Washington County

HAZARD MITIGATION PLAN ELEMENT DRAFT: AUGUST 11, 2020

2020

NORTHEAST COLORADO REGIONAL HAZARD MITIGATION PLAN

Section One – Introduction

Overview

The purpose of the ***Washington County Plan Element*** is to provide Washington County and political subdivisions within the county with a comprehensive hazard mitigation strategy for reducing long-term risks to people, property and natural resources. It is the intent of this plan to help ensure that Washington County remains a safe place to live and work and to provide a framework for addressing potential future hazards through hazard mitigation planning.

Hazard mitigation is defined by FEMA as "any sustained action taken to reduce or eliminate long-term risk to human life and property from a hazard event." Mitigation creates safer communities by reducing loss of life, risk of injury, property damage, and damage to the environment.

The ***Washington County Plan Element*** is an annex of the ***Northeast Colorado Regional Hazard Mitigation Plan***. This Plan Element ("Plan") is organized into the following sections:

1. ***Introduction – Overview and Community Profile***
2. ***Risk Assessment***
3. ***Capability Assessment***
4. ***Vulnerability Assessment***
5. ***Mitigation Strategy***
6. ***Maintaining and Updating the County Plan Element***.

Participating Jurisdictions and Stakeholders

The jurisdictions and organizations that participated in the 2020 plan update process are identified in Table 1.1 below. *Participating Jurisdictions* that adopt the updated plan are eligible to receive federal hazard mitigation grant funds directly from FEMA. In addition to participating in the planning process and formally adopting the updated plan, Participating Jurisdictions must also identify specific mitigation actions for reducing risks from local hazards. *Stakeholders* are jurisdictions or organizations that participate in and have an interest in the planning process, but are not required to formally adopt the updated plan or identify mitigation actions. Stakeholders that identify specific mitigation actions may be the recipient of federal hazard mitigation grant funds, but are required to work through a Participating Jurisdiction that agrees to sponsor the project application.

Table 1.1 Participating Jurisdictions and Stakeholders

Participating Jurisdictions and Stakeholders	
Akron Public Schools	Town of Akron*
American Red Cross	Town of Otis*
Arickaree Public Schools	Southwest Washington County Fire Protection District*
CSU Extension Services	Washington County *
Northeast Colorado Health Department	Washington County Ambulance
Northeast Colorado Regional Advisory Trauma Council (RETAC)	Washington County Nursing Home
	Woodlin School

* Participating Jurisdiction

Staff from the Colorado Department of Public Safety, Division of Fire Prevention and Control, and the Division of Homeland Security and Emergency Management, provided technical planning support for the project.

Planning Process and Public Involvement

A planning workshop was conducted on March 11, 2020, 6:00-8:00 PM, in Akron to gather and evaluate information to include in the 2020 updates to the Washington County Hazard Mitigation Plan Element. The workshop was attended by representatives of Washington County and its local partners. The workshop was facilitated by a mitigation specialist from the Colorado Division of Homeland Security and Emergency Management and the contractor hired to coordinate the project. Prior to the workshop, a survey of Participating Jurisdictions and Stakeholders was conducted to collect initial information for updates to the Plan, including hazard events and mitigation efforts from the previous five years.

In addition to the March planning workshop, two planning coordination meetings regarding updates to the mitigation plan were conducted by Emergency Manager Bryant McCall in February, on February 5 and February 19, 2020.

The survey and workshop provided two opportunities to (1) review and update the Risk Assessment and assess the vulnerability of community assets to local hazards, (2) review local mitigation capabilities and update the Capability Assessment, and (3) determine the status of 2015 Mitigation Actions and identify new opportunities and projects to include in the updated plan. The workshop was open to the public and citizens and volunteers were also provided an opportunity to review and comment on draft updates prior to final review by the Washington County Hazard Mitigation Planning Team.

Table 1.2 Washington County Hazard Mitigation Planning Team

Washington County Hazard Mitigation Planning Team		
Name	**Position**	**Organization**
Dallas Bowin	Coroner	Washington County
Brandon Fincher	Assistant Chief	Akron Volunteer Fire Department
Amy Harrison		American Red Cross
Dennis Kaan	Area Director	CSU Extension Services
James Kirchmeyer	Council Member	Town of Otis
Lea Ann Laybourn	Commissioner	Washington County
Jeannie Lambertson	Chair	ERC
Jason Lockard	Supervisor, District 2	Washington County Road & Bridge Department
Collin Patterson	Director	Washington County Ambulance
Misty Peterson	County Administrator	Washington County
Scott Porteus	Assistant Chief	Akron Volunteer Fire Department
Mark Reser	Maintenance Manager	Town of Otis
Brenda Rhea	Administrator	Washington County Nursing Home
Danny Rogers	Supervisor, District 1	Washington County Road & Bridge Department
Kari Seri	EPO/IPCO	Washington County Nursing Home
Jon Stivers	Sheriff	Washington County
Teresa Traxler	Deputy Director	Washington County Human Services Department
Taylor Triolo	Battalion Chief	CO Division of Fire Prevention and Control
Steve Vasquez	Chief	Akron Volunteer Fire Department
Tony Wells	Commissioner	Washington County

Steve Williams	Supervisor, District 3	Washington County Road & Bridge Department
Bryant McCall	Emergency Manager	Washington County
Mark Thompson	Mitigation Planning Specialist	Colorado Division of Homeland Security and Emergency Management
Bob Wold	Consultant	Robert Wold Emergency Management Planning Services

Community Profile

Established	**1887**	**Assessed Value (2018)**	**$146,736,745**
Land Area (Square Miles)	**2,524**	**Top Industry**	**Agriculture**
Elevation Range	**3,313-5,433'**	**Population (2010)**	**4,814**
County Seat	**Akron**	**Population (2017)**	**4,809**

History

Washington County, named for George Washington, was established by the Colorado General Assembly in 1887 as part of the partitioning of Weld County, which at the time covered most of northeastern Colorado. In 1889, the eastern half of Washington County was partitioned off to create Yuma County. In 1903, Washington County acquired part of eastern Arapahoe County, establishing the county borders that exist today.

Akron, the Washington County Seat, became an important railroad depot by 1890 with a railroad roundhouse and depot, general store, two newspapers, four hotels, four blacksmiths, five doctors' offices, a Presbyterian church, and a library. Akron was platted in 1882 and the town was incorporated in 1887. Otis was established in 1882 as a construction campsite for workers building the Burlington & Missouri rail line from Lincoln, Nebraska to Denver and was named after W.O. Otis, a pioneer settler. The post office opened in 1886 and the town was platted in 1887 and incorporated in 1917.

