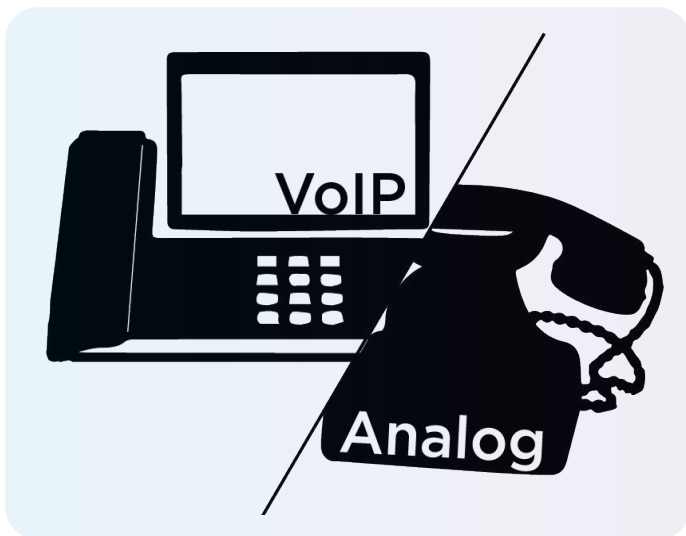


# ASK THE EXPERTS



*Why should customers upgrade old analog phones to VoIP?*



## **Strategic Methods for Lowering Total Costs and Improving Customer Operations and Satisfaction in Public Safety Help Points**

**Code Blue: Analog-vs-IP Emergency Phones** - will emphasize upgrade strategies that will help System Integrators and Customers understand life cycles costs and operational benefits for a range of Solutions.

In the mid-nineties, the voice of Bell Atlantic, James Earl Jones, would say the call is only good if it goes through! In today's public safety arena, emergency phones are no different, and security and IT professionals at customer institutions must take steps to not only ensure that calls can go through but also take a predictive and real-time approach to readiness.

Discover the range of pros and cons of both analog and IP emergency phones.

# Analog and VoIP Considerations

**Emergency phones are crucial** in ensuring safety and timely response during critical situations. Technological advancements, infrastructure, and specific application requirements have influenced the choice between analog and VoIP (Voice over Internet Protocol) emergency phones.

## Analog Emergency Phones

### Pros

- Analog emergency phones are often easier to set up and operate, but **they can only make a call, nothing else**. Technical support is severely limited to troubleshooting or predicting any issues.
- Analog systems have been around for a long time and are often compatible with various existing infrastructures.
- In some instances, typically for runs to Help Point units that are less than ~200 feet, Analog emergency phones have a lower price but not necessarily a lower life-cycle total cost.

### Cons

- IT departments no longer favor analog-based communications, especially for emergency communications.
- POTS phone lines are being forced to shut down as they are **too difficult and expensive to maintain** - the public no longer wants POTS lines.
- Analog emergency phones lack the advanced features of VoIP systems, such as Code Blue Managed Services and the Nebula® Cloud (discussed in Code Blue's - Ask the Experts Series).
- **Brand risks** - in many cases, analog emergency phones can be rendered in-operable without the customer being aware. Although this could happen because of a contractor accident or vandals, [given today's rising threats of domestic "bad actors," such an occurrence \(like on campus\) could be a part of a coordinated or lone attack.](#)
- Analog emergency phones may not deliver as crisp or clear audio as some VoIP systems.
- Although the initial price might be lower, the **ongoing risks and life-cycle costs can be much higher**.
- Moving or changing an analog system can be more cumbersome and very expensive.

## VoIP Emergency Phones

### Pros

- VoIP emergency phones are aligned with IT mandates to move institutions and enterprises to the Cloud. [Click through here to a HubSpot article about general and future VoIP capabilities and considerations.](#)
- **Code Blue, VoIP, emergency phone solutions, offers a range of advanced features such as diagnostics (16 health checks), video calling, easy integration with other security systems, voicemail to email, unlimited scalability, and more.**
- The initial price for Help Point emergency cellular VoIP phones is typically lower for runs over ~300 feet.
- VoIP emergency phones can be easily moved or reconfigured as they rely only on network connectivity and cellular backup, not a cable run.
- VoIP phones can use Cellular IP data plans to connect to a PBX.
- Modern VoIP systems often provide more precise sound quality.
- VoIP emergency phones increase productivity, diagnostics, and preparedness risks through a digital approach.
- VoIP emergency phones can be powered with solar panels, which supports green and environmental initiatives.

### Cons

- Many existing cables already in use with analog phones will need to be replaced.
- Depending on the configuration, with VoIP, a cyberattack could disrupt service.

# Essentials to Consider

When choosing between analog and VoIP emergency phones, it's essential to consider the specific requirements and circumstances of the deployment, including the reliability of power sources, network infrastructure, available budget, desired features, and risk management.

*it's essential to consider the specific requirements and circumstances of the deployment*

The following chart may help customers consider overall value propositions associated with the Analog vs. VoIP choice from the onset or in a retrofit design to save analog legacy investments.

