

WSU 4th Annual Design-Build Forum 'Design-Build Experiences' Summarized Minutes

TOPIC: CPARB Statute Review Committee Update

Open discussion on the proposed legislation changes.

- RCW 39.10.330 Changes (specifically those of subparagraph (d), (i) and (ii)):
 - There were multiple comments that teaming agreements are of the utmost importance before going for a project. The new language seems to infer that whomever holds the contract (typically the builder) could submit solely and create the team after to best suit the project and client. Equal partnerships are needed to make a good culture for the project team.
 - Concern that excluding the Architect/Engineer from the qualification process could reduce the selection pool.
 - Could the open-endedness of the proposed process/language create an environment that would require a forced partnership between Designer and Builder and subsequently lead to incompatible partnerships?
 - Similarly, designers were concerned with the potential limitations of being selected after the Builder or by an un-savvy Owner.
 - If the intention is to maintain relationships with the Architect/Engineers, or to have them at the table, there are questions as to why they are being excluded from the language.
- Consensus agreement that reducing the threshold from 10M (with a limitation of 5 Projects between 2-10M) to 2M with no limitations is a good idea.
 - There was a comment that this change may impact the design-bid-build community by providing fewer opportunities for small business in the public works arena. Further conversation was had that it could in fact be a way to encourage diversity in not only construction fields but also design if procurement stressed those goals.
- RCW 39.10.300 proposed change to include the term progressive Design-Build: Should all potential types of Design-Build be listed since this revision only calls out a specific few? Concern that the language could limit the types of Design-Build in the future.
- The proposed changes to RCW 39.10.330 include striking the section that says “if all finalists adequately meet the project requirements, then the contract may be awarded based on lowest price.” There was concern that this is federal law (Brooks Act?) and there was curiosity how it is not required in this case. Potentially the Brooks Act was intended for selecting an Architect only and not a Design-Build team?
- The proposed changes to remove the RCW requirements for past performance were felt to open the door for new firms.
- Scoring between the RFQ and RFP, (RCW 39.10.330 (5) (a)): there was discussion around cumulative scoring between RFQ and RFP or “reset” scoring at each stage of

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the procurement to prevent buying the job. Different parties prefer different methods, and were interested in seeing more clarification.

- Allow Owners to electric to not have Payment and Performance Bonds and instead a contractor's guarantee when appropriate for the project.

TOPIC: Procurement

What can be done during progressive Design-Build procurement to set the stage for successful collaboration and concept development between Owner and the Teams?

- This subject was skipped to accommodate the RCW discussion taking place.

TOPIC: Design

Can a design process be developed that encourages the Team to achieve a program that provides opportunities for additions as opposed to overdesign that needs to be scaled back?

- Designers are concerned about the ability to predict the costs in the early stage. Modular concept discussion.
- Early selection of trade partners may help.
- Risk transparency - important to address who owns what risk. Problems arise when risk is transferred to parties who cannot handle the risk. Owner and team need to dialog how to get betterments and contingencies.
- "Overdesign" could be a symptom of not knowing exactly what Owners want. Designers can give Owners option of they want versus cost.
- Start with a box - determine what program needs are negotiable and what are absolute.
- Milestones to check the budget.
- Look for experience in Target-value design and bench marking. Set targets for building elements as a graph versus industry standards – set appropriate expectation for what you can get for the money.
- Develop options with an additive process.
- Expectations need to be managed to equal budget. Who is responsible?
- All parties on the team need to be heard and be focused on the same scope and purpose from the beginning.
- Have specific meetings to discuss range of options for systems, building envelope, add-on choices, material building selections, etc.
- Longer validation period (Traditional Design-Build).
- Place value on the ability to design to cost.

