

TECHNICAL MEMORANDUM

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Executive Direction
Tuolumne County Transportation Council

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Project Communication Strategy

RE: Task 7 Draft Memo – Communications Strategy

EXECUTIVE SUMMARY

The purpose of this memo proposes a Communications Deployment Strategy (Strategy) for the public in the event of a major wildfire incident, as part of the Evacuation Needs Assessment and Communications Strategy project for Tuolumne County Transportation Council (TCTC) and Tuolumne County Office of Emergency Services (OES). The Strategy focuses on identifying and organizing key audiences and resources, as well as actions and recommendations for activating each of them in the likely wildfire scenarios.

The Strategy is divided into the following sections:

- Introduction
- Existing Conditions
 - Area Notification Systems
 - Social Media and Media Programs
 - Educational and Planning Resources
- Communications Deployment Strategy
 - General Strategy
 - Scenarios
 - Audiences
 - Resources
 - Backchannel
 - Scenario-Specific Strategies
 - Pre-Evacuation
 - Phased Evacuation
 - Total Evacuation
 - Post-Evacuation
- Conclusion

INTRODUCTION

This memorandum presents the proposed Strategy for the public in the event of a major wildfire incident in Tuolumne County, California. Due to a variety of concerns—including a highly active and severe wildfire region, limited access and egress routes, limited emergency response resources, a large percentage of lands consisting of undeveloped wildland fuels, and a growing population—Jensen Hughes was contracted to identify and enhance existing communication strategies in the development of a countywide Communications Deployment Strategy. The Strategy is intended to support decision-making for a range of potential evacuation scenarios during a major wildfire incident. This includes the following main sections:

- Existing Communication Conditions
 - Area Notification Systems
 - Social Media and Media Programs
 - Educational and Planning Resources
- Communications Deployment Strategy
 - General Strategy
 - Scenario-Specific Strategies

The intent of this assessment, in conjunction with the evacuation analysis, industry standards, and best practices, is to identify areas for improvement and recommendations to help reduce risk to life-safety in future wildfire incidents.

COUNTY DESCRIPTION

Tuolumne County, located centrally in the California Mother Lode along the western slope of the Sierra Nevada range, is approximately 2,217 square miles in area with an estimated population of 54,039 in 2020 and projected population of 63,000 by 2040 per the Department of Finance. The county extends from the foothills to the Sierra crest and is bordered on the north by Calaveras County, on the South by Mariposa County, on the west by Stanislaus County and on the east by Alpine and Mono Counties. Approximately 78 percent of the land within the county is owned by government agencies, which includes portions of the Stanislaus National Forest and Yosemite National Park. Sonora is the only incorporated city in the Tuolumne County region and is also the county seat.

The majority of the county's population resides in the City of Sonora and the unincorporated areas abutting the national forest and national park wildlands. Development in the wildland-urban-interface is only anticipated to grow in the near- and long-term, creating a series of complex challenges. This is further complicated by the millions of visitors and seasonal workers who come to the County for recreational and/or work opportunities increasing the potential for ignitions during the summer months. While the majority of the County's residents and visitors live (or stay) within close proximity to the four main highways: Highway 108, Highway 120, Highway 132, and State Highway 49—a large portion of the population has limited access/egress to these main transit corridors. This can present several challenges not only for firefighters and other first responders conducting emergency operations, but also for residents (and visitors) who may be evacuating or seeking refuge in an emergency event (wildfire-related or not). The limited

access/egress routes, coupled with difficult terrain, can also present communication challenges for both first responders, residents, and visiting populations.

As the County primarily consists of mountainous, forested lands in a dry Mediterranean climate, it is highly susceptible to major wildland fires. Historically, and in recent years, the County has experienced significant and catastrophic wildfires both in the wildland and at the wildland urban interface (WUI) (e.g., 2013 Rim Fire)), leading to major physical, social, economic, and environmental impacts.

REFERENCED DOCUMENTS

The following documents and information were reviewed as part of development a proposed communication deployment strategy presented hereinafter:

- Tuolumne County Emergency Operations Plan
- Tuolumne County Evacuation Plan Pamphlet
- Tuolumne County Community Wildfire Protection Plan (CWPP), 2004
- Tuolumne County General Plan, Chapter 9, Public Safety Element, 2018
- Tuolumne County Office of Emergency Services (OES), Evacuation Guidelines for Tuolumne County Residents
- Greater Tuolumne City Community CWPP, 2004
- Tuolumne-Calaveras Unit, Strategic Fire Plan, 2020
- Emergency Operations Plan for the City of Sonora, 2014
- Tuolumne County Firewise Communities, 2021
- California Strategic Fire Plan, 2018
- CALFIRE / Tuolumne County Fire Department, 2021-2025 Strategic Plan, DRAFT
- Pacific Gas & Electric Company, 2021 Wildfire Mitigation Plan (WMP), 2021
- PG&E, Community Wildfire Safety Program, Tuolumne County, 2018

