEarthquake>
    .
    .
    .

```

Name element

Specifies the name of a historical hurricane or descriptive information about a historical earthquake.

Item	Value	Description
Element name	<i>Name</i>	Specifies the name of a historical hurricane or descriptive information about a historical earthquake..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane, Earthquake	
Example	1906 San Francisco, CA	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
        </HazardInformation>
      </Report ...>
    </Reports>
  </ISOResponses>

```

```

    .
    <ProfileEarthquake>
      <Risk>
        <Risk100YR>0-5</Risk100YR>
        <Risk250YR>5-10</Risk250YR>
        <RiskAnnual>0.1</RiskAnnual>
        <RelRiskCounty>90-100</RelRiskCounty>
        <RelRiskState>90-100</RelRiskState>
      </Risk>
      <MMI_VI>25.34</MMI_VI>
      <MMI_VII>15.17</MMI_VII>
      <MMI_VIII>5.87</MMI_VIII>
      <MMI_IX>1.61</MMI_IX>
      <MMI_X>0.25</MMI_X>
      <MMI_XI>0.02</MMI_XI>
      <MMI_XII>0.00</MMI_XII>
      <MMI_100YR>5.9</MMI_100YR>
      <MMI_200YR>7.1</MMI_200YR>
      <MMI_250YR>7.3</MMI_250YR>
      <MMI_475YR>8.0</MMI_475YR>
      <Liquefaction>High</Liquefaction>
      <ZoneCADOI>Not Applicable</ZoneCADOI>
      <LandSlide />
      <GroundFailure>Not Applicable</GroundFailure>
      <SoilType>Soft Soil to Firm Soil</SoilType>
      <NumberOfFaults>5</NumberOfFaults>
      <NumberOfHistEvents>5</NumberOfHistEvents>
      <NearestFault>2</NearestFault>
      <Faults>
        <Fault>
          <FaultName>Southern Whidbey Island
          <DistanceToFault>14.05</
          <FaultLength>55.92</FaultLength>
          <EventMagnitude> 7.32</
          <ReturnPeriod>3680</ReturnPeriod>
        </Fault>
        .
        .
        .
      </Faults>
      <HistoryEvents>
        <HistoryEvent>
          <History>
            <Name>Unnamed</Name>
            <Year>1872</Year>
            <Date>December 15</Date>
            <Magnitude> 7.00</Magnitude>
            <Distance>96.72</Distance>
            <Depth>N/A</Depth>
          </History>
        </HistoryEvent>
        .
        .
        .
      </HistoryEvents>
    </ProfileEarthquake>

```

NearestFault element

Specifies the active fault nearest to the property from the list of active faults in the *Faults* element.

Item	Value	Description
Element name	<i>NearestFault</i>	Specifies the active fault nearest to the property from the list of active faults in the <i>Faults</i> element. . The service accounts only for known faults within a 200-mile radius of the property. However, a property may experience seismic activity even if it is not within 200 miles of a known fault.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Profile	Earthquake	
Values	An integer between 1 and 5, inclusive.	For example, a value of 3 indicates that the fault nearest to the property is the third fault listed in the <i>Faults</i> element.

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
```

```

<Reports>
  <Report ...>
    <AddressProfile>
      <LocationInformation>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
      <ProfileEarthquake>
        <Risk>
          <Risk100YR>0-5</Risk100YR>
          <Risk250YR>5-10</Risk250YR>
          <RiskAnnual>0.1</RiskAnnual>
          <RelRiskCounty>90-100</RelRiskCounty>
          <RelRiskState>90-100</RelRiskState>
        </Risk>
        <MMI_VI>25.34</MMI_VI>
        <MMI_VII>15.17</MMI_VII>
        <MMI_VIII>5.87</MMI_VIII>
        <MMI_IX>1.61</MMI_IX>
        <MMI_X>0.25</MMI_X>
        <MMI_XI>0.02</MMI_XI>
        <MMI_XII>0.00</MMI_XII>
        <MMI_100YR>5.9</MMI_100YR>
        <MMI_200YR>7.1</MMI_200YR>
        <MMI_250YR>7.3</MMI_250YR>
        <MMI_475YR>8.0</MMI_475YR>
        <Liquefaction>High</Liquefaction>
        <ZoneCADOI>Not Applicable</ZoneCADOI>
        <Landslide />
        <GroundFailure>Not Applicable</GroundFailure>
        <SoilType>Soft Soil to Firm Soil</SoilType>
        <NumberOfFaults>5</NumberOfFaults>
        <NumberOfHistEvents>5</NumberOfHistEvents>
        <NearestFault>2</NearestFault>
        <Faults>
          <Fault>
            <FaultName>Southern Whidbey Island
            fault</FaultName>
            <DistanceToFault>14.05</
            DistanceToFault>
            <FaultLength>55.92</FaultLength>
            <EventMagnitude> 7.32</
            EventMagnitude>
            <ReturnPeriod>3680</ReturnPeriod>
          </Fault>
          .
          .
          .
        </Faults>
        <HistoryEvents>
          <HistoryEvent>
            <History>
              <Name>Unnamed</Name>
              <Year>1872</Year>

```

```

        <Date>December 15</Date>
        <Magnitude> 7.00</Magnitude>
        <Distance>96.72</Distance>
        <Depth>N/A</Depth>
      </History>
    </HistoryEvent>
    .
    .
    .
  </HistoryEvents>
</ProfileEarthquake>
.
.
.

```

NearestTarget element

Specifies the type of the terrorist target nearest to the property.

Item	Value	Description
Element name	<i>NearestTarget</i>	Specifies the type of the terrorist target nearest to the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Terrorism	
Values	A value from this list	Airport Amusement Park Bridge Bus Terminal Capitol Chemical Plant Commercial Embassy Event Venue Federal Building Higher Education Hotel Mall Medical Natural Gas Nuclear Power Plant Oil Refinery Storage Port Post Office Power Plant

Item	Value	Description
		Prominent Building Religious Subway Station Train Station

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileTerrorism>
          <NearestTarget>TRAIN STATION</NearestTarget>
          <Distance>0.20145692986724237</Distance>
          <LandmarkType>AIR</LandmarkType>
        </ProfileTerrorism>
      </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>

```

NumberOfFaults element

Specifies the number of active faults near the property.

Item	Value	Description
Element name	<i>NumberOfFaults</i>	Specifies the number of active faults near the property. .
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric

Item	Value	Description
		value without a fractional component.
Profile	Earthquake	
Values	An integer between 0 and 5, inclusive.	The service returns a maximum of five faults.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
          <MMI_250YR>7.3</MMI_250YR>
          <MMI_475YR>8.0</MMI_475YR>
          <Liquefaction>High</Liquefaction>
          <ZoneCADOI>Not Applicable</ZoneCADOI>
          <LandSlide />
          <GroundFailure>Not Applicable</GroundFailure>
          <SoilType>Soft Soil to Firm Soil</SoilType>
          <NumberOfFaults>5</NumberOfFaults>
          <NumberOfHistEvents>5</NumberOfHistEvents>
          <NearestFault>2</NearestFault>
          <Faults>

```

```

        <Fault>
            <FaultName>Southern Whidbey Island
        fault</FaultName>
        DistanceToFault>
            <DistanceToFault>14.05</
        EventMagnitude>
            <FaultLength>55.92</FaultLength>
            <EventMagnitude> 7.32</
            <ReturnPeriod>3680</ReturnPeriod>
        </Fault>
        .
        .
        .
    </Faults>
    <HistoryEvents>
        <HistoryEvent>
            <History>
                <Name>Unnamed</Name>
                <Year>1872</Year>
                <Date>December 15</Date>
                <Magnitude> 7.00</Magnitude>
                <Distance>96.72</Distance>
                <Depth>N/A</Depth>
            </History>
        </HistoryEvent>
        .
        .
        .
    </HistoryEvents>
</ProfileEarthquake>
.

```

NumberOfHistEvents element

Specifies the number of historical earthquakes that have occurred near the property.

Item	Value	Description
Element name	<i>NumberOfHistEvents</i>	Specifies the number of historical earthquakes that have occurred near the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Profile	Earthquake	

Item	Value	Description
Values	An integer between 0 and 5, inclusive.	The service returns a maximum of five historical earthquakes.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
          <MMI_250YR>7.3</MMI_250YR>
          <MMI_475YR>8.0</MMI_475YR>
          <Liquefaction>High</Liquefaction>
          <ZoneCADOI>Not Applicable</ZoneCADOI>
          <Landslide />
          <GroundFailure>Not Applicable</GroundFailure>
          <SoilType>Soft Soil to Firm Soil</SoilType>
          <NumberOfFaults>5</NumberOfFaults>
          <NumberOfHistEvents>5</NumberOfHistEvents>
          <NearestFault>2</NearestFault>
          <Faults>
            <Fault>
              <FaultName>Southern Whidbey Island
            </Fault>
          </Faults>
        </ProfileEarthquake>
      </Report ...>
    </Reports>
  </ISOResponses>

```

```

DistanceToFault>
    <DistanceToFault>14.05</
    <FaultLength>55.92</FaultLength>
    <EventMagnitude> 7.32</
EventMagnitude>
    <ReturnPeriod>3680</ReturnPeriod>
  </Fault>
  .
  .
  .
</Faults>
<HistoryEvents>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1872</Year>
      <Date>December 15</Date>
      <Magnitude> 7.00</Magnitude>
      <Distance>96.72</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>
  .
  .
  .
</HistoryEvents>
</ProfileEarthquake>
.

```

Options element

Indicates whether to include detailed address information in the response.

Item	Value	Description
Element name	<i>Options</i>	Indicates whether to include detailed address information in the response..
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

Item	Value	Description
Attribute name	<i>additionalInfo</i>	Indicates whether the service returns the county, state, and zip code of the property in the response.
Data type	xsd:boolean	The <i>boolean</i> data type is used to specify a true or false value.
Use	required	

Item	Value	Description
Attribute name	<i>geocode</i>	Indicates whether the service returns the latitude and longitude of the property in the response.
Data type	xsd:boolean	The <i>boolean</i> data type is used to specify a true or false value.
Use	required	

Item	Value	Description
Attribute name	<i>returnHighestScore</i>	Indicates whether the service returns only the address that most closely matches the input. This must be set to <code>true</code> . The service does not provide multiple addresses.
Data type	xsd:boolean	The <i>boolean</i> data type is used to specify a true or false value.
Use	required	

Request example

```
<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terrorism,
    WinterstormHazard</Products>
    </HazardAnalysis>
    <Addresses>
      <Options geocode="yes" returnHighestScore="yes"
additionalInfo="no"/>
      <Address>
        <Latitude>25.926777</Latitude>
        <Longitude>-80.342367</Longitude>
        <Addr1> </Addr1>
```

```

        <City></City>
      <County></County>
      <StateProv></StateProv>
      <Country></Country>
    </Address>
  </Addresses>
</ISORequest>
</ISORequests>

```

Password element

Specifies your password for AIR's web services.

Item	Value	Description
Element name	<i>Password</i>	Specifies your password for AIR's web services. If you need login credentials, contact your AIR representative.
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Request example

```

<ISORequests>
  <RequestHeader>
    <AIR>
      <LoginID>YourLogin</LoginID>
      <Password>YourSecretPassword</Password>
      <LicenseKey>YourLicenseKey</LicenseKey>
    </AIR>
  </RequestHeader>
  <ISORequest>
    .
    .
    .
  </ISORequest>
</ISORequests>

```

ParsedAddr element

Contains the elements of the parsed address used by the service.

Item	Value	Description
Element name	<i>ParsedAddr</i>	Contains the elements of the parsed address used by the service..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.
Notes	You can supply an unparsed address in the <i>Addr1</i> element of the request.	

Source

```
<xs:element name="ParsedAddr" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="Address" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
```

```

        <Street NumPre="" Num="100" NumSuf=""
Seperator="" Name="MAIN" Type="ST" TypeEx="STREET" PostDir=""
PreDir="" />
        <Building UnitType="" UnitValue=""
FloorValue="" Type="" Name="" />
        <Delivery BoxType="" BoxValue=""
RouteType="" RouteValue="" />
        <Contact Company="" CareOf="" Attn=""
Other="" />
    </Address>
</ParsedAddr>
<AddrValidator>
    .
    .
    .
</AddrValidator>
.

```

PostalCode element

Specifies the fiveor nine-digit ZIP code for the property street address.

Item	Value	Description
Element name	<i>PostalCode</i>	Specifies the fiveor nine-digit ZIP code for the property street address.
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	5 or 9 characters.	
Notes	If you supply an incorrect ZIP code, the service provides the best ZIP-code match for the other address information that you provided.	If you specify the nine-digit ZIP code, do not include a hyphen.

Request example

```

<ISORequests>
  <RequestHeader>
    .

```

```

      .
      .
      .
    <ISORequest>
      <Products><HazardAnalysisLossAnalysis</Products>
      <HazardAnalysis>

    <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
    WinterstormHazard</Products>
      </HazardAnalysis>
      <Addresses>
        <Options geocode="yes" returnHighestScore="yes"
        additionalInfo="no"/>
        <Address>
          <Latitude></Latitude>
          <Longitude></Longitude>
          <Addr1>100 Main Street</Addr1>
          <City>Seattle</City>
          <County>King</County>
          <PostalCode>98104</PostalCode>
          <StateProv>WA</StateProv>
          <Country>US</Country>
        </Address>
      </Addresses>
    </ISORequest>
  </ISORequests>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
    timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
    ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
    ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
            </Address>
          </Entered>
          <PostalCode>98104</PostalCode>
          <GeoPath AreaLevel2="53"
          AreaLevel3="033" />
        </Matched>
      </Matched>
    </Matched>
  </Matched>

```

```

      .
      .
      .
    </Matched>
  </LocationInformation>
  <HazardInformation>
    .
    .
    .
  </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" ... .ASF.LogFile="">
      <LossAnalysis engine="12.0.3 20100826">
        <Data type = "Locations">
          <Locations>
            <Location>
              <ID>LOC06</ID>
              <YearBuilt>1970</Year Built>
              <Address>
                <Country>US</Country>
                <StreetAddress>1850 Massachusetts
Ave</StreetAddress>
                <City>CAMBRIDGE</City>
                <Area>MA</Area>
                <AreaModeled>MA</AreaModeled>
                <PostalCode>02138</PostalCode>
                <PostalCodeModeled>02138</
PostalCodeModeled>
                <SubareaModeled>Middlesex</
SubareaModeled>
                <GeoPoint>
                  <GeoLat>42.385719</GeoLat>
                  <GeoLong>-71.076202</GeoLong>
                  <MatchLevel>Exact</MatchLevel>
                </GeoPoint>
              </Address>
            </Location>
          </Locations>
        </Data>
        <ResultSet type="Preset" name="Your configuration
package name">
          <Results>

```

```

        .
        .
        .
      </Results>
    </ResultSet>
  </LossAnalysis>
</Report>
</Reports>
</ISOResponses>

```

PostalCodeModeled element

Specifies the postal code included in the analysis.

Item	Value	Description
Element name	<i>PostalCodeModeled</i>	Specifies the postal code included in the analysis. <i>PostalCodeModeled</i> differs from the PostalCode element of the request if the service finds a better postal code match for the location.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" ... .ASF.LogFile="">
      <LossAnalysis engine="12.0.3 20100826">
        <Data type = "Locations">
          <Locations>
            <Location>
              <ID>LOC06</ID>
              <YearBuilt>1970</Year Built>
              <Address>

```

```

Ave</StreetAddress>
<Country>US</Country>
<StreetAddress>1850 Massachusetts

<City>CAMBRIDGE</City>
<Area>MA</Area>
<AreaModeled>MA</AreaModeled>
<PostalCode>02138</PostalCode>
<PostalCodeModeled>02138</

PostalCodeModeled>
<SubareaModeled>Middlesex</

SubareaModeled>
<GeoPoint>
  <GeoLat>42.385719</GeoLat>
  <GeoLong>-71.076202</GeoLong>
  <MatchLevel>Exact</MatchLevel>
</GeoPoint>
</Address>
</Location>
</Locations>
</Data>
<ResultSet type="Preset" name="Your configuration
package name">
  <Results>
    .
    .
    .
  </Results>
</ResultSet>
</LossAnalysis>
</Report>
</Reports>
</ISOResponses>

```

ProcessErrors element

Specifies any issues the service encountered when processing the address that you supplied in the request.

Item	Value	Description
Element name	<i>ProcessErrors</i>	Specifies any issues the service encountered when processing the address that you supplied in the request. Errors cause the service to abort the analysis.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line

Item	Value	Description
		feeds, carriage returns, and tab characters.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
              <GeoPath AreaLevel2="53"
AreaLevel3="033" />
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
                <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
                <InputAddress>
                  <Addr1>100 MAIN STREET</Addr1>
                  .
                  .
                  .
                </InputAddress>
                <ResultAddress>
                  <Addr1>100 S MAIN ST</Addr1>
                  .
                  .
                  .
                </ResultAddress>
                <Message>No Rows found for given
House Number;House Number out of range;Street Info is in City;Input
ZIP5 is blank;</Message>
              </ValidateResult>
            </AddrValidator>
          </Matched>
        </Entered>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

        <ProcessErrors>None</ProcessErrors>
        <ProcessWarnings>None</ProcessWarnings>
    </AddrValidator>
    <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
        <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"
AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
    <Match>
        .
    
```

ProcessWarnings element

Specifies any issues the service encountered when processing the address that you supplied in the request.