Geography

Washington County covers a total land area of 2,524 square miles (1,619,200 acres), 12th largest of the state's 64 counties. Most of the land is dedicated to farming and ranching and the county is annually a leader of all the Colorado counties in wheat production. Corn, oats, and millet are other important local crops.

The topography of Washington County is nearly level to gently rolling with elevation ranging from approximately 4,000 feet in the northeastern corner of the county to a high point of 5,433 feet to the south at the Washington-Lincoln County line. Fremont Butte and Rocking Chair are well-known geologic landmarks.

Water resources are limited to a few small tributaries to the South Platte River. The Arikaree River and Red Willow Creek are the only continuous streams in the county, except for the South Platte River which cuts across the northwestern corner of the county. To cope with the dry, arid

conditions, Washington County farmers have traditionally relied on the cultivation of dryland crops, especially winter wheat, which requires little moisture.

The only incorporated towns in Washington County are Akron and Otis. Unincorporated communities include Anton, Cope, Last Chance, Lindon Otis, Platner and Woodrow. Major highways in the county include I-76, US 34, US 36, CO 61, CO 63 and CO 71. There are five school districts in Washington County: Akron, Arickaree, Lone Star, Otis and Woodlin. The county is served by four fire protection districts: Akron, Cope, Otis and Southwest Washington County FPD.

In addition to being the county seat, Akron is also home to the Washington County Museum, Colorado Plains Regional Airport, and Washington County Fairgrounds and Events Center. Otis is located at the junction of US 34 and CO 61. Both towns lie in the heart of a prosperous agricultural area that produces a large variety of crops, both irrigated and dry land. Ranchers graze livestock on the grasslands surrounding the communities.

Climate

According to the Colorado Climate Center, the climate of Washington County is characterized by low relative humidity, frequent sunshine, infrequent moisture, moderate to high winds, and temperature extremes that range from zero to -15°F in winter months to daily maximum temperatures of 95°F or above during the summer. Between 2015 and 2019, the average high temperature was 65°F and the average low temperature was 37°F. The average annual precipitation for Washington County for the same period ranged from 16.58 inches (2017) to 18.68 inches (2015) and the average annual snowfall ranged from 16.4 inches (2017) to 50.0 inches (2019). Precipitation is seasonal, with most of the annual total (70-80%) falling during the growing season from April through September.

Large thunderstorms are common in the spring and summer months and capable of producing small- to medium-size tornadoes, crop-damaging hail, and heavy rainfall that can result in localized flood events. Although winter weather is generally dry, severe winter weather events are fairly common, including blizzards and wind-blown snow that can close highways and isolate communities and rural residents. Fall is the most stable time of year for weather conditions, with cooler temperatures and very low humidity levels for most of the season. Multi-year drought is common to the area, such as the intense widespread drought of the early 2000s.

Population

Washington County experienced a very slight decrease in population since 2010, from 4,814 in 2010 to a total population in 2017 of 4,809 (0.10% decrease). The population of Akron grew

during the period from 1,702 in 2010 to 2,116 in 2017 (24.32% increase) and the population of Otis fell from 475 to 470 (1.05% decrease). Other population characteristics for Washington County from the 2017 U.S. Census are shown in the following table.

Table 1.3 Population Characteristics

Population Characteristics	Washington County	Town of Akron	Town of Otis
Population (2017)	4,809	2,116	470
Median Age	42.2	38.1	32.8
Population 65 Years and Over	927	371	99
Female Population	2,324	1,056	251
Male Population	2,485	1,060	219
Average Household Size	2.25	2.22	2.19
Average Family Size	2.64	2.55	3.25
Percent of Total Population with Disabilities	12.2	12.9	13.6
Residents with Disabilities less than 18 Years Old (%)	3.8	2.9	8.6
Residents with Disabilities 18-64 Years Old (%)	7.1	9.0	5.2
Residents with Disabilities over 65 Years Old (%)	36.8	37.5	40.4
Residents with Health Insurance Coverage (%)	94.0	94.2	96.2
Residents with High School Degree (%)	93.0	90.5	94.7
Residents with Bachelor's Degree (%)	16.6	12.4	18.4

U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Select economic and housing statistics for Washington County for 2017 are provided in Table 1.4 below.

Table 1.4 Economic and Housing Characteristics

Economic and Housing Characteristics	Washington County	Town of Akron	Town of Otis
Median Household Income	$51,458	$42,500	$41,328
Percent of Total Population that is Unemployed	4.2	6.0	3.0
Percent of Families Living Below Poverty Level	9.5	13.7	12.6
Percent of Individuals Living Below Poverty Level	9.9	13.7	12.6
Total Housing Units	2,397	952	257
Vacant Housing Units	385	130	42
Homeowner Vacancy Rate (%)	3.5	4.9	4.7
Rental Vacancy Rate (%)	4.6	5.4	0.0
Number of Businesses/Companies*	308	N/A	N/A

U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

* 2012 Survey of Business Owners

Section Two – Risk Assessment

Risk is the potential for damage, loss, or other impacts created by the interaction of natural or other types of hazards with community assets. The purpose of the ***risk assessment*** is to provide a better understanding of local risks and establish a framework for developing and prioritizing mitigation actions to reduce risk from future natural hazard events.

Local Natural Hazards

The risk assessment matrix below reflects the results of the rating-ranking exercise conducted during updates to the plan in 2014 and 2020. ***Probability*** is defined by FEMA as the likelihood of the hazard occurring in the future, based on historical frequencies or statistical probability models. ***Magnitude*** refers to the scale or severity of a hazard event in terms of the impacts to public safety, critical infrastructure, private property, economic activity, natural resources and other community assets. ***Significance*** is a measure of the need for planning and mitigation action, based on the geographic extent, probability and magnitude of potential impacts.

Through the survey process and planning workshop the Probability and Magnitude ratings for all hazards in the table below were validated and no changes were made from the 2015 analysis, except for the addition of Pandemic as a high priority biological hazard.

