

Managing School Security

**Tom Sorrell, RCDD, InfraGard, LEED AP BD+C, NICET
Principal / CMTA Technology Solutions**

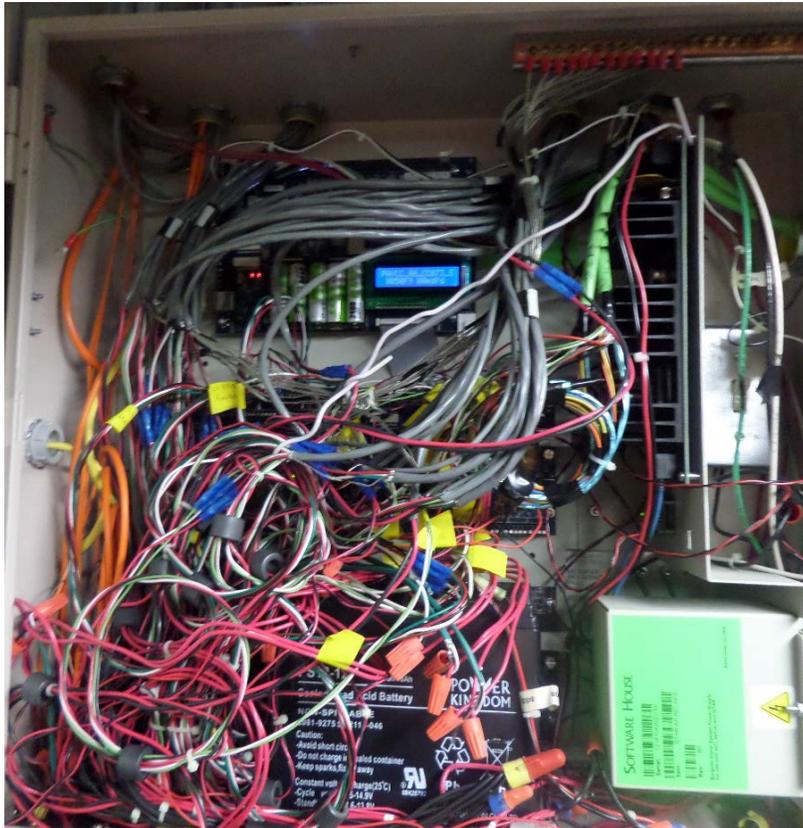
Managing School Security

Safety must be a priority for all campuses, large and small!

Today's Objective:

- ✓ Assess legacy facility security systems
- ✓ Evaluate security technology solutions available
- ✓ Integrate video, access control and emergency notification
- ✓ Importance of following Industry Standards

Managing School Security

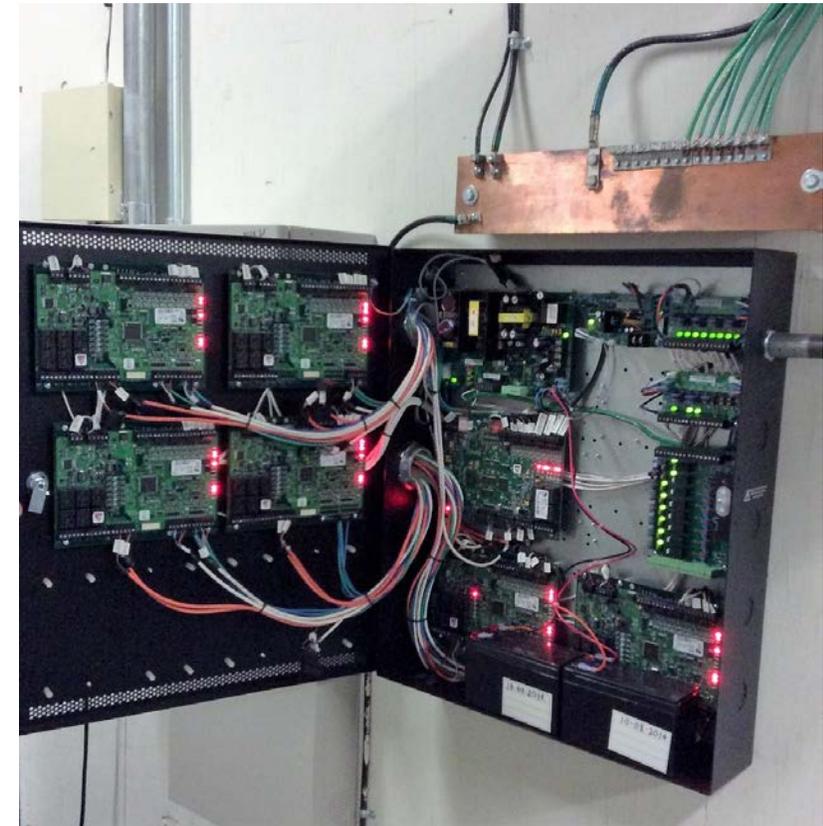


Existing ESS Practices
working to your
advantage?

Multiple Legacy
Systems?

Central Management?

Updated Campus
Security Standards?



Managing School Security

Trending: What is being done on other campuses?

Convergence!

**Video (VMS) + Access Control (SMS)
+ Panic Alarms = Analytics**

Usable Information / Lockdown



Managing School Security

Does Video Detection Enhance Security?

