



The Cambridge 911 Center (PSAP)

Evolution of 911

1968-1970's:	Basic 911 was established in many urban areas
1980's to 2000	911 was enhanced (E911) to provide the caller's telephone number ("ANI") and address ("ALI") and to route calls by specific address to the proper 911 center
Late 1990's to the present	E911 artfully jury-rigged to support cell phones and VoIP devices
2012 onwards	IP-based NG911 provides a platform for text, video, smart call flow, alarm info, and much more

Through this time period, 911 has achieved unparalleled brand recognition

Wireline Call Location Presentation

Call is from a Residential Phone

Calling Phone Number

Subscriber's Name

Street Address matching Municipally-Specified MSAG format (a valid

Address within the min to max number range permitted for each street in a Municipality e.g., 1 to 200 Adams St)

This phone is in Apartment 27!

```
206  
RESD 10:00 06/09  
(617) 868-0001 COID=VERIZ  
ROGERS, FRED  
114  
ADAMS  
  
APT 27  
CAMBRIDGE MA  
CI  
ESN=152 MTN:617-868-0001  
LAT: LON:  
ELV: COF: COP:  
  
CAMBRIDGE POLICE  
CAMBRIDGE FIRE  
CAMBRIDGE EMS
```

Wireline **PBX** Call Location - **BAD**

```
206  
PBXb 20:00 06/09  
(617) 253-1250 COID=VERIZ  
UNIVERSITY OF NORTHEAST  
200  
MAIN ST  
  
SUITE 212  
CAMBRIDGE MA  
CI  
ESN=152 MTN:617-253-1250  
LAT: LON:  
ELV: COF: COP:  
  
CAMBRIDGE POLICE  
CAMBRIDGE FIRE  
CAMBRIDGE EMS
```

Call is from a PBX

Calling Trunk Line (**cannot be called back**)

Subscriber's Name (Business Name)

Street Address of PBX switch

Room of PBX!

**But caller is actually in the Gym
which is 4 blocks away at 452
Cambridge Street!**

Caller, choking and alone, DIES

Wireline **PBX** 911 ALI Screen with E911 Solution – **GOOD!**

Call is from a PBX

Calling Phone (**but CAN be called back**)

Subscriber's Name (Business Name)

Street Address of Caller

Location at Address of Caller

```
206
PBXb 20:00 06/09
(617) 253-1025 COID=VERIZ
UNIVERSITY OF NORTHEAST
 452
CAMBRIDGE ST

GYM 1ST FL
CAMBRIDGE MA
CI
ESN=152 MTN:617-253-1025
LAT:     LON:
ELV:    COF:    COP:

CAMBRIDGE POLICE
CAMBRIDGE FIRE
CAMBRIDGE EMS
```

Help can now find caller

Caller, choking and alone, LIVES

911 Call Answering Screen

VESTA Titlebar - vanrell
File Options Window Help Monday, February 7, 2005 13:03

0

ALI Display

ALI [Retransmit] Options

Calling Number: (401) 497-8466

ALI History (18) Supp Info (0)

```

206
WPH2 13-03-02/07
(401) 497-8466 COID=
T-MOBILE USA (973) 292-1111
165
FOREST
SE_SECTOR
Marlborough MA
ESN=603 MTN=508-7
LAT:+042.333691 LON:-071.573610
ELV:+0000 COP:0 COP:000
Region 3
Region 3
Region 3
    
```

Current/Last ANI

Queue Display

Queue	Calls	Agents	Longest Call
Wireline_911	0	6	
One_Way	0	6	
Two_Way	0	6	
Framingham_800	0	6	
Wireless_911	0	6	

Call Control

Ready Hold Emergency Park Release

Auto Dial

Last Number Dialed: Sharon

Boston Police	Boston EMS	Boston Fire
Cambridge	Lawrence PD	Worcester PD
PSAP Directory...	STATE POLICE...	SPEED DIAL...
ANI Callback...	Intercom...	Internal Transfer
Transfer	Cancel	Recording
		Redial

Line Status

911_WSBO 2
508 5-
(401) 497- 00:57

In Calls ◀ DN 3106 DN 6210

VESTA Toolbar

- ALI
- ALI Display
- Auto Dial
- IRR
- Line Status
- Master Volume
- TTY
- VESTA Titlebar
- Call Control
- Queue Display
- MapStar

Start VESTA Titlebar - vanrell 1:03 PM

Wireless Call Location Presentation

ALI Display

ALI Retransmit Options

Calling Number: (401) 497-8466

ALI History (18) Supp Info (0)

206
WPH2 13:03 02/07
(401) 497- COID=
T-MOBILE USA (973)292-
165
FOREST

SE SECTOR
Marlborough MA

FSN=603 MTN-508
LAT:+042.5555 LON:-071.05888
ELEV:0000 COP:33 COP:062

Region 3
Region 3
Region 3

Current/Last ANI

Edit Wireless Event Address

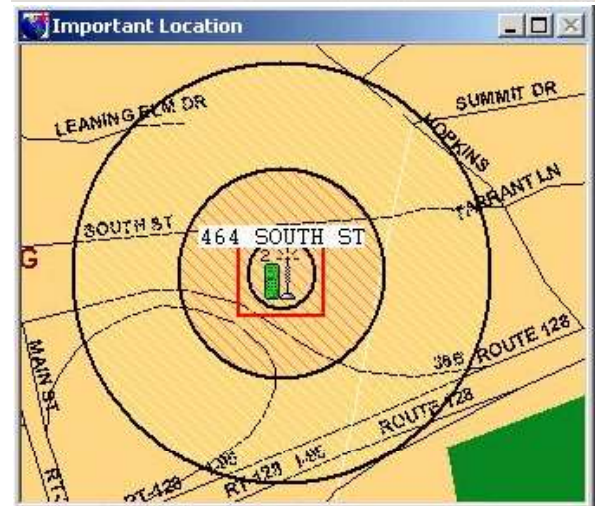
Position: Latitude: 42.083265 Longitude: -72.642589

Closest Intersection: HOPKINS && SOUTH ST

Address: Address: 464 SOUTH

Boundary: NORTHBOROUGH

OK Cancel Apply



NG911 Calls can

Be Text messages	Frightening to 911 call takers and 911 center managers (e.g., TTD)
Have an accompanying picture	Appears of most value to responders
Have accompanying data	Medical record of patient, map of premise with locations of hazardous materials,
Come from machines	Airbag deployment, security alarm, heart monitoring fob, wristband on autistic child wanderer – you name it.

AND: 911 has unparalleled brand recognition