

# DHS Science and Technology Directorate

## Video Quality in Public Safety

### Why it's needed

First responders rely heavily on video technology to increase their situational awareness while on site at an incident, monitoring the situation from afar, or conducting day-to-day response. As video technology has evolved, equipment options have become increasingly complex. Many first responder agencies lack the tools and subject matter expertise needed to make informed video system purchasing decisions, so they often turn to manufacturers to direct them. The Video Quality in Public Safety (VQiPS) initiative provides information and support to first responders so they can articulate their video quality needs and ultimately buy the best products to fit their unique needs.

### What it does

The VQiPS initiative is a partnership between the Department of Homeland Security Science and Technology Directorate and the Department of Commerce Public Safety Communications Research program. Together, these organizations create unbiased guidance and educational resources that assist the first response community in clearly defining and communicating their video quality needs. VQiPS empowers practitioners with the tools and information needed to purchase and deploy the appropriate video technology solutions to support their mission.

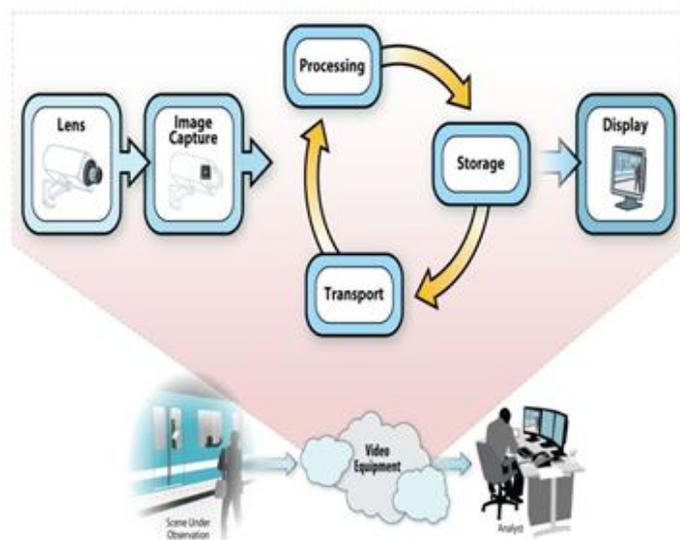
### The value of the VQiPS Working Group

Composed of federal, state, and local first responders from across multiple disciplines, federal partners, representatives from academia, standards-making bodies, and manufacturers, the VQiPS Working Group coordinates the numerous efforts underway to develop specifications that inform video standards—creating one unified, clear message for the first responder community.

The VQiPS Working Group developed a Web tool User Guide that assists practitioners in determining video options based on specific video scenes they are targeting and the resulting tasks based on viewing that scene. The Web tool also helps agencies align their video quality needs

with existing technical performance specifications and standards by including an inventory of existing standards and specifications that address video system components.

In addition to this Web tool, the VQiPS Working Group has produced a glossary of video terms; a video library; a Video Quality Standards Handbook; and four technical reports on topics such as visual quality, object of recognition, and visual acuity. These tools are designed to help practitioners make better informed purchasing decisions.



Core Video System Components

### Next steps

As use of video throughout the first responder community continues to increase, these tools, lessons learned, and guidance developed through the VQiPS initiative will provide responders with a solid foundation on which to become educated, grow, and meet their mission-critical video needs. With the ongoing build-out of the nationwide public safety broadband network, the VQiPS initiative will be planning more projects related to video over broadband.



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To learn more about the Video Quality in Public Safety initiative, contact [SandTFRG@dhs.gov](mailto:SandTFRG@dhs.gov).