Table 2.1 Washington County Risk Assessment

WASHINGTON COUNTY HAZARDS	Geographic Extent	Probability	Magnitude	Significance
Biological Hazards: Pandemic	Extensive	Occasional	Critical	High
Biological Hazards: Pestilence	Extensive	Occasional	Limited	Medium
Biological Hazards: Zoonotic Diseases	Limited	Likely	Limited	Medium
Blizzards and Severe Winter Storms	Extensive	Likely	Critical	High
Dam Failures/Levee Failures	Limited	Likely	Limited	Medium
Drought	Extensive	Likely	Critical	High
Earthquake	Limited	Occasional	Limited	Low
Flooding	Significant	Likely	Critical	High
Fog	Significant	Likely	Negligible	Low
Hailstorms	Extensive	Highly Likely	Limited	Medium
Landslides	Limited	Occasional	Negligible	Low
Lightning	Extensive	Highly Likely	Limited	Medium
Noxious Weeds/Tumbleweeds	Extensive	Highly Likely	Negligible	Low
Straight-Line Winds	Extensive	Highly Likely	Limited	High
Temperature Extremes	Extensive	Highly Likely	Limited	Low
Tornadoes	Extensive	Likely	Critical	High
Wildland and Grassland Fires	Extensive	Highly Likely	Limited	High

Legend		
Geographic Extent	Extensive	50-100% of planning area.
	Significant	10-50% of planning area.
	Limited	Less than 10% of planning area.
Probability	Highly Likely	Near 100% chance of occurrence each year.
	Likely	10-100% chance of occurrence each year (recurrence interval: 10 yrs. or less).
	Occasional	1-10% chance of occurrence each year (recurrence interval: 11-100 yrs.)
	Unlikely	Less than 1% chance of occurrence each year (recurrence interval: >100 yrs.).
Magnitude	Catastrophic	Mass casualties and/or illnesses; extraordinary levels of destruction and service interruptions; sustained impacts to infrastructure, government functions and the economy; local and state resources overwhelmed (>50% of property severely damaged).
	Critical	Isolated deaths; multiple injuries and/or illnesses; major property damage; impacts to critical infrastructure; and/or disruption of essential services (25-50% of property severely damaged).
	Limited	Minor injuries, manageable number of illnesses; minor property damage; and/or interruption of essential services for less than 24 hrs. (10-25% of property severely damaged).

	Negligible	No injuries or illnesses; little or no property damage; brief disruptions of essential services (<10% of property severely damaged).
Significance	**High**	Widespread potential impacts (planning and mitigation priority: high).
	Medium	Moderate potential impacts (planning and mitigation priority: medium).
	Low	Minimal potential impacts (planning and mitigation priority: low).

Significant Hazard Events in Washington County, 2015-2020

As the updates to this plan were being completed, the ***2020 COVID-19 Pandemic*** spread across the globe, United States and Colorado. COVID-19 is an infectious disease caused by the most recently discovered coronavirus that was unknown before the outbreak began in Wuhan, China in December 2019. The illness rapidly spread to other continents and on March 5, 2020, the Colorado Department of Public Health and Environment's (CDPHE) public health laboratory confirmed the first presumptive positive COVID-19 test result in Colorado. Soon thereafter, most areas in eastern and northeastern Colorado reported cases of the virus. Locations where groups of people congregate in confined spaces – nursing homes/assisted-care facilities, manufacturing plants, correctional facilities – were prime locations for rapid disease transmission. The crisis resulted in statewide "stay at home" and "safer at home" orders as well as orders closing certain businesses (e.g., restaurants, bars, gyms and non-essential retail stores) and prohibiting gatherings of 10 or more people in a confined space. Many local governments and health departments also instituted requirements relative to safe-distancing, wearing face masks and other protective measures.

A strong thunderstorm in the early morning hours of ***June 9, 2020*** produced a microburst that damaged homes, businesses, outbuildings and grain silos in Akron. The storm uprooted trees, brought down power lines and folded a radio tower in half. At the Colorado Plains Regional Airport outside of Akron, a 102-mph wind gust was reported and an airplane was flipped over.

Damage from a straight-line wind event on June 8, 2020 in Akron (Washington County), including downed trees at the courthouse (center) and an airplane that was flipped at Colorado Plains Regional Airport (photos by Kevin Kuretich).

The other hazard events that occurred in Washington County between 2015-2020 were reviewed at the workshop and through the survey process and the most significant events during the period are summarized in the table below, with additional data from the National Centers for Environmental Information (NCEI) Storm Events Database.

Table 2.2 Significant Hazard Events in Washington County, 2015-2020

Hazard Event	Date(s)	Impacts
Blizzard	November 16, 2015	High winds/blowing snow; only 2" or less snowfall, but sustained high winds with gusts over 50 mph recorded @ Akron Airport

Blizzard	March 23, 2016	High winds and heavy snowfall closed area roads and caused power outages; sustained winds of 30-35 mph with peak gust of 48 mph (Woodrow) and moderate to heavy snowfall
Blizzard	April 13, 2018	Strong winds and heavy snow, especially over northern Washington County; 8" snowfall SE of Akron with visibility reduced to 50'; 8 semi-trucks on Hwy. 34 west of Akron blown over
Blizzard	March 13, 2019	Bomb Cyclone* caused severe straight-line winds, blowing/drifting snow, zero visibilities, power outages, and closure of area roads
Blizzard	November 26, 2019	High winds; blowing snow; zero or near-zero visibilities
Flood/Levee Failure	June 15, 2015	A levee breach approximately 100 yards wide on the S. Platte R. caused farmland flooding in NW Washington County; floodwaters 3-4' deep washed out Union Pacific railroad tracks SW of Messex, covering several miles of track with up to 10" of water; approximately 30 trains per day had to be diverted for several days for repairs/inspection; Washington County Road 58.3 was washed out (property damage: $5 million/crop damage: $500,000)
Hailstorm	September 3, 2016	3" hail reported in Platner
Hailstorm	July 29, 2018	Baseball-size hail south of Anton in southern Washington County damaged crops, structures and vehicles
Hailstorm	August 11, 2019	4.5" hail reported in Otis
Hailstorms	2015-2019	27 days with severe hail (hailstones measuring 1" in diameter or greater)
Pandemic	2020**	The COVID-19 pandemic was still at a crisis stage in Colorado as updates to this plan were completed in July 2020. Impacts to date in Washington County include several confirmed cases, economic losses, and public health orders requiring social distancing.
Straight-Line Winds	June 8-9, 2020	Microburst with winds exceeding 100 mph caused extensive damage in and around Akron, including homes, businesses, outbuildings, grain silos, power lines, aircraft and a radio tower.
Tornado	May 24, 2016	Two EF0 tornadoes and one EF1 tornado touched down, with the EF1 tornado and straight-line winds causing damage to 10 structures from Platner east to the Yuma County line; the storm destroyed a pole shed and scattered debris for a mile and snapped several power poles near Otis
Tornado	May 28, 2018	EF1 in Cope caused extensive damage to a carport and garage and uprooted a pine tree
Tornadoes	2015-2019	Multiple weak EFO tornadoes touched down briefly over open country with no damages (4-18-15/6-5-15/9-2-16/5-26-17/6-7-17/8-12-17/8-11-19)

Source: National Centers for Environmental Information (NCEI) Storm Events Database

* According to the National Weather Service, a "bomb cyclone" is a storm with rapidly plummeting atmospheric pressure, usually when a cold air mass collides with a warm air mass.