Item	Value	Description
Element name	<i>ProcessWarnings</i>	Specifies any issues the service encountered when processing the address that you supplied in the request. Warnings do not cause the service to abort the analysis.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
            
```

```

        <City>Seattle</City>
        <StateProv>WA</StateProv>
        <Country>US</Country>
        <MatchLevel>3</MatchLevel>
        <County>KING</County>
        <GeoPath AreaLevel2="53"
AreaLevel3="033" />
        </Address>
    </Entered>
    <Matched>
        <ParsedAddr>
            .
            .
            .
        </ParsedAddr>
        <AddrValidator>
            <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

<ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
        <InputAddress>
            <Addr1>100 MAIN STREET</Addr1>
            .
            .
            .
        </InputAddress>
        <ResultAddress>
            <Addr1>100 S MAIN ST</Addr1>
            .
            .
            .
        </ResultAddress>
        <Message>No Rows found for given
House Number;House Number out of range;Street Info is in City;Input
ZIP5 is blank;</Message>
        </ValidateResult>
        <ProcessErrors>None</ProcessErrors>
        <ProcessWarnings>None</ProcessWarnings>
    </AddrValidator>
    <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
        <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"
AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
    <Match>
        .

```

Products element

Specifies the type of web service to use or the type of hazard analysis to run

Item	Value	Description
Element name	<i>Products</i>	Specifies the type of web service to use or the type of hazard analysis to run
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Values	<i>HurricaneHazard</i> <i>ThunderstormHazard</i> <i>EarthquakeHazard</i> <i>FEMAFlood</i> <i>Terrorism</i>	When <i>Products</i> is a child element of the <i>ISORequest</i> element, the value specifies the type of web service to use. You must specify <i>HazardAnalysisLossAnalysis</i>. When <i>Products</i> is a child element of the <i>HazardAnalysis</i> element, the value specifies the type of hazard analysis to run.

Request example

```

<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

      <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terrorism,
      WinterstormHazard</Products>
      </HazardAnalysis>
      <Addresses>
        <Options geocode="yes" returnHighestScore="yes"
        additionalInfo="no"/>
        <Address>
          <Latitude>25.926777</Latitude>

```

```

        <Longitude>-80.342367</Longitude>
        <Addr1> </Addr1>
        <City></City>
        <County></County>
        <StateProv></StateProv>
        <Country></Country>
    </Address>
</Addresses>
</ISORequest>
</ISORequests>

```

Request example

```

<ISORequests>
  <RequestHeader>
    <AIR>
      .
      .
      .
    </AIR>
  </RequestHeader>
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <ReturnLocationResults>true</ReturnLocationResults>
      <ReturnLayerResults>true</ReturnLayerResults>
      <Options stormSurge="true" demandSurge="true" SSValue="10"
PFValue="100"/>
      <Data type="Contract">
        .
        .
        .
      </Contract>
    </Data>
  .

```

Response example

```

<ISORequests>
  <RequestHeader>
    <AIR>
      .
      .
      .
    </AIR>
  </RequestHeader>
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <ReturnLocationResults>true</ReturnLocationResults>
      <ReturnLayerResults>true</ReturnLayerResults>
      <Options stormSurge="true" demandSurge="true" SSValue="10"
PFValue="100"/>
      <Data type="Contract">
        .
        .
        .
      </Contract>
    </Data>
  .

```

```

    .
  </Contract>
</Data>
.
.
.

```

ProfileEarthquake element

Contains information about the risk of earthquakes at the property.

Item	Value	Description
Element name	<i>ProfileEarthquake</i>	Contains information about the risk of earthquakes at the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="ProfileEarthquake" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:all minOccurs="0">
      <xs:element ref="Risk" />
      <xs:element ref="MMI_VI" minOccurs="0" />
      <xs:element ref="MMI_VII" minOccurs="0" />
      <xs:element ref="MMI_VIII" minOccurs="0" />
      <xs:element ref="MMI_IX" minOccurs="0" />
      <xs:element ref="MMI_X" minOccurs="0" />
      <xs:element ref="MMI_XI" minOccurs="0" />
      <xs:element ref="MMI_XII" minOccurs="0" />
      <xs:element ref="MMI_100YR" minOccurs="0" />
      <xs:element ref="MMI_200YR" minOccurs="0" />
      <xs:element ref="MMI_250YR" minOccurs="0" />
      <xs:element ref="MMI_475YR" minOccurs="0" />
      <xs:element ref="Liquefaction" minOccurs="0" />
      <xs:element ref="ZoneCADOI" />
      <xs:element ref="LandSlide" />
      <xs:element ref="GroundFailure" />
      <xs:element ref="SoilType" />
      <xs:element ref="NumberOfFaults" />
      <xs:element ref="NumberOfHistEvents" />
      <xs:element ref="NearestFault" />
      <xs:element ref="Faults" minOccurs="0" />
      <xs:element ref="HistoryEvents" minOccurs="0" />
    </xs:all>
  </xs:complexType>

```

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

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
          <MMI_250YR>7.3</MMI_250YR>
          <MMI_475YR>8.0</MMI_475YR>
          <Liquefaction>High</Liquefaction>
          <ZoneCADOI>Not Applicable</ZoneCADOI>
          <LandSlide />
          <GroundFailure>Not Applicable</GroundFailure>
          <SoilType>Soft Soil to Firm Soil</SoilType>
          <NumberOfFaults>5</NumberOfFaults>
          <NumberOfHistEvents>5</NumberOfHistEvents>
          <NearestFault>2</NearestFault>
          <Faults>
            <Fault>
              <FaultName>Southern Whidbey Island
            </Fault>
          </Faults>
        </ProfileEarthquake>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>
```

```

<FaultLength>55.92</FaultLength>
<EventMagnitude> 7.32</
EventMagnitude>
    <ReturnPeriod>3680</ReturnPeriod>
  </Fault>
  .
  .
  .
</Faults>
<HistoryEvents>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1872</Year>
      <Date>December 15</Date>
      <Magnitude> 7.00</Magnitude>
      <Distance>96.72</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>
  .
  .
  .
</HistoryEvents>
</ProfileEarthquake>
.
.
.

```

ProfileFlood element

Contains information about the risk of flood at the property.

Item	Value	Description
Element name	<i>ProfileFlood</i>	Contains information about the risk of flood at the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="ProfileFlood" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence minOccurs="0">
      <xs:choice maxOccurs="unbounded">
        <xs:element ref="Elevation" />
        <xs:element ref="FloodZone" />

```

```

        <xs:element ref="FloodZoneDistance" />
        <xs:element ref="FloodZoneFEMA" />
        <xs:element ref="Source" />
    </xs:choice>
</xs:sequence>
</xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
          <ProfileFlood>
            <Source>AIR</Source>
            <FloodZone>100-Year</FloodZone>
            <FloodZoneFEMA>AE</FloodZoneFEMA>
            <Elevation>9 - 10</Elevation>
            <FloodZoneDistance>
              <WaterBody>More than 5</WaterBody>
              <Flood100YR>0.030</Flood100YR>
              <Flood500YR>0.040</Flood500YR>
            </FloodZoneDistance>
            <AIRFloodZone>100-Year</AIRFloodZone>
            <FloodZoneAIRDistance>
              <AIRFlood100YR>0.052</Flood100YR>
              <AIRFlood500YR>0.126</Flood500YR>
            </FloodZoneAIRDistance>
            <BaseFloodElevation>8 - 9</
BaseFloodElevation>
          </ProfileFlood>
          .
          .
          .
        </HazardInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

ProfileHurricane element

Contains information about the risk of hurricanes at the property.

Item	Value	Description
Element name	<i>ProfileHurricane</i>	Contains information about the risk of hurricanes at the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```
<xs:element name="ProfileHurricane" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:all minOccurs="0">
      <xs:element ref="Risk" />
      <xs:element ref="CoastalCounty" />
      <xs:element ref="StormSurge" minOccurs="0" />
      <xs:element ref="DistanceToCoast" />
      <xs:element ref="Elevation" />
      <xs:element ref="SurfaceTerrain" />
      <xs:element ref="ZoneWindSpeed" />
      <xs:element ref="ZoneWindborneDebris" />
      <xs:element ref="ZoneTerrain" />
      <xs:element ref="ZoneHighVelocity" />
      <xs:element ref="ZoneWindSpeed2010" />
      <xs:element ref="ZoneWindborneDebris2010" />
      <xs:element ref="ZoneTerrain2010" />
      <xs:element ref="ZoneHighVelocity2010" />
      <xs:element ref="HistoryEvents" minOccurs="0" />
    </xs:all>
  </xs:complexType>
</xs:element>
```

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
```

```

<AddressProfile>
.
.
.
</LocationInformation>
<HazardInformation>
  <ProfileHurricane>
    <Risk>
      <Risk100YR>0-5</Risk100YR>
      <Risk250YR>0-5</Risk250YR>
      <RiskAnnual><0.1</RiskAnnual>
      <RelRiskCounty>0-10</RelRiskCounty>
      <RelRiskState>0-10</RelRiskState>
    </Risk>
    <CoastalCounty>No</CoastalCounty>
    <StormSurge>No</StormSurge>
    <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
      <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
    <Elevation>20 - 25</Elevation>
    <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
      <ZoneWindSpeed />
      <ZoneWindborneDebris />
      <ZoneTerrain />
    <ZoneHighVelocity />
      <ZoneWindSpeed2010 />
      <ZoneWindBorneDebris2010 />
      <ZoneTerrain2010 />
    <ZoneHighVelocity2010 />
  </ProfileHurricane>
  <ProfileEarthquake>
    .
    .
    .
  </ProfileEarthquake>
  <ProfileThunderstorm>
    .
    .
    .
  </ProfileThunderstorm>
  <ProfileWinterstorm>
    .
    .
    .
  </ProfileWinterstorm>
  <ProfileFlood>
    .
    .
    .
  </ProfileFlood>
  <ProfileTerrorism>
    .
    .
    .
  </ProfileTerrorism>
</HazardInformation>
</AddressProfile>

```

```

    </Report>
  </Reports>
</ISOResponses>

```

ProfileTerrorism element

Contains information about the risk of terrorism at the property.

Item	Value	Description
Element name	<i>ProfileTerrorism</i>	Contains information about the risk of terrorism at the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="ProfileTerrorism" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="NearestTarget" />
      <xs:element ref="Distance" />
      <xs:element ref="LandmarkType" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
        </HazardInformation>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

```

        .
        <ProfileTerrorism>
          <NearestTarget>TRAIN STATION</NearestTarget>
          <Distance>0.20145692986724237</Distance>
          <LandmarkType>AIR</LandmarkType>
        </ProfileTerrorism>
      </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>

```

ProfileThunderstorm element

Contains information about the risk of thunderstorms at the property.

Item	Value	Description
Element name	<i>ProfileThunderstorm</i>	Contains information about the risk of thunderstorms at the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="ProfileThunderstorm" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence minOccurs="0">
      <xs:element ref="FrequencyTornado" />
      <xs:element ref="FrequencyHail" />
      <xs:element ref="FrequencySLWind" />
      <xs:element ref="Risk" />
      <xs:element ref="HistoryEvents" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
</Reports>

```

```

<Report ...>
  <AddressProfile>
    <LocationInformation>
      .
      .
      .
    </LocationInformation>
    <HazardInformation>
      .
      .
      .
    <ProfileThunderstorm>
      <FrequencyTornado>Very Low</FrequencyTornado>
      <FrequencyHail>Very Low</FrequencyHail>
      <FrequencySLWind>Very Low</FrequencySLWind>
      <Risk>
        <Risk100YR>0-5</Risk100YR>
        <Risk250YR>0-5</Risk250YR>
        <RiskAnnual><0.1</RiskAnnual>
        <RelRiskCounty>20-30</RelRiskCounty>
        <RelRiskState>20-30</RelRiskState>
      </Risk>
      <HistoryEvents>
        <HistoryEventsTornado>
          <HistoryEvent>
            <Year>1969</Year>
            <Date>December 12</Date>
            <Distance> 4.89</Distance>
            <Intensity>3</Intensity>
          </HistoryEvent>
          .
          .
        </HistoryEventsTornado>
        <HistoryEventsHail>
          <HistoryEvent>
            <Year>1972</Year>
            <Date>June 8</Date>
            <Distance>13.72</Distance>
            <Intensity>1.3-2.0</Intensity>
          </HistoryEvent>
          .
          .
        </HistoryEventsHail>
        <HistoryEventsSLWind>
          <HistoryEvent>
            <Year>1956</Year>
            <Date>March 3</Date>
            <Distance> 7.10</Distance>
            <Intensity>70-80</Intensity>
          </HistoryEvent>
          .
          .
        </HistoryEventsSLWind>
      </HistoryEvents>
    </ProfileThunderstorm>
  .

```

```

      .
      .
    </HazardInformation>
  </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

ProfileWinterstorm element

Contains information about the risk of winter storms at the property.

Item	Value	Description
Element name	<i>ProfileWinterstorm</i>	Contains information about the risk of winter storms at the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="ProfileWinterstorm" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence minOccurs="0">
      <xs:element ref="WindFrequency" />
      <xs:element ref="SnowFrequency" />
      <xs:element ref="Risk" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .

```

```

        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
        <ProfileWinterstorm>
          <WindFrequency>Very Low</WindFrequency>
          <SnowFrequency>Very Low</SnowFrequency>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>20-30</RelRiskCounty>
            <RelRiskState>60-70</RelRiskState>
          </Risk>
        </ProfileWinterstorm>
        .
        .
        .
      </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>

```

RelRiskCounty element

Specifies the relative risk of an event affecting the property with respect to other properties in the same county.

Item	Value	Description
Element name	<i>RelRiskCounty</i>	Specifies the relative risk of an event affecting the property with respect to other properties in the same county.. <i>RelRiskCounty</i> represents the loss that is likely to meet or exceed one percent of the loss of to other properties in the county.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line

Item	Value	Description
		feeds, carriage returns, and tab characters.
Profile	Hurricane, Earthquake, Severe Thunderstorm, Winter Storm	
Values	0-10 10-20 20-30 30-40 40-50 50-60, 60-70 70-80 80-90 90-100	A value of 1-10 indicates that there is a one percent chance that losses will meet or exceed 0-10% of the losses to other properties in the county.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
          <MMI_250YR>7.3</MMI_250YR>
          <MMI_475YR>8.0</MMI_475YR>
          <Liquefaction>High</Liquefaction>
          <ZoneCADOI>Not Applicable</ZoneCADOI>
        </ProfileEarthquake>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

        <Landslide />
        <GroundFailure>Not Applicable</GroundFailure>
        <SoilType>Soft Soil to Firm Soil</SoilType>
        <NumberOfFaults>5</NumberOfFaults>
        <NumberOfHistEvents>5</NumberOfHistEvents>
        <NearestFault>2</NearestFault>
        <Faults>
            <Fault>
                <FaultName>Southern Whidbey Island
                <DistanceToFault>14.05</
            <FaultLength>55.92</FaultLength>
            <EventMagnitude> 7.32</
            <ReturnPeriod>3680</ReturnPeriod>
        </Fault>
        .
        .
        .
    </Faults>
    <HistoryEvents>
        <HistoryEvent>
            <History>
                <Name>Unnamed</Name>
                <Year>1872</Year>
                <Date>December 15</Date>
                <Magnitude> 7.00</Magnitude>
                <Distance>96.72</Distance>
                <Depth>N/A</Depth>
            </History>
        </HistoryEvent>
        .
        .
        .
    </HistoryEvents>
</ProfileEarthquake>
.
.
.

```

RelRiskState element

Specifies the relative risk of an event affecting the property with respect to other properties in the same county.

Item	Value	Description
Element name	<i>RelRiskState</i>	Specifies the relative risk of an event affecting the property with respect to other properties in the same county..

Item	Value	Description
		<i>RelRiskState</i> represents the loss that is likely to meet or exceed one percent of the loss to other properties in the state.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane, Earthquake, Severe Thunderstorm, Winter Storm	
Values	0-10 10-20 20-30 30-40 40-50 50-60, 60-70 70-80 80-90 90-100	A value of 1-10 indicates that there is a one percent chance that losses will meet or exceed 0-10% of the losses to other properties in the state.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
          </Risk>
        </ProfileEarthquake>
      </Report ...>
    </Reports>
  </ISOResponses>

```

```

        <RelRiskState>90-100</RelRiskState>
    </Risk>
    <MMI_VI>25.34</MMI_VI>
    <MMI_VII>15.17</MMI_VII>
    <MMI_VIII>5.87</MMI_VIII>
    <MMI_IX>1.61</MMI_IX>
    <MMI_X>0.25</MMI_X>
    <MMI_XI>0.02</MMI_XI>
    <MMI_XII>0.00</MMI_XII>
    <MMI_100YR>5.9</MMI_100YR>
    <MMI_200YR>7.1</MMI_200YR>
    <MMI_250YR>7.3</MMI_250YR>
    <MMI_475YR>8.0</MMI_475YR>
    <Liquefaction>High</Liquefaction>
    <ZoneCADOI>Not Applicable</ZoneCADOI>
    <LandSlide />
    <GroundFailure>Not Applicable</GroundFailure>
    <SoilType>Soft Soil to Firm Soil</SoilType>
    <NumberOfFaults>5</NumberOfFaults>
    <NumberOfHistEvents>5</NumberOfHistEvents>
    <NearestFault>2</NearestFault>
    <Faults>
        <Fault>
            <FaultName>Southern Whidbey Island
            <DistanceToFault>14.05</
            <FaultLength>55.92</FaultLength>
            <EventMagnitude> 7.32</
            <ReturnPeriod>3680</ReturnPeriod>
        </Fault>
        .
        .
        .
    </Faults>
    <HistoryEvents>
        <HistoryEvent>
            <History>
                <Name>Unnamed</Name>
                <Year>1872</Year>
                <Date>December 15</Date>
                <Magnitude> 7.00</Magnitude>
                <Distance>96.72</Distance>
                <Depth>N/A</Depth>
            </History>
        </HistoryEvent>
        .
        .
        .
    </HistoryEvents>
</ProfileEarthquake>
.
.