Threat Deterrent / Situational Awareness

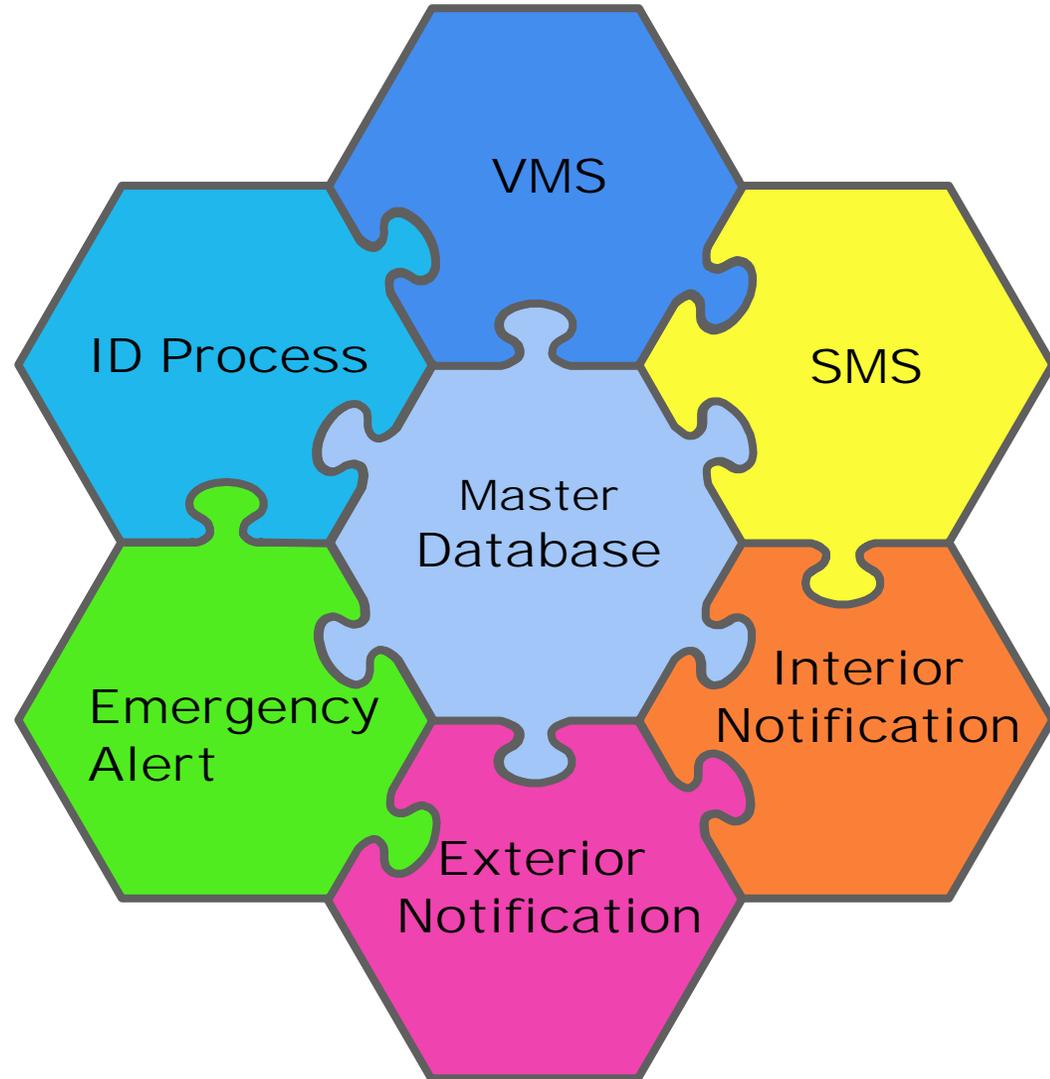
Faster Response Time / Video Forensics

Improved Safety

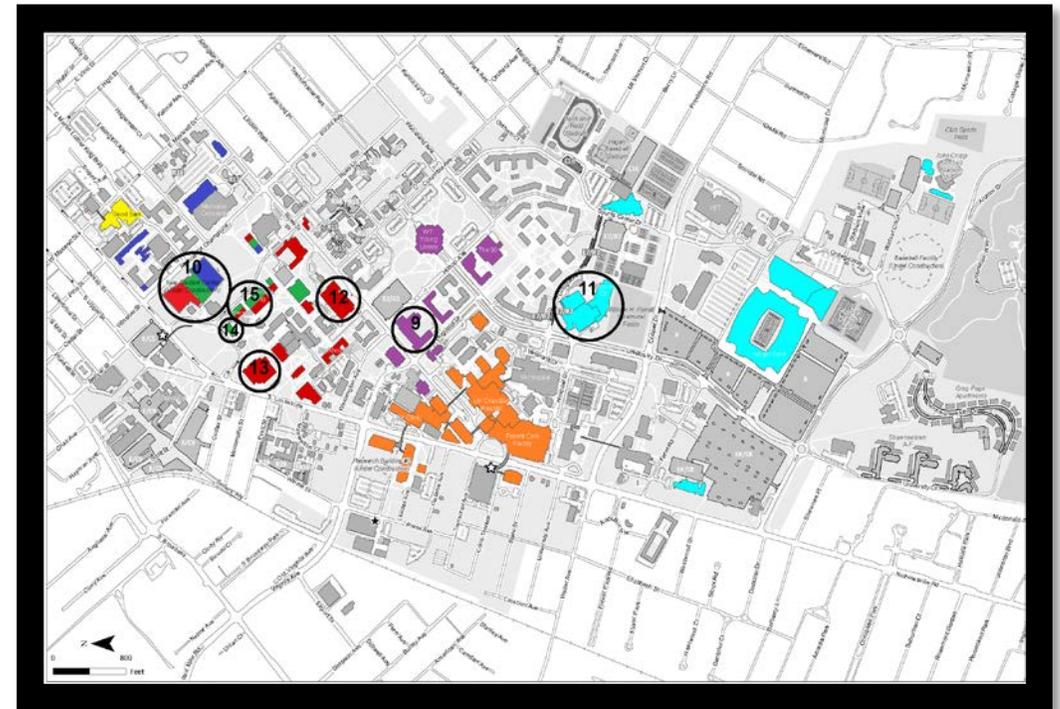
Reassurance/Peace of Mind for All!



