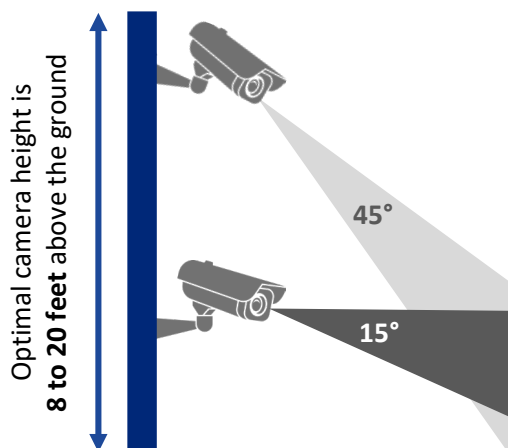




VIDEO SURVEILLANCE RECOMMENDATIONS

In counties with a population of 100,000 or more, the general custodian of election records is required to maintain a video surveillance system and a continuous livestream of all areas containing voted ballots. This recording must begin from the time voted ballots are delivered to the SVC, EVBB, or CCS—which ever occurs first—and must remain continuous and publicly accessible at no cost to the viewer until the local canvass of election results is complete. Although the livestream requirement is mandatory for covered entities, its design and implementation are left to the discretion of the entity running the election. **Therefore, the following items are recommendations only, intended to assist in evaluating the current setup or implementing an effective system.**

Camera Positions



- An effective camera angle between **15° and 45°**
- Camera height determines how far focal point is from the camera's center

Camera Height	Focal-Point Distance (min/max)
8 feet	4.6 feet – 8 feet
10 feet	5.8 feet – 10 feet
12 feet	7 feet – 12 feet
14 feet	8 feet – 14 feet
16 feet	9.2 feet - 16 feet
20 feet	11.5 feet – 20 feet

Camera Specifications



- **Lens:** 2.8mm or 4 mm
- **Frame Rate:** 15 to 30 frames per second (FPS)
- **Resolution:** 2MP (1080p), 4MP (1440p), 5MP (1920p), or 8MP (4K/2160p)
- **Compression:** H.264 offers universal compatibility while H.265 is more efficient but requires a powerful computer
- Either **analog, network, or wireless** models

Connectivity

- **25/3 Mbps** (download/upload): Basic HD streaming and office work
- **100/20 Mbps** (download/upload): 4K conferencing and cloud backups

Types of Cameras

Camera Type	Description
Dome	Obscured lens direction makes it hard to tell where it's pointing
Analog	Provides an effective, low-complexity security solution
Transport Video Interface (TVI)	Allows for high-definition video transmission using standard analog cables
Action	Durable construction with automated “one-button” recording
Wireless and Digital/Internet Protocol (IP)	Ideal for areas where running data cables is impossible
Fisheye	Captures a complete 360° by 180° field of view
Bullet	Less conspicuous than larger models and works well at many depths
Pan-Tilt-Zoom (PTZ)	Can pan, tilt, and zoom to cover large areas with fewer units
Turret	Ball-and-socket design allows for simple installation and many angles

Video Storage

- Consider size of hard drives required for storing footage
- Influenced by desired resolution, days' worth of footage to be retained, frame rate, compression method, and total number of cameras

