Off-Site Construction Council

Research Needs Assessment

1. Stakeholders:

- Organizations
  - NIBS OSCC
  - Universities AEC
  - CII
  - NIST
  - McGraw-Hill
  - AEC Companies
  - Consultant Companies

- Funding Associations:
  - Pankow
  - AGC
  - AIA
  - Industry companies

2. Topics:

- Labor
  - Labor Skills
  - Labor impacts
  - Health and safety

- Supply chain integration, standardization

- Market Assessments
  - Benefits and drivers
  - Perceptions
  - Levels of use
  - When and where to use offsite

- Regulatory Accommodation
  - Performance based specifications
- Transportation logistics
  - Cost analysis
  - Technology development
  - Regulatory

- Design constraint impact

- Performance evaluation
  - Intrinsic: fire, structure, hygrothermal, etc.
  - Extrinsic: cost, schedule, worker safety, quality, environmental impact (LCA, air quality, worker safety, maintenance, etc.)

- How To: project approach, delivery and teaming
  - Next step in a company
  - Best practices case studies
  - Education tool development for different audiences

- R&D new product
  - Product development model
  - Standardization across sectors
  - Commercialization and IP evaluation

- BIM and fabrication
  - Interoperability and IFC compliance design to fabrication
  - BIM Standards for offsite sectors

- Onsite efficiencies and Lean Construction

- Factory efficiencies and Lean Manufacturing
  - Cost estimating for manufacturers
  - Contract negotiating for manufacturers

3. Standards:

- ASTM
- ISO
- NIST
- LEED