EXISTING CONDITIONS

As part of the development of a Communication Deployment Strategy, an evaluation of existing communication strategies with respect to large-scale wildfire evacuations across the County was undertaken. This included the assessment of the following:

- Traffic Management
- Area Notification Systems
- Social Media and Media Programs
- Educational Resources

TRAFFIC MANAGEMENT

PHYSICAL SIGNAGE

Hurdles to evacuation can include challenging road characteristics, limited access/egress routes independent of fire hazards, vegetation encroachment on roads, security gates, unlit roads and intersections, and unlit street signage.

Tuolumne County utilizes functional Incident Management Organization groups and sections. The Operations Section is responsible for providing and coordinating public works services, including providing and placing barricades and signs for traffic management activities. The current type and use of digital technologies for signage during emergency incidents in Tuolumne County is unclear. However, this is one of many different approaches for communicating critical information before, during, and after a major wildfire incident, and thus is discussed in greater detail later in this report.

AREA NOTIFICATION SYSTEMS

Operational Area (OA) coordination refers to the multi-agency coordination under the California Standardized Emergency Management System (SEMS). Tuolumne County OES provides preparedness before, and coordination during, large-scale emergencies and disasters across the County. This includes serving as the OA coordinator with partner agencies, special districts, and key private agencies in providing planning, response, recovery, and mitigation activities due to fire and non-fire-related incidents. During an emergency, their primary role is to facilitate priority setting, interagency cooperation, and the efficient sharing and flow of information and resources.

California's Office of Emergency Services coordinates overall state agency response to major disasters in support of local government. The office is responsible for assuring the state's readiness to respond to and recover from both natural and human-made disasters, and for assisting local governments in their emergency preparedness, response, and recovery efforts.

The following is a list of various area notification systems and/or emergency communication services to the public:

- The Everbridge® Citizen Alert System
 - All residents and visitors are able to receive alerts issued by the Tuolumne County Sheriff's Office of imminent threats and emergency warnings via the Everbridge Citizen Alert system. The system has the option to enter one or multiple addresses that any registrant requests in the event of an emergency (e.g., primary residence, vacation property, child's school, daycare facilities, pet sitter, etc.). The system also allows for multiple methods of notification – home or work phones, or email addresses to receive time-sensitive emergency messages on multiple devices, no matter where you are.



Link to register: <https://member.everbridge.net/index/1332612387832200#/login>

- Notify Me®
 - Tuolumne County provides an alert center that enables residents and visitors to subscribe to a number of emergency event alerts (e.g., emergency alerts via Everbridge, press releases, public health) in Tuolumne County.

Link to subscribe: <https://www.tuolumnecounty.ca.gov/list.aspx>

- National Weather Service (NWS)
 - The NWS transmits continuous weather information on 146.425 and 146.525 MHz frequencies. NWS severe weather broadcasts are preceded with a 1050 Hz tone that activates weather monitor receivers equipped with decoders. The NWS can also access the National Warning System to announce severe weather information

SOCIAL MEDIA AND MEDIA PROGRAMS

SOCIAL MEDIA

Tuolumne County is actively connected with social network programs including Facebook, Twitter, and Instagram. Local agencies use social media in an effort to keep stakeholders up to date on events, advisories, and alerts. The following table summarizes some of the primary social network links and websites for emergency preparedness in Tuolumne and surrounding areas.

Source	Weblink
Tuolumne County	
Tuolumne County Facebook	https://www.facebook.com/tuolumnecountygovernment
Tuolumne County Twitter	https://twitter.com/TuolumneCountyC
Tuolumne County Office of Emergency Services Facebook	https://www.facebook.com/TuolumneCountyOES

Tuolumne County Fire Department Facebook	https://www.facebook.com/people/Tuolumne-County-Fire-Department
Tuolumne County Fire Department Twitter	https://twitter.com/tuolumnecofire
Tuolumne County Fire Department Instagram	https://www.instagram.com/tuolumnecountyfire/?hl=en
Tuolumne County Sheriff Facebook	https://www.facebook.com/tuolumnecountysheriff
Tuolumne County Sheriff Twitter	https://twitter.com/tuolumnesheriff
Tuolumne County Sheriff Instagram	https://www.instagram.com/tuolumnesheriff/?hl=en
Tuolumne County Notification Registration page	https://member.everbridge.net/index/1332612387832200#/login
Tuolumne County Animal Control	https://www.facebook.com/tuolumnecountyanimalcontrol/
CAL FIRE	
CAL FIRE Tuolumne-Calaveras Unit Facebook	https://www.facebook.com/CALFIRETCU
CAL FIRE Tuolumne-Calaveras Unit Twitter	https://twitter.com/CALFIRETCU
Independent Entities	
My Mother Lode*	https://www.mymotherlode.com/
* Provides information on evacuation advisories, warnings, and orders for Calaveras and Tuolumne counties.	

