

LOS ANGELES COMMUNITY COLLEGE DISTRICT

Districtwide Baseline Standards

For

Security Camera Systems



April 13, 2023

Districtwide Baseline Standards for Security Camera Systems

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1. Strategic Documents

- Facilities Master Plans
- Sherriff's Strategic Plan
- Campus Risk Assessment Report
- Video Management System Summary
- Sample Layouts

2. Summary

The goal of this standard is to identify a baseline level of security that is appropriate for use at the LACCD colleges.

LACCD has developed minimum design standards governing the deployment of Security Camera Systems (SCS) to provide a baseline level of security that is required within District facilities.

These standards shall be utilized to aid in the application of current technology standards and best practices to all new construction as well as renovation projects undertaken within the District.

A Security Camera Systems documents occurrence within a camera or group of camera's fields of view through the use of video recording software. The purpose of the SCS is to provide live viewing for situational awareness as well as recorded video for forensic analysis.

The operation, oversight, and maintenance of the systems discussed herein is primarily the shared responsibility of the following departments:

- District Information Technology
- College Administration (IT and Facilities)
- Campus Safety Office
- District Safety and Emergency Response

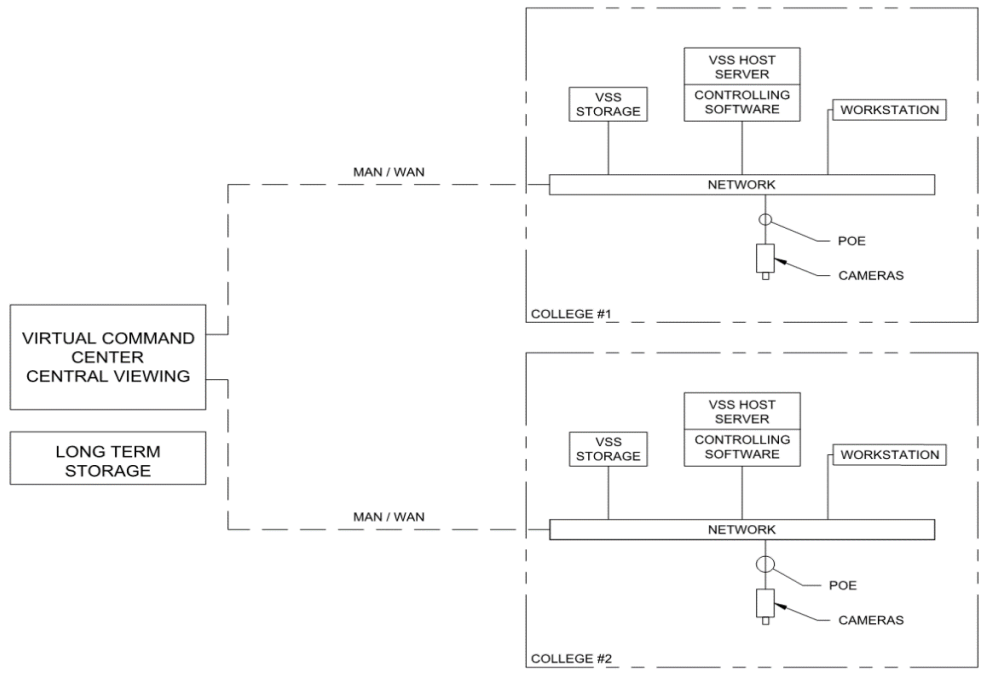
3. Acronyms Used

- BW – Black & White
- CAD – Computer Aided Design
- FPS – Frames per Second
- IP – Internet Protocol
- IR - Infrared
- ONVIF – Open Network Video Interface Forum
- PPF – Pixels Per Foot
- SCS – Security Camera Systems
- VMS – Video Management System

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4. Security Camera System Components

- Host Server – This is where the core system software typically resides, including the database containing the individual camera configuration, as well as the actual operating software of the system. Manufacturer of the servers shall be selected by the District IT department.
- Workstations – These are where system operators / administrators can monitor live video / review recorded video, export video for documentary / evidentiary purposes, and modify the operating parameters of the system. These workstations are typically on the robust side in order to effectively process multiple video streams with a minimum of latency. Workstations would typically be provided by the College IT departments, subject to meeting VMS manufacturer minimum specifications.
- Controlling Software – This is the actual operating system of the SCS, the Video Management System (VMS) which resides on the host server.
- SCS Storage –Recorded video data is stored here. Typically, a RAID solution is utilized for redundancy.
- Cameras – Sensors which capture and store events occurring within their field of view.



Video System Component Diagram

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5. Standards for Security Camera System Deployment

- All camera locations shall be identified in the security drawings by the 100% Schematic Design submittal.
- The 100% Schematic Design Security Drawings shall be submitted for mandatory review to the District’s Safety and Security Services Department.
- All updates will be captured in the 50% Design Development submittal.
- A final security confirmation shall be performed at the 100% Design Development phase.