```

Report element

Contains processing information for the AIR Address Service.

Item	Value	Description
Element name	<i>Report</i>	Contains processing information for the AIR Address Service.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Attributes

Item	Value	Description
Attribute name	<i>ASF.ErrorCode</i>	Specifies the code associated with the error message in the ASF.ErrorMessage field.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	required	

Item	Value	Description
Attribute name	<i>ASF.ErrorMessage</i>	Specifies any error that occurred during processing in an abbreviated format.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>ASF.InfoMessage</i>	Specifies any error that occurred during processing in human-readable format.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>ASF.Logfile</i>	Specifies the processing log file.

Item	Value	Description
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>ASF.PercentCompleted</i>	Specifies the percentage of the processing that the service completed during asynchronous bulk tasks.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	required	

Item	Value	Description
Attribute name	<i>ASF.StatusMessage</i>	Specifies the status of the processing tasks in human-readable format.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>product</i>	Specifies the name of the service that processed the request.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>sequence</i>	Specifies when the service received the request. Sequence is an administrative counter.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Use	required	

Item	Value	Description
Attribute name	<i>success</i>	Specifies whether the service was available and functioning.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>timespan</i>	Specifies the total processing time for the request.
Data type	xs:decimal	
Use	required	

Item	Value	Description
Attribute name	<i>version</i>	Specifies the version number of the service that processed the request.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Source

```
<xs:element name="Report" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="AddressProfile" />
    </xs:sequence>
    <xs:attribute name="ASF.ErrorCode" use="required"
type="xs:integer" />
    <xs:attribute name="ASF.ErrorMessage" use="required" />
    <xs:attribute name="ASF.InfoMessage" use="required" />
    <xs:attribute name="ASF.Logfile" use="required" />
    <xs:attribute name="ASF.PercentCompleted" use="required"
type="xs:integer" />
    <xs:attribute name="ASF.StatusMessage" use="required"
type="xs:string" />
    <xs:attribute name="product" use="required" type="xs:string" />
    <xs:attribute name="version" type="xs:string" />
    <xs:attribute name="sequence" use="required" type="xs:integer" />
    <xs:attribute name="success" use="required" type="xs:string" />
    <xs:attribute name="timespan" use="required" type="xs:decimal" />
  </xs:complexType>
</xs:element>
```

Response example

```

<ISOResponses>
  <ResponseHeader>
    <AIRTrack>
      <Instance></Instance>
    </AIRTrack>
    <runtimeinformation>
      responseid="1476783114;636428872887964084"
      clientparam="UnknownUserHostAddress">
        <time start="10/6/2017 11:48:06 AM" end="10/6/2017
11:48:08 AM" timespan="2.547" />
        <count reportcount="1" errorcount="0" />
      </runtimeinformation>
    </ResponseHeader>
    <Reports>
      <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
        <AddressProfile>
          .
        </AddressProfile>
      </Report>
    </Reports>
  </ResponseHeader>
</ISOResponses>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" version="3.5.0.0"
timespan="0.172" sequence="143321" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage=";" ASF.InfoMessage=";"
ASF.PercentCompleted="" ASF.StatusMessage="" ASF.Logfile="">
      <LossAnalysis engine="12.0.3 20100826">
        <Data type = "Locations">
          <Locations>
            <Location>
              .
              .
              .
            </Location>
          </Locations>
        </Data>
        <ResultSet type="Preset" name="Your configuration
package name">
          <Options>
            .
            .
            .
          </Options>
          <StrPerils>PAL+PWH+PWX</StrPerils>
          <Results>
            <AnnualSummaries>

```

```

      .
      .
      .
    </AnnualSummaries>
    <AnnualDetails>
      .
      .
      .
    </AnnualDetails>
  </Results>
</ResultSet>
</LossAnalysis>
</Report>
</Reports>
</ISOResponses>

```

Reports element

Contains the *Report* element.

Item	Value	Description
Element name	<i>Reports</i>	Contains the <i>Report</i> element.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="Reports" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="Report" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    <AIRTrack>
      <Instance></Instance>
    </AIRTrack>
    <runtimeinformation
responseid="1476783114;636428872887964084"
clientparam="UnknownUserHostAddress">

```

```

        <time start="10/6/2017 11:48:06 AM" end="10/6/2017
11:48:08 AM" timespan="2.547" />
        <count reportcount="1" errorcount="0" />
    </runtimeinformation>
</ResponseHeader>
<Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
        <AddressProfile>
            .
        </AddressProfile>
    </Report>
</Reports>
</ISOResponses>
<ResponseHeader>
    <AIRTrack>
        <Instance></Instance>
    </AIRTrack>
    <runtimeinformation>
responseid="1476783114;636428872887964084"
clientparam="UnknownUserHostAddress">
        <time start="10/6/2017 11:48:06 AM" end="10/6/2017
11:48:08 AM" timespan="2.547" />
        <count reportcount="1" errorcount="0" />
    </runtimeinformation>
</ResponseHeader>
<Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
        <AddressProfile>
            .
        </AddressProfile>
    </Report>
</Reports>
</ISOResponses>

```

Response example

```

<ISOResponses>
    <ResponseHeader>
        .
        .
        .
    </ResponseHeader>
    <Reports>
        <Report product="LossAnalysis" version="3.5.0.0"
timespan="0.172" sequence="143321" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage=";" ASF.InfoMessage=";"
ASF.PercentCompleted="" ASF.StatusMessage="" ASF.Logfile="">
            <LossAnalysis engine="12.0.3 20100826">
                <Data type = "Locations">
                    <Locations>
                        .
                        .
                        .
                    </Locations>
                </Data>
                <ResultSet type="Preset" name="Your configuration
package name">
                    <Options>
                        .
                    </Options>
                </ResultSet>
            </LossAnalysis>
        </Report>
    </Reports>
</ISOResponses>

```

```

      .
      .
    </Options>
    <StrPerils>PAL+PWH+PWX</StrPerils>
    <Results>
      <AnnualSummaries>
        .
        .
      </AnnualSummaries>
      <AnnualDetails>
        .
        .
      </AnnualDetails>
    </Results>
  </ResultSet>
</LossAnalysis>
</Report>
</Reports>
</ISOResponses>

```

ReportID element

Specifies the report ID.

Item	Value	Description
Element name	<i>ReportID</i>	Specifies the report ID..
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

RequestHeader element

Contains the *AIR* element.

Item	Value	Description
Element name	<i>RequestHeader</i>	Contains the <i>AIR</i> element.
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.

Item	Value	Description
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Source

```
<xs:element name="RequestHeader" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="AIR" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Request example

```
<ISORequests>
  <RequestHeader>
    <AIR>
      <LoginID>YourLogin</LoginID>
      <Password>YourSecretPassword</Password>
      <LicenseKey>YourLicenseKey</LicenseKey>
    </AIR>
  </RequestHeader>
  <ISORequest>
    .
    .
    .
  </ISORequest>
</ISORequests>
```

ResponseHeader element

Contains the *AIRTrack* and *runtimeinformation* elements.

Item	Value	Description
Element name	<i>ResponseHeader</i>	Contains the <i>AIRTrack</i> and <i>runtimeinformation</i> elements.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```
<xs:element name="ResponseHeader" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="AIRTrack" minOccurs="0"
maxOccurs="unbounded" />
      <xs:element ref="runtimeinformation" minOccurs="1"
maxOccurs="1" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Response example

```
<ISOResponses>
  <ResponseHeader>
    <AIRTrack>
      <Instance></Instance>
    </AIRTrack>
    <runtimeinformation
responseid="1476783114;636428872887964084"
clientparam="UnknownUserHostAddress">
      <time start="10/6/2017 11:48:06 AM" end="10/6/2017
11:48:08 AM" timespan="2.547" />
      <count reportcount="1" errorcount="0" />
    </runtimeinformation>
  </ResponseHeader>
  <Reports>
    .
    .
    .
  </Reports>
```

ResultAddress element

Specifies the unparsed address that you provided in the request and the parsed address used by the service.

Item	Value	Description
Element name	<i>ResultAddress</i>	Specifies the unparsed address that you provided in the request and the parsed address used by the service..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="ResultAddress" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:all>
      <xs:element ref="Addr1" />
      <xs:element ref="AirStreetID" minOccurs="0" />
      <xs:element ref="HouseNumber" minOccurs="0" />
      <xs:element ref="DirPrefix" minOccurs="0" />
      <xs:element ref="StreetName" minOccurs="0" />
      <xs:element ref="StreetSuffix" minOccurs="0" />
      <xs:element ref="DirSuffix" minOccurs="0" />
      <xs:element ref="County" />
      <xs:element ref="City" />
      <xs:element ref="CityAlias" minOccurs="0" />
      <xs:element ref="StateProv" />
      <xs:element ref="Zip5" />
      <xs:element ref="ZipPlus4" minOccurs="0" />
    </xs:all>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>

```

```

        <AddrValidator>
          <ValidateResult>
            <AttemptedAt>Match5</AttemptedAt>

          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
            <InputAddress>
              .
              .
            </InputAddress>
            <ResultAddress>
              <Addr1>100 S MAIN ST</Addr1>
              <AirStreetID>182926209</
AirStreetID>
              <HouseNumber>100</HouseNumber>
              <DirPrefix>S</DirPrefix>
              <StreetName>MAIN</StreetName>
              <StreetSuffix>ST</StreetSuffix>
              <DirSuffix />
              <County>KING</County>
              <City>SEATTLE</City>
              .
              .
            </ResultAddress>
            .
            .
          </Match>
        </Matched>
      </LocationInformation>
      <HazardInformation>
        .
        .
      </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>

```

ResultRowAnnualDetail element

Contains loss information for one risk for a given return period.

Item	Value	Description
Element name	<i>ResultRowAnnualDetail</i>	Contains loss information for one risk for a given return period.
Where used	response	A <i>response</i> returns the analysis results and

Item	Value	Description
		the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```
<xs:element name="ResultRowAnnualDetail" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="ReturnPeriod" minOccurs="0" />
      <xs:element ref="Loss_Aggregate" minOccurs="0" />
      <xs:element ref="Aggregate_Year" minOccurs="0" />
      <xs:element ref="Loss_Occurrence" minOccurs="0" />
      <xs:element ref="Occurrence_Year" minOccurs="0" />
      <xs:element ref="Occurrence_Peril" minOccurs="0" />
      <xs:element ref="Occurrence_Model" minOccurs="0" />
      <xs:element ref="Occurrence_Event" minOccurs="0" />
      <xs:element ref="Uncertainty" minOccurs="0" maxOccurs="2" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" version="3.5.0.3"
timespan="67.155" sequence="73" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted=""
ASF.StatusMessage="" ASF.Logfile="">
      <LossAnalysis engine="3.0.0 20170210">
        <Data type="Locations">
          <Locations>
            <Location>
              <ID>37899</ID>
              <LocationTerms>
                <LocationTerm>
                  <StrPerils>PFL</StrPerils>
                </LocationTerm>
              </LocationTerms>
              <Address>
                .
                .
                .
              </Address>
            </Location>
          </Locations>
        </Data>
      </LossAnalysis>
    </Report>
  </Reports>
</ISOResponses>
```

```

        </Location>
        <Location>
            <ID>37900</ID>
            <LocationTerms>
                <LocationTerm>
                    <StrPerils>PFL</StrPerils>
                </LocationTerm>
            </LocationTerms>
            <Address>
                .
                .
                .
            </Address>
        </Location>
        <Location>
            <ID>37901</ID>
            <LocationTerms>
                <LocationTerm>
                    <StrPerils>PFL</StrPerils>
                </LocationTerm>
            </LocationTerms>
            <Address>
                .
                .
                .
            </Address>
        </Location>
        <Location>
            .
            .
            .
        </Locations>
    </Data>
    <ResultSet type="preset" name="Your configuration
package name">
        <StrPerils>PFL</StrPerils>
        <Options>
            .
            .
            .
        </Options>
        <Results>
            <AnnualSummaries>
                .
                .
                .
            </AnnualSummaries>
            <AnnualDetails>
                <AnnualDetail type="Aggregate"
perils="PFL" losstype="Gross" coverage="Total">
                    <Level type="Location"
descriptor="ID">37899</Level>
                        <ResultAnnualDetailRows>
                            <ResultRowAnnualDetail>
                                <ReturnPeriod>50</
ReturnPeriod>
                                <Loss_Aggregate>0</
Loss_Aggregate>

```

```

Aggregate_Year>
    <Aggregate_Year>0</
    </ResultRowAnnualDetail>
    <ResultRowAnnualDetail>
    <ReturnPeriod>100</
ReturnPeriod>
    <Loss_Aggregate>0</
Loss_Aggregate>
    <Aggregate_Year>0</
Aggregate_Year>
    </ResultRowAnnualDetail>
    <ResultRowAnnualDetail>
    <ReturnPeriod>250</
ReturnPeriod>
    <Loss_Aggregate>0</
Loss_Aggregate>
    <Aggregate_Year>0</
Aggregate_Year>
    </ResultRowAnnualDetail>
    <ResultRowAnnualDetail>
    .
    .
    .
    </ResultAnnualDetailRows>
</AnnualDetail>
.
.
.
    <AnnualDetail type="Aggregate"
perils="PFL" losstype="Gross" coverage="Total">
    <Level type="Location"
    descriptor="ID">37900</Level>
    <ResultAnnualDetailRows>
    <ResultRowAnnualDetail>
    <ReturnPeriod>50</
ReturnPeriod>
    <Loss_Aggregate>0</
Loss_Aggregate>
    <Aggregate_Year>0</
Aggregate_Year>
    </ResultRowAnnualDetail>
    <ResultRowAnnualDetail>
    <ReturnPeriod>100</
ReturnPeriod>
    <Loss_Aggregate>0</
Loss_Aggregate>
    <Aggregate_Year>0</
Aggregate_Year>
    </ResultRowAnnualDetail>
    <ResultRowAnnualDetail>
    <ReturnPeriod>250</
ReturnPeriod>
    <Loss_Aggregate>0</
Loss_Aggregate>
    <Aggregate_Year>0</
Aggregate_Year>
    </ResultRowAnnualDetail>
    .
    .

```

```

        .
      </ResultAnnualDetailRows>
    </AnnualDetail>
    .
    .
    .

```

ReturnPeriod element

Specifies the interval at which the fault may experience an earthquake of similar magnitude to the one specified in the corresponding *EventMagnitude* element.