TUOLUMNE COUNTY RADIO BROADCAST

Area radio stations monitor emergency broadcasts and provide updated information on the following stations:

- 93.5 KKBN
- 92.7 KZSQ FM Sonora (Star)
- AM 1450 / FM 102.7 KVLM (News Talk)
- KOSO 93.1 FM (Modesto-Local EAS Station)

TUOLUMNE COUNTY PUBLIC ACCESS TELEVISION

Access Tuolumne is a Tuolumne County non-profit, community media organization. Access Tuolumne provides airtime on the local TV channels and online and offers media production training, facilities, and equipment. The content is a mix of local government and community programming, programs from other public access stations, items of interest found in the Public Domain, and emergency updates.

EDUCATIONAL AND PLANNING RESOURCES

Community collaboration and engagement are central to any effective emergency preparedness program. Communicating accurate and timely information before, during, and after a wildfire is a challenge that communities are addressing through a variety of programs before an event escalates.

The following is a list of preparedness actions and measures at the city, county, and regional levels.

CITY AND LOCAL COMMUNITY PROGRAMS

- City of Sonora – Firefighters On Your Side campaign
 - The latest Firefighters On Your Side campaign – Prepare For Wildfire – brings critical wildfire preparedness tools to communities across California. This program offers materials in English and Spanish. Available at: <https://firefightersonyourside.org/wildfire>
- City of Sonora – Defensible Space Program
 - This program developed for the City of Sonora provides requirements and recommendations for defensible and reduced fuel zones to offer solutions to improve resistance of structures to wildfire loss for developed properties by improving management by homeowners of their defensible space zone. Available at: <https://www.sonoraca.com/wp-content/uploads/2020/06/CITY-OF-SONORA-DEFENSIBLE-SPACE-INFORMATION.pdf>
- Pine Mountain Lake Association – Ready! Go!
 - Fire emergency preparedness action plan for the Pine Mountain Lake area. Provides information for residents to prepare for wildfire events. Available at: https://www.pinemountainlake.com/wp-content/uploads/2020/11/PML-Emergency-Preparedness_FINAL.pdf
- Pine Mountain Lake Association – Fire Safety
 - Resource that provides many guidance documents including preventing home ignition, defensible space requirements and recommendations, tree removal requests, and emergency preparedness plans for the area. Available at: <https://www.pinemountainlake.com/fire-safety-2/>

COUNTY AND REGIONAL PROGRAMS

- Tuolumne County – Wildland Fire Evacuation Pamphlet
 - The County offers a wildfire evacuation pamphlet providing residents, business and visitor with information regarding various wildfire evacuation preparedness and planning before, during and after a major wildfire incident. This includes identification of primary travel routes, emergency communication media outlets, sheltering options, etc. Available at: <https://www.tuolumnecounty.ca.gov/DocumentCenter/View/19395/Tuolumne-County-Wildland-Fire-Evacuations-Pamphlet?bidId=>

■ Tuolumne County GIS Mapping Tool

- Tuolumne County provides a GIS mapping tool of active evacuation advisories. Available at:

https://experience.arcgis.com/experience/d309d5b7f81a46adbb0a1ae627967633/?fbclid=IwAR1_2ViLZG0-PETEILFA6tX0D-MZBnb2mH4iQiXcl8YPe6SC3IA6pwlpZ80

■ Tuolumne County – Firewise USA program

- Offered through the National Fire Protection Association for the purpose of empowering community members to reduce their wildfire risk and encouraging neighbors to work together to take action against loss caused by wildfire. Available at:

<https://www.tuolumnecounty.ca.gov/1242/Firewise-Communities>

■ Tuolumne County – Defensible Space and You! program

- Tuolumne County provides information on recommended defensible space for property owners to reduce the threat of wildfire loss. Available at:

<https://www.tuolumnecounty.ca.gov/1260/Defensible-Space#:~:text=Most%20areas%20of%20the%20County,the%20risk%20of%20structural%20fires>

■ Tuolumne County – Emergency Services Plan

- County procedures and policies for response to significant disasters. This plan encompasses all significant disasters, including wildland fires. Available at:

<https://www.tuolumnecounty.ca.gov/DocumentCenter/View/6165/Tuolumne-County-EOP?bidId=>

■ Tuolumne County – Community Emergency Response Team (CERT)

- Community Emergency Response Training is a 36-hour course designed for the average citizen so that they can be valuable to their community during a time of disaster. The County of Tuolumne encourages local citizens to participate in and learn essential emergency procedures to enhance emergency response by local public agencies through citizen preparedness. Available at: <https://www.tuolumnefire.com/cert-update>

Note: CERT Programs have been postponed until further notice.

