

Assess Vulnerability and Risk | Develop Impact Statements

WHO

This exercise is for the practitioner, government champion and full planning team in the Assess Vulnerability and Risk step.

WHAT

This exercise illustrates how to use various elements of the assessment and the Assess Vulnerability and Risk step results to identify key findings and develop narratives of the resulting consequences for people and community assets. This exercise relies on group discussion around types of vulnerabilities and drivers and will be used to inform brainstorming options in the Investigate Options step.

Impact statements help to:

- Communicate critical planning issues,
- Assist the community and stakeholders to prioritize and focus on the areas that have the greatest need for mitigation or adaptation based on co-occurrence of physical and social vulnerability,
- Create a clear and cogent “story” to help support decision making by community leaders and other stakeholders,
- Provide a foundation for seeking funds to reduce risks and increase community resilience.

SUPPORTING RESOURCES

- Look back at [3.4 Ruleset Development - Worksheet](#) to help with interpreting the assessment results.

INSTRUCTIONS

- Review the [example below](#).
- Using the assessment results and supporting resources, answer the questions below in as much detail as possible.
- Summarize the assessment results for people and community assets, particular sectors and services evaluated, the project or study area as a whole, or the agencies and organizations assessed.
- Don't limit yourself to developing a single impact statement. Record your observations of the results in detail and be prepared to discuss as a group.

Example

Describe the physical community asset and hazard, and discuss exposure.

Community asset, sector, service: *residential properties*

Describe what you know about the nature of the hazard in terms of its spatial extent, frequency of occurrence, timeframe and projected changes (near-term, long-term) and the resulting exposure of the community asset mentioned above? *FEMA flooding, current day*

Scale (a particular transportation corridor, neighborhood, entire project or study area): *along route 371, southwest of downtown*

Primary function (what is disrupted by impacts, why do these functions matter): *single and multi-family homes*

Exposure (defined as the presence of people and community assets in places where they could be adversely affected by hazards) *Homes in the neighborhoods along route 371, southwest of downtown have experienced flooding in the past five years.*

Describe the types and causes of vulnerability and risk.

What are the key ways in which the community asset(s) is (are) vulnerable/ at risk to impacts? *Multiple properties in frequent flooding zones and several in 100- and 500-year flood extents.*

Describe the physical vulnerabilities (what makes it a high potential impact, low adaptive capacity, exposure)? *At least 60% of properties in this neighborhood are in frequent flooding zones and have a structure in the inundation extent. Many of these are also high potential impact (property types with high criticality of impact and structure in inundation extent). Of the properties that have high potential impact, about 25% have low adaptive capacity (structure was built before BFE [base flood elevation] requirements were in place).*

Describe the social vulnerabilities and the causes (is the neighborhood historically marginalized? Is the population primarily low-income, older, something else?) *In this neighborhood, about 56% of households are below the poverty line and about 6% of the population is of hispanic or latino origin (above the 50th percentile compared to the rest of the city). A predominantly low-income and minority neighborhood, this area has a large amount of naturally-occurring affordable housing potentially because of the proximity with the floodplain. These populations often do not have access to resources to prepare for or respond to a flood event.*

Construct the impact statement.

In a neighborhood along route 371, southwest of downtown, almost 22% of all residential properties in that neighborhood are highly vulnerable to flooding. This area comprises many single and multi-family homes, many of which are high potential impact (based on property type, multi-family) and about 25% were built before BFE (base flood elevation) requirements were in place. At least 60% of the properties in this neighborhood are in frequent flooding zones and over half of households are below the poverty line, which may mean there are less resources to respond to and recover from a flood event. This is also an area with a large amount of naturally-occurring affordable housing likely because of the proximity with the floodplain.

Impact Statement 1

Describe the physical community asset and hazard, and discuss exposure.

Community asset, sector, or service:

What is the hazard causing the impact? Is the impact near-term, long-term?

Scale (a particular transportation corridor, neighborhood, entire project or study area):

Primary function (what is disrupted by impacts, why do these functions matter):

Exposure (defined as the presence of people and community assets in places where they could be adversely affected by hazards):

Consider what factors or characteristics make the people and community assets more or less vulnerable to impacts. This may be determined by examining the assessment factors, such as building year, or the social vulnerability indicators, or a combination of those. Remember there are physical and social drivers of vulnerability. Identifying these aspects within the impact statements will help inform the development of options in the Investigate Options step.

Describe the types and causes of vulnerability.

What are the key ways in which the community asset(s) is/are vulnerable to impacts? What makes the community asset sensitive to the hazard, have low adaptive capacity?

Describe the pre-existing stressors, social vulnerabilities, or and any root causes (historical disinvestment, income inequality, limited access to resources or services).

Use the information gathered and construct a full impact statement. This can be 1-4 sentences. This should be a story about the particular neighborhood, area, community asset identified above. Why does it matter if this area is affected or function is lost?

Impact Statement 2

Describe the physical community asset and hazard, and discuss exposure.

Community asset, sector, or service:

What is the hazard causing the impact? Is the impact near-term, long-term?

Scale (a particular transportation corridor, neighborhood, entire project or study area):

Primary function (what is disrupted by impacts, why do these functions matter):

Exposure (defined as the presence of people and community assets in places where they could be adversely affected by hazards):

Consider what factors or characteristics make the people and community assets more or less vulnerable to impacts. This may be determined by examining the assessment factors, such as building year, or the social vulnerability indicators, or a combination of those. Remember there are physical and social drivers of vulnerability. Identifying these aspects within the impact statements will help inform the development of options in the Investigate Options step.

Describe the types and causes of vulnerability.

What are the key ways in which the community asset(s) is/are vulnerable to impacts? What makes the community asset sensitive to the hazard, have low adaptive capacity?

Describe the pre-existing stressors, social vulnerabilities, or and any root causes (historical disinvestment, income inequality, limited access to resources or services).

Use the information gathered and construct a full impact statement. This can be 1-4 sentences. This should be a story about the particular neighborhood, area, community asset identified above. Why does it matter if this area is affected or function is lost?

Impact Statement 3

Describe the physical community asset and hazard, and discuss exposure.

Community asset, sector, or service:

What is the hazard causing the impact? Is the impact near-term, long-term?

Scale (a particular transportation corridor, neighborhood, entire project or study area):

Primary function (what is disrupted by impacts, why do these functions matter):

Exposure (defined as the presence of people and community assets in places where they could be adversely affected by hazards):

Consider what factors or characteristics make the people and community assets more or less vulnerable to impacts. This may be determined by examining the assessment factors, such as building year, or the social vulnerability indicators, or a combination of those. Remember there are physical and social drivers of vulnerability. Identifying these aspects within the impact statements will help inform the development of options in the Investigate Options step.

Describe the types and causes of vulnerability.

What are the key ways in which the community asset(s) is/are vulnerable to impacts? What makes the community asset sensitive to the hazard, have low adaptive capacity?

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Use the information gathered and construct a full impact statement. This can be 1-4 sentences. This should be a story about the particular neighborhood, area, community asset identified above. Why does it matter if this area is affected or function is lost?