Item	Value	Description
Element name	<i>ReturnPeriod</i>	Specifies the interval at which the fault may experience an earthquake of similar magnitude to the one specified in the corresponding <i>EventMagnitude</i> element..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Profile	Earthquake	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        </HazardInformation>
      </Report ...>
    </Reports>
  </ISOResponses>

```

```

<ProfileEarthquake>
  <Risk>
    <Risk100YR>0-5</Risk100YR>
    <Risk250YR>5-10</Risk250YR>
    <RiskAnnual>0.1</RiskAnnual>
    <RelRiskCounty>90-100</RelRiskCounty>
    <RelRiskState>90-100</RelRiskState>
  </Risk>
  <MMI_VI>25.34</MMI_VI>
  <MMI_VII>15.17</MMI_VII>
  <MMI_VIII>5.87</MMI_VIII>
  <MMI_IX>1.61</MMI_IX>
  <MMI_X>0.25</MMI_X>
  <MMI_XI>0.02</MMI_XI>
  <MMI_XII>0.00</MMI_XII>
  <MMI_100YR>5.9</MMI_100YR>
  <MMI_200YR>7.1</MMI_200YR>
  <MMI_250YR>7.3</MMI_250YR>
  <MMI_475YR>8.0</MMI_475YR>
  <Liquefaction>High</Liquefaction>
  <ZoneCADOI>Not Applicable</ZoneCADOI>
  <Landslide />
  <GroundFailure>Not Applicable</GroundFailure>
  <SoilType>Soft Soil to Firm Soil</SoilType>
  <NumberOfFaults>5</NumberOfFaults>
  <NumberOfHistEvents>5</NumberOfHistEvents>
  <NearestFault>2</NearestFault>
  <Faults>
    <Fault>
      <FaultName>Southern Whidbey Island
      <DistanceToFault>14.05</
      <FaultLength>55.92</FaultLength>
      <EventMagnitude> 7.32</
      <ReturnPeriod>3680</ReturnPeriod>
    </Fault>
    .
    .
    .
  </Faults>
  <HistoryEvents>
    <HistoryEvent>
      <History>
        <Name>Unnamed</Name>
        <Year>1872</Year>
        <Date>December 15</Date>
        <Magnitude> 7.00</Magnitude>
        <Distance>96.72</Distance>
        <Depth>N/A</Depth>
      </History>
    </HistoryEvent>
    .
    .
    .
  </HistoryEvents>
</ProfileEarthquake>
.

```

Risk element

Represents the relative risk of an event affecting the property.

Item	Value	Description
Element name	<i>Risk</i>	Represents the relative risk of an event affecting the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.
Profile	Earthquake	

Source

```
<xs:element name="Risk" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:choice>
      <xs:sequence minOccurs="0">
        <xs:element ref="Risk100YR" />
        <xs:element ref="Risk250YR" />
        <xs:element ref="RiskAnnual" />
        <xs:element ref="RelRiskCounty" />
        <xs:element ref="RelRiskState" />
      </xs:sequence>
    </xs:choice>
  </xs:complexType>
</xs:element>
```

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
```

```

.
.
.
<ProfileEarthquake>
  <Risk>
    <Risk100YR>0-5</Risk100YR>
    <Risk250YR>5-10</Risk250YR>
    <RiskAnnual>0.1</RiskAnnual>
    <RelRiskCounty>90-100</RelRiskCounty>
    <RelRiskState>90-100</RelRiskState>
  </Risk>
  <MMI_VI>25.34</MMI_VI>
  <MMI_VII>15.17</MMI_VII>
  <MMI_VIII>5.87</MMI_VIII>
  <MMI_IX>1.61</MMI_IX>
  <MMI_X>0.25</MMI_X>
  <MMI_XI>0.02</MMI_XI>
  <MMI_XII>0.00</MMI_XII>
  <MMI_100YR>5.9</MMI_100YR>
  <MMI_200YR>7.1</MMI_200YR>
  <MMI_250YR>7.3</MMI_250YR>
  <MMI_475YR>8.0</MMI_475YR>
  <Liquefaction>High</Liquefaction>
  <ZoneCADOI>Not Applicable</ZoneCADOI>
  <Landslide />
  <GroundFailure>Not Applicable</GroundFailure>
  <SoilType>Soft Soil to Firm Soil</SoilType>
  <NumberOfFaults>5</NumberOfFaults>
  <NumberOfHistEvents>5</NumberOfHistEvents>
  <NearestFault>2</NearestFault>
  <Faults>
    <Fault>
      <FaultName>Southern Whidbey Island
      <DistanceToFault>14.05</
      <FaultLength>55.92</FaultLength>
      <EventMagnitude> 7.32</
      <ReturnPeriod>3680</ReturnPeriod>
    </Fault>
    .
    .
    .
  </Faults>
  <HistoryEvents>
    <HistoryEvent>
      <History>
        <Name>Unnamed</Name>
        <Year>1872</Year>
        <Date>December 15</Date>
        <Magnitude> 7.00</Magnitude>
        <Distance>96.72</Distance>
        <Depth>N/A</Depth>
      </History>
    </HistoryEvent>
    .
    .
    .

```

```

    </HistoryEvents>
  </ProfileEarthquake>
  .

```

Risk100YR element

Specifies the loss amount likely to be equaled or exceeded one percent of the time, or in one year out of 100 years.

Item	Value	Description
Element name	<i>Risk100YR</i>	Specifies the loss amount likely to be equaled or exceeded one percent of the time, or in one year out of 100 years..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane, Earthquake, Severe Thunderstorm, Winter Storm	
Values	0–5, 5–10, 10–15, 15–20, 20–25, 25–30, 30–35, 35–40, 40–45, 45–100	A value of 20–25 indicates that in a given year, there is a one percent chance that losses will meet or exceed 20–25% of the total value.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>

```

```

.
.
.
<ProfileEarthquake>
  <Risk>
    <Risk100YR>0-5</Risk100YR>
    <Risk250YR>5-10</Risk250YR>
    <RiskAnnual>0.1</RiskAnnual>
    <RelRiskCounty>90-100</RelRiskCounty>
    <RelRiskState>90-100</RelRiskState>
  </Risk>
  <MMI_VI>25.34</MMI_VI>
  <MMI_VII>15.17</MMI_VII>
  <MMI_VIII>5.87</MMI_VIII>
  <MMI_IX>1.61</MMI_IX>
  <MMI_X>0.25</MMI_X>
  <MMI_XI>0.02</MMI_XI>
  <MMI_XII>0.00</MMI_XII>
  <MMI_100YR>5.9</MMI_100YR>
  <MMI_200YR>7.1</MMI_200YR>
  <MMI_250YR>7.3</MMI_250YR>
  <MMI_475YR>8.0</MMI_475YR>
  <Liquefaction>High</Liquefaction>
  <ZoneCADOI>Not Applicable</ZoneCADOI>
  <Landslide />
  <GroundFailure>Not Applicable</GroundFailure>
  <SoilType>Soft Soil to Firm Soil</SoilType>
  <NumberOfFaults>5</NumberOfFaults>
  <NumberOfHistEvents>5</NumberOfHistEvents>
  <NearestFault>2</NearestFault>
  <Faults>
    <Fault>
      <FaultName>Southern Whidbey Island
      <DistanceToFault>14.05</
      <FaultLength>55.92</FaultLength>
      <EventMagnitude> 7.32</
      <ReturnPeriod>3680</ReturnPeriod>
    </Fault>
    .
    .
    .
  </Faults>
  <HistoryEvents>
    <HistoryEvent>
      <History>
        <Name>Unnamed</Name>
        <Year>1872</Year>
        <Date>December 15</Date>
        <Magnitude> 7.00</Magnitude>
        <Distance>96.72</Distance>
        <Depth>N/A</Depth>
      </History>
    </HistoryEvent>
    .
    .
    .

```

```

        </HistoryEvents>
    </ProfileEarthquake>
    .
    .

```

Risk250YR element

Specifies the loss amount likely to be equaled or exceeded 0.4 percent of the time, or in one year out of 250 years.

Item	Value	Description
Element name	<i>Risk250YR</i>	Specifies the loss amount likely to be equaled or exceeded 0.4 percent of the time, or in one year out of 250 years..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane, Earthquake, Severe Thunderstorm, Winter Storm	
Values	0–5, 5–10, 10–15, 15–20, 20–25, 25–30, 30–35, 35–40, 40–45, 45–100	A value of 20–25 indicates that in a given year, there is a 0.4% chance that losses will meet or exceed 20–25% of the total value.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .

```

```

      .
    </LocationInformation>
    <HazardInformation>
      .
      .
      .
    <ProfileEarthquake>
      <Risk>
        <Risk100YR>0-5</Risk100YR>
        <Risk250YR>5-10</Risk250YR>
        <RiskAnnual>0.1</RiskAnnual>
        <RelRiskCounty>90-100</RelRiskCounty>
        <RelRiskState>90-100</RelRiskState>
      </Risk>
      <MMI_VI>25.34</MMI_VI>
      <MMI_VII>15.17</MMI_VII>
      <MMI_VIII>5.87</MMI_VIII>
      <MMI_IX>1.61</MMI_IX>
      <MMI_X>0.25</MMI_X>
      <MMI_XI>0.02</MMI_XI>
      <MMI_XII>0.00</MMI_XII>
      <MMI_100YR>5.9</MMI_100YR>
      <MMI_200YR>7.1</MMI_200YR>
      <MMI_250YR>7.3</MMI_250YR>
      <MMI_475YR>8.0</MMI_475YR>
      <Liquefaction>High</Liquefaction>
      <ZoneCADOI>Not Applicable</ZoneCADOI>
      <LandSlide />
      <GroundFailure>Not Applicable</GroundFailure>
      <SoilType>Soft Soil to Firm Soil</SoilType>
      <NumberOfFaults>5</NumberOfFaults>
      <NumberOfHistEvents>5</NumberOfHistEvents>
      <NearestFault>2</NearestFault>
      <Faults>
        <Fault>
          <FaultName>Southern Whidbey Island
            fault</FaultName>
          <DistanceToFault>14.05</
            DistanceToFault>
          <FaultLength>55.92</FaultLength>
          <EventMagnitude> 7.32</
            EventMagnitude>
          <ReturnPeriod>3680</ReturnPeriod>
        </Fault>
        .
        .
        .
      </Faults>
      <HistoryEvents>
        <HistoryEvent>
          <History>
            <Name>Unnamed</Name>
            <Year>1872</Year>
            <Date>December 15</Date>
            <Magnitude> 7.00</Magnitude>
            <Distance>96.72</Distance>
            <Depth>N/A</Depth>
          </History>
        </HistoryEvent>

```

```

      .
      .
      .
    </HistoryEvents>
  </ProfileEarthquake>
  .
  .
  .

```

RiskAnnual element

Specifies the the expected loss per year, averaged over many years.

Item	Value	Description
Element name	<i>RiskAnnual</i>	Specifies the the expected loss per year, averaged over many years..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane, Earthquake, Severe Thunderstorm, Winter Storm	
Values	<0.1 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3	The service displays the < symbol as < and the > symbol as >. For example, the value <0.1 indicates that the risk is less than 0.1.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .

```

```

</LocationInformation>
<HazardInformation>
.
.
.
<ProfileEarthquake>
  <Risk>
    <Risk100YR>0-5</Risk100YR>
    <Risk250YR>5-10</Risk250YR>
    <RiskAnnual>0.1</RiskAnnual>
    <RelRiskCounty>90-100</RelRiskCounty>
    <RelRiskState>90-100</RelRiskState>
  </Risk>
  <MMI_VI>25.34</MMI_VI>
  <MMI_VII>15.17</MMI_VII>
  <MMI_VIII>5.87</MMI_VIII>
  <MMI_IX>1.61</MMI_IX>
  <MMI_X>0.25</MMI_X>
  <MMI_XI>0.02</MMI_XI>
  <MMI_XII>0.00</MMI_XII>
  <MMI_100YR>5.9</MMI_100YR>
  <MMI_200YR>7.1</MMI_200YR>
  <MMI_250YR>7.3</MMI_250YR>
  <MMI_475YR>8.0</MMI_475YR>
  <Liquefaction>High</Liquefaction>
  <ZoneCADOI>Not Applicable</ZoneCADOI>
  <LandSlide />
  <GroundFailure>Not Applicable</GroundFailure>
  <SoilType>Soft Soil to Firm Soil</SoilType>
  <NumberOfFaults>5</NumberOfFaults>
  <NumberOfHistEvents>5</NumberOfHistEvents>
  <NearestFault>2</NearestFault>
  <Faults>
    <Fault>
      <FaultName>Southern Whidbey Island
      <DistanceToFault>14.05</
      <FaultLength>55.92</FaultLength>
      <EventMagnitude> 7.32</
      <ReturnPeriod>3680</ReturnPeriod>
    </Fault>
    .
    .
    .
  </Faults>
  <HistoryEvents>
    <HistoryEvent>
      <History>
        <Name>Unnamed</Name>
        <Year>1872</Year>
        <Date>December 15</Date>
        <Magnitude> 7.00</Magnitude>
        <Distance>96.72</Distance>
        <Depth>N/A</Depth>
      </History>
    </HistoryEvent>
    .

```

```

      .
      .
    </HistoryEvents>
  </ProfileEarthquake>
  .

```

runtimeinformation element

Specifies processing information for the analysis service.

Item	Value	Description
Element name	<i>runtimeinformation</i>	Specifies processing information for the analysis service.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Attributes

Item	Value	Description
Attribute name	<i>clientparam</i>	Specifies the client's host address.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>responseparam</i>	Specifies an identification code for the response
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Source

```

<xs:element name="runtimeinformation" xmlns:xs="http://
www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:all>

```

```

        <xs:element ref="time" />
        <xs:element ref="count" />
    </xs:all>
    <xs:attribute name="clientparam" use="required"
type="xs:string" />
    <xs:attribute name="responseid" use="required" type="xs:string" /
>
</xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    <AIRTrack>
      <Instance></Instance>
    </AIRTrack>
    <runtimeinformation
responseid="1476783114;636428872887964084"
clientparam="UnknownUserHostAddress">
      <time start="10/6/2017 11:48:06 AM" end="10/6/2017
11:48:08 AM" timespan="2.547" />
      <count reportcount="1" errorcount="0" />
    </runtimeinformation>
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        .
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

Source

```

<ISOResponses>
  <ResponseHeader>
    <AIRTrack>
      <Instance></Instance>
    </AIRTrack>
    <runtimeinformation
responseid="1141238794;636378838301730395"
clientparam="UnknownUserHostAddress">
      <time start="8/9/2017 1:57:07 PM" end="8/9/2017 1:57:10
PM" timespan="2.922" />
      <count reportcount="1" errorcount="0" />
    </runtimeinformation>
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" ... ASF.Logfile="">
      <LossAnalysis engine="15.0.0 20130531">
        <Data type="Locations">

```

```

        <Locations>
            <Location>
                .
                .
                .
            </Location>
        </Locations>
    </Data>
    <ResultSet type="Preset" name="Your configuration
package name">
        <StrPerils>PWH</StrPerils>
        <Options>
            .
            .
            .
        </Options>
        <Results>
            <AnnualSummaries>
                <AnnualSummary type="Aggregate"
perils="PWH" percentPSH="0" losstype="Gross" coverage="Total">
                    <Level type="Location"
descriptor="ID">Loc06</Level>
                        <Mean_Agg>391.56243</Mean_Agg>
                        <StdDev_Agg>3712.33856</StdDev_Agg>
                    </AnnualSummary>
                </AnnualSummaries>
            </Results>
        </ResultSet>
    </LossAnalysis>
</Report>
</Reports>
</ISOResponses>

```

SnowFrequency element

Specifies the occurrence of severe snowfalls that have historically affected the property.

Item	Value	Description
Element name	<i>SnowFrequency</i>	Specifies the occurrence of severe snowfalls that have historically affected the property..
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Values	Very high High Moderate Low Very low	

AIR computes the occurrence using historical data from the Global Reanalysis Project Data Set maintained by the National Center for Environmental Prediction (NCEP) and the National Center for Atmospheric Research (NCAR) in cooperation with the World Meteorological Organization (WMO).

Furthermore, AIR simulates hundreds of individual historical storms to capture the vertical elements in the storms that lead to damaging factors. AIR then uses a stochastic ensemble to extend the data and assess the occurrence of winter storms with damaging wind or snow.

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileWinterstorm>
          <WindFrequency>Very Low</WindFrequency>
          <SnowFrequency>Very Low</SnowFrequency>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>20-30</RelRiskCounty>
            <RelRiskState>60-70</RelRiskState>
          </Risk>
        </ProfileWinterstorm>
        .
        .
        .
      </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>
```

SoilType element

Specifies the soil type around the property.

Item	Value	Description
Element name	<i>SoilType</i>	Specifies the soil type around the property.. For most urban areas, the mapped soil resolution

Item	Value	Description
		varies between 25 m and 100 m. AIR obtains high-resolution soil maps from various sources, including United States Geological Survey (USGS), California Department of Conservation, Division of Mines and Geology (CDMG), and local municipalities.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Earthquake	
Values	A value from the list	Very Hard Rock Hard Rock Firm to Hard Rock Firm Rock Soft to Firm Rock(stiff soil) Soft Rock Stiff clay and Sandy soil(firm soil) Soft Soil to Firm Soil Soft Soil(shallow soil) Soft Soil

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>

```

```

        <Risk100YR>0-5</Risk100YR>
        <Risk250YR>5-10</Risk250YR>
        <RiskAnnual>0.1</RiskAnnual>
        <RelRiskCounty>90-100</RelRiskCounty>
        <RelRiskState>90-100</RelRiskState>
    </Risk>
    <MMI_VI>25.34</MMI_VI>
    <MMI_VII>15.17</MMI_VII>
    <MMI_VIII>5.87</MMI_VIII>
    <MMI_IX>1.61</MMI_IX>
    <MMI_X>0.25</MMI_X>
    <MMI_XI>0.02</MMI_XI>
    <MMI_XII>0.00</MMI_XII>
    <MMI_100YR>5.9</MMI_100YR>
    <MMI_200YR>7.1</MMI_200YR>
    <MMI_250YR>7.3</MMI_250YR>
    <MMI_475YR>8.0</MMI_475YR>
    <Liquefaction>High</Liquefaction>
    <ZoneCADOI>Not Applicable</ZoneCADOI>
    <LandSlide />
    <GroundFailure>Not Applicable</GroundFailure>
    <SoilType>Soft Soil to Firm Soil</SoilType>
    <NumberOfFaults>5</NumberOfFaults>
    <NumberOfHistEvents>5</NumberOfHistEvents>
    <NearestFault>2</NearestFault>
    <Faults>
        <Fault>
            <FaultName>Southern Whidbey Island
            <DistanceToFault>14.05</
            <FaultLength>55.92</FaultLength>
            <EventMagnitude> 7.32</
            <ReturnPeriod>3680</ReturnPeriod>
        </Fault>
        .
        .
        .
    </Faults>
    <HistoryEvents>
        <HistoryEvent>
            <History>
                <Name>Unnamed</Name>
                <Year>1872</Year>
                <Date>December 15</Date>
                <Magnitude> 7.00</Magnitude>
                <Distance>96.72</Distance>
                <Depth>N/A</Depth>
            </History>
        </HistoryEvent>
        .
        .
        .
    </HistoryEvents>
</ProfileEarthquake>
.
.

