

# Appendix B: Planning Process Documentation

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1. Local Planning Committee Invite List
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  6. Subject Matter Expert Surveys
  7. Public Survey Results
  8. Prioritization Worksheets
  9. Public Comments on Plan
-



**Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
Revision - July 29, 2015**



Last Name	First Name	Organization	Email address	Signature
Arroyo	Cindey	Colorado Springs Utilites	<a href="mailto:carroyo@csu.org">carroyo@csu.org</a>	Assigned Group: Terrorism
Barrentine	Jim	Pikes Peak Community College	<a href="mailto:Jim.Barrentine@ppcc.edu">Jim.Barrentine@ppcc.edu</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Blanchard	Tobi	Colorado Springs Office of Emergency Management	<a href="mailto:tblanchard@springsgov.com">tblanchard@springsgov.com</a>	
Boley	Mark	El Paso County Sheriff's Office	<a href="mailto:MarkBoley@elpasoco.com">MarkBoley@elpasoco.com</a>	
Brady	Mike	Federal Express	<a href="mailto:mkbrady@fedex.com">mkbrady@fedex.com</a>	
Brenner	Gordon	Colorado Springs Office of Emergency Management	<a href="mailto:gbrenner@springsgov.com">gbrenner@springsgov.com</a>	Facilitator Assigned Group: Flood
Broomfield	Sally	American Red Cross	<a href="mailto:sally.broomfield2@redcross.org">sally.broomfield2@redcross.org</a>	
Burgard	Tim	Harrison School District 2	tburgard@hsd2.org	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Carrier	Will	AECOM	<a href="mailto:will.carrier@aecom.com">will.carrier@aecom.com</a>	Assigned Group: Wildfire
Chamberlain	Rich	AECOM	<a href="mailto:rich.chamberlain@aecom.com">rich.chamberlain@aecom.com</a>	Assigned Group: Severe Weather/Geologic Hazards
Corsaro	Cindy	Memorial - UC Health	<a href="mailto:Cindy.Corsaro@uchealth.org">Cindy.Corsaro@uchealth.org</a>	

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Last Name	First Name	Organization	Email address	Signature
Curtis	Keith	Pikes Peak Regional Building Department	<a href="mailto:keith@pprbd.org">keith@pprbd.org</a>	
Dunn	Ray	Fort Carson	<a href="mailto:raymond.h.dunn2.civ@mail.mil">raymond.h.dunn2.civ@mail.mil</a>	
Easton	Travis	Public Works - Engineering	teaston@springsgov.com	Assigned Group: Flood
Edmondson	David	Colorado Springs Police Department	<a href="mailto:EDMONDMA@ci.colospgs.co.us">EDMONDMA@ci.colospgs.co.us</a>	Assigned Group: Terrorism
Eller	Paul	Colorado Division of Emergency Management and Homeland Security - Mitigation and	<a href="mailto:paul.eller@state.co.us">paul.eller@state.co.us</a>	
Evans	Bart	El Paso County	<a href="mailto:BartEvans@elpasoco.com">BartEvans@elpasoco.com</a>	
Farkas	Corey	Colorado Springs Public Works - Streets	<a href="mailto:cfarkas@springsgov.com">cfarkas@springsgov.com</a>	Assigned Group: Severe Weather/Geologic Hazards
Force	Jeff	Memorial Hospital - UC Health	<a href="mailto:jeff.force@ushealth.org">jeff.force@ushealth.org</a>	
Frank	Lawrence	AECOM	<a href="mailto:lawrence.frank@aecom.com">lawrence.frank@aecom.com</a>	Assigned Group: Terrorism
French	Brigitte	Penrose St Francis	<a href="mailto:BrigitteFrench@Centura.Org">BrigitteFrench@Centura.Org</a>	
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Last Name	First Name	Organization	Email address	Signature
Grady	Brian	Academy School District 20	<a href="mailto:brian.grady@asd20.org">brian.grady@asd20.org</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Griffin-Strickland	Deb	Colorado Springs Utilites	<a href="mailto:dgriffin@CSU.org">dgriffin@CSU.org</a>	
Hannon	James	USAA	<a href="mailto:james.hannon@usaa.com">james.hannon@usaa.com</a>	
Hastings	James	School District 11	<a href="mailto:JAMES.HASTINGSII@d11.org">JAMES.HASTINGSII@d11.org</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Hein	Jay	Colorado Springs Parks and Recreation	<a href="mailto:jhein@springsgov.com">jhein@springsgov.com</a>	Assigned Group: Wildfire
Howard	Bart	Colorado Springs Office of Emergency Management	<a href="mailto:bhoward@springsgov.com">bhoward@springsgov.com</a>	Facilitator Assigned Group: Terrorism
Hughlett	Ken	Colorado Springs Utilites	<a href="mailto:khughlett@csu.org">khughlett@csu.org</a>	Assigned Group: Flood
Husted	David	Colorado Springs Police Department	<a href="mailto:HUSTEDDA@ci.colospgs.co.us">HUSTEDDA@ci.colospgs.co.us</a>	Assigned Group: Terrorism
Inzer	Lonnie	El Paso County OEM	<a href="mailto:LonnieInzer@elpasoco.com">LonnieInzer@elpasoco.com</a>	
Jenkins	Jimmy		<a href="mailto:Jimmy.R.Jenkins@comcast.net">Jimmy.R.Jenkins@comcast.net</a>	
Kelley	Brian	Public Works	<a href="mailto:bkelly@springsgov.com">bkelly@springsgov.com</a>	Assigned Group: Flood

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Korwes	Christopher	Peterson AFB	<a href="mailto:christopher.korwes@us.af.mil">christopher.korwes@us.af.mil</a>	
Lacey	Brett	Colorado Springs Fire Marshal's Office	<a href="mailto:blacey@springsgov.com">blacey@springsgov.com</a>	Assigned Group: Wildfire
Magnuson	Tom	National Weather Service	<a href="mailto:thomas.magnuson@noaa.gov">thomas.magnuson@noaa.gov</a>	Assigned Group: Severe Weather/Geologic Hazards
Martinez	Oscar	United States Forestry Service - Pike and San Isabel National Forest	<a href="mailto:omartinez@fs.fed.us">omartinez@fs.fed.us</a>	Assigned Group: Wildfire
Mitros	Tim	Public Works - Engineering/ Fountain Creek Watershed Flood Control and Greenway District	<a href="mailto:tmitros@springsgov.com">tmitros@springsgov.com</a>	
Morin	Natalie	Cheyenne School District 12	<a href="mailto:morin@cmsd12.org">morin@cmsd12.org</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Mouton	Andre	United States Air Force Academy	<a href="mailto:andre.mouton.2.ctr@us.af.mil">andre.mouton.2.ctr@us.af.mil</a>	
Pirri	Kimberly	AECOM	<a href="mailto:kimberley.pirri@aecom.com">kimberley.pirri@aecom.com</a>	Assigned Group: Flood
Poage	David	American Red Cross	<a href="mailto:david.s.poage@gmail.com">david.s.poage@gmail.com</a>	
Quitana	Kenny	Colorado Department of Transportation	<a href="mailto:kenneth.quintana@state.co.us">kenneth.quintana@state.co.us</a>	Assigned Group: Flood
Roux	Russ	South Central Health Care Coalition	<a href="mailto:rroux@springsgov.com">rroux@springsgov.com</a>	

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Last Name	First Name	Organization	Email address	Signature
Sasaki	Caroline	El Paso County OEM	<a href="mailto:carolinesasaki@elpasoco.com">carolinesasaki@elpasoco.com</a>	
Scalfri	David	Colorado Springs Public Works - Streets	<a href="mailto:dscalfri@springsgov.com">dscalfri@springsgov.com</a>	Assigned Group: Severe Weather/Geologic Hazards
Sevey	Anthony	Fort Carson OEM	<a href="mailto:anthony.h.sevey.civ@mail.mil">anthony.h.sevey.civ@mail.mil</a>	
Smith	RC	El Paso County OEM	<a href="mailto:rsmith@elpasoco.com">rsmith@elpasoco.com</a>	
Stanton	David	American Red Cross	<a href="mailto:dstanton82@icloud.com">dstanton82@icloud.com</a>	
Stoecklein	Tim	University of Colorado at Colorado Springs	<a href="mailto:tstoeckl@uccs.edu">tstoeckl@uccs.edu</a>	Facilitator Assigned Group: Severe Weather/Geologic Hazards
Sylvester	Amy	Colorado Springs Fire Marshal's Office	<a href="mailto:asylvester@springsgov.com">asylvester@springsgov.com</a>	Assigned Group: Wildfire
Teferiller	Ryan	Planning - Land Use Review	<a href="mailto:rtefertilizer@springsgov.com">rtefertilizer@springsgov.com</a>	
Vigil	Steve	Information Technology - GIS	<a href="mailto:snvigil@springsgov.com">snvigil@springsgov.com</a>	
Vitwar	David	Colorado Springs Fire Department	<a href="mailto:dvitwar@springsgov.com">dvitwar@springsgov.com</a>	Facilitator Assigned Group: Wildfire
Waldrip	Erik	Cheyenne Mountain Air Force Station	<a href="mailto:erik.waldrip@us.af.mil">erik.waldrip@us.af.mil</a>	
Walker	Jeremy	Colorado Technical University	<a href="mailto:jwalker@coloradotech.edu">jwalker@coloradotech.edu</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards

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Last Name	First Name	Organization	Email address	Signature
Waters	Bret	Colorado Springs Office of Emergency Management	<a href="mailto:bwaters@springsgov.com">bwaters@springsgov.com</a>	
Watson	David	School District 49	dwatson@d49.org	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Will	Dennis	Colorado Springs Parks and Recreation	dwill@springsgov.com	Assigned Group: Wildfire
Wysocki	Peter	Planning - Land Use Review	<a href="mailto:pwysocki@springsgov.com">pwysocki@springsgov.com</a>	



## **City of Colorado Springs Pre-Disaster Mitigation Plan Revision Pre-Kickoff Meeting Conference Call**

**April 16, 2015  
10:00 am to 12:00 pm MDT**

### **AGENDA**

1. Introductions: roles and responsibilities
2. Any contractual business
3. Plan Revision schedule and process
4. Plan Revision participants
  - a. Local Planning Committee (have jurisdictional authority in COS)
  - b. Initial identification of key stakeholders
5. PDMP data needs for identified hazards including human-caused
  - a. GIS Data Needs
  - b. Hazus Data Needs – Matrix Flood Inundation Study, Latest DEM
6. Other Plans of note that need to be reviewed
7. Kickoff meeting date, invitations and materials discussion
8. Public Outreach Strategy Framework
9. Next Steps



## Local Planning Committee (Local Jurisdictional Authority)

- Office of Emergency Management
- Fire Department
- Police Department
- Planning and Development
- City Engineering/Stormwater
- Colorado Springs Utilities
- El Paso County Office of Emergency Management (include here or as Stakeholder?)
- Pikes Peak Regional Building Department
- Pikes Peak Metropolitan Medical Response System

## Stakeholders

- Downtown Business Partnership
- Peterson Air Force Base
- US Air Force Academy
- Cheyenne Mountain Air Force Station
- USAA
- Federal Express
- Fountain Creek Watershed Flood Control and Greenway District
- Pikes Peak Community College
- University of Colorado at Colorado Springs
- Colorado State departments (DHSEM and CDOT)
- Other El Paso County departments?
- Non-profits?
- State and National Parks?
- Other Regional agencies?

## Plans

- Updated comprehensive plan
- Capital Improvement budget/plan
- 2011 Colorado Springs Community Wildfire Protection Plan
- Recovery plans
- 2012 Colorado Springs Emergency Preparedness and Safety Guide
- 2007 Emergency Operations Plan
- Local by-laws, building codes, and zoning ordinances
- Shook's Run Drainage Basin Planning Study



## GIS Data

Data	Source	Notes (scale, vintage, etc.)
<i>Aerial &amp; Elevation</i>		
Aerial Photography	City, CSU	
Digital Elevation Model	CSU	
<i>Boundaries</i>		
County Boundary	City	
Municipal Boundaries	City	
Districts	City, CSU, El Paso County	
Zoning	City	
Land Use	City	
Future Land Use	City	
Zip Codes	City	
<i>Inventory</i>		
Parcels	CSU	
Assessor's Data	CSU	
Building Footprints	CSU	
Street Trees	City	
Snow Routes	City	
<i>Natural Features</i>		
Streams, Lakes (Hydrography)	Stormwater	
<i>Critical Facilities</i>		
Roads	City	
Police Stations	City	
Fire Stations	City	
Schools	City	
Hospitals	City	
Airports	City	
Bridges	City	
Dams	City	
Water Facilities	City	
Wastewater Facilities	City	
Communications Facilities	City	
EOCs	City	
Government Buildings	City/CSU	
Levees	City/CSU	
Powerplants or Substations	City	
<i>Hazards Data</i>		
Flood Hazard Zones	City	
Earthquake Data	City/USGS	



Data	Source	Notes (scale, vintage, etc.)
Wildfire (Burn Areas)	City/CSU	
Wildland Urban Interface Areas	City	
Rockfall		
Landslide		
Subsidence		
Hazmat Facilities	City	



# City of Colorado Springs Pre-Disaster Mitigation Plan Revision GIS Data Needs – May 21, 2015



Data	Source	Notes (scale, vintage, etc.)
<b><i>Aerial &amp; Elevation</i></b>		
Aerial Photography	City, CSU	
Digital Elevation Model	CSU	
<b><i>Boundaries</i></b>		
County Boundary	City	
Municipal Boundaries	City	
Districts	City, CSU, El Paso County	
Zoning	City	
Land Use	City	
Future Land Use	City	
Zip Codes	City	
<b><i>Inventory</i></b>		
Parcels	El Paso County	
Assessor's Data	El Paso County	
Building Footprints	El Paso County	
Street Trees	El Paso County	
Snow Routes	El Paso County	
<b><i>Natural Features</i></b>		
Streams, Lakes (Hydrography)	Stormwater	
<b><i>Critical Facilities</i></b>		
Roads	City	
Police Stations	City	
Fire Stations	City	
Schools	City	
Hospitals	City	
Airports	City	
Bridges	City	
Dams	City/CSU	
Water Facilities	City/CSU	
Wastewater Facilities	City/CSU	
Communications Facilities	City	
EOCs	City	
Government Buildings	City/CSU	
Levees	City/CSU	
Powerplants or Substations	CSU	
<b><i>Hazards Data</i></b>		
Flood Hazard Zones	PPRBD	
Earthquake Data	City/USGS	
Wildfire (Burn Areas)	City/CSU	
Wildland Urban Interface Areas	City	
Rockfall	CSGS	
Landslide	CSGS	
Subsidence		
Hazmat Facilities	City	



**City of Colorado Springs  
Pre-Disaster Mitigation Plan (PDMP) Revision  
Kickoff Meeting**

**May 12, 2015  
1:00 pm to 3:00 pm MDT**

**AGENDA**

1. Welcome and Remarks – Bart Howard, Office of Emergency Management (OEM)
2. General Introductions
3. Introduction of AECOM Team – Kim Pirri, AECOM
4. Purpose and overview of mitigation planning and Colorado Springs PDMP – Lawrence Frank, AECOM
5. Purpose and roles of the Local Planning Committee and Stakeholders – Lawrence Frank
6. Baseline Survey
7. Local Mitigation Planning Process – Lawrence Frank
  - a. Themes/Concepts
  - b. List of Hazards
  - c. Data Collection
  - d. Plans to Review
  - e. Past Goals and Actions
8. Detailed Survey and Discussion
9. Plan Revision schedule – Lawrence Frank and OEM
  - Chart out next two meetings
10. Public Outreach Strategy Framework – Lawrence Frank
11. Next Steps

# Pre-Disaster Mitigation Plan Kickoff Meeting



**AECOM**

# Agenda

- OEM Welcome and Remarks
  - General Introductions
  - Introduction of AECOM Team
- Purpose and overview of mitigation planning and COS PDMP
- Purpose and roles of the Local Planning Committee and Stakeholders
  - Baseline Survey
- Local Mitigation Planning Process
  - Detailed Survey and Discussion
- Plan Revision schedule including next two meetings
- Public Outreach Strategy Framework
  - Next Steps



# Purpose and Overview of Mitigation Planning and COS PDMP



**AECOM**

# Emergency Management Cycle



# Mitigation is...

Sustained action taken to reduce or eliminate long-term risk to human life and property from natural and human caused hazards



Photo Credit: Colorado Springs OEM



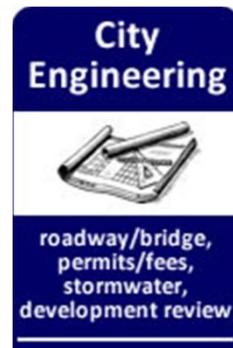
Photo Credit: Colorado Springs OEM



**AECOM**

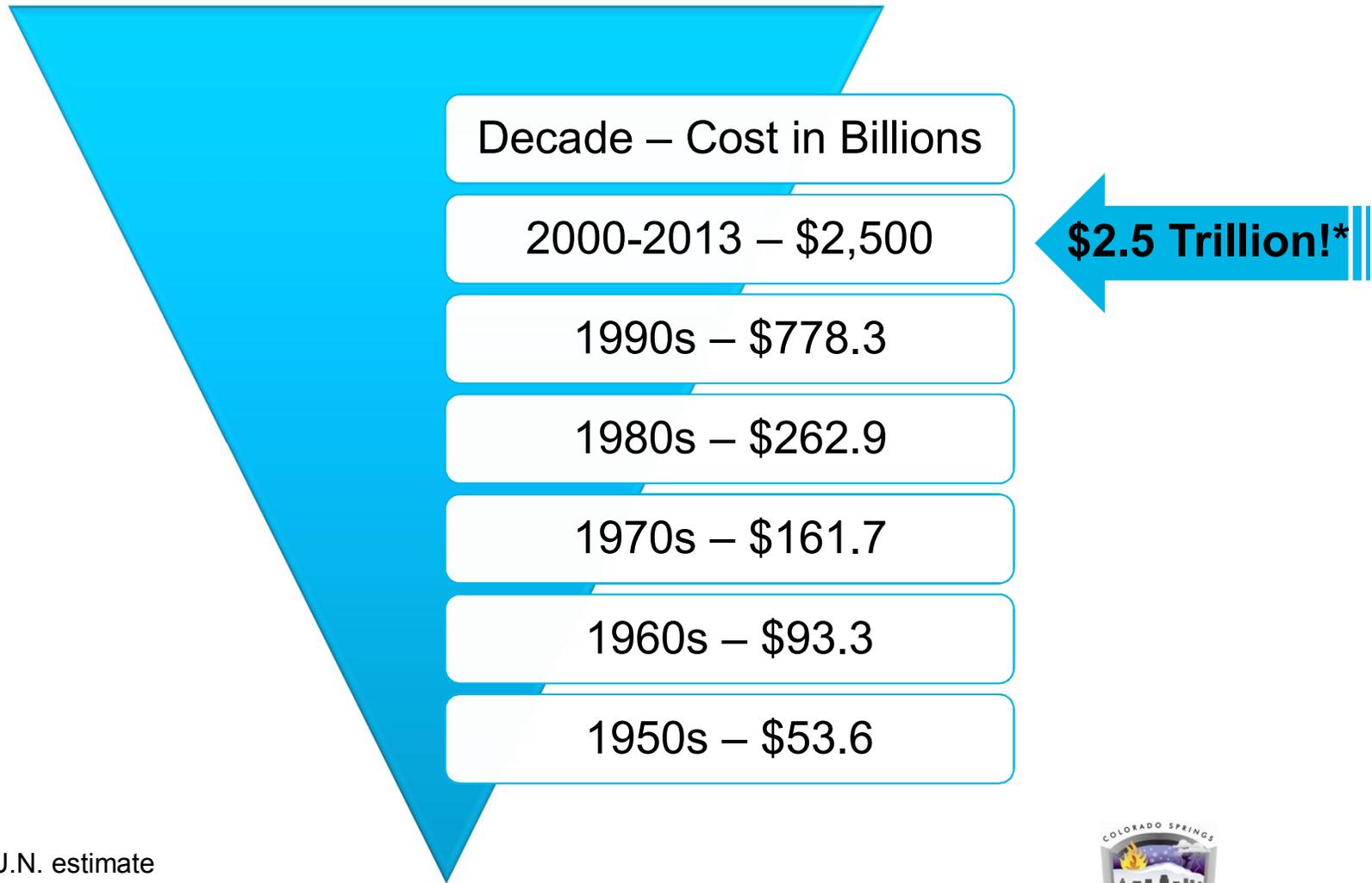
# Mitigation is...

Partnerships to combine efforts to reduce the risk of hazards in the community.



# Increasing Disaster Costs

## Worldwide Economic Losses from Natural Disasters



\*from a U.N. estimate



**AECOM**

# Increasing Disaster Costs

## Most Costly Non-Flood Catastrophes in the Rocky Mountain Region

Year	Peril	Insured Loss	Insured Loss in 2014 Dollars
July 20, 2009	Hail and wind – Denver Metro	\$767.6 M	\$844.9 M
July 1990	Hail-Colorado	\$625 M	\$1.1 Billion
June 2012	Wildfire - Colorado Springs (Waldo Canyon)	\$453.7 M	\$466.7 M
June 2013	Wildfire - Black Forest, Colorado	\$420.5 M	\$426.3 M

Source: Rocky Mountain Insurance Information Association



**AECOM**

# Disaster Mitigation Act of 2000

- Encourages and facilitates Local/State planning
- Requires a hazard mitigation plan to maintain eligibility for FEMA mitigation funds
- Enables effective risk reduction
- Creates public forum for hazard mitigation



**AECOM**

# Benefits of Mitigation Planning

- Identifies community policies/actions for risk reduction
- Communicates priorities to state and federal officials
- Builds partnerships and efficiencies
- Helps institutionalize mitigation
- Helps creates disaster resilient communities by preparing now to reduce impact of future disasters



**AECOM**

# Benefits of Mitigation Planning

- Can help achieve multiple community objectives
- Eligibility and/or preparation for Grant Programs...
  - Hazard Mitigation
  - Pre-Disaster Mitigation
  - Flood Mitigation Assistance
  - HUD Recovery (CDBG-DR) programs
  - Others
- Synergies – How can we do more?



**AECOM**

# Examples of Mitigation Project Categories

- Preventive
- Property Protection
- Public Education and Awareness
- Natural Resource Protection
- Emergency Services Protection
- Structural Projects

Photo Credit: Colorado Springs OEM



**AECOM**

# Colorado Springs PDMP – 2015 Plan Revision

- Chapter 1 Introduction
- Chapter 2 Community Profile
- Chapter 3 Planning Process
- Chapter 4 Risk Assessment
- Chapter 5 Mitigation Strategy
- Chapter 6 Plan Maintenance
- Appendices



**AECOM**

# Colorado Springs PDMP – 2015 Plan Revision

- How Mitigation Planning is distinct from other on-going efforts
- Challenges
  - Cross-disciplinary (requires multiple partners to succeed)
  - Scarce resources
  - Competes with other worthy issues
  - Disaster amnesia



**AECOM**

# Purpose and Roles of the Local Planning Committee and Stakeholders



**AECOM**

# Who is what?

## –Local Planning Committee

- Municipal Agencies – You have the jurisdictional authority to implement mitigation
- Input is **significant!**

## –Stakeholders

- Community representatives – A broader audience affected by the implemented mitigation
- A force-multiplier on the LPC, with grass-roots knowledge and leadership
- Input is **significant!**



**AECOM**

## Local Planning Committee Role and Responsibilities

- Provide data and institutional knowledge
- Communicate plan goals and progress with agency/department
- Review risk assessment and critique vulnerability analysis
- Update the mitigation strategy and prioritize mitigation actions
- Help promote mitigation and resiliency within community
- Review and provide comments on draft plan
- For actions within your jurisdiction, help implement them



**AECOM**

# Stakeholders

## Role and Responsibilities

- Provide data and institutional knowledge
- Communicate and promote plan goals and progress with constituency
- Review risk assessment and critique vulnerability analysis
- Update the mitigation strategy and prioritize mitigation actions
- Help promote mitigation and resiliency within community
- Review and provide comments on draft plan



**AECOM**

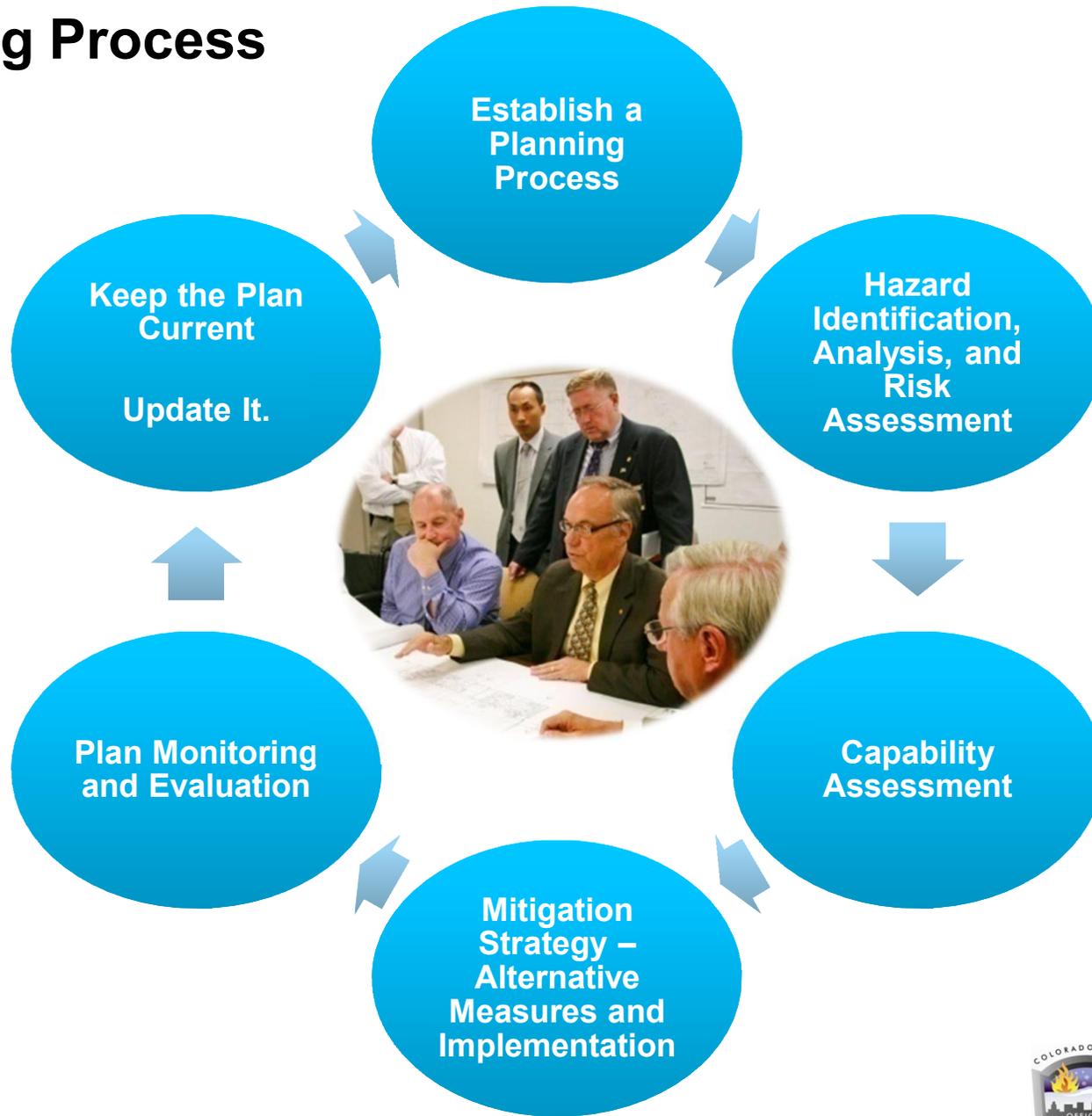
# Baseline Survey (10 minutes)

# Local Mitigation Planning Process



**AECOM**

# Planning Process



## Desired Outcomes

- FEMA compliant plan
  - Accrue CRS points
  - Receive EMAP mitigation credit
- Build on momentum from recovery
- Enhance working relationships
- Clear sense of priority
- Risk and potential actions communicated to community, including public and elected officials
- Make it compelling and interesting to the public



**AECOM**

# Planning Themes

- Public-private partnerships
- Make floodplains an amenity – nature trail with flood buffer (natural function of the floodplain)
- Proactive long term approaches and enhanced readiness posture (can react to events better)
- Engage the whole community (public, business, non-profit, military)



**AECOM**

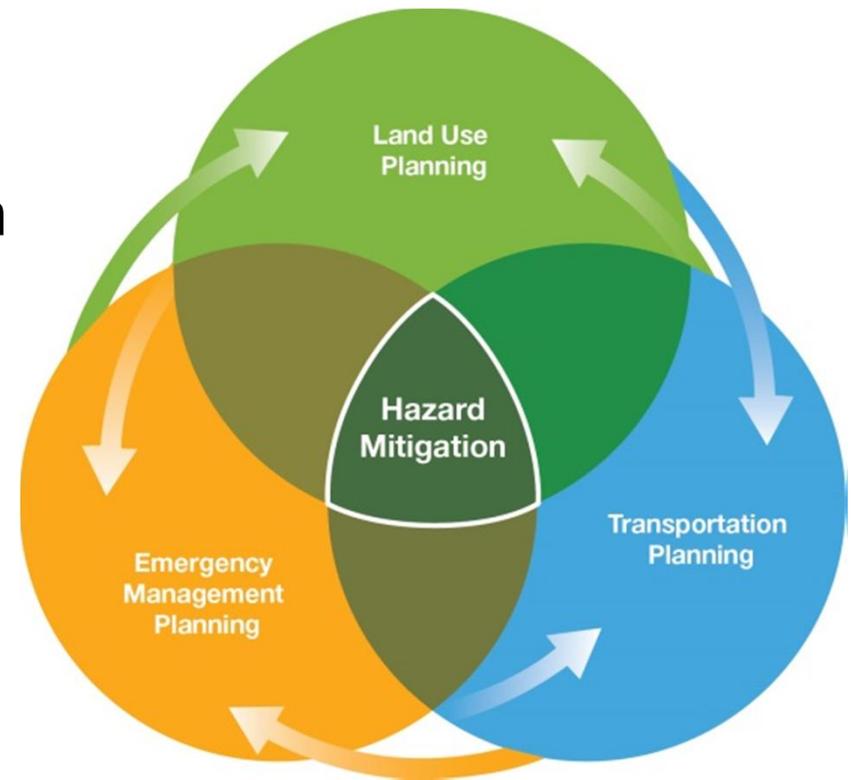
# Planning Themes

- Integrate mitigation into other local planning mechanisms
- To the extent possible, make mitigation a consideration in day-to-day community business and when making capital investments
- Opportunities to piggyback a mitigation project onto another infrastructure project (e.g., road reconstruction plus drainage system upgrade)
- Get as many uses out of your capital, your land, and your infrastructure as possible



