



U.S. Department of Transportation
Federal Highway Administration



FHWA Expectations and More

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2011 NDDOT Construction Conference
March 2-3, 2011 - Grand Forks
March 7-8, 2011 - Mandan

Items of Discussion

- Full Involvement Projects
- Change Orders
- Review Findings
- Performance Based Specifications
- Latest Technologies
- Alternative Contracting



Full Involvement Projects

- Pre-Construction Meeting
- Contractor Schedule
- Construction Inspections
- Change Order Approval
- Final Inspections/Final Voucher



Change Order Approval

- FHWA Involvement for Change Orders:
 - Full Involvement Projects, costs increasing or decreasing contract by \$100K.
 - Full Involvement Projects, time extensions.
 - Emergency Relief Funded Projects – Changes affecting eligibility (approved DDIR).
 - All Changes affecting the Environmental Approval or Commitments.



Change Orders

- Changes are a natural part of construction.
- Changes may have both cost and schedule impacts.
- Deal with changes promptly.
- Delaying resolution may increase costs and may delay the completion of the project.
- Changes affecting the Environmental Commitments need to be reassessed.



Primary Reasons for Changes

- Differing site conditions.
- Changed conditions including regulatory changes.
- Added/Deleted Scope.
- Information missing from the contract documents.
- Errors and/or Omissions.
- Project Delays.



Owners Perception of a Change Order



Review Findings

- Change Orders and Time Extensions processed separately.
- Liquidated damages are not being charged.
- Added work off Right of Way.
- Encroachments .
- Missing Sidewalk Ramps.



Method/Performance Specifications

Definitions

- Method Specification – Recipe describing materials (products) to be used and the steps required to fabricate and install the materials.
- Performance Specification – Statement of required results with criteria for verifying compliance.

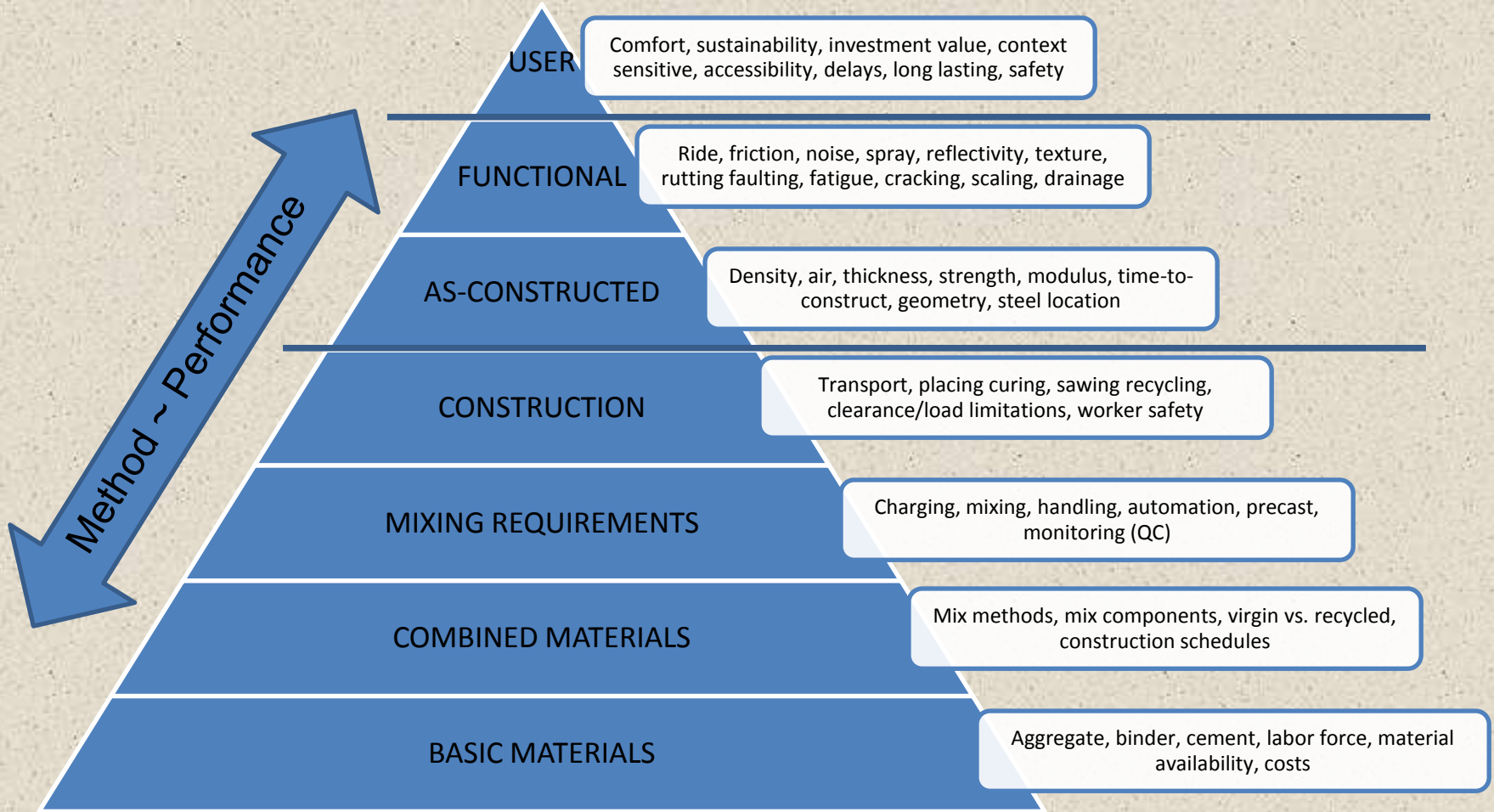


Performance Specifications Goal

- Means to transfer the burden of achieving success to the contractor in exchange for providing the contractor with significantly more flexibility than exists under traditional prescriptive specifications.