■ Tuolumne Firesafe Council

- The Tuolumne Fire Safe Council (FSC) is a grassroots, nonprofit organization that works to reduce wildfire hazard and the effects of wildfires in the north Tuolumne County community. Throughout California, FSCs educate homeowners about community wildfire preparedness activities, typically working directly with local fire officials to design and implement projects that increase wildfire preparedness and response efforts.

Available at: <https://tuolumnefiresafe.org/>

■ Tuolumne County – Hazardous Vegetation Management Ordinance

- County Hazardous Vegetation Management Ordinance. Provides for the removal of hazardous vegetation situations in unincorporated areas of the county to reduce the potential for fire and to promote the safety and welfare of the community. Available at :

https://www.tuolumnecounty.ca.gov/DocumentCenter/View/22280/Draft_Hazardous_Vegetation_Management_Ordinance_20220622_FSACpdf?bidId=

■ Tuolumne County – Hazardous Fuel Reduction Program

- Large scale fuel reduction and vegetation clearance on roads in Tuolumne County and provide defensible space assistance to low-income homeowners through grant funding. Available at:
<https://www.tuolumnecounty.ca.gov/DocumentCenter/View/14288/CCI2018GrantAgreementandMod1>

■ American Red Cross California Gold Country Region

- The Gold Country Region Chapter of the American Red Cross seeks to help people prevent, prepare for, and respond to natural and human-caused disasters through immediate mobilization of people and resources and the provision of community, workplace, and school-based training. In addition to disaster relief, the Region delivers Community-Disaster Education, First Aid/CPR, and other types of life-saving health & safety training to people across the region. Available at:
<https://www.redcross.org/local/california/gold-country/about-us/locations/sierra-delta-chapter.html>

■ Tuolumne County Amateur Radio Emergency Services (ARES)

- ARES is a nationwide organization of licensed radio amateurs who have volunteered their expertise and equipment to provide emergency communications when disaster strikes. Available at: <https://tcares.net/about-tuolumne-county-amateur-radio-emergency-services/>

COMMUNICATIONS DEPLOYMENT STRATEGY

GENERAL STRATEGY

The primary goals of this Communications Deployment Strategy are to:



The following strategic guidance organizes this Strategy into several key components, consisting of scenarios, audiences, resources, and backchannel. A specific sub-strategy accompanies each scenario as it relates to the audiences and resources involved as well as the use of the backchannel to inform decision-making. In the section below, each of the components and their supporting elements are examined, and in the section that follows, how they interact and support a cogent strategy in each of the most likely scenarios is reviewed.

SCENARIOS

From a functional communications perspective, there are four scenarios of concern for Tuolumne County: pre-evacuation, phased evacuation, total evacuation, and post-evacuation. The simplified distinction is that total evacuation requires outreach to all audiences, whereas a phased evacuation might require certain audiences to be prioritized and reached independently of others. Pre-evacuation represents the entire period before an evacuation is announced and represents opportunity to take proactive communications measures before any are required. Post-evacuation is the process of reintegrating the public into the previously evacuated area as well as the closure of the communications loop to all external audiences.

- **Pre-evacuation**
- **Phased evacuation**
- **Total evacuation**
- **Post-evacuation**

AUDIENCES

Tuolumne County's functional audiences for communications vary from traditional audiences such as indigenous tribes or school children because they speak specifically to the actions or strategies required to reach them rather than simply categorical labeling. For example, senior centers and group homes are an audience, but functionally, the traits that make the approach for them different are their propensity to have less mobility or access to and familiarity with digital communications, so focus is on those functional distinctions while providing the associated traditional audiences as examples. In this strategy, the separation of locals from non-locals is distinguished by the ability to proactively reach, educate, and equip local audiences

with resources prior to any emergency event, which is not a reasonable expectation with non-locals.