** The Coronavirus COVID-19 outbreak began in Colorado in March 2020 and was still impacting Washington County as of the completion of updates to this document.

History of Natural Hazard Events in Washington County

Extreme weather events in Washington County occasionally result in major damage to homes, businesses, utilities, agricultural operations and crops, and on rare occasion even loss of life. According to the National Weather Service, a possible F4-scale tornado on August 10, 1924 destroyed most of the town of Thurman and a nearby farmstead, resulting in 12 fatalities. Ten of the people killed were attending a family gathering at the farm of Henry Kuhns, four miles east/northeast of Thurman. The tornado, the deadliest in state history, was estimated to be one-half mile wide and traveled at least eight miles.

Widespread flooding from several storms in August 2002 caused $250,000 in road and bridge damages to CO 63 north of Akron, CO 61 13 miles north of Otis, and five county roads in southwestern Washington County. In August 2013, two storms washed out multiple roads in the Last Chance area and closed CO 71.

On June 25, 2012, the Last Chance Fire burned 45,000 acres of grassland, farmland and 11 structures, including four homes. Firefighters from all over northeastern Colorado battled the fire and contained it in less than 48 hours. The fire was started by sparks from a tire blowout and quickly burned through the town of Last Chance and near the town of Woodrow in southern Washington County. One fire truck and a county bridge were also destroyed in the fire.

When the response capacity of an affected jurisdiction is exhausted by a natural disaster, a ***state disaster declaration*** may be issued, allowing for the provision of state assistance, usually for the purpose of covering the costs of state assets committed to response operations. Washington County has been designated as a state-declared disaster area 18 times since 1980, including eight statewide declarations and five regional declarations.

Federal disaster declarations are granted when the magnitude and severity of impacts caused by an event surpass the ability of state and affected local governments to respond and recover. Most disaster assistance programs are supplemental and require a local cost-sharing match. Washington County has received a major federal disaster declaration on six (6) occasions:

1. June 19, 1965 for tornadoes, severe storms and flooding (DR-200) that occurred on May 23-24, 1965 and washed out roads and bridges on US 34 and CO 63 and isolated the Town of Akron (Individual Assistance/Public Assistance);
2. May 19, 1969 (DR-261) for severe storms and flooding, mostly in areas along the S. Platte River (Individual Assistance/Public Assistance);
3. May 23, 1973 (DR-385) following heavy rains and snowmelt flooding (Individual Assistance/Public Assistance);
4. May 17, 2001 following ice storms in April that caused extensive damage to REA-owned power lines and poles in Washington County (Public Assistance only) and other Eastern Colorado counties (DR-1374);
5. September 14, 2013 for severe storms and flooding (DR-4145) that damaged county roads and residences in the Messex area (Public Assistance/Individual Assistance); and
6. July 16, 2015 (DR-4229) following severe storms, tornadoes and flooding that occurred in early May 2015, breached a levee and caused significant damage to property, roads, crops and Union Pacific railroad tracks in the Messex area (Public Assistance only).

A ***USDA disaster declaration*** is the most common type of federal disaster assistance and is limited to low-interest loans to farmers and ranchers to help compensate for losses due to natural hazards, including drought, freezing, hail, and insect infestations. Washington County received 14 USDA disaster declarations between 2003-2019 for drought and other hazards.

Section Three – Capability Assessment

Mitigation capabilities refer to the programs and policies currently in place to reduce hazard impacts, principally through the identification and implementation of cost-effective hazard mitigation measures. Capabilities can take the form of regulatory requirements (e.g., building codes or hazard-specific zoning ordinances), plans (e.g., hazard mitigation plans or stormwater master plans), certification programs (e.g., *Firewise* or *StormReady*), personnel (e.g., floodplain administrators and community planners), insurance (e.g., National Flood Insurance Program), and structural projects that protect critical facilities and other property. Hazard awareness and public education programs are also proven measures for preparing citizens to cope with hazard events that cannot be avoided.

In 2016, the Town of Akron adopted new floodplain management regulations to minimize public and private losses due to flooding by restricting/prohibiting flood hazard zone uses and controlling floodplain alterations such as filling, grading, dredging or construction of flood barriers.

The political jurisdictions within Washington County enforce a range of policies and regulations that support mitigation goals and principles by restricting development in areas prone to natural hazards. In most jurisdictions, the local comprehensive plan, zoning ordinance and building codes are the primary tools utilized to regulate development in hazard-prone areas. The mitigation capabilities and resources currently in place in the Participating Jurisdictions are summarized in the table below.

Table 3.1 Mitigation Capabilities

Capability	Washington County	Town of Akron	Town of Otis
Planning and Regulatory Capabilities			
Building Codes	No	Yes	No
Building Codes Year	N/A	2009	N/A
BCEGS Rating	N/A	N/A	N/A
Capital Improvements Program or Plan (CIP)	No	No	No
Community Rating System	N/A	N/A	No
Community Wildfire Protection Plan (CWPP)	No	No	No
Comprehensive, Master or General Plan	Yes	No	No
Economic Plan	No	No	No
Elevation Certificates	N/A	N/A	No
Erosion/Sediment Control Program	No	No	No
Floodplain Management Plan or Ordinance	No	Yes	Yes
Flood Insurance Study (FIS)	No	No	No
Growth Management Ordinance	No	No	No
Non-Flood Hazard-Specific Ordinance	No	No	No
National Flood Insurance Program (NFIP) Participant	No	No	Yes

Site Plan Review Requirements	No	No	No
Stormwater Plan, Program or Ordinance	No	No	No
Zoning Ordinance	Yes	Yes	No
Administrative, Financial and Technical Capabilities			
Withheld Spending in Hazard-Prone Areas	No	No	No
Stormwater Service Fees	No	No	No
Capital Improvement Project (CIP) Funding	No	No	No
Community Development Block Grant (CDBG) Funds	No	No	No
Emergency Manager	Yes	Yes (County)	Yes (County)
Floodplain Administrator	No	No	Yes
Land Use/Community Planner	Yes	No	No
Planner/Engineer (Construction/Development)	No	No	No
Building Official	No	Yes	No
GIS Specialist and Capability	No	No	No
Grant Manager, Writer, or Specialist	No	No	No
Education and Outreach			
Warning Systems/Services			
♦ General	Yes	Yes	Yes
♦ Flood	No	No	No
♦ Wildfire	No	No	No
♦ Tornado	Yes	Yes	Yes
♦ Geologic Hazards	No	No	No
Local Citizen Groups that Communicate Hazard Risks	Yes	Yes (County)	Yes (County)
Firewise	No	No	No
StormReady	Yes	Yes (County)	Yes (County)

Section Four – Vulnerability Assessment

Community Assets at Risk

This section describes the community assets at risk to natural hazards in Washington County, including people and property; economic assets; critical facilities and infrastructure; and natural, cultural, and historic resources.