```

Source element

Specifies the source of the flood hazard data used in the analysis.

Item	Value	Description
Element name	<i>Source</i>	Specifies the source of the flood hazard data used in the analysis..
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Profile	Flood	
Values	A value from the list	• Q3FIRM = FEMA Q3 Flood Data • DFIRM = FEMA Digital Flood Insurance Rate Map • AIR = AIR data

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
      <ProfileFlood>
        <Source>AIR</Source>
        <FloodZone>100-Year</FloodZone>
        <FloodZoneFEMA>AE</FloodZoneFEMA>
        <Elevation>9 - 10</Elevation>
      </ProfileFlood>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

        <FloodZoneDistance>
            <WaterBody>More than 5</WaterBody>
            <Flood100YR>0.030</Flood100YR>
            <Flood500YR>0.040</Flood500YR>
        </FloodZoneDistance>
        <AIRFloodZone>100-Year</AIRFloodZone>
        <FloodZoneAIRDistance>
            <AIRFlood100YR>0.052</Flood100YR>
            <AIRFlood500YR>0.126</Flood500YR>
        </FloodZoneAIRDistance>
        <BaseFloodElevation>8 - 9</
BaseFloodElevation>
    </ProfileFlood>
    .
    .
    .
    </HazardInformation>
  </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

SSIntensity element

Specifies the intensity of a historical hurricane that affected the property.

Item	Value	Description
Element name	<i>SSIntensity</i>	Specifies the intensity of a historical hurricane that affected the property. The service provides the intensity as a value on the Saffir-Simpson scale.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Profile	Hurricane	
Values	A number between 1 and 5, inclusive	1 = 74–95 mile per hour wind speeds 2 = 96–110 mile per hour wind speeds 3 = 111–130 mile per hour wind speeds 4 = 131–155 mile per hour wind speeds 5 = wind speeds greater than 155 miles per hour

SSIfIntensity element

Specifies the intensity at landfall of a historical hurricane that affected the property.

Item	Value	Description
Element name	<i>SSIfIntensity</i>	Specifies the intensity at landfall of a historical hurricane that affected the property. The service provides the intensity as a value on the Saffir-Simpson scale.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Profile	Hurricane	
Values	A number between 1 and 5, inclusive	• 1 = 74–95 mile per hour wind speeds • 2 = 96–110 mile per hour wind speeds • 3 = 111–130 mile per hour wind speeds • 4 = 131–155 mile per hour wind speeds • 5 = wind speeds greater than 155 miles per hour

StateProv element

Specifies the abbreviation for the state or other area where the property resides.

Item	Value	Description
Element name	<i>StateProv</i>	Specifies the abbreviation for the state or other area where the property resides. The service may display the value in two ways: • When the service reverse geocodes a location, the value is the full state name. • When the service forward geocodes a

Item	Value	Description
		location, the value is the two-letter abbreviation for the state.
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Values	In the request, you can use an abbreviation from the list of U.S. State Codes. See United States state and FIPS codes .	In the response, when <i>StateProv</i> is a child element of the <i>Address</i> element, the response <i>StateProv</i> value specifies the state you provided in the request. When <i>StateProv</i> is a child element of the <i>ResultAddress</i> element, the value specifies the state that the service included in the analysis.

Request example

```

<ISORequests>
  <RequestHeader>
    .
    .
    .
  <ISORequest>
    <Products>HazardAnalysis</Products>
    <HazardAnalysis>

      <Products>HurricaneHazard,ThunderstormHazard,EarthquakeHazard,FEMAFlood,Terroris
      WinterstormHazard</Products>
      </HazardAnalysis>
      <Addresses>
        <Options geocode="yes" returnHighestScore="yes"
        additionalInfo="no"/>
        <Address>
          <Latitude></Latitude>
          <Longitude></Longitude>

```

```

        <Addr1>100 Main Street</Addr1>
        <City>Seattle</City>
        <County>King</County>
        <StateProv>WA</StateProv>
        <Country>US</Country>
    </Address>
</Addresses>
</ISORequest>
</ISORequests>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
              <GeoPath AreaLevel2="53"
AreaLevel3="033" />
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
          </Matched>
          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>
            <Addr1>100 MAIN STREET</Addr1>
            .
            .
            .
          </InputAddress>
          <ResultAddress>
            <Addr1>100 S MAIN ST</Addr1>
            .
            .
          </ResultAddress>
        </LocationInformation>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

        </ResultAddress>
        <Message>No Rows found for given
House Number;House Number out of range;Street Info is in City;Input
ZIP5 is blank;</Message>
    </ValidateResult>
    <ProcessErrors>None</ProcessErrors>
    <ProcessWarnings>None</ProcessWarnings>
</AddrValidator>
    <GeoCode Latitude="47.600124"
Longitude="-122.33406" MatchLevel="MatchLevel_Relaxed" MatchNorm="0"
Vendor="AIR" />
    <GeoPath GUID="{3c780a86-f76d-11d2-
bb8d-00a0c9d56dce}" AreaScheme="1003" AreaLevel1="1" AreaLevel2="53"
AreaLevel3="33" AreaLevel4="98104" PostalCode="98104" City="SEATTLE"
State="WA" County="KING" />
    <Match>
        .
        .
        .
    </Match>
</Matched>
</LocationInformation>
<HazardInformation>
    .
    .
    .
</HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

StormSurge element

Indicates whether storm surge poses a severe threat to the property.

Item	Value	Description
Element name	<i>StormSurge</i>	Indicates whether storm surge poses a severe threat to the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	

Item	Value	Description
Values	Yes or No	• Yes = The property is in an area affected by storm surges • No = The property is not an area affected by storm surges

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        <ProfileHurricane>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>0-10</RelRiskCounty>
            <RelRiskState>0-10</RelRiskState>
          </Risk>
          <CoastalCounty>No</CoastalCounty>
          <StormSurge>No</StormSurge>
          <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
          <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
          <Elevation>20 - 25</Elevation>
          <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
          <ZoneWindSpeed />
          <ZoneWindborneDebris />
          <ZoneTerrain />
          <ZoneHighVelocity />
          <ZoneWindSpeed2010 />
          <ZoneWindBorneDebris2010 />
          <ZoneTerrain2010 />
          <ZoneHighVelocity2010 />
        </ProfileHurricane>
        <ProfileEarthquake>
          .
          .
          .
        </ProfileEarthquake>
        <ProfileThunderstorm>

```

```

        .
        .
        .
        </ProfileThunderstorm>
        <ProfileWinterstorm>
        .
        .
        .
        </ProfileWinterstorm>
        <ProfileFlood>
        .
        .
        .
        </ProfileFlood>
        <ProfileTerrorism>
        .
        .
        .
        </ProfileTerrorism>
    </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

Street element

Specifies the details of the parsed street address of the property.

Item	Value	Description
Element name	<i>Street</i>	Specifies the details of the parsed street address of the property..
Data type	xs:element	The <i>element</i> data type defines an element.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

Attribute name	Data type	Description
<i>Name</i>	xs:string	Specifies the name of the street, highway, or other road that the property resides on. If the name is a number, the service provides the number.

Attribute name	Data type	Description
<i>Num</i>	xs:integer	Specifies the main house number of the property.
<i>NumPre</i>		Specifies the prefix for the main house number. The prefix is located to the left of the main house number. For example, for the street address A-131 Dartmouth Street, the value of NumPre is A.
<i>NumSuf</i>		Specifies the suffix for the main house number. The suffix is located to the right of the main house number. For example, for the street address 131A Dartmouth Street, the value of NumSuf is A. The suffix may also refer to the second number in a range of house numbers to the right of the main house number, for example, 104 in the range 100–104.
<i>PostDir</i>		Specifies the postal abbreviation for the street direction to the right of the street name. For example, for the street address 131 Dartmouth Street NW, the value of PostDir is NW. See DirSuffix element .
<i>PreDir</i>		Specifies the postal abbreviation for the street direction to the left of the street name. For example, for the street address 131 NW Dartmouth Street, the value of PostDir is NW. See DirPrefix element .
<i>Seperator</i>		Specifies the delimiter between the portions of the street address.

Attribute name	Data type	Description
		Delimiters include commas and semicolons.
<i>Type</i>	xs:string	Specifies the abbreviation for the street type. See Street type abbreviations .
<i>TypeEx</i>	xs:string	Specifies the full name of the street type, for example STREET.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysis" version="2.9.0.8"
timespan="2.469" sequence="0" success="True" ASF.ErrorCode="0"
ASF.ErrorMessage="" ASF.InfoMessage="" ASF.PercentCompleted="0"
ASF.StatusMessage="Completed" ASF.Logfile="">
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              <Address Version="1.0" Type="Parsed"
Addr1="100 MAIN STREET">
                <Street NumPre="" Num="100" NumSuf=""
Seperator="" Name="MAIN" Type="ST" TypeEx="STREET" PostDir=""
PreDir="" />
                <Building UnitType="" UnitValue=""
FloorValue="" Type="" Name="" />
                <Delivery BoxType="" BoxValue=""
RouteType="" RouteValue="" />
                <Contact Company="" CareOf="" Attn=""
Other="" />
              </Address>
            </ParsedAddr>
            <AddrValidator>
              .
              .
              .
            </AddrValidator>
          .
          .
          .
        </Matched>
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

StreetAddress element

Specifies the house number, street name, directionals, and apartment number of the property.

Item	Value	Description
Element name	<i>StreetAddress</i>	Specifies the house number, street name, directionals, and apartment number of the property. You must specify this element if you do not specify the <i>Latitude</i> and <i>Longitude</i> elements. Whenever possible, you should specify the <i>Latitude</i> and <i>Longitude</i> elements rather than providing the street address. You can use the AIR Address Service to obtain the latitude and longitude.
Where used	request	A <i>request</i> contains the information the service needs to run the analysis.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	100 characters maximum	

Example

```
<ISORequests>
  .
  .
  .
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            .
          </Location>
        </Locations>
      </Data>
    </LossAnalysis>
  </ISORequest>
</ISORequests>
```

```

      .
      .
      <Address>
        <StreetAddress>14 W Evans St</
StreetAddress>
        <City>Florence</City>
        <Area>SC</Area>
        <PostalCode>29501</PostalCode>
        <Country>US</Country>
        <Latitude></Latitude>
        <Longitude></Longitude>
      </Address>
      .
      .
      .

```

StreetName element

Specifies the name of the street, road, or highway that you provided in the request or the street name included in the analysis.

Item	Value	Description
Element name	<i>StreetName</i>	Specifies the name of the street, road, or highway that you provided in the request or the street name included in the analysis.. When <i>StreetName</i> is a child element of the <i>InputAddress</i> element, the value specifies the street name you provided in the request. When <i>StreetName</i> is a child element of the <i>ResultAddress</i> element, the value specifies the street name the service included in the analysis.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
          </Matched>
        </LocationInformation>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

<ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
  <InputAddress>
    <Addr1>100 MAIN STREET</Addr1>
    <HouseNumberPrefix />
    <HouseSeparator />
    <HouseNumber>100</HouseNumber>
    <HouseNumberSuffix />
    <DirPrefix />
    <StreetName>MAIN</StreetName>
    <StreetSuffix>ST</StreetSuffix>
    <DirSuffix />
    .
    .
    .
  </InputAddress>
  <ResultAddress>
    <Addr1>100 S MAIN ST</Addr1>
    <AirStreetID>182926209</AirStreetID>
    <HouseNumber>100</HouseNumber>
    <DirPrefix>S</DirPrefix>
    <StreetName>MAIN</StreetName>
    <StreetSuffix>ST</StreetSuffix>
    <DirSuffix />
    .
    .
    .
  </ResultAddress>

```

StreetSuffix element

Specifies the standard postal abbreviation for the street type. The street type generally appears to the right of the street name.

Item	Value	Description
Element name	<i>StreetSuffix</i>	Specifies the standard postal abbreviation for the street type. The street type generally appears to the right of the street name..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>
              </ValidateResult>
            </AddrValidator>
          </Matched>
          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>
            <Addr1>100 MAIN STREET</Addr1>
            <HouseNumberPrefix />
            <HouseSeparator />
            <HouseNumber>100</HouseNumber>
            <HouseNumberSuffix />
          </InputAddress>
        </LocationInformation>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>
```

```

        <DirPrefix />
        <StreetName>MAIN</StreetName>
        <StreetSuffix>ST</StreetSuffix>
        <DirSuffix />
        .
        .
        .
    </InputAddress>
    <ResultAddress>
        <Addr1>100 S MAIN ST</Addr1>
        <AirStreetID>182926209</
AirStreetID>
        <HouseNumber>100</HouseNumber>
        <DirPrefix>S</DirPrefix>
        <StreetName>MAIN</StreetName>
        <StreetSuffix>ST</StreetSuffix>
        <DirSuffix />
        .
        .
        .
    </ResultAddress>
    .
    .
    .

```

Subarea element

Specifies the name of the subarea or county where the property resides.

Item	Value	Description
Element name	<i>Subarea</i>	Specifies the name of the subarea or county where the property resides. You must specify this element if you do not specify the Latitude element and the Longitude element or the SubareaCode element .
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	20 characters maximum	

Request example

```

<ISORequests>
  .
  .
  .
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            .
            .
            .
            <Address>
              <StreetAddress>100 Main St </
StreetAddress>
              <City>Salem</City>
              <Subarea>Rockingham</Subarea>
              <Area>NH</Area>
              <PostalCode>03079</PostalCode>
              <Country> </Country>
              <Latitude></Latitude>
              <Longitude></Longitude>
            </Address>
            <LocationTerms Items="1">
              .
              .
              .
            </LocationTerms>
            <Details>
              .
              .
              .
            </Details>
            .
            .
            .

```

Response example

```

Subarea Element
Specifies the value you provided in the Subarea Element of the
request.
The SubareaModeled Element specifies the subarea included in the
analysis.
Type
xs:string
Example
<ISOResponses>
  <ResponseHeader>
    .
    .
    .

```

```

</ResponseHeader>
<Reports>
  <Report product="LossAnalysis" ... ASF.Logfile="">
    <LossAnalysis engine="15.0.0 20130531">
      <Data type="Locations">
        <Locations>
          <Location>
            <ID>Loc06</ID>
            <LocationTerms>
              <LocationTerm>
                <StrPerils>PWH</StrPerils>
              </LocationTerm>
            </LocationTerms>
            <Address>
              <Country>USA</Country>
              <StreetAddress>131 Dartmouth St</
StreetAddress>
              <City>Boston</City>
              <Area>MA</Area>
              <AreaModeled>MA</AreaModeled>
              <PostalCode>02116</PostalCode>
PostalCodeModeled>
              <PostalCodeModeled>02116</
SubareaModeled>
              <Subarea>Suffolk</Subarea>
              <SubareaModeled>Suffolk</
              <GeoPoint>
                <GeoLat>42.34769</GeoLat>
                <GeoLong>-71.076034</GeoLong>
                <MatchLevel>Exact</MatchLevel>
              </GeoPoint>
            </Address>
          </Location>
        </Locations>
      </Data>
      <ResultSet type="Preset" name="NORTHLIGHT_US_WSST">
        <StrPerils>PWH</StrPerils>
        <Options>
          <Option name="DemandSurge">True</Option>
          <Option name="StormSurge">False</Option>
        </Options>
        <Results>
          <AnnualSummaries>
            <AnnualSummary type="Aggregate"
perils="PWH" percentPSH="0" losstype="Gross" coverage="Total">
              <Level type="Location"
descriptor="ID">Loc06</Level>
              <Mean_Agg>391.57825</Mean_Agg>
              <StdDev_Agg>3712.49299</StdDev_Agg>
            </AnnualSummary>
          </AnnualSummaries>
        </Results>
      </ResultSet>
    </LossAnalysis>
  </Report>
</Reports>
</ISOResponses>

```

SubareaCode element

Specifies the FIPS (Federal Information Processing Standards) numeric code for the county where the property resides.

Item	Value	Description
Element name	<i>SubareaCode</i>	Specifies the FIPS (Federal Information Processing Standards) numeric code for the county where the property resides. The response returns this value. You must specify this element if you do not specify the Latitude element and the Longitude element or the Subarea element .
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Length	5 characters maximum	

Request example

```
<ISORequests>
  .
  .
  .
  <ISORequest>
    <Products>LossAnalysis</Products>
    <LossAnalysis>
      <Options demandSurge="false" stormSurge="true"/>
      <Data type="Locations">
        <Locations>
          <Location>
            .
            .
            .
          <Address>
```

```

StreetAddress>
    <StreetAddress>100 Main St </
    <City>Salem</City>
    <Area>NH</Area>
    <SubareaCode>015</SubareaCode>
    <PostalCode>03079</PostalCode>
    <Country></Country>
    <Latitude></Latitude>
    <Longitude></Longitude>
</Address>
.
.
.

