# NG9-1-1

Next Generation 9-1-1 in Oregon

#### **Basic 9-1-1 History**

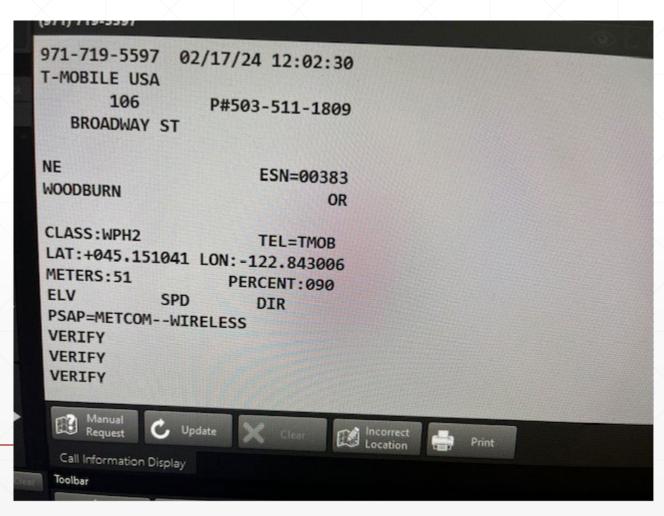
- First 9-1-1 call was placed on February 16, 1968
- 1981 Oregon Legislature issued a mandate for statewide 9-1-1 and instituted a 3% surcharge on subscriber's telephone lines. 280 Public Safety Answering Points (PSAP's) at that time with only a few providing basic 9-1-1
- 1991 legislature increased the surcharge to 5% and mandated "Enhanced 9-1-1 service (9-1-1 caller's address and responsible police, fire, and EMS provider displayed to the 9-1-1 call taker)
- 1995 the 5% surcharge was converted to .75 cent surcharge
- 2020 surcharge increased to \$1.00
- 2021 surcharge increased to \$1.25

### 9-1-1 History

- Basic 9-1-1
  - Routed calls to a PSAP but not necessarily the one for your area
- Enhanced 9-1-1
  - Routed calls based on location to the correct PSAP and included the owner name, address, phone number, and the name of the police, fire and EMS agency serving that area
- Phase 1
  - Routed cell calls based on the location of the cell tower (1973 first cell demonstrated became popular in the 90's and early 2000's)
- Phase 2
  - Routed cell calls based on location of the device latitude & longitude (started with triangulation and now many use GPS – still not 100% accurate

#### Flow of a 9-1-1 Call

- Call 9-1-1
  - "Simple" way your call gets to a PSAP
- What does the dispatcher see



### **Oregon 9-1-1**

- 43 9-1-1 Emergency Communication Centers, also known as Public Safety Answering Points (PSAP)
- All are connected to a statewide network that delivers location information of 9-1-1 callers
- Approximately 2.2 million calls are handled in Oregon on outdated technology which is unable to support the demands of today's "smart" device technology
- Many 9-1-1 centers must use "over the top" technology in order to bring in data like text to 9-1-1, photos and in some cases, video

#### So what is NG9-1-1

- The true definition is still being defined but in short, the NG9-1-1 network will be an Internet Protocol (IP) based system that would allow for integration of technology for greater interoperability and ease of sharing data
- OEM 9-1-1 program is leading the change out of the 9-1-1 "network"
  - Building a new IP Network from the ground up
  - Ensure International Standards to move away from proprietary interfaces
  - Ensure tougher security to protect the network (i.e. denial of service)

## Why is this important

- The 9-1-1 system must be upgraded to accept new technology and to build in better security standards
  - Enable 9-1-1 centers to receive and process all types of 9-1-1 requests for emergency assistance without over the top solutions – including photo, video, and other forms of data
  - Ensure seamless interoperability between 9-1-1 centers, not just within Oregon, and with responders in the field
  - Ensure emergency calls for assistance are routed properly between boarding states and Oregon PSAP jurisdictions

### NG9-1-1 Federal Legislation

- Federal funding is being requested to deploy NG9-1-1 nationwide (\$15B)
- Modern definitions of important terms such as NG9-1-1 and interoperability (so everyone is using the same terms)
- Assist state/local public safety agencies dealing with cyber threats

## **Oregon NG9-1-1 Progress and Information**