In 2018, the total assessed value of agricultural properties (land, support buildings and residences) in Washington County was $50,298,394 (34.3% of all assessed properties). The total assessed value of residential properties was $7,581,652, and the total assessed value of commercial and industrial properties was $3,483,688. The assessed value of Akron was $8,484,294 and Otis was $1,479,200. The assessed value of school districts in Washington County in 2018 was $146,736,745. The total assessed value of fire protection districts was $123,236,421.

Table 4.1 Summary of Taxable Properties in Washington County, 2018

Property Classification	2018 Assessed Value	Percent
Agricultural Properties	$50,298,394	34.3
Natural Resources	$17,206,762	11.7
Residential Properties	$7,581,652	5.2

Personal Property	$3,993,107	2.7
Commercial & Industrial Properties	$3,483,688	2.4
Possessory Interest	$314,042	0.2
State Assessed Properties	$63,859,100	43.5
Total Taxable Property	**$146,736,745**	**100.0**

Source: 2018 Washington County Abstract of Assessment

Table 4.2 Summary of Taxable Properties for Municipalities, Schools and Fire Districts

2018 Assessed Values					
Towns		**School Districts**		**Fire Protection Districts**	
Akron	$8,484,294	**Akron R-1**	$38,149,105	**Akron**	$23,127,257
Otis	$1,479,200	**Arickaree R-2**	$32,104,358	**Cope**	$7,421,437
		Lone Star 101	$11,619,129	**Otis**	$20,267,918
		Otis R-3	$17,293,050	**SW Washington County**	$61,873,948
		Woodlin R-104	$42,260,155		

Source: 2018 Washington County Abstract of Assessment

Critical Facilities

Critical facilities and infrastructure are the structures and systems that are integral to day-to-day functions and, if damaged, would have serious adverse impacts on disaster response and recovery operations. Infrastructure and facilities that are commonly considered *critical* include law enforcement facilities, fire service facilities, health care facilities, government facilities, emergency operations centers, public shelters, transportation systems, water supply facilities, wastewater treatment facilities, agricultural production facilities, electrical power systems and other utilities. In addition, critical facilities are those that house vulnerable populations, such as schools and assisted living or senior housing.

Table 4.3 Critical Facilities in Washington County

Critical Facilities	Washington County	Akron	Otis
Law Enforcement Facilities	**1**	**0**	**0**
Fire Stations	**5***	**1**	**1**
Hospitals	**1**	**0**	**0**
EMS/Ambulance Stations	**1**	**0**	**0**
Emergency Operations Centers (EOCs)	**1****	**0**	**0**
Public Safety Communications Centers	**1**	**0**	**0**
Courthouse/City Hall/Town Hall	**1**	**1**	**1**
Schools	**6*****	**2**	**2**
Assisted Living Facilities	**1**	**1**	**0**
Wastewater Treatment	**0**	**1**	**1**
Water Utilities/Treatment	**0**	**1**	**1**
Airports	**1**	**1**	**0**

* 4 stations in Southwest Washington County Fire Protection District/1 station in Cope Rural Fire Protection District

** W-Y Combined Communications Center

*** Lone Star R-101 Schools (3 schools); Arickaree R-2 Schools (2 schools); Woodlin School (1 school)

Electrical power transmission and distribution systems are particularly important given the role they play in providing power to all other critical facilities, including public safety facilities, hospitals/clinics and emergency shelters, which do not always have backup generators. Critical facilities such as the substations, line-sectionalizing equipment, poles and lines are located at various locations in the communities and unincorporated areas of the county. It should be noted that these facilities are particularly vulnerable to many of the natural hazards addressed in this plan.

Economic Assets

In addition to the traditionally strong crop and livestock production industries in Washington County, the other primary sectors of the local economy with the most employees are Education and Health Care.

Table 4.4 Industry Distribution – Top Three Industrial Sectors by Jurisdiction

Jurisdiction	Sector	Employees	Percent of Workforce
Washington County	1. Educational Services/Health Care/Social Assistance	463	20.9
	2. Agriculture	410	18.5
	3. Construction	202	9.1
Town of Akron	1. Educational Services/Health Care/Social Assistance	180	19.5
	2. Retail Trade	105	11.4
	3. Manufacturing	102	11.1
Town of Otis	1. Educational Services/Health Care/Social Assistance	47	21.1
	2. Agriculture	35	15.7
	3. Construction	29	13.0

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, 2012 Survey of Business Owners

Social Vulnerability

Certain demographic and housing characteristics are important considerations when identifying and prioritizing mitigation goals and actions. *Age* can affect the ability of individuals to safely evacuate away from hazardous conditions. *Language and cultural barriers* can affect the communication of warning information and access to post-disaster information. *Low-income residents* generally have fewer resources available for mitigation, preparedness, and recovery and are more likely to live in vulnerable structures.

Table 4.5 Social Vulnerability Indicators from U.S. Census, 2013-2017

Jurisdiction	Total Population	Housing Units	% Female	% Under 18 Yrs.	% 65 and Over	% Non-English at Home	Individuals Below Poverty Level (%)
Washington County	4,809	2,397	48.3	22.7	19.3	5.5	9.9
Town of Akron	2,116	952	49.9	21.0	17.5	7.9	13.7
Town of Otis	470	257	53.4	29.8	21.1	3.3	12.6

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Historic, Cultural and Natural Resources

The National Register of Historic Places is the nation's official list of cultural resources worthy of preservation. The table below lists the properties in Washington County that are on the National Register of Historic Places.

Table 4.6 Historic Properties in Washington County on the National Register

Property	Location	Year Listed
Akron Gymnasium	W. 4th St. and Custer Ave., Akron	2008
Farmers State Bank of Cope	45450 Washington Ave., Cope	2017
Plum Bush Creek Bridge	US 36, Last Chance Vicinity	2002
West Plum Creek Bridge	US 36, Last Chance Vicinity	2002

Source: Directory of Colorado State Register Properties

The Colorado State Register of Historic Properties is a listing of the state's significant cultural resources worthy of preservation for the future education and enjoyment of Colorado's residents and visitors. The table below lists the properties in Washington County that are on the Colorado State Register of Historic Properties.