Roadmap	Analog	VoIP
AI Ready	X	✓
Budget	✓	X
Diagnostics	X	✓
Digital Migration	X	✓
Digital PBX	X	✓
Features	X	✓
Integrations	X	✓
Invest Over Time	✓	✓
IT Friendly	X	✓
Nebula Cloud	X	✓
Proactive Monitor	X	✓
Redundancy	X	✓
Risk Reduction	X	✓
Smart Routing	X	✓

*Note: Analog can technically support, in a minimal way, some diagnostics, Nebula Cloud features, and proactive monitoring*

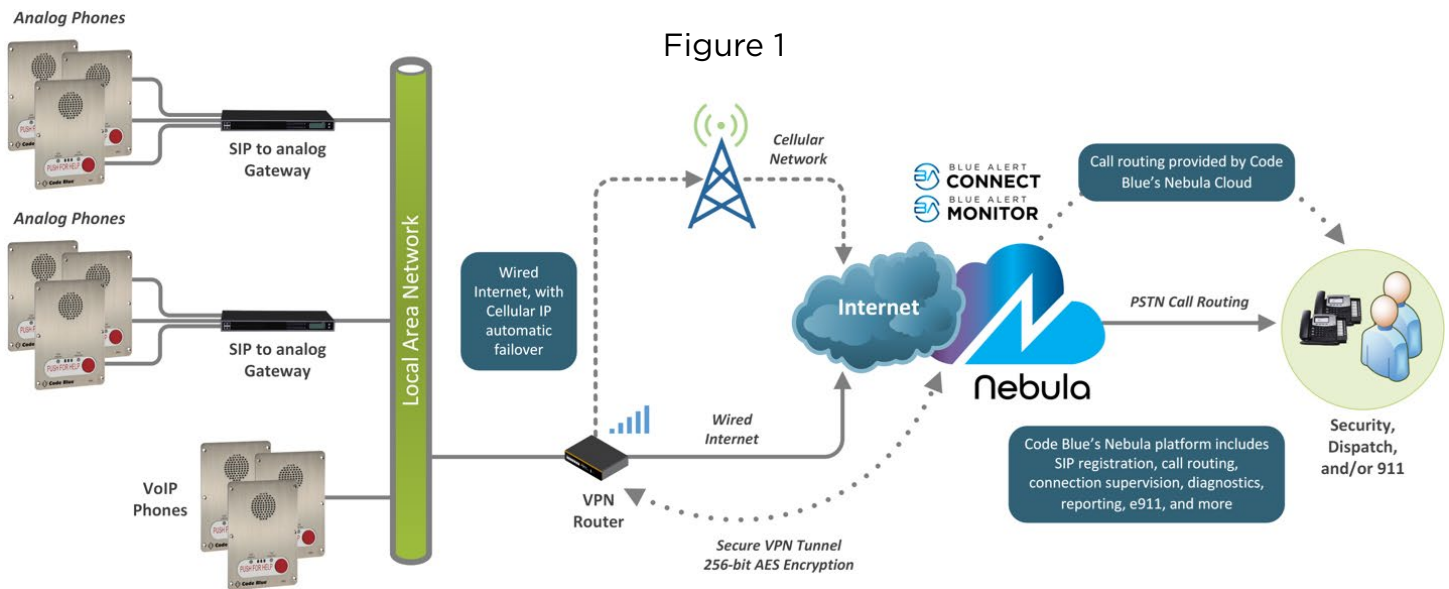
## BOTTOM LINE

**Analog to VoIP Upgrades** –As quickly as technology advances, many locations seek ways to extend the life of their analog emergency phone systems. Making the switch to VoIP can include solutions that allow existing cabling infrastructure to remain in place while also allowing organizations to invest in technology upgrades on their chosen timeline.

Several factors are forcing locations to consider their technology infrastructure. IP PBXs are increasingly making the transition to the cloud. Many others are also moving to onsite virtualized networks. This creates a problem for analog phones and devices operating on the public switched telephone network (PSTN), driving the need for IP-to-analog gateways.

Locations also may want to remove their old legacy PBXs and put in new IP PBXs, and they need to offload all of their analog devices into a network. Still, their current infrastructure may only have legacy phone cable available. Utilizing a gateway is an effective and economical way to get the most out of your previous spending while providing an opportunity for future investments. The diagram below is an example of such an architecture (Figure 1).

*Making the switch to VoIP can include solutions that allow existing cabling infrastructure to remain in place*



Beyond this architecture, Code Blue has many Solutions designed to handle complex environments where hybrid approaches or multi-phased projects require continuous security and business continuity while segmenting upgrades from analog phones to gateways, to Help Points, to PBX, to cellular VoIP phones. We can work together and engineer a best-of-class solution!

We hope the Code Blue Team has helped you understand the Analog and VoIP questions better. Please consider contacting Code Blue for help (<https://codeblue.com/contact>) to make your Code Blue Solutions come to life!