- **Locals** (*residents, schools, camps, senior centers, group homes, businesses, agencies, etc.*)
 - Urban areas (*higher density, higher potential traffic, high availability, high signage potential, ease of communication*)
 - Specific needs: directed signage
 - In transit (*limited opportunities to reach, highly mobile - may cross various boundaries*)
 - Specific needs: high-visibility signage, mobile/cellular notification
 - Rural or wilderness (*limited cellular network, limited access to signage, potentially longer, more time consuming egress*)
 - Specific needs: sufficient signage, for peer-to-peer network notification
- **Non-locals** (*recreational visitors/tourists, traveling workers, etc.*)
 - Urban areas
 - In transit
 - Rural or wilderness
- **Sub-categories** (*qualifying each of the above — e.g., local urban business or limited-mobility non-local in wilderness*)
 - Vulnerable Populations
 - Limited mobility (*elderly, disabled/chronic conditions/injured, children, transportation disadvantaged*)
 - Specific needs: Physical assistance, peer-to-peer network notification
 - Limited access to communications (*disconnected from digital communications, elderly, young children, homeless, low-income, isolated/remote communities*)
 - Specific needs: Physical signage, peer-to-peer notification
 - Limited communications comprehension (*Limited English proficiency LEF, children, disabled*)
 - Specific needs: Translated communications, multi-lingual assistance and resources, physical assistance
 - Limited reaction time (*all aforementioned groups*)
 - Specific needs: Greater time buffer, peer-to-peer notification
 - Businesses and organizations
 - Adjacent agencies
 - Media

RESOURCES

Tuolumne County resources are separated into two categories—proactive and reactive—representing different opportunities for investment in communications infrastructure. The goal of proactive resources is to empower local populations and businesses with the information to act efficiently in the event of an emergency, and to go one step further in both knowing what to do and how to do it. This relieves pressure on active communications in the event of an emergency and allows emergency response to focus resources on non-local audiences. The goal with all reactive emergency response communications is to be as effective as possible using as few resources as possible. To this end, it is crucial to have a “single source of truth” as a reference for all outbound communications. This can be a document, a process, or trained personnel, but the

goal is to have the same message translated and distributed across multiple formats, media, agencies, etc.

- **Proactive**

- Planning, education, training
- Infrastructure
- Activation

- **Reactive**

- Digital
- Physical
- Relational

BACKCHANNEL

The backchannel is the monitoring and information feed that allows for updating and modifying the communications strategy and output of that strategy. For example, when changes occur in the situation or feedback is received on the effectiveness of communications, adjustments can be made accordingly to achieve the desired outcome.

- **Operational feedback**

- **Actionable updates**

- Situation status changes
- Audience changes
- Messaging changes

- **Reintegrating populations**

PRE-EVACUATION

COMMUNICATIONS CONSIDERATIONS

Pre-evacuation is the complete space of available time for Tuolumne County before an incident. In this period, the full suite of proactive measures that can be accomplished in order to offset the strain on resources during the emergency event is considered. By spreading out reactive work into the pre-event period, it is effectively flattening the curve of resource demand during the event. The pre-evacuation period, therefore, represents an opportunity to set the framework for many of the reactive measures that take place during emergency response. For example, reaching out to local businesses with tools and protocols for spreading the word about emergencies to their clientele who may be enroute to an affected area or already there.

- Encompasses all proactive resource measures
- Opportunity to offset resource strain during phased- and full-evacuation scenarios
- Opportunity to set framework for managing reactive scenarios

AUDIENCES

For practical purposes, the key audiences in this period include only county locals, because they are the ones reliably available prior to an incident. The county's vulnerable populations are best served through proactive measures taken at this phase, as they are the most dependent on resources already in place during the emergency period. This is an opportunity to test the reach of communications to these populations in a non-critical environment.

- Locals
 - Especially vulnerable populations

RESOURCES

The full suite of proactive resources is being considered. Though depending on the lead time to the event, some may or may not be feasible.

- Proactive

BACKCHANNEL

In this scenario, the backchannel serves as feedback from the local audience to build in new resources into measures for both proactive and reactive.

- Local feedback

ACTIONS

County staff and/or partners must first prioritize and assign ownership of the following events in order to get them off of the ground. The following actions are recommended in this period, depending on the availability of resources and cooperation of local organizations.