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report product="LossAnalysis" ... ASF.Logfile="">
      <LossAnalysis engine="15.0.0 20130531">
        <Data type="Locations">
          <Locations>
            <Location>
              <ID>Loc06</ID>
              <LocationTerms>
                <LocationTerm>
                  <StrPerils>PWH</StrPerils>
                </LocationTerm>
              </LocationTerms>
              <Address>
                <Country>USA</Country>
                <StreetAddress>100 Main St</
StreetAddress>
                <City>Salem</City>
                <Area>NH</Area>
                <AreaModeled>NH</AreaModeled>
                <PostalCode>03079</PostalCode>
PostalCodeModeled>
                <PostalCodeModeled>030791234</
SubareaModeled>
                <SubareaCode>015</SubareaCode>
                <SubareaModeled>Rockingham</
                <GeoPoint>
                  <GeoLat>42.78189</GeoLat>
                  <GeoLong>-71.229232</GeoLong>
                  <MatchLevel>Exact</MatchLevel>
                </GeoPoint>
              </Address>
            </Location>
          </Locations>
        </Data>
      <ResultSet type="Preset" name="NORTHLIGHT_US_WSST">

```

```

        <StrPerils>PWH</StrPerils>
        <Options>
            <Option name="DemandSurge">True</Option>
            <Option name="StormSurge">False</Option>
        </Options>
        <Results>
            <AnnualSummaries>
                <AnnualSummary type="Aggregate"
perils="PWH" percentPSH="0" losstype="Gross" coverage="Total">
                    <Level type="Location"
descriptor="ID">Loc06</Level>
                        <Mean_Agg>391.57825</Mean_Agg>
                        <StdDev_Agg>3712.49299</StdDev_Agg>
                    </AnnualSummary>
                </AnnualSummaries>
            </Results>
        </ResultSet>
    </LossAnalysis>
</Report>
</Reports>
</ISOResponses>

```

SubareaModeled element

Specifies the subarea included in the analysis.

Item	Value	Description
Element name	<i>SubareaModeled</i>	Specifies the subarea included in the analysis. The value will differ from the Subarea element of the request if the service finds a better area match for the PostalCode element of the request.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Example

```

<ISOResponses>
  <ResponseHeader>
    .
    .

```

```

</ResponseHeader>
<Reports>
  <Report product="LossAnalysis" ... ASF.Logfile="">
    <LossAnalysis engine="15.0.0 20130531">
      <Data type="Locations">
        <Locations>
          <Location>
            <ID>Loc06</ID>
            <LocationTerms>
              <LocationTerm>
                <StrPerils>PWH</StrPerils>
              </LocationTerm>
            </LocationTerms>
            <Address>
              <Country>USA</Country>
              <StreetAddress>100 Main St</
StreetAddress>
              <City>Salem</City>
              <Area>NH</Area>
              <AreaModeled>NH</AreaModeled>
              <PostalCode>03079</PostalCode>
PostalCodeModeled>
              <PostalCodeModeled>030791234</
SubareaModeled>
              <SubareaCode>015</SubareaCode>
              <SubareaModeled>Rockingham</
              <GeoPoint>
                <GeoLat>42.78189</GeoLat>
                <GeoLong>-71.229232</GeoLong>
                <MatchLevel>Exact</MatchLevel>
              </GeoPoint>
            </Address>
          </Location>
        </Locations>
      </Data>
      <ResultSet type="Preset" name="NORTHLIGHT_US_WSST">
        <StrPerils>PWH</StrPerils>
        <Options>
          <Option name="DemandSurge">True</Option>
          <Option name="StormSurge">False</Option>
        </Options>
        <Results>
          <AnnualSummaries>
            <AnnualSummary type="Aggregate"
perils="PWH" percentPSH="0" losstype="Gross" coverage="Total">
              <Level type="Location"
descriptor="ID">Loc06</Level>
              <Mean_Agg>391.57825</Mean_Agg>
              <StdDev_Agg>3712.49299</StdDev_Agg>
            </AnnualSummary>
          </AnnualSummaries>
        </Results>
      </ResultSet>
    </LossAnalysis>
  </Report>
</Reports>
</ISOResponses>

```

SurfaceTerrain element

Specifies the type of surface terrain or the land use around the property.

Item	Value	Description
Element name	<i>SurfaceTerrain</i>	Specifies the type of surface terrain or the land use around the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	Open Water Perennial Ice/Snow Developed, Open Space Developed, Low Intensity Developed, Medium Intensity Developed, High Intensity Barren Land (Rock/Sand/Clay) Deciduous Forest Evergreen Forest Mixed Forest Shrub/Scrub Grassland/Herbaceous Pasture/Hay Cultivated Crops Woody Wetlands Emergent Herbaceous Wetlands Unconsolidated Shore (coastal areas only)	The types include the Land Use/Land Cover (LULC) categories in the AIR Hurricane Model for the United States.

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
```

```

<AddressProfile>
.
.
.
</LocationInformation>
<HazardInformation>
  <ProfileHurricane>
    <Risk>
      <Risk100YR>0-5</Risk100YR>
      <Risk250YR>0-5</Risk250YR>
      <RiskAnnual><0.1</RiskAnnual>
      <RelRiskCounty>0-10</RelRiskCounty>
      <RelRiskState>0-10</RelRiskState>
    </Risk>
    <CoastalCounty>No</CoastalCounty>
    <StormSurge>No</StormSurge>
    <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
      <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
    <Elevation>20 - 25</Elevation>
    <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
      <ZoneWindSpeed />
      <ZoneWindborneDebris />
      <ZoneTerrain />
    <ZoneHighVelocity />
      <ZoneWindSpeed2010 />
      <ZoneWindBorneDebris2010 />
      <ZoneTerrain2010 />
    <ZoneHighVelocity2010 />
  </ProfileHurricane>
  <ProfileEarthquake>
    .
    .
    .
  </ProfileEarthquake>
  <ProfileThunderstorm>
    .
    .
    .
  </ProfileThunderstorm>
  <ProfileWinterstorm>
    .
    .
    .
  </ProfileWinterstorm>
  <ProfileFlood>
    .
    .
    .
  </ProfileFlood>
  <ProfileTerrorism>
    .
    .
    .
  </ProfileTerrorism>
</HazardInformation>
</AddressProfile>

```

```

    </Report>
  </Reports>
</ISOResponses>

```

time element

Specifies the time the service used to process the request.

Item	Value	Description
Element name	<i>time</i>	Specifies the time the service used to process the request..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

Item	Value	Description
Attribute name	<i>end</i>	Specifies the date and time that the process ended
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>start</i>	Specifies the date and time that the process began
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>timespan</i>	Specifies the total time the service used to process the request
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Item	Value	Description
Use	required	

Response example

```
<ISOResponses>
  <ResponseHeader>
    <AIRTrack>
      <Instance></Instance>
    </AIRTrack>
    <runtimeinformation
responseid="1476783114;636428872887964084"
clientparam="UnknownUserHostAddress">
      <time start="10/6/2017 11:48:06 AM" end="10/6/2017
11:48:08 AM" timespan="2.547" />
      <count reportcount="1" errorcount="0" />
    </runtimeinformation>
  </ResponseHeader>
  <Reports>
    <Report product="HazardAnalysisLossAnalysis"
version="2.9.0.8" timespan="2.469" sequence="0" success="True"
ASF.ErrorCode="0" ASF.ErrorMessage="" ASF.InfoMessage=""
ASF.PercentCompleted="0" ASF.StatusMessage="Completed"
ASF.Logfile="">
      <AddressProfile>
        .
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>
```

Type element

This is a type of address.

Item	Value	Description
Element name	<i>Type</i>	This is a type of address..
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Values	UnparsedRiskAddress	The service returns the type of address that you supplied in the <i>Address</i> of the request. The service accepts only parsed addresses.

Item	Value	Description
		Consequently, the value of this element is always <code>UnparsedRiskAddress</code> .

UserLocationID element

Specifies a user location ID.

Item	Value	Description
Element name	<i>UserLocationID</i>	Specifies a user location ID..
Where used	request, response	A <i>request</i> contains the information the service needs to run the analysis. A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

UniqueMatch element

Specifies the level at which the service found a unique match for the address.

Item	Value	Description
Element name	<i>UniqueMatch</i>	Specifies the level at which the service found a unique match for the address..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

Item	Value	Description
Attribute name	<i>name</i>	Specifies the level at which the service found a unique match

Item	Value	Description
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

Item	Value	Description
Attribute name	<i>value</i>	Specifies the value that corresponds to the match level
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	required	

<i>name</i> attribute value	<i>value</i> attribute value	
<i>Exact_SET1_g0</i>	0	
<i>Exact_SET1_g1</i>	1	
<i>Exact_SET1_g2</i>	2	
<i>Relaxed_SET1_g3</i>	3	
<i>StreetCentroid_SET1_g4</i>	4	
<i>PostalCentroid_SET1_g5</i>	5	
<i>CityCentroid_SET1_g6</i>	6	
<i>Exact_SET2_g0</i>	10	
<i>Exact_SET2_g1</i>	11	
<i>Exact_SET2_g2</i>	12	
<i>Relaxed_SET2_g3</i>	13	
<i>StreetCentroid_SET2_g4</i>	14	
<i>PostalCentroid_SET2_g5</i>	15	
<i>CityCentroid_SET2_g6</i>	16	
<i>Relaxed_SET3_g0</i>	20	
<i>Relaxed_SET3_g1</i>	21	
<i>Relaxed_SET3_g2</i>	22	
<i>Relaxed_SET3_g3</i>	23	
<i>StreetCentroid_SET3_g4</i>	24	
<i>PostalCentroid_SET3_g5</i>	25	
<i>CityCentroid_SET3_g6</i>	26	

<i>name</i> attribute <i>value</i>	<i>value</i> attribute <i>value</i>	
<i>PostalCentroid_SNF_g5</i>	35	
<i>CityCentroid_SNF_g6</i>	36	
<i>CountyCentroid_SNF_g7</i>	37	
<i>None</i>	38	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

                <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
                <InputAddress>
                  .
                  .
                  .
                </InputAddress>
                <ResultAddress>
                  .
                  .
                  .
                </ResultAddress>
                <Message>...</Message>
              </ValidateResult>
              <ProcessErrors>None</ProcessErrors>
              <ProcessWarnings>None</ProcessWarnings>
            </AddrValidator>
            <GeoCode .../>
            <GeoPath .../>
            <Match>

```

```

>
value="2" />
value="22" />
    <ValidatorMatch name="Match5" value="6" />
    <GeocodeMatch name="SegmentImputed"
    <UniqueMatch name="Relaxed_SET3_g2"
    <CL2Match name="Relaxed" value="3" />
    </Match>
  </Matched>
</LocationInformation>
<HazardInformation>
  .
  .

```

ValidateResult element

Contains the *AttemptedAt*, *ValidatorMatchLevel*, *InputAddress*, *ResultAddress*, and *Message* elements.

Item	Value	Description
Element name	<i>ValidateResult</i>	Contains the <i>AttemptedAt</i> , <i>ValidatorMatchLevel</i> , <i>InputAddress</i> , <i>ResultAddress</i> , and <i>Message</i> elements..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:element	The <i>element</i> data type defines an element.

Source

```

<xs:element name="ValidateResult" xmlns:xs="http://www.w3.org/2001/
XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="AttemptedAt" />
      <xs:element ref="ValidatorMatchLevel" />
      <xs:element ref="InputAddress" />
      <xs:element ref="ResultAddress" />
      <xs:element ref="Message" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
          <Matched>
            <ParsedAddr>
              .
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

          </ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>
            <Addr1>100 MAIN STREET</Addr1>
            <HouseNumberPrefix />
            <HouseSeparator />
            <HouseNumber>100</HouseNumber>
            <HouseNumberSuffix />
            <DirPrefix />
            <StreetName>MAIN</StreetName>
            <StreetSuffix>ST</StreetSuffix>
            <DirSuffix />
          .
        
```

ValidatorMatch element

Specifies the level of accuracy of the matched address.

Item	Value	Description
Element name	<i>ValidatorMatch</i>	Specifies the level of accuracy of the matched address. .
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.

Attributes

A higher match value indicates a greater difference between the address you specified and the matched address. For example, a *ValidatorMatch* value of 19 indicates a matched address that is very different from the address you specified.

Item	Value	Description
Attribute name	<i>name</i>	Specifies the AIR proprietary name for the match level
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

Item	Value	Description
Attribute name	<i>value</i>	Specifies the AIR proprietary name for the match level
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Use	optional	

<i>name</i> attribute value	value attribute value	
<i>MatchNone</i>	-1	
<i>Match A</i>	0	
<i>Match B</i>	1	
<i>Match 1</i>	2	
<i>Match 2</i>	4	
<i>Match 3</i>	5	
<i>Match 4</i>	6	
<i>Match 5</i>	7	
<i>Match 6</i>	8	
<i>Match 6A</i>	9	
<i>Match 7</i>	10	
<i>Match 7A</i>	11	
<i>Match 7AA</i>	12	
<i>Match7AAA</i>	13	
<i>Match 7AB</i>	14	
<i>Match 8</i>	15	

<i>name</i> attribute value	<i>value</i> attribute value	
<i>Match 8A</i>	16	
<i>Match 9</i>	17	
<i>Match 10</i>	18	
<i>Match 10A</i>	18.1	
<i>Match 11</i>	19	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

                <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
                <InputAddress>
                  .
                  .
                </InputAddress>
                <ResultAddress>
                  .
                  .
                </ResultAddress>
                <Message>...</Message>
              </ValidateResult>
              <ProcessErrors>None</ProcessErrors>
              <ProcessWarnings>None</ProcessWarnings>
            </AddrValidator>
          </GeoCode .../>

```

```

        <GeoPath .../>
        <Match>
            <ValidatorMatch name="Match5" value="6" /
        >
            <GeocodeMatch name="SegmentImputed"
            <UniqueMatch name="Relaxed_SET3_g2"
            <CL2Match name="Relaxed" value="3" />
        </Match>
    </Matched>
</LocationInformation>
<HazardInformation>
    .
    .
    .

```

ValidatorMatchLevel element

Specifies the level of accuracy of the matched address.

Item	Value	Description
Element name	<i>ValidatorMatchLevel</i>	Specifies the level of accuracy of the matched address..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Values	A number between 0 and 11, inclusive	• 0 = Exact • 1 = POBox • 2 = ZIP9 • 3 = RelaxedAddress • 4 = PostCodeCentroid • 5 = StreetCentroid • 6 = CityCentroid • 7 = CountyCentroid • 8 = None • 9 = UserSupplied If you supplied a geocode in the the <i>Latitude</i>and

Item	Value	Description
		<i>Longitude</i> elements of the request, <i>ValidatorMatchLevel</i> is UserSupplied. 10 = Country 11 = County

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              <Latitude>0</Latitude>
              <Longitude>0</Longitude>
              <Addr1>100 Main Street</Addr1>
              <City>Seattle</City>
              <StateProv>WA</StateProv>
              <Country>US</Country>
              <MatchLevel>3</MatchLevel>
              <County>KING</County>
              <GeoPath AreaLevel2="53"
AreaLevel3="033" />
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

              <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
              <InputAddress>
                <Addr1>100 MAIN STREET</Addr1>
                .

```

WaterBody element

Specifies the distance in miles from the property to the closest FEMA-defined water body.

Item	Value	Description
Element name	<i>WaterBody</i>	Specifies the distance in miles from the property to the closest FEMA-defined water body.. The water body may be an ocean, very large lake, or very large river.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Flood	
Values	A number from 0 to 5, or More than 5	If the distance is greater than five miles, the service returns <i>More than 5</i> .

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
      </LocationInformation>
      <HazardInformation>
        .
        .
        .
      <ProfileFlood>
        <Source>AIR</Source>
        <FloodZone>100-Year</FloodZone>
        <FloodZoneFEMA>AE</FloodZoneFEMA>
        <Elevation>9 - 10</Elevation>
        <FloodZoneDistance>
```

```

        <WaterBody>More than 5</WaterBody>
        <Flood100YR>0.030</Flood100YR>
        <Flood500YR>0.040</Flood500YR>
    </FloodZoneDistance>
    <AIRFloodZone>100-Year</AIRFloodZone>
    <FloodZoneAIRDistance>
        <AIRFlood100YR>0.052</Flood100YR>
        <AIRFlood500YR>0.126</Flood500YR>
    </FloodZoneAIRDistance>
    <BaseFloodElevation>8 - 9</
BaseFloodElevation>
    </ProfileFlood>
    .
    .
    </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

WindFrequency element

Specifies the occurrence of severe winds that have historically affected the property.

Item	Value	Description
Element name	<i>WindFrequency</i>	Specifies the occurrence of severe winds that have historically affected the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Winter Storm	
Values	Very high or High or Moderate or Low or Very low	

AIR computes the occurrence using historical data from the Global Reanalysis Project Data Set maintained by the National Center for Environmental Prediction (NCEP) and the National

Center for Atmospheric Research (NCAR) in cooperation with the World Meteorological Organization (WMO).

Furthermore, AIR simulates hundreds of individual historical storms to capture the vertical elements in the storms that lead to damaging factors. AIR then uses a stochastic ensemble to extend the data and assess the occurrence of winter storms with damaging wind or snow.

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileWinterstorm>
          <WindFrequency>Very Low</WindFrequency>
          <SnowFrequency>Very Low</SnowFrequency>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>20-30</RelRiskCounty>
            <RelRiskState>60-70</RelRiskState>
          </Risk>
        </ProfileWinterstorm>
        .
        .
        .
      </HazardInformation>
    </AddressProfile>
  </Report>
</Reports>
</ISOResponses>
```

Year element

Specifies the year that a historical event affecting the property occurred.