# Planning Themes

- Combined talent, authority, energy, experience and capability as a committee to do what would not be possible with everyone on their own
- Address immediate risks while also laying groundwork to approach on-going, long-term risk
- Leverage funding opportunities



**AECOM**

# Planning Themes - Integration

## – Integration into local planning mechanisms

- Consider natural hazards information (past events, impacts and vulnerabilities)
- Identify hazard prone areas
- Identify inconsistencies, gaps, and recommendations
- Add into plans like comprehensive plan and capital improvement budgeting process

## – Integration between departments

- Involve key community officials with authority to execute policies and programs
- Collaborate across departments to share knowledge and build relationships for successful implementation

Photos Credit: FEMA Region III



**AECOM**

# Risk Assessment

## Risk: Intersection of Hazard, Vulnerability and Capability

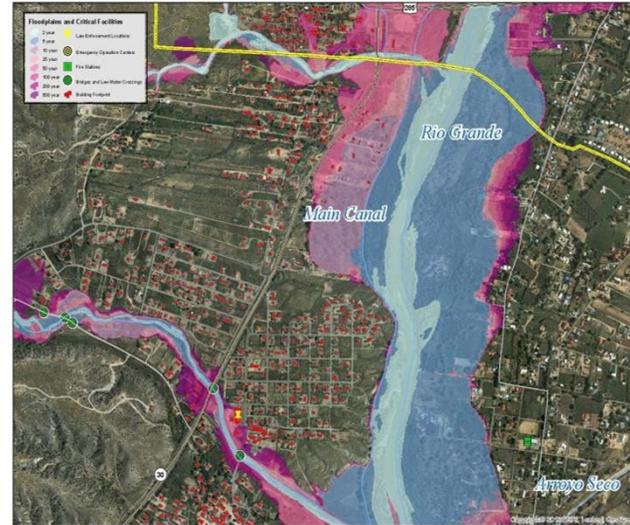


Photo Credit: NASA



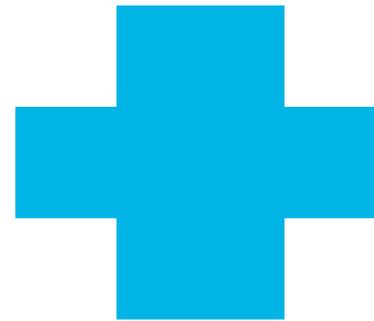
# Identifying the Hazards

## 2010 PDMP Update included:

- Dam and Levee Failure
- Drought
- Earthquake
- Flood
- Hail
- Landslide
- Lightning
- Severe Winter Storm
- Tornado
- Wildfire
- Windstorm
- Human-caused hazards

## 2015 PDMP Revision:

- Updates all those hazards



- **Flood after Fire**
- **More detail on:**
  - **Human-caused hazards**
  - **Terrorism**



# Hazard Profile in the Risk Assessment

- Hazard Description
- Geographic Location / Spatial Extent
  - Using best available data, depict and describe areas at risk
  - Focus on increased risk from flooding post-wildfire
- Previous Occurrences
- Probability and Extent of Future Occurrences
- Magnitude / Severity
  - Determine what is at risk – especially critical facilities and critical infrastructure
- Vulnerability Assessment
- Damage Estimates (for certain hazards, using Hazus)



# Data Sources for Hazard Analysis

- Local GIS data
- National Oceanic and Atmospheric Administration (NOAA)
- National Weather Service (NWS)
- SHELDUS – Spatial Hazard Event and Loss Database
- NCDC – National Climatic Data Center
- Western Regional Climate Center
- Others specific to hazard



# HAZUS<sup>®</sup> MH

EARTHQUAKE • WIND • FLOOD

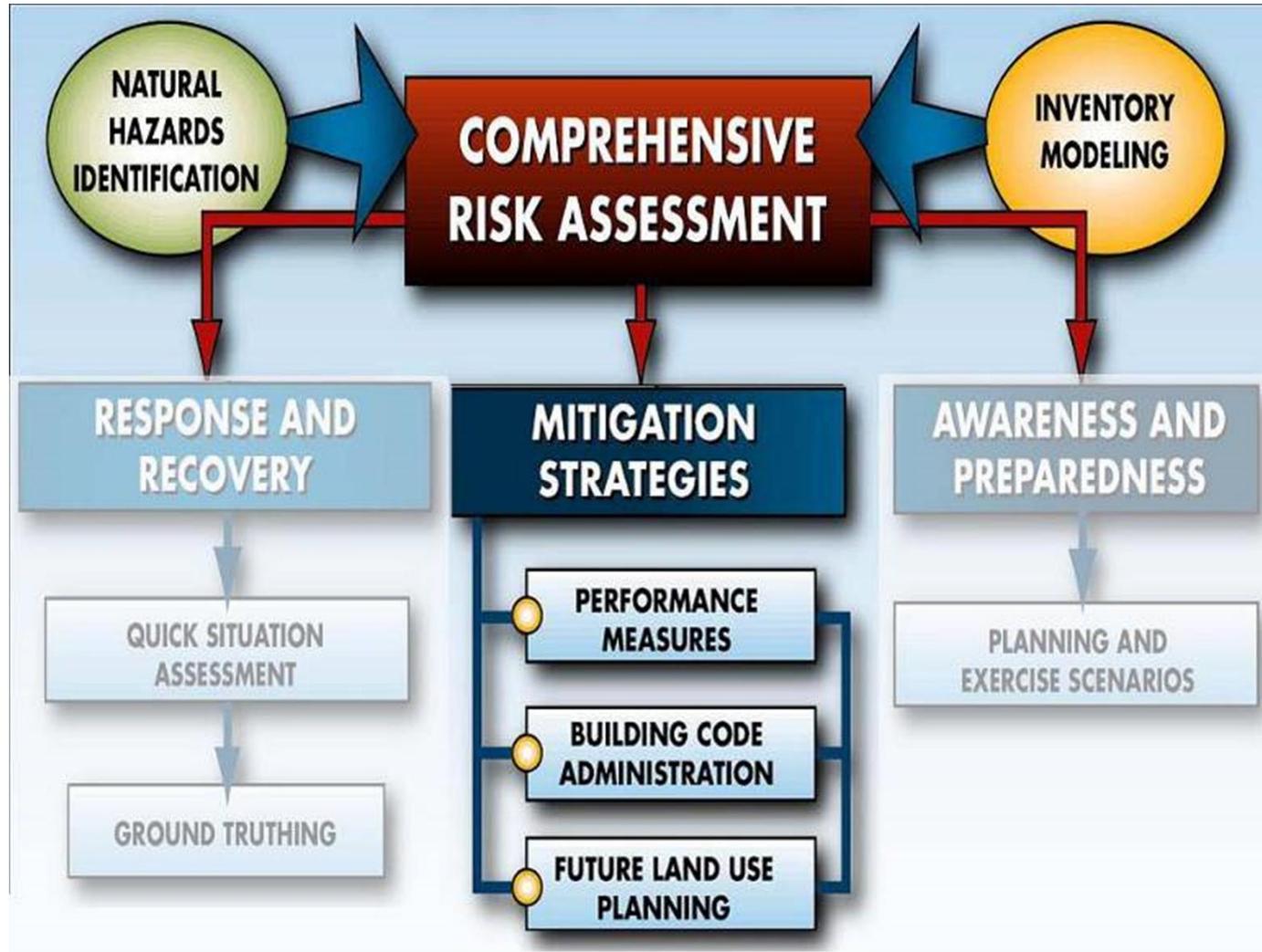
***FEMA's Software Program for  
Estimating Potential Losses from  
Natural Disasters***

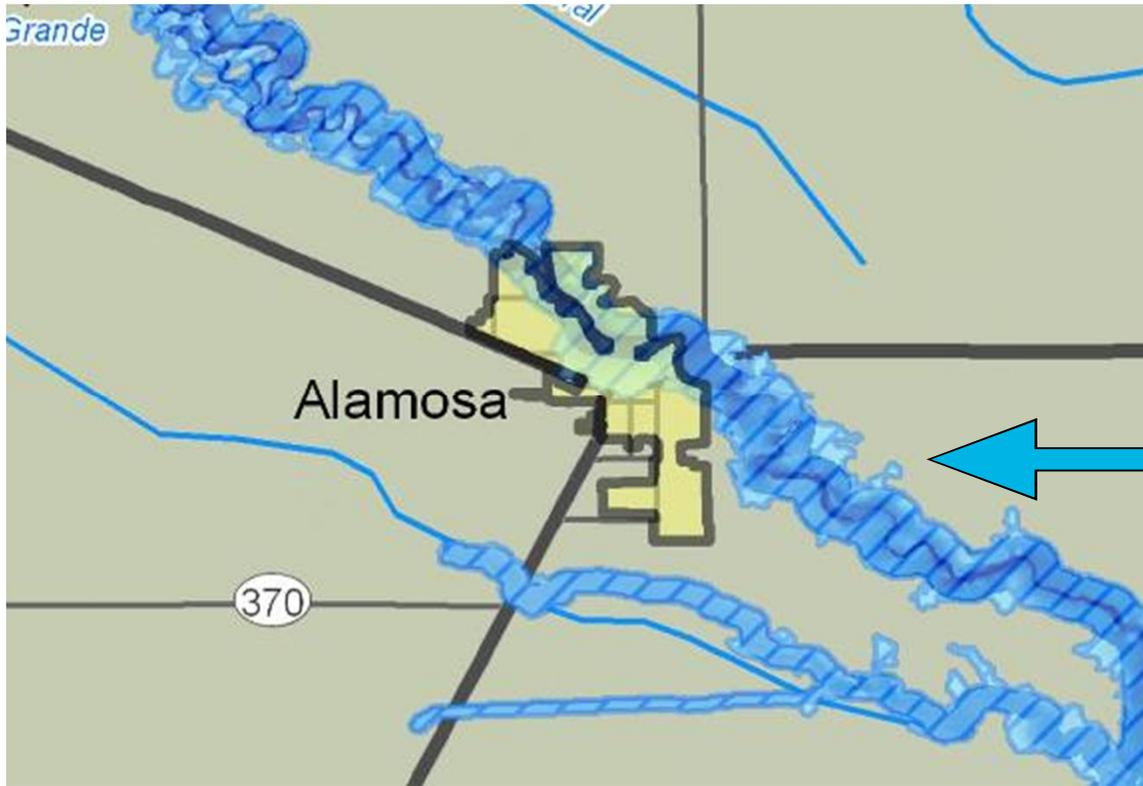


**FEMA**

FEDERAL EMERGENCY MANAGEMENT AGENCY

# How Hazus fits into the Planning Process...





## Example Hazus Output...

Flood Model

Estimated Losses

Name	Building Damage %	Content Damage %	Structure Loss USD (In Thousands of Dollars)	Contents Loss USD (In Thousands of Dollars)	Days To 100 Pct Functionality
Cottonwood Christian	6.10	33.03	\$29.56	\$160.18	480
Evans Elementary	7.26	39.92	\$35.19	\$193.61	480
Police Dept	8.63	14.50	\$117.14	\$295.44	480
Alamosa Fire Dept	8.63	14.50	\$50.20	\$126.62	480
<b>TOTAL CRITICAL FACILITY LOSS</b>			<b>\$232.10</b>	<b>\$775.85</b>	

## Plans to Review

- Approved City Comprehensive Plan
- Capital Improvement budget/plan
- 2011 Community Wildfire Protection Plan
- Recovery plan (being revised)
- 2012 Colorado Springs Emergency Preparedness and Safety Guide
- 2014 Emergency Operations Plan
- Local by-laws, building codes, and zoning ordinances
- Shook's Run Drainage Basin Planning Study
- Colorado State Mitigation Plan
- Colorado Resiliency Framework

➔ **ARE THERE MORE TO CONSIDER???**



**AECOM**

## Past Mitigation Goal, Objectives, and Actions

- Reduce or eliminate the exposure to property damage, injury or loss of life, and damage to the natural environment caused by natural hazards.
- Identify and initiate improvements to public safety, response, and recovery programs to reduce risk and vulnerability.
- Follow through with and leverage existing organizations, programs, and procedures to implement the PDM Program.



**AECOM**

## Past Mitigation Goal, Objectives, and Actions

- Build upon existing public outreach efforts to reduce risk and vulnerability to natural hazards.
- Leverage external financial assistance and other resources to strengthen the City's disaster resiliency.
- Continue to improve the regulatory review process for development and construction in the vicinity of known natural hazard areas.
- Continue to assess ongoing disaster preparedness programs that maintain or improve City preparedness.



**AECOM**

# Results of Baseline Survey and Detailed Survey (20 minutes)

# Plan Revision Schedule

- Two more meetings for LPC and Stakeholders
  - Risk Assessment Meeting
  - Mitigation Strategy Meeting



# Public Outreach Strategy Framework



**AECOM**

# Who to Involve

– Considering a few more stakeholders:

- Downtown Business Partnership
- Non-profits
- Environmental Groups
- US Forest Service

– General public



**AECOM**

## How to Involve Them

- Already have organized wildland fire preparedness drills and flash flood preparedness meetings
- Survey
- **Information available at the “Community Emergency Preparedness Night” at the May 31st Sky Sox game**
- Public Meetings
- Stakeholders promote preparedness and resiliency among constituencies
- Post notifications and draft plan on OEM website (and others)
- Other preferred and successful outreach modes
  - Social media



**AECOM**

# Next Steps

## Action Items for LPC:

- Confirm dates for next two meetings
- Review 2010 actions
- Known hazard events from 2010-2015
- Recent/New Mitigation actions completed by your organization
  - Projects triggered by recent fires (recovery, HUD, HMGP)
  - Post-fire flood recovery



**AECOM**

# Next Steps

## Action Items for Stakeholders:

- Confirm dates for next two meetings
- Promote your participation in the planning process within your agency
- Recent/New Mitigation actions completed by your organization
  - Projects triggered by recent fires (recovery, HUD, HMGP)
  - Post-fire flood recovery



**AECOM**

Questions???



**AECOM**

# Thank You!

- Tobi Blanchard, City of Colorado Springs OEM  
[tblanchard@springsgov.com](mailto:tblanchard@springsgov.com)
- Kim Pirri, AECOM  
[kimberley.pirri@aecom.com](mailto:kimberley.pirri@aecom.com)
- Lawrence Frank, AECOM  
[lawrence.frank@aecom.com](mailto:lawrence.frank@aecom.com)



**AECOM**



## Objectives and Actions from the 2010 Colorado Springs PDMP Revision

Mitigation Action Description		Hazard	Responsible Agency
<b>Objective A:</b> Identify and initiate improvements to public safety, response, and recovery programs to reduce risk and vulnerability.			
A-1	Upgrade aging infrastructure such as transportation, drainage, utilities, and others that could be affected during a major natural disaster.	All Hazards	OEM and Engineering
A-2	Evaluate repetitive loss properties and potential solutions to mitigate existing conditions.	Flood	OEM
A-3	Update and maintain the Jimmy Camp Creek and Cottonwood Creek Drainage Basin Planning Studies.	Flood	Engineering
A-4	Evaluate funding alternatives to achieve United States Army Corps of Engineers (USACE) certification of the Templeton Gap Floodway (levee).	Flood, Dam & Levee Failure	Engineering
<b>Objective B:</b> Follow through with and leverage existing organizations, programs, and procedures to implement the PDM Program.			
B-1	Continue to expand the capabilities and participation of the Emergency Management Committee and Volunteer Committee.	All Hazards	OEM
B-2	Develop a strategy to integrate the PDM plan with the City's strategic plan and other long-term planning documents.	All Hazards	Planning
B-3	Complete GIS and other automated inventories for stormwater, problem drainage areas, DFIRM and other City assets.	Flood	Engineering
B-4	Coordinate with Colorado Springs Utilities to review their current water conservation and drought programs.	Drought	CSU and OEM
B-5	Achieve and maintain a Class 6 rating in the Community Rating System (CRS) for floodplain management.	Flood	PPRBD and OEM
B-6	Review the Emergency Action Plans provided by Colorado Springs Utilities.	Dam & Levee Failure	OEM and CSU
B-7	Attend Emergency Action Plan exercises coordinated by Colorado Springs Utilities.	Dam & Levee Failure	OEM and CSU
B-8	Continue to develop programs and allocate resources for the reduction of fuels in potential wildfire areas. This includes continuing the Wildfire Mitigation program as well as organizing and providing resources that can be used to reduce natural fuels.	Wildfire	WM-Division of FM
B-9	Continue to develop partnerships with other organizations to implement wildfire mitigation plans and other hazard reduction programs.	Wildfire	WM-Division of FM
B-10	Complete and maintain the 2010 Community Wildfire Protection Plan including the assessment of parcels identified in the Wildland Urban Interface.	Wildfire	WM-Division of FM
B-11	Implement the actions identified in the 2010 Community Wildfire Protection Plan.	Wildfire	WM-Division of FM



Mitigation Action Description		Hazard	Responsible Agency
B-12	Work with the State Division of Water Resources to evaluate the dams that are not managed by Colorado Springs Utilities to determine high or significant impact and current conditions.	Dam & Levee Failure	OEM
<b>Objective C:</b> Build upon existing public outreach efforts to reduce risk and vulnerability to natural hazards.			
C-1	Collaborate with other stakeholders (public, businesses, non-profit organizations, government and regulatory agencies, and others) for public outreach efforts.	All Hazards	OEM
C-2	Restructure the public outreach strategy to share responsibilities amongst the citizens, federal, state, and local governments.	All Hazards	OEM
C-3	Continue to operate the City's Department of Emergency Management natural hazards website.	All Hazards	OEM
C-4	Incorporate earthquakes in the Office of Emergency Management public outreach strategy.	Earthquake	OEM
<b>Objective D:</b> Leverage external financial assistance and other resources to strengthen the City's disaster resiliency.			
D-1	Pursue additional grants to implement risk reduction projects.	All Hazards	OEM
<b>Objective E:</b> Continue to improve the regulatory review process for development and construction in the vicinity of known natural hazard areas.			
E-1	Continue to involve the Colorado Geological Survey in land use reviews and hazard assessments.	Landslide	Planning
<b>Objective F:</b> Continue to assess ongoing disaster preparedness programs that maintain or improve City preparedness.			
F-1	Maintain Emergency Management Accreditation Program certification.	All Hazards	OEM
F-2	Ensure the effectiveness of large-scale evacuation plans through full-scale tests.	Flood, Wildfire,	OEM
F-3	Maintain the programs and data outlined in the Special Needs Assessment and Plan.	All Hazards	OEM
F-4	Develop preparedness guides for Colorado Springs residents and businesses.	All Hazards	OEM
F-5	Continue to improve the communication of severe weather warnings, flood warning, and related information.	All Hazards	OEM
F-6	Prepare a feasibility study on updating the City's rain gauge automation system to the Gauge-Adjusted Radar Rainfall (GARR) System.	Flood	OEM
F-7	Consider the use of a resource management system to capture the financial data for natural hazard events.	All Hazards	



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Erk Waldrip

Organization: 721 CES/CEX CMAFS

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | Wildfire                   |
| <u>Hail</u>   | Windstorm                  |
| Landslide   |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | Wildfire                   |
| <u>Hail</u>   | Windstorm                  |
| Landslide   |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | <u>Windstorm</u>    |
| <u>Landslide</u>                             |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

Infectious Disease

Industrial accidents involving transportation

Railroad accident

Hazardous materials release-chemical-biological

Radiological contamination

Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

Infectious Disease

Industrial accidents involving transportation

Railroad accident

Hazardous materials release-chemical-biological

Radiological contamination

Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

Infectious Disease

Industrial accidents involving transportation

Railroad accident

Hazardous materials release-chemical-biological

Radiological contamination

Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

Infectious Disease

Industrial accidents involving transportation

Railroad accident

Hazardous materials release-chemical-biological

Radiological contamination

Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?

highest Dollar and chance of occurrence, natural.  
High cost, low chance terrorism,



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Michael Brady

Organization: FEDEX

**NATURAL HAZARDS**

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Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                     |
|---|---------------------|
| Dam Failure   | Lightning           |
| Drought   | Severe Winter Storm |
| Earthquake  | Tornado             |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>     |
| Hail  | Windstorm           |
| <u>Landslide</u>                                    |                     |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | Wildfire                   |
| Hail  | Windstorm                  |
| <u>Landslide</u>                                    |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | <u>Lightning</u>    |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |



**HUMAN CAUSED HAZARDS**

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Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?

EMP's (Electro Magnetic Pulse) Odds nationwide  
seem probable.



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Keith Curtis

Organization: PPRBD

**NATURAL HAZARDS**

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Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |   |                      |
|---|---|----------------------|
| 3 | <u>Dam Failure</u>                                  | Lightning            |
|   | <u>Drought</u>                                      | Severe Winter Storm  |
|   | <u>Earthquake</u>                                   | Tornado              |
| 4 | <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u> - 2  |
| 1 | <u>Hail</u>   | <u>Windstorm</u> - 5 |
|   | Landslide   |                      |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                     |
|---|---------------------|
| <u>Dam Failure</u>                                  | Lightning           |
| <u>Drought</u>                                      | Severe Winter Storm |
| <u>Earthquake</u>                                   | Tornado             |
| <u>Flood (including flood after wildfire event)</u> | Wildfire            |
| Hail  | Windstorm           |
| Landslide   |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                            |
|--|----------------------------|
| Dam Failure                                  | <u>Lightning</u>           |
| Drought                                      | <u>Severe Winter Storm</u> |
| Earthquake                                   | Tornado                    |
| Flood (including flood after wildfire event) | Wildfire                   |
| Hail   | <u>Windstorm</u>           |
| Landslide                                    |                            |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- |  |  |
|--|--|
| <u>Infectious Disease</u>                            | <u>Hazardous materials release-chemical-biological</u> |
| <u>Industrial accidents involving transportation</u> | Radiological contamination                             |
| <u>Railroad accident</u>                             | Explosion  |

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | <u>Radiological contamination</u>               |
| Railroad accident                             | Explosion                                       |

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- |   |   |
|---|---|
| <u>Infectious Disease</u>                     | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | <u>Radiological contamination</u>               |
| Railroad accident                             | Explosion                                       |

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| <u>Railroad accident</u>                      | <u>Explosion</u>                                |

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- |                       |                            |
|-----------------------|----------------------------|
| Armed attacks         | <u>Explosive bomb</u>      |
| Biological release    | <u>Nuclear event</u>       |
| Chemical release      | Radiological contamination |
| <u>Cyberterrorism</u> |                            |

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- |                    |                                   |
|--------------------|-----------------------------------|
| Armed attacks      | Explosive bomb                    |
| Biological release | <u>Nuclear event</u>              |
| Chemical release   | <u>Radiological contamination</u> |
| Cyberterrorism     |                                   |



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Ryan Tefertiller

Organization: Colorado Springs Planning Dept.

**NATURAL HAZARDS**

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Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |  |                            |
|--|----------------------------|
| Dam Failure                                  | Lightning                  |
| <u>Drought</u>                               | <u>Severe Winter Storm</u> |
| Earthquake                                   | Tornado                    |
| Flood (including flood after wildfire event) | <del>Wildfire</del>        |
| <u>Hail</u>                                  | Windstorm                  |
| Landslide                                    |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | <u>Windstorm</u>    |
| <u>Landslide</u>                             |                     |



**HUMAN CAUSED HAZARDS**

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Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

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- Explosive bomb
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- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



### 2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision Baseline Survey

Name: \_\_\_\_\_

Organization: \_\_\_\_\_

#### NATURAL HAZARDS

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                     |
|---|---------------------|
| Dam Failure   | <u>Lightning</u>    |
| Drought   | Severe Winter Storm |
| <u>Earthquake</u>                                   | Tornado             |
| <u>Flood (including flood after wildfire event)</u> | Wildfire            |
| <u>Hail</u>   | Windstorm           |
| Landslide   |                     |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                     |
|---|---------------------|
| Dam Failure   | Lightning           |
| Drought   | Severe Winter Storm |
| Earthquake  | Tornado             |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>     |
| <u>Hail</u>   | Windstorm           |
| Landslide   |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <del>Dam Failure</del>                       | <u>Lightning</u>    |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Ken Hughlett

Organization: CSU

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | Wildfire                   |
| <u>Hail</u>   | Windstorm                  |
| Landslide   |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                            |
|--|----------------------------|
| <u>Dam Failure</u>                           | Lightning                  |
| Drought                                      | <u>Severe Winter Storm</u> |
| <u>Earthquake</u>                            | Tornado                    |
| Flood (including flood after wildfire event) | Wildfire                   |
| Hail   | Windstorm                  |
| Landslide                                    |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |



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- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

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- Railroad accident
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Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
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- Radiological contamination
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- Railroad accident
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- Armed attacks
- Biological release
- Chemical release
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- Explosive bomb
- Nuclear event
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Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Brian Kelley

Organization: Public Works, Colorado Springs

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                     |
|---|---------------------|
| Dam Failure   | Lightning           |
| Drought   | Severe Winter Storm |
| Earthquake  | Tornado             |
| <u>Flood</u> (including flood after wildfire event) | <u>Wildfire</u>     |
| <u>Hail</u>   | Windstorm           |
| Landslide   |                     |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |



**HUMAN CAUSED HAZARDS**

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- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
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- Railroad accident
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- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
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- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

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- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Debbie Griffin-Strickland

Organization: Colo Sprgs Utilities

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                     |
|---|---------------------|
| Dam Failure   | <u>Lightning</u>    |
| Drought   | Severe Winter Storm |
| Earthquake  | Tornado             |
| <u>Flood</u> (including flood after wildfire event) | Wildfire            |
| <u>Hail</u>   | Windstorm           |
| Landslide   |                     |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                     |
|---|---------------------|
| Dam Failure   | Lightning           |
| <u>Drought</u>                                      | Severe Winter Storm |
| Earthquake  | Tornado             |
| <u>Flood</u> (including flood after wildfire event) | <u>Wildfire</u>     |
| Hail  | Windstorm           |
| <u>Landslide</u>                                    |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| <u>Hail</u>                                  | <u>Windstorm</u>    |
| Landslide                                    |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

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- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: JIM HANNON

Organization: USAA

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                     |
|---|---------------------|
| Dam Failure   | Lightning           |
| Drought   | Severe Winter Storm |
| Earthquake  | Tornado             |
| <b>2</b> Flood (including flood after wildfire event) | <b>3</b> Wildfire   |
| <b>1</b> Hail   | Windstorm           |
| Landslide   |                     |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <b>1</b> Dam Failure                         | Lightning           |
| Drought                                      | Severe Winter Storm |
| <b>3</b> Earthquake                          | <b>2</b> Tornado    |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                     |
|---|---------------------|
| Dam Failure   | Lightning           |
| Drought   | Severe Winter Storm |
| <b>2</b> Earthquake                                   | <b>3</b> Tornado    |
| <b>1</b> Flood (including flood after wildfire event) | Wildfire            |
| Hail  | Windstorm           |
| Landslide   |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                              |
|--|------------------------------|
| Dam Failure                                  | <b>1</b> Lightning           |
| <b>2</b> Drought                             | <b>3</b> Severe Winter Storm |
| Earthquake                                   | Tornado                      |
| Flood (including flood after wildfire event) | Wildfire                     |
| Hail   | Windstorm                    |
| Landslide                                    |                              |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- ① Infectious Disease
- ③ Industrial accidents involving transportation
- ② Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- ② Hazardous materials release-chemical-biological
- ① Radiological contamination
- ③ Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- ① Infectious Disease
- ② Industrial accidents involving transportation
- ④ Railroad accident
- ② Hazardous materials release-chemical-biological
- ③ Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- ② Industrial accidents involving transportation
- ③ Railroad accident
- ④ Hazardous materials release-chemical-biological
- Radiological contamination
- ① Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the ***intentional use of Weapons of Mass Destruction.***

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- ① Cyberterrorism
- ③ Explosive bomb
- Nuclear event
- ② Radiological contamination

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- ① Armed attacks
- ③ Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- ② Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- Armed attacks
- ① Biological release
- ② Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- ③ Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- ① Armed attacks
- Biological release
- Chemical release
- ③ Cyberterrorism
- ② Explosive bomb
- Nuclear event
- Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- ① Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Tim Stoecklein

Organization: University of Colorado Colorado Springs

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |  |                            |
|--|----------------------------|
| Dam Failure                                  | <u>Lightning</u>           |
| Drought                                      | <u>Severe Winter Storm</u> |
| Earthquake                                   | Tornado                    |
| Flood (including flood after wildfire event) | Wildfire                   |
| <u>Hail</u>                                  | Windstorm                  |
| Landslide                                    |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                            |
|---|----------------------------|
| <u>Dam Failure</u>                                  | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | Wildfire                   |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |



**HUMAN CAUSED HAZARDS**

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- Cyberterrorism
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- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
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- Chemical release
- Cyberterrorism
- Explosive bomb
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Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Gordon Brenner