- Planning, education, training
 - Public workshops

- Stakeholder engagements
- Spokesperson training
- Social media training
- Public relations strategies, planning, and proactive outreach
- Interagency content development and planning (digital templates, etc.)
- Comms messaging development (templates, etc.)
- Planning peer-to-peer carpooling
- Establishing emergency peer-to-peer communications networks
- Planning resort/camp/hotel shuttles
- Planning emergency transportation routes and coordination
- Emergency operations training for local organizations (camps, schools, businesses, centers, etc.)
- Planning interagency communications, including protocols and directories for coordination
- Translating planning, education, and training materials
- Infrastructure
 - Road and remote-activated signage
 - PA system
 - Extended/back-up cellular/data network
 - Peer-to-peer communications network
 - Physical communications resource directory
- Activation
 - Dissemination of plans, strategies, and resources
 - Signing up public for push notifications
 - Identifying and connecting associated social media accounts
 - Posting informational signs, posters, flyers

CHALLENGES

One of the biggest operational challenges in this period is establishing a protocol or working rubric for taking pre-event measures with event teams. For example, the public information officer (PIO) who would be assigned in the condition of an emergency, might not have access to resources to accomplish these things in a non-emergency situation. All of these actions also require both capital and time expenditures to accomplish, which are finite. Some of these actions rely on the participation of outside agencies and organizations in order to work effectively, which introduces an element of unpredictability in handoff. Finally, inherent to this period is the consideration of vulnerable populations and how to reach them. It may be a resource challenge to identify and build communications channels that will reach all intended vulnerable audiences reliably in the event of an emergency.

- Availability and continuity of resources in planning vs. emergency phases of operation
- Investment of capital and human resources
- Reliance on outside parties
- Identifying and building communications channels to reach all vulnerable populations

RECOMMENDATIONS

The primary recommendation in this period is to ensure that no audience in Tuolumne County is left behind—especially vulnerable populations. If there are gaps or tenuous connections

allowing information to travel to certain audiences, building the infrastructure and system for reaching them should be prioritized in this phase of operation. To that end, laying the groundwork for amplification strategies on top of existing channels such as Everbridge® and Alert Me® that allow a one-to-many approach of sending communications to an intermediary who is responsible for reaching other audiences (such as hotels who will then be responsible for notifying their individual guests) can reduce strain on available resources in particularly demanding communications scenarios. This period also represents the opportunity to actively engage with the public via educational programs such as Firefighters On Your Side and Ready! Go! or consider the reprogramming of such county resources as CERT (Community Emergency Response Team).

- Investment in in-transit signage and communications media to reach vulnerable communications-deficient audiences
- Investment in communications infrastructure such as PA systems and cellular/data network extenders to reach more people in remote areas
- Investment in language translation services to more effectively reach non-English speaking audiences
- Investment in amplification strategies that allow one-to-many communications, especially in resource-constrained scenarios
- Establishing protocols and lines of sight for peer-to-peer communications networks
- Activation of city and county educational programs for public emergency preparedness

PHASED-EVACUATION

COMMUNICATIONS CONSIDERATIONS

A phased evacuation is a unique challenge to the Strategy because it involves delivering targeted communications to specific audiences to the exclusion of others. The key priority of the communications strategy at this stage is identifying those audiences that require the most time and resources to reach or mobilize. Time is the key driver of priority. As this is a phased activity, it is important to phase audiences as well, prioritizing both those affected by the current situation as well as those who are likely to be next—this is where the feedback channel comes into play in deciding whom the next audiences in line will be.

- Targeted communications and specific audiences
- Prioritizing audiences based on difficulty to reach or mobilize
- Phased or tiered audience categories

AUDIENCES

Functionally, the audience here consists of all audiences until some are labeled as non-priority or non-actionable. That said, vulnerable audiences in particular must be given the requisite time buffer to be notified and evacuated safely and effectively.

- Locals
- Non-locals

RESOURCES

The toolkit for outreach consists of all the county's available resources, though the messaging and targeting will vary depended on the intended audience.

- Digital
 - Press releases
 - EAS, EBS, Everbridge®, Alert Me®, push notifications
 - Social media posts
 - Tweet updates
 - Instagram post updates
 - Facebook post updates, groups
 - Interagency and affiliate/partner support
 - Retweets, regrams, reposts, shares, etc.
 - Website page updates
- Physical
 - Road signage
 - Press conferences
- Relational
 - Media relations: TV, radio, web, social
 - Via email, phone, social
 - Interagency relations
 - Peer-to-peer network
 - Real-time translation across media

BACKCHANNEL

The backchannel has a large role in this scenario, because it is the gatekeeper for unlocking various audiences and actions as they become necessary. It is also a measurement tool to gauge the effectiveness of communications in achieving the intended goal evacuation of targeted audiences, which should feed back into the use of resources to fill in any gaps, as necessary.

- Assigning priority audiences based on operational feedback
- Opening new audiences for communications
- Prioritizing the use of resources in reaching target audiences
- Measuring communications effectiveness

ACTIONS

The communications actions of this scenario involve a phased and multi-pronged activation that include most if not all of the available resources.