Item	Value	Description
Element name	<i>Year</i>	Specifies the year that a historical event affecting the property occurred..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:integer	The <i>integer</i> data type is used to specify a numeric value without a fractional component.
Profile	Hurricane, Severe Thunderstorm, Winter Storm	

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
        </ProfileEarthquake>
      </AddressProfile>
    </Report ...>
  </Reports>
</ISOResponses>

```

```

<MMI_250YR>7.3</MMI_250YR>
<MMI_475YR>8.0</MMI_475YR>
<Liquefaction>High</Liquefaction>
<ZoneCADOI>Not Applicable</ZoneCADOI>
<Landslide />
<GroundFailure>Not Applicable</GroundFailure>
<SoilType>Soft Soil to Firm Soil</SoilType>
<NumberOfFaults>5</NumberOfFaults>
<NumberOfHistEvents>5</NumberOfHistEvents>
<NearestFault>2</NearestFault>
<Faults>
  <Fault>
    <FaultName>Southern Whidbey Island
    <DistanceToFault>14.05</
    <FaultLength>55.92</FaultLength>
    <EventMagnitude> 7.32</
    <ReturnPeriod>3680</ReturnPeriod>
  </Fault>
  .
  .
  .
</Faults>
<HistoryEvents>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1872</Year>
      <Date>December 15</Date>
      <Magnitude> 7.00</Magnitude>
      <Distance>96.72</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>
  .
  .
  .
</HistoryEvents>
</ProfileEarthquake>
.
.
.

```

Zip5 element

Specifies the five-digit ZIP code found in the database for the property.

Item	Value	Description
Element name	<i>Zip5</i>	Specifies the five-digit ZIP code found in the database for the property..
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          <Entered>
            <Address>
              .
              .
            </Address>
          </Entered>
          <Matched>
            <ParsedAddr>
              .
              .
            </ParsedAddr>
            <AddrValidator>
              <ValidateResult>
                <AttemptedAt>Match5</AttemptedAt>

                <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
                <InputAddress>
                  .
                  .
                </InputAddress>
                <ResultAddress>
                  <Addr1>100 S MAIN ST</Addr1>
                  <AirStreetID>182926209</
AirStreetID>

                  <HouseNumber>100</HouseNumber>
                  <DirPrefix>S</DirPrefix>

```

```

        <StreetName>MAIN</StreetName>
        <StreetSuffix>ST</StreetSuffix>
        <DirSuffix />
        <County>KING</County>
        <City>SEATTLE</City>
        <CityAlias />
        <StateProv>WA</StateProv>
        <Zip5>98104</Zip5>
        <ZipPlus4 />
    </ResultAddress>
    <Message>...</Message>
</ValidateResult>
.

```

ZipPlus4 element

Specifies the four-digit ZIP code extension found in the database for the property.

Item	Value	Description
Element name	<i>ZipPlus4</i>	Specifies the four-digit ZIP code extension found in the database for the property.. <i>ZIPPlus4</i> is returned only if the house number in the validated street address is within the house number range for the street segment.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>

```

```

    <Entered>
      <Address>
        .
        .
        .
      </Address>
    </Entered>
    <Matched>
      <ParsedAddr>
        .
        .
        .
      </ParsedAddr>
      <AddrValidator>
        <ValidateResult>
          <AttemptedAt>Match5</AttemptedAt>

          <ValidatorMatchLevel>MatchLevel_StreetInCity</ValidatorMatchLevel>
          <InputAddress>
            .
            .
            .
          </InputAddress>
          <ResultAddress>
            <Addr1>100 S MAIN ST</Addr1>
            <AirStreetID>182926209</
AirStreetID>
            <HouseNumber>100</HouseNumber>
            <DirPrefix>S</DirPrefix>
            <StreetName>MAIN</StreetName>
            <StreetSuffix>ST</StreetSuffix>
            <DirSuffix />
            <County>KING</County>
            <City>SEATTLE</City>
            <CityAlias />
            <StateProv>WA</StateProv>
            <Zip5>98104</Zip5>
            <ZipPlus4 />
          </ResultAddress>
          <Message>...</Message>
        </ValidateResult>
      .

```

ZoneCADOI element

For locations in California, specifies the California Department of Insurance zone where the property resides.

Item	Value	Description
Element name	<i>ZoneCADOI</i>	For locations in California, specifies the California Department of Insurance zone where the property resides..

Item	Value	Description
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Earthquake	
Values	The service returns Not Applicable for properties outside of California.	See California Department of Insurance (DOI) zones .

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        <LocationInformation>
          .
          .
          .
        </LocationInformation>
        <HazardInformation>
          .
          .
          .
        <ProfileEarthquake>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>5-10</Risk250YR>
            <RiskAnnual>0.1</RiskAnnual>
            <RelRiskCounty>90-100</RelRiskCounty>
            <RelRiskState>90-100</RelRiskState>
          </Risk>
          <MMI_VI>25.34</MMI_VI>
          <MMI_VII>15.17</MMI_VII>
          <MMI_VIII>5.87</MMI_VIII>
          <MMI_IX>1.61</MMI_IX>
          <MMI_X>0.25</MMI_X>
          <MMI_XI>0.02</MMI_XI>
          <MMI_XII>0.00</MMI_XII>
          <MMI_100YR>5.9</MMI_100YR>
          <MMI_200YR>7.1</MMI_200YR>
          <MMI_250YR>7.3</MMI_250YR>
        
```

```

<MMI_475YR>8.0</MMI_475YR>
<Liquefaction>High</Liquefaction>
<ZoneCADOI>Not Applicable</ZoneCADOI>
<LandSlide />
<GroundFailure>Not Applicable</GroundFailure>
<SoilType>Soft Soil to Firm Soil</SoilType>
<NumberOfFaults>5</NumberOfFaults>
<NumberOfHistEvents>5</NumberOfHistEvents>
<NearestFault>2</NearestFault>
<Faults>
  <Fault>
    <FaultName>Southern Whidbey Island
    <DistanceToFault>14.05</
    <FaultLength>55.92</FaultLength>
    <EventMagnitude> 7.32</
    <ReturnPeriod>3680</ReturnPeriod>
  </Fault>
  .
  .
  .
</Faults>
<HistoryEvents>
  <HistoryEvent>
    <History>
      <Name>Unnamed</Name>
      <Year>1872</Year>
      <Date>December 15</Date>
      <Magnitude> 7.00</Magnitude>
      <Distance>96.72</Distance>
      <Depth>N/A</Depth>
    </History>
  </HistoryEvent>
  .
  .
  .
</HistoryEvents>
</ProfileEarthquake>
.
.

```

ZoneHighVelocity element

For locations in Florida, indicates whether the property is in a zone defined prior to 2010 that is subject to high-velocity winds.

Item	Value	Description
Element name	<i>ZoneHighVelocity</i>	For locations in Florida, indicates whether the property is in a zone defined prior to 2010 that is subject to high-velocity

Item	Value	Description
		winds. This element is associated with Florida's Wind-Loss Mitigation program. The value of <i>ZoneHighVelocity</i> is based on zones defined prior to 2010, while the value of the ZoneHighVelocity2010 element is based on zones defined in 2010. In general, the value of <i>ZoneHighVelocity2010</i> applies to buildings that meet modern Florida building codes.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	Yes or No	<i>Yes</i> means the property is in a area prone to high-velocity winds. <i>No</i> means the property is not in an area prone to high-velocity winds.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

```

        </LocationInformation>
        <HazardInformation>
            <ProfileHurricane>
                <Risk>
                    <Risk100YR>0-5</Risk100YR>
                    <Risk250YR>0-5</Risk250YR>
                    <RiskAnnual><0.1</RiskAnnual>
                    <RelRiskCounty>0-10</RelRiskCounty>
                    <RelRiskState>0-10</RelRiskState>
                </Risk>
                <CoastalCounty>No</CoastalCounty>
                <StormSurge>No</StormSurge>
                <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
                <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
                <Elevation>20 - 25</Elevation>
                <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
                <ZoneWindSpeed />
                <ZoneWindborneDebris />
                <ZoneTerrain />
                <ZoneHighVelocity />
                <ZoneWindSpeed2010 />
                <ZoneWindBorneDebris2010 />
                <ZoneTerrain2010 />
                <ZoneHighVelocity2010 />
            </ProfileHurricane>
            <ProfileEarthquake>
                .
                .
                .
            </ProfileEarthquake>
            <ProfileThunderstorm>
                .
                .
                .
            </ProfileThunderstorm>
            <ProfileWinterstorm>
                .
                .
                .
            </ProfileWinterstorm>
            <ProfileFlood>
                .
                .
                .
            </ProfileFlood>
            <ProfileTerrorism>
                .
                .
                .
            </ProfileTerrorism>
        </HazardInformation>
    </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

ZoneHighVelocity2010 element

For locations in Florida, indicates whether the property is in zone defined in 2010 that is subject to high-velocity winds.

Item	Value	Description
Element name	<i>ZoneHighVelocity2010</i>	For locations in Florida, indicates whether the property is in zone defined in 2010 that is subject to high-velocity winds. This element is associated with Florida's Wind-Loss Mitigation program. The value of <i>ZoneHighVelocity2010</i> is based on zones defined in 2010, while the value of the ZoneHighVelocity element is based on zones defined prior to 2010. In general, the value of <i>ZoneHighVelocity2010</i> applies to buildings that meet modern Florida building codes.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	Yes or No	<i>Yes</i> means the property is in a area prone to high-velocity winds. <i>No</i> means the property is not in an area prone to high-velocity winds.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        <ProfileHurricane>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>0-10</RelRiskCounty>
            <RelRiskState>0-10</RelRiskState>
          </Risk>
          <CoastalCounty>No</CoastalCounty>
          <StormSurge>No</StormSurge>
          <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
          <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
          <Elevation>20 - 25</Elevation>
          <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
          <ZoneWindSpeed />
          <ZoneWindborneDebris />
          <ZoneTerrain />
          <ZoneHighVelocity />
          <ZoneWindSpeed2010 />
          <ZoneWindBorneDebris2010 />
          <ZoneTerrain2010 />
          <ZoneHighVelocity2010 />
        </ProfileHurricane>
        <ProfileEarthquake>
          .
          .
          .
        </ProfileEarthquake>
        <ProfileThunderstorm>
          .
          .
          .
        </ProfileThunderstorm>
        <ProfileWinterstorm>
          .
          .
          .
        </ProfileWinterstorm>
        <ProfileFlood>

```

```

      .
      .
      .
    </ProfileFlood>
    <ProfileTerrorism>
      .
      .
      .
    </ProfileTerrorism>
  </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

ZoneTerrain element

For locations in Florida, specifies the type of terrain in the zone where the property resides.

Item	Value	Description
Element name	<i>ZoneTerrain</i>	For locations in Florida, specifies the type of terrain in the zone where the property resides. This element is associated with Florida's Wind-Loss Mitigation program. The value of <i>ZoneTerrain</i> is based on zones defined prior to 2010, while the value of the ZoneTerrain2010 element is based on zones defined in 2010. In general, the value of <i>ZoneTerrain</i> applies to buildings that do not meet modern Florida building codes.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.

Item	Value	Description
Profile	Hurricane	
Values	B or C	B - Urban and suburban areas, wooded areas, or other terrain with numerous, closely spaced obstructions having the size of single-family dwellings or larger. C - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands and shorelines in hurricane prone regions.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        <ProfileHurricane>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>0-10</RelRiskCounty>
            <RelRiskState>0-10</RelRiskState>
          </Risk>
          <CoastalCounty>No</CoastalCounty>
          <StormSurge>No</StormSurge>
          <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
          <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
          <Elevation>20 - 25</Elevation>
          <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
          <ZoneWindSpeed />
          <ZoneWindborneDebris />

```

```

        <ZoneTerrain />
    <ZoneHighVelocity />
        <ZoneWindSpeed2010 />
        <ZoneWindBorneDebris2010 />
        <ZoneTerrain2010 />
    <ZoneHighVelocity2010 />
    </ProfileHurricane>
    <ProfileEarthquake>
        .
        .
        .
    </ProfileEarthquake>
    <ProfileThunderstorm>
        .
        .
        .
    </ProfileThunderstorm>
    <ProfileWinterstorm>
        .
        .
        .
    </ProfileWinterstorm>
    <ProfileFlood>
        .
        .
        .
    </ProfileFlood>
    <ProfileTerrorism>
        .
        .
        .
    </ProfileTerrorism>
    </HazardInformation>
    </AddressProfile>
    </Report>
    </Reports>
</ISOResponses>

```

ZoneTerrain2010 element

Item	Value	Description
Element name	<i>ZoneTerrain2010</i>	For locations in Florida, specifies the type of terrain in the zone where the property resides. This element is associated with Florida's Wind-Loss Mitigation program. The value of <i>ZoneTerrain2010</i> is based on zones defined in 2010,

Item	Value	Description
		while the value of the ZoneTerrain element is based on zones defined prior 2010. In general, the value of <i>ZoneTerrain2010</i> applies to buildings that meet modern Florida building codes.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	B or C	B - Urban and suburban areas, wooded areas, or other terrain with numerous, closely spaced obstructions having the size of single-family dwellings or larger. C - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands and shorelines in hurricane prone regions.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </AddressProfile>
    </Report>
  </Reports>
</ISOResponses>

```

```

        </LocationInformation>
        <HazardInformation>
            <ProfileHurricane>
                <Risk>
                    <Risk100YR>0-5</Risk100YR>
                    <Risk250YR>0-5</Risk250YR>
                    <RiskAnnual><0.1</RiskAnnual>
                    <RelRiskCounty>0-10</RelRiskCounty>
                    <RelRiskState>0-10</RelRiskState>
                </Risk>
                <CoastalCounty>No</CoastalCounty>
                <StormSurge>No</StormSurge>
                <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
                <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
                <Elevation>20 - 25</Elevation>
                <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
                <ZoneWindSpeed />
                <ZoneWindborneDebris />
                <ZoneTerrain />
                <ZoneHighVelocity />
                <ZoneWindSpeed2010 />
                <ZoneWindBorneDebris2010 />
                <ZoneTerrain2010 />
                <ZoneHighVelocity2010 />
            </ProfileHurricane>
            <ProfileEarthquake>
                .
                .
                .
            </ProfileEarthquake>
            <ProfileThunderstorm>
                .
                .
                .
            </ProfileThunderstorm>
            <ProfileWinterstorm>
                .
                .
                .
            </ProfileWinterstorm>
            <ProfileFlood>
                .
                .
                .
            </ProfileFlood>
            <ProfileTerrorism>
                .
                .
                .
            </ProfileTerrorism>
        </HazardInformation>
    </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

ZoneWindborneDebris element

For locations in Florida, indicates whether the property is in a zone defined prior to 2010 that is subject to severe wind-borne debris.

Item	Value	Description
Element name	<i>ZoneWindborneDebris</i>	For locations in Florida, indicates whether the property is in a zone defined prior to 2010 that is subject to severe wind-borne debris.. <i>ZoneWindborneDebris</i> is associated with Florida's Wind-Loss Mitigation program. See ZoneWindborneDebris2010 element .
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	Yes or No	Yes means the property is in a area prone to wind-borne debris. No means the property is not in an area prone to wind-borne debris.

Response example

```
<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
```

```

    <AddressProfile>
      .
      .
      .
    </LocationInformation>
    <HazardInformation>
      <ProfileHurricane>
        <Risk>
          <Risk100YR>0-5</Risk100YR>
          <Risk250YR>0-5</Risk250YR>
          <RiskAnnual><0.1</RiskAnnual>
          <RelRiskCounty>0-10</RelRiskCounty>
          <RelRiskState>0-10</RelRiskState>
        </Risk>
        <CoastalCounty>No</CoastalCounty>
        <StormSurge>No</StormSurge>
        <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
          <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
          <Elevation>20 - 25</Elevation>
          <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
          <ZoneWindSpeed />
          <ZoneWindborneDebris />
          <ZoneTerrain />
        <ZoneHighVelocity />
          <ZoneWindSpeed2010 />
          <ZoneWindBorneDebris2010 />
          <ZoneTerrain2010 />
        <ZoneHighVelocity2010 />
      </ProfileHurricane>
      <ProfileEarthquake>
        .
        .
        .
      </ProfileEarthquake>
      <ProfileThunderstorm>
        .
        .
        .
      </ProfileThunderstorm>
      <ProfileWinterstorm>
        .
        .
        .
      </ProfileWinterstorm>
      <ProfileFlood>
        .
        .
        .
      </ProfileFlood>
      <ProfileTerrorism>
        .
        .
        .
      </ProfileTerrorism>
    </HazardInformation>
  </AddressProfile>

```

```

    </Report>
  </Reports>
</ISOResponses>

```

ZoneWindborneDebris2010 element

For locations in Florida, indicates whether the property is in a zone defined in 2020 that is subject to severe wind-borne debris.