Organization: Colorado Springs OEM

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |  |                            |
|--|----------------------------|
| Dam Failure                                  | Lightning                  |
| <u>Drought</u>                               | <u>Severe Winter Storm</u> |
| Earthquake                                   | Tornado                    |
| Flood (including flood after wildfire event) | Wildfire                   |
| Hail   | <u>Windstorm</u>           |
| Landslide                                    |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                            |
|--|----------------------------|
| <u>Dam Failure</u>                           | Lightning                  |
| Drought                                      | <u>Severe Winter Storm</u> |
| Earthquake                                   | <u>Tornado</u>             |
| Flood (including flood after wildfire event) | Wildfire                   |
| Hail   | Windstorm                  |
| Landslide                                    |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | <u>Windstorm</u>    |
| Landslide                                    |                     |



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- Railroad accident
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- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- 1 Armed attacks
- Biological release
- 4 Chemical release
- 2 Cyberterrorism
- 3 Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- |                    |                            |
|--------------------|----------------------------|
| Armed attacks      | Explosive bomb             |
| Biological release | Nuclear event              |
| Chemical release   | Radiological contamination |
| Cyberterrorism     |                            |

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- |                    |                            |
|--------------------|----------------------------|
| Armed attacks      | Explosive bomb             |
| Biological release | Nuclear event              |
| Chemical release   | Radiological contamination |
| Cyberterrorism     |                            |

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

1. Naturally occurring hazard
2. Accidental, human caused incident
10. Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Brian Grady

Organization: Academy District 20

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |  |                            |
|--|----------------------------|
| Dam Failure                                  | <u>Lightning</u>           |
| Drought                                      | <u>Severe Winter Storm</u> |
| Earthquake                                   | Tornado                    |
| Flood (including flood after wildfire event) | Wildfire                   |
| <u>Hail</u>                                  | Windstorm                  |
| Landslide                                    |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                            |
|--|----------------------------|
| <u>Dam Failure</u>                           | Lightning                  |
| Drought                                      | <u>Severe Winter Storm</u> |
| Earthquake                                   | Tornado                    |
| Flood (including flood after wildfire event) | <u>Wildfire</u>            |
| Hail   | Windstorm                  |
| Landslide                                    |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | <u>Windstorm</u>    |
| <u>Landslide</u>                             |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: MSU

Organization: IT-GIS

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| <u>Drought</u>                                      | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood</u> (including flood after wildfire event) | Wildfire                   |
| <u>Hail</u>   | Windstorm                  |
| Landslide   |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |   |                     |
|---|---------------------|
| <u>Dam Failure</u>                                  | Lightning           |
| Drought   | Severe Winter Storm |
| Earthquake  | Tornado             |
| <u>Flood</u> (including flood after wildfire event) | <u>Wildfire</u>     |
| Hail  | Windstorm           |
| Landslide   |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                            |
|--|----------------------------|
| Dam Failure                                  | Lightning                  |
| <u>Drought</u>                               | <u>Severe Winter Storm</u> |
| Earthquake                                   | Tornado                    |
| Flood (including flood after wildfire event) | Wildfire                   |
| <u>Hail</u>                                  | Windstorm                  |
| Landslide                                    |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |   |                     |
|---|---------------------|
| Dam Failure   | Lightning           |
| Drought   | Severe Winter Storm |
| Earthquake  | <u>Tornado</u>      |
| <u>Flood</u> (including flood after wildfire event) | Wildfire            |
| Hail  | Windstorm           |
| <u>Landslide</u>                                    |                     |



**HUMAN CAUSED HAZARDS**

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Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Explosive bomb
- ~~Biological release~~
- ~~Chemical release~~
- ~~Cyberterrorism~~
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- ~~Armed attacks~~
- ~~Biological release~~
- ~~Chemical release~~
- ~~Cyberterrorism~~
- Explosive bomb
- ~~Nuclear event~~
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: DAVID KOMONASON

Organization: CSPD

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                     |
|---|---------------------|
| Dam Failure   | Lightning           |
| Drought   | Severe Winter Storm |
| Earthquake  | Tornado             |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>     |
| <u>Hail</u>   | Windstorm           |
| Landslide   |                     |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                            |
|--|----------------------------|
| <u>Dam Failure</u>                           | Lightning                  |
| Drought                                      | <u>Severe Winter Storm</u> |
| <u>Earthquake</u>                            | Tornado                    |
| Flood (including flood after wildfire event) | Wildfire                   |
| Hail   | Windstorm                  |
| Landslide                                    |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| <u>Hail</u>                                  | Windstorm           |
| <u>Landslide</u>                             |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Tobi Blanchard

Organization: CSOEM

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                     |                            |
|---|---------------------|----------------------------|
| Dam Failure   | <u>Lightning</u>    | <i>Severe Thunderstorm</i> |
| Drought   | Severe Winter Storm |                            |
| Earthquake  | <u>Tornado</u>      |                            |
| <u>Flood</u> (including flood after wildfire event) | <u>Wildfire</u>     |                            |
| Hail  | Windstorm           |                            |
| Landslide   |                     |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | <u>Windstorm</u>    |
| <u>Landslide</u>                             |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- |   |   |
|---|---|
| Infectious Disease <i>depend on fatality rate</i> | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation     | Radiological contamination                      |
| Railroad accident                                 | Explosion                                       |

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- |                    |                            |
|--------------------|----------------------------|
| Armed attacks      | Explosive bomb             |
| Biological release | Nuclear event              |
| Chemical release   | Radiological contamination |
| Cyberterrorism     |                            |

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- |                    |                            |
|--------------------|----------------------------|
| Armed attacks      | Explosive bomb             |
| Biological release | Nuclear event              |
| Chemical release   | Radiological contamination |
| Cyberterrorism     |                            |



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: JEFF FORCE

Organization: MEMORIAL HOSP. / UC HEALTH

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |  |                            |
|--|----------------------------|
| Dam Failure                                  | Lightning                  |
| Drought                                      | <u>Severe Winter Storm</u> |
| Earthquake                                   | Tornado                    |
| Flood (including flood after wildfire event) | <u>Wildfire</u>            |
| <u>Hail</u>                                  | Windstorm                  |
| Landslide                                    |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | <u>Lightning</u>    |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
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- Radiological contamination
- Explosion

**TERRORISM**

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- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

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- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
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Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: R.C. Smith

Organization: El Paso County Office of Emergency Management

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |



**HUMAN CAUSED HAZARDS**

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- Railroad accident
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- Radiological contamination
- Explosion

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- Railroad accident
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- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

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- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

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- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- |                           |                            |
|---------------------------|----------------------------|
| Armed attacks             | Explosive bomb             |
| <u>Biological release</u> | <u>Nuclear event</u>       |
| Chemical release          | Radiological contamination |
| <u>Cyberterrorism</u>     |                            |

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- |                         |                            |
|-------------------------|----------------------------|
| <u>Armed attacks</u>    | <u>Explosive bomb</u>      |
| Biological release      | Nuclear event              |
| <u>Chemical release</u> | Radiological contamination |
| Cyberterrorism          |                            |

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: NANCY BRACKEN

Organization: CO SCR VOAD - CH BFT Co Founder

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood</u> (including flood after wildfire event) | Wildfire                   |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u> ?                           |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | <u>Wildfire</u>     |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | <u>Windstorm</u>    |
| Landslide                                    |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Dave Poeger

Organization: Red Cross

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |



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Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- |                    |                            |
|--------------------|----------------------------|
| Armed attacks      | Explosive bomb             |
| Biological release | Nuclear event              |
| Chemical release   | Radiological contamination |
| Cyberterrorism     |                            |

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- |                    |                            |
|--------------------|----------------------------|
| Armed attacks      | Explosive bomb             |
| Biological release | Nuclear event              |
| Chemical release   | Radiological contamination |
| Cyberterrorism     |                            |



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Brigitte French

Organization: Penrose - St. Francis Health Services

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| <u>Earthquake</u>                                   | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| <u>Earthquake</u>                                   | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | <u>Lightning</u>    |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| <u>Hail</u>                                  | Windstorm           |
| Landslide                                    |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- |   |   |
|---|---|
| Infectious Disease                            | Hazardous materials release-chemical-biological |
| Industrial accidents involving transportation | Radiological contamination                      |
| Railroad accident                             | Explosion                                       |

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- |                    |                            |
|--------------------|----------------------------|
| Armed attacks      | Explosive bomb             |
| Biological release | Nuclear event              |
| Chemical release   | Radiological contamination |
| Cyberterrorism     |                            |

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- |                    |                            |
|--------------------|----------------------------|
| Armed attacks      | Explosive bomb             |
| Biological release | Nuclear event              |
| Chemical release   | Radiological contamination |
| Cyberterrorism     |                            |



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?

For Human-Caused hazards - we had to pick top 4 most & least likely - but there we only 6 options - what are you going to do with the overlap?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: David Stanton

Organization: Red Cross

**NATURAL HAZARDS**

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Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| <u>Dam Failure</u>                                  | <u>Lightning</u>           |
| <u>Drought</u>                                      | <u>Severe Winter Storm</u> |
| <u>Earthquake</u>                                   | <u>Tornado</u>             |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| <u>Hail</u>   | <u>Windstorm</u>           |
| <u>Landslide</u>                                    |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| <u>Dam Failure</u>                                  | <u>Lightning</u>           |
| <u>Drought</u>                                      | <u>Severe Winter Storm</u> |
| <u>Earthquake</u>                                   | <u>Tornado</u>             |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| <u>Hail</u>   | <u>Windstorm</u>           |
| <u>Landslide</u>                                    |                            |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |   |                            |
|---|----------------------------|
| <u>Dam Failure</u>                                  | <u>Lightning</u>           |
| <u>Drought</u>                                      | <u>Severe Winter Storm</u> |
| <u>Earthquake</u>                                   | <u>Tornado</u>             |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| <u>Hail</u>   | <u>Windstorm</u>           |
| <u>Landslide</u>                                    |                            |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |   |                            |
|---|----------------------------|
| <u>Dam Failure</u>                                  | <u>Lightning</u>           |
| <u>Drought</u>                                      | <u>Severe Winter Storm</u> |
| <u>Earthquake</u>                                   | <u>Tornado</u>             |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| <u>Hail</u>   | <u>Windstorm</u>           |
| <u>Landslide</u>                                    |                            |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Anthony Sevey

Organization: FT Carson OEM

**NATURAL HAZARDS**

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Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                     |
|---|---------------------|
| Dam Failure   | <u>Lightning</u>    |
| Drought   | Severe Winter Storm |
| Earthquake  | Tornado             |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>     |
| Hail  | Windstorm           |
| Landslide   |                     |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | <u>Windstorm</u>    |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | <u>Windstorm</u>    |
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Biological release

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Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: Bart Evans

Organization: EPC OEM

**NATURAL HAZARDS**

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Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| <u>Earthquake</u>                                   | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| <u>Landslide</u>                             |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | <u>Wildfire</u>     |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
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- Explosion

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- Explosion

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- Explosion

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- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: BART HOWARD

Organization: COS OEM

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood (including flood after wildfire event)</u> | <u>Wildfire</u>            |
| Hail  | Windstorm                  |
| Landslide   |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                     |
|--|---------------------|
| <u>Dam Failure</u>                           | Lightning           |
| <u>Drought</u>                               | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | <u>Wildfire</u>     |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| <u>Drought</u>                               | Severe Winter Storm |
| Earthquake                                   | Tornado             |
| Flood (including flood after wildfire event) | <del>Wildfire</del> |
| Hail   | <u>Windstorm</u>    |
| Landslide                                    |                     |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

For the purpose of this survey, terrorism is defined as the **intentional use of Weapons of Mass Destruction**.

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism

- Explosive bomb
- Nuclear event
- Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

- Naturally occurring hazard
- Accidental, human caused incident
- Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan (PDMP) Revision  
Baseline Survey

Name: RAYMOND DUNN

Organization: FOR CARLSON

**NATURAL HAZARDS**

Natural hazards are **naturally occurring events** that will have an effect on people or the environment.

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

- |   |                            |
|---|----------------------------|
| Dam Failure   | Lightning                  |
| Drought   | <u>Severe Winter Storm</u> |
| Earthquake  | Tornado                    |
| <u>Flood</u> (including flood after wildfire event) | <u>Wildfire</u>            |
| <u>Hail</u>   | Windstorm                  |
| Landslide   |                            |

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | Lightning           |
| Drought                                      | Severe Winter Storm |
| <u>Earthquake</u>                            | Tornado             |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | <u>Windstorm</u>    |
| Landslide                                    |                     |

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

- |  |                     |
|--|---------------------|
| Dam Failure                                  | <u>Lightning</u>    |
| Drought                                      | Severe Winter Storm |
| Earthquake                                   | <u>Tornado</u>      |
| Flood (including flood after wildfire event) | Wildfire            |
| Hail   | Windstorm           |
| Landslide                                    |                     |

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

- |  |                            |
|--|----------------------------|
| Dam Failure                                  | <u>Lightning</u>           |
| Drought                                      | <u>Severe Winter Storm</u> |
| Earthquake                                   | Tornado                    |
| Flood (including flood after wildfire event) | Wildfire                   |
| Hail   | <u>Windstorm</u>           |
| Landslide                                    |                            |



**HUMAN CAUSED HAZARDS**

Human caused hazards are distinct from natural hazards and terrorism in that they originate from human activities that are not intentional. Human caused hazards are accidental, negligent, or the result of an error.

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- Radiological contamination
- Explosion

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- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

- Infectious Disease
- Industrial accidents involving transportation
- Railroad accident
- Hazardous materials release-chemical-biological
- Radiological contamination
- Explosion

**TERRORISM**

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- Armed attacks
- Biological release
- Chemical release
- Cyberterrorism
- Explosive bomb
- Nuclear event
- Radiological contamination



Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

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Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks

Biological release

Chemical release

Cyberterrorism

Explosive bomb

Nuclear event

Radiological contamination

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard

Accidental, human caused incident

Act of Terrorism

Q15. Comments?



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: JEFF FORCE

Organization: MEMORIAL HOSP. / UCHHEALTH

Q1. What is your current role and responsibility in your organization?

DIRECTOR OF EMERGENCY MEDICAL SERVICES, WORK IN TANDEM & WITH CIVIL COURTS, OUR EMERGENCY MGMT OFFICER.

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

RESPONSIBLE FOR PROVIDING SUPPORT & RESOURCES TO THE EMS & FIRE AGENCIES IN OUR REGION. RESPONSIBLE TO ACT AS THE LIAISON BETWEEN OUR STAFF & EMERGENCY SERVICES PERSONNEL IN THE COMMUNITY

Q3. What is your experience with mitigating hazards or managing a disaster?

- BEEN INVOLVED IN EMERGENCY SERVICES FOR ABOUT 30 YRS IN FIELD, EDUCATION, & LEADERSHIP ROLTS.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

- FOR ME THE MOST LIKELY, & MOST ~~IMMEDIATE~~ <sup>BOUNDSOME</sup> IN TERMS OF MODERNIZING MISSION RESPONSE PLANS WOULD BE MAJOR SNOW STORMS

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

- GREATEST RISK IN TERMS OF NATURAL HAZARDS INVOLVED WOULD BE TERRORIST ACTS AGAINST OUR MEDICAL ESTABLISHMENTS IN THE REGION



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

- ATTACKS AGAINST OUR MILITARY BASES/POSS

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

- WATER SUPPLY  
- DEFICIENT KNOWLEDGE BUT IT SEEMS TO ME THAT H<sub>2</sub>O IS VULNERABLE BECAUSE VENTIL FOR LIFE & CRITICAL TO ACCESS & COMMUNICATE

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

- INTERAGENCY COOPERATION  
- NEED TO TOLERANCE FOR ECOS

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

- INTERAGENCY COOPERATION  
- NEED TO TOLERANCE FOR ECOS

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

- IMPROVE INTERAGENCY COOPERATION  
- I KNOW, BROKEN RECORD BUT WE MUST IMPROVE TRUE COOPERATION, NOT ~~FORMAL~~ NEED NOT 'WE NEED TO BE BETT COOPERATION

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

UNK  
- NOT AS FAMILIAR AS AS & NEED TO BE



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: BART HOWARD

Organization: OEM

Q1. What is your current role and responsibility in your organization?

DEPUTY DIRECTOR - OEM

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

ADVISED TO POLICY GROUP - BUT NOT SME  
ON ENGINEERING. SME ON EM CYCLE PROCESS &  
EOC OPERATIONS.

Q3. What is your experience with mitigating hazards or managing a disaster?

- ANTI-TERRORISM TRAINING - MITIGATE HUMAN CAUSED
- MILITARY / HUMANITARIAN RELIEF.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

FLASH FLOOD, HAIL / STATISTICAL HISTORY

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

ACTIVE SHOOTER - HISTORICAL  
AURORA, COLUMBINE



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

INSIDE THREAT AT MILITARY BASE -  
DENSITY OF POPULATION - INSIDE  
THREAT IS MOST COMMON.

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

PERHAPS - CYBER VS CITY SYSTEMS THAT  
COULD SHUT DOWN / DEGRADE PUBLIC SAFETY.

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

MORE FINANCIAL BACKLOG - PLUG OF MITIGATION  
PROJECTS CAN BE FD'N - BUT NEED FUNDING.

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

COORDINATION BETWEEN GOVT AGENCIES BEFORE  
LARGE EVENTS. HANDS NOW BUT CAN ALWAYS BE  
EXPANDED - IMPROVED.

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

NOT ENOUGH DATA - PERHAPS CYBER ?

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

PREVIOUS FORMAT SEEMS TO BE  
WELL RECEIVED.



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Stephen Vigil

Organization: City of Col. Spgs, IT Dept - GIS

Q1. What is your current role and responsibility in your organization?

City GIS Supervisor - guide IT-GIS resources in meeting demands for GIS services & stay in alignment with City leadership objectives

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

The GIS group maintains the Wild Fire Mitigation application for City fire. The GIS group also supports the EOC in pre-planning, activation, or post analysis following floods or fire events

Q3. What is your experience with mitigating hazards or managing a disaster?

GIS support the Waldo & Black Forest fire events to the EOC / minor flooding events

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Wildfire of probably a distorted view based on the string of fires that have impacted our area - Haymen, Waldo, Black Forest recently

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Fire due to arsonist or careless smoker



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

Armed attack due to a great number of Government and military complexes in our area

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

power plant, reservoirs, military institutions i.e. AFA

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

public awareness and education - preparedness

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

public education about how their actions can cause or worsen a fire event

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

enhancing building codes could potentially reduce the risk ~~these~~ to damaged residential structures. regulating materials used for construction of dwelling units could also reduce the impact of a wildfire

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Nancy Bracken

Organization: CA CO SCR VOAD - BFT - Colorado

Q1. What is your current role and responsibility in your organization?

- Building the capacity for partnerships during disasters  
- Helping all 17 counties grow and be resilient during disasters  
- Building + procuring small organization to gain from larger EM organizations.

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

SCR VOAD: Learn to be resilient + build relationship with other partnership - Already - educate - accessible learning

BFT - Current DNR grant - in progress to have homeowners learn how to deal with fire through wildfire. those that can mitigate - education + Restoration of forest in long term

Q3. What is your experience with mitigating hazards or managing a disaster?

I have experienced 2 earthquakes. 1989 -

I worked Habitat for 6 weeks. Berkeley Hills Fire 3400 homes lost 40 people died

current many wildfires in CA. Berkeley Hills Fire 3400 homes lost 40 people died  
BFT. people needs to Restore + Recover. / Learn from the FIRE and put necessary actions in process to enroll the people to adhere to different practices.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Flooding - So many places for water to come from - mts - Rivers - Streams - Inadequate movement streams. Roads in disrepair. New development geographical + terrain inequities - New development did not adequately take into account changes across development areas - Not enough oversight from County City Govt.

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Follow up to repair is inadequate - Usually lack of \$\$\$ and late in making assessments.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

Biological } easy access & greater  
Chemical } demerit on damage - FAST,

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

Water sources -  
Aquifers - wells -

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

Mitigation of Trees + Shrubs etc.  
Clean up of trash areas. Roadways, potholes  
Build more access for water to flow -

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human-caused hazards and become resilient, what could be improved?

There are many updates with culverts being built that eliminates disaster - we saw this in BF from major road culvert - eliminated several floods this winter.

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

Enhance building codes -  
Stainless Steel Culverts / do away w/ plastic with new builds.

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

I will read the plan for next meeting.



Last 2 weeks of July  
may be problematic for re.  
August is better  
**AECOM**

## 2015 Colorado Springs Pre-Disaster Mitigation Plan Revision Detailed Survey

Name: Ryan Tefertiller

Organization: City of Colorado Springs Planning Dept.

Q1. What is your current role and responsibility in your organization?

Manager for 2 of 4 Divisions within the Dept → Land Use Review and the Development Review Enterprise. Both Divisions focus on the review and approval of development applications

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

Primary role w/ Disasters is recovery/rebuild not mitigation. However, I'm very involved with writing zoning codes → some of which could help mitigate disaster impacts.

Q3. What is your experience with mitigating hazards or managing a disaster?

I rewrote the city's Streamside Overlay zone that regulates development along creeks + streams (some of which is in floodplain). I also am responsible for implementation procedures (and possible future updates) for the city's Hillside Overlay zone → wildfire + landslide hazards are addressed.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective)

and why? Biggest risk is wildfire. SW Colorado Springs could be devastated by a Waldo Canyon type event.

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Hazardous materials on city road network → especially I-25 in and around urban core



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

# & prominence of military installations make Colorado Springs a high profile terrorist target. Chemical/biological/explosive threat at or around military bases is high

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

- Certain bridges on I-25 could have high impact
- Drake Power plant is critical

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

wildfire mitigation is SW Colorado Springs should be a priority

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

?

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

# Many mitigation efforts require funds. Local tax aversion makes funding scarce

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

? I haven't read/seen previous plan



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Jim Hammon

Organization: USAA

Q1. What is your current role and responsibility in your organization?

Site Director: Lead for business continuation, safety, Military Affairs, Community Affairs, Worker Compensation Security, Charitable contributions, etc

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

Lead for Business Continuation, planning exercises and execution.

Q3. What is your experience with mitigating hazards or managing a disaster?

Before retired from AF worked at US Northcom and now at USAA (past 6 yrs). Planned/executed two table top + two full scale exercises per year for entire campus population (1400+).

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Hail -- most likely  
Flood --  
Fire

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Risk of transportation accident of hazardous chemical from truck or rail.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

Cyber

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

COS Utilities. Power.

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

The roads!  
Drainage!

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

Linkage to US Northcom Comd Ctr.

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

Exercises

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

No



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Brian Kelley

Organization: Public Works, Colorado Springs

Q1. What is your current role and responsibility in your organization?

Engineering Manager of Asset Management, ROW Mgmt, & Standards

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

Additional duty: to participate/lead efforts for hazard mitigation plan for Public Works → hazards:  
- flooding  
- impacts to civil infrastructure

Q3. What is your experience with mitigating hazards or managing a disaster?

- Northcom/NARAD J42 staff for Disaster Response/Recovery
- Waldo Canyon post fire flood planning & response
- Sept 2013 Flooding response with the FEMA Assistance

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Stormwater conveyance systems and bridges  
→ due to insufficient, vulnerable, and <sup>compromised</sup> ~~at risk~~ infrastructure

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Transportation Networks  
→ Areas of City will be shut down ∴ therefore stressing the transportation network, by ~~and~~ reducing available roadway and in creating route times



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

Transportation Networks & Public Utilities  
→ a single closed location on the interstate (e.g. - bridge collapse) or interrupted utility seriously degrades commercial transit/puts us on heels

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

→ Power (Electric) is the most vulnerable due to EMP, severed mains, power grid destruction, source destruction

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

these are not my expertise {  
- Power redundancy and networks for backup  
- Power generation facilities in grids  
- Improve transportation grid for secondary + tertiary truck/high volume  
- Replace aging infrastructure w/ resilient designs routes in + around City

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

- Improving the transportation grid for secondary + tertiary routes should the primary routes be shut down  
- Monitoring systems + staff/equipment to quickly address hazards

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.  
I'm not familiar with it



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: KEV HUGHLETT

Organization: CS UTILITIES

Q1. What is your current role and responsibility in your organization?

EMERGENCY MANAGEMENT

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

PLANNING FOR RECOGNIZED HAZARDS  
MANAGING CRISIS MANAGEMENT TEAM

Q3. What is your experience with mitigating hazards or managing a disaster?

14 YEARS IN CITY - 2YR SAFETY, 8YR EMS/FD, 4YR OEM  
1 YEAR UTILITIES EM

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

WILDFIRE, WUI

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

TERRORISM SHOOTER, TOO MANY LOCATIONS DISARMING PATRONS ALLOWING CRIMINAL A FREE KILL ZONE

CYBER VERY VULNERABLE



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

SEE SHOOTER

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

POWER DISTRIBUTION AND WATER DISTRIBUTION -

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

MORE FUNDING

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

INCREASED SECURITY AT CRITICAL LOCATIONS

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

CONTINUE TO IMPROVE WUI FIRE CODES (NO DFM IN MEETING), PROTECT CRITICAL INFRASTRUCTURE - ELECTRIC/WATER

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

NONE



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Enkwabiri P

Organization: 721 ces/cex cmas

Q1. What is your current role and responsibility in your organization?

emergency manager, plan coop, eoc manager, liaison to outside agencies, exercise planning/evaluating, trainer

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)? opr for multi hazard plans, training objectives.

Q3. What is your experience with mitigating hazards or managing a disaster?

2013 landslide at cmas 7 day eoc activation. various training and exercise multiagency. submitting projects, defining scope to mitigate risk or accept it.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

severe winter storm, economic loss of business productivity, damage to property, loss of life from weather conditions, high frequency, impact varied.

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

armed attack, ie active shooter, low cost, simple to accomplish, many targets. If attackers followed Kenya, Nairobi malls or Mumbai india, ~~or~~ methods. moved from location to location mass casualties hard to stop.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why? *see question 5. what classifies active shooters as terrorism seems political in nature based on where it occurs and who implemented it.*

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

*Public spaces that are gun free zones. CSU has very diverse multipath infrastructure that's made and used inside the city. very little high impact/long term repair to their nodes.*

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

*Communicating the danger and cost to the public. great example is storm water issues. twice attempted funding failed because of lack of understanding to public. If you quantify your flood damage, then follow up with PR/news on successful mitigation.*

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

*training and outreach. largest human caused is accident with hazmat being the potential highest cost in damage and dollars.*

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

*focus on wildland urban interface. grant program replace shake roofs, combustable siding. as sits now they can't replace with those but many leave as is. highest risk in state*

Q11. Is there anything about the previous plan format that you would like to see changed for wild fire, either city/country's last improved. *Plan.*

*More detail on human caused hazards*



I'm pretty darn available  
end of Jul/early Aug **AECOM**

**2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey**

Name: Brigitte French

Organization: Penrose - St. Francis Health Services

Q1. What is your current role and responsibility in your organization?

Emergency Preparedness Manager  
- maintain EOP & HVA; ensure hospitals are w/in Joint  
Commission Stds; run Hazardous Materials Program

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

I get our leadership educated & prepared to respond - make sure all areas have appropriate training, plans updated, Mous in place, supplies

Q3. What is your experience with mitigating hazards or managing a disaster?

Managing disaster - Public Health Emergency Officer  
@ AF Academy for H1N1 outbreak, (local) Norovirus  
outbreak, Waldo Canyon & Black Forest fires - EOC member

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Fire - Colorado Springs is typically a dry/arid  
place - we can mitigate but we can stop  
people (smokers, campers) from being stupid...  
especially in high winds

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Cyberterrorism - one person (or a group) could  
hijack personal information, shut down  
city systems, wreck havoc on one (or more)  
of the 5 military bases in the area -



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

See Q5

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

Utilities - take out power and water and you cripple the entire community... probably power the most vulnerable

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

Communication with the community - let the people know the steps they can take to protect themselves, their families & neighbors

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

Education about safeguarding personal information & training on awareness

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

Talk to the people - TV commercial, Emergency Preparedness Night @ Sky Sox game, going to city meetings, churches, schools... get it out there

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

I haven't seen/used the previous plan



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Brian Grady

Organization: Academy District 20

Q1. What is your current role and responsibility in your organization?

Executive Director for Security & Transportation.  
Responsible for all Security and Transportation matters. Responsible for emergency management plans & exercises.

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

Would be part of the Emergency Management Team. I ensure that school practice emergency drills, (Fire, Lockdown, severe weather, evacuation, etc). Responsible for assessing threats to students & staff.

Q3. What is your experience with mitigating hazards or managing a disaster?

I worked during the Black Forest fire and was part of the recovery plan for affected families & schools.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

~~Water~~ Lightning because of the unpredictability of a lightning strike.

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Active shooter in a school. There have been multiple school shootings each year and we must be prepared to mitigate them.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

Cyber terrorism - Ransomware and attacks on computer systems can disrupt operations and cause power failures, malfunction of traffic signals etc.

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

Water resources are most vulnerable. Most water sources are accessible for contamination.

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

Need air support for wild land fires to be immediately dispatched to knock out a fire before it becomes a larger disaster

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

Better information sharing of intelligence and risks.

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

Require <sup>fire</sup> sprinkler systems for high occupancy buildings.

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

N/A.



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Gordon Brenner

Organization: Colorado Springs OEM

Q1. What is your current role and responsibility in your organization?

1. Recovery coordinator for Waldo Canyon Fire, 2013 rains (July-Sept)

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

Assemble data vis-a-vis recovery operations including installation of mitigation structures, and helping to explain the outcomes of the mitigation.  
Build collaborative relationships with all recovery stakeholders, and seek new members to participate.

Q3. What is your experience with mitigating hazards or managing a disaster?

Mitigation: Participate in discussions with engineers, natural resources professional and others to determine how to prepare the community for and against mainly natural disasters.  
During a disaster, I am a member of the city of Colorado Springs' EOC staff. I have been the embedded liaison at the El Paso County EOC during Black Forest Fire and 2013 Floods. I am also the EOC liaison with the various support agencies.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Complacency. We all rely on the media to tell us what to fear or prepare for. If we aren't reading about it in the media, we lose interest.

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Criminal activity in the form of "terrorism." Again, if the media brand something as "terrorism," people react; conversely, if it's labeled "criminal," people go about their daily business.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

A symbolic attack on a public event or one of our five military bases. The attack doesn't have to cause widespread casualties or damage; it only has to demonstrate that it can happen.