- Identifying and developing single source of truth
- Prioritizing and tiering all relevant and potentially relevant audiences
- Codifying evacuation messaging for intended audiences
- Translating and distributing messaging across all available resources to reach necessary audiences
- Employing backchannel to calibrate resource use and identify priority audiences, and to gauge effectiveness of communications

CHALLENGES

The inherent challenge of a phased evacuation is casting too wide or too narrow of a net that either strains resources or egress routes with more people than necessary or does not completely reach the intended audiences. This can be mitigated with information and planning: that is, a well-calibrated pre-event phase and backchannel that minimizes room for error.

- Casting too wide or narrow an audience net

RECOMMENDATIONS

Information and planning are the keys to an effective phased-evacuation. By anticipating audience needs, preparing resources, and prioritizing audiences, communications can be both effective and flexible in reaching the intended audiences.

- Prioritizing audiences based on time delay and anticipation of impact
- Real-time relay of developing incident through communications channels—queuing audiences on standby
- Planning and timing communications actions to coincide with event unfolding
- Preparing communications messaging and outreach that lays the groundwork for future communications

TOTAL EVACUATION

COMMUNICATIONS CONSIDERATIONS

The total evacuation scenario is an exhaustive communications effort that demands engagement of all Tuolumne County resources. While the demands are simple in terms of targeting—all audiences are targeted—it is more complex operationally because of the number of pieces in play and the demands on the communications team to manage the outreach as well as the feedback and response to each of the activated resources. For example, reporters return for a follow-up, or social media posts receive questions or criticism.

- Resource strain from activation of all channels and resources at once
- Backchannel from active communications causes additional strain
- More channels to update as scenario evolves

AUDIENCES

This scenario includes all audiences with priority assigned to the most vulnerable.

- Locals
- Non-locals

RESOURCES

This scenario activates the full suite of digital, physical, and relational resources available.

- Digital
 - Press releases
 - EAS, EBS, Everbridge®, Alert Me®, push notifications
 - Social media posts
 - Tweet updates
 - Instagram post updates
 - Facebook post updates, groups
 - Interagency and affiliate/partner support
 - Retweets, regrams, reposts, shares, etc.
 - Website page updates
- Physical
 - Road signage
 - Press conferences
- Relational
 - Media relations: TV, radio, web, social
 - Via email, phone, social
 - Interagency relations
 - Peer-to-peer network
 - Real-time translation across media

BACKCHANNEL

In the event of a total evacuation, the county backchannel is crucial insight for adjusting the strategy and to adding filters back to the wide-open net cast on resources and audiences. It helps answer the questions: Which audiences are being left behind? How effective is the current communications strategy? And when do we close the loop? Staff can use it to understand how different audiences may be responding to the same messages delivered across the board—allowing adjustments to messaging and methods to meet audiences where they are.

- Refocusing communications resources and messaging to reach all audiences
- Measuring communications effectiveness
- Deciding when communications resources can be deactivated

ACTIONS

The communications actions of this scenario are the complete and simultaneous activation of all county resources.

- Identifying and developing single source of truth
- Prioritizing vulnerable audiences and refocusing resources to reach those underserved
- Translating and distributing messaging across all resources to reach necessary audiences
- Monitoring the backchannel to enable the effective distribution of updates and gauge the effectiveness of communications
- Deprecating the use of resources as appropriate to manage resource strain

CHALLENGES

Resource strain and resource management is one of the largest challenges in this scenario. Additionally, engaging with an audience this large presents a logistical burden to providing effective updates and feedback across all channels.

- Resource strain
- Logistical considerations of managing feedback and updates to all audiences

RECOMMENDATIONS

Because this scenario requires such a large resource investment from all county communications channels, the communications team should consider the use of amplification methods (i.e., one-to-many) that would have been prepared at the pre-evacuation stage, thereby minimizing the number of channels required to reach the same audience. In addition, designating a single source of truth, such as the Tuolumne County Facebook page, and referring multiple audiences to it for updates can be an effective way of keeping audiences in the loop with the expenditure of active resources. Audience priorities remain ensuring effective, early, and redundant efforts to reach vulnerable populations who may otherwise be underserved in this scenario.

- Employing amplification methods to maximize reach with minimal resources
- Designating and referring audiences to single source of truth to limit resource strain with updates across all channels
- Prioritization and close monitoring of vulnerable populations to ensure they are effectively reached

POST-EVACUATION

COMMUNICATIONS CONSIDERATIONS

Post-evacuation represents the closing of the loop on county crisis communications. It is the phase marked by the eventual reintegration of both local and visiting populations into the area. That said, the time scale of this phase may vary significantly—in some cases, it may be weeks or days before the public is allowed to return. In all cases, communications channels are expected to stay open to announce updates and finally to announce the terminus of the event. This period also serves as an opportunity to learn from how communications were handled and received during the previous phases and is the ultimate backchannel for refining the process of communications strategy development.