Managing School Security



Multi-Layered Approach
For a Complete Solution!



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Managing School Security

Crime Prevention Through Environmental Design (CPTED)

“Your School Here” Path is a series of recommended walking routes through a campus that provides the community with a convenient means of traversing campus on a network of popular paths.



Questions?

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Mission Impossible: Combating Technophobia

Christy Miller

Caitlin Brudnicki

BCL IT Consulting

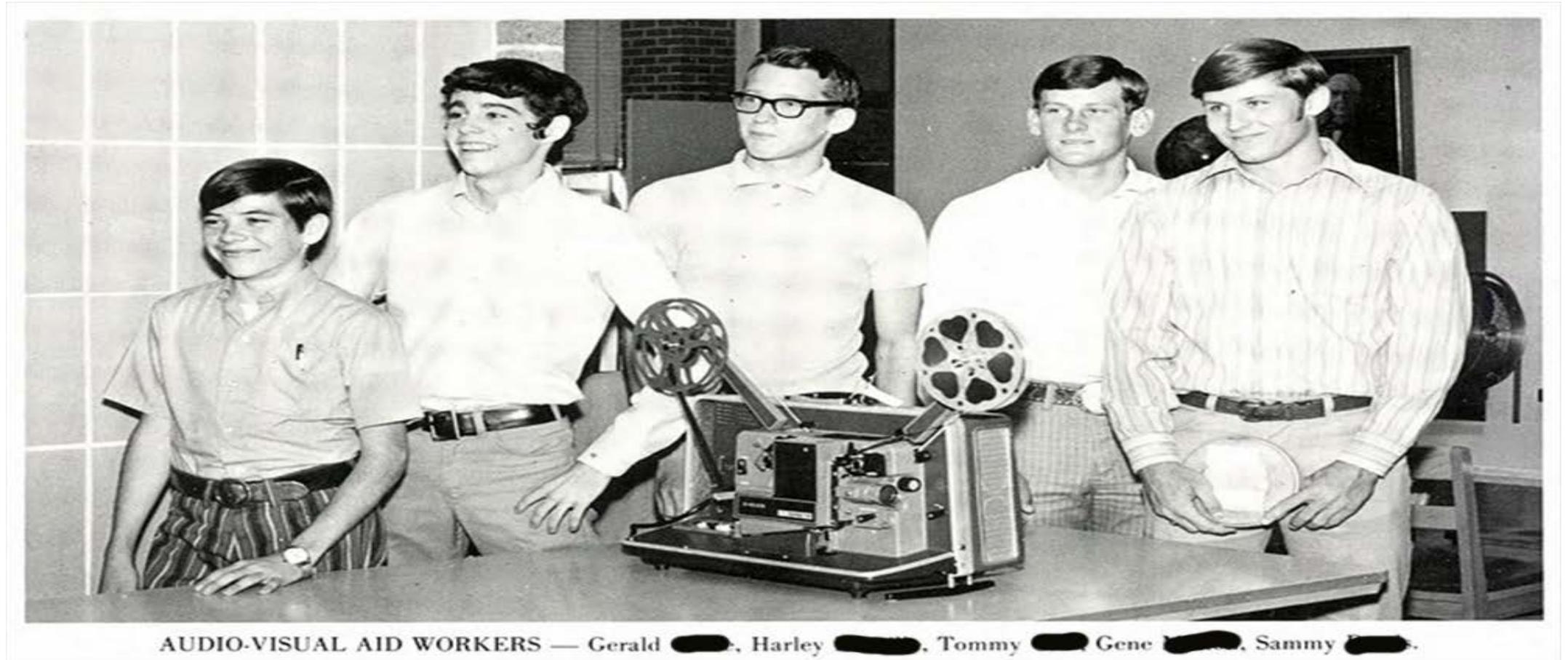
Whatever You do, do NOT Panic!



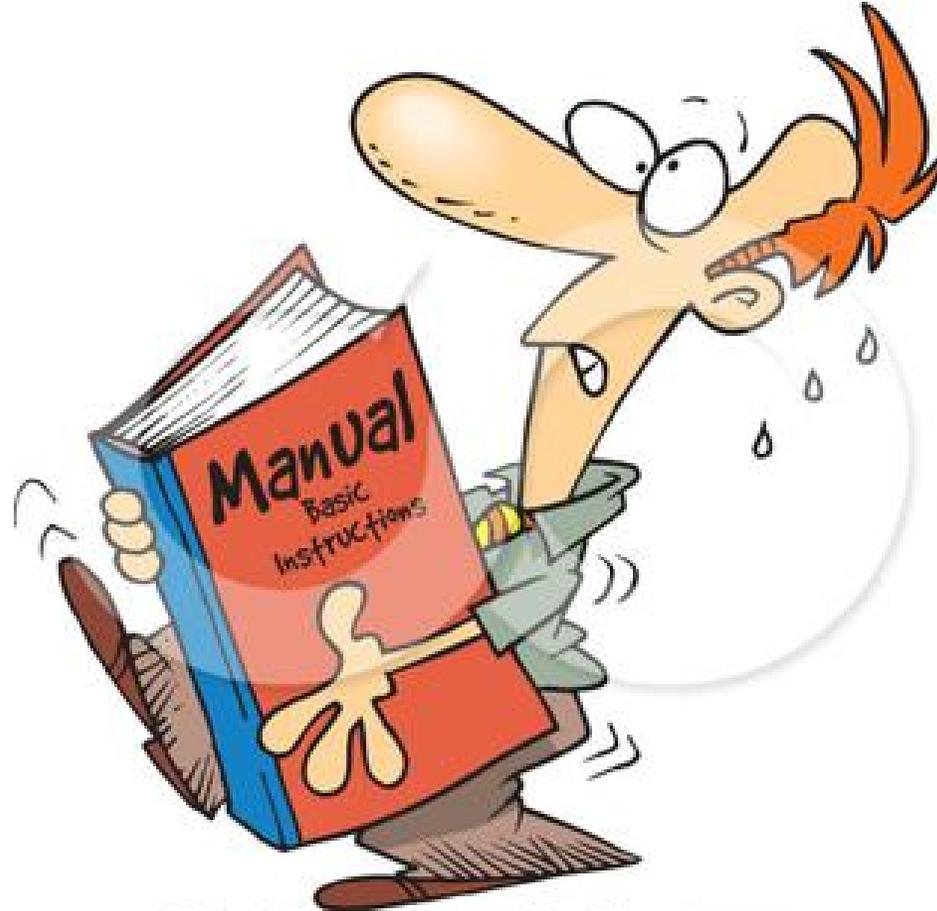
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AV Club Membership Comes with Complimentary D&D membership