Table 4.7 Historic Properties in Washington County on the State Register

Property	Location	Year Listed
Akron Public Library	302 Main St., Akron	2001
Hoopes Drug Store	200 N. Washington, Otis	1994
Otis Commercial District	100 Block S. Washington/102 Block N. Washington, Otis	1994
Otis Municipal Waterworks System	302 E. 1st Ave./113 Work St., Otis	1993
Schliesfsky's Dime Store	202 N. Washington, Otis	1994
Washington County Courthouse	150 Ash Ave., Akron	1998

Source: Directory of Colorado State Register Properties

Growth and Development Trends

According to the State Demography Office, the population of Washington County is forecast to be 4,717 in 2020, 5,007 in 2030, 4,788 in 2040 and 4,530 in 2050. Overall, the population growth rate for Washington County is expected to be flat between 2020 and 2050 with a projected growth rate of -3.96 percent.

Table 4.8 Population Change, 2010-2017

Jurisdiction	2010 Population	2017 Population	Percent Change
Washington County	4,814	4,809	-0.10
Town of Akron	1,702	2,116	24.32
Town of Otis	475	470	-1.05

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Vulnerability to High Priority Hazards in Washington County

The entire population of Washington County is more or less equally vulnerable to the high priority natural hazards identified in this plan. The vulnerability of community assets in Washington County to high priority hazards is summarized in the following discussion.

Blizzards and Severe Winter Storms

Winter storms will continue to occur with high frequency throughout Washington County and occasionally cause widespread impacts. The greatest risk is to the safety of the public, including travelers on the county's highways and roads and citizens with medical conditions or other special needs that may become isolated. Highway closures and power outages can present a need to open and manage public shelters and provide mass care services. Winter storms can occasionally lead to school and business closures, road closures, and extraordinary requirements to remove snow and maintain critical emergency services.

Drought

The most significant impacts from drought are related to water-intensive activities, such as agriculture (both crops and livestock), wildfire protection, municipal usage, commerce, recreation, and wildlife preservation, as well as a reduction of electric power generation and water quality deterioration. Secondary impacts of drought are wildfires, wind erosion, and soil compaction that can make an area more susceptible to flooding. Drought impacts increase with the length of a drought.

Drought does not usually present life safety issues or directly impact critical infrastructures such as roads, bridges, utilities, communications systems, or public safety resources. However, drought presents ongoing challenges for all communities in Northeast Colorado and the Eastern Plains, requiring sustained planning and conservation efforts to ensure a reliable water supply to meet current and future needs.

Flooding

Flood events can happen anywhere in Washington County when storms produce heavy rainfall. Flooding along the South Platte River in the Messex area in extreme northwestern Washington County is fairly common and usually results in flooded farm fields and minor damage to roads. The county has received five federal disaster declarations related to flooding: (1) in 1965 for flooding around Akron (DR-200); (2) in 1969 for flooding along the S. Platte River (DR-261); (3) in 1973 (DR-385); (4) in 2013 for flooding in the Messex area (DR-4145); and (5) in 2015, again for flooding in the Messex area (DR-4229).

Widespread flooding from several storms in August 2002 caused $250,000 in road and bridge damages to CO 63 north of Akron, CO 61 13 miles north of Otis, and five county roads in southwestern Washington County. In August 2013, two storms washed out multiple roads in the Last Chance area and closed CO 71.

In 2019, FEMA began the process of updating flood hazard maps for the Towns of Akron and Otis and unincorporated Washington County. The proposed flood hazard determinations will be the basis for new Flood Insurance Rate Maps (FIRMs) following local adoption. The new FIRMs will be used to guide local floodplain management measures and calculate flood insurance premium rates. A public comment period on the proposed flood hazard determinations ended in March 2020 with an appeal process to follow.

The Town of Otis is the only community in Washington County currently participating in the National Flood Insurance Program (NFIP). As of July 31, 2019, there are three (3) flood insurance policies in effect for a total of $206,000 in coverage. No claims for losses have been filed and there are no repetitive loss properties in Washington County.

The Prewitt Reservoir is the only Class I, High Hazard Dam in Washington County. (Note: the dam structure is actually located in Logan County, while the majority of the reservoir impoundment is located in Washington County.) The nearest downstream community is the Town of Merino (8 miles) in Logan County. The condition of the Prewitt Reservoir dam was rated Unsatisfactory on October 16, 2019 by the Division of Water Resources/State Engineer's Office, due to lack of an adequate spillway and ongoing seepage issues. The dam is currently under restricted storage.

Tables 4.9 and 4.10 Jurisdictional Dams in Washington County

Dam Name	Hazard Class	Year Built	Stream	Downstream Community	Miles*
Arrowhead	NPH	N/A	Surveyor Creek	Otis	7
Prewitt	High	1912	South Platte River	Merino	8

Source: Colorado Division of Water Resources ∗ Distance to nearest downstream community
NPH = No Public Hazard

Dam Name	EAP	Storage (Acre Feet)	Owner
Arrowhead	Not Required	2,320	Washington County
Prewitt	2020	28,840	Logan Irrigation District

Source: Colorado Division of Water Resources
EAP = Emergency Action Plan

Pandemic: COVID-19 and other Novel Virus Infections

Older adults and individuals with serious chronic health conditions are most at risk for becoming very ill or dying from a serious respiratory virus like COVID-19 and other novel virus infections. In eastern and northeastern Colorado, the population skews to the older side of the state average (approximately 2-8 years older per capita, depending on the county) and residents with underlying health problems have less access to the health care services they need.

With fewer people and wide-open spaces, rural Colorado provides a natural social-distancing environment. However, rural residents still tend to congregate in common places where diseases can be passed from person-to-person, including schools, churches, grocery stores and post offices. Communities located along interstate highways may be more susceptible to exposure from the traveling public, including truck drivers from all parts of the country. Large rural employers, including packing plants, feedlots, grain elevators, and confined livestock operations as well as prisons, can also be prime locations for rapid virus transmission, as was experienced during the COVID-19 crisis at the Cargill meatpacking plant in Morgan County and the Sterling Correctional Facility in Logan County. Sadly, nursing home and assisted living facility residents have been the most vulnerable citizens to the highly contagious COVID-19 virus, due to their age, underlying health issues and congregate living setting.

Although most individuals who contract COVID-19 do not become seriously ill, persons with mild symptoms and asymptomatic COVID-19 illness can still place other vulnerable members of

the public at significant risk. A large surge in the number of persons with serious infections can overwhelm local hospitals and clinics and compromise the ability of the health care system to deliver necessary health care to the public.[1] Most rural hospitals are not as equipped as larger hospital systems and many face significant health care workforce shortages on a normal basis, meaning patients in a pandemic may need to be transferred to larger hospitals or cared for in an unconventional, alternate setting. Other challenges to small town hospitals posed by a pandemic include limited inpatient and intensive care beds, disadvantages in competing for critical equipment and supplies, and loss of revenue from cancellation of elective procedures.

