



Emergency Notification System at Virginia Tech

Michael Mulhare, P.E., Director, Office of Emergency Management

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Emergency Notification Systems (ENS) and Higher Education

- Ø Virginia Tech; Morva Incident, August 21, 2006.
- Ø All of Higher Education considering ENS systems following April 16th tragedy.
- Ø October 2009; final regulations to Higher Education Opportunity Act promulgated.



Higher Education Act

*“...**immediately notify** the campus community upon the confirmation of a significant emergency or dangerous situation involving an immediate threat to the health or safety of students or staff occurring on the campus ... unless issuing a notification will compromise efforts to contain the emergency.”*



Initial System Selection Criteria (2006)

- Ø Test message using Short Message Service (SMS) protocol
- Ø E-mail
- Ø Web posting
- Ø Voice communication to cellular and/or land line phone



Initial System Selection Criteria (2006)

- Ø Flexibility in registering or subscribing user.
- Ø Redundancy of critical systems and data.
- Ø Dispersed messaging; system needs to address saturation of communication channels.



Developed a Unified Portal for Varied Channels

- Ø Mobile device – (VT *Phone Alerts*)
- Ø Blast e-mail
- Ø Computer Modules (VT *Desktop Alerts*)
- Ø Web site alerts
- Ø Classroom digital signs
- Ø Recorded Hotline
- Ø Campus sirens and loudspeakers
- Ø Public media
- Ø Switchboard



Single Web Portal to Access Multiple

 **VirginiaTech**
Invent the Future

Emergency Notification System

[▶ VT Home](#)
[▶ VT News](#)
[▶ Logout](#)

SCENARIOS

▶ Emergency	Custom
Bomb Threat	Health Threat
Inclement Weather	Shooter On Campus

MESSAGE

HEADLINE

Virginia Tech Emergency Notification

SYNOPSIS

[SYNOPSIS]

CHANNELS

☒ VT Homepage	☒ Classroom Signs
☒ E-mail (Listserv)	☒ Desktop, Twitter, RSS, ...
☒ Phone, SMS, ...	

