

SECTION 2

PLANING PROCESS AND PARTICIPATION

PLANNING PROCESS

The planning process for Tooele County Pre-Disaster Mitigation Plan (PDMP) was adapted from the *Local Mitigation Planning Handbook* (FEMA, 2013). The planning process followed five major steps: pre-analysis, risk assessment, mitigation strategy creation, plan development, and implementation and maintenance of the plan. The process was developed to be continuous and iterative to allow new information to be integrated into the process over the next five years. Participation by the public and stakeholders were critical to the entire process and was sought during each step of the process. The following sections describe in detail how each step of the process was completed, and is followed by who and how participation in the planning process occurred.

The plan was developed over an 18-month period beginning in the fall of 2020 and ending in the fall of 2021. Due to COVID-19 the planning process was delayed to a certain extent as communities responded to the pandemic. As such the completion date of the plan was pushed back from August to October.

PRE-ANALYSIS

The pre-analysis step was used to establish

the scope of the project, to form an initial understanding of the natural hazards affecting Tooele County, and to understand the issues and opportunities in the region related to natural hazard planning. This was accomplished by reviewing related PDM documents, forming a County Planning Team, and holding the County Kick-Off Meeting.

DOCUMENT REVIEW

The following PDM related documents were reviewed in order to develop the initial Tooele County Region PDM planning process and to develop an preliminary list of natural hazards and community assets in the region:

- Local Mitigation Planning Handbook (FEMA, 2013)
- Pre-Disaster Mitigation 5-Year Plan (Tooele County [Tooele County], 2015)
- Local Mitigation Plan Review Tool (Tooele County, 2015)
- Pre-Disaster Mitigation Plan: Bear River Region, Utah (Bear River Association of Governments [BRAG], 2015)
- 2019 Utah State Hazard Mitigation Plan (Utah Division of Emergency Management [UDEM], 2019)

COUNTY PLANNING TEAM

Once the project scope was established, Tooele County and BRAG staff identified and invited representatives from each community and partnering organization to form the County Planning Team, including county and local elected officials and planners, state and local emergency managers, and state and federal land managers.

COUNTY KICK-OFF MEETING

The County planning team met in at the County kick-off meeting on September 15, 2020 to:

- Inform them on pre-disaster mitigation planning by State Hazard Mitigation staff
- Help inform Tooele County PDM planning process
- Receive input on the natural hazards and community assets to analyze
- Understand the issues experienced during the 2016 PDMP update
- Identify people and organizations to invite to participate in the County Working Group

RISK ASSESSMENT SUMMARY

The risk assessment step was used to determine the potential impacts of natural hazards to the people, economy, and built and natural environments of Tooele County, and to provide the factual basis for the mitigation strategies. This included collecting input on the risk assessment, natural hazard research and data collection, and conducting the risk analysis.

RISK ASSESSMENT INPUT

The risk assessment input step was used to gather additional information and comments about which natural hazards and community assets to analyze in the risk assessment as well as to further develop Tooele County PDM planning process. This was completed through county working group risk assessment meetings and a risk assessment survey.

County Working Groups

Based on input from the County planning team, a county working group was formed. This group was comprised of county and local elected officials, emergency managers, administrators, planners and GIS personnel, school districts, the public, and state and federal land managers that operated in the county.

Risk Assessment Survey

Once a county working group was formed, a risk assessment survey was sent out to local government officials. The survey was used to gain input on what natural hazards and community assets to include in the risk assessment, and what current capabilities (e.g., general plan, municipal codes, zoning etc.) were in place to protect their community from natural hazards.

Risk Assessment Meetings

A county working group risk assessment meeting was held on November 19, 2020. This meeting was used to inform county working group members and the public about:

- Tooele County PDM planning process
- Natural hazards that exist in and around Tooele County
- A review and discussion of the risk assessment survey results
- Primer on how the need to create good mitigation strategies

RESEARCH AND DATA COLLECTION

After collecting input from the county working group, natural hazards were researched, and natural hazard and community asset data was collected and organized into maps and tables to prepare for the risk analysis.

Natural Hazards Research

Input from the County planning team, the county working group, and the risk assessment surveys were used to create an updated the list of natural hazards. Next state and federal natural hazard experts were consulted to understand those natural hazards, to find out if any other hazard existed in the region, and where to find data to analyze them.

Based on the updated list of natural hazards and the information collected from the natural hazard experts, local and County natural hazard reports, related planning documents, and websites were reviewed to describe each natural hazard, including:

- Community Wildfire Preparedness Plans
- FEMA Flood Insurance Studies
- Local and County General Plans
- Utah Geological Survey Reports on faults, flood, landslides, liquefaction and problem soils
- 2019 State of Utah Hazard Mitigation Plan
- Hazards.utah.gov

The natural hazard research provided the basis for which natural hazards to include and not to include in the plan.