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

I am not comfortable answering this question.

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

We've spent tens of millions of dollars in federal, state, and local money on hazard mitigation. We prioritize based on life safety and property protection. We gotta keep doing what we're doing.

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

Continue to fund law enforcement.

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

I would like to know what's recommended... this is one of my blind spots!

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

I have no comment.



**2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey**

Name: Tom MAGNUSON

Organization: NATIONAL WEATHER SERVICE

Q1. What is your current role and responsibility in your organization?

LIAISON BETWEEN NWS AND  
CORE PARTNERS; EMS, BROADCAST MEDIA,  
ELECTED OFFICIALS,

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

MITIGATION CONSISTS OF EDUCATIONAL OUTREACH/  
PREPAREDNESS FOR HAZARDOUS WEATHER EPISODES  
SO PEOPLE STAY SAFE

Q3. What is your experience with mitigating hazards or managing a disaster?

35 YRS. OF PREPAREDNESS EDUCATION

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

LIGHTNING, MORE PEOPLE HAVE BEEN KILLED  
AND INJURED, BY FAR, THAN ANY OTHER NATURAL  
PHENOMENON (BESIDES SNOW AND TRAFFIC ACCIDENTS)

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

ARMED ATTACKS. STATS



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

ARMED ATTACK. AVAILABILITY OF FIREARMS

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

POWER. JUST A GUESS. GO TO UTILITIES  
PEOPLE FOR MORE KNOW HOW

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

FIREWISE PROGRAM

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

NOT MY AREA OF EXPERTISE

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

NOT MY AREA OF EXPERTISE

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

NOT MY AREA OF EXPERTISE. I'LL LEAVE  
THAT FOR EMERGENCY MGMT



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Michael J. J. J.

Organization: FEDEX

Q1. What is your current role and responsibility in your organization?

Senior Manager Express operations COSA / PUBA

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

None specific. However Wado taught us the need for planning. Once our operation was evacuated shipments ranging from medical, payroll, food and contractual stopped

Q3. What is your experience with mitigating hazards or managing a disaster?

Wado Fire all operations ceased, emergency operations established (Airport) to ensure movement of 1000's of medical shipments, both inbound and outbound.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Transportation of goods and services are critical during and after an event. Using just one customer / one example OS market moves estimated 7000 "life emergency" shipments both in and out of our community.

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Greatest as I see it Grid failure, and recovery. There is little recovery on a national level and panic would be imminent with in days.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

EMP or Cyber terrorist.

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

Power, and electronics biggest threat followed closely by fuel delivery

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

Flooding + fire mitigation offer the most opportunity to improve. Slow the water, trim the bushes.

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

Stringent Building codes in the face of inevitable disaster (I.E. Star Ranch Rd, Perigun<sup>(?)</sup>)

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

Building materials to code, public education to prepare.

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

Not familiar with previous plan.

As FedEx Representative: Waldo taught us much. I am certain the magnitude of what we went through never had been considered nor since discussed. Ah, but for the Mayor's card \*  
\* STORY FOR BENEFIT OF DAY!



**2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey**

Name: Bart Evans

Organization: EPC OEM

Q1. What is your current role and responsibility in your organization?

planner - write and test plans  
coordinate EOC functionality

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

education on various plans covering most disasters

Q3. What is your experience with mitigating hazards or managing a disaster?

very little

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

infrastructure - damage to that and the city fails to operate.

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Same as above.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

Military bases - just seems to be the likely target.

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

Hospitals - not much in way of security  
Colorado Springs Utilities

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

Hard to say - a lot of work has been completed with drainage basins and planting of vegetation - hasn't been completely tested to know if more should be done.

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

The presence of the military and law enforcement acts as a deterrent.

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

Not sure

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

no



\* First two weeks of July will likely not work



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Tim Stoecklein

Organization: Univ. of Colorado Colorado Springs

Q1. What is your current role and responsibility in your organization?

Program Director of Emergency Mgmt. - Planning, training, and exercise/evaluation for all-hazards; Community Outreach + education

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

- Risk + Vulnerability assessment for campus properties + Community
- Coordination of projects for mitigation

Q3. What is your experience with mitigating hazards or managing a disaster?

- Minimal disaster mgmt.
- Hazard mitigation is mostly focused of assessments + planning for natural hazards + Some man-middle/terrorism

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

- Transportation Infrastructure - Closures of I-25, railways, and even state highways have a significant impact

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

- Railway / transportation - Difficult to secure



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

- Military installations + ~~transportation~~ utilities infrastructure

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

- I believe power is most vulnerable, not enough redundancy, or ability to sector off affected areas

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

- Storm water system  
-

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

- Increased interoperability and collaboration in training and response

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

- Continued wildfire + flood mitigation efforts  
- Building codes + land use requirements along the WUI

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Anthony Sevelly

Organization: FT Carson AEM

Q1. What is your current role and responsibility in your organization?

- EM responsible for EM planning, exercises.

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

- I pull SME together to provide input for developing Plans/Policies which lead to identification of hazards and help develop exercise planning cycle.

Q3. What is your experience with mitigating hazards or managing a disaster?

EM, for entire Garrison, - working EM for 8 years and hazard planning for 15 years.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Flood, Fire, Ft. Carson is down from burn scars all the debris, ends up flowing through the installation. Mitigation, conservation projects -

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Low wild. type event. Terrorism is on the rise. Violent crime, active shooter type events could devastate the city financially.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why? *explosive device, Active shooter previous?*

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

*Electrical Grid. I believe Utilities should be given more consideration for possible attack.*

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved? - *Owner / - Personal property preventative measure through low-interest loans, \$50 homeowners can take preventative measure to mitigate effects of flooding / ~~land~~ <sup>Tuge</sup> clearing ~~at~~ where over growth has occurred*

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved? - *Education programs, L/E Law Enforcement / neighborhood watch etc.*

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction? - *Review flood plain. Do not allow*

*construction projects in flood zones. If a flood does occur or is likely to occur again, do not allow reconstruction in such areas.*

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved. - *I believe the broad is fine adding the human-caused threats will help tremendously*



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Ray Dunn

Organization: Fort Carson

Q1. What is your current role and responsibility in your organization?

FORCE PROTECTION (EM & ANTITERRORISM)

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

PLANNING (MITIGATION)  
EXERCISE PLAN / DESIGN  
VULNERABILITY / CAPABILITY ASSESSMENTS

WILD LAND FIRE  
ACTIVE SHOOTER  
WIND  
SEVERE WEATHER (WINTER)  
TERRORISM

Q3. What is your experience with mitigating hazards or managing a disaster?

- RESOURCE UNIT LDR FOR THE FORT CARSON IMT3,
- ATTENDED DEF. THREAT REDUCTION AGENCY WEAPONS OF MASS DESTRUCTION COMMAND, CONTROL, COMMUNICATIONS COURSE (WMDC<sup>3</sup>)
- LEVEL II ANTITERRORISM OFFICER

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

- LOSS DAMAGE DUE TO SEVERE WEATHER ie. FLOOD
- HISTORICAL DATA

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

- LOSS / DESTRUCTION (FEAR) CAUSED BY TERRORIST ACTIVITY
- LOSS OF FREEDOMS DUE TO LAWS PASSED TO MITIGATE TERRORISM (PATRIOT ACT, FOREIGN INTELLIGENCE SURVEILLANCE ACT, ETC.)



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

- **FEAR**, DEATH, LOSS OF PROPERTY. COLORADO HAS A PRESENCE OF TERRORIST ORGANIZATIONS, TO INCLUDE PASSIVE SUPPORTERS.
- NOT RECOGNIZING & ADDRESSING THREATS, PRIMARILY POLITICAL/RADICAL ISLAM.

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

- UTILITIES & HOSPITALS.
- LOCATIONS/EASE OF ACCESS

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

- PLANNING (CAN NEVER REACH A STATE WHERE PLANNING CANNOT BE IMPROVED)
- COMMUNITY INVOLVEMENT

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

NO COMMENT

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

- CURRENT TECHNOLOGY GAPS SUCH AS SCADA SYSTEMS.
- USE OF BUILDING CODES THAT SUPPORT THE UFC (UNIFIED FACILITY <sup>CRITERIA</sup> ~~CODES~~)

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

N/A



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Debbie Griffin-Strickland

Organization: Colo Sprgs Utilities

Q1. What is your current role and responsibility in your organization?

Grant Coordinator - Oversight for grants & front end FEMA involvement for Damage Assessments during disasters.

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

None - Find Funding Sources

Q3. What is your experience with mitigating hazards or managing a disaster?

Front end as mentioned in #1. Tracking & amount of loss. Working with State on Process improvements for FEMA. Obtain grant funding.

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Loss of drinking water if raw water pipes are damaged.  
Fire to power plants loss of power producing capacity.

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

Terrorism - Blow up Utilities.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

Damage Utility infrastructure. City relies on local utility co. affecting hospitals, military, city etc.

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

Water as I mentioned before.

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

Bridge over I-24 for traffic water to flow down existing highway. Elevated road Rampart Range Rd to run parallel to I-24. Be<sup>a</sup> maintained highway's

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

Unsure.

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

Unsure

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

NA



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: David Stanton

Organization: Red Cross

Q1. What is your current role and responsibility in your organization?

Government Liaison - interface w/ ~~the~~ gov't org's

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

Provide shelter in the event of a disaster  
aid in immediate recovery efforts (distribute clean-up kits following a flood)

Q3. What is your experience with mitigating hazards or managing a disaster?

none

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

property destruction - we face a lot of different hazards that affect property

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

something that would affect the population, but not property, like a chemical spill



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

*an attack on one of the military bases - we have so many bases*

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

*sources of drinking water*

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

*flood mitigation*

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

*increase the number of first responders*

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

*Educating the public*

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

*N/A*



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Dave Poage

Organization: Red Cross

Q1. What is your current role and responsibility in your organization?

Red Cross government liaison (volunteer)

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)?

personally, none  
Red Cross does education and disaster response/recovery.

Q3. What is your experience with mitigating hazards or managing a disaster?

Extensive in role as former military officer

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why?

Flood, due to scale/scope

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why?

(I-25 transportation)  
Second order effect on critical logistics if I-25 suffers extended closure.



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

Ft Carson, it will be a military target

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

probably power production during extreme cold wx

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

drainage and storm water

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

an I-25 loop to flow "through traffic" east of the city

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

long term re-design of traffic flow and stormwater runoff

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

—



2015 Colorado Springs Pre-Disaster Mitigation Plan Revision  
Detailed Survey

Name: Keith Curtis

Organization: PPRBD

Q1. What is your current role and responsibility in your organization?

Floodplain Adm. Administer Floodplain Code

Q2. What are your responsibilities related to managing/mitigating hazards or disasters (specify the hazards)? Permitting new construction compliance

Q3. What is your experience with mitigating hazards or managing a disaster?

NA

Q4. What is at greatest risk from natural hazards in Colorado Springs (from your perspective) and why? Fire/Flooding

Q5. What is at greatest risk from human caused hazards in Colorado Springs (from your perspective) and why? Chemical Spill



Q6. What is at greatest risk from terrorism in Colorado Springs (from your perspective) and why?

*NOT Sure Noted? USAF Strike*

Q7. Which key community resources/facilities do you think are most vulnerable and why? Is there one particular utility (e.g., water, power) that serves the entire, or most of, the community that is most vulnerable??

*NOT Sure*

Q8. In considering the capability of Colorado Springs to mitigate natural hazards and become resilient, what could be improved?

*Drainage/Infrastructure*

Q9. In considering the capability of Colorado Springs to prevent, deter, and/or mitigate human caused hazards and become resilient, what could be improved?

Q10. What high level mitigation actions or strategies (e.g., protect critical infrastructure, enhance building codes) can help improve capability? What other high level mitigation actions or strategies are critical to risk reduction?

*Acquisition/Relocation of  
Redundant Loss Properties*

Q11. Is there anything about the previous plan format that you would like to see changed because it didn't work well? If yes, please specify what could be changed and how it could be improved.

*NO*

# Colorado Springs Pre-Disaster Mitigation Plan Revision

Kickoff Meeting Baseline Survey Results

Tuesday, May 12, 2015

Total Surveys Completed: 25

**Count    Percent Response**

## NATURAL HAZARDS

Q1. Circle three natural hazards that you believe are **MOST LIKELY** to occur in Colorado Springs.

Flood (including flood after wildfire event)	17	68%
Severe Winter Storm	16	64%
Hail	15	60%
Wildfire	15	60%
Lightning	7	28%
Drought	5	20%
Landslide	2	8%
Windstorm	2	8%
Tornado	1	4%
Dam Failure	0	0%
Earthquake	0	0%

Q2. Circle three natural hazards that you believe are **LEAST LIKELY** to occur in Colorado Springs.

Earthquake	24	96%
Dam Failure	19	76%
Tornado	13	52%
Drought	6	24%
Landslide	6	24%
Windstorm	2	8%
Flood (including flood after wildfire event)	1	4%
Wildfire	1	4%
Hail	0	0%
Lightning	0	0%
Severe Winter Storm	0	0%

Q3. Circle three natural hazards that, if they did occur, would have a **HIGH IMPACT** citywide.

Severe Winter Storm	13	52%
Dam Failure	12	48%
Flood (including flood after wildfire event)	11	44%
Wildfire	11	44%
Earthquake	10	40%
Tornado	7	28%
Drought	3	12%
Hail	3	12%
Landslide	3	12%
Lightning	1	4%
Windstorm	0	0%

Q4. Circle three natural hazards that, if they did occur, would have the **LEAST IMPACT** citywide.

Lightning	20	80%
Landslide	13	52%
Drought	12	48%

# Colorado Springs Pre-Disaster Mitigation Plan Revision

Kickoff Meeting Baseline Survey Results

Tuesday, May 12, 2015

Total Surveys Completed: 25

	Count	Percent Response
Windstorm	12	48%
Hail	5	20%
Tornado	4	16%
Dam Failure	3	12%
Severe Winter Storm	3	12%
Flood (including flood after wildfire event)	1	4%
Earthquake	0	0%
Wildfire	0	0%

## **HUMAN CAUSED HAZARDS**

Q5. Circle four human caused events that are the **MOST LIKELY** to occur in the city

Industrial accidents involving transportation	21	84%
Railroad accident	21	84%
Infectious Disease	19	76%
Hazardous materials release-chemical-biological	19	76%
Explosion	15	60%
Radiological contamination	3	12%

Q6. Circle four human caused events that are the **LEAST LIKELY** to occur in the city.

Radiological contamination	24	96%
Hazardous materials release-chemical-biological	16	64%
Explosion	16	64%
Infectious Disease	15	60%
Industrial accidents involving transportation	10	40%
Railroad accident	8	32%

Q7. Circle four human caused events that, if they did occur, would have the **HIGHEST IMPACT** citywide

Hazardous materials release-chemical-biological	21	84%
Infectious Disease	19	76%
Radiological contamination	18	72%
Industrial accidents involving transportation	15	60%
Explosion	14	56%
Railroad accident	9	36%

Q8. Circle four human caused events that, if they did occur, would have the **LEAST IMPACT** citywide.

Industrial accidents involving transportation	23	92%
Railroad accident	23	92%
Explosion	18	72%
Radiological contamination	13	52%
Infectious Disease	8	32%
Hazardous materials release-chemical-biological	7	28%

# Colorado Springs Pre-Disaster Mitigation Plan Revision

Kickoff Meeting Baseline Survey Results

Tuesday, May 12, 2015

Total Surveys Completed: 25

**Count    Percent Response**

## TERRORISM

Q10. Circle three terrorism threats that would be **MOST LIKELY** to occur in Colorado Springs.

Cyberterrorism	23	92%
Explosive bomb	21	84%
Armed attacks	17	68%
Chemical release	7	28%
Biological release	5	20%
Radiological contamination	5	20%
Nuclear event	0	0%

Q11. Circle three terrorism threats that would be **LEAST LIKELY** to occur in Colorado Springs.

Nuclear event	23	92%
Biological release	16	64%
Radiological contamination	14	56%
Chemical release	10	40%
Armed attacks	5	20%
Explosive bomb	4	16%
Cyberterrorism	0	0%

Q12. Circle three terrorism threats that, if they occur, would have the **HIGHEST IMPACT** citywide.

Nuclear event	16	64%
Biological release	15	60%
Radiological contamination	14	56%
Cyberterrorism	12	48%
Explosive bomb	8	32%
Chemical release	7	28%
Armed attacks	3	12%

Q13. Circle three terrorism threats that, if they occur, would have the **LOWEST IMPACT** citywide.

Armed attacks	20	80%
Explosive bomb	19	76%
Chemical release	12	48%
Cyberterrorism	10	40%
Radiological contamination	6	24%
Biological release	4	16%
Nuclear event	4	16%

Q14. Overall, the City of Colorado Springs is most vulnerable to a high impact threat from a:

Naturally occurring hazard	21	84%
Act of Terrorism	3	12%
Accidental, human caused incident	1	4%

# Colorado Springs Hazard Mitigation Plan Revision

## May 12, 2015



Last Name	First Name	Organization	Email address	Signature
Barrentine	Jim	Pikes Peak Community College	<a href="mailto:Jim.Barrentine@ppcc.edu">Jim.Barrentine@ppcc.edu</a>	
Blanchard	Tobi	Colorado Springs Office of Emergency Management	<a href="mailto:tblanchard@springsgov.com">tblanchard@springsgov.com</a>	<i>Tobi Blanchard</i>
Boley	Mark	El Paso County Sheriff's Office	<a href="mailto:MarkBoley@elpasoco.com">MarkBoley@elpasoco.com</a>	
Brady	Mike	Federal Express	<a href="mailto:mkrady@fedex.com">mkrady@fedex.com</a>	<i>Mike Brady</i>
Brenner	Gordon	Colorado Springs Office of Emergency Management	<a href="mailto:gbrenner@springsgov.com">gbrenner@springsgov.com</a>	<i>Gordon Brenner</i>
Broomfield	Sally	American Red Cross	<a href="mailto:sally.broomfield2@redcross.org">sally.broomfield2@redcross.org</a>	
Burgard	Tim	Harrison School District 2	<a href="mailto:tburgard@hsd2.org">tburgard@hsd2.org</a>	
Corsaro	Cindy	Memorial - UC Health	<a href="mailto:Cindy.Corsaro@uchealth.org">Cindy.Corsaro@uchealth.org</a>	
Curtis	Keith	Pikes Peak Regional Building Department	<a href="mailto:keith@pprbd.org">keith@pprbd.org</a>	<i>Keith Curtis</i>
Dunn	Ray	Fort Carson	<a href="mailto:raymond.h.dunn2.civ@mail.mil">raymond.h.dunn2.civ@mail.mil</a>	<i>Ray Dunn</i>
Easton	Travis	Public Works - Engineering	<a href="mailto:teaston@springsgov.com">teaston@springsgov.com</a>	
Edmondson	David	Colorado Springs Police Department	<a href="mailto:EDMONDMA@ci.colosprgs.co.us">EDMONDMA@ci.colosprgs.co.us</a>	<i>David Edmondson</i>

# Colorado Springs Hazard Mitigation Plan Revision

## May 12, 2015



Last Name	First Name	Organization	Email address	Signature
Eller	Paul	Colorado Division of Emergency Management and Homeland Security - Mitigation and Recovery	<a href="mailto:paul.eller@state.co.us">paul.eller@state.co.us</a>	
Frank	Lawrence	AECOM	<a href="mailto:lawrence.frank@aecom.com">lawrence.frank@aecom.com</a>	<i>Lawrence Frank</i>
French	Brigitte	Penrose St Francis	<a href="mailto:BrigitteFrench@Centura.Org">BrigitteFrench@Centura.Org</a>	<i>Brigitte French</i>
<del>SAVELDA</del> Gonzales	Patricia	Colorado Division of Emergency Management and Homeland Security - Mitigation and Recovery	<a href="mailto:Patricia.gavelda@state.co.us">Patricia.gavelda@state.co.us</a>	<i>P. Gavelda</i>
Gonzales	Tom	El Paso County Public Health - Environmental Health Division	<a href="mailto:TomGonzales@elpasoco.com">TomGonzales@elpasoco.com</a>	
Gorsich-Bracken	Nancy	South Central Region VOAD	<a href="mailto:ngorsich@gmail.com">ngorsich@gmail.com</a>	<i>Nancy Gorsich Bracken</i>
Grady	Brian	Academy School District 20	<a href="mailto:brian.grady@asd20.org">brian.grady@asd20.org</a>	<i>Brian Grady</i>
Hannon	James	USAA	<a href="mailto:james.hannon@usaa.com">james.hannon@usaa.com</a>	<i>James Hannon</i>
Hastings	James	School District 11	<a href="mailto:JAMES.HASTINGSII@d11.org">JAMES.HASTINGSII@d11.org</a>	
Howard	Bart	Colorado Springs Office of Emergency Management	<a href="mailto:bhoward@springsgov.com">bhoward@springsgov.com</a>	<i>Bart Howard</i>
Jordan	Lizabeth	El Paso County OEM	<a href="mailto:lizabethjordan@elpasoco.com">lizabethjordan@elpasoco.com</a>	
Korwes	Christopher	Peterson AFB	<a href="mailto:christopher.korwes@us.af.mil">christopher.korwes@us.af.mil</a>	



# Colorado Springs Hazard Mitigation Plan Revision

## May 12, 2015



Last Name	First Name	Organization	Email address	Signature
Vigil	Steve	Information Technology - GIS	snvigil@springsgov.com	
Vitwar	David	Colorado Springs Fire Department	dvitwar@springsgov.com	
Waldrip	Erik	Cheyenne Mountain Air Force Station	erik.waldrip@us.af.mil	
Walker	Jeremy	Colorado Technical University	jwalker@coloradotech.edu	
Waters	Bret	Colorado Springs Office of Emergency Management	bwaters@springsgov.com	
Watson	David	School District 49	dwatson@d49.org	
Wysocki	Peter	Planning - Land Use Review	pwyssocki@springsgov.com	
		Fountain Creek Watershed Flood Control and Greenway District		
Evans	Bart	EPG-DEM	bartevans@elpasoco.com	
Griffin	John	CSU	dgriffin@csu.org	
Hughlett	Karl	CSU	khughlett@csu.org	
Stanton	David	ARC	dmsstanton82@icloud.com	

# Colorado Springs Hazard Mitigation Plan Revision

## May 12, 2015



Last Name	First Name	Organization	Email address	Signature
Kuhr	Steve	Colorado Springs Utilities	<a href="mailto:skuhr@csu.org">skuhr@csu.org</a>	
Magnuson	Tom	National Weather Service	<a href="mailto:thomas.magnuson@noaa.gov">thomas.magnuson@noaa.gov</a>	<i>Thomas L Magnuson</i>
Mitros	Tim	Public Works - Engineering	<a href="mailto:tmitros@springsgov.com">tmitros@springsgov.com</a>	
Morin	Natalie	Cheyenne School District 12	<a href="mailto:morin@cmsd12.org">morin@cmsd12.org</a>	
Mouton	Andre	United States Air Force Academy	<a href="mailto:andre.mouton.2.ctr@us.af.mil">andre.mouton.2.ctr@us.af.mil</a>	
Pirri	Kimberly	AECOM	<a href="mailto:kimberley.pirri@aecom.com">kimberley.pirri@aecom.com</a>	<i>[Handwritten Signature]</i>
Quitana	Kenny	Colorado Department of Transportation	<a href="mailto:kenneth.quintana@state.co.us">kenneth.quintana@state.co.us</a>	
Roux	Russ	South Central Health Care Coalition	<a href="mailto:rroux@springsgov.com">rroux@springsgov.com</a>	
Sasaki	Caroline	El Paso County OEM	<a href="mailto:carolinesasaki@elpasoco.com">carolinesasaki@elpasoco.com</a>	
Smith	RC	El Paso County OEM	<a href="mailto:rcsmith@elpasoco.com">rcsmith@elpasoco.com</a>	<i>[Handwritten Signature]</i>
Stoecklein	Tim	University of Colorado at Colorado Springs	<a href="mailto:tstoeckl@uccs.edu">tstoeckl@uccs.edu</a>	<i>[Handwritten Signature]</i>
Teferiller	Ryan	Planning - Land Use Review	<a href="mailto:rteferiller@springsgov.com">rteferiller@springsgov.com</a>	



## **City of Colorado Springs 2015 Pre-Disaster Mitigation Plan Risk Assessment Meeting**

**July 29, 2015  
9:00 am to 12:00 pm MDT**

### **AGENDA**

1. Office of Emergency Management (OEM) Welcome and Remarks – Bart Howard (5 mins)
2. General Introductions (15 mins)
3. Status of Plan Update – Lawrence Frank and Kim Pirri (10 mins)
  - a. Status of the Planning Process and Plan Development
  - b. Public Outreach – Survey
4. Risk Assessment Update – Lawrence Frank and Rich Chamberlain (15 mins)
  - a. Hazard Profiles
  - b. Hazus Results
5. City Actions/Post Wildfire and Flood Recovery – Gordon Brenner (20 mins)
6. Break (10 mins)
7. Brainstorming Sessions (40 mins)
  - a. Flood Hazard (includes Dam and Levee Failure) – Gordon Brenner & Kim Pirri
  - b. Wildfire Hazard – David Vitwar & Will Carrier
  - c. Human Caused Hazards and Terrorism – Bart Howard & Lawrence Frank
  - d. Geologic Hazards and Severe Weather – Tim Stoecklein & Rich Chamberlain
8. Report Out on Breakout Sessions – Top 5 Ideas (10 mins each group/40 mins total)
9. Schedule & Next Steps – Kim Pirri and OEM (5 mins)

# Pre-Disaster Mitigation Plan

# Risk Assessment Meeting



July 29, 2015



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# Agenda

- OEM Welcome and Remarks
- General Introductions
- Status of Plan Update
- Risk Assessment Update
- City Actions / Post Wildfire and Flood Recovery
- Break
- Brainstorming Sessions and Report Out
- Schedule & Next Steps



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# Status of Plan Update



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# Planning Process



## Status of Plan Update

- Establish Planning Process ✓ **DONE**
- Draft Risk Assessment ✓ **NEARLY DONE**
  - Updated Past Events
  - Narrative
  - Hazus and GIS Maps
- Draft Capability Assessment ✓ **NEARLY DONE**
- Public Survey
  - Released Monday, July 27<sup>th</sup>
  - Open for 30 days
- Starting Mitigation Strategy process



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# Public Survey Update



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# Risk Assessment Update



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# Risk Assessment

**Risk:** *The Intersection of Hazard, Vulnerability and Capability*

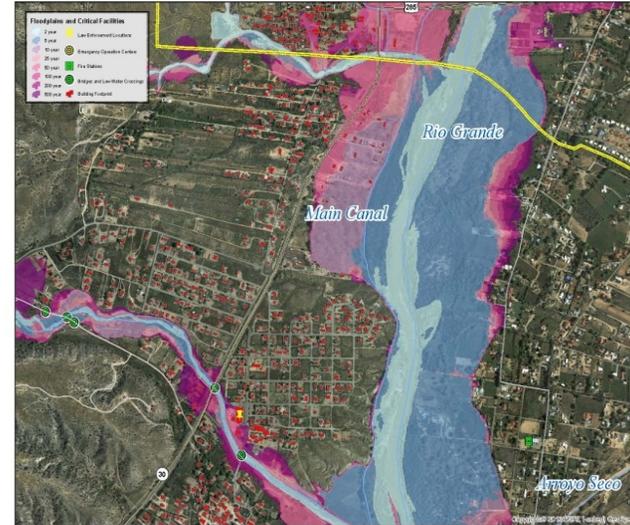


Photo Credit: NASA



# Hazards

- Flood
- Dam and Levee Failure
- **Wildfire**
- Severe Weather: Drought, Hail, Lightning, Severe Winter Storm, Tornado, and Windstorm
- Geologic Hazards: Earthquake; and Landslide, Rockfall, and Subsidence
- Human-caused hazards
- Terrorism
- Infectious Disease



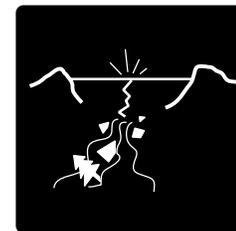
# Hazard Profile in the Risk Assessment

- Hazard Description
- Geographic Location / Spatial Extent
  - Using best available data, depict and describe areas at risk
  - Focus on increased risk from flooding post-wildfire
- Previous Occurrences
- Probability and Extent of Future Occurrences
- Magnitude / Severity
  - Determine what is at risk – especially critical facilities and critical infrastructure
- Vulnerability Assessment
- Damage Estimates (for certain hazards, using Hazus)



## Flood/Dam and Levee Failure Risk Highlights

- 2,328 NFIP policies – an increase of 120% from 2010
  - Two repetitive loss properties
  - CRS rating of Class 6 (20% flood insurance discount); previously Class 8
- Waldo Canyon Burn area: Flood flows 3-4x higher due to burn scar
- 2013 Stormwater Needs Assessment identified 44 High Priority projects with an estimated cost of \$161.7M
- May and June 2015 flooding from very high rainfall:
  - \$21M in damage to public infrastructure and utilities
  - 500 to 600 homes with reported basement flooding
- High hazard dams – 22 of 33 dams that could impact Colorado Springs if breached are rated high hazard
- Templeton Gap Floodway: “marginally acceptable” levee



# Flood Risk – Hazus Loss Estimates

Hazus Loss Estimates - Streams with Highest Potential Losses				
Stream Name	2-year flood 2010 Plan (Hazus MH)	2-year flood 2015 Plan (Hazus 2.2 )	10-year flood 2010 Plan (Hazus MH)	10-year flood 2015 Plan (Hazus 2.2)
Camp Creek	\$453,000	\$210,000	\$640,000	\$461,000
Cheyenne Creek	\$4,635,000	\$8,097,000	\$28,417,000	\$51,257,000
Douglas Creek North*	\$163,000	\$1,479,000	\$13,091,000	\$25,235,000
Douglas Creek South*	\$2,561,000	\$2,164,000	\$5,945,000	\$5,042,000
Fountain Creek*	\$7,862,000	\$15,459,000	\$45,967,000	\$95,161,000
Monument Creek*	\$19,784,000	\$50,022,000	\$27,613,000	\$71,507,000
N. Rockrimmon Creek	\$10,057,000	\$34,582,000	\$7,928,000	\$18,414,000
Sand Creek	\$11,071,000	\$42,837,000	\$23,986,000	\$76,400,000
Shooks Run/ Templeton Gap Floodway	\$60,319,000	\$157,749,000	\$95,855,000	\$152,615,000
Spring Creek	\$10,794,000	\$17,958,000	\$18,092,000	\$21,809,000