Item	Value	Description
Element name	<i>ZoneWindborneDebris2010</i>	For locations in Florida, indicates whether the property is in a zone defined in 2020 that is subject to severe wind-borne debris. This element is associated with Florida's Wind-Loss Mitigation program.. The value of <i>ZoneWindborneDebris2010</i> is based on zones defined in 2010, while the value of ZoneWindborneDebris element is based on zones defined prior to 2010. In general, the value of <i>ZoneWindborneDebris2010</i> applies to buildings that meet modern Florida building codes.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	Yes or No	<i>Yes</i> means the property is in a area prone to wind-borne debris. <i>No</i> means

Item	Value	Description
		the property is not in an area prone to wind-borne debris.

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        <ProfileHurricane>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>0-10</RelRiskCounty>
            <RelRiskState>0-10</RelRiskState>
          </Risk>
          <CoastalCounty>No</CoastalCounty>
          <StormSurge>No</StormSurge>
          <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
          <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
          <Elevation>20 - 25</Elevation>
          <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
            <ZoneWindSpeed />
            <ZoneWindborneDebris />
            <ZoneTerrain />
            <ZoneHighVelocity />
            <ZoneWindSpeed2010 />
            <ZoneWindBorneDebris2010 />
            <ZoneTerrain2010 />
            <ZoneHighVelocity2010 />
          </ProfileHurricane>
          <ProfileEarthquake>
            .
            .
            .
          </ProfileEarthquake>
          <ProfileThunderstorm>
            .
            .
            .

```

```

        </ProfileThunderstorm>
        <ProfileWinterstorm>
            .
            .
            .
        </ProfileWinterstorm>
        <ProfileFlood>
            .
            .
            .
        </ProfileFlood>
        <ProfileTerrorism>
            .
            .
            .
        </ProfileTerrorism>
    </HazardInformation>
</AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

ZoneWindSpeed element

For locations in Florida, specifies the wind speed in miles per hour (mph) associated with the hurricanes that occurred in the zone (defined prior to 2010) where the property resides.

Item	Value	Description
Element name	ZoneWindSpeed	For locations in Florida, specifies the wind speed in miles per hour (mph) associated with the hurricanes that occurred in the zone (defined prior to 2010) where the property resides. This element is associated with Florida’s Wind-Loss Mitigation program. The value of <i>ZoneWindSpeed</i> is based on zones defined prior to 2010, while the value of ZoneWindSpeed2010 element is based on zones defined in 2010. In general, the value of <i>ZoneWindSpeed2010</i> applies to buildings that meet modern Florida building codes.

Item	Value	Description
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	A value from the list	90 or 100 or 105 or 100-110 or 110 or 115 or 119 or 110-120 or 120 or 120-130 or 123 or 125 or 130 or 130-140 or 135 or 140 or 140-150 or 145 or 150

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        <ProfileHurricane>
          <Risk>
            <Risk100YR>0-5</Risk100YR>
            <Risk250YR>0-5</Risk250YR>
            <RiskAnnual><0.1</RiskAnnual>
            <RelRiskCounty>0-10</RelRiskCounty>
            <RelRiskState>0-10</RelRiskState>
          </Risk>
          <CoastalCounty>No</CoastalCounty>
          <StormSurge>No</StormSurge>
          <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
          <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
          <Elevation>20 - 25</Elevation>
          <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>

```

```

        <ZoneWindSpeed />
        <ZoneWindborneDebris />
        <ZoneTerrain />
    <ZoneHighVelocity />
        <ZoneWindSpeed2010 />
        <ZoneWindBorneDebris2010 />
        <ZoneTerrain2010 />
    <ZoneHighVelocity2010 />
    </ProfileHurricane>
    <ProfileEarthquake>
        .
        .
        .
    </ProfileEarthquake>
    <ProfileThunderstorm>
        .
        .
        .
    </ProfileThunderstorm>
    <ProfileWinterstorm>
        .
        .
        .
    </ProfileWinterstorm>
    <ProfileFlood>
        .
        .
        .
    </ProfileFlood>
    <ProfileTerrorism>
        .
        .
        .
    </ProfileTerrorism>
    </HazardInformation>
    </AddressProfile>
</Report>
</Reports>
</ISOResponses>

```

ZoneWindSpeed2010 element

For locations in Florida, specifies the wind speed in miles per hour (mph) associated with the hurricanes that occurred in the 2010-defined zone where the property resides.

Item	Value	Description
Element name	<i>ZoneWindSpeed2010</i>	For locations in Florida, specifies the wind speed in miles per hour (mph) associated with the hurricanes that occurred in the 2010-defined zone where the property

Item	Value	Description
		resides. This element is associated with Florida's Wind-Loss Mitigation program.. The value of <i>ZoneWindSpeed2010</i> is based on zones defined in 2010, while the value of ZoneWindSpeed element is based on zones defined prior to 2010. In general, the value of <i>ZoneWindSpeed2010</i> applies to buildings that meet modern Florida building codes.
Where used	response	A <i>response</i> returns the analysis results and the information used to compute the results.
Data type	xs:string	The <i>string</i> data type can contain characters, line feeds, carriage returns, and tab characters.
Profile	Hurricane	
Values	A value from the list	115-120 or 120-130 or 130-140 or 140-150 or 150-160 or 160-170 or 170-180 or >180

Response example

```

<ISOResponses>
  <ResponseHeader>
    .
    .
    .
  </ResponseHeader>
  <Reports>
    <Report ...>
      <AddressProfile>
        .
        .
        .
      </LocationInformation>
      <HazardInformation>
        <ProfileHurricane>
          <Risk>

```

```

        <Risk100YR>0-5</Risk100YR>
        <Risk250YR>0-5</Risk250YR>
        <RiskAnnual><0.1</RiskAnnual>
        <RelRiskCounty>0-10</RelRiskCounty>
        <RelRiskState>0-10</RelRiskState>
    </Risk>
    <CoastalCounty>No</CoastalCounty>
    <StormSurge>No</StormSurge>
    <DistanceToCoast>Greater than 50 miles</
DistanceToCoast>
    <DistanceToActualCoast>Greater than 25
miles</DistanceToActualCoast>
    <Elevation>20 - 25</Elevation>
    <SurfaceTerrain>Developed High Intensity</
SurfaceTerrain>
    <ZoneWindSpeed />
    <ZoneWindborneDebris />
    <ZoneTerrain />
    <ZoneHighVelocity />
    <ZoneWindSpeed2010 />
    <ZoneWindBorneDebris2010 />
    <ZoneTerrain2010 />
    <ZoneHighVelocity2010 />
    </ProfileHurricane>
    <ProfileEarthquake>
        .
        .
        .
    </ProfileEarthquake>
    <ProfileThunderstorm>
        .
        .
        .
    </ProfileThunderstorm>
    <ProfileWinterstorm>
        .
        .
        .
    </ProfileWinterstorm>
    <ProfileFlood>
        .
        .
        .
    </ProfileFlood>
    <ProfileTerrorism>
        .
        .
        .
    </ProfileTerrorism>
    </HazardInformation>
    </AddressProfile>
    </Report>
    </Reports>
</ISOResponses>

```

6 Supporting reference

Street type abbreviations

These are the U.S. Postal Service abbreviations for street types.

Extended street type	Abbreviation	
Alley	ALY	
Annex	ANX	
Avenue	AVE	
Bayou	BYU	
Bottom	BTM	
Brooks	BRKS	
Beach	BCH	
Boulevard	BLVD	
Burg	BG	
Bend	BND	
Branch	BR	
Burbs	BGS	
Bluff	BLF	
Bridge	BRG	
Bypass	BYP	
Bluffs	BLFS	
Brook	BRK	
Camp	CP	
Cliffs	CLFS	
Cove	CV	
Canyon	CYN	
Club	CLB	
Coves	CVS	
Cape	CPE	
Common	CMN	
Creek	CRK	
Causeway	CSWY	

Extended street type	Abbreviation	
Corner	COR	
Crescent	CRES	
Center	CTR	
Corners	CORS	
Crest	CRST	
Centers	CTRS	
Course	CRSE	
Crossing	XING	
Circle	CIR	
Court	CT	
Crossroad	XRD	
Circles	CIRS	
Courts	CTS	
Curve	CURV	
Cliff	CLF	
Dale	DL	
Divide	DV	
Drives	DRS	
Dam	DM	
Drive	DR	
Estate	EST	
Expressway	EXP1Y	
Extensions	EXTS	
Estates	ESTS	
Extension	EXT	
Fall	FALL	
Flats	FLTS	
Forges	FRGS	
Falls	FLS	
Ford	FRD	
Fork	FRK	
Ferry	FRY	
Fords	FRDS	

Extended street type	Abbreviation	
Forks	FRKS	
Field	FLD	
Forest	FRST	
Fort	FT	
Fields	FLDS	
Forge	FRG	
Freeway	FWY	
Flat	FLT	
Garden	GDN	
Glen	GLN	
Greens	GRNS	
Gardens	GDNS	
Glens	GLNS	
Grove	GRV	
Gateway	GTWY	
Green	GRN	
Groves	GRVS	
Harbor	HBR	
Heights	HTS	
Hills	HLS	
Harbors	HBRs	
Highway	HWY	
Hollow	HOLW	
Haven	HVN	
Hill	HL	
Inlet	INLT	
Islands	ISS	
Isle	ISLE	
Island	IS	
Junction	JCT	
Junctions	JCTS	
Key	KY	
Knoll	KNL	

Extended street type	Abbreviation	
Knolls	KNLS	
Keys	KYS	
Lake	LK	
Lane	LN	
Lock	LCK	
Lakes	LKS	
Light	LGT	
Locks	LCKS	
Land	LAND	
Lights	LGTS	
Lodge	LDG	
Landing	LNDG	
Loaf	LF	
Loop	LOOP	
Mall	MALL	
Mews	MEWS	
Motorway	MTWY	
Manor	MNR	
Mill	ML	
Mount	MT	
Manors	MNRS	
Mills	MLS	
Mountain	MTN	
Meadow	MDW	
Mission	MSN	
Mountains	MTNS	
Meadows	MDWS	
Orchard	ORCH	
Oval	OVAL	
Overpass	OPAS	
Park	PARK	
Pike	PIKE	
Plaza	PLZ	

Extended street type	Abbreviation	
Parks	PARK	
Pine	PNE	
Point	PT	
Parkway	PKWY	
Pines	PNES	
Points	PTS	
Parkways	PKWY	
Place	PL	
Port	PRT	
Pass	PASS	
Plain	PLN	
Ports	PRTS	
Passage	PSGE	
Plains	PLNS	
Prairie	PR	
Path	PATH	
Radial	RADL	
Rest	RST	
Roads	RDS	
Ramp	RAMP	
Ridge	RDG	
Route	RTE	
Ranch	RNCH	
Ridges	RDGS	
Row	ROW	
Rapid	RPD	
River	RIV	
Rue	RUE	
Rapids	RPDS	
Road	RD	
Run	RUN	
Shoal	SHL	
Springs	SPGS	

Extended street type	Abbreviation	
Stravenue	STRA	
Shoals	SHLS	
Spur	SPUR	
Stream	STRM	
Shore	SHR	
Spurs	SPUR	
Street	ST	
Shores	SHRS	
Square	SQ	
Streets	STS	
Skyway	SKWY	
Squares	SQS	
Summit	SMT	
Spring	SPG	
Station	STA	
Terrace	TER	
Track	TRAK	
Tunnel	TUNL	
Throughway	TRWY	
Trafficway	TRFY	
Turnpike	TPKE	
Trace	TRCE	
Trail	TRL	
Underpass	UPAS	
Union	UN	
Unions	UNS	
Valley	VLY	
View	VW	
Villages	VLGS	
Valleys	VLYS	
Views	VWS	
Ville	VL	
Viaduct	VIA	

Extended street type	Abbreviation	
Village	VLG	
Vista	VIS	
Walk	WALK	
Way	WAY	
Well	WL	
Walks	WALK	
Ways	WAYS	
Wells	WLS	
Wall	WALL	

Rural route and highway contract designators

These are the U.S. Postal Service abbreviations mail delivery locations that do not have a post office.

These codes may be used in the *RouteType* attribute of the [Delivery element](#).

Rural route designators	Box 5 RD 5 (on separate line) RD 5 Box 58 (on separate line) RDF RFD RR R R R.R. R. R. RR# R.R.# R F D R. R. D. Rural Free Delivery Rural Route Rural Rt Rural Rte	If RD is on the same line as the address, it can mean either Road or Rural Delivery depending on the context. If an address includes the text RD RD, the first RD means road, and the second RD means rural delivery. For example, the address 10 Valley RD RD4 is read as <i>ten valley road rural delivery route number four</i> .
Highway contract designators	HC H C H.C. HCR H C R H.C.R Highway Contract Highway Contract Route Star Route	

Building unit codes

These are the U.S. Postal Service abbreviations for building units.

These codes are used in the *UnitType* attribute of the [Building element](#).

Building unit	Abbreviation	
Apartment	APT	

Building unit	Abbreviation	
Pier	PIER	
Basement	BSMT	
Rear	REAR7	
Building	BLDG	
Room	RM	
Department	DEPT	
Side	SIDE7	
Floor	FL	
Slip	SLIP	
Front	FRNT7	
Space	SPC	
Hangar	HNGR	
Stop	STOP	
Lobby	LBBY7	
Suite	STE	
Lot	LOT	
Trailer	TRLR	
Lower	LOWR7	
Unit	UNIT	
Office	OFC7	
Upper	UPPR7	
Penthouse	PH7	

United States state and FIPS codes

These are the U.S. state and FIPS codes.

State	Abbreviation/Code	FIPS Code
Alabama	AL	1
Alaska	AK	2
Arizona	AZ	4
Arkansas	AR	5
California	CA	6
Colorado	CO	8
Connecticut	CT	9

State	Abbreviation/Code	FIPS Code
Delaware	DE	10
Dist.Columbia	DC	11
Florida	FL	12
Georgia	GA	13
Hawaii	HI	15
Idaho	ID	16
Illinois	IL	17
Indiana	IN	18
Iowa	IA	19
Kansas	KS	20
Kentucky	KY	21
Louisiana	LA	22
Maine	ME	23
Maryland	MD	24
Massachusetts	MA	25
Michigan	MI	26
Minnesota	MN	27
Mississippi	MS	28
Missouri	MO	29
Montana	MT	30
Nebraska	NE	31
Nevada	NV	32
NewHampshire	NH	33
NewJersey	NJ	34
NewMexico	NM	35
NewYork	NY	36
NorthCarolina	NC	37
NorthDakota	ND	38
Ohio	OH	39
Oklahoma	OK	40
Oregon	OR	41
Pennsylvania	PA	42

State	Abbreviation/Code	FIPS Code
Rhodelsland	RI	44
SouthCarolina	SC	45
SouthDakota	SD	46
Tennessee	TN	47
Texas	TX	48
Utah	UT	49
Vermont	VT	50
Virginia	VA	51
Washington	WA	53
WestVirginia	WV	54
Wisconsin	WI	55
Wyoming	WY	56

Post office box designators

These are the U.S. Postal Service abbreviations for post office boxes.

PO box designators	BIN (followed by a number or alphanumeric) Caller (followed by a value) Drawer (followed by a value) Lock Box (followed by a value) Lockbox (followed by a value) POB PoBo POBox POBoxx PoBx PO B PO Bo PO Box PO Boxx PO Bx P.O.B P.O.Bo P.O.Box P.O.Boxx P.O.Bx P.O.B. P.O.Bo. P.O.Box. P.O.Boxx. P.O.Bx. P.O. B P.O. Bo P.O. Box P.O. Boxx P.O. Bx P.O. B. P.O. Bo. P.O. Box. P.O. Boxx. P.O. Bx.	These codes are used in the <i>BoxType</i> attribute of the Delivery element .
--------------------	--	--

California Department of Insurance (DOI) zones

The California Department of Insurance divides California into the eight zones and six subzones. Insurers use the zones to manage their total exposures.



Zone	Counties	
A1	San Francisco and San Mateo	
A2	Alameda and Contra Costa	
A3	Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito, Santa Clara, Santa Cruz, Solano, and Sonoma	
B1	Los Angeles county west of Interstate 5 and south of Mulholland Drive	
B2	Remainder of Los Angeles county not covered by zone B1	
B3	Orange	
C	Kern, San Luis Obispo, Santa Barbara, and Ventura	
D	San Diego	
E	Alpine, Imperial, Inyo, Mono, Riverside, and San Bernardino	
F	Fresno, Kings, Madera, Mariposa, Merced, and Tulare	
G	Amador, Butte, Calaveras, Colusa, El Dorado,	

Zone	Counties	
	Glenn, Nevada, Placer, Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo, and Yuba	
H	Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, and Trinity	

About AIR Worldwide

AIR Worldwide (AIR) provides risk modeling solutions that make individuals, businesses, and society more resilient to extreme events. In 1987, AIR Worldwide founded the catastrophe modeling industry and today models the risk from natural catastrophes, terrorism, pandemics, casualty catastrophes, and cyber incidents. Insurance, reinsurance, financial, corporate, and government clients rely on AIR's advanced science, software, and consulting services for catastrophe risk management, insurance-linked securities, longevity modeling, site-specific engineering analyses, and agricultural risk management. AIR Worldwide, a Verisk (Nasdaq:VRSK) business, is headquartered in Boston with additional offices in North America, Europe, and Asia. For more information, please visit www.air-worldwide.com.

