

9-1-1 in the MAG Region
Vision 2017-2024 Summary

The Maricopa Region IP 9-1-1 call delivery system will provide a platform to deliver IP-based communications through a variety of providers and a variety of devices. The system should include all PSAPs within the Maricopa Region as well as all 9-1-1 work stations. Highlights of this evolved 9-1-1 system include:

- A. 9-1-1 Call Delivery
 - Ability to accept all 9-1-1 calls: legacy, IP
 - Ability to receive text-to-9-1-1
 - Ability to directly connect with telematics services for crash notifications
 - Ability to accept picture/video feeds and forward to a third party system
 - Ability to receive automated building alarm information
 - Ability to transmit and receive transfer 9-1-1 calls with other i3 9-1-1 Networks
 - Call mapping to include location (including Z coordinate), call type, pictometry, traffic, and weather
 - Three 9-1-1 network centers, with at least two in Phoenix metro area so that availability of out-of-region transport services are not required for 9-1-1 routing and call processing, with cloud an option for third
 - Three or more carrier-diverse network connections at each PSAP
 - Five or more carrier-diverse network connections between 9-1-1 network centers

- B. System Management
 - Systems monitoring tools able to provide contracting agency with all system metrics and alarms in near-real-time
 - Detailed performance analysis for 9-1-1 calls from ESInet ingress to delivery to 9-1-1 position
 - Platform virtualization

- C. PSAP Management
 - PSAP monitoring for PSAP Manager on a mobile device
 - Firewalls installed at each PSAP to allow for modern data exchange for external PSAP use
 - Session Border Controllers to safely interface to allow Administration 10 digit (non-9-1-1 calls) SIP to system
 - Ethernet port aggregation for distribution of packet data to PSAP logging recorders and other devices

- D. Security
 - Packet capture and real time analysis
 - Advanced Network Access Control
 - Advanced Endpoint Protection
 - Internal firewalling and detection systems

- E. Resources
 - Lab to validate equipment, software, and processes

- F. Administrative
 - Secure funding source for all 9-1-1 call taking work stations
 - Consistent equipment refresh schedule