Hazus Loss Estimates - Camp Creek		
Post-Fire Flows from Hazus 2.2 for 2015 Plan (PRELIMINARY RESULTS)		
Stream Name	2-year POST-FIRE	10-year POST-FIRE
Camp Creek	\$999,000	\$2,234,000



# Wildfire Risk Highlights



- Waldo Canyon and Black Forest Fires since 2010 PDMP
- 24% of the City’s parcels within the WUI
- Increased risk from:
  - Drought and Wind
  - Future development, specifically west of I-25
- Southwest Colorado Springs at high risk
- Human-caused aspect – arson or careless smoker
- Code changes informed by Waldo Canyon fire building ignition source findings:

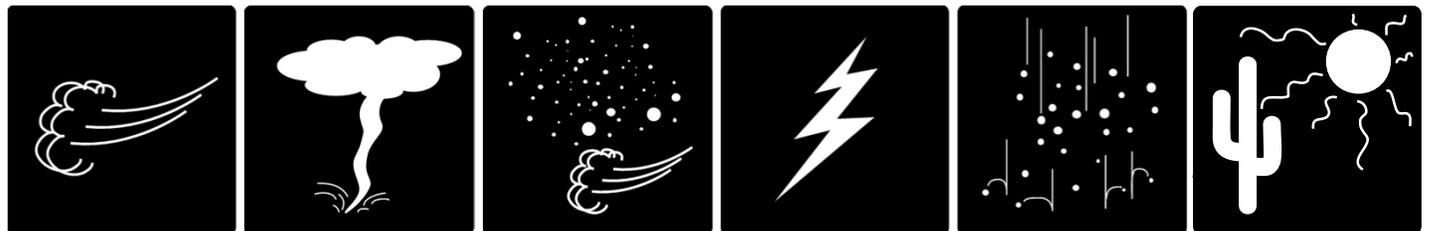
Ignition Source	Percentage of Burned Structures*
Fire Brands/Embers	54%
Vegetation Exposure	22%
Structural Exposure	16%
Fire Front/Direct Flame Contact	8%



# Severe Weather Risk Highlights

## Drought, Hail, Lightning, Severe Winter Storm, Tornado, and Windstorm

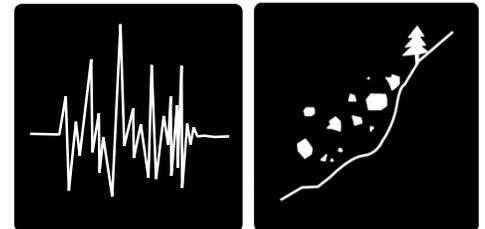
- Drought: As recently as 2013, a USDA-declared drought disaster area
- Hail:
  - 1,060 records of significant hail storms from 1955 to 2015.
  - One storm caused \$8.7M in damage.
- Lightning: More cloud-to-ground lightning than most Colorado counties
- Severe Winter Storm: 10 storms since 2005 but no reported damage, injuries or fatalities
- Tornado: 7 tornado incidents since 2001 causing about \$8.2M in damage and 13 injuries
- Wind: Fairly common, 24 events since 2010 but only 2 with reported damage



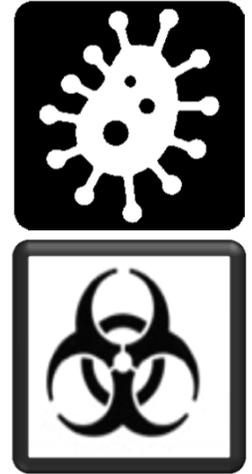
# Geologic Hazards Risk Highlights

## Earthquake, Landslide, Rockslide, and Subsidence

- Earthquake: Within 150 years,
  - 0.5% to 1% chance of a 6.0 earthquake
  - Up to a 0.5% chance of a 7.0 earthquake
- Landslide: 8,103 structures within identified susceptibility areas
- Rockfall: 359 structures within the susceptibility zone
- Subsidence: City has one of the highest levels of risk in Colorado



# Human-Caused Hazards, Infectious Disease, and Terrorism Risk Highlights



- Hazardous Materials: Colorado Springs averages about 10 reported hazardous material incidents a year.
  - Mostly from fixed sites and vehicles
  - In 3 of the last 10 years, there were events with evacuations
  - Biggest threats are along I-25 and railroads
- Infectious Disease:
  - 1,674 reported cases in 2014 for 28 different diseases
  - Most are only 1-3 cases except for campylobacteriosis (food poisoning), giardiasis, influenza, norovirus
- Terrorism: Threats constantly change
  - Homegrown terrorism/hate crime
  - International/jihadi
  - Lone wolf/mentally disturbed (crime vs. terrorism)
  - Acute Local Risk: Acts against military/government establishments
    - insider vs. external threat



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# Climate Change Impacts

## From 2014 National Climate Assessment (NCA) and 2015 Colorado Resiliency Framework:

- “Snowpack and streamflow amounts are projected to decline in parts of the Southwest, decreasing surface water supply reliability for cities, agriculture, and ecosystems.”
- “Increased warming, drought, and insect outbreaks, all caused by or linked to climate change, have increased wildfires and impacts to people and ecosystems in the Southwest. Fire models project more wildfire and increased risks to communities across extensive areas.”
- “Increased temperatures and the projection that precipitation will generally increase in the winter months, and decrease in the summer months.” Rainy part of year may move up 1-3 weeks.



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# City Actions / Post Wildfire and Flood Recovery



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BREAK (10 minutes)

# Brainstorming Sessions



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## Other City Plans, Initiatives, and Requirements

- 2013 Stormwater Needs Assessment
- Appendix K to the Code of the City of Colorado Springs
  - Wildland Urban Interface Mitigation Requirements for the Hillside Overlay Zone
- Ignition Resistant Construction Design Manual and Vegetation Management Guide
- Water Shortage Ordinance
- CSU Integrated Water Resource Plan for 2015 to address water conservation and drought



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# Brainstorming Sessions

- **Divide up into four groups**
- **Group facilitator with ground rules, summary risk information and ‘Problem Statements’ for**
  - *Flood (includes flood after fire risk)*
  - *Wildfire*
  - *Human-caused hazards and Terrorism*
  - *Severe Weather and Geologic hazards*
- **With your group, brainstorm strategies and potential actions to address the risks and issues from the Problem Statement**
- **Report out to the group – Top 5 Ideas**



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## REMINDER: Mitigation is...

Sustained action taken to reduce or eliminate long-term risk to human life and property from natural and human caused hazards. It also includes secondary actions to contain impacts.



Photo Credit: Colorado Springs OEM



Photo Credit: Colorado Springs OEM



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# Brainstorming Sessions (40 minutes)

# Report Out

- **Flood Hazard**
- **Wildfire Hazard**
- **Human-caused hazard, Terrorism and Infectious Disease**
- **Severe Weather and Geologic Hazards**



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# PDMP Preparation Schedule

- Public Survey – 4 weeks from July 27
- Follow-up questions to LPC for remaining Plan items
- Mitigation Strategy Meeting – September 10, 2015
- Review of the Plan – Late September/Early October



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Questions???



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# Thank You!

- Tobi Blanchard, City of Colorado Springs OEM  
[tblanchard@springsgov.com](mailto:tblanchard@springsgov.com)
- Kim Pirri, AECOM  
[kimberley.pirri@aecom.com](mailto:kimberley.pirri@aecom.com)
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[lawrence.frank@aecom.com](mailto:lawrence.frank@aecom.com)



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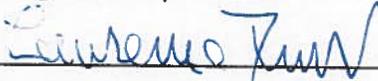
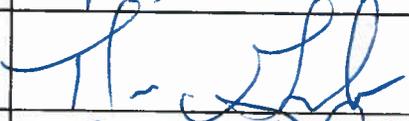
Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
 Revision - July 29, 2015



Last Name	First Name	Organization	Email address	Signature
Arroyo	Cindey	Colorado Springs Utilites	<a href="mailto:carroyo@csu.org">carroyo@csu.org</a>	Assigned Group: Terrorism 
Barrentine	Jim	Pikes Peak Community College	<a href="mailto:Jim.Barrentine@ppcc.edu">Jim.Barrentine@ppcc.edu</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Blanchard	Tobi	Colorado Springs Office of Emergency Management	<a href="mailto:tblanchard@springsgov.com">tblanchard@springsgov.com</a>	
Boley	Mark	El Paso County Sheriff's Office	<a href="mailto:MarkBoley@elpasoco.com">MarkBoley@elpasoco.com</a>	
Brady	Mike	Federal Express	<a href="mailto:mikbrady@fedex.com">mikbrady@fedex.com</a>	
Brenner	Gordon	Colorado Springs Office of Emergency Management	<a href="mailto:gbrenner@springsgov.com">gbrenner@springsgov.com</a>	Facilitator Assigned Group: Flood 
Broomfield	Sally	American Red Cross	<a href="mailto:sally.broomfield2@redcross.org">sally.broomfield2@redcross.org</a>	
Burgard	Tim	Harrison School District 2	<a href="mailto:tburgard@hsd2.org">tburgard@hsd2.org</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Carrier	Will	AECOM	<a href="mailto:will.carrier@aecom.com">will.carrier@aecom.com</a>	Assigned Group: Wildfire 
Chamberlain	Rich	AECOM	<a href="mailto:rich.chamberlain@aecom.com">rich.chamberlain@aecom.com</a>	Assigned Group: Severe Weather/Geologic Hazards 
Corsaro	Cindy	Memorial - UC Health	<a href="mailto:Cindy.Corsaro@uchealth.org">Cindy.Corsaro@uchealth.org</a>	

**Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
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Last Name	First Name	Organization	Email address	Signature
Curtis	Keith	Pikes Peak Regional Building Department	<a href="mailto:keith@pprbd.org">keith@pprbd.org</a>	
Dunn	Ray	Fort Carson	<a href="mailto:raymond.h.dunn2.civ@mail.mil">raymond.h.dunn2.civ@mail.mil</a>	
Easton	Travis	Public Works - Engineering	<a href="mailto:teaston@springsgov.com">teaston@springsgov.com</a>	Assigned Group: Flood
Edmondson	David	Colorado Springs Police Department	<a href="mailto:EDMONDMA@ci.colospgs.co.us">EDMONDMA@ci.colospgs.co.us</a>	Assigned Group: Terrorism
Eller	Paul	Colorado Division of Emergency Management and Homeland Security - Mitigation and	<a href="mailto:paul.eller@state.co.us">paul.eller@state.co.us</a>	
Evans	Bart	El Paso County	<a href="mailto:BartEvans@elpasoco.com">BartEvans@elpasoco.com</a>	
Farkas	Corey	Colorado Springs Public Works - Streets	<a href="mailto:cfarkas@springsgov.com">cfarkas@springsgov.com</a>	Assigned Group: Severe Weather/Geologic Hazards
Force	Jeff	Memorial Hospital - UC Health	<a href="mailto:jeff.force@ushealth.org">jeff.force@ushealth.org</a>	
Frank	Lawrence	AECOM	<a href="mailto:lawrence.frank@aecom.com">lawrence.frank@aecom.com</a>	Assigned Group: Terrorism 
French	Brigitte	Penrose St Francis	<a href="mailto:BrigitteFrench@Centura.Org">BrigitteFrench@Centura.Org</a>	
Gavelda	Patricia	Colorado Division of Emergency Management and Homeland Security - Mitigation and	<a href="mailto:Patricia.gavelda@state.co.us">Patricia.gavelda@state.co.us</a>	
Gonzales	Tom	El Paso County Public Health - Environmental Health Division	<a href="mailto:TomGonzales@elpasoco.com">TomGonzales@elpasoco.com</a>	
Gorsich-Bracken	Nancy	South Central Region VOAD	<a href="mailto:ngorsich@gmail.com">ngorsich@gmail.com</a>	

**Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
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Last Name	First Name	Organization	Email address	Signature
Grady	Brian	Academy School District 20	<a href="mailto:brian.grady@asd20.org">brian.grady@asd20.org</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards <i>Brian Grady</i>
Griffin-Strickland	Deb	Colorado Springs Utilites	<a href="mailto:dgriffin@CSU.org">dgriffin@CSU.org</a>	
Hannon	James	USAA	<a href="mailto:james.hannon@usaa.com">james.hannon@usaa.com</a>	
Hastings	James	School District 11	<a href="mailto:JAMES.HASTINGSII@d11.org">JAMES.HASTINGSII@d11.org</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Hein	Jay	Colorado Springs Parks and Recreation	<a href="mailto:jhein@springsgov.com">jhein@springsgov.com</a>	Assigned Group: Wildfire
Howard	Bart	Colorado Springs Office of Emergency Management	<a href="mailto:bhoward@springsgov.com">bhoward@springsgov.com</a>	Facilitator Assigned Group: Terrorism <i>Bart Howard</i>
Hughlett	Ken	Colorado Springs Utilites	<a href="mailto:khughlett@csu.org">khughlett@csu.org</a>	Assigned Group: Flood
Husted	David	Colorado Springs Police Department	<a href="mailto:HUSTEDDA@ci.colospgs.co.us">HUSTEDDA@ci.colospgs.co.us</a>	Assigned Group: Terrorism <i>David Husted</i>
Inzer	Lonnie	El Paso County OEM	<a href="mailto:LonnieInzer@elpasoco.com">LonnieInzer@elpasoco.com</a>	<i>Lonnie Inzer</i>
Jenkins	Jimmy		<a href="mailto:Jimmy.R.Jenkins@comcast.net">Jimmy.R.Jenkins@comcast.net</a>	
Kelley	Brian	Public Works	<a href="mailto:bkelley@springsgov.com">bkelley@springsgov.com</a>	Assigned Group: Flood

**Local Planning Committee - Colorado Springs Hazard Mitigation Plan**  
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Last Name	First Name	Organization	Email address	Signature
Korwes	Christopher	Peterson AFB	<a href="mailto:christopher.korwes@us.af.mil">christopher.korwes@us.af.mil</a>	
Lacey	Brett	Colorado Springs Fire Marshal's Office	<a href="mailto:blacey@springsgov.com">blacey@springsgov.com</a>	Assigned Group: Wildfire
Magnuson	Tom	National Weather Service	<a href="mailto:thomas.magnuson@noaa.gov">thomas.magnuson@noaa.gov</a>	Assigned Group: Severe Weather/Geologic Hazards
Martinez	Oscar	United States Forestry Service - Pike and San Isabel National Forest	<a href="mailto:omartinez@fs.fed.us">omartinez@fs.fed.us</a>	Assigned Group: Wildfire
Mitros	Tim	Public Works - Engineering/ Fountain Creek Watershed Flood Control and Greenway District	<a href="mailto:tmitros@springsgov.com">tmitros@springsgov.com</a>	
Morin	Natalie	Cheyenne School District 12	<a href="mailto:morin@cmsd12.org">morin@cmsd12.org</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Mouton	Andre	United States Air Force Academy	<a href="mailto:andre.mouton.2.ctr@us.af.mil">andre.mouton.2.ctr@us.af.mil</a>	
Pirri	Kimberly	AECOM	<a href="mailto:kimberley.pirri@aecom.com">kimberley.pirri@aecom.com</a>	Assigned Group: Flood 
Poage	David	American Red Cross	<a href="mailto:david.s.poage@gmail.com">david.s.poage@gmail.com</a>	
Quitana	Kenny	Colorado Department of Transportation	<a href="mailto:kenneth.quintana@state.co.us">kenneth.quintana@state.co.us</a>	Assigned Group: Flood
Roux	Russ	South Central Health Care Coalition	<a href="mailto:rroux@springsgov.com">rroux@springsgov.com</a>	

Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
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Last Name	First Name	Organization	Email address	Signature
Sasaki	Caroline	El Paso County OEM	<a href="mailto:carolinesasaki@elpasoco.com">carolinesasaki@elpasoco.com</a>	
Scalfri	David	Colorado Springs Public Works - Streets	<a href="mailto:dscalfri@springsgov.com">dscalfri@springsgov.com</a>	Assigned Group: Severe Weather/Geologic Hazards <i>David Scalfri</i>
Sevey	Anthony	Fort Carson OEM	<a href="mailto:anthony.h.sevey.civ@mail.mil">anthony.h.sevey.civ@mail.mil</a>	
Smith	RC	El Paso County OEM	<a href="mailto:rcsmith@elpasoco.com">rcsmith@elpasoco.com</a>	
Stanton	David	American Red Cross	<a href="mailto:dstanton82@icloud.com">dstanton82@icloud.com</a>	
Stoecklein	Tim	University of Colorado at Colorado Springs	<a href="mailto:tstoeckl@uccs.edu">tstoeckl@uccs.edu</a>	Facilitator Assigned Group: Severe Weather/Geologic Hazards <i>Tim Stoecklein</i>
Sylvester	Amy	Colorado Springs Fire Marshal's Office	<a href="mailto:asylvester@springsgov.com">asylvester@springsgov.com</a>	Assigned Group: Wildfire <i>AS</i>
<sup>TeFertiller</sup> Teferiller	Ryan	Planning - Land Use Review	<a href="mailto:rtefertiller@springsgov.com">rtefertiller@springsgov.com</a>	<i>Ryan Teferiller</i>
Vigil	Steve	Information Technology - GIS	<a href="mailto:snvigil@springsgov.com">snvigil@springsgov.com</a>	<i>Steve Vigil</i>
Vitwar	David	Colorado Springs Fire Department	<a href="mailto:dvitwar@springsgov.com">dvitwar@springsgov.com</a>	Facilitator Assigned Group: Wildfire <i>DAVID</i>
Waldrip	Erik	Cheyenne Mountain Air Force Station	<a href="mailto:erik.waldrip@us.af.mil">erik.waldrip@us.af.mil</a>	<i>Erik Waldrip</i>

**Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
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Last Name	First Name	Organization	Email address	Signature
Walker	Jeremy	Colorado Technical University	<a href="mailto:jwalker@coloradotech.edu">jwalker@coloradotech.edu</a>	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Waters	Bret	Colorado Springs Office of Emergency Management	<a href="mailto:bwaters@springsgov.com">bwaters@springsgov.com</a>	<i>Bret Waters</i>
Watson	David	School District 49	dwatson@d49.org	Assigned Group: Terrorism OR Severe Weather/Geologic Hazards
Will	Dennis	Colorado Springs Parks and Recreation	dwill@springsgov.com	Assigned Group: Wildfire
Wysocki	Peter	Planning - Land Use Review	<a href="mailto:pwysocki@springsgov.com">pwysocki@springsgov.com</a>	
<i>Platt</i>	<i>Cole</i>	<i>City Streets</i>	<i>Platt@Springsgov</i>	
<i>Castle</i>	<i>Robb</i>	<i>American Red Cross</i>	<i>rcastle@gmail.com</i>	
<i>Alexander</i>	<i>Susan</i>	<i>CSU</i>		<i>Susan Alexander</i>





## Colorado Springs Emergency Preparedness Survey

### 1. Welcome to the Colorado Springs Emergency Preparedness Survey

**The Colorado Springs Office of Emergency Management (OEM) has just started a planning process to update its Pre-Disaster Mitigation Plan. The Plan evaluates the natural and human-caused hazards that may affect the City of Colorado Springs (City) and offers suggested actions that could be taken to increase the community's resiliency to those hazards. An important part of the planning process is obtaining feedback from the people living in the community.**

**In accordance with the Americans with Disabilities Act of 1990 ("ADA"), the City will not discriminate against individuals with disabilities. Anyone requiring assistance to participate in this survey should make the request to Tobi Blanchard, 375 Printers Parkway, Colorado Springs, CO 80910, or e-mail [tblanchard@springsgov.com](mailto:tblanchard@springsgov.com), or by calling 719-385-7228.**

**Thank you for participating in our survey.**



## Colorado Springs Emergency Preparedness Survey

### 2. Information about You

**The following questions about you provide us with important information needed to understand whether age, location, and length of stay affect the survey results.**

\* 1. In what ZIP code is your home located? (enter 5-digit ZIP code; for example, 80910)

\* 2. What is your age?

- 18-20
- 21-29
- 30-39
- 40-49
- 50-59
- 60 or older

\* 3. How long have you lived in Colorado Springs?

- Less than 1 year
- 1-5 years
- 6-10 years
- 11-20 years
- More than 20 years



## Colorado Springs Emergency Preparedness Survey

### 3. Information about Your Household

**The following questions about your household provide us with important information regarding our citizens' needs during a variety of emergencies.**

\* 4. Is there anyone in your household: (check all that apply)

- With limited English proficiency or are non-English speaking?
- With a physical, sensory, behavioral, mental, intellectual, developmental, or cognitive disability?
- That can't go without medication or medical treatment for more than 72 hours?
- That is dependent on specialized medical equipment requiring electricity?
- None of the above
- Other (please specify)

\* 5. Do you or anyone in your household use any personal or assistive devices? (check all that apply)

- Walker/Cane/Crutches
- Non-motorized wheelchair
- Motorized Wheelchair/Scooter
- Apnea monitor
- Continuous Positive Air Pressure (CPAP) machine
- Nebulizer
- Oxygen
- Respirator
- None of the above
- Other (please specify)

\* 6. Do you or anyone in your household use special care services such as personal assistants or home health services?

Yes

No

\* 7. Do you or anyone in your household prefer to use any of the following as a primary communication method? (check all that apply)

Braille

ASL (American Sign Language)

CART (Communication Access Real Time) or other electronic means

None of the above

Other (please specify)

\* 8. If you had to evacuate, would anyone in your household need an ambulance or other medical transportation provider to evacuate?

Yes

No



## Colorado Springs Emergency Preparedness Survey

### 4. Preparedness Information

The following questions help us understand your level of preparedness for an emergency.

\* 9. My household is prepared to remain in the home without water, gas, or electricity for 72 hours.

Strongly Agree

Agree

Don't Know

Disagree

Strongly Disagree

\* 10. How would you rate your household's preparedness?

Very prepared

Somewhat prepared

Don't know

Minimally prepared

Unprepared

\* 11. During an emergency, what is your first choice for getting information?

Sources

First Choice

Other (please specify)

\* 12. During an emergency, what is your second choice for getting information?

Sources

Second Choice

Other (please specify)



## Colorado Springs Emergency Preparedness Survey

### 5. Hazard Information

**The following questions will provide us with information on the natural or human-caused hazards that you are most concerned about.**

\* 13. Pick the top three (3) natural hazards that you are most concerned about.

- Flooding
- Wildfire
- Severe Weather (hail, tornadoes, strong winds, heavy rain, etc.)
- Winter Storm
- Earthquake
- Landslide
- Other (please specify)

\* 14. Pick the top three (3) human-caused hazards that you are most concerned about.

- Active Shooter
- Explosive Device
- Hazardous Material Spills
- Radiological/Nuclear Event
- Epidemic/Infectious Disease
- Cyber Attack
- Other (please specify)

15. If there was one thing that the City could do to be more prepared for disasters, what would it be?

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# Colorado Springs Emergency Preparedness Survey

by OEM (<https://oem.coloradosprings.gov>) - 7/16/2015

Participate in our survey ([https://www.surveymonkey.com/s/COS\\_PDMP\\_Survey1](https://www.surveymonkey.com/s/COS_PDMP_Survey1))

The City of Colorado Springs Office of Emergency Management needs your help! We want to understand the community's changing demographics, needs and level of preparedness for hazards by receiving your input with this quick and anonymous emergency preparedness survey. Tell us how you stay informed during an emergency and what concerns you most about local hazards. Your input is valuable and can help the City better respond to an emergency.

In accordance with the Americans with Disabilities Act of 1990 ("ADA"), the City will not discriminate against individuals with disabilities. Anyone requiring assistance to participate in this survey should make the request to Tobi Blanchard, 375 Printers Parkway, Colorado Springs, CO 80910, or e-mail [tblanchard@springsgov.com](mailto:tblanchard@springsgov.com) (<mailto:tblanchard@springsgov.com>), or by calling 719-385-7228.

Participate in our survey ([https://www.surveymonkey.com/s/COS\\_PDMP\\_Survey1](https://www.surveymonkey.com/s/COS_PDMP_Survey1))

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## Public invited to participate in emergency preparedness survey

by [OEM \(https://oem.coloradosprings.gov/\)](https://oem.coloradosprings.gov/) - 7/27/2015

**COLORADO SPRINGS, Colo** – Colorado Springs residents are invited to participate in a short anonymous survey to gather information about personal emergency preparedness that will help the Colorado Springs Office of Emergency Management better prepare for an emergency.

The Colorado Springs Office of Emergency Management is updating its Pre-Disaster Mitigation Plan which evaluates natural and human-caused hazards that may affect the City of Colorado Springs and actions that could be taken to increase the community's resiliency and preparedness for those hazards. Obtaining feedback from residents in the community is an important step in the planning process and will help the City better understand the changing demographics in Colorado Springs, needs of the community during times of emergency and its overall level of preparedness.

Colorado Springs residents are encouraged to take this quick online survey at [csready.org/survey \(http://www.csready.org/survey\)](http://www.csready.org/survey). The survey will be available through August 15.

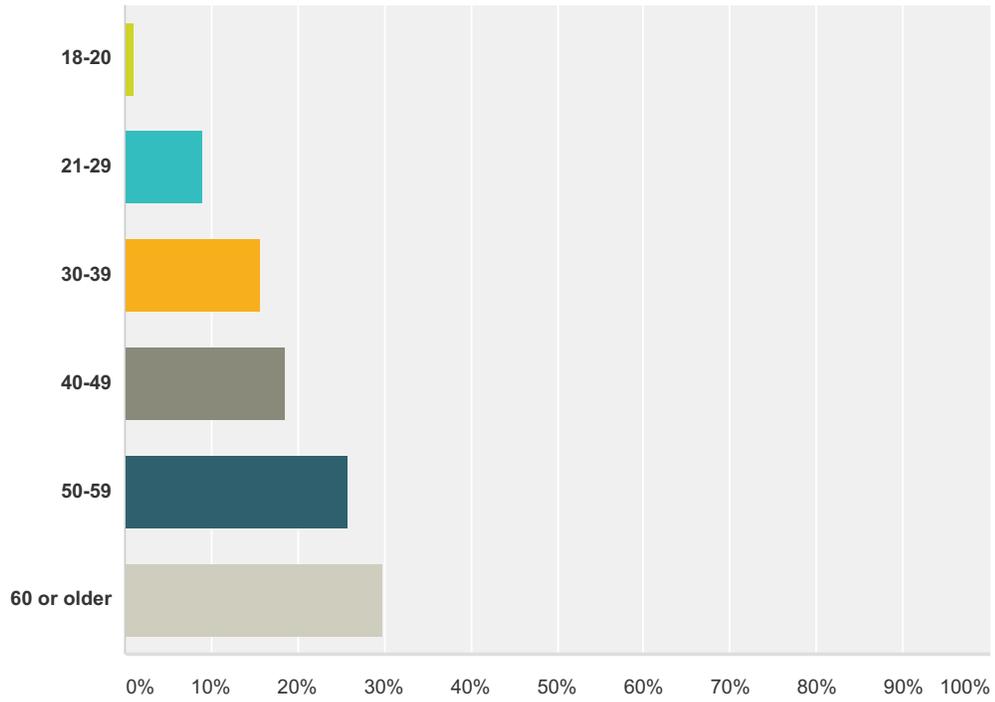
The Pre-Disaster Mitigation Plan, which was last updated in 2010 is updated every five years.