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- Owner could allow for flexibility in the standards and how Owner's team interprets them. More generic standards balance an Owner who is not as up to date on market cost information. Specify performance instead of specific products.
- Informed Owner and trade partner who have skin in the game and rewards/provides motivation.
- Appropriate contingencies for Owner and Design-Builder are important.
- Co-locate with Owner rather than dial-in meetings to make discussions on the spot to increase efficiency and smoothen the process.
- Flexible scope with a fixed price, or fixed scope with a flexible price.
- Owner needs to clearly differentiate between program needs, "wants" and "nice to have". The RFP should include program requirements along with assumptions. The RFP could provide program budget numbers and Owner's assumption of what they will get for that budget (e.g., assumes (12) offices and (3) labs, etc.). Then the DB team can speak up very early if the cost assumptions are way off.
- Builder should develop a buy-back strategy early in the project to allow the Owner opportunities to utilize savings/contingency to "add" to the project before it is too late.
- Architects have a hard time working with Contractors in determining pricing and estimates, as this is mostly dictated by the GC. Architects could work to change the mind set to meet Contractor's input to actual cost of design.
- Third Party Estimator & Peer Review may be beneficial for early budget development, as this is only based upon programming and conceptual. Also provide 3rd party estimating review of final budget for GMP. As the GMP is being developed partnerships between Owner/Architect/Contractor is being pushed with a time line.
- Hire scoping consultants - provide good enough information for costing at the pre-design stage.
- Funding cycle process that meets the program needs. Designers should also play a part in the start of the funding process, as some of the user needs may have changed, from start to finish. State Funding Cycle also does effect design process and budget and GMP. Budget needs to align with the purpose and goals of the project. State funding and purpose and goals need to align.
- Prioritize scopes and the time lines that they can still be implemented when budgets are known.
- Design-Builder could provide a menu of trading options.
- Weigh the options of less brick and mortar and more function. Owners may get more value in locating facilities in a different location not hamstrung by the appearance requirements of adjacent buildings.
- Hold a charrette as the first meeting after award, get as many consultants/clients in the room as possible over possibly several days to understand the client's "Want-Have-Need" list and University Guidelines from day one. Get the right people in

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the room. Top-to-bottom users, including the actual custodian works in the building.

- Use face-to-face meetings as much as possible. While technology like Bluebeam and Skype have their place, you lose a lot of the sense of collaboration and nuance when mostly digital. Need to have multiple charrettes, at least one per phase.
- Interview versus workshop versus proprietary meeting – leverage so that Owner can tell how your team works together.

TOPIC: Construction

Could interim milestone incentives help facilitate realistic schedules during construction?

- Have everyone on the team buy into the schedule up front.
- Open communication, honesty between all players.
- Incentives – Why pay someone extra to do what they're already supposed to do?
- Need interesting ideas to incentivize the subs.
- Have an MEP coordinator.
- Use contingency savings as incentives.
- Have realistic durations for closeout.
- Risk transparency with contingency – communal bucket to draw from – not just for unknown but for added values.
- Maintain OAC meetings throughout project – no hand off between designer and Contractor – always a partnership.
- Milestone incentives - more about behavior than outcomes. Commitments made and kept versus dates met. Check-ins still important with schedule, but date incentives could lead to less quality and safety.
- Punchlist as you go rather than wait until the end.
- Staff continuity is important on all sides – manage around it. Tightness of market plays a big part. Better management leads to better retention.
- Survey style behavior incentive – risk/regulatory items and did they get resolves the way they said they would. Measuring commitments, risk, etc.
- Plan percentage complete within ranges.
- Provide incentives for Subs rather than the General – tailored to the project with everyone setting the incentives together to get subs to work together to help the project as a whole.
- Safety reporting and identifying incentive. Entertaining safety observations into program and predict better safety methods.
- Incentives:

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- LDs have a negative tone and often lead to a legal battle. Can we focus on milestone incentives throughout the project for a better message?
- Would it be possible for Owners to hold some of the project funding back in order to pay profit % incentives as project milestones are achieved? This could help avoid the large rush and lack of quality at the end of the project. In addition, the Contractor could be given the chance to “catch-up” from one milestone to the next and still collect all of their profits. For example, if the Contractor fell behind early and missed the first project milestone but was able to catch-up before the second milestone, then they could still collect both incentives. This may still result in a rush job which could affect quality, but perhaps on a smaller scale?
- A simple incentive model will be critical so that it can be easily tracked/managed.
- Incentives should be focused around high-risk milestones and may be needed for key members of the entire DB team (GC, subs, design professionals, etc.).
- Not very favorable. Some considered this a somewhat demeaning practice.
- Some liked setting aside a portion of contingency for schedule issues.
- Milestones should be set by the team not the Owner.
- Schedule is diametrically opposed to thoroughness - one suffers at the expense of the other.
- Schedule is also the enemy of proper review which becomes costly - suggest common review events (including submittals).
- Owner decisions have an impact on the schedule and must be made in a timely fashion.
- Incentives could be for meeting milestones early, rather than just meeting them.
- Contractor's contingency could be shared with design team and build team should final dates or milestone dates be met. Could also be shared back to Owner for timely decisions.
- Rather than monetary incentives – explore other kinds such as meals or ball game tickets.
- Management solutions is what is needed. Early planning in defining the right Project Superintendent early in the project selection. Project Super is key, they need the correct skill set to align with the project needs. Super needs to be part of the early planning in design, to develop a good plan in executing the scope and schedule for a crisp finish.
- BIM Coordination provides smooth schedule and exposes unknowns.
- Provide RCL walks (Rolling Completion List). CM provides project walks with Facilities Maintenance and stake holders at an early stage of rough in to define the issues and changes that align with good work flow. All issues are logged in the RCL and the items that are not addressed roll over into the final punch. Involve MEP

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Forman's and have them lead the walks as is good to have them take ownership of their quality install.