Data Collection and Organization

After finalizing which natural hazards to include in the plan, the best available natural hazard and community asset data were collected from national, state and local data sources for the risk analysis. Spatial data was organized in the software ArcGIS Pro by Esri, and hazard history data was organized into tables in Microsoft Excel.

Community asset data was organized into different categories and mapped. Community asset maps were created in Google Earth Pro and sent out to each jurisdiction for a final review before conducting the risk analysis. Comments were collected and community asset data were updated accordingly. Due to the sensitivity of some community asset data, their locations were kept out of the plan. Contact Tooele County staff or the county emergency manager to request a copy of their locations.

Extent maps were used to display the relative area a natural hazard could impact (see Section 5 to view maps). To provide a robust analysis, some natural hazards had multiple maps to provide additional information. Additionally, some natural hazard event maps were derived from maps that displayed a range of risk or threat. In those cases a range

of event criteria were selected to represent the natural hazard event. For example, moderate to high wildfire threat areas were grouped together and considered the wildfire event.

Natural Hazard Descriptions and Evaluations

Before analyzing each jurisdiction's risk, natural hazards were defined for the region. Information collected during the data research and collection step was used to define each natural hazard in terms of its location, timing, occurrence and impact.

Location was determined based on currently available best quality data collected from a variety of sources (see Appendix D for details). Some hazards, such as severe weather, have extents that are regional in nature and cover the entire county.

Timing is the temporal potential for severe events to occur, i.e. how long it takes for ominous clouds to create a microburst in Tooele City once the skys begin to cloud over.

Occurrence was the likelihood of a natural hazard occurring in the next year and was based on its recorded history. It was calculated as a percentage by dividing the number of years the natural hazard has been tracked by the number of times the natural hazard has

occurred.

**Note: probability of occurrence was also used in the jurisdictional risk assessment section and was defined differently than the probability of occurrence definition used above.*

Impact was the potential damage as a result of a natural hazard occurring. It is described in terms of severity which is the relative measure of the damage caused by a natural hazard and included the following categories:

Minor/Limited: limited and scattered property damage, limited damage to public infrastructure and essential service not interrupted, limited injuries and/or fatalities.

Serious: scattered major property damage, some minor infrastructure damage, essential services are briefly interrupted, some injuries and/or fatalities.

Severe: widespread major property damage, major public infrastructure damage (up to several days for repair), essential services are interrupted from several hours to several days, many injuries and/or fatalities.

Catastrophic: property and public infrastructure destroyed, essential services stopped, numerous injuries and/or fatalities.

Risk Assessment

After defining the natural hazards, a combination of historical and exposure analyses were completed for each jurisdiction. Due to data limitations the following natural hazards only included a historical analysis: among them were drought, radon, severe weather. The historic analysis was used to predict potential impacts and losses during similar future events by using the historic occurrence databases provided in Appendix F.

Historical and exposure analyses were conducted for all hazards with available GIS data (See Appendix D for details). The exposure analysis involved identifying which community assets were located in identified natural hazard areas. This was completed in ArcGIS Pro—an ESRI GIS analysis software—by overlaying the location of a natural hazard with a jurisdiction’s community assets. For jurisdictions that had natural hazards with multiple event maps, the event map with the highest area impacted was used. This way jurisdictions could plan for the worst case scenarios.

The number of community assets that were found in the natural hazard areas were totaled and recorded in various tables for each community. Loss estimates were calculated for housing units and businesses based on local

estimates.

MITIGATION STRATEGIES

The mitigation strategies step was used to identify and prioritize actions to reduce the risk of natural hazards to a jurisdiction. This was completed by holding a county-level mitigation strategy meeting, and developing risk analysis summaries.

Prioritizing Local Mitigation Strategies

A guiding factor in prioritizing mitigation strategies was the principle that mitigation should provide the greatest amount of good to the greatest number of people, after considering resources, staffing, and other constraints. Recurrence intervals, past events, and damage estimates compiled during the risk assessment in this plan were also considered. Overall, each community individually considered their own capabilities and resources as they prioritized each strategy. Strategies were considered a higher priority if there was adequate funding, staff, and elected official support. Moderate-priority strategies may only have two out of three, and low-priority strategies may only have one. Without adequate community staffing and elected official support, for example, projects are not very likely to be implemented.