START OVER

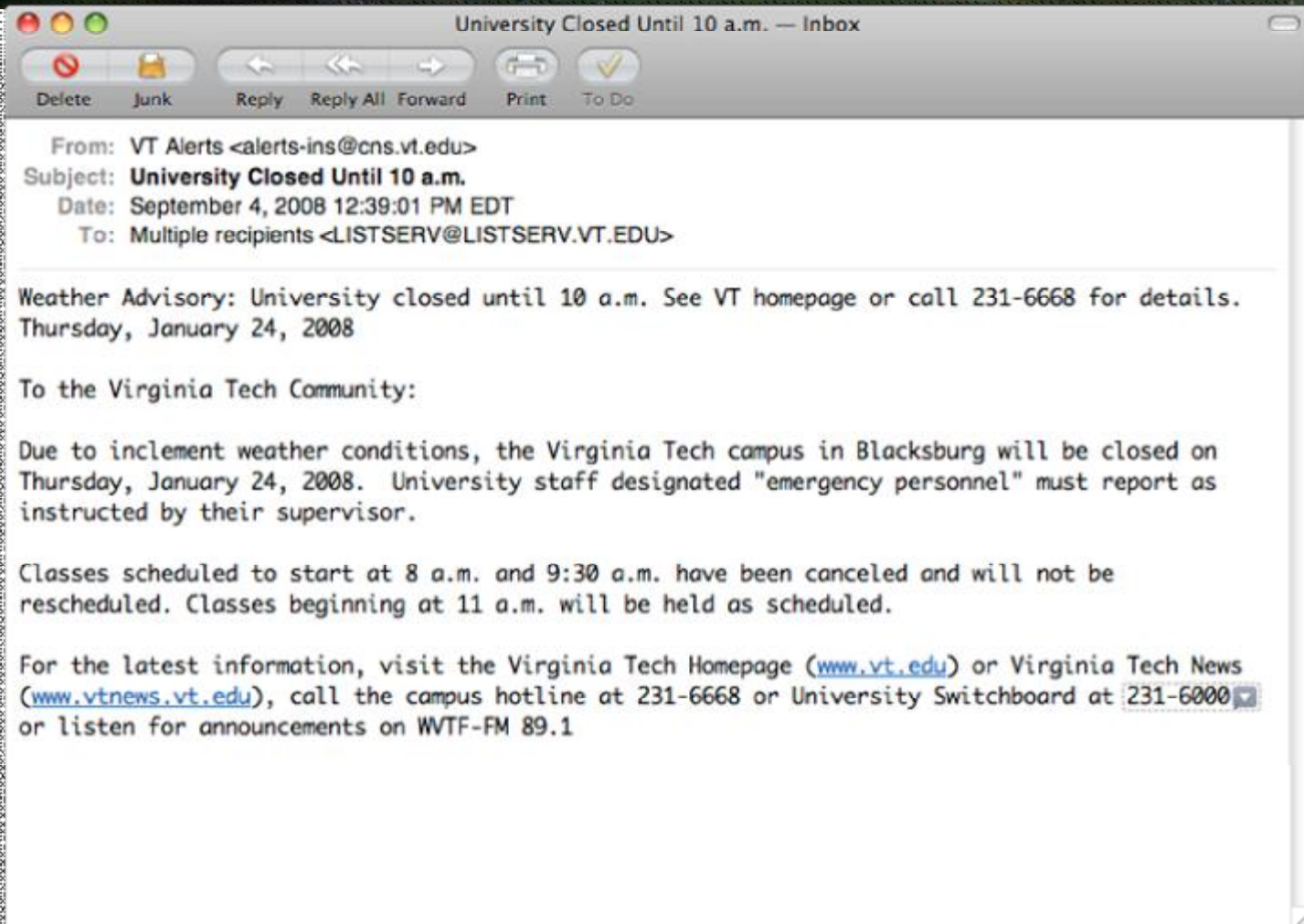
PREVIEW

TEMPLATES

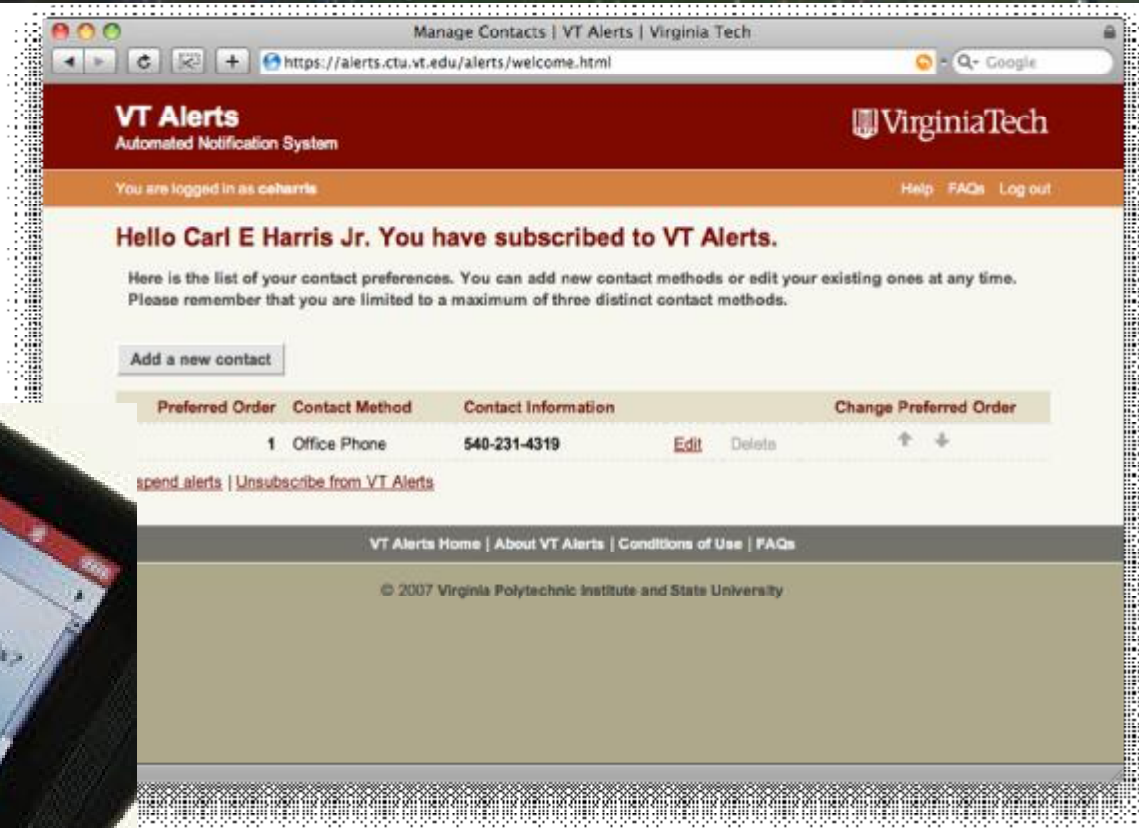
SCENARIO HISTORY

No message history for the selected scenario

Blast e-mail



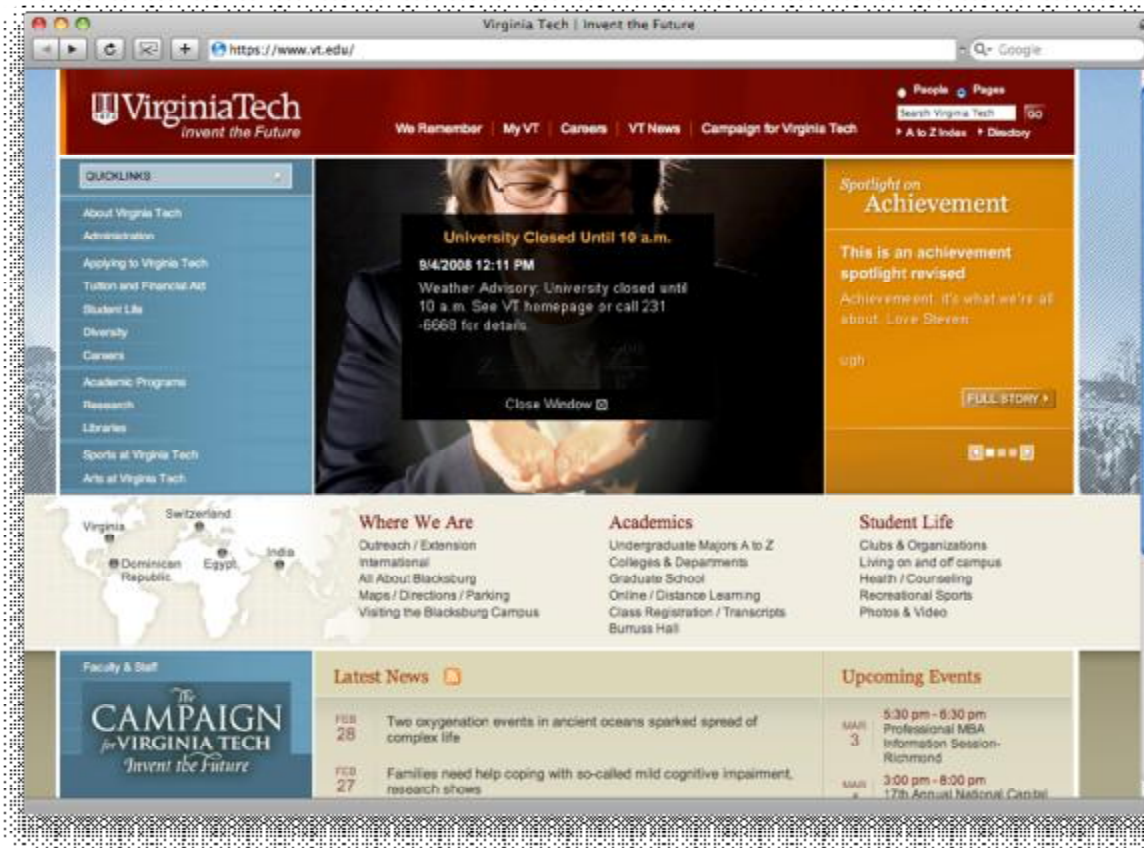
Mobile Device





VT Notification Systems

Web site
alerts





VT Notification Systems

Electronic Message Boards



358 electronic message boards in all general assignment and most other classrooms

- Ø Messages sent instantly
- Ø Messages preceded by audible tone.
- Ø 150 +/- more being installed