- Designer onsite more during construction.
- Budgets are not allowing architects to factor in a "construction contingency" fee.
- Perhaps the expectation to see the architects/designers all the way through may be an older way of thinking and the expectation needs to switch to knowing they've done their part and Owner will see them less as they go on in construction.
- If incentives are not available, then tie progress payments to hitting specific milestones instead of a monthly payment.
- Architect fees too low? No, they actually get paid a little more on DB projects. They are not as involved at the end of the project simply because they are not needed. The Architect should not be doing the QA/QC. It's the GC's responsibility. For example a GC may use their Quality Control Manager to oversee the work quality, who does not report to the superintendent but to the higher-ups in the company. This person walks the project with the Owner at several times during construction to make sure the Owner is happy with the quality of work, and would develop punchlists as they went. Owner copied on those punchlists.
- If the Architect isn't getting paid fairly, then don't select that team. Ask for a break out of the design fees. Use the State A/E guidelines as a general guide for fees, it's pretty accurate.
- Incentives if used need to be applied in a meaningful way for exemplary performance versus just performance.
- Frontload conflict checking with conflicting disciplines. There are problems with drawings coming in later and later. Obtain neutral buy-in at every phase.
- Follow the federated model where all building elements are completely coordinated.

TOPIC: Closeout

How can the Design-Builder help make sure that closeout activities are achieved in a timely manner?

- Need to achieve early milestones or make it up in order to meet the schedule.
- Get the right commissioning agent on board early and require a detailed commissioning plan.
- Use electronic tools, bluebeam, klammity, procore, etc.
- Don't pay Design-Builder. Don't let Design-Builder demobilize their project manager or superintendent until complete.
- Define level of detail for as-built requirements.
- The Design-Build team should have a specific plan for commissioning and closeout available early on. It should not just be considered project float time at the end, otherwise it is a big red flag.

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- As-built drawings and/or BIM models:
 - Contractor commits to the delivery of as-built drawings for the project, but it is rarely included in the design consultant's scope. They are prepared to provide "as designed" closeout drawings, but not "as-builts." Therefore, this communication and expectation between Contractor and designer must be clear from day one.
 - There is a misconception that BIM models are always up to date. This is not always true throughout the course of a project. It is important to define whose model is responsible for tracking "as-built" information. For example, a fabricator may have a model that includes very accurate piece dimensions, but nothing related to the design intent, etc.
- Owner may need to take over better control and drive the closeout.
- Allow the Design-Builder to hire the subs that are typically at the tail end of the job – i.e.: controls, air balancing, metering, etc.
- Critical to hit milestones during the project so that the time for close out doesn't get compressed.
- Europeans generally have longer warranty periods – 5 year minimum, some 10-year standard warranties. The GCs on European projects tend to be more attentive to quality and proper closeout when they know they are responsible for a longer duration.
- Celebrate the "silent success" superintendent. We tend to celebrate the superintendents who solve all the crisis, when you really need to celebrate those supers that don't allow the crises to occur in the first place.
- Need to focus staff on O&Ms – have one person assigned to do only that.
- Submittals should be automatically filed in the "O&M binder" the minute they are approved, don't wait until the end of the project. Owner should check O&M binder throughout the project to make sure that happens.
- Need to change mindset that Substantial Completion is "finished". The finish line isn't reached until Final Completion.
- Provide a checklist of which C of O is one item.
- Have a closeout meeting at 75% completion.

TOPIC: SMWBE

Growing SMWBE in Design-Build.

- Shared responsibility when the SMWBE are not the lowest bid for the sub-work?
- Develop a list "pool" of SMWBE that would compete against each other on certain size projects (2M? 3M?). They would be on equal playing field with the competition.
- Create opportunity though meaningful leadership in the industry first. Leaders beget leaders and new firms.

