

# WarnMe: Is This Even for Me?

## A UXR + NLP Study of UC Berkeley's Emergency Mass Notification System



### What is WarnMe?

WarnMe is one part of UCB's emergency alert system. It is a mass notification system in which UCPD compose and send out timely warnings, emergency notifications, and community advisories related to crimes and emergencies on or around campus. It is one part of how UCB must adhere to the Clery Act along with annual reports.

### What is the Clery Act?

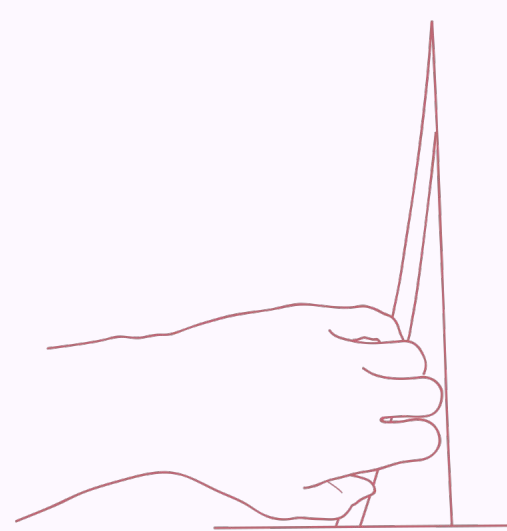
The Clery Act mandates disclosure of campus crime statistics and policies, including specified geographic areas and crime categories that universities must report on. It was passed in 1990 after the murder of Jeanne Clery and was amended in 2008 after the Virginia Tech shootings to include specific requirements for emergency notification of the campus population.

**1.** (How) Do Students Use WarnMe?

**2.** (How) Does WarnMe Impact Students?

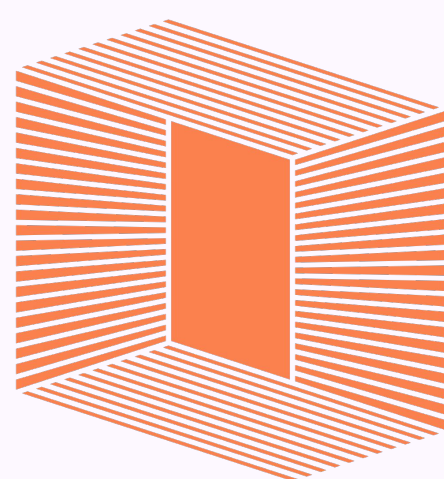
### NOTABLE FINDINGS

#### Oz of WarnMe



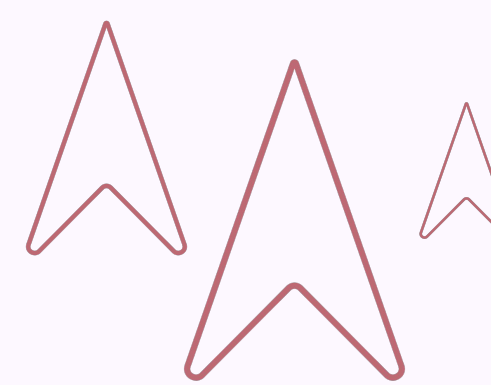
How users conceptualize the administrators and authors of WarnMe messages influences how they engage with the system and their sentiments towards it. The perceived motivations and expectations of these internally-constructed figures has an impact on how users evaluate the WarnMe system and their feelings and trust towards the system.

#### Illusion of Safety



The gap between the perceived security provided by WarnMe and its actual effectiveness in real-world scenarios. Discrepancies in timeliness, relevance, and clarity of communications can create a false sense of security, leading to increased anxiety and confusion among the community.

#### Location Granularity



315 WarnMe messages from Aug 2021 to Oct 2023 were manually coded by 4 annotators by location granularity along with other categories. Nearly half of the messages analyzed included a location descriptor was coarser than a specific address/named place or an intersection: by one block, a general area, all-campus or digital/telephone.

### Toolkit



To evaluate your university's emergency alert system

### RESEARCH METHODS

#### User Interviews

Interviews were conducted to understand users' comprehension of WarnMe messages, assumptions of WarnMe's role in campus safety, the impact of the Feb 9, 2024 shooting, impressions of WarnMe and user needs.

Ten students were interviewed and their responses were coded to surface key themes and findings to inform the toolkit's outcomes.

#### Diary Study

A diary study, a form of User Experience Research, was conducted to collect real-time responses from eleven UC Berkeley students about their impressions of WarnMe messages sent by the university.

The diary study's purpose was to understand: comprehension of WarnMe messages, the emotional impact of WarnMe content and alerts on users, user needs, and suggestions for improvement.

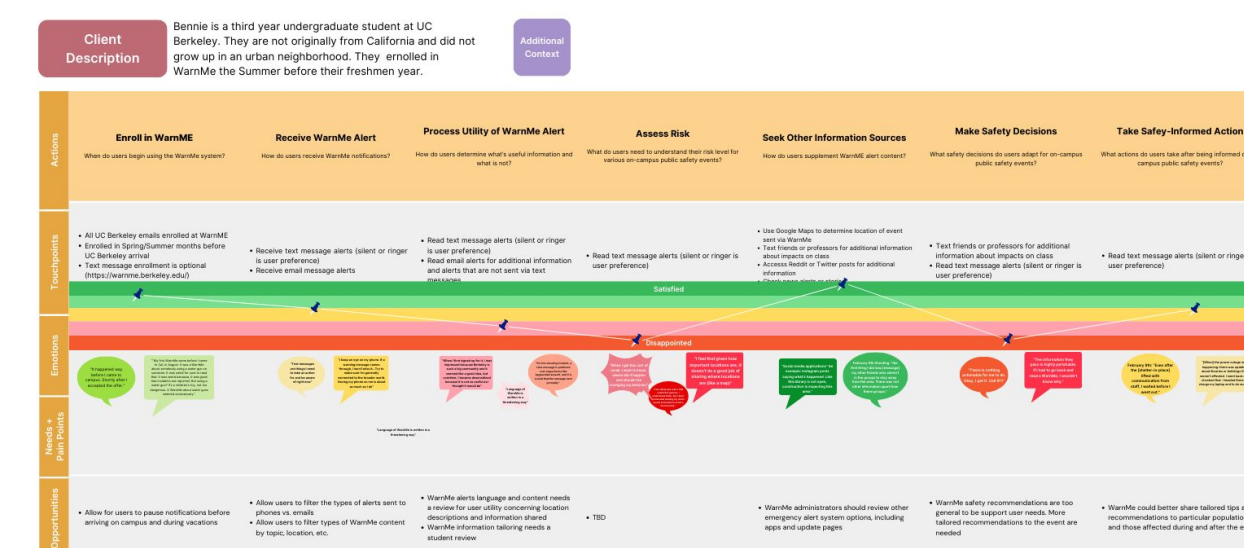
#### Sentiment Analysis

WarnMe-related posts on the r/berkeley Subreddit were manually annotated with +/- sentiment as well as emotion (joy, love, anger, sadness, fear & surprise) labels.

A BERT-based model was then trained to classify the emotion and sentiment of the messages. The model achieved 80.65% accuracy, excelling in identifying sadness and anger but less effective with surprise and love.

#### Journey Map

##### WarnMe Student Journey Map



A map outlining how students receive WarnMe messages, engage with the system, and apply its information.