MITIGATION STRATEGY MEETING

A mitigation strategy meeting was held with the county working group to:

- Learn how to develop mitigation strategies from FEMA and Utah DEM staff
- Review the risk analysis results and discuss the historical analysis only natural hazards
- Learn how to interpret risk analysis results and develop mitigation strategies
- Provide hard and digital copies of the community workbooks to take back to their communities and discuss

Revised Capability Assessments

See Section 4 for updates on community capabilities.

PLAN DEVELOPMENT

This step was utilized to write, review, approve and adopt the plan. This included creating and reviewing the plan, approval from the Utah DEM and FEMA, and adoption by each participating jurisdiction.

CREATE AND REVIEW PLAN

Mitigation strategies were collected, reviewed and revised as a draft of the plan was created. After an internal review, the draft plan was

opened to a 30-day review by the public. The County planning team, county work group and jurisdictions were also given the opportunity to review and submit plan comments.

Comments were collected and an updated draft plan was created before holding a county-level plan adoption meeting. The plan adoption meeting was held to:

- Inform jurisdictions on how to apply for funding
- Establish how the plan will be maintained, including:
- Tracking the progress
- People and agencies responsible for monitoring, evaluating and updating the plan
- Methods for continued public involvement
- Collect any additional comments on the plan

UTAH DEM AND FEMA APPROVAL

After a final revision based on the plan adoption meetings, the plan was submitted on September 17, 2021 to the Utah DEM for review and approval. Based on Utah DEM comments, the plan was updated and then submitted to FEMA for review and approval. Comments from FEMA were integrated into the final plan.

PLAN ADOPTION

Once the plan was approved by the Utah DEM and FEMA it was sent out to each jurisdiction for official approval. The plan is expected to be adopted by participating jurisdictions in the fall of 2021. A copy of all resolutions for adoption will be maintained on file with the Tooele County staff, and each jurisdiction will maintain its own resolution with its records.

IMPLEMENT AND MAINTAIN

Following the adoption, the plan entered into a 5 year period of implementation, monitoring, evaluating and updating.

PARTICIPATION

A variety of local, county, tribal, County, state and federal stakeholders were invited to participate in the planning process to collect a wide array of knowledge and opinions as well as to inform and educate. The plan relied on 3 levels of stakeholder group participation: the County planning team, the county working group and the public.

JURISDICTION PARTICIPATION

All jurisdictions were invited to participate in the plan either by attending meetings,

responding to surveys or direct communication with the Tooele County Emergency Manager, including:

Tooele County, Grantsville City, Rush Valley City, Stockton City, Tooele City, Vernon City, and Wendover City. Unincorporated communities, such as Stansbury Park, and local Native American tribes were also invited to participate.

COUNTY WORKING GROUP

A Tooele County working group was formed and included Grantsville, Rush Valley, Stockton, Tooele City, Vernon, and Wendover. Unincorporated communities and Native American tribes were also invited to participate. The group consisted of the participating jurisdiction's representative(s), local government staff, county emergency manager, local responders, federal land managers, and any other group interested or invested in the county. County working groups were used to collect feedback, and present information and results (see Appendix B for each meeting's agenda and sign-in sheet).

OTHER INVITES

To ensure a robust participation in the planning process, county and local emergency managers, emergency responders, planning

staff, zoning and building administrative staff, GIS staff, County health department staff, universities and school district leaders, and federal and state land managers were invited (see Appendix A for details). In addition, County governments from around the state, neighboring counties and states, and other natural agencies involved in natural hazard activities were invited to participate.

PUBLIC PARTICIPATION

The general public was also invited to participate throughout the planning process, and to review the draft through announcements in the newspaper and the Tooele County website. Comments were submitted to Tooele County staff for integration into the planning process and final plan.

Newspaper Announcement

A newspaper announcement inviting the public to participate in the planning process was posted in late September of 2019. Announcements were posted in the local newspaper (see Appendix A for a copy of the newspaper announcement.).

Website Announcement

An announcement was posted on the main page of the Tooele County website throughout the entire update process as well as the

State of Utah public meetings website. The announcement stated the purpose of the plan, invited people to participate, and provided contact information for more information (see Appendix A for a copy of the announcement).

Invitation to Comment on Draft

On September 17, 2021 the draft of Tooele County PDMP was put on the Tooele County website, located at <https://tcecm.org/> and a hard copy was made available at the Tooele County office for the public to review and comment on the draft. Comments were provided to BRAG staff for inclusion in plan.

After the 30-day public comment period, feedback from communities, the public, county working groups, as well as the Utah Division of Emergency Management were integrated into the plan.