

# ONLINE DISSEMINATION OF OFFICIAL INFORMATION - THE 2014 CARLTON COMPLEX WILDFIRES

## WHAT WAS THE PROBLEM AND MOTIVATION?

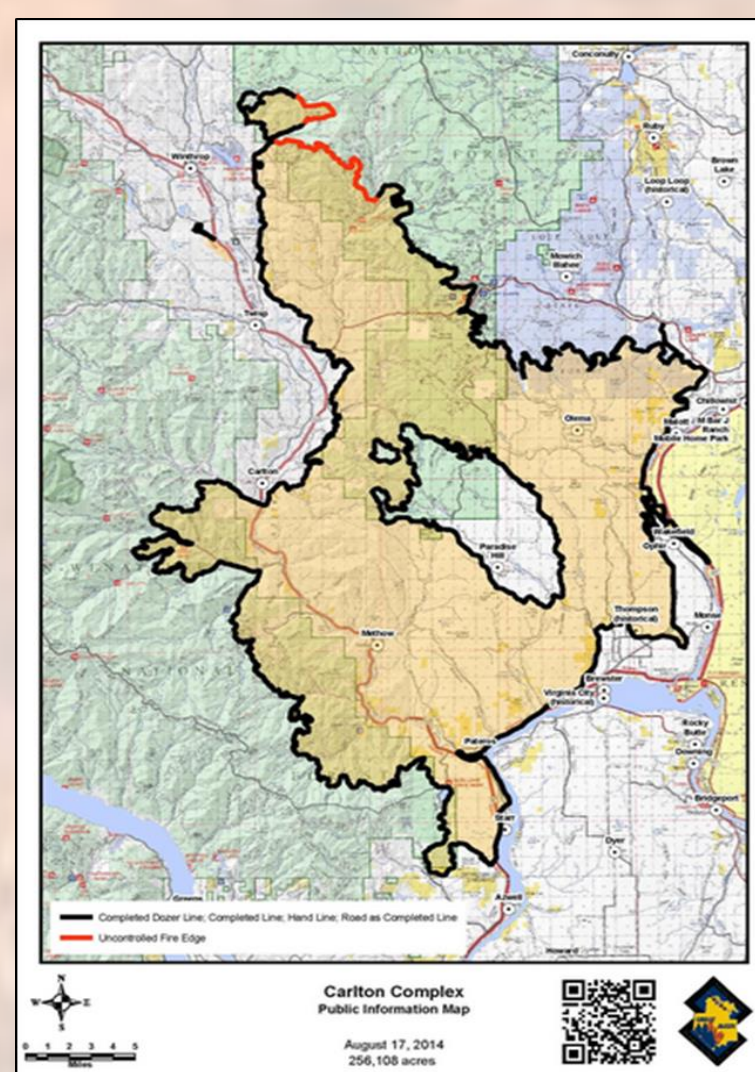
Around a disaster event, when there is a large influx of official information throughout the Internet, it is not always clear who to follow for timely, frequent, and relevant information.

## HOW DID WE ADDRESS THE PROBLEM?

We identified the first, and the most frequent official reporters, of two critical pieces of information during the 2014 Carlton Complex wildfires: the number of houses consumed by wildfire and fire evacuation levels.

## WHY DID WE STUDY CARLTON COMPLEX WILDFIRES?

On July 14, 2014, lightning in the Methow River Valley started four wildfires: the Cougar Flat, French Creek, Gold Hike, and Stokes fires.



These fires later merged (by July 20) to form the Carlton Complex Wildfire.

The Carlton Complex Wildfire burned 256,108 acres to become the largest wildfire in the history of the US state of Washington, affecting the communities of Okanogan and Chelan counties in Washington. The wildfire consumed more than 300 homes and cost approximately \$50 million.

## WHAT DID WE DO TO SOLVE THE PROBLEM?

### STEP 1- DECIDING PARAMETERS

#### OFFICIAL INFORMATION SOURCES

- 1. Event Based Accounts (EBA):** Online media dedicated to the Carlton Complex Wildfire.
- 2. Event Cooperating Agencies (ECA):** Online media belonging to incident cooperators. Examples- WADNR, WSDOT, WDFW etc.
- 3. Affected Area Officials (AAO):** Online media belonging to the affected cities/communities and their emergency responders (i.e., fire, police, and emergency management agencies).
- 4. Local News Media (LNM):** Online media belonging to the local news media of the affected cities/communities.

#### ONLINE MEDIA TYPES

Official Websites | Facebook | Twitter

#### CRITICAL PIECES OF INFORMATION

Number of Houses Consumed by the Wildfire | Fire Evacuation Levels.