Training is Mandatory...There is a package for that.



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Work Smarter-

Not Harder....



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Professional Development is Never a Bad Thing...



Ask the kids, this technology isn't scary to them.



Questions?

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Solutions to Protect your New Construction Sites

Chris Jones

Axis Communications

Analytics – Benefits of Analytics

- 1. Cost savings** - less video sent over the network reduces the network load and storage requirements.
- 2. Time savings** - monitoring and searches in recorded video become easier, allowing operators to manage more cameras.



Motion Guard



Fence Guard



Loitering Guard



People Counter



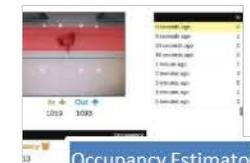
Tailgating Detector



Occupancy Estimator

Analytics – Benefits of Analytics

- 3. Greater efficiency** - automatically monitoring video for security incidents helps prevent crime, rather than simply reacting after the event.
- 4. Creation of business value** - integrating video data into other systems, such as headcounts from entrance cameras in retail stores, means the surveillance system can contribute insights and new solutions for other business functions.



Solution Example: Perimeter Protection

- **Intrusion:** When one or more persons or vehicles enter a predetermined zone
- **Zone crossing:** When a person or vehicle passes through two predetermined zones in a predetermined order and direction.
- **Loitering:** When a person or a vehicle remains in a predetermined zone for more than a certain number of seconds
- **Conditional zone crossing:** When a person or a vehicle enters a predetermined zone without starting in or passing through one or more predetermined zones



Solution Example: Perimeter Protection

- **Free system-management application:** Connect to and manage all cameras from a single interface
- **Free system-design tool:** Drag and drop “cameras” on a map and immediately see approximate detection ranges and blind spots
- **Optional VMS integration modules:** Visualize the cause of an alarm by outlining the person or vehicle triggering it in the video.



Building your Solution



Audio



PTZ Camera

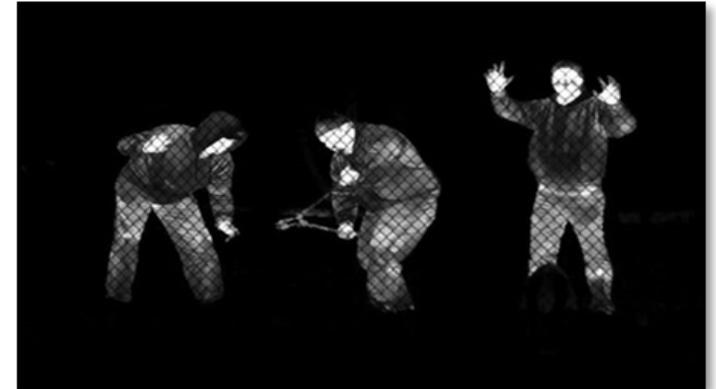


Multi-sensor Cameras

Building your Solution



Timelapse



Thermal Cameras



Radar

Questions?

Chris Jones

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Lessons Learned: General Contracting

Ramzi Najjar

Program Manager | K-12 North

General Information

- OFCC has started 180 GC projects since January 2012
- GC projects range in value from \$49K to \$29M
- Most diverse scale and type of projects in comparison to other delivery methods used by OFCC

Lessons Learned

- Need for Preconstruction Stage Support
 - Estimating experience
 - Conducted at end of each Design Stage
 - Independent validation
 - Knowledge of market conditions
 - Ability to perform compliance/constructability review
 - Basic knowledge of means & methods
 - Assistance in phasing construction

Lessons Learned

- Public Bidding Challenges (similar to Multiple Prime)
 - Soliciting sufficient GC bidder interest to ensure competitive prices
 - Scope, scale, timing and location of project
 - Bonding capacity
 - Lack of transparency to Subs
 - Harder to identify true cost drivers
 - Potential need for rebidding (>10% over estimate)
 - + First-hand knowledge of market conditions
 - Confidence varies with number of bids received

Lessons Learned

- Need to Verify Quality of Schedule
 - While GC is responsible for schedule performance by all Subs, Owner team still needs to evaluate and carefully monitor schedule (both technical development of schedule & its outcomes)
 - Schedule logic (predecessors/successors)
 - Relationship types (finish to start, etc)
 - Durations
 - Constraints
 - Float (total, free)
 - Lags

Questions?