**Q1 In what ZIP code is your home located?  
(enter 5-digit ZIP code; for example, 80910)**

Answered: 1,157 Skipped: 1

### Q2 What is your age?

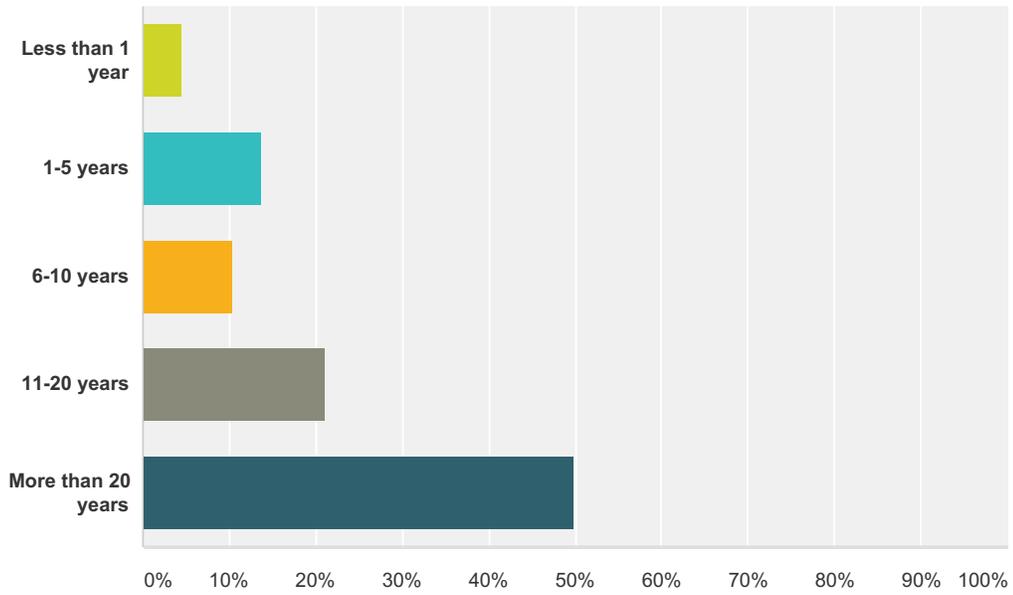
Answered: 1,157 Skipped: 1



Answer Choices	Responses
18-20	1.04% 12
21-29	9.08% 105
30-39	15.56% 180
40-49	18.50% 214
50-59	25.93% 300
60 or older	29.90% 346
<b>Total</b>	<b>1,157</b>

### Q3 How long have you lived in Colorado Springs?

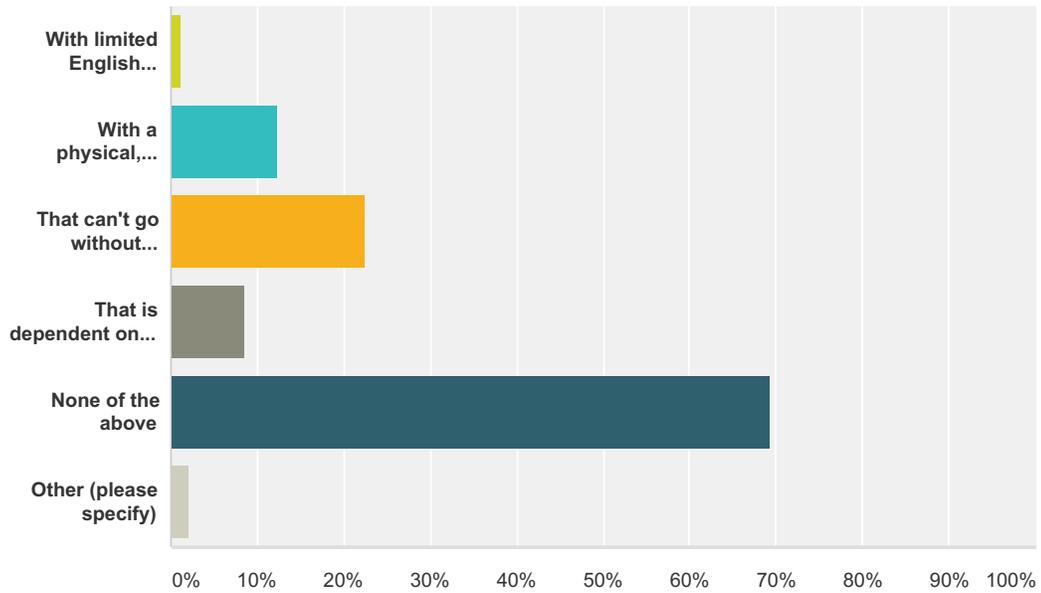
Answered: 1,157 Skipped: 1



Answer Choices	Responses	
Less than 1 year	4.58%	53
1-5 years	13.83%	160
6-10 years	10.46%	121
11-20 years	21.18%	245
More than 20 years	49.96%	578
<b>Total</b>		<b>1,157</b>

### Q4 Is there anyone in your household: (check all that apply)

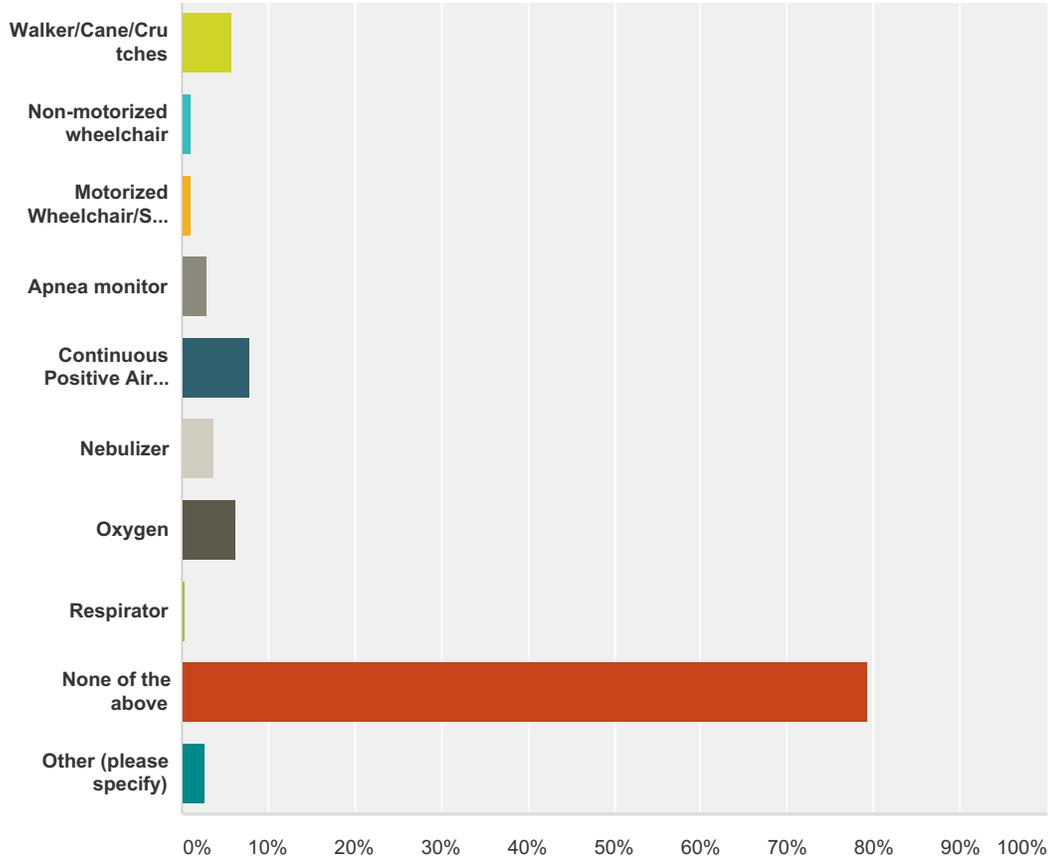
Answered: 1,146 Skipped: 12



Answer Choices	Responses
With limited English proficiency or are non-English speaking?	1.22% 14
With a physical, sensory, behavioral, mental, intellectual, developmental, or cognitive disability?	12.22% 140
That can't go without medication or medical treatment for more than 72 hours?	22.60% 259
That is dependent on specialized medical equipment requiring electricity?	8.55% 98
None of the above	69.28% 794
Other (please specify)	2.09% 24
<b>Total Respondents: 1,146</b>	

**Q5 Do you or anyone in your household use any personal or assistive devices?  
(check all that apply)**

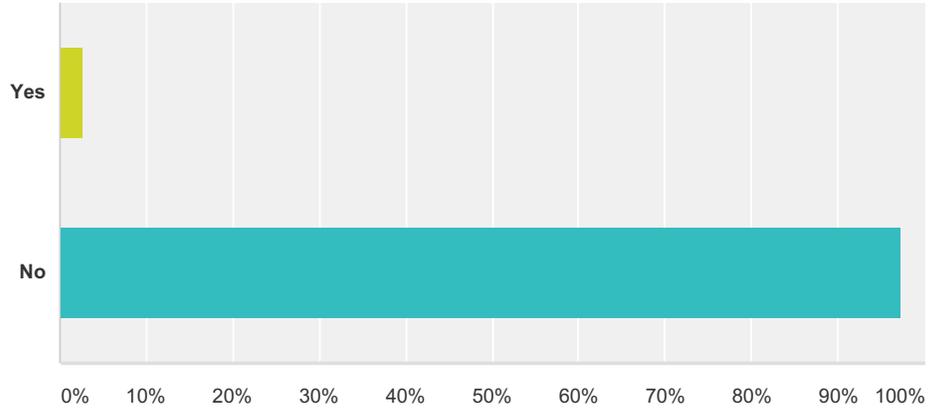
Answered: 1,146 Skipped: 12



Answer Choices	Responses	Count
Walker/Cane/Crutches	5.93%	68
Non-motorized wheelchair	1.13%	13
Motorized Wheelchair/Scooter	1.05%	12
Apnea monitor	2.88%	33
Continuous Positive Air Pressure (CPAP) machine	7.85%	90
Nebulizer	3.84%	44
Oxygen	6.20%	71
Respirator	0.35%	4
None of the above	79.32%	909
Other (please specify)	2.79%	32
<b>Total Respondents: 1,146</b>		

**Q6 Do you or anyone in your household use special care services such as personal assistants or home health services?**

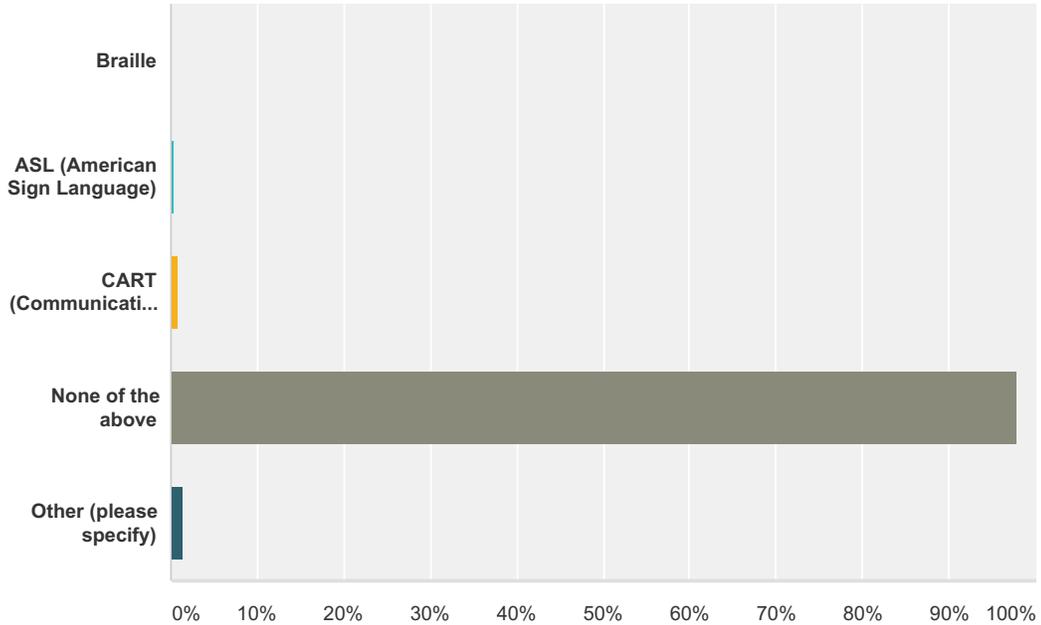
Answered: 1,146 Skipped: 12



Answer Choices	Responses
Yes	2.62% 30
No	97.38% 1,116
<b>Total</b>	<b>1,146</b>

**Q7 Do you or anyone in your household prefer to use any of the following as a primary communication method? (check all that apply)**

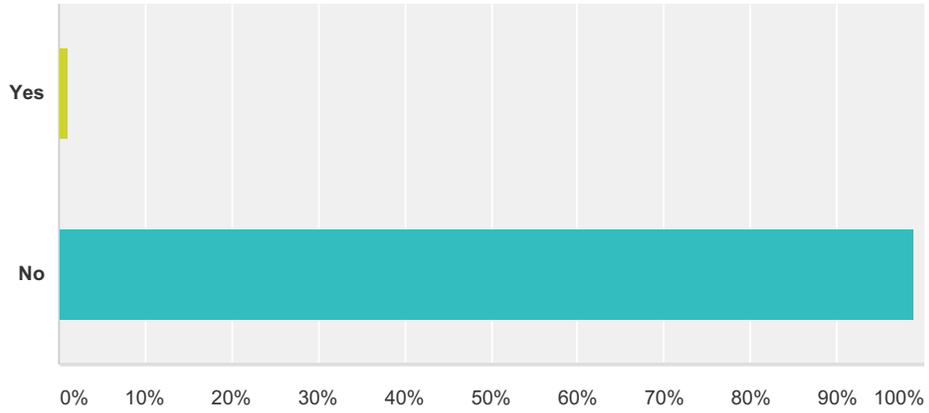
Answered: 1,146 Skipped: 12



Answer Choices	Responses
Braille	0.17% 2
ASL (American Sign Language)	0.44% 5
CART (Communication Access Real Time) or other electronic means	0.79% 9
None of the above	97.99% 1,123
Other (please specify)	1.48% 17
<b>Total Respondents: 1,146</b>	

**Q8 If you had to evacuate, would anyone in your household need an ambulance or other medical transportation provider to evacuate?**

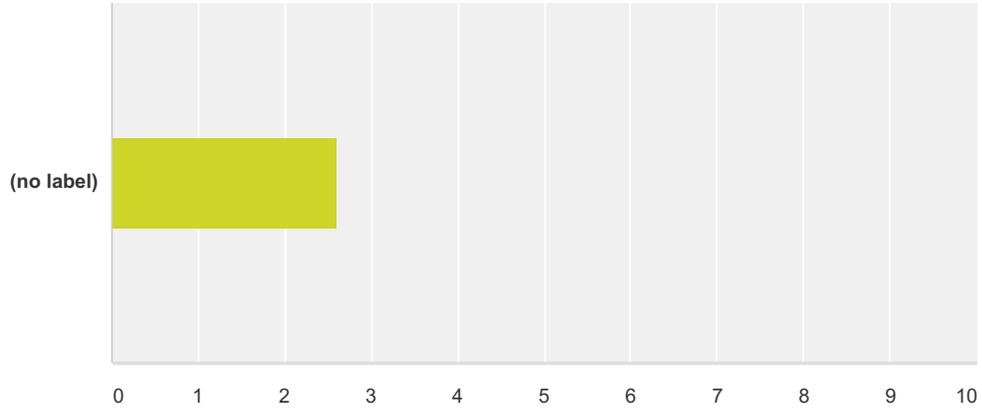
Answered: 1,146 Skipped: 12



Answer Choices	Responses
Yes	0.96% 11
No	99.04% 1,135
<b>Total</b>	<b>1,146</b>

**Q9 My household is prepared to remain in the home without water, gas, or electricity for 72 hours.**

Answered: 1,134 Skipped: 24

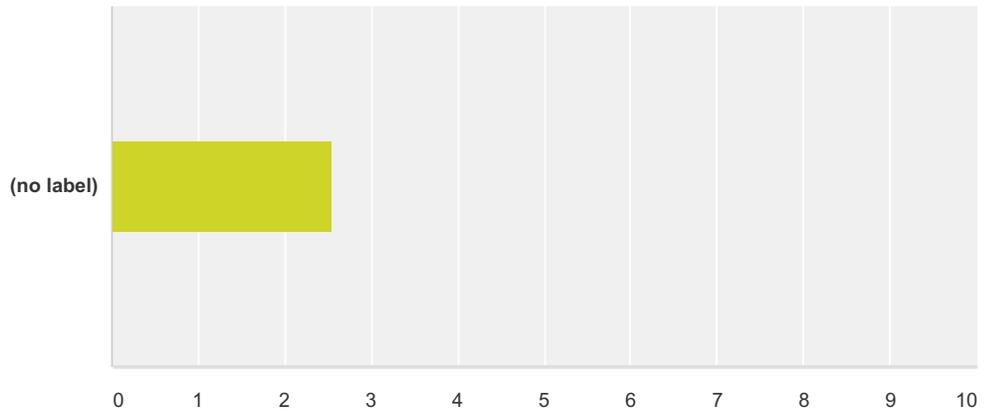


	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree	Total	Weighted Average
(no label)	20.19% 229	37.57% 426	10.93% 124	24.07% 273	7.23% 82	1,134	2.61

Colorado Springs Emergency Preparedness Survey

**Q10 How would you rate your household's preparedness?**

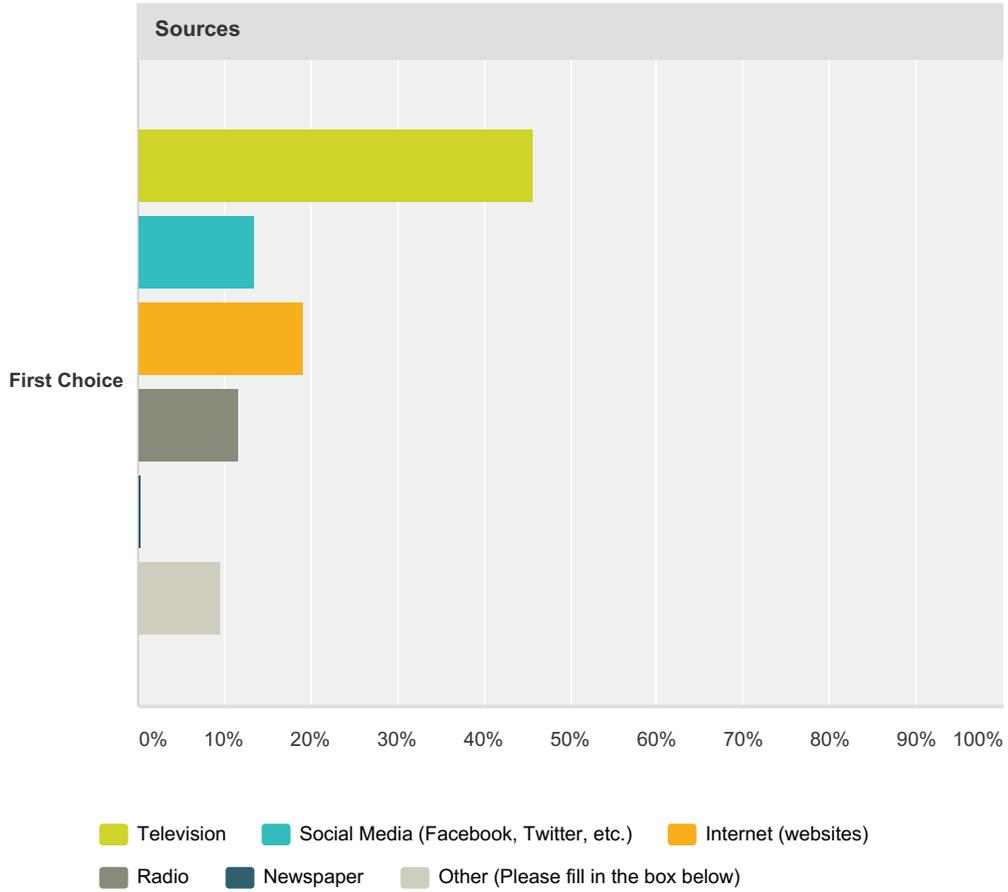
Answered: 1,134 Skipped: 24



	Very prepared	Somewhat prepared	Don't know	Minimally prepared	Unprepared	Total	Weighted Average
(no label)	15.34% 174	50.44% 572	4.67% 53	24.34% 276	5.20% 59	1,134	2.54

**Q11 During an emergency, what is your first choice for getting information?**

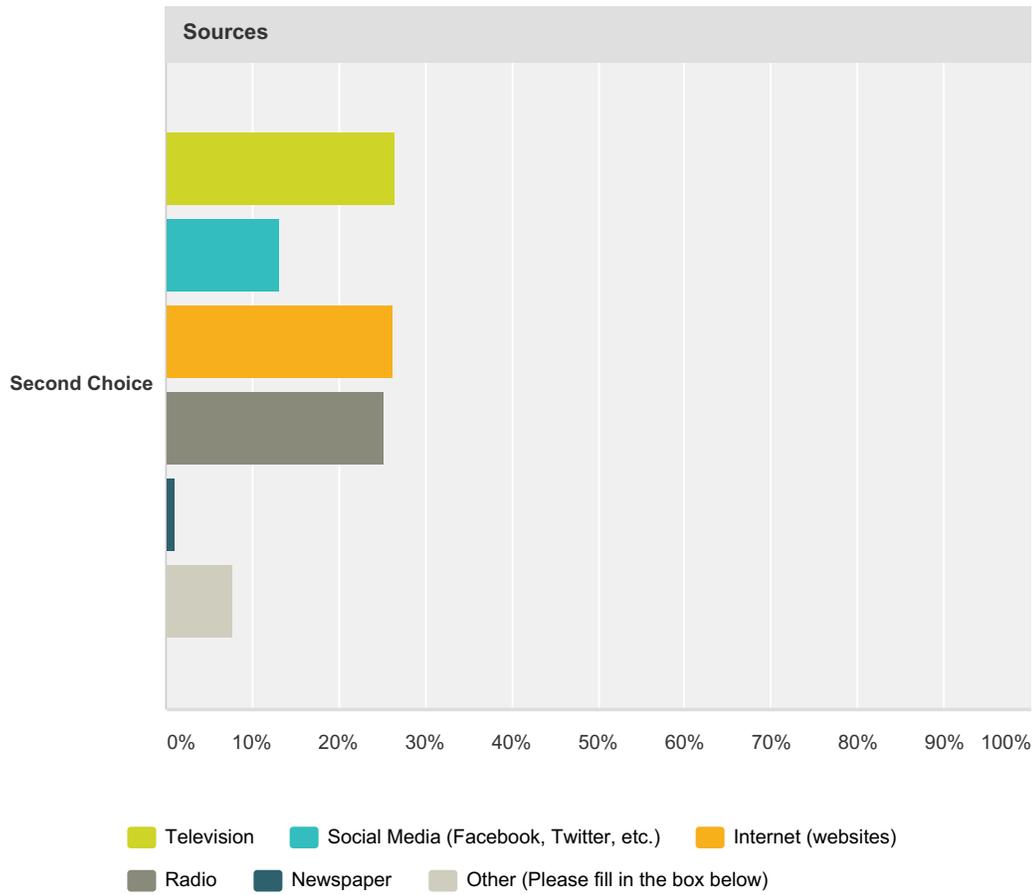
Answered: 1,134 Skipped: 24



Sources							
	Television	Social Media (Facebook, Twitter, etc.)	Internet (websites)	Radio	Newspaper	Other (Please fill in the box below)	Total
First Choice	45.68% 518	13.49% 153	19.22% 218	11.64% 132	0.44% 5	9.52% 108	1,134

**Q12 During an emergency, what is your second choice for getting information?**

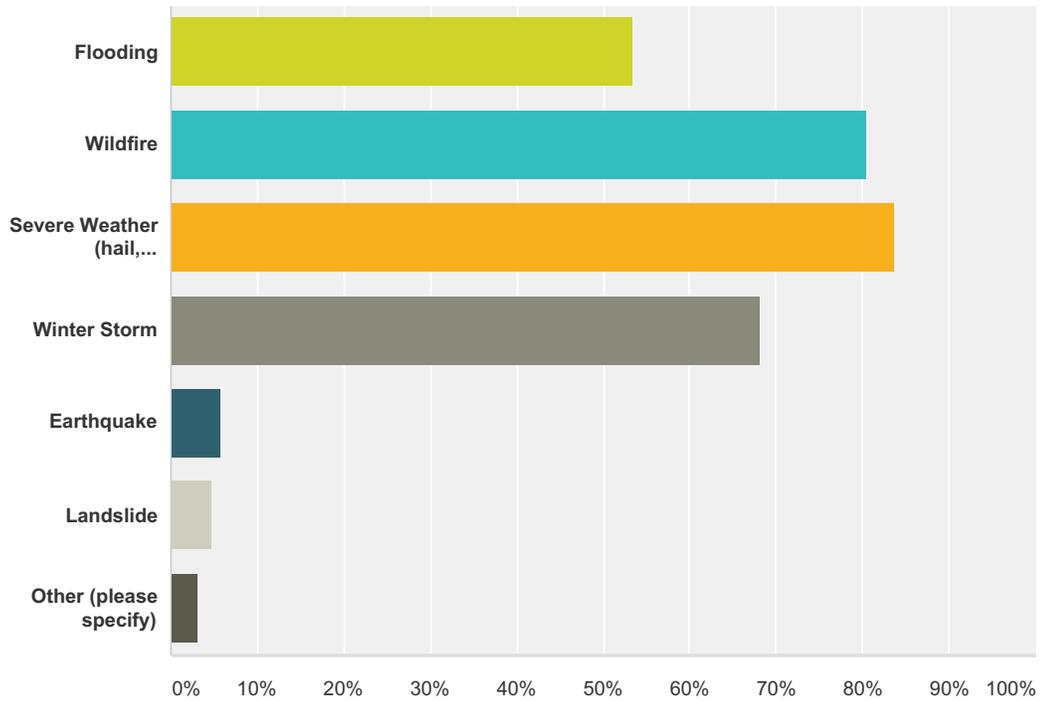
Answered: 1,134 Skipped: 24



Sources							
	Television	Social Media (Facebook, Twitter, etc.)	Internet (websites)	Radio	Newspaper	Other (Please fill in the box below)	Total
Second Choice	26.54% 301	13.23% 150	26.28% 298	25.22% 286	1.06% 12	7.67% 87	1,134

**Q13 Pick the top three (3) natural hazards that you are most concerned about.**

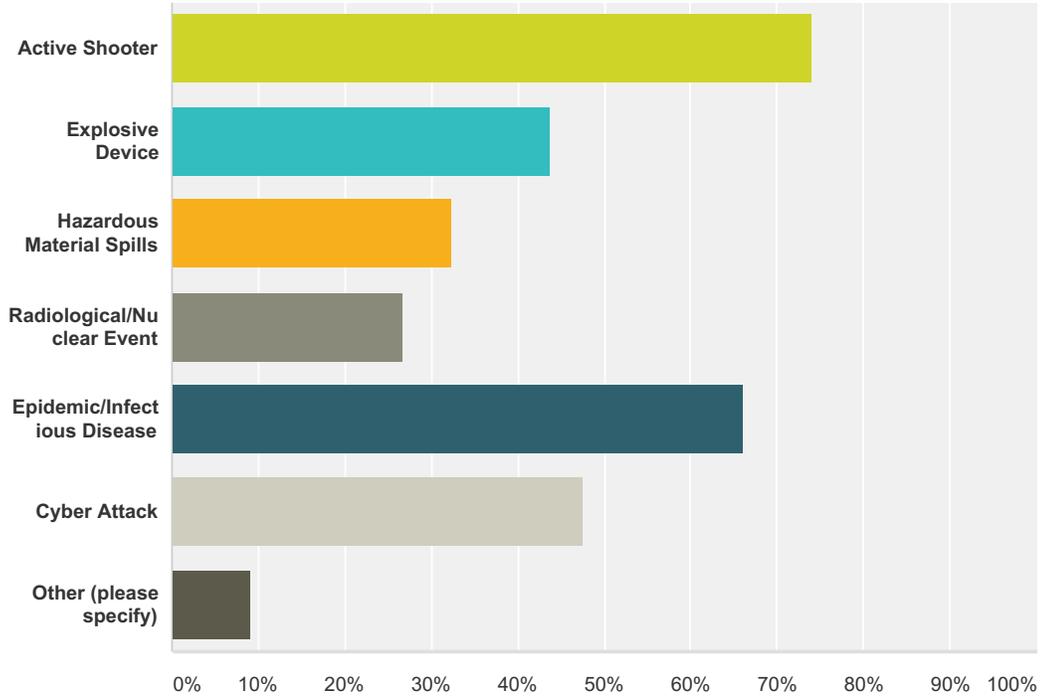
Answered: 1,115 Skipped: 43



Answer Choices	Responses
Flooding	53.54% 597
Wildfire	80.54% 898
Severe Weather (hail, tornadoes, strong winds, heavy rain, etc.)	83.77% 934
Winter Storm	68.34% 762
Earthquake	5.83% 65
Landslide	4.75% 53
Other (please specify)	3.23% 36
<b>Total Respondents: 1,115</b>	

**Q14 Pick the top three (3) human-caused hazards that you are most concerned about.**

Answered: 1,115 Skipped: 43

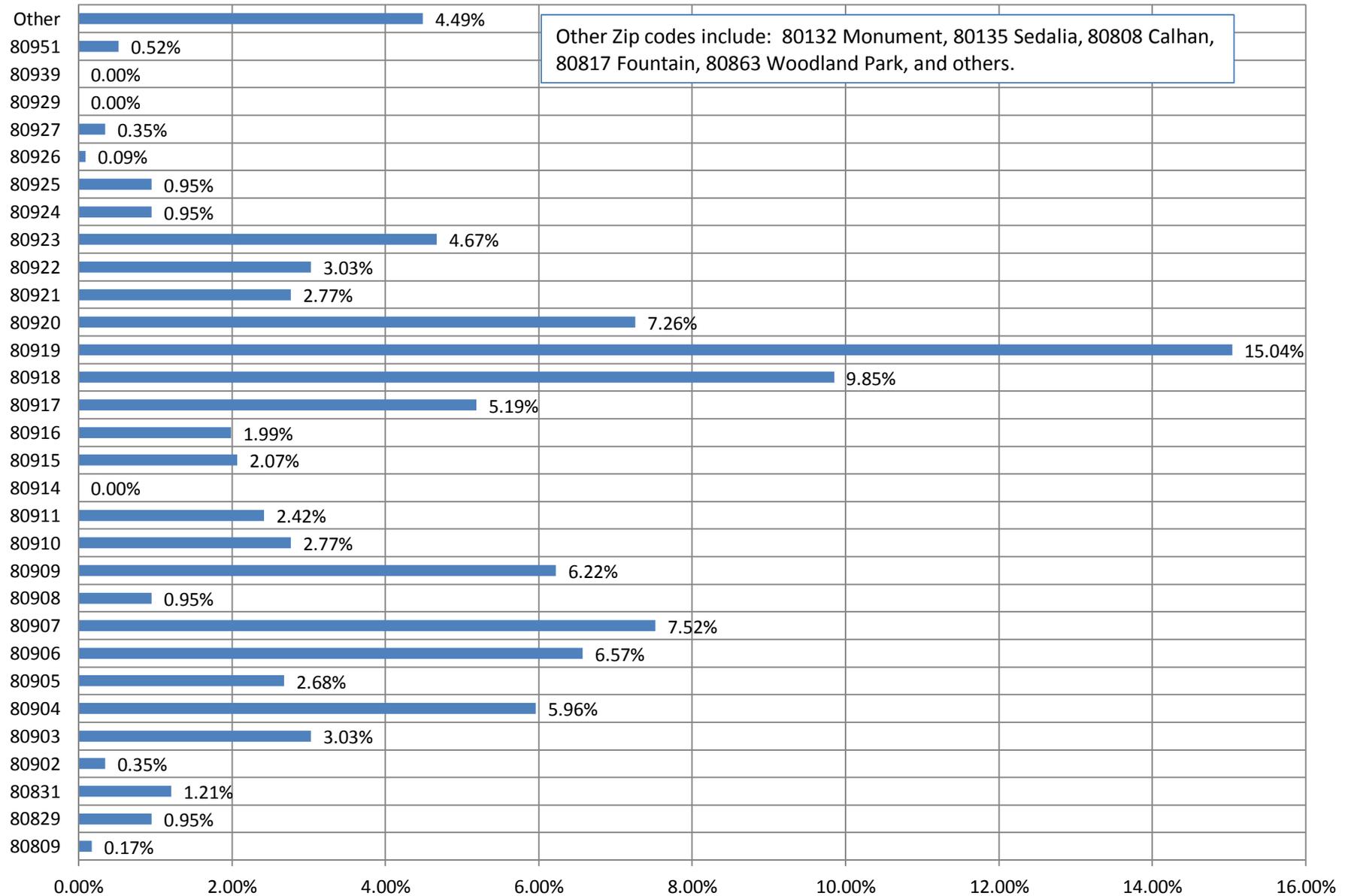


Answer Choices	Responses	Count
Active Shooter	74.08%	826
Explosive Device	43.86%	489
Hazardous Material Spills	32.29%	360
Radiological/Nuclear Event	26.73%	298
Epidemic/Infectious Disease	66.28%	739
Cyber Attack	47.62%	531
Other (please specify)	9.15%	102
<b>Total Respondents: 1,115</b>		