The drawn-out nature of a pandemic also places additional strain on EMS, fire and other response resources that rely heavily on volunteers, who together with their families already face greater exposure to the virus and a higher risk of infection. Every community in eastern and northeastern Colorado depends on volunteers to provide fire, EMS and ambulance services.

In addition to the loss of life and human suffering caused by COVID-19, the pandemic is expected to have an extensive negative effect on the global economy for years to come, with substantial drops in Gross Domestic Product (GDP) accompanied by extraordinary increases in unemployment in the U.S. and around the world.

COVID-19 presents a number of challenges for farmers and ranchers in Colorado, including (1) uncertain impacts on markets and farm prices, (2) supply chain shortages and slowdowns, (3) health impacts to the farm-ranch workforce, and (4) potential shortages of safety gear such as protective gloves and N-95 masks due to their critical need by health care workers.[2] If large hog-packing plants in Oklahoma, Kansas or Texas had to shut down due to the spread of a virus through their workforce, agricultural COOPs and commercial hog farms in northeastern Colorado could be affected by the supply chain disruptions that would be created. In a worst-case scenario, local hog farms would have to depopulate animals because there would be no place to ship them for processing.

The Centers for Disease Control and Prevention (CDC) recommends community mitigation strategies such as social distancing measures to limit spread of the virus. A community mitigation strategy is a set of actions that individuals and communities can take to help slow the spread of respiratory virus infections. Community mitigation is especially important before a vaccine or drug becomes widely available. Community mitigation aims to slow the spread of a novel influenza virus and protect health care and critical infrastructure workers through the use of nonpharmaceutical interventions (NPIs). NPIs are readily available actions and response measures that people can take including staying at home, covering coughs and sneezes, frequent handwashing and routine cleaning of frequently touched surfaces.

Community-level NPIs help reduce social contacts between people in schools, workplaces, and other community settings by dismissing schools temporarily, providing telework options, postponing large gatherings and issuing public health orders. A community mitigation strategy outlines recommended actions that can be taken by individuals/families at home, schools and

[1] Colorado Department of Public Health and Environment, covid19.colorado.gov.
[2] Colorado Farm Bureau, coloradofarmbureau.com.

childcare facilities, assisted living facilities, workplaces, health care facilities, and community- and faith-based organizations.[3]

Tornadoes and Straight-Line Winds

According to the National Storm Events Database, there have been 150 confirmed tornado events in Washington County since 1950. Most of these tornadoes were small (F0/EF0) and occurred over open country; however, F1 to F4-scale tornadoes have occurred in Washington County from time to time and can cause considerable damage. An F4-scale tornado on August 10, 1924 destroyed most of the town of Thurman and a nearby farmstead, resulting in 12 fatalities. The tornado is the deadliest in the history of the State of Colorado.

Straight-line wind events occur more frequently than tornadoes in Washington County and cause at least as much damage. It is often difficult to tell whether storm damage was a result of a tornado or severe winds. During blizzards, straight-line winds magnify the dangerous effects of cold temperatures and impede safe travel by reducing visibility. Prolonged power outages can result when power lines are brought down by a combination ice buildup on the lines and strong winds. During dry periods, high winds can contribute to rapid fire growth in open spaces and other areas where natural grasses can grow tall and ultimately cure. High winds can also damage roofs and structures and cause secondary damages as a result of flying debris.

Wildland/Grassland Fires

All areas of Washington County are subject to the risk of wildfire, including non-irrigated pastureland, harvested dry land crop areas (corn stalks and wheat stubble) and natural grassland areas (e.g., land enrolled in the Conservation Reserve Program, or CRP). Wildfires in these areas are typically caused by severe weather events (lightning) and tend to spread rapidly. The greatest risk exists during severe weather season (spring/summer months), when cloud-to-ground lightning is common. Fall is also considered a high-risk time as crops have matured and are drying out in the fields and harvesting is in progress. Most controlled burns by property owners are conducted in the Spring.

The conditions that lead to extreme wildfire behavior are high winds, high temperatures, low relative humidity and dry ignitable fuels. Wind-driven fire events present serious challenges for rural fire protection districts, including (a) distance and access to many rural locations; (b) difficulty establishing buffers and zone boundaries; (c) short time available to conduct timely evacuations; and (d) potential manpower/resource limits with volunteer fire organizations.

On June 25, 2012, the Last Chance Fire burned 45,000 acres of grassland, farmland and 11 structures, including four homes.

Section Five – Mitigation Strategy

This section describes the ***Mitigation Strategy*** developed by Washington County, based on the assessment of risks and vulnerable community assets that was updated at the planning workshop and through survey feedback and interviews with local officials. The Mitigation

[3] *Implementation of Mitigation Strategies for Communities with Local COVID-19 Transmission*. March 12, 2020. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, www.cdc.gov/COVID19.

Strategy includes Mitigation Actions for reducing local risks and accomplishing the following goals:

1. Reduce loss of life, property damages, and economic impacts caused by natural hazard events.
2. Improve County-level capabilities to reduce disaster losses.
3. Increase public awareness of potential hazard impacts.
4. Improve preparedness for future pandemic events by collaborating with government, business, education, medical and public health partners on plans that address identified lessons learned from the COVID-19 public health disaster on a local, region and state level.
5. Maintain FEMA eligibility and qualify participating communities for federal mitigation grant funding.

Since 2015, significant progress has been made with implementation of the Mitigation Actions recommended in the previous plan, including recognition by the National Weather Service of Washington County as a ***StormReady*** community and completion of a project to purchase and install backup emergency generators at two Southwest Washington County Fire Protection District stations, located in Last Chance and Anton. Most of the 2015 Mitigation Actions are ongoing projects that are making progress and are worthy of retaining in the updated plan. At the planning workshop, participants reviewed the status of 2015 projects and determined which incomplete actions to retain in the updated plan. Table 5.1 below provides a report on the status of Mitigation Actions identified in the previous 2015 version of this plan.

