

# KING COUNTY E-9-1-1 PROGRAM OFFICE

## 9-1-1 May Not Work for VoIP Phones

There are several service providers who now offer Voice over Internet Protocol (VoIP) service to their customers. This service is attractive to people because they can now have voice service using their Internet Digital Subscriber Line (DSL) connection, and no longer need a dedicated telephone line to make phone calls. They also are provided with long distance service at no charge. Given the attractiveness of this service, people may not stop to think about drawbacks to the service, such as the fact that Enhanced 9-1-1 (E9-1-1) may not work for VoIP phones.

Citizens have come to rely on E9-1-1 service, and have an expectation that this service will be available from any phone.

### *The features of E9-1-1 include:*

- Routing of 9-1-1 calls to the correct 9-1-1 Center over a dedicated 9-1-1 network
- Display of the caller's telephone number at the 9-1-1 Center
- Display of the caller's location at the 9-1-1 Center

These features may not be available for all VoIP phones.

### *Issues related to E9-1-1 Service for VoIP are:*

- **The VoIP phone may not be capable of placing a 9-1-1 call.** The caller may receive a "service not available" recording.
- **The VoIP 9-1-1 call is not routed over a dedicated 9-1-1 network.** This call will compete with all other calls in the public switched telephone network. VoIP 9-1-1 calls are currently forwarded to a ten-digit number, which may or may not be answered at a 9-1-1 Center.
- **VoIP traffic on today's internet can be slowed by viruses, worms, and other cyber attacks.** This could affect the ability of a VoIP 9-1-1 call to get through the network to reach a 9-1-1 Center.
- **The VoIP 9-1-1 calls may not be answered with the same priority as other 9-1-1 calls.** Because the VoIP calls are received on ten-digit telephone lines instead of the dedicated 9-1-1 network, they will not be answered at the same priority as 9-1-1 calls.
- **The VoIP 9-1-1 call may not be routed to the correct 9-1-1 Center.** Wireline and wireless 9-1-1 calls are routed to a 9-1-1 Center based on the caller's location. A nationwide VoIP network typically will have only one access point to the public switched telephone network, and from there the 9-1-1 call will be routed to a 9-1-1 Center anywhere in the North America. There have been cases where VoIP 9-1-1 calls have been routed several states away from the location of the caller.
- **No caller information will be displayed at the 9-1-1 Center for VoIP 9-1-1 calls.** Neither the caller's phone number nor address will display. The caller must be able to provide their location before help can be sent.
- **There is no funding source for VoIP 9-1-1 service.** There is presently no statutory authority for Governments to assess a 9-1-1 tax on VoIP phones. Any service provided to these phones will need to be funded with the 9-1-1 taxes on wireline and wireless phones. Eventually, this will jeopardize the funding of the entire E9-1-1 system.

Some VoIP service providers do inform their customers about the limitations of E9-1-1 service when they subscribe to VoIP service. There is concern that in their excitement over new, low-cost telephone service, customers may not read or understand the problem. Another concern is that the VoIP phone will look like any other telephone. Even if the phone's owner understands the 9-1-1 issue, visitors or others in the home will expect the phone to provide them with access to E9-1-1 service when they call 9-1-1 in an emergency.

The public must be educated on the limitations of E9-1-1 service when they consider switching their phone service from traditional wireline service to VoIP service. Anyone who is thinking about switching to VoIP service needs to understand that the 9-1-1 service they have come to rely on may not be available from this new phone.