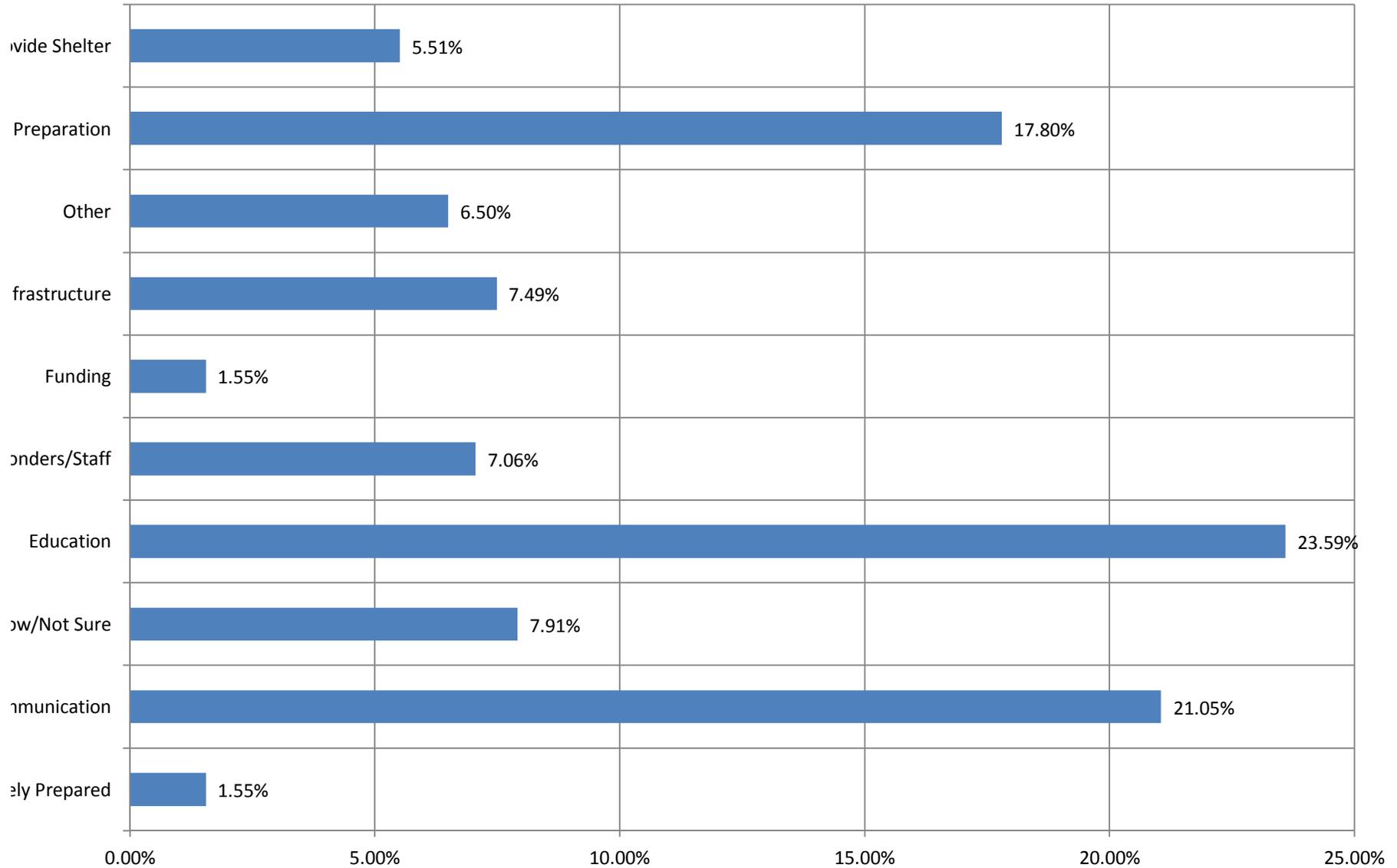
**Q15 If there was one thing that the City could do to be more prepared for disasters, what would it be?**

Answered: 708 Skipped: 450

## In what ZIP code is your home located?



**Q15. If there was one thing the City could do to be more prepared for disasters, what would it be? (By category)**



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# Emergency preparedness survey results indicate Colorado Springs residents feel prepared for emergencies

by [OEM](https://oem.coloradosprings.gov/) (<https://oem.coloradosprings.gov/>) - 8/25/2015

**COLORADO SPRINGS, Colo.** – Results from a recent survey designed to gather information about personal emergency preparedness indicate that Colorado Springs residents feel prepared for an emergency or disaster situation. One thousand, one hundred, fifty-seven (1,157) people participated in this anonymous survey to help the Office of Emergency Management better understand the changing demographics and needs of the community and its overall level of preparedness. This information is intended to help the Colorado Springs Office of Emergency Management better prepare for an emergency.

## Survey highlights:

- More than 50 percent of respondents were 50 years or older and have lived in Colorado Springs for at least 20 years
- More than 65 percent feel they are somewhat or very prepared for an emergency
- More than 58 percent said their household is prepared to remain in the home without water, gas, or electricity for 72 hours.
  - Although prepared to remain at home 23 percent of respondents cannot go without medication or medical treatment after 72 hours.
- Most respondents would rely on television to receive public information during an emergency (45 percent), followed by the internet (19 percent), social media (13 percent) and radio (11 percent)
- Perceived natural hazard concerns: Severe weather, winter storm, wildfire and flooding
- Perceived manmade disaster concerns: Active shooter, epidemic infectious disease, cyber-attack and explosive device

“Although this is a sampling of residents who chose to take the survey, it indicates some very positive trends in individual preparedness from community members that have lived in Colorado Springs for a long time,” said Bret Waters, Colorado Springs Office of Emergency Management Director. “We recognize that emergency preparedness education is an ongoing mission, and we must continue to reach out to our community including those that have unique access and functional needs.”

Results from the survey, which was open to the public July 27 through August 15, will assist in updating its Hazard Mitigation Plan which evaluates natural and human-caused hazards that may affect the City of Colorado Springs, and actions that could be taken to increase the community’s resiliency and preparedness for those hazards. The Pre-Disaster Mitigation Plan, which was last updated in 2010 is updated every five years.

## [082415 Emergency Preparedness Survey Respondent data](#)

[\(/sites/default/files/office\\_of\\_emergency\\_management/pages/082415\\_emergency\\_preparedness\\_survey\\_respondent\\_data.pdf\)](#) (pdf)

## [082415 Emergency Preparedness Survey Participation by Zip Code](#)

[\(/sites/default/files/office\\_of\\_emergency\\_management/pages/082415\\_emergency\\_preparedness\\_survey\\_participation\\_by\\_zip\\_code.pdf\)](#) (pdf)

## [082415 Emergency Preparedness Survey Respondent Comments](#)

[\(/sites/default/files/office\\_of\\_emergency\\_management/pages/082415\\_emergency\\_preparedness\\_survey\\_respondent\\_comments.pdf\)](#) (pdf)





## **City of Colorado Springs 2015 Hazard Mitigation Plan Mitigation Strategy Meeting**

**September 10, 2015  
9:00 am to 11:00 am MDT**

### **AGENDA**

1. Office of Emergency Management (OEM) Welcome and Remarks – Bart Howard (5 mins)
2. General Introductions (10 mins)
3. Status of Plan Update – Lawrence Frank and Kim Pirri (10 mins)
  - a. Status of the Planning Process and Plan Development
  - b. Final Results of the Public Survey
4. Mitigation Strategy – Lawrence Frank (15 mins)
  - a. Review of Goals and Objectives
  - b. Potential Funding Sources for Actions (grants/capital improvements)
  - c. Evaluation Criteria for Actions
5. Break (5 mins)
6. Breakout Sessions to Refine, Evaluate, and Prioritize Actions (40 mins)
  - a. Flood Hazard (includes Dam and Levee Failure) – Gordon Brenner & Kim Pirri
  - b. Wildfire Hazard – David Vitwar & TBD
  - c. Human Caused Hazards – Bart Howard & Lawrence Frank
  - d. Severe Weather/Geologic Hazards – Tim Stoecklein & Rich Chamberlain
7. Report Out on Breakout Sessions – Top 3 Actions (5 mins each group/20 mins total)
8. Implementation / Maintenance Strategy – Lawrence Frank (5 mins)
9. Schedule & Next Steps – Kim Pirri and OEM (5 mins)



**Guidelines:**

**1. Evaluate each action using the STAPLEE Method:**

<b>Evaluation Criteria</b>	<b>Discussion “It is important to consider...”</b>	<b>Considerations</b>
<b><u>S</u>ocial</b>	<i>The public support for the overall mitigation strategy and specific mitigation actions.</i>	<ul style="list-style-type: none"> <li>• Community acceptance</li> <li>• Adversely affects population</li> </ul>
<b><u>T</u>echnical</b>	<i>If the mitigation action is technically feasible and if it is the whole or partial solution.</i>	<ul style="list-style-type: none"> <li>• Technical feasibility</li> <li>• Long-term solutions</li> <li>• Secondary impacts</li> </ul>
<b><u>A</u>ministrative</b>	<i>If the community has the personnel and administrative capabilities necessary to implement the action or whether outside help will be necessary.</i>	<ul style="list-style-type: none"> <li>• Staffing</li> <li>• Funding allocation</li> <li>• Maintenance/operations</li> </ul>
<b><u>P</u>olitical</b>	<i>What the community and its members feel about issues related to the environment, economic development, safety, and emergency management.</i>	<ul style="list-style-type: none"> <li>• Political support</li> <li>• Local champion</li> <li>• Public support</li> </ul>
<b><u>L</u>egal</b>	<i>Whether the community has the legal authority to implement the action, or whether the community must pass new regulations.</i>	<ul style="list-style-type: none"> <li>• Local, state, and federal authority</li> <li>• Potential legal challenge</li> </ul>
<b><u>E</u>conomic</b>	<i>If the action can be funded with current or future internal and external sources, if the costs seem reasonable for the size of the project, and if enough information is available to complete any necessary federal economic analysis criteria (e.g. FEMA Benefit-Cost Analysis).</i>	<ul style="list-style-type: none"> <li>• Benefit/cost of action</li> <li>• Contributes to other economic goals</li> <li>• Outside funding required</li> <li>• FEMA Benefit-Cost Analysis</li> <li>• Best bang for the buck</li> </ul>
<b><u>E</u>nvironmental</b>	<i>The impact on the environment because of public desire for a sustainable and environmentally healthy community.</i>	<ul style="list-style-type: none"> <li>• Effect on local flora and fauna</li> <li>• Consistent with community environmental goals</li> <li>• Consistent with local, state, and federal laws</li> </ul>

**Other Evaluation Considerations:**

- Current or potential support from the City Council
- Local department or agency champion
- Ability to be implemented during the 5-year lifespan of this version of the Plan
- Ability to reduce expected future damages and losses (cost-benefit)
- Value added to resiliency (of the City and its citizens)
- “Low-hanging fruit” projects (projects that are easy to develop, fund, implement, and close out)

**2. Prioritization considerations:**

- Is the need urgent because the risk is high? – HIGHER Priority
- Can the action be easily implemented? (e.g., it is already an acceptable practice or resources are available) – HIGHER Priority
- Is it an important action but it will need more legwork done before it is ready to be presented to the public? – LOWER Priority



## Mitigation Action Review & Prioritization Worksheets

WILDFIRE HAZARD		
Proposed Action	Evaluation (STAPLEE) & Prioritization	Implementation (who, what, where, when)
#1 - Hillside Overlay boundaries should be revised to match the WUI. This does not need to be corrected but it does cause confusion for property owners. There are future areas that are not part of the City, such as Banning Lewis, that should be included because Colorado Springs Fire serves the area.	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#2 - Continue conducting wildfire presentations to Homeowner Associations to educate them on mitigation actions. Areas for mitigation are prioritized based on the receptiveness of the community. Roughly 66 HOAs are participating.	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#3 - Continue thinning/clearing activities	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#4 - Consider the requirement of cement board siding in Hillside Overlay ordinance	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –



## Mitigation Action Review & Prioritization Worksheets

WILDFIRE HAZARD		
Proposed Action	Evaluation (STAPLEE) & Prioritization	Implementation (who, what, where, when)
#5 - Increase education on 'no burning' practice (rather than make it a law)	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#6 - Continue Business Education and Awareness about wildfire concerns and evacuation/rescue issues (3-4 business presentations done this year).	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#7 - Wildfire mitigation information should be provided to school-age children as part of Safety Presentation. This can help influence parents through child pressure.	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#8 - [reserved for additional identified actions]	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –



## Mitigation Action Review & Prioritization Worksheets

<b>WILDFIRE HAZARD</b>		
<b>Proposed Action</b>	<b>Evaluation (STAPLEE) &amp; Prioritization</b>	<b>Implementation (who, what, where, when)</b>
#9 - [reserved for additional identified actions]	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#10 - [reserved for additional identified actions]	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –



## Mitigation Action Review & Prioritization Worksheets

<b>FLOOD HAZARD</b>		
<b>Proposed Action</b>	<b>Evaluation (STAPLEE) &amp; Prioritization</b>	<b>Implementation (who, what, where, when)</b>
<p><b>#1 - Templeton Gap Floodway</b>            Obtain documentation regarding the floodway's accreditation status from USACE and FEMA. Evaluate the need to assess the functional capacity of the floodway to determine if the City should seek accreditation.</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p><b>#2 - Evaluate the need for acquisition of critical facilities, schools, or nursing homes in high flood risk areas, especially at the base of canyons. Acquired lands would be kept as open space or the location of a flood mitigation project (e.g., retention basin)</b></p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p><b>#3 - Evaluate additional ways to reduce or eliminate erosion and sloughing on stream banks.</b></p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p><b>#4 - Implement mitigation actions on non-burn streams</b></p> <ul style="list-style-type: none"> <li>• In-channel improvements for stability</li> <li>• Detention</li> <li>• Zero run-off increase from new development</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>



## Mitigation Action Review & Prioritization Worksheets

FLOOD HAZARD		
Proposed Action	Evaluation (STAPLEE) & Prioritization	Implementation (who, what, where, when)
<p>#5 - Monument Creek is the downstream receiving water for many dams where a failure could affect Colorado Springs. Verify that Emergency Action Plans are available for all the upstream dams.</p> <ul style="list-style-type: none"> <li>Evaluate need for inundation mapping</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#6 - Evaluate the potential of implementing code and/or regulations revisions to further limit or eliminate development in the 100-year floodplain.</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#7 - [reserved for additional identified actions]</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#8 - [reserved for additional identified actions]</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#9 - [reserved for additional identified actions]</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>



## Mitigation Action Review & Prioritization Worksheets

SEVERE WEATHER/GEOLOGIC HAZARDS		
Proposed Action	Evaluation (STAPLEE) & Prioritization	Implementation (who, what, where, when)
<p>#1 - Continue to bury utilities underground</p> <ul style="list-style-type: none"> <li>Evaluate cost-sharing opportunities with CSU to continue burying utilities</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#2 - Continue to trim trees and vegetation along power line corridors</p> <ul style="list-style-type: none"> <li>Evaluate whether the City can support vegetation trimming via cost-sharing methods</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#3 - Provide more outreach to the public on severe weather risk and mitigation actions they can take to protect themselves and their property</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#4 - Influence building codes to mitigate for severe weather</p> <ul style="list-style-type: none"> <li>Evaluate whether certain roof types could be required to mitigate the impacts of hail and damaging winds</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>



## Mitigation Action Review & Prioritization Worksheets

<b>SEVERE WEATHER/GEOLOGIC HAZARDS</b>		
<b>Proposed Action</b>	<b>Evaluation (STAPLEE) &amp; Prioritization</b>	<b>Implementation (who, what, where, when)</b>
<p>#5 - Purchase variable message signs for use at key locations to warn motorists of ice so they can avoid these areas.</p> <ul style="list-style-type: none"> <li>• Locations include: Austin Bluffs Parkway either side of UCCS and South Carefree</li> <li>• These signs could also be used for wildfire, HAZMAT, or traffic incidents</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#6 - Review building codes to encourage xeriscape landscapes.</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#7 - The City should proactively monitor landslides with GPS or pendulum technology</p> <ul style="list-style-type: none"> <li>• Technology is costly</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#8 - Provide outreach to the public on earthquake risk and mitigation actions they can take to protect themselves and their property</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>



## Mitigation Action Review & Prioritization Worksheets

<b>SEVERE WEATHER/GEOLOGIC HAZARDS</b>		
<b>Proposed Action</b>	<b>Evaluation (STAPLEE) &amp; Prioritization</b>	<b>Implementation (who, what, where, when)</b>
#9 - [reserved for additional identified actions]	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#10 - [reserved for additional identified actions]	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#11 - [reserved for additional identified actions]	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –



**HUMAN CAUSED HAZARDS**

Proposed Action	Evaluation (STAPLEE) & Prioritization	Implementation (who, what, where, when)
<p>#1 - Continue Public Awareness on terrorism risk</p> <ul style="list-style-type: none"> <li>Continue theme of shared responsibility and how the public should notify law enforcement of suspicious behavior (“See something, Say something”)</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#2 - Enhance collaboration and coordination amongst Law Enforcement, Emergency Management and other intelligence-gathering agencies</p> <ul style="list-style-type: none"> <li>Helps ‘connect the dots’ from a variety of sources on potential terrorists or bad actors</li> <li>EM has a better tie-in and can prepare to respond when risk profile is raised</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#3 - Continue improving readiness and warning to appropriate officials and public for hazardous materials incidents for public safety and to reduce secondary impacts</p> <ul style="list-style-type: none"> <li>Enhance use of IPAWS</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#4 - Evaluate whether the Tier II reporting enforcement is adequate and whether the LEPC needs more resources/support in this area</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>



**HUMAN CAUSED HAZARDS**

Proposed Action	Evaluation (STAPLEE) & Prioritization	Implementation (who, what, where, when)
<p>#5 - Evaluate mitigation actions for areas particularly susceptible to hazardous materials incidents like downtown</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#6 - Continue public education for infectious disease on several topics including vaccinations, emerging diseases, and things to avoid (e.g., animal carcasses)</p>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#7 - Review response operations to intervene and stop the spread of disease</p> <ul style="list-style-type: none"> <li>• In disaster, need redundancy of drinking water (e.g., resist spread of cholera)</li> <li>• CDC City Ready Initiative – pods in strategic sites for distribution</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>
<p>#8 - Implement education and awareness activities for City of Colorado Springs employees to reduce hacking via phishing attacks</p> <ul style="list-style-type: none"> <li>• Share information with other stakeholders on potential phishing threats</li> </ul>	<p>STAPLEE – any concerns?:</p> <p>Prioritization – High Medium Low</p>	<p>Who –</p> <p>When –</p> <p>How (resources) –</p>



## Mitigation Action Review & Prioritization Worksheets

### HUMAN CAUSED HAZARDS

Proposed Action	Evaluation (STAPLEE) & Prioritization	Implementation (who, what, where, when)
#9 - Evaluate Continuity of Operations scenarios if technology is incapacitated (e.g., no phones, no computer) <ul style="list-style-type: none"> <li>• Use of radios and courier service</li> </ul>	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#10 - [reserved for additional identified actions]	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#11 - [reserved for additional identified actions]	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –
#12 - [reserved for additional identified actions]	STAPLEE – any concerns?:  Prioritization – High Medium Low	Who –  When –  How (resources) –

# Hazard Mitigation Plan

## Mitigation Strategy Meeting



September 10, 2015



**AECOM**

# Agenda

- OEM Welcome and Remarks
- General Introductions
- Status of Plan Update
- Mitigation Strategy
- Break
- Breakout Sessions and Report Out
  - Refine strategies into actions, evaluate, and prioritize
- Schedule & Next Steps



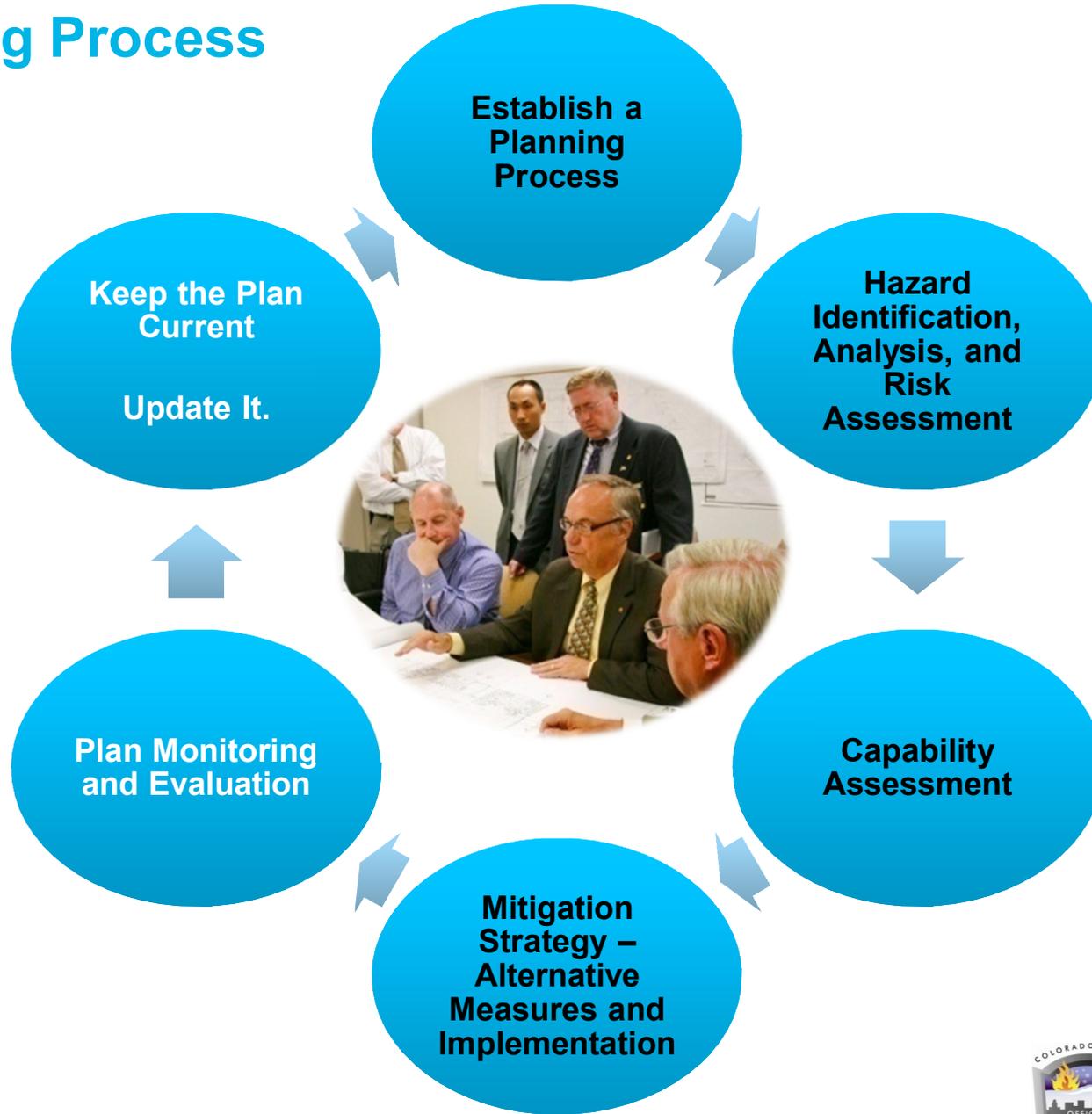
**AECOM**

# Status of Plan Update



**AECOM**

# Planning Process



## Status of Plan Update

- Planning Process
- Risk Assessment ✓ **COMPLETE**
- Capability Assessment ✓ **COMPLETE**
- Public Survey ✓ **COMPLETE**
- Mitigation Strategy
  - Past actions
  - Actions from strategies discussed at July meeting



**AECOM**

# Public Survey Results



**AECOM**

# Public Survey Results

## 1548 Respondents

- 55.8% Over 50 years old
- 50% lived in COS over 20 years
- 52.5% from 80906, 80907, 80909, 80918, 80919 & 80920
- 99% do not need medical transport to evacuate
- **65.8% rate themselves somewhat or very prepared**
- TV is the #1 source of information
- Top 3 answers to “If there was one thing the City could do...”
  - Education – 23.6%
  - Communication – 21.1%
  - Preparation – 17.8%

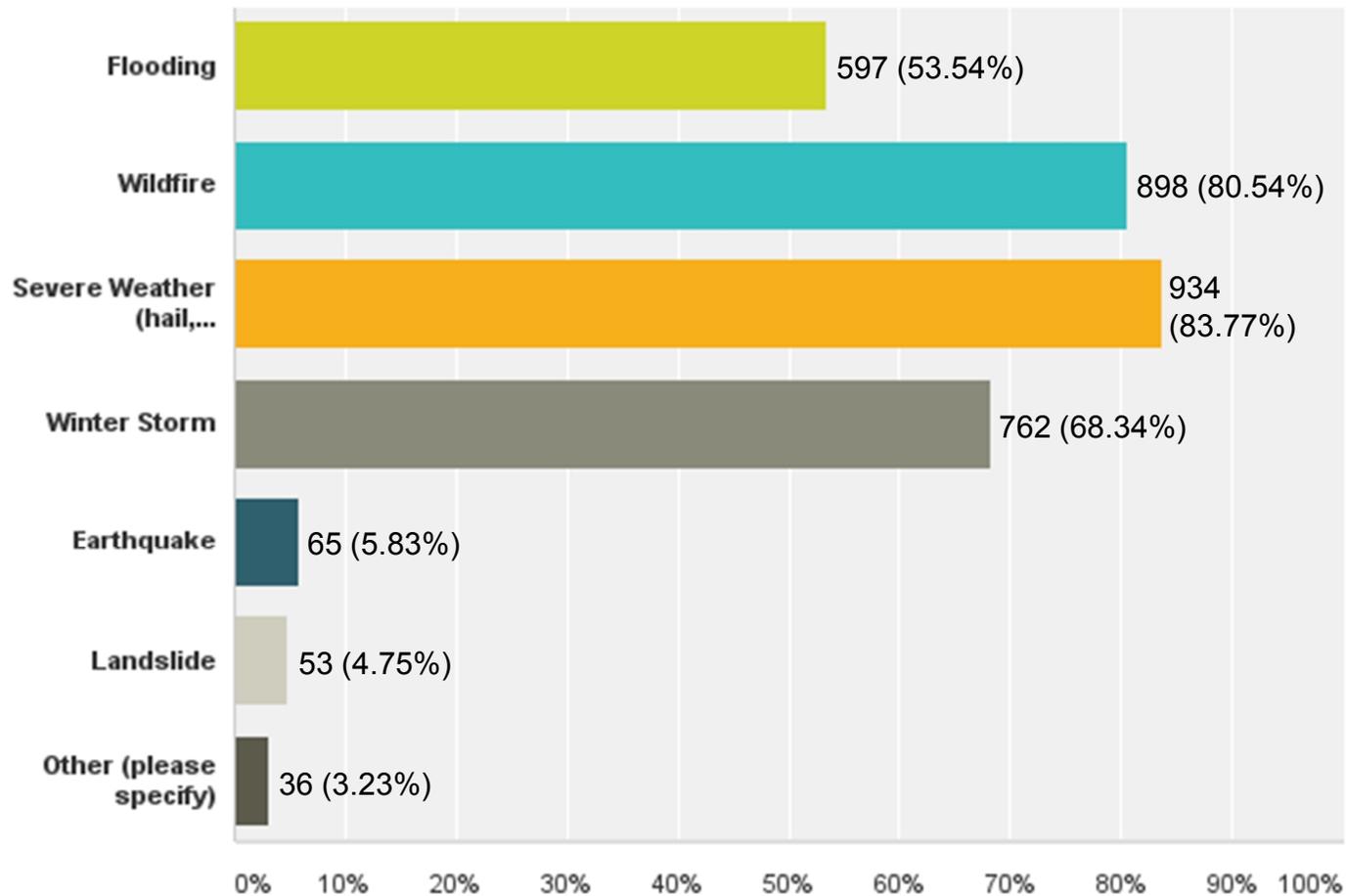


**AECOM**

# Public Survey Results – Top 3 Natural Hazards

Q13 Pick the top three (3) natural hazards that you are most concerned about.