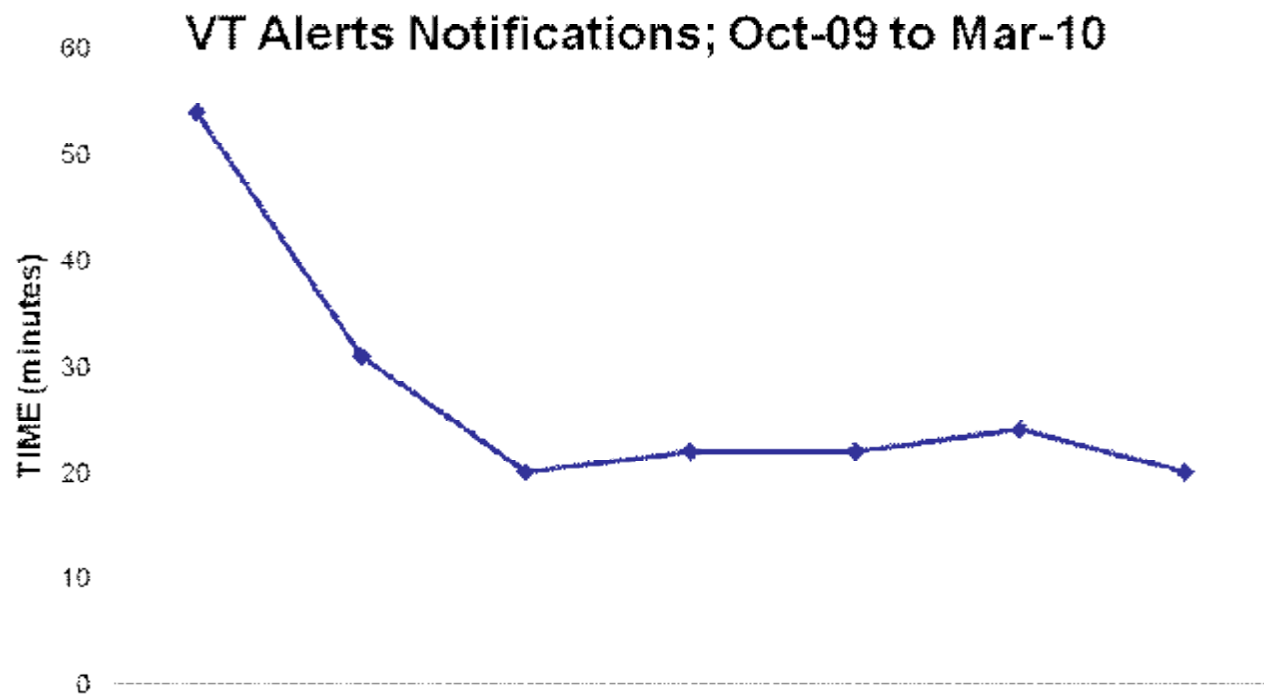
VT Notification Systems

VT Desktop Alerts



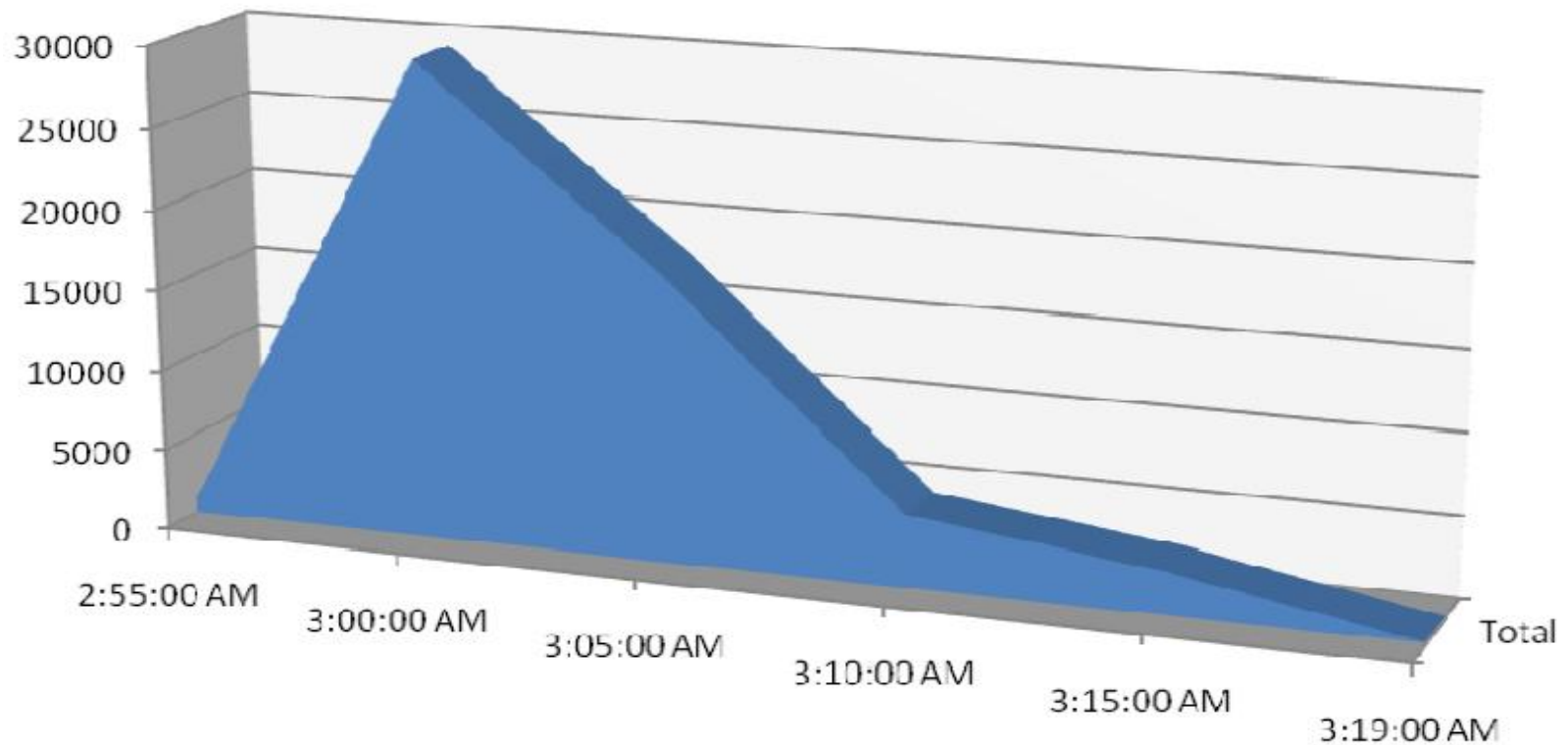


VT Alerts Utilization



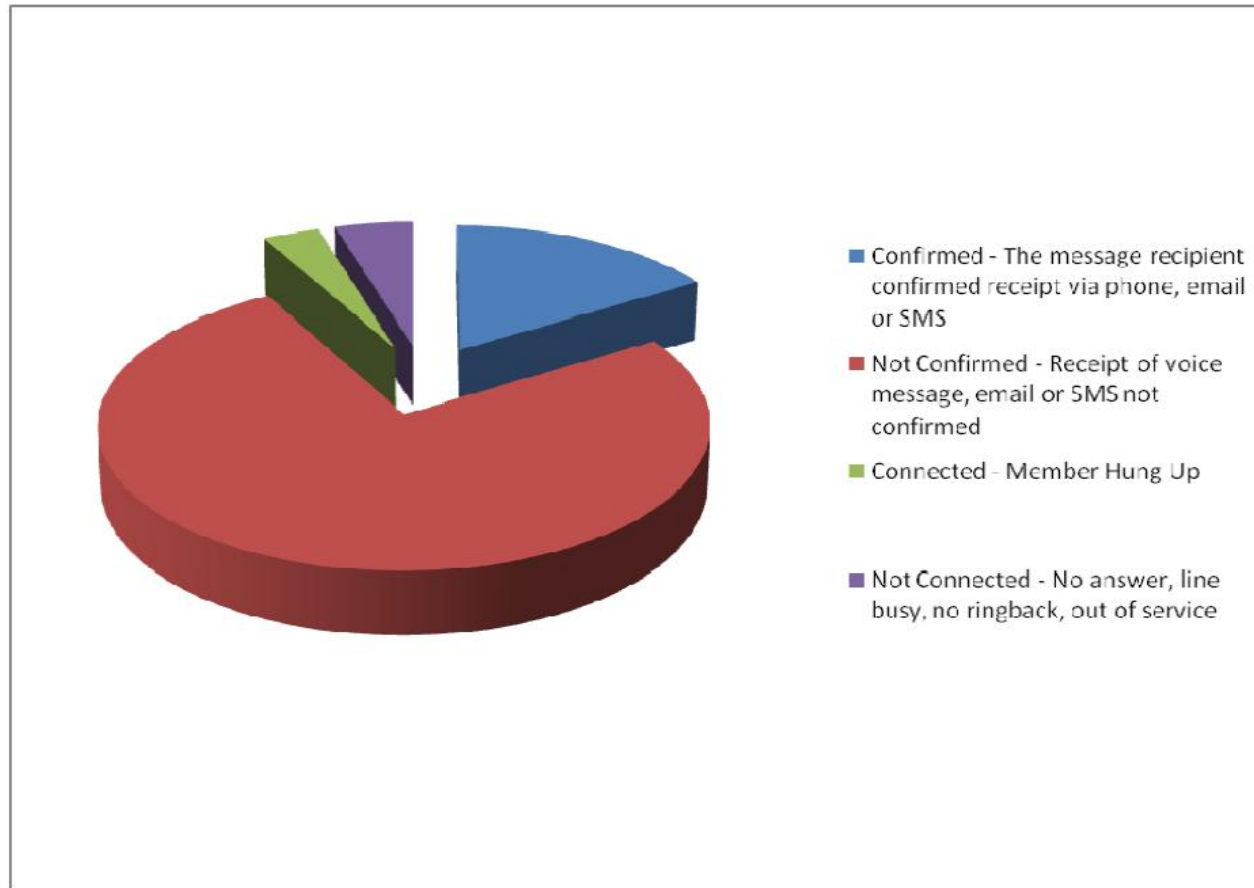


ENS Attempts





ENS Call Result Chart





Messaging

- Ø This is a test of the VT Alerts System.
Thank you for your participation.
- Ø This is a test of the Vermont Alerts
System Thank you for your participation