The LACCD has determined minimum levels of camera coverage to be deployed at each LACCD College. The following areas are to be equipped with security cameras:

	Location	Camera Type	Quality
Typical Building Coverage	Building Entrances/Exits (Interior)	Fixed Camera Multi Sensor Dome	40PPF
	Stairwell (Exterior)	Fixed Camera Dome	40PPF
	Roof Level Building Perimeter (Exterior)	Fixed Camera Multi Sensor Dome	20 PPF
	Elevator Cab (Interior)	Fixed Camera Corner Mount Dome	20 PPF
Parking Areas	Vehicle Entrances / Exits (Exterior)	Fixed Camera bullet style	20 PPF
	Pedestrian Entrance / Exits (Exterior)	Fixed Camera 360 degrees Dome	40 PPF
Point of Sale / Cash Transaction Areas	Register (Interior)	Fixed Camera Dome	8 PPF
	Entrance/Exits (Interior)	Fixed Camera Multisensor Dome	20 PPF
	Corners of Store (Interior)	Fixed Camera Dome	8 PPF
	Cash Handling / Safes (Interior)	Fixed Camera Dome	8 PPF
Specialty	Cafeteria Seating / Event / Multipurpose Space (Interior)	Fixed Camera Multi Sensor Dome	8 PPF
	High Value Storage / Display (+\$50k) (Interior)	Fixed Camera Dome	8 PPF
	MPOEs, MDFs, and Datacenters	Fixed Camera Dome	8 PPF
	Loading/Delivery Areas (Interior)	Fixed Camera Multi Sensor Dome	8 PPF
Child Development Center	Classrooms (Interior)	Fixed Camera Multi Sensor Dome	20 PPF
	Playgrounds (Exterior)	Fixed Camera Multi sensor Dome	20 PPF

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Cameras shall have the following basic functionality at a minimum:

- ONVIF Compliant
- Wide Dynamic Range
- Day/Night Capability
- Motion Detection
- Analytic Capabilities
- Standard Mounting
- Pixels Per Foot (PPF) – The location of the camera shall be placed to ensure that the horizontal field of view meets the PPF requirements as identified in the table above.
- The following camera types will typically be utilized on LACCD projects:
 - a. Minimum 2 Megapixel (1080p) interior wall / ceiling mount fixed dome type camera, integral IR illumination and varifocal lens, color / low light BW capable. Product shall be manufactured by Axis or equal.
 - b. Minimum 2 Megapixel (1080p) exterior wall / pole mount fixed dome type camera, integral IR illumination and varifocal lens, color / low light BW capable. Product shall be manufactured by Axis or equal.
 - c. Specialty cameras as needed for project specific application

6. System Integration Capability

- This SCS software platform and cameras shall be compatible with, and capable of integration to, the current District-wide Lenel OnGuard PACS platform, without exception.
- The SCS software platform and cameras shall be integrated into the PACS software platform in such a fashion as to cause selected PACS user actions and policy violations as well as IDS / Duress activations to be tagged with descriptive metadata on the recorded video and activate a live viewing screen.

7. System Enterprise Capability

- The SCS system cameras shall be configured as an enterprise system using local College servers but having the capability to stream security camera data to an off-site centralized command center.
- System operators and administrators of the SCS shall only be granted access to the application and camera views using Windows Active Directory credentials. Logon and Password associated user privileges will determine operator operating levels and the ability to view live or recorded video, export video, delete video, or make operational changes to the system programming.
- Audit trail records shall be accurately maintained for a period of three (3) years of which individuals performed programming / configuration / database changes within the SCS.

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8. System Performance Verification Testing and Commissioning

- A performance verification testing and commissioning report shall be completed for each SCS project, containing a checklist of all District deployment and installation standards. This testing and commissioning process shall serve to verify compliance with all features and functionality required of the SCS. If any portion of the system fails the testing / commissioning process, the issue shall be corrected, and the process shall begin again. Any system consecutively failing two (2) such testing attempts shall be retested at the Contractor's expense.
- A representative from each firm involved with any portion of the installation shall be present for the system testing in order to ensure whichever firm is responsible for the failure is present and able to resolve the issue expeditiously.

9. Training and Documentation

- Support and training costs associated with the SCS cameras will be paid by the System Installer.
- System training shall be allocated for each project. This training shall be conducted by a manufacturer authorized and certified instructor. Training materials shall be supplied in both printed as well as electronic format and shall be specific to the project.
- Training shall not begin until the SCS has been completely tested and commissioned, in order that users may be trained on a fully functional system.
- Training shall be centric to the operational roles that the College deems necessary at the time the training takes place.
- The College shall be engaged throughout the design process to confirm the appropriate amount of training required.
- Training shall be formatted into 4-hour increments, so that multiple training sessions may take place depending upon the availability of the staff requiring the training. A minimum of two (2) 4-hour training sessions shall be included in all Security Camera System projects.

10. Warranty

- All Security Camera equipment shall be warrantied against any defects in material and workmanship under normal use for a period of five (5) years from date of official acceptance of the completed project by the Owner. The Vendor shall complete a manufacturer "Installation Certification" certifying the date on which the system has been installed to ensure the Owner receives full warranty rights from the manufacturer.