Owners/Managers Roundtable Discussion – Summary of Key Points

Participants

- Brian Meacham (BM), Moderator
- Cameron Oskvig (CO), National Academies, US Federal Facilities Council (FFC), support federal government in facilities and infrastructure
- Chris Ackerman (CA), Millenium Challenge Corporation, part of US federal government foreign development, lead engineer for facilities, work in LMIC where capacity is limited, lots of handholding with local engineers and authorities, helpful to have performance code
- Danny K. Cobourne (DKC), PANYNJ, engineering group, work on challenging projects, most facilities are existing, which is where performance-based design approach is helpful
- Luther Miller (LM), Dept. of State, OBO, produces OBO design standards and OBO code, which adopts ICC codes (but not performance code)
- Dan Nichols (DN), NYC Metropolitan Transit Authority, infrastructure and buildings, provides interesting coupling, which often stretch prescriptive and benefit from performance
- Gary Strong (GS), RICS and IFSS Coalition, working with functional regulation in UK, but difference of opinion in IFSS about performance versus prescriptions
- David Hammes (DH), Dept. of State, OBO, produces OBO design standards and OBO code
- Bernie Deneke (BD), US Dept. of Defense, US Navy, facility side, use IBC as code basis. Try to use performance but end up back with prescriptive. How to measure performance seems key.

Key Take-aways

- Existing buildings present a big challenge for prescriptive codes - both for equivalency to current requirements – and to address future resilience and sustainability needs.
- Performance gap exists between how buildings are designed (performance based on design) and performance delivered in use. Need to find ways to narrow the gap.
- Prescriptive codes are based largely on looking backward (addressing concerns which have already arisen) and maybe not so good at looking forward, in particular around resilience and sustainability. Need to be able to predict and adapt and incorporate uncertainty in analyses.
- A performance-code differs from the alternate methods and materials clause in that, ideally, functional requirements, performance objectives, and performance criteria (measures) are stated, as well as appropriate means of demonstrating and verifying performance – none of which exists formally exists for undertaking or approving alternate methods and materials. It provides a basis to start a discussion on performance that is desired.
- Need clear statement of function that is expected, the performance expectation around system or material, how you measure, and tools to measure.
- Buildings with specific mission focus benefit from risk-informed approach, but many differing views on risk, risk acceptability, and how to use. Risk-informed performance-based approach could be beneficial if can reach consensus on terms and definitions.
- Clients often risk averse to performance approaches due to uncertainty in approval, and designers can be risk averse to using performance because not well defined and supported.

- Need risk-performance-cost balance. Cannot meet all performance at tolerable costs. Current ICCPC does not address the balance issue.
- Not dichotomy between performance and prescription but something in between.
- Design-bid-build different than design-build – need to address both approaches.
- Need to be clear on how to assess appropriateness of performance standards that differ between countries in making sure performance expectations are met (e.g., application of ASCE 7 versus Eurocodes for Structure).
- Competency and qualifications important issues to address.
- Consistency in application and interpretation important.