### STEP 2- DATA COLLECTION

#### DATA COLLECTION TIME FRAME

July 14 - August 28, 2014

#### DATA COLLECTION METHODS

Google Search | Facebook Graph API | Twitter Search API

#### COLLECTED DATA

WEBSITES	FACEBOOK	TWITTER
30 webpages	30 pages (2,099 posts)	21 accounts (3,996 tweets)

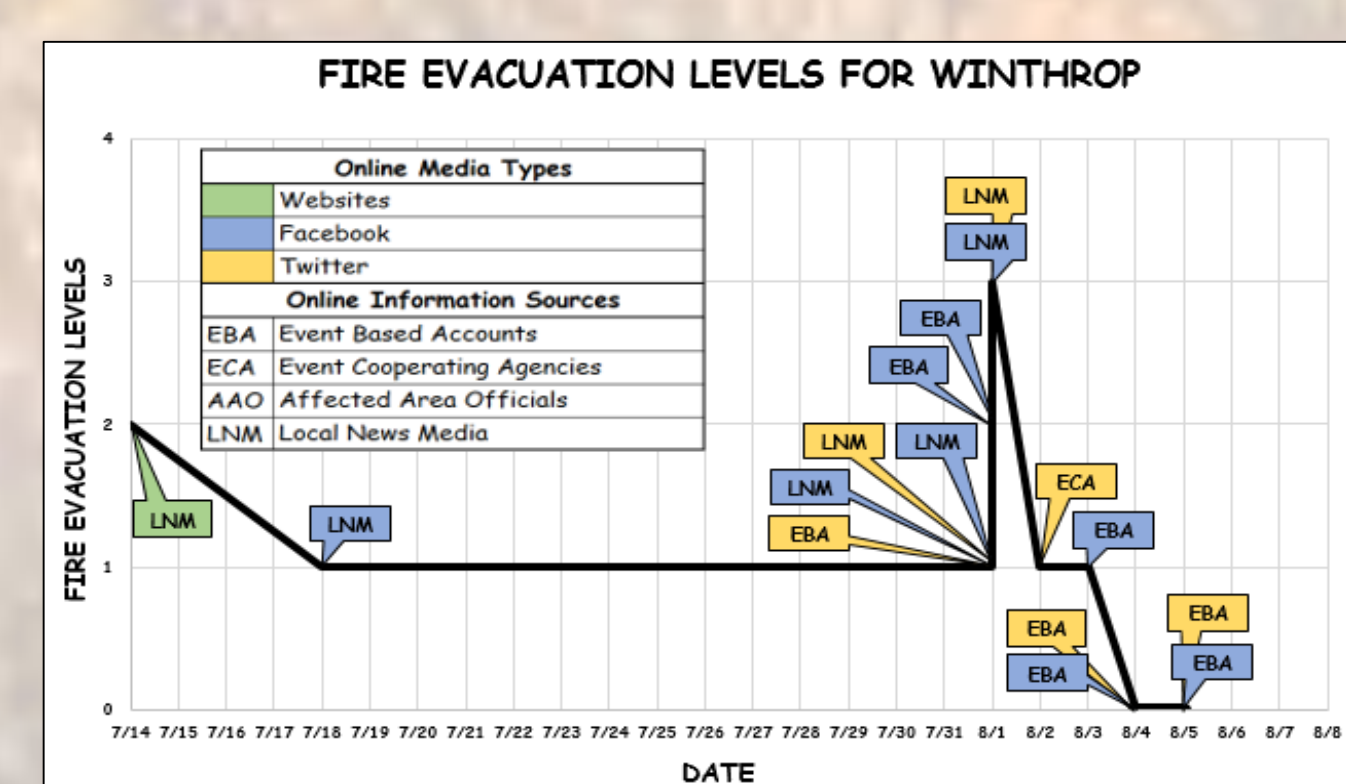
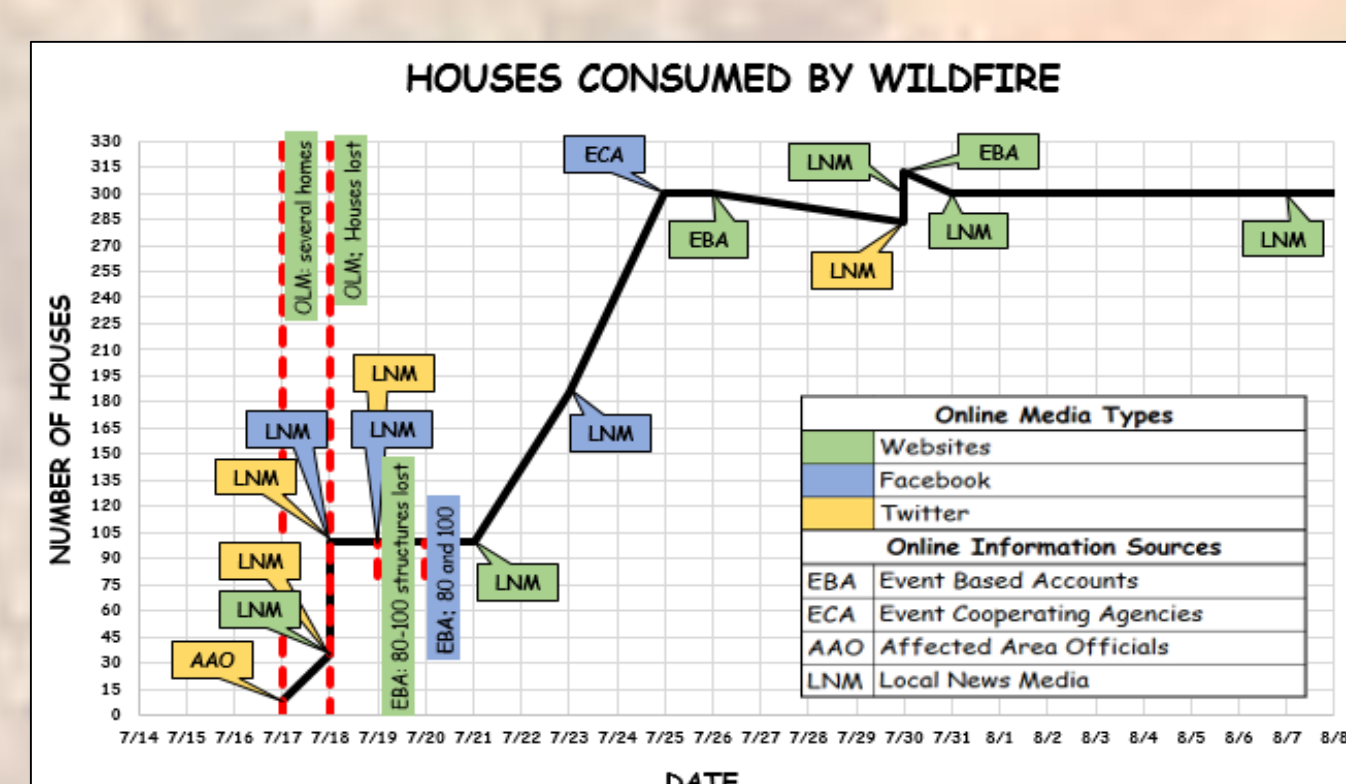
### STEP 3- DATA ANALYSIS

