

Next Generation 9-1-1: A basis for discussion

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Traditional 9-1-1 Call Process, Landlines

- 9-1-1 call made from 10 digit landline number is immediately connected to telephone provider's selective router in their Central Office switching center.
- The Selective Router looks up 9-1-1 Call Center assignment code from its internal table and transfers call to the appropriate 9-1-1 Call Center.
- 9-1-1 Call Center receives the call, and very shortly thereafter, the address of the caller (from a query to the 9-1-1 Service Contractors ALI database) is delivered to the call taker's screen.







Traditional 9-1-1 Call Process, Wireless

- Wireless subscriber places 9-1-1 call from a mobile device
- Mobile device communicates with a single tower antenna sector
- That sector is linked to a single 9-1-1 Call Center, via a 10-digit phone number
- Caller is connected to that 9-1-1 Call Center
- Location of the caller is provided to 9-1-1 Call Center, at phase 1 or phase 2 level



9-1-1 System Design Elements

- 1. ESI Network: IP-based networked communications backbone. Allows for failover operations, load balancing between locations, remotely hosted solutions
- 2. CPE Infrastructure. The call handling equipment at every stage from telecom provider to 911 center is internet-enabled
- 3. Location-based services. Geographic coordinates are used to dynamically determine the center that receives the call. Geocoding services allow landline providers to determine in advance the coordinates to attach to a 911 call.



