



# UTP-H VMS Stabilization and LPR Deployment

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# Pre-Project Conditions/Challenges

- Mix of over 4000 analog and digital cameras (majority analog)
- Mostly low-resolution cameras by today's standards
- No advanced analytic capability
- Split between server-based VMS and scores of NVRs of various age and capability, spread across 2 campuses plus remote sites
- User accounts/passwords managed individually on NVRs and servers
- Unable to search across systems
- Disparate retention times and device load
- Increasing demand for VMS with no sustainability plan
- VMS systems going end of life

# Where We Are Now

- Approximately 25% of cameras on Avigilon
- All new cameras are Avigilon models configured on Avigilon Control Center
- Camera replacements prioritized for security sensitive areas and entrances
- Avigilon cameras are H-series AI-powered
- Avigilon AI servers installed for non-Avigilon cameras
- Flock Safety pole cameras and customized surveillance trailers deployed where permanent Avigilon install not feasible
- Adequate storage to provide for a minimum of 30 days of recording for 100% of cameras
- Pelco Endura decommissioned
- Avigilon servers installed in two centralized data centers with health monitoring
- Defined sustainability plan
- Implemented Single Sign-On Solution, role-based user groups and training

# Future State

- Continued migration of all cameras to Avigilon
- Integration with access control alarms
- Retirement of other VMS systems
- Cameras from both campuses accessible from same Avigilon client
- License Plate Recognition in garages and surface lots
- Advanced analytics implementation (e.g. Camera-based weapons detection)
- New cameras placed to optimize facial recognition
- Watch list notifications for persons of interest and trespassed individuals
- Collaboration features enabled to share feeds across SOC, ROC, and potentially responding personnel.
- Security sensitive cameras will auto failover on primary connection loss

# Noted Successes

- Bike thief caught on camera at Medical School within 24 hours of camera replaced with Avigilon. Security Officer noted the suspicious behavior of individual loitering in the area.
- Known offender noted trespassing at Graduate School of Biomedical Science same day exterior camera replaced. Caught next day on premise in violation of trespass warning.
- Thief in garage caught on camera and identified post incident. Individual and tools easily identified on camera due to increased image quality.
- Flock solution deployed at remote location being hit by catalytic converter thefts. Camera captured license plate of vehicle of interest, which assisted investigators in identifying and a member of a large-scale theft ring responsible for thousands of thefts in the Houston area.