#### STEP 1- CONTENT CODING

We read and coded every tweet, post, and webpage to determine if they contained information about:

1. the Carlton Complex Wildfires,
2. the number of houses consumed by the wildfire, and
3. fire evacuation levels.

#### STEP 2- IDENTIFIED FIRST REPORTERS OF OFFICIAL INFORMATION



## WHAT WERE OUR FINDINGS?

### FIRST REPORTERS

ONLINE MEDIA TYPES	# HOUSES CONSUMED BY WILDFIRE MESSAGES	#FIRE EVACUATION LEVEL MESSAGES
Website	6	27
Facebook	6	51
Twitter	4	42

OFFICIAL INFORMATION SOURCES	# HOUSES CONSUMED BY WILDFIRE MESSAGES	#FIRE EVACUATION LEVEL MESSAGES
Local News Media	11	63
Event Based Accounts	3	40
Event Cooperating Agencies	1	16
Affected Area Officials	1	1

### FREQUENCY OF REPORTS

ONLINE MEDIA TYPES	# HOUSES CONSUMED BY WILDFIRE MESSAGES	#FIRE EVACUATION LEVEL MESSAGES
Website	18	44
Facebook	11	127
Twitter	7	102

OFFICIAL INFORMATION SOURCES	# HOUSES CONSUMED BY WILDFIRE MESSAGES	#FIRE EVACUATION LEVEL MESSAGES
Local News Media	27	163
Event Based Accounts	6	82
Event Cooperating Agencies	2	27
Affected Area Officials	1	1

## WHAT CONCLUSIONS DID WE DRAW FROM THIS STUDY?

Local news media were the first reporters, and also the most frequent reporters of official information for both the number of houses consumed by wildfire and fire evacuation levels. This is important because local news media, at least in this study, were the most viable source of official information, even though other emergency responders who had more ready access to the information could have shared it more quickly over their online media accounts.