COGENCE Alliance

Owners+Architects+Engineers+Contractors

Inspire. Educate. Unite.

Mission + Purpose

Cogence *(Latin)*

"To drive together" or "Thinking that is well organized"

The purpose of the Alliance is to bring Owners and Developers, Architects and Engineers, Construction Managers and Contractors, and Allied Industry Professionals together to advocate and be a resource for improved project delivery.

For more information visit us at www.cogence.org

NEO Chapter Board Elections

Nominations due December 3ʳᵈ

Bonnie Kulczycki
admin@cogence.org

2021 Theme: INFLECTION POINTS – The Moments that Define a Project

- **March 24: Project Kick-Off**

- **May 26: GMP / Design Sign-Off**

- **July 27: Start of Construction**

- **September 22: Changes in the Work**

- **November 17: Close-Out & Post-Occupancy**

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Agenda

- **Introduction**

- **Survey Highlights**

- **Presentation:**
  Cynthia Leitson & Shehadeh Abdelkarim, Tri-C
  Chris Orlando, VOC Associates

- **Questions**

- **Breakout**

- **Breakout Results**

- **Plus / Delta**

Close-Out & Post-Occupancy

17 November 2021

Inspire. Educate. Unite.

What are the biggest impediments to getting a timely close-out

Too many separate lists,

too many punchlists floating around

Outstanding punchlist items

Other projects in construction phase requiring time

Lack of stamina or interest.

documentation

collecting record information

documentation - i.e. as-built drawings, user manuals

end of job fatigue,

Project Fatigue

Change Orders being issued

dragging change orders

Owner changes.