Pyramid of Performance



Redefine Roles and Responsibilities

Latest Technologies

- Geo-coding for photos
- Lidar imaging



Alternative Contracting

- Design-Build Project Delivery
- Public-Private Partnerships (P3s)
- Construction Manager General Contract (CMGC)



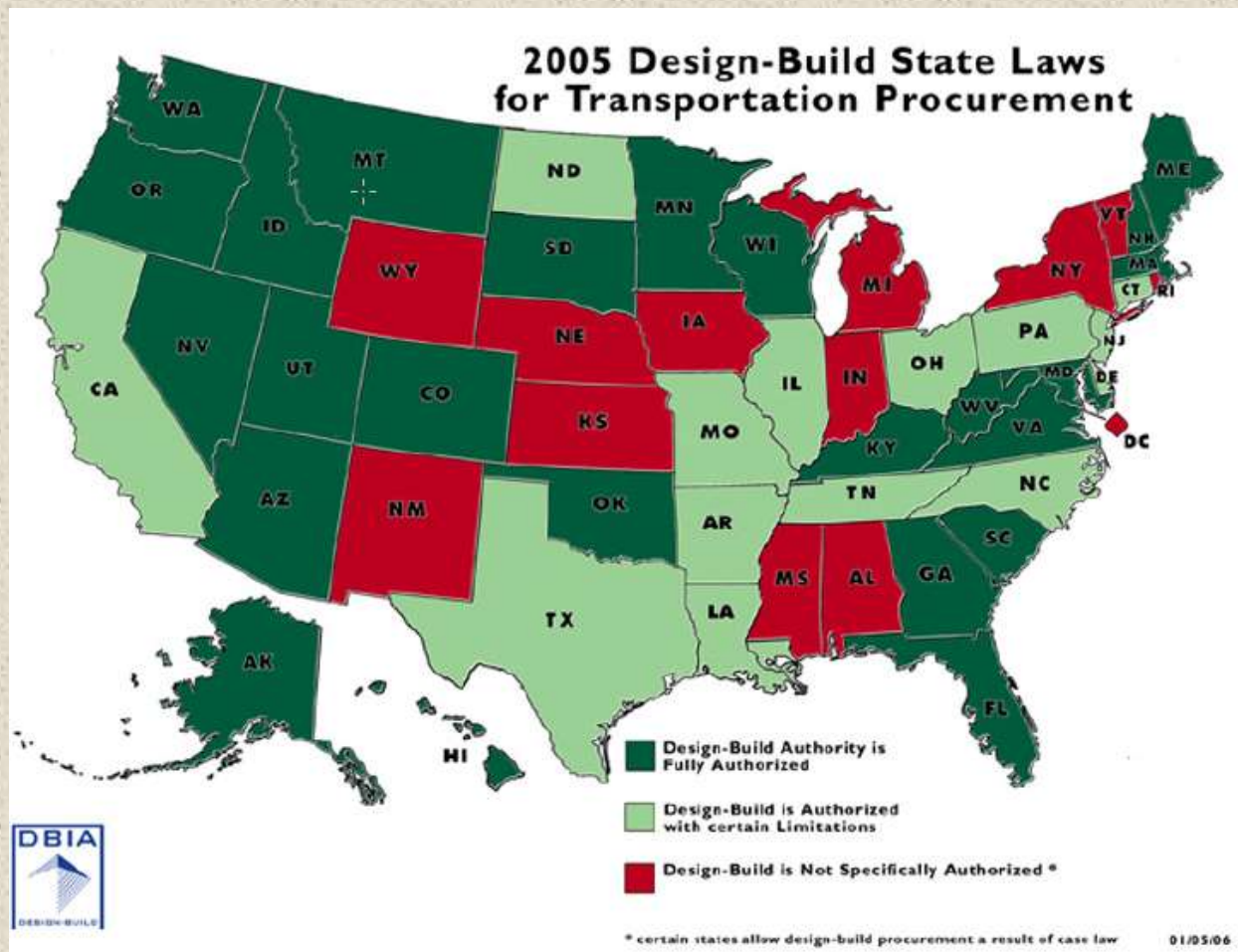
Design/Build Project Delivery

A system of contracting whereby one entity performs both architectural/engineering work and construction under a single contract.

Source: Design-Build Institute of America (DBIA)



States with Transportation Design/Build Authority



How is DB different from DBB?

Owner

- Design compliance review.
- Need dedicated design assets available to the field.
- Performance-based.
- Higher level of trust required.

Design-Builder

- Owns details of design.
- Designer-of-Record (DoR) **Must** design to budget and schedule.
- Responsive to owner needs-preferences.
- Internal contracts different.
- DoR's client is the design-builder NOT the owner.



Understanding the Term “Quality Assurance”