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- Subguard – alternative bonding option for small subcontractors in which the State underwrites the SMWBE.
- Incorporate it into this event at WSU.
- Change system at State level (mandatory for Owners and incentivize industry) with industry outreach to K-12.
- Retainage is an issue – too far out for payment, should set out an early release. Regular payments need to turn around faster as well.
- Set goals like every member of risk/reward pool carve off 10% to help a SMWBE firm get into the project.
- Open design call (expertise divvied up). Let SMWBE partner with larger firms and give more opportunity to role model and set precedent.
- Get people used to communicating with design community. Community outreach to encourage more women and minorities to go into design discipline in the first place.
- Availability is an issue. Show a good quality list of various players in the SMWBE Market.
- Set realistic goals for the pool of designers/builders to seek out capable SMWBE Contractors/designers.
- In larger cities, SMWBE involvement is mandatory and dictated by minimum percentages. However, they often have a loop hole stating if “you tried your best” and could not find the right fit then the requirement is waived.
- Design/Build team members will say that it depends on the complexity of the task and the associated risk to the project. Therefore, they would like to develop relationships early and work together year round (not just to fill a requirement on a specific project). This could help lower the risk.
- Which is better - a minority owned business with lots of non-minority employees or a non-minority owned business with lots of minority employees? Both seem to be a step in the right direction, but only the first one will qualify per the State definitions and able to get certification.
- Companies need to look inward first and make sure that they are as diverse as possible. One person mentioned that their company utilizes the voluntary JUST certification to evaluate how they stack up.
- How does the DB cost threshold (\$2M vs. \$10M vs. other) affect this? Will it lower project limits create more or less SMWBE involvement?
- Nurture/Mentor – share the risk to get more people to participate.
- Kepp Rosters.
- Need better cohesion in State, Federal and local laws.
- Design/Builders can work out custom payment for firms.
- Risk of companies folding might need to be addressed.

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- Try to break up larger contracts into smaller ones to have smaller pieces for the SMWBE's to pick up. Or put requirements into main contracts to include subcontracts so it trickles down.
- General Question: Why is there a lack of diversity given the massive demand in the construction industry today?
- Keep the money flowing as young businesses' are not equipped to fund the projects.
- This is more of a question: Are we seeing a rise in diversity to meet the demand of projects?
- Implicit Bias to be more open to bring young team members from out of State (recruit from outside the State, and work with unexperienced consultants). This may require a separate fund from the Owner to make this happen, as the project budget usually only wants professionals, may need some assistance from the Owner to make this happen.
- SMWBE percentages are not realistic and should be changed.
- Most businesses hire a fairly large portion of minority or SMWBE employees but few minorities choose to be business. Owners-percentages should be based on hire rates instead.
- SMWBE registration-community development agencies rather than Contractor percentages. Training programs.
- Data base is required – It is hard to find companies to engage in process.
- There are some minority employees in professional companies but it will be several years before they become Owners.
- East vs West demographics - State needs to recognize the difference between the two.
- Include in the RFQ/RFP scores some points for having a realistic and effective outreach plan. How has the company reached out in the past? Not just a plan, but real actions.
- Work closely with the Blue Book (directory).
- State needs to make the process to be certified easier. There are a lot of small/minority companies that just can't handle the cost/paperwork to be State certified. The federal certification is easier, but even that is sometimes too much. Maybe larger companies can help smaller ones go through the filing process. Use their staff time.
- The Owner could self-certify. WSU could set its own goals/qualifications that are easy to achieve. One-page application form.
- Encouragement needs to start at a lower level. GCs and Design firms should connect with high school students, community colleges, to encourage more interest in the construction fields. Hire more part-time interns to get on-the-job training.
- Don't base criteria only on ownership. Consider the diversity of a firm's employment. If it's just the Owner but all the employees are white men, have you

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gained anything? If you encourage hiring practices of a firm to be more inclusive, then you'll get more diversity in the field and eventually there will be more diverse ownership as those people move on and start their own companies. Gets back to the concept of a company's outreach plan.

- Outreach to youth/students to construction industry. Cultivate the resource.
- Small businesses can't bond, don't have assets but that's were larger firms could help them out in a mentorship program. Risk Part: big company's need to vet out the risks. "Little" guys could walk away with money but not have done anything.
- Owner needs to provide a safe "playground" between the mentor and mentee firms as they work out how to "play".
- Owners could provide more trade training, or strong mentorship internship programs. Airforce base example; 4-5 year internship programs so firms have the experience to be able to compete.
- Could Owners make some sort of incentive if a firms mentors?
- Larger firms put on a class for the smaller firms. 12 classes – 12 weeks, etc. To teach on various topics: schedule, how to write and RFI, etc. Help firms to understand the basics (best practices).
- Do a program within high schools for student – free, first come first serve, once a month, to work together on a project and learn about the industry. Encourage more students to attend technical or applied science apprenticeships.
- Union versus non-union?
- Set realistic goals for subcontractors so that they can be successful.
- Demonstrate a commitment to diversity by example within our own organizations.

End of Summarized Minutes