Ramzi Najjar

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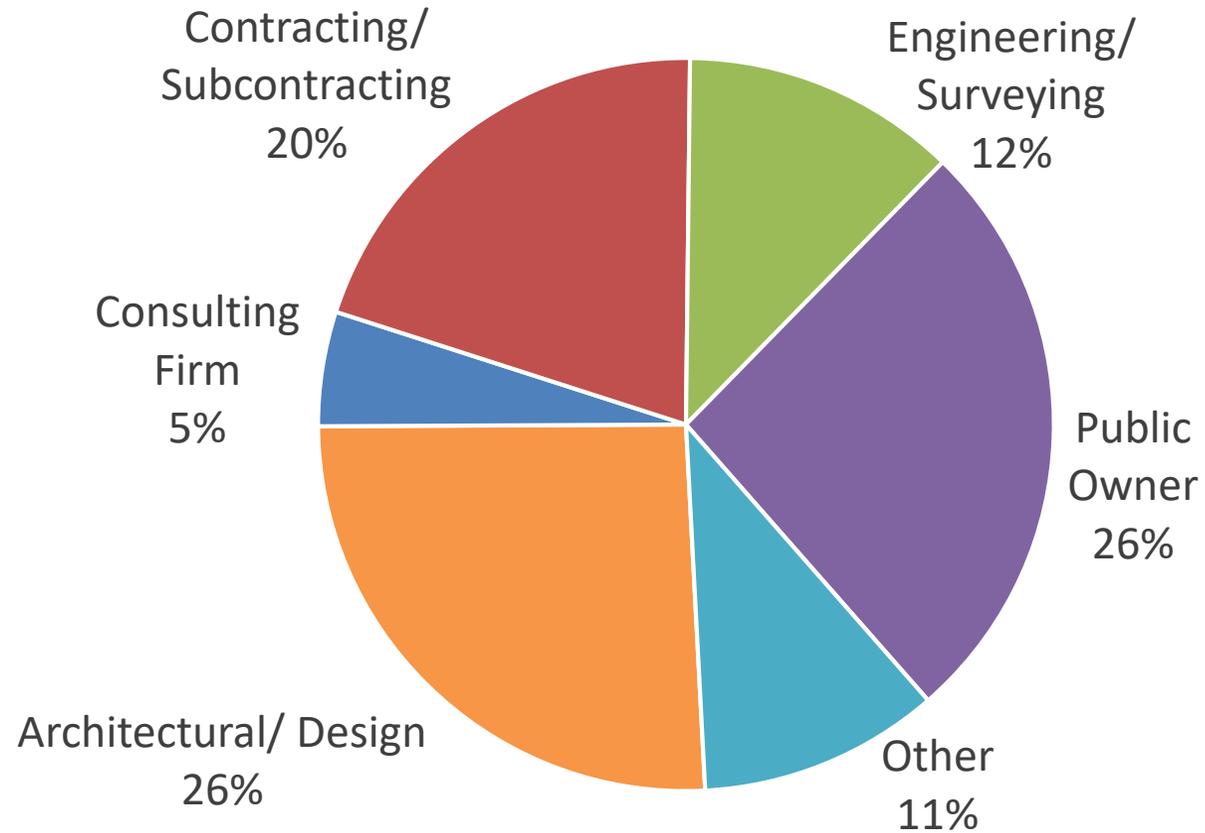
Business Opportunities

Jeff Westhoven, OFCC

John Siebert, Miami University

Beth McGrew, University of Cincinnati

Audience profile



Business Opportunities: Topics

- Finding opportunities
- Cultural facilities projects
- Finding background on other capital projects
- Upcoming K-12 projects
- Upcoming state agency/higher education projects

Finding Opportunities ... Opportunities Map



Opportunities

- A/E
- CxA
- Planning



Qualifications-based Selection (QBS) Requests for Qualifications

Qualifications-based Selection" (QBS) refers to a procurement process used by state agencies, institutions of higher education and school districts for the selection of Architect/Engineer (A/E) and A/E services for public construction projects. It is a competitive contract procurement process where bidders submit qualifications to the public over a set schedule, budget and fees.

- CMR
- D-B
- Energy PC

For the...Architect/Engineer (CMA); Owner Agent (OA); Construction Management Services (CxA) provider; and Construction Management Services (C) provider.



*Highlighted designations may not reflect the actual project location.
*To enlarge the map, click icon.

[Website Opportunities](#)

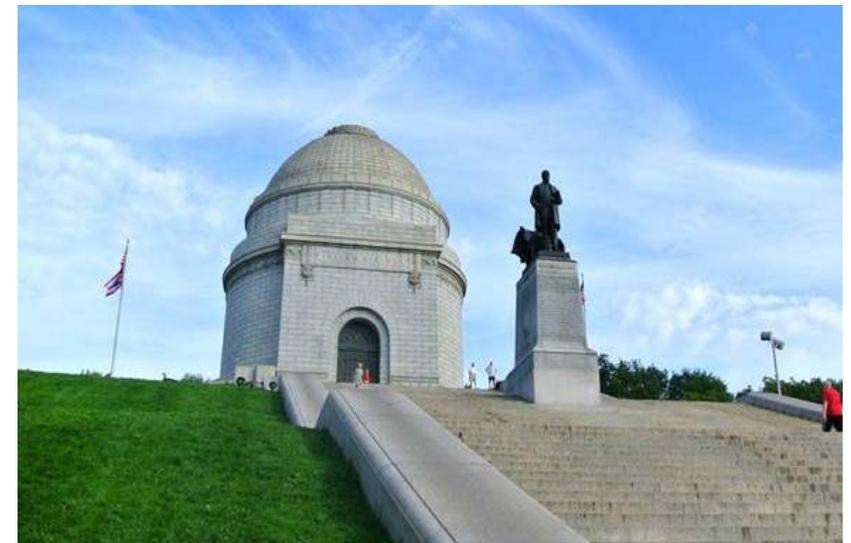
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Finding Opportunities ...

Cultural Facilities Projects

- Community projects
 - Economic development projects of local or regional importance
 - OFCC, DNR, higher education; others
 - \$ 149 Million in new capital bill
- \$78 million assigned to OFCC for cultural facilities projects
- Theaters, museums, historical sites, others that support culture



Finding Opportunities ...

Cultural Facilities Projects

- Local grantees award contracts
 - Non-profit organizations
 - Local government
- Not all publicly advertised
- Mostly renovation work
- Local match
- \$ 5,000 to \$ 5,000,000 (avg. \$330 K)



Finding Opportunities ...

Opportunities Map: Cultural Facilities Projects



Community School Classroom
Facilities Grants - Round 2

Cultural Facilities Grants

Program Eligibility

Funding & Grant Process

Program Resources

Contacts

School Security Grants

Lead Fixture Replacement Grants -
Round 2

Cultural Facilities
Projects

Cultural Facilities Grant Program



Approved
129 projects
\$ 50 M state
\$ 230 M total

To be approved
227 projects
\$ 86 M state
\$? M total

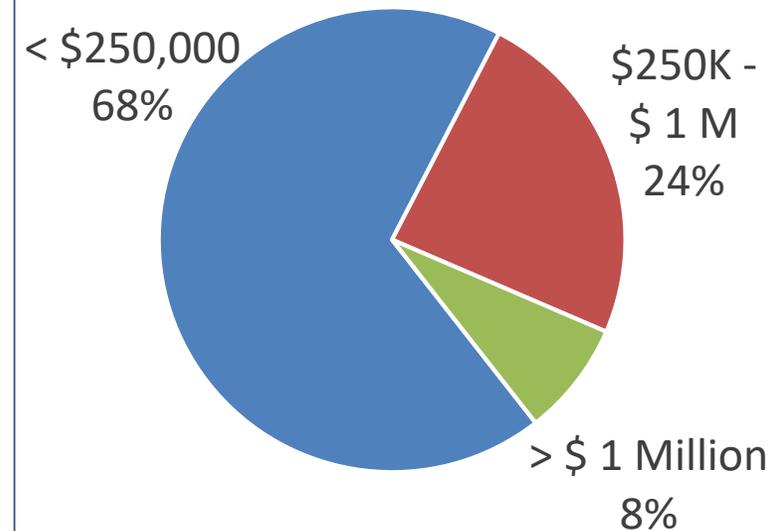
Finding Opportunities ...

Opportunities Map: Cultural Facilities Projects

CAPITAL PROJECTS BY COUNTY-COMMUNITY PROJECTS ONLY

County and Funding Agency	Fund	Line Item	Item/Project Name	Appropriations
Department of Natural Resources	7035	C725E2	Stanbery Park Pavilion	\$360,000
Department of Natural Resources	7035	C725E2	Symmes Township Home of the Brave Phase 2	\$300,000
Department of Natural Resources	7035	C725E2	Delhi Township Bicentennial Pavilion	\$62,000
Department of Natural Resources	7035	C725U5	The Banks	\$2,000,000
Department of Rehabilitation and Correction	7027	C50100	Hamilton County Justice Center Capacity & Recovery Expansion	\$2,500,000
Ohio Facilities Construction Commission	7030	C230FM	Cincinnati Contemporary Arts Center Learning Center Renovation	\$500,000
Ohio Facilities Construction Commission	7030	C230FM	Cincinnati Art Museum Building Envelope Improvements	\$1,000,000
Ohio Facilities Construction Commission	7030	C230FM	Cincinnati Museum Center STEM and Space Galleries	\$2,000,000
Ohio Facilities Construction Commission	7030	C230FM	Cincinnati Playhouse in the Park Theater Project	\$1,200,000
Ohio Facilities Construction Commission	7030	C230FM	Evendale Cultural Arts Center ADA Compliance	\$125,000

Project Size (State \$)



Finding Background on Other Capital Projects

Legislative Service Commission: [Capital Projects by County](#)

- Service needed
- **Project size**
- **Location**
- Timing
- Delivery model
- **Owner**

CAPITAL PROJECTS BY COUNTY-ALL PROJECTS

County and Funding Agency	Fund	Line Item	Item/Project Name	Appropriations
Statewide				
Adjutant General	7026	C74535	Renovations and Improvements	\$5,561,505
Adjutant General	3420	C74537	Renovation Projects - Federal Share	\$10,330,366
Adjutant General	7026	C74541	Armory Technology Infrastructure	\$120,000
Adjutant General	5340	C74542	Renovations and Improvements	\$1,000,000
Department of Agriculture	7057	C70009	Clean Ohio Agricultural Easement	\$12,500,000
Department of Administrative Services	7026	C10011	Statewide Communications System	\$7,000,000
Department of Administrative Services	5KZ0	C10035	Building Improvement	\$39,424,700
Department of Developmental Disabilities	7033	C59004	Community Assistance Projects	\$24,000,000
Development Services Agency	7046	C19505	Coal Research and Development	\$5,000,000
Department of Natural Resources	7061	C72514	Clean Ohio Trail Fund	\$12,500,000
Department of Natural Resources	7031	C72549	Facilities Development	\$1,500,000
Department of Natural Resources	7035	C725A0	State Parks, Campgrounds, Lodges, Cabins	\$57,554,343

Finding Background on Other Capital Projects

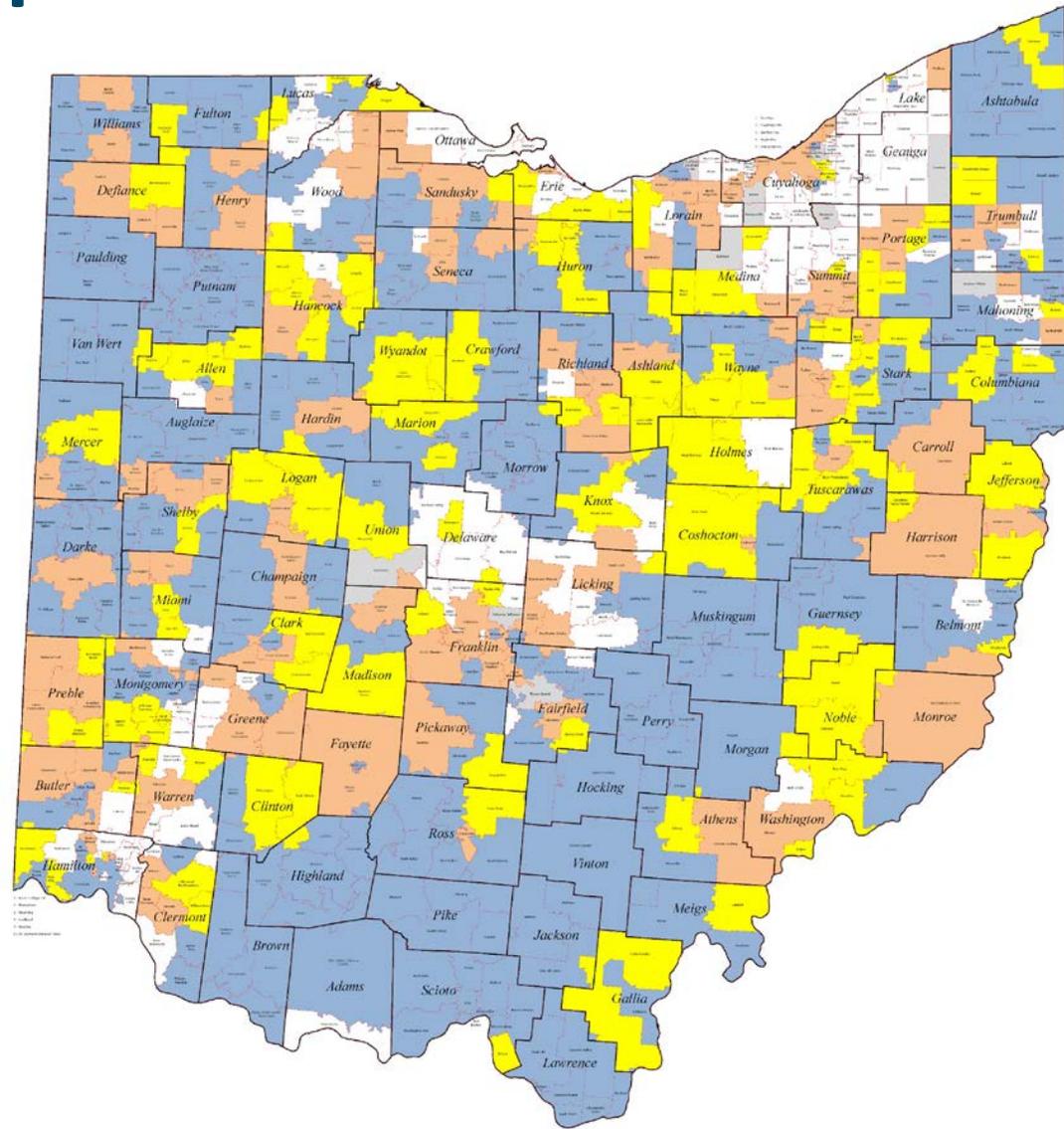
Legislative Service Commission:
[Capital Appropriations, Complete Analysis, pp. 65-183](#)

- Service needed
- Project size
- Location
- Timing
- Delivery model
- Owner

(AGO) ATTORNEY GENERAL	
Administrative Building Fund	\$3,813,752
TOTAL - All Funds	\$3,813,752
ADMINISTRATIVE BUILDING FUND (7026)	
C05517	General Building Renovations \$200,000
<i>County:</i> Multi-county - Madison, Summit	
<p>This capital appropriation will support general renovation projects in facilities operated by the Attorney General. The Ohio Facilities Construction Commission has identified a number of small projects where building renovations are necessary to remediate issues that absent this capital money might require the Office of the Attorney General to use money appropriated for its operating budget.</p>	
C05521	BCI London Renovations \$969,752
<i>County:</i> Madison	
<p>This capital appropriation will be used to complete a three-phase HVAC upgrade project at the Bureau of Criminal Investigation (BCI) headquarter facility in London, Ohio. The age of the existing HVAC controls and components, along with the need for improved compatibility between the newer chillers (installed in phases 1 and 2 of the project) and existing controls created the need for this final phase of the upgrade project.</p>	

Upcoming K-12 Projects ...