- Reintegrating local and visiting populations
- Updating all communications channels to close out the event
- Feedback opportunity to refine communications strategy going forward

AUDIENCES

This involves all previously reached audiences through either the phased- or total-evacuation scenarios.

- Locals
- Non-locals

RESOURCES

The resource considerations here involve closing the loop with all previously activated resources. Because audiences are physically further afield than they were in the previous activation phases, it may be more challenging to reach them through the same channels.

- Previously activated resources
- Broad-reaching communications channels

BACKCHANNEL

As previously noted, this scenario serves as its own backchannel for improving the communications strategy development process. This is an opportunity to seek feedback from various media, partners, and the public. It is valuable to assess which audiences, for example were difficult to reach or to reach effectively to improve future communications strategies.

- Better understanding barriers to communications
- Better understanding difficult-to-reach audiences
- Measuring holistic effectiveness of communications strategy and process

ACTIONS

As with earlier phases, continuity of messaging across all media is crucial in this stage. Coordinating the return of locals and non-locals to Tuolumne County may involve a phased and targeted effort or blanket directions. It is key that these communications are not conflated in

mixed messages, so the same priorities of a single source of truth and continuity across resources present in earlier stages is paramount here as well. Finally, as this phase represents the terminus of outbound activity, it involves closing the loop with all open communications channels and ensuring that all audiences reached understand the next steps.

- Identifying and referring to single source of truth
- Translating and distributing messaging across all resources to reach necessary audiences
- Monitoring the backchannel to enable the effective distribution of updates and gauge the effectiveness of communications
- Closing the loop with all audiences and channels

CHALLENGES

As noted in the resources section, one of the primary challenges involved in this stage is reconnecting with all audiences that may have moved further afield in the evacuation phase, and as such are more difficult to reach. Maintaining continuity and an open channel of communication is in itself a resource strain that should not be discounted. Finally, in phased reintegration approaches, it may be necessary to keep lines of connection open with updates and targeted messaging intended for specific audiences—so managing this multi-pronged multi-priority communications tack is resource intensive as well.

- Reconnecting with audiences that have been evacuated and are more dispersed
- Resource strain of open communications for updates
- Resource strain of phased reintegration requiring targeted messaging and audience specificity

RECOMMENDATIONS

The general goal of this phase is to close the loop with all activated resources and evacuated audiences, in Tuolumne County and beyond. To that end, it makes the most sense to limit the resource strain involved with reaching each of them where they are by providing information in one place that they can refer to as the situation unfolds, such as the Tuolumne County Facebook page. The latter stages of this phase are also an opportunity to refer audiences to available resources that may be outside the scope of the emergency communications function, such as housing resources, reintegration procedures, safety protocols, etc. It is recommended to work with partner agencies and resources ahead of time to have systems in place and available. It is also an opportunity to close the loop with local media like KVLM and Tuolumne County Public Access Television who may be able to broadcast the aforementioned resources in their news coverage. Finally, as this is the end phase of communications, it is also an opportunity to leverage the backchannel to refine the communications processes and inform infrastructure and resource investments going forward.

- Referring audiences in to single source of truth to limit outbound resource strain in updates and closing the loop
- Preparing referrals to outside resources for reintegration and local area information
- Leveraging open channels to local and broader media to broadcast updates and resource availability
- Leveraging backchannel to refine communications processes and inform future infrastructure and resource investments

CONCLUSION

Communications strategy is an evolving process. It benefits greatly from the investment of resources into the early, pre-evacuation stage as well as the time taken in the post-evacuation stage to monitor and take stock of both shortcomings and successes in the effectiveness of communications in reaching intended audiences. During an event, having a single source of truth is both strategic from the perspective of communications clarity as well as for minimizing resource strain. Further, in all communications phases, employing an active and reliable backchannel for communications and operations is one of the most valuable investments that can be made to improve communications in real-time as well as in the future.

Given Tuolumne County's vulnerable and remote populations combined with limited public communications infrastructure, the imperative is that no audience is left behind. There should be a reliable method for reaching everyone, and ideally multiple methods that allow for a quick and coordinated response in the event of a time-sensitive event. The more redundancy that can be built into reaching all audiences, the more investment that can be made in the infrastructure to do so, and the more that those resources can be front-loaded in anticipation of an event, the more successful communications will be in achieving its goals in the case of an emergency.