Answered: 1,115 Skipped: 43

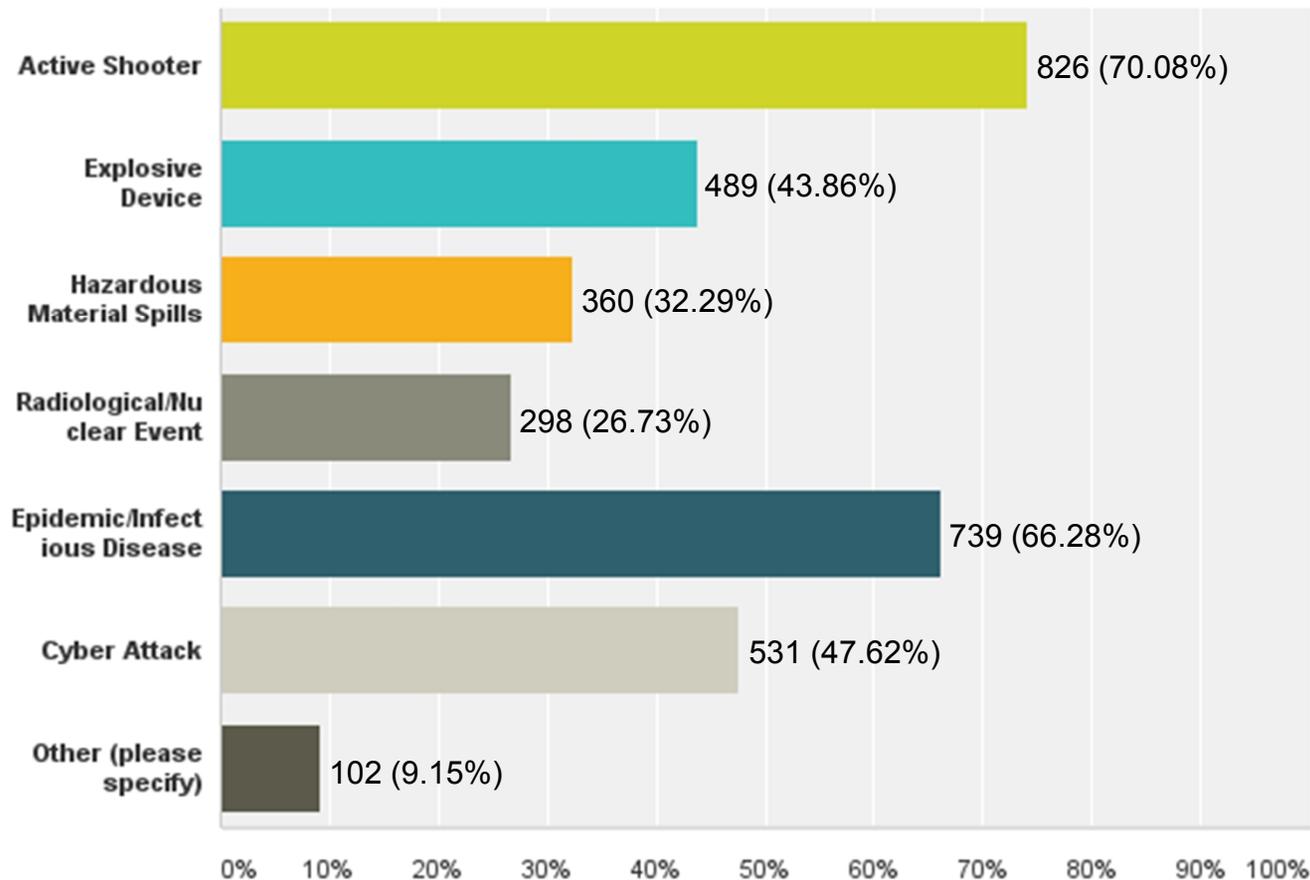


AECOM

# Public Survey Results – Top 3 Human-Caused Hazards

**Q14 Pick the top three (3) human-caused hazards that you are most concerned about.**

Answered: 1,115 Skipped: 43



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# Risk Assessment Summary



**AECOM**

# Risk Assessment Summary

Hazard	Probability	Magnitude	Risk Ranking
Flood/ Dam and Levee Failure	Likely/ Unlikely	Critical to Catastrophic	3
Severe Weather (Drought, Hail, Lightning, Tornado, Windstorm, and Severe Winter Storm)	Highly Likely	Limited to Critical	2
Geologic Hazard (Earthquake and Landslides, etc.)	Occasional to Likely	Limited to Critical	5
Human-Caused Hazards (Hazardous Materials, Infectious Disease, and Terrorism)	Occasional	Limited to Critical	4
Wildfire	Likely	Critical	1



# Mitigation Strategy



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## 2015 Goal and Objectives

**GOAL:** Reduce or eliminate the exposure to property damage, injury or loss of life, and damage to the natural environment caused by ~~natural~~ hazards.

- **Objective A:** Identify and initiate improvements to public safety, response, and recovery programs to reduce risk and vulnerability.
- **Objective B:** Follow through with and leverage existing organizations, programs, and procedures to implement the ~~PDM Program~~ Hazard Mitigation Plan.



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## 2015 Goal and Objectives

- **Objective C:** Build upon existing public outreach efforts to reduce risk and vulnerability to ~~natural~~ hazards.
- **Objective D:** Leverage ~~external~~ financial assistance and other resources to strengthen the City's disaster resiliency.
- **Objective E:** Continue to improve the regulatory review process for development and construction in the vicinity of known ~~natural~~ hazard areas.
- **Objective F:** Continue to assess ongoing disaster preparedness programs that maintain or improve City preparedness.



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# Funding Sources

## INTERNAL

- Staff time for ordinance change, outreach or coordination
- Capital improvement budgets

## EXTERNAL

- Grants – FEMA HMGP, PDM, FMA
- HUD Community Development Block Grants (Normal and Disaster Recovery funds)
- Emergency Management Program Grant
- Preparedness Grants for Human Caused Hazards
- Other federal funding sources: FHWA, NOAA, USGS
- Studies by local universities



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# Evaluation Criteria

## STAPLEE Method

- Social
- Technical
- Aministrative
- Political
- Legal
- Economic
- Environmental



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# Evaluation Criteria

## Other Evaluation Considerations:

- Current or potential support from the City Council
- Local department or agency champion
- Ability to be implemented during the 5-year lifespan of this version of the Plan
- Ability to reduce expected future damages and losses (cost-benefit)
- Value added to resiliency (of the City and its citizens)
- “Low-hanging fruit” projects (projects that are easy to develop, fund, implement, and close out)



**AECOM**

# Prioritization Considerations

Category	Timeframe	Comments
High	Begin within 1 year from plan adoption	Top organizational priority and is generally a well-details project idea. Protects population, resource, or property at high risk. Uses feasible methods, techniques, or technology.
Medium	2-3 years from plan adoption	A good idea that needs more information or is an action that addresses a moderate hazard.
Low	3-5 years from plan adoption	An idea that needs a lot more information or will take a lot of preliminary action to build support.



# Breakout Sessions



## Breakout Session

- Divide up into four groups like in July meeting
- Group facilitator with ground rules, summary risk information and Actions for:
  - *Flood (includes flood after fire risk)*
  - *Wildfire*
  - *Human-caused hazards*
  - *Severe Weather and Geologic hazards*
- With your group, refine actions on handouts (derived from July meeting), then evaluate and prioritize
  - *Add more detail like Who, When and How*
- Report out to the group – Top 3 Actions



**AECOM**

# Breakout Sessions (40 minutes)

## Report Out

- Flood Hazard
- Wildfire Hazard
- Human-caused hazards
- Severe Weather and Geologic Hazards



**AECOM**

# HMP Maintenance Strategy

- Biannual meetings
- Checklist
- Follow progress of actions



**AECOM**

## HMP Preparation Schedule

- Follow-up questions to LPC for remaining Plan items
- Review of the Plan
  - By OEM (early October)
  - By LPC, Stakeholders, and Public (mid to late October)



**AECOM**

Questions???



**AECOM**

# Thank You!

- Tobi Blanchard, City of Colorado Springs OEM  
[tblanchard@springsgov.com](mailto:tblanchard@springsgov.com)
- Kim Pirri, AECOM  
[kimberley.pirri@aecom.com](mailto:kimberley.pirri@aecom.com)
- Lawrence Frank, AECOM  
[lawrence.frank@aecom.com](mailto:lawrence.frank@aecom.com)



**AECOM**

## BRAINSTORMING SESSION NOTES - WILDFIRES

### PROBLEM STATEMENTS/RESPONSES

1. Are additional modifications or enhancements needed to the Hillside Overlay Ordinance needed/ any new WUI Codes?
  - Screening and Codes were updated after Waldo Canyon and Black Forest Fires.
  - 15' clearance area around structures
  - WUI does not match the Hillside Overlay boundaries. This does not need to be corrected but it does cause confusion for property owners. There are future areas that are not part of the City, such as Banning Lewis, that should be included because Colorado Springs Fire serves the area. WUI is almost fully built out. Only 8% of new development located in WUI.
  - Colorado Springs Fire is not enforcement; they're focus is education. Development is responsible for enforcement.
2. What areas to prioritize for mitigation projects?
  - The project is not NEEDS based. The areas are prioritized based on the receptiveness of the community. The approach is that those requesting the information are most receptive and will perform the suggested improvements.
  - HOAs are requesting presentations. Roughly 66 HOAs are participating.
3. Any new treatment options?
  - Basically limited to thinning/clearing
  - New roofs must be Class A and are fire retardant. Can only be enforced if new roofing area exceeds 25% of total roof.
  - Perhaps require cement board siding in codes.
  - "No Burning" requirements are hard to pass politically.
  - Codes are not developed by Fire Department. Development Department is responsible for code development and enforcement.
4. Any new Education programs or strategies are needed?

Most programs are focused on Adult Education

  - There are new strategies being offered by Colorado Springs Fire Department:
    - Business Education and Awareness.
      - Informs businesses about wildfire concerns and evacuation/rescue issues. 3-4 business presentations done this year.
      - CSFD has links on website to FEMA links.
    - Insurance Companies and Policy Renewal
      - USAA, All State and State Farms are participating.
      - Insurance companies notify owners if they are located in the WUI and inform them that rates are dependent on compliance with codes. CSFD will perform inspections and recommendations and will provide letter

of compliance to Insurance Companies. CSFD does not advertise because they are not staffed to review all homes. Performing reviews on an insurances renewal basis makes inspections manageable.

- Information provided to School age children as part of Safety Presentation
  - Might place greater stress in future to influence parents through child pressure.

## BRAINSTORMING SESSION NOTES - SEVERE WEATHER/GEOLOGIC HAZARDS

### Severe Weather:

- Continue to bury utilities underground
  - CSU does this already
  - Can the City continue burying utilities with cost-sharing with CSU?
- Continue to trim trees and vegetation along power line corridors
  - CSU currently does this already
  - Can the City support vegetation trimming via cost-sharing methods?
- Provide more outreach to the public
  - The City already does public press releases on a seasonal basis (i.e. in the late fall for winter storms, in the early spring for severe weather).
- Influence building codes
  - Can the City influence building codes to mitigate for severe weather (i.e. hail and damaging winds)
    - Example: Require certain roof types
- The City has part of an integrated warning team that includes the National Weather Service, local media, CDOT and others. Three years ago this team had a 2-day workshop to kick off and discuss strategies. Another 1 day workshop is scheduled for 2015.
- The City is already a National Weather Service Weather Ambassador.
- The City has hired a vendor, Skyview Weather, to consult with when needed. Examples of when the City consults with Skyview include when precip events occur over burn scars or near areas of landslide activity.

### Winter Weather:

- The team discussed locations in the City where icy roads were common during storms and in the mornings after melted snow and ice refreezes overnight.
  - Purchase variable message signs at key locations to warn motorists of ice so they can avoid these areas.
  - David Scalfri, team member and City Streets Operations Manager in the Public Works/Streets Department, offered to mark up a map to show these locations so AECOM can include as a figure in the Plan.
  - Some locations include: Austin Bluffs Parkway either side of UCCS and South Carefree
  - Message signs also useful for Amber alerts, accident warnings, etc.

### Drought:

- Review building codes to encourage xeriscape landscapes.
- CSU has a xeriscape program already.

### Landslides:

- The City should proactively monitor landslides. Use GPS or pendulum technology to assist with monitoring but this is expensive.
- The City's 1994 geologic hazard code dictates that certain parts of the City need to assess risks for subsidence, mine shafts, etc. when a new development is planned.

- An example of a new landslide this year due to the very wet weather is in the Lower Skyway area.

Earthquakes:

- The team did not discuss earthquake mitigation strategies but acknowledged there is a slight risk of an earthquake to the area.

## Human Caused Hazards Brainstorming Session

Emphasis on mitigation, not response; for human caused hazards, mitigation is also mitigating human life and safety (protection of human life). Key to this type of mitigation, is getting to the source and getting it away - removing the hazard from others (e.g., infected person)

### Terrorism (Home Grown and Foreign)

- 1) Public Awareness – Make people aware they can help serve as ‘eyes and ears’ of law enforcement; ‘see something, say something’
- 2) Collaboration and coordination to receive and analyze intelligence – put together the pieces of the puzzle (and to prioritize protection of high risk targets) – use existing channels and better tie into existing groups like CIAC and the CSU Regional Threat Identification Group (once/month meeting); also, lots of information from Vice Narcotics and Intelligence (VNI) and STIC

Law Enforcement is lead on terrorism but EM seeking a better tie-in when specific threat levels may be raised (EM does do things for big events like July 4 to get ready)

### Hazardous Materials (Industrial Accident/I-25/Rail)

- 1) Better readiness and warning to appropriate officials and public (reduce secondary impacts) – IPAWS compliant – can draw a circle on a map and warn people via cellphone within that circle of an event
- 2) Brought in BNSF/Union Pacific (train companies) into an exercise (these companies have a high level of capability also to respond)
- 3) For stationary, LEPC (run by Fire Marshals) does Tier II reporting – there are laws on the books like sensor alarms to detect a leak – is enforcement adequate?
- 4) Look at specific parts of I-25/rail that are particularly susceptible – near downtown/dense development (e.g., nursing homes, schools)

OEM knows in general terms what is travelling on I-25 but does not know what is on specific trucks and rail cars (trucks is even more open); DOT does have guidelines; train derailment earlier in the year (white powder spilled but it was just fertilizer); chlorine gas on truck to water treatment every day

### Infectious Disease

- 1) Public awareness – communicate to public upfront and early what to do- public needs a credible source on television (media will fill in the gaps if no official info and that will like be worse)
  - a. Animal borne (avoid carcasses)
  - b. Vaccinations
  - c. Emerging diseases (chikungunya – climate change causation)
  - d. After a disaster (e.g. cholera, salmonella) – need redundancy of drinking water
- 2) Preparedness/Mitigation to intervene quickly and stop spread - CDC City Ready Initiative – pods in strategic sites for distribution

Education – tulinnaria/plague/rodent diseases are becoming more prevalent / get the word out so kids know not to play with dead animals or let pets do the same

### **Cyber Attack**

- 1) Education – what do staff need to do to avoid letting in a cyber attack (e.g. phishing attempts) {on a systems level - also evaluate systems like OMB to see if there are weak links}
- 2) Redundancy of operations needed – COOP if there is no computer (e.g., for communication, go to 800 megahertz radio if normal phones go down and then courier service if that goes down) / look at firewall also & detect when someone is trying get through the firewall

## Flood and Dam/Levee Failure Brainstorming Session

### Dam Location/Risks

Rampart – Failure would go down Monument Creek down I-25

North Slope – N. Catamount/S. Catamount/Crystal Creek – would affect southern part of the City

Pikeview Reservoir – near Wastewater Treatment Plant

S. Suburban

Common denominator for dam failure – Monument Creek

Biggest impact on City = Rampart; has gap with inundation down to Pueblo

Last plan was too specific at intersection level to reasonably implement

### Templeton Gap Floodway

- Great mitigation opportunity
- Talk to Tim Mitros

### Flood Risks

- No study available for Fountain downstream to Pueblo
- Matrix starting study on Monument from county line to confluence

### Flash Flooding

- Streets is placing signage in creeks as they do maintenance – Outreach Program exists
- Lots of post-fire mitigation has happened
- Erosion/sloughing – current concern
- Maintenance – annual VectorTruck sediment removal program for stormwater systems through Streets
- Stormwater Program – implement codes/regulations (low-hanging fruit)
- Mitigation on non-burn streams
  - In-channel improvements for stability
  - Detention
  - Zero run-off increase from new development

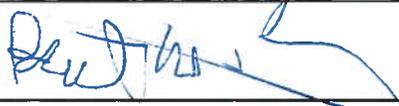
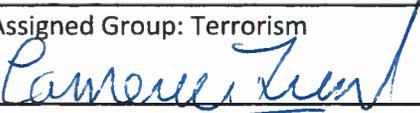
**Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
Revision - September 10, 2015**



Last Name	First Name	Organization	Email address	Signature
Arroyo	Cindey	Colorado Springs Utilites	<a href="mailto:carroyo@csu.org">carroyo@csu.org</a>	Assigned Group: Terrorism
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Blanchard	Tobi	Colorado Springs Office of Emergency Management	<a href="mailto:tblanchard@springsgov.com">tblanchard@springsgov.com</a>	<i>Tobi Blanchard</i>
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**Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
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Easton	Travis	Public Works - Engineering	<a href="mailto:teaston@springsgov.com">teaston@springsgov.com</a>	Assigned Group: Flood
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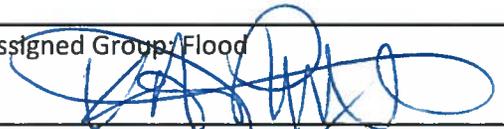
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**Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
Revision - September 10, 2015**



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**Local Planning Committee - Colorado Springs Hazard Mitigation Plan  
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Stoecklein	Tim	University of Colorado at Colorado Springs	<a href="mailto:tstoeckl@uccs.edu">tstoeckl@uccs.edu</a>	Facilitator Assigned Group: Severe Weather/Geologic Hazards <i>T. Stoecklein</i>
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Teferiller	Ryan	Planning - Land Use Review	<a href="mailto:rtefertilizer@springsgov.com">rtefertilizer@springsgov.com</a>	
Vigil	Steve	Information Technology - GIS	<a href="mailto:snvigil@springsgov.com">snvigil@springsgov.com</a>	
Vitwar	David	Colorado Springs Fire Department	<a href="mailto:dvitwar@springsgov.com">dvitwar@springsgov.com</a>	Facilitator Assigned Group: Wildfire

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Duran	Erin	CSOEM		EA
Randall	Christine	CSFD		

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## Public invited to comment on Hazard Mitigation Plan through January 31

by [Colorado Springs \(https://coloradosprings.gov\)](https://coloradosprings.gov) - 1/21/2016

**COLORADO SPRINGS, Colo** – The Colorado Springs Office of Emergency Management is accepting public input now through Sunday, January 31 on the Colorado Springs Hazard Mitigation Plan prior to its finalization.

Following the Federal Emergency Management Agency's (FEMA) guidelines in maintaining a Hazard Mitigation Plan, the City of Colorado Springs reviewed risks, assessed vulnerabilities, and identified and prioritized goals and actions for mitigating the effects of natural and human-caused hazards in Colorado Springs. It also establishes a blueprint to institutionalize new and existing programs, processes, and procedures to continuously reduce the impacts of hazardous events in the city. The Hazard Mitigation Plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 to achieve eligibility for FEMA hazard mitigation grant programs including:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Severe Repetitive Loss (SRL)
- Repetitive Flood Claim (RFC)

The public may view the plan by visiting: [csready.org/hazardplan](https://csready.org/hazardplan) ([csready.org/hazardplan](https://csready.org/hazardplan)). Comments may be sent to [OEM@Springsgov.com](mailto:OEM@Springsgov.com) (<mailto:OEM@Springsgov.com>) no later than January 31, 2016.

In accordance with the Americans with Disabilities Act of 1990 ("ADA"), the City will not discriminate against individuals with disabilities. Anyone requiring assistance to view the plan or provide comment should make the request to Tobi Blanchard, City of Colorado Springs Office of Emergency Management, 30 S. Nevada Ave, Mail Code 1443, Colorado Springs, CO 80903, or e-mail [tblanchard@springsgov.com](mailto:tblanchard@springsgov.com) (<mailto:tblanchard@springsgov.com>), or by calling 719-385-7228.

The Hazard Mitigation Plan, formerly called the Pre-Disaster Mitigation Plan, was last updated in 2010 and is updated every five years.

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# Colorado Springs wants input on disaster preparedness plan

By: **Ryan Maye Handy** (/author/Ryan+Maye+Handy)

Comments: 

January 27, 2016

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Landslides, hail storms, wildfires and floods have all changed how Colorado Springs officials think of local natural disasters, and that's reflected in the city's new hazard mitigation plan.

While those hazards have been well known locally for decades, the threat of disasters became more real in recent years, when El Paso County was hit by catastrophic wildfires, hail storms and flooding events. In spring 2015, record-breaking rainfall triggered landslides on the southwest side of Colorado Springs - an area that has not seen slides in nearly two decades.

The city's latest hazard mitigation plan, a document it revises every five years and submits to the Federal Emergency Management Agency, reflects the change wrought on the city by recent history.

Wildfires, always considered a hazard, demand more aggressive prevention and attention to risk than in previous years, according to a draft of the city's latest plan. Landslides have always been a threat, but now the city suggests buying monitoring technology and changing ordinances to address danger zones. When it comes to floods, the city lists newer concerns about flooding off the Wald Canyon burn scar, stream bank erosion and the overloaded Fountain Creek watershed.

The city must regularly update its hazard mitigation plan and get it approved by FEMA to qualify for several federal grants. Putting together the document also gives the city a chance to touch base with its residents, said Bart Howard, deputy director of the city's Office of Emergency Management.

Howard expects the 2015 plan will spur the city to continue to improve its disaster communications with residents who are deaf or blind and address emergency concerns for those with disabilities.

The city's new plan, in its final stages of drafting, is open for public comment until Jan. 31.

In its 2010 plan, the city suggested that the Office of Emergency Management work toward getting federal accreditations - mainly to improve its disaster preparedness plans - which it achieved a few years later. The 2015 plan also has suggestions and recommendations, which include increasing public education and changing some land use ordinances.

One recommendation suggests the city prohibit further development in the 100-year floodplain areas. In the case of landslides, the plan recommends that the city reconsider its building codes and ordinances for homes built in landslide-prone areas and track landslides with GPS technology.

Wildfire considerations include increasing public education and creating a well-defined map of the wildland urban interface, or neighborhoods with high fire danger. The plan's suggestions are non-binding, although the plan must get approval from the City Council, Howard said.

The plan also offers an extensive history of local disasters, giving dates and details for all of the major landslides, wildfires and hail storms that have hit the city over the past several decades. Windstorms, for instance, have frequently caused thousands of dollars of damage in Colorado Springs - a windstorm on Feb. 15, 1986 caused \$500,000 of damage. One windstorm in March 1977 killed five people. The disaster plan also takes into account terrorist attacks and earthquakes.

```
var cX = cX || {}; cX.callQueue = cX.callQueue || []; cX.callQueue.push(['insertWidget',{
widgetId: 'e92c72ef40ba2f23f1f6f997d6ed05e6d58b285b', renderFunction: function(data,
context) { document.getElementById('recommendedContentTemplate-1568541').innerHTML =
data.response.template; cX.renderTemplate('recommendedContentTemplate-1568541',
'recommendedContent-1568541', data, context); } }]);
```

**Pirri, Kimberley**

---

**From:** Garcia, Amy <AGarcia@springsgov.com>  
**Sent:** Monday, February 01, 2016 8:16 AM  
**To:** Blanchard, Tobi A.  
**Subject:** FW: Public comments

**From:** Greg Kreger [<mailto:blitzkreger@gmail.com>]  
**Sent:** Sunday, January 31, 2016 4:12 PM  
**To:** OEM  
**Subject:** Public comments

To whom it may concern,  
please stop the high density housing. Our infrastructure is inadequate as it is.

Greg Kreger

## Pirri, Kimberley

---

**From:** Garcia, Amy <AGarcia@springsgov.com>  
**Sent:** Monday, February 01, 2016 8:13 AM  
**To:** Blanchard, Tobi A.  
**Subject:** FW: Comments on Colorado Springs Hazard Mitigation Plan

-----Original Message-----

From: Steven Saint [<mailto:sustain719@gmail.com>]  
Sent: Sunday, January 31, 2016 1:54 PM  
To: OEM  
Subject: Comments on Colorado Springs Hazard Mitigation Plan

Greetings from the Green Cities Coalition. My name is Steve Saint, one of the GCC co-founders as well as chief facilitator for the Coalition's Local Food Working Group.

We read with interest the city's call for public response to the draft Colorado Springs Hazard Mitigation Plan update. We actually couldn't locate the update draft on the city website, so we settled for reading through the 2010 final plan - which we could find. Perhaps the latest update draft is not yet available to the public via the city website.

Given that limitation, please accept our comments.

1. We applaud the efforts of the OEM to prepare Colorado Springs residents for emergencies. Generally speaking, we would like the city to consider local food reliance as a significant strategy to mitigate all hazards or emergencies. The city imports almost all its food from other states, making our food lifeline not only vulnerable to natural and human-caused hazards occurring in our region, but everywhere else that produces our food. For example, disruptive earthquakes and droughts might be considered rare in Colorado, but these disasters in California will have significant impact on Colorado's food supply.

Colorado Springs needs to move towards increased local food supplies.

2. The 2010 update mentions "human-caused" hazards as an afterthought (Appendix E), but we urge the city to consider these hazards more thoroughly. Terrorist attacks are not the only human-caused hazards that could be "catastrophic." Infrastructure and technology failures need to be added to this list. For example, a recent fire at the Drake Power Plant took a boiler offline. If another significant fire happens this year, the city could lose electricity for days or weeks. A significant break in the Homestake Pipeline could leave Colorado Springs without water for days or weeks. Economic factors like a spike in petroleum costs or the closing/consolidation of large food retailers could present our city with lots of empty grocery stores.

3. On "catastrophe." The 2010 update defines catastrophe as any event that hits us so hard we will require out-of-state help to survive.

This definition assumes there will be out-of-state rescue coming to save us. We would offer another approach: "Catastrophe" is any event that cripples our lifelines (food, water, energy) for more than three days. Grocery stores in Colorado Springs have enough inventory to feed the population for three days. Any crisis - natural or human-caused - that disrupts food, water and energy for more than three days will be disastrous! We urge the city to look beyond short-term emergencies and consider disasters that could alter our community for weeks, months and years.

4. Local food reliance will help mitigate against major disruptions to our lifelines. We encourage the OEM to work closely with the Local Food Working Group and others on the forefront of a local food shift.

We've already broken the region into 100 "villages" with the aim of establishing neighborhood food councils. These councils will encourage more local food cultivation and micro-markets. Our website is [www.greencitiescoalition.net](http://www.greencitiescoalition.net).

Thanks!

## Pirri, Kimberley

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**From:** Garcia, Amy <AGarcia@springsgov.com>  
**Sent:** Monday, February 01, 2016 8:12 AM  
**To:** Blanchard, Tobi A.  
**Subject:** FW: Comment on The Hazard Mitigation Plan

**From:** Deborah Stout-meininger [<mailto:dlsmeininger2011@yahoo.com>]  
**Sent:** Sunday, January 31, 2016 4:49 PM  
**To:** OEM  
**Cc:** [opinion@gazette.com](mailto:opinion@gazette.com); [newsroom@denverpost.com](mailto:newsroom@denverpost.com); [mspence@chieftain.com](mailto:mspence@chieftain.com)  
**Subject:** Comment on The Hazard Mitigation Plan

1. 10 day notification for review and comment on the Colorado Springs "Hazard Mitigation Plan" (Jan 21, 2016) with last date for comment on Jan 31, 2016 is not nearly enough time for public to have time to read it all for a public review and comment. There needs to be more review and "transparency" on how the Fema Hazard Mitigation Grant Programs are applied for and funds disbursed among all the areas of the City.

2. FEMA hazard mitigation grant programs including:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Severe Repetitive Loss (SRL)
- Repetitive Flood Claim (RFC)

When Colorado Springs has received these kind of grants since 2012, they are used in areas of

"greatest financial benefit" instead of greatest needs for safety and stability of residential areas .

The Hazard Mitigation Plan is through the OEM office that is part of the "Strong Mayor" Executive Office Plan and all too often funds that are designated for Mitigation of Hazard and Disaster areas are stalled and diverted by political/big business "agendas" which have nothing to do with the Health and Safety of residents in Colorado Springs, or are diverted to "upscale communities" with scenes like the Mayoral Town-hall meetings on West Side in 2013 and 2014 where the then-Mayor Bach told residents "you can have 4 million in Storm-water Hazard Mitigation or you can have Street Lights and Bus Service". Hazard Mitigation for Wildfires since 2012 have been mostly in affluent areas like the Broadmoor and Parks.

Sincerly,  
Deborah Stout-Meininger  
Community Advocate, Citizen Scientist

## Pirri, Kimberley

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**From:** Blanchard, Tobi A. <TBlanchard@springsgov.com>  
**Sent:** Thursday, January 28, 2016 1:23 PM  
**To:** Brenner, Gordon J.  
**Subject:** FW: Mitigation Plan comment

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**From:** Garcia, Amy  
**Sent:** Thursday, January 28, 2016 12:55 PM  
**To:** Blanchard, Tobi A.  
**Subject:** FW: Mitigation Plan comment

This arrived in the OEM mailbox ☺

Thank you,  
Amy Garcia, MBA

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**From:** colobolo [<mailto:colobolo@comcast.net>]  
**Sent:** Thursday, January 28, 2016 11:52 AM  
**To:** OEM  
**Subject:** Mitigation Plan comment

### Feedback on Colorado Springs Hazard Mitigation Plan

Reference Section 4.5 Severe Weather Hazards

Recommend adding a new paragraph number 4.5.7 entitled something along the lines of *Severe Space Weather/Coronal Mass Ejection (CME)*.

Ideally this paragraph would recognize the potential impacts of a CME super flare which was first identified by the Carrington Event of 1859. There is a significant amount of historical and scientific data available on the subject including the frequency and potential severity of this potential natural hazard. Unless the Colorado Springs Utilities electrical systems are already 'hardened' against a potential CME super flare (or an electromagnetic pulse (EMP) attack for that matter), adding and planning for this naturally occurring hazard would seem to be a wise addition to the 'plan'.

Thanks, Frank

Frank Zacharias  
719.573.9418/home