K-12 Completion Status 2017



Complete

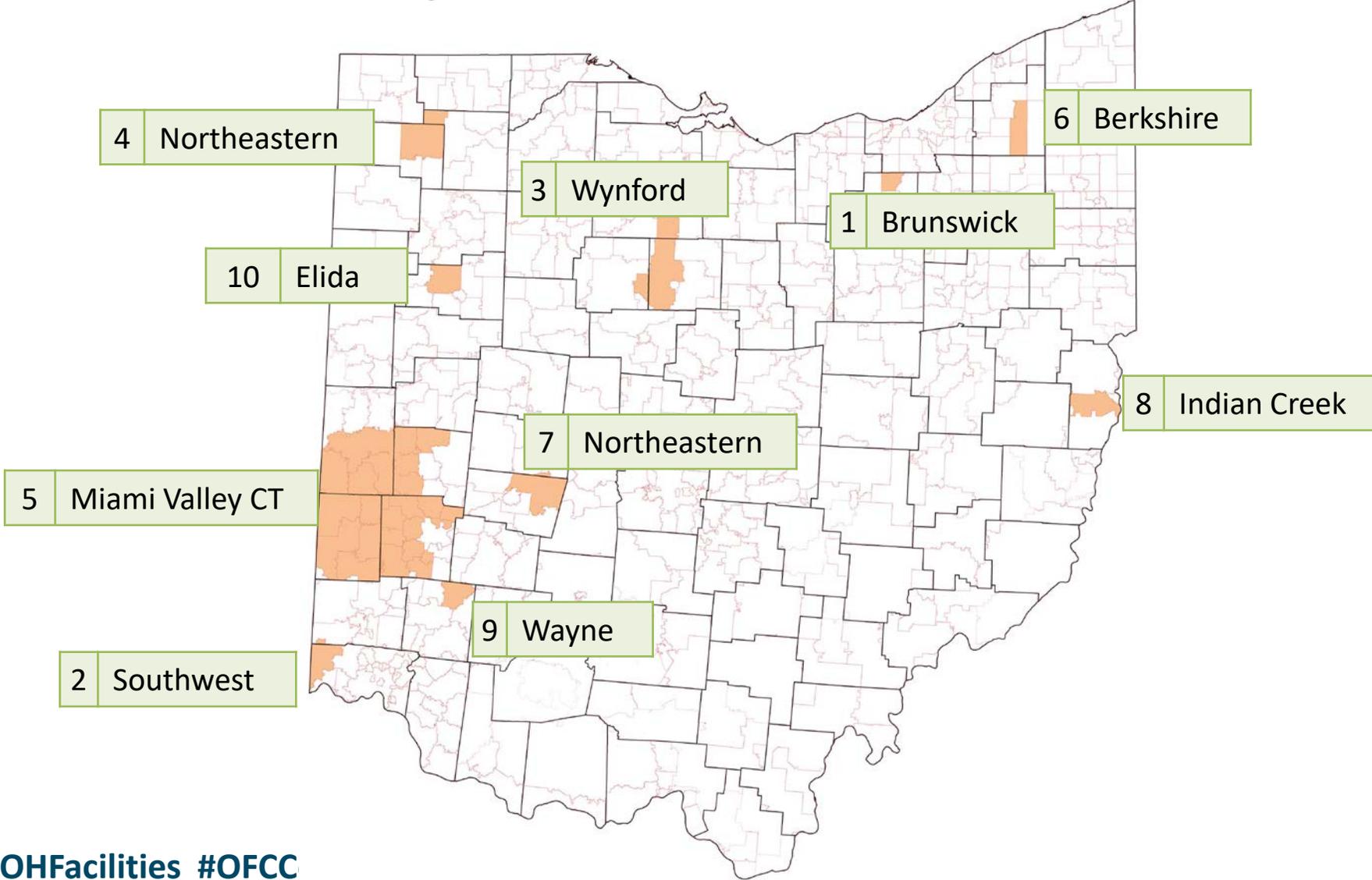
Partial

Waiting for local \$

Waiting for state \$

Upcoming K-12 Projects ...

New K-12 Projects 2018-2019



Upcoming Capital Projects: Miami University

John K. Seibert

Director of Planning, Architecture & Engineering

Project	Construction Budget	Method	A/E Selection	BVS/Bid
Academic and Administrative				
Campus Feeder J - high voltage upgrade	\$ 550,000	GC	Fall 2018	Early Spring 2019
Center for Career Exploration - Expansion	\$ 500,000	GC	Fall 2018	Early Spring 2019
Art Building - Corridor Improvements	\$ 420,000	GC	Fall 2018	Early Spring 2019
Cole Service Building - Renovations	\$ 280,000	GC	Fall 2018	Early Spring 2019
Center for Performing Arts - Waterproofing	\$ 350,000	GC	Fall 2018	Early Spring 2019
Patterson Place - Envelope/ Roof Rehab	\$ 350,000	GC	Fall 2018	Early Spring 2019
Roofing (Hoyt, Yager, Gross)	\$ 1,500,000	GC	Fall 2018	Early Spring 2019
Walks and Drives hardscape / paving repairs	\$ 680,000	GC	Fall 2018	Early Spring 2019
Western Bridge to Presser Hall Renovation	\$ 1,050,000	GC	Fall 2018	Early Spring 2019

Upcoming Capital Projects: Miami University

John K. Seibert

Director of Planning, Architecture & Engineering

Project	Construction Budget	Method	A/E Selection	BVS/Bid
Housing and Dining				
Dodds Hall - Rehabilitation	\$ 15,000,000	Design-Build	Late Fall 2018	Winter 2019
Equestrian Center - Erosion Control	\$ 350,000	GC	Fall 2018	Early Spring 2019
HVAC upgrades at 5 Residence Halls	\$ 1,750,000	GC	Fall 2018	Early Spring 2019
Multiple Hall Bathroom Renovations	\$ 500,000	GC	Fall 2018	Early Spring 2019
Intercollegiate Athletics				
Field Hockey - Turf Replacement	\$ 630,000	TBD		
Women's Soccer Stadium - Upgrades	\$ 700,000	GC	Fall 2018	Early Spring 2019
Yager West - HVAC replacement	\$ 1,050,000	GC	Fall 2018	Early Spring 2019

Upcoming Capital Projects: University of Cincinnati

Mary Beth McGrew

Senior Associate Vice President, University Architect

Project	Construction Budget	Method	A/E Selection	BVS/Bid
Vontz Exterior Phase 2	\$ 8 M	GC	Completed	Early 2019 Bid
College of Law, Renovation Project	\$ 40 M	CMR	Completed	Fall 2019 Bid
Rieveschl Lab Renovations	\$ 10 M	GC	Completed	Fall 2019 Bid
Library Square Plaza and Roof	\$ 1.5 M	GC	TBD	TBD
Mary Emery Roof	\$ 4.2 M	GC	Completed	Winter 2018 Bid
UC Clermont Chiller/Boiler	\$ 3.7 M	GC	Completed	Fall 2018

Contact Information

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Thank you!

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ASK OFCC

Craig Weise
Chief of Projects

This concludes The American Institute of Architects Continuing Education Systems Course

Provider Name: Ohio Facilities Construction Commission
Provider #: G442
Contact: sue.meyer@ofcc.ohio.gov

Reminder:
***Pick up your Certificate of Participation at
the Registration desk.***