Table 5.1 Status of 2015 Mitigation Actions

Washington County			
#	**2015 Mitigation Actions**	**Responsible Agency**	**Status**
1	Obtain *StormReady* certification from National Weather Service.	OEM	Complete
2	Provide refresher training for lenders and insurance agencies regarding the NFIP and publicize and promote the purchase of flood insurance for flood-prone properties.	OEM, Participating NFIP Communities	Ongoing/retain for 2020
3	Washington County and the Town of Otis should continue to work with the Colorado Water Conservation Board (CWCB) in their ongoing efforts to reduce future flood losses.	OEM, Otis Town Manager/Council	Ongoing/retain for 2020
4	Encourage the State of Colorado and NFIP officials to map unincorporated portions of Washington County to facilitate improved mitigation planning.	OEM, CWCB	Ongoing/retain for 2020
5	Contact National Weather Service (NWS) regarding need for a NOAA weather repeater to improve weather alerts/warnings.	OEM, NWS	Ongoing/retain for 2020
6	Construct Severe Weather Shelter at Washington County Fairgrounds Community Center in Akron.		Retain for 2020 as community safe room project
7	Obtain and install backup emergency generators at two Southwest Washington County Fire Protection District stations, located in Last Chance and Anton.	Southwest Washington County Fire Protection District	Complete

8	Educate homeowners about the need for wildfire mitigation and seek *Firewise* Community Preparedness recognition.	Southwest Washington County Fire Protection District	No progress/retain for 2020

2020-2025 Mitigation Actions

The evaluation and prioritization of proposed 2020 Mitigation Actions were based on the updated risk assessment (i.e., probability and magnitude of impacts for each hazard), significant events from the last five years, and the informed judgement of local officials who weighed the pros and cons of proposed actions based on their subject matter expertise and experience with local hazards. The STAPLEE evaluation tool was considered as an additional method for evaluating the effectiveness of each action item. STAPLEE considers social, technical, administrative, political, legal, economic, and environmental constraints and benefits of each proposed activity.

Mitigation Actions 7-9 in the table below are new initiatives that address the vulnerability of communities and critical facilities to the types of severe hazard events experienced in the last five years. Mitigation Actions 10-13 are intended to help Washington County and its local partners reduce the impacts to public health from future pandemic events like the COVID-19 crisis.

Ongoing actions from the 2015 plan and proposed new mitigation actions were rated as High or Medium priority (actions considered low priority are not included in the update of this plan). The results of this effort are summarized in the table below, including a description of each mitigation action, the action's priority, and the offices, departments or agencies responsible for implementing the action.

Table 5.2 Mitigation Actions 2020-2025

Washington County			
#	**Proposed Mitigation Actions**	**Responsible Agency**	**Priority**
1	Provide refresher training for lenders and insurance agencies regarding the NFIP and publicize and promote the purchase of flood insurance for flood-prone properties.	OEM, Participating NFIP Communities	High
2	Washington County and the Town of Otis will continue to work with the Colorado Water Conservation Board (CWCB) in their ongoing efforts to reduce future flood losses.	OEM, Otis Town Manager/Council	High
3	Encourage the State of Colorado and NFIP officials to map unincorporated portions of Washington County to facilitate improved mitigation planning.	OEM, CWCB	High
4	Contact National Weather Service (NWS) regarding need for a NOAA weather repeater to improve weather alerts/warnings.	OEM, NWS	High
5	Determine feasibility and costs of installing community safe room at Washington County Fairgrounds Community Center in Akron.	Commissioners, County Administrator, OEM	High
6	Educate homeowners about the need for wildfire mitigation and seek *Firewise* Community Preparedness recognition.	Southwest Washington County Fire Protection District	High
7	Obtain and install a new emergency warning siren for the Town of Akron.	Town of Akron, OEM	High

8	Purchase emergency back-up generator for the Washington County Courthouse and Washington County Department of Human Services facilities.	OEM	High
9	Purchase back-up generator for the Otis Fire Hall, which also serves as the community aid center, warming station and local EOC during emergency events.	Town of Otis, OEM	High
10	Develop a comprehensive After-Action Report that documents COVID-19 impacts and captures lessons learned related to government services, public safety, education, agriculture, health care and the economy.	OEM with EMS, Public Health and Medical Services Partners	High
11	Develop a countywide mitigation strategy that outlines recommended actions that can be taken at different stages of a pandemic by individuals/families at home, schools and childcare facilities, assisted living facilities, workplaces, health care facilities, and community- and faith-based organizations.	OEM with EMS, Public Health and Medical Services Partners	High
12	Develop a plan for acquiring, maintaining and refreshing a local stockpile of vaccines, medicines (including antibiotics and antivirals), and equipment (such as masks, gowns, and ventilators) and identify reliable vendors and other external sources to supplement local stockpiles.	OEM with EMS, Public Health and Medical Services Partners	High
13	Develop public education guidelines for communicating with the public during a pandemic that ensures information is timely, accurate, coordinated, and includes provisions for addressing rumors, misinformation and public perceptions of risk.	OEM with EMS, Public Health and Medical Services Partners	High

Section Six – Maintaining and Updating the County Plan Element

Formal Plan Adoption

In accordance with protocols established by the Colorado Division of Homeland Security & Emergency Management (CDHSEM), the final draft of this updated plan is submitted to CDHSEM for state-level review and recommended changes prior to FEMA review. FEMA then reviews the plan and, pending any required changes, issues a notice that the plan is Approvable Pending Adoption (APA) by the governing body of each participating jurisdiction. According to CDSHEM requirements, the plan must be formally adopted by participating jurisdictions within eight months of receiving notice of FEMA APA status.

Plan Maintenance

Regular maintenance of this plan will help maintain a focus on hazards that pose the greatest risks and on the recommended measures for reducing future potential hazard losses. The Washington County Emergency Manager will serve as the primary point of contact and will coordinate all local efforts to monitor, evaluate, and update this plan. Participating jurisdictions and individual departments are responsible for implementing their specific mitigation actions and reporting on the status of these actions to the Emergency Manager.

Plan maintenance involves an ongoing effort to monitor and evaluate the implementation of identified action items in the plan, and to update the plan as progress, opportunities, obstacles, or changing circumstances are encountered. At least once a year, the Emergency Manager will convene a meeting to review new hazards data or studies, discuss new capabilities or changes in

capabilities, consider any input received from the public, evaluate the effectiveness of existing mitigation actions, and modify or add mitigation actions.

Incorporation of Mitigation Strategy into Other Plans and Programs

Mitigation is most successful when it is incorporated within the day-to-day operations of land use planning, road and bridge/public works, public health and other mainstream functions of local government. Multi-objective projects that mutually benefit partners and stakeholders are usually more cost-effective and more-broadly supported. Many other local plans present opportunities to address hazard mitigation in a way that can support multiple community objectives.

Ideally, identified mitigation actions should be implemented through existing plans and policies, which already have support from the community and policy makers. The incorporation of elements of this plan into existing planning mechanisms requires coordination between the Emergency Manager and the staff of each department responsible for implementing specific mitigation actions. The Emergency Manager, with support and guidance from Participating Jurisdictions, will work with the responsible agencies to incorporate this County Plan Element into existing planning mechanisms.