Post Completion changes
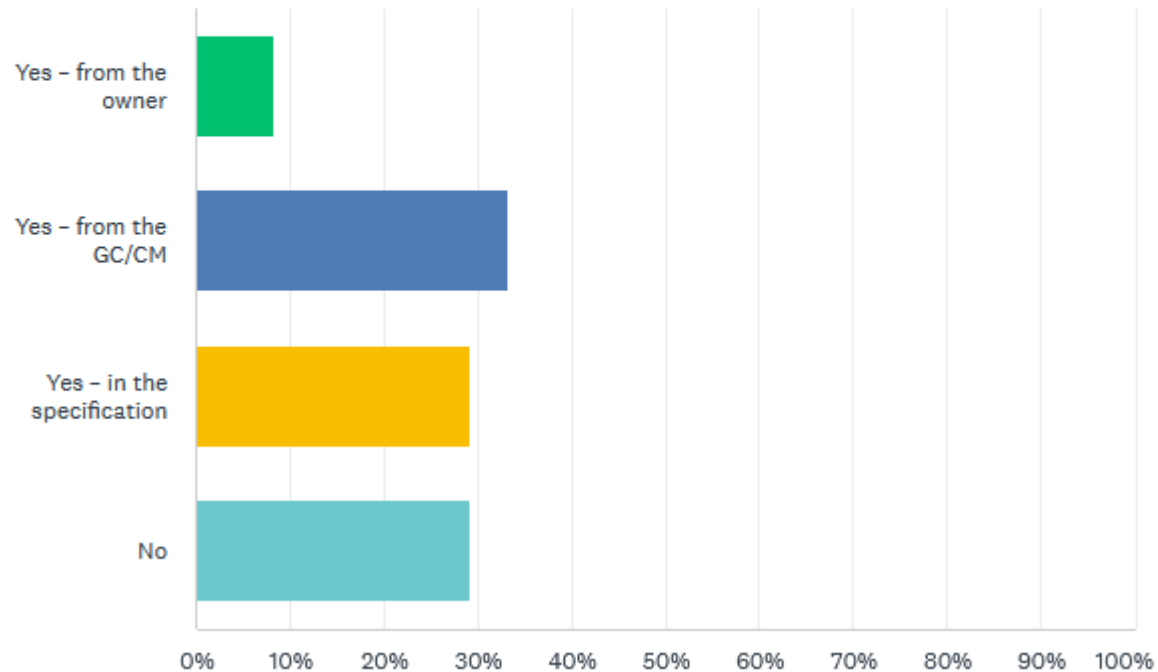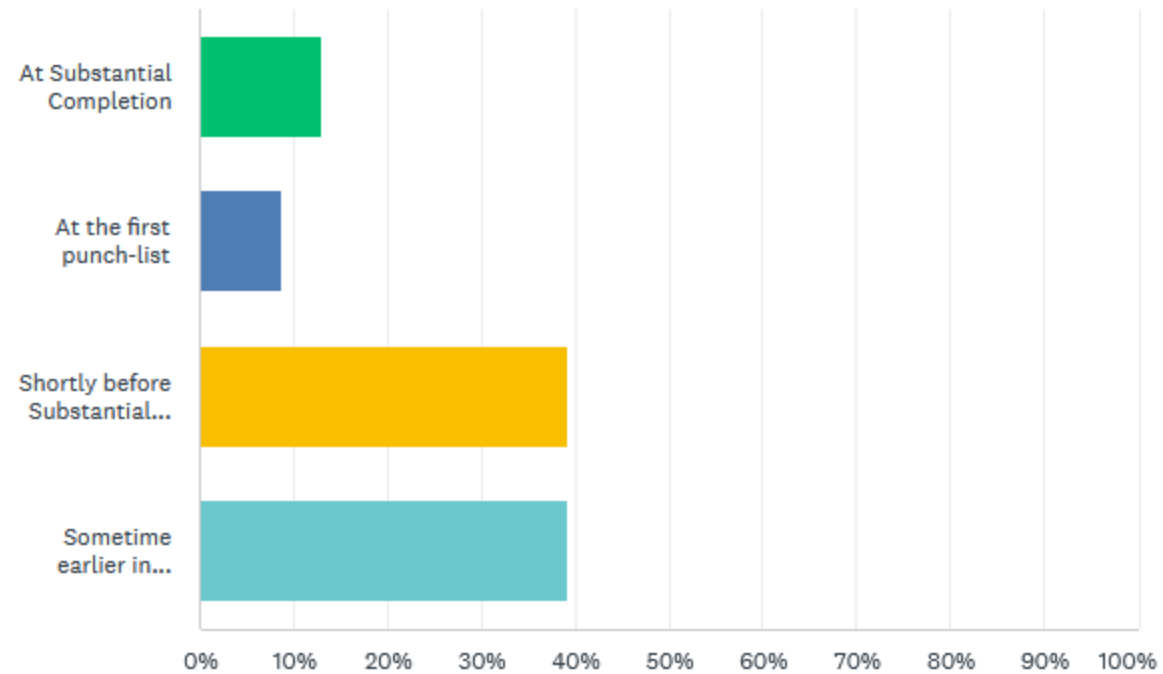
Peoples attention