Message Characteristics

- Ø All VT ENS messages will contain, at minimum, the following information.
 - Ø Nature of the incident
 - Ø Location
 - Ø Actions to be taken



Operational Issues

- Ø Notification – Capability creates expectations.
- Ø Notification systems – Will it work? How long to complete notification? Does the system have sufficient capacity?
- Ø When do you send a notification? What is actionable? What about false alarms? Using alerts too often?
- Ø Who makes the decision to notify – public safety? communicators? Need for Protocols.



Emergency Notification System Protocols

The Virginia Polytechnic Institute
and State University

January 2010

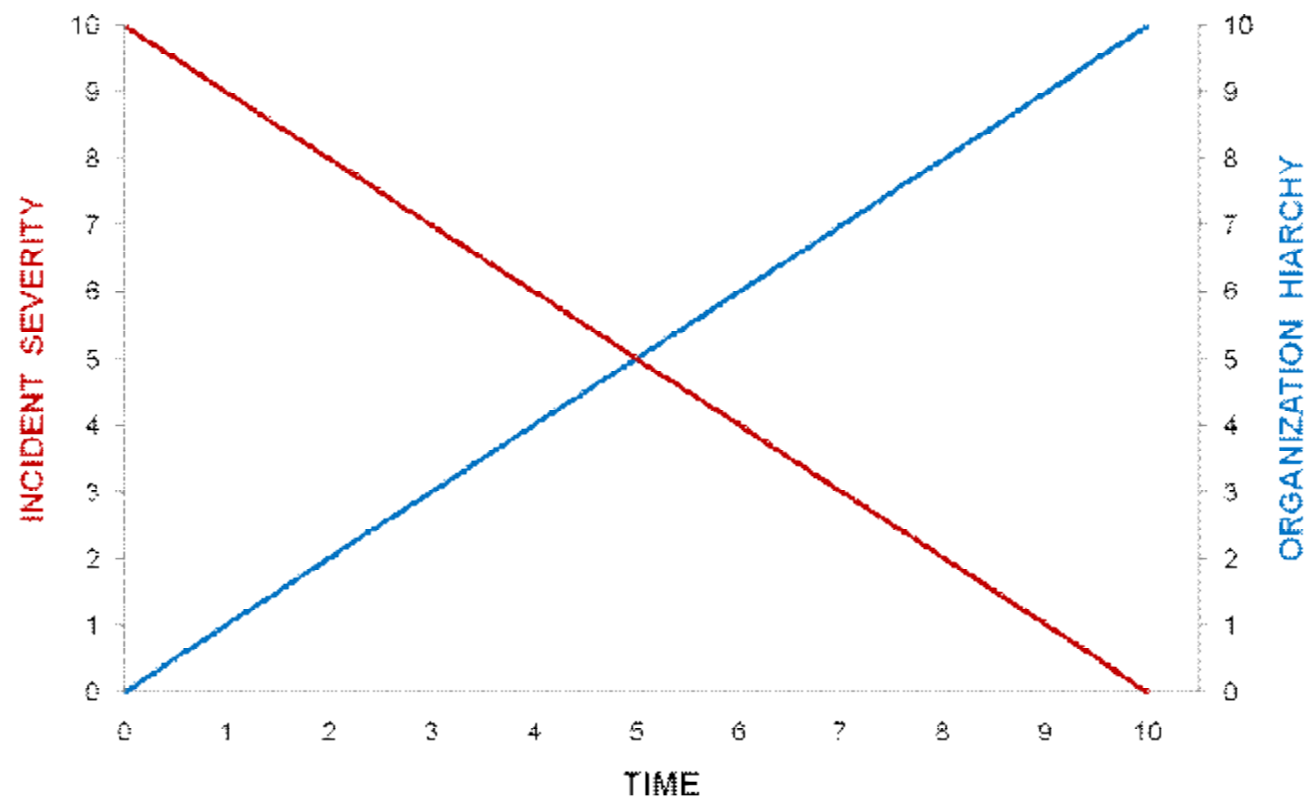


ENS Protocols

- Ø Formalizes intent of the ENS
- Ø Provides a SOP
- Ø Removes ambiguity
- Ø Creates a legally defensible position for actions taken



ENS AUTHORIZATION





Scenario	Notification Level	
	IMMEDIATE	URGENT
Flooding or water main Break	Flood at <i>(LOCATION)</i> -Seek higher ground-follow instructions from authorities-Do not attempt to drive (100)	Flood at <i>(LOCATION)</i> -Seek higher ground-follow instructions from authorities-Do not attempt to drive (100)
Roof failure or other structural damage	<i>(NATURE OF INCIDENT)</i> -Evacuate <i>(LOCATION)</i> immediately-Follow instructions from authorities-All others avoid area (112)	<i>(NATURE OF INCIDENT)</i> - <i>(LOCATION)</i> -Evacuate immediately-Follow instructions from authorities-All others avoid area (111)
Utility failure	N/A	<i>(NATURE OF INCIDENT)</i> - <i>(LOCATION)</i> -Follow instructions from authorities-Avoid area (81)



What's Next at Tech?

- Ø Regionalization of ENS system.
- Ø Incorporate fire alarm enunciators into ENS.
- Ø Linking blue light phones to siren system.





Purpose

- Protocols define the goals of ENS
- Establish the procedures for activating the VT ENS
- Authorize decision-making at the operational/response level when needed



Authorized University Officials

- Ø University President
- Ø VT Police Chief
- Ø Senior Office on Duty
- Ø Other designated university official(s) who are *directly involved with safety-and-security*.



Message Characteristics

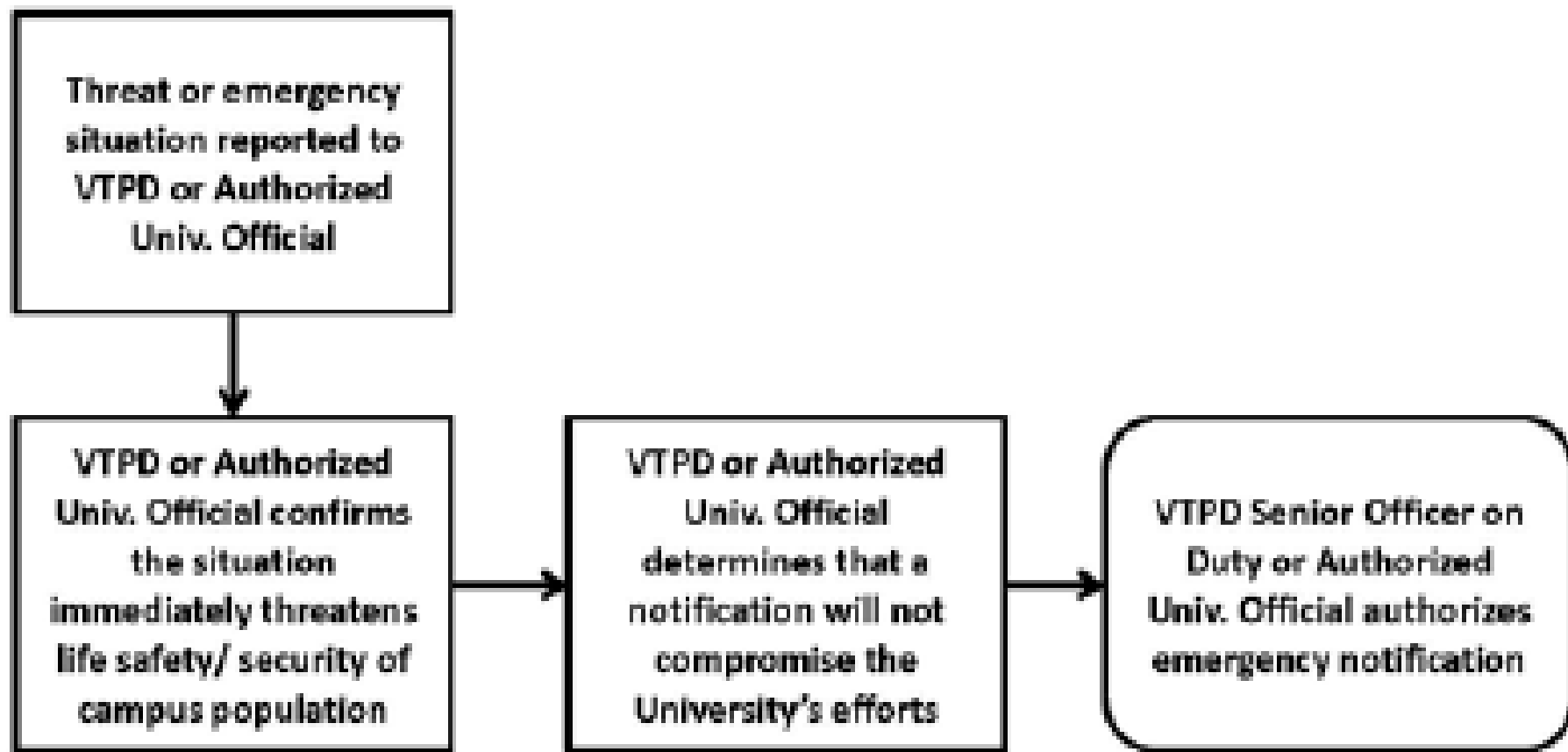
- Ø All VT ENS messages will contain at minimum the following information, in this order:
 - Ø Nature of the incident
 - Ø Location
 - Ø Actions to be taken



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ENS Activation Flow Chart





Additional Issues

- ∅ Reliance on too few systems? No single system does it all.
- ∅ Cell Phone Network capacity during emergency.
- ∅ Others will absorb your capacity in real emergency.
- ∅ Example: Cell phone, campus e-mail; internet.



University Closed Until 10 a.m. — Inbox

Delete Junk Reply Reply All Forward Print To Do

From: VT Alerts <alerts-ins@ons.vt.edu>
 Subject: **University Closed Until 10 a.m.**
 Date: September 4, 2008 12:39:01 PM EDT
 To: Multiple recipients <LISTSERV@LISTSERV.VT.EDU>

Weather Advisory: University closed until 10 a.m. See VT homepage or call 231-6668 for details.
 Thursday, January 24, 2008

To the Virginia Tech Community:

Due to inclement weather conditions, the Virginia Tech campus in Blacksburg will be closed on Thursday, January 24, 2008. University staff designated "emergency personnel" must report as instructed by their supervisor.

Classes scheduled to start at 8 a.m. and 9:30 a.m. have been canceled and will not be rescheduled. Classes beginning at 11 a.m. will be held as scheduled.

For the latest information, visit the Virginia Tech Homepage (www.vt.edu) or Virginia Tech News (www.vtnews.vt.edu), call the campus hotline at 231-6668 or University Switchboard at 231-6000, or listen for announcements on WTF-FM 89.1

Blast E-mail

VT Alerts Emergency Notification System

ALERT STATUS: No Active Alerts

ACTIVE USERS: 10,000

SCENARIOS: Emergency Custom

MESSAGE: HEADLINE: (Required) 4 characters remaining
 Virginia Tech Emergency Notification:
 SYNOPSIS: (Optional) 100 characters remaining
 This is only a test.

CHANNELS: ☒ VT Homepage ☒ Classroom Signs
☒ Campus Library

START OVER PREVIEW

SCENARIO HISTORY: 1/24/2008 @ 10:00 AM (John Harris)
 Emergency Test
 1/24/2008 @ 12:24 PM (John Harris)
 This is a test message.
 1/24/2008 @ 09:43 AM (John Harris)
 TEST. This is a test message.
 1/24/2008 @ 09:13 AM (John Harris)
 This is an update to an alert.
 1/24/2008 @ 08:08 AM (John Harris)

Single Portal

VT Alerts Automated Notification System

You are logged in as **carl**

Hello Carl E Harris Jr. You have subscribed to VT Alerts.

Here is the list of your contact preferences. You can add new contact methods or edit your existing ones at any time. Please remember that you are limited to a maximum of three distinct contact methods.

Add a new contact

Preferred Order	Contact Method	Contact Information	Change Preferred Order
1	Office Phone	540-231-4319	Edit Delete

Suspend alerts | Unsubscribe from VT Alerts

VT Alerts Home | About VT Alerts | Conditions of Use | FAQs

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VT Alerts Website

Virginia Tech | Inventing the Future

Remember | My VT | Campus | VT News | Campaign for Virginia Tech | Alerts | About

SPOTLIGHT on Achievement

University Closed Until 10 a.m.

9/4/2008 12:31 PM
 Weather Advisory: University closed until 10 a.m. See VT homepage or call 231-6668 for details.

Academics: Undergraduate Majors & Minors, Graduate School, Online/Distance Learning, Class Registration/Transcripts, Business Plan

Student Life: Clubs & Organizations, Living on and off campus, Health/Conducting, Recreational Sports, Photos & Video

Latest News: Two organizational events in ancient ruins sparked spread of complex life, Familiar meet help coping with so-called mild cognitive impairment, research shows

Upcoming Events: 9/4/08 6:00 pm - 6:30 pm Professional MBA Information Session - Richmond, 9/4/08 6:00 pm - 6:30 pm 2008 Annual Meeting - Blacksburg

2010 CAMPAIGN - VIRGINIA TECH Inventing the Future

Black Box Alert



Classroom Alert Signs

