



SECTION 4 RISK ASSESSMENT

4.1 UPDATE PROCESS SUMMARY

In accordance with the Federal Emergency Management Agency (FEMA) Local Mitigation Planning Handbook, risk is the potential for damage, loss, or other impacts created by the interaction of natural hazards with community assets. Chester County's risk assessment is organized into the following sections:

- Section 4.2 outlines the hazard identification process for both natural and human-caused hazards of concern for further profiling and evaluation.
- Section 4.3 profiles the hazards of concern (location and extent, range of magnitude, past occurrence, and future occurrence) and assesses vulnerability.
- Section 4.4 summarizes the risk assessment methodology, ranking results, potential losses, and future development and vulnerability.

The Steering Committee and Planning Team evaluated the 2015 Hazard Mitigation Plan (HMP) hazards of concern by examining the historic events that have taken place in the county since the last plan update and by also reviewing the Commonwealth's 2018 HMP. In addition, the Steering Committee and Planning Team completed the risk assessment worksheet (Evaluation of Identified Hazards and Risk Worksheet). The worksheet listed hazards profiled in the 2015 HMP and requested that participants identify whether the frequency of occurrence, magnitude of impact, and/or geographic extent of each hazard increased, decreased, or did not change since the preparation of the 2015 HMP. The worksheet also provided the opportunity to assess hazards not profiled in the HMP to determine if those hazards should be included as part of the update. Responses from the worksheets were reviewed by the Steering Committee to identify a list of hazards to profile in the 2021 HMP. Civil Disturbance, Armed Attacks, and Thunderstorms were deleted as their own profiles. Thunderstorms are addressed in the Tornadoes and Windstorms hazard profile (Section 4.3.16) since their effects in eastern Pennsylvania are generally limited to windstorms. Armed Attacks are addressed in Terrorism (Section 4.3.15). Civil Disturbance was deleted because they did not have significant effects in the county. Each hazard profile also includes an additional subsection that discusses the effect of climate change on vulnerability. Appendix H includes copies of the completed worksheets.