disengagement

Do you usually see a single comprehensive list of what needs to be submitted for close-out, whether from the owner, from the GC/CM, or in the specification?
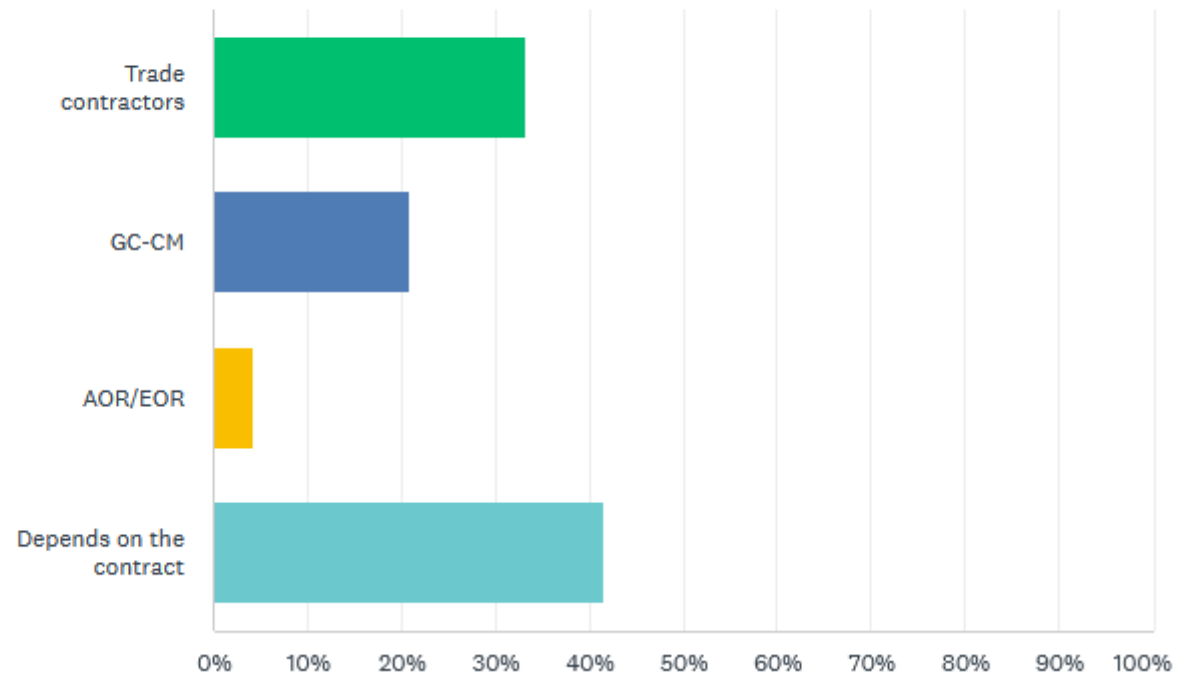
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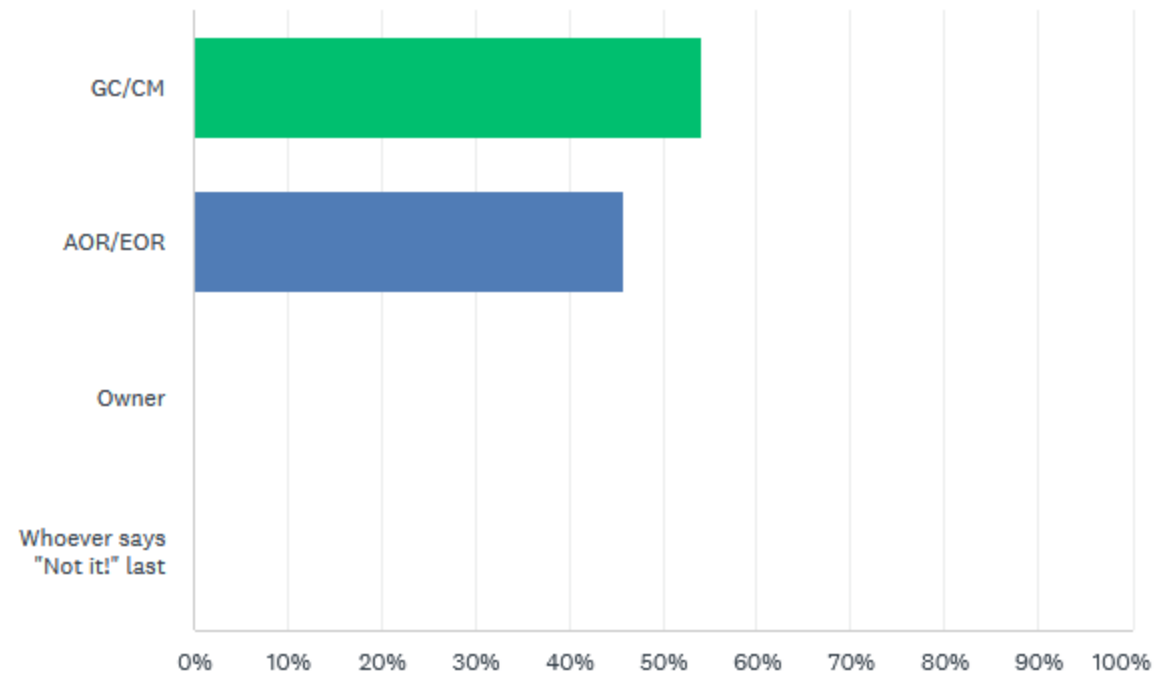
Close-Out & Post-Occupancy
Observations, Risks, & Best Practices

Shehadeh Abdelkarim – Executive Director, Facilities Operations

Cynthia Leitson – Vice President, Capital, Construction & Facilities

Cuyahoga Community College

Team Dynamics & Culture

- **Communication & Ownership**

- **Early Financial Planning & Operational Impact**

- **Decision Making, Respect the Flow**

- **Utilize Software Technology**

- **Organizational Process for New Building Information**

- **Post Occupancy Work Order Tracking**

- **Feedback Improvement**

Before the Construction Project Starts

- Review and Update Standards

- Establish Good Relationships

- Capital Project Selection inclusive of Deferred Maintenace

- Master Planning Team Involvement

During the Design Phase

- **Understand Deliverables**

- **Attend Design Meetings**

- **Understand User Perspective**

- **Ensure Installed Systems are Serviceable and Reachable**

- **Additional Items to Consider: custodial storage, access**

Construction / Facilities Checklist

- **Construction Schedule Details**

- **OFCC Checklist**

- **Owner Institution Systems**

- **Rolling Punch List and Completion**

- **Final Payment/Forms and Retainage**

- **11 Month walkthrough schedule**

During Construction

- **Conduct Walkthroughs**

- **Attend Installation and Commissioning MEP Equipment**

- **Rolling Punch List Creation and Team**

Pre-Acceptance

- Review Certificates

- Review O&M Manuals

- Review Warranty Documents

- Ensure Required Trainings Take Place

- Inspect Final Clean Up

- Verify Occupancy

Pre-Acceptance (continued)

- **Building Systems Verification**

- **Review and Test Building Automation System**

- **Review and Test Lighting Controls**

- **Review all Balancing Reports**

Acceptance Phase / Final Closeout of Project

- **Punch List Addressed and Issues Resolved**

- **Project Sign-off**

- **Move-in Process**

- **Utilize Work Order Request – w/Construction & Facilities**

- **Notate Lessons Learned**

Occupancy Planning

Chris Orlando
President
VOC Associates, LLC

Aligning Construction and Occupancy Planning

- Why is it important?

- Critical Collaboration and Communication

- How will it make the project and your life easier?

Key Action Items:

❑ Integrate the Construction and Activation Schedule

❑ Define substantial completion

❑ Establish routine meetings and updates

❑ Determine user training for building systems

❑ Plan for issue resolution

Activation Schedule Example

| Task Name	Duration	Start Date	End Date
Construction Clean (South)	5d	09/05/23	09/11/23
Construction Punch list Created (South)	6d	09/11/23	09/18/23
Punch list Issues Corrected (South)	5d	09/18/23	09/22/23
Floor turned over to Owner	1d	09/25/23	09/25/23
Install Fixed Furniture	5d	09/26/23	10/02/23
Install Phones/Vocera	5d	10/09/23	10/13/23
Install Computers/Printers	5d	10/16/23	10/20/23
Deep Clean Activities	5d	10/23/23	10/27/23
Install Shelving in Equipment and Storage rooms	3d	10/30/23	11/01/23
Stocking	5d	11/02/23	11/08/23
WAP Survey	2d	09/20/23	09/21/23
WAP Equipment Install	3d	10/23/23	10/25/23
WAP Activation	3d	10/26/23	10/30/23
Install Signage	3d	11/09/23	11/13/23
OFVI/OFOI deliveries to site	4d	11/13/23	11/16/23

Key Action Items:

❑ Integrate the Construction and Activation Schedule

❑ Define substantial completion

❑ Establish routine meetings and updates

❑ Determine user training for building systems

❑ Plan for issue resolution

Go-Live Command Center

User Problem → Command Center → Problem Logged into Data Base → Appropriate Team Contacted for Resolution
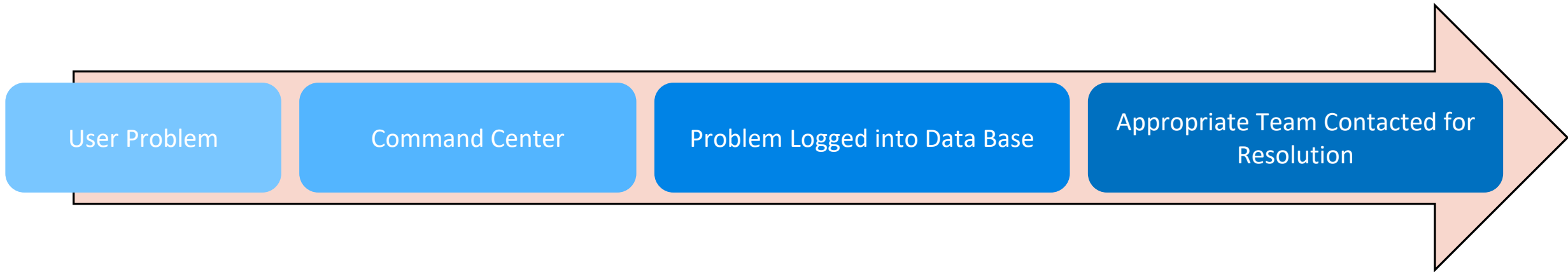
Questions

Breakout Sessions:
What are the best practices for...

What are the best practices for...

1: Punchlist

2: Phased Close-Out

3: As-Builts

4: Retainage

5: Inspection / Certificate of Occupancy

Breakout Results

Group 1: Punchlist (Keri Ash)

- **How many?**

  One (1) goes from a rolling to the final punch list; however it often results in 2

- **Who generates?**

  Contractor

- **Who controls?**

  GC, CMR, DB

- **Expectations for completion? Multiple/continuous (keep coming)**
  Need to define who the ultimate authority to make decision & what the cut off is
  Once Owner's vendors start moving in

- **When start?**
  In wall, above ceiling, rolling, final

- **Format/consistency?**
  Procore, BIM 360; Auto CAD 360; key to use one throughout

Group 2: Phased Close-Out (Brad Berkowitz)

- **Define expectations and phases**

    When do warranties start (utilities, etc)

    When does owner take 100% possession

    Include the right people

- **Lay it out in the contract**

- **Final close-out stage - bring all equipment current with services, maintenance, etc.**

- **Listening to the owner and end users to ensure turnover sequencing/timing**

- **Communicate to the end users; identify disruptions and consequences of phasing**

Breakout Sessions - What are the best practices for...

Group 3: As-Builts (Scott Wagner)

- Sub-contractors provide dimensions

- Multiple responsible - Trade Contractors, GC/CMR, Arch & Engineer - to Owner

- BIM utilization for as-builts - Different levels of use could be utilized

- See mostly 'red' lined drawings or marked up pdf

- Timely updates more frequent as you go in the field. - only see mark up of changes - can tie to pay apps

- Expectations: To what level are the documentations being shown.

- Put more emphasis on architect to take contractors info in field and convert to an as-built set. Have a/e involved more on back end.

- Record Drawings vs As-built drawings definition.

- At Construction Kick Off - Talk about process and expectation of as-builts

Group 4: Retainage (Joanne Brown)

- "early' release on small scale projects

- partial release on long term projects, so early completed subs do not need to wait until the end to receive their retainage

- have an established retainage percentage amount identified within contractual documents

Breakout Sessions - What are the best practices for...

Group 5: Inspection / C of O (David Kleckner)

-

Plus / Delta

Plus (+)

Including facilities &
occupancy expertise
Good to focus on different
aspect that doesn't get as
much attention

Delta (-)

Would like to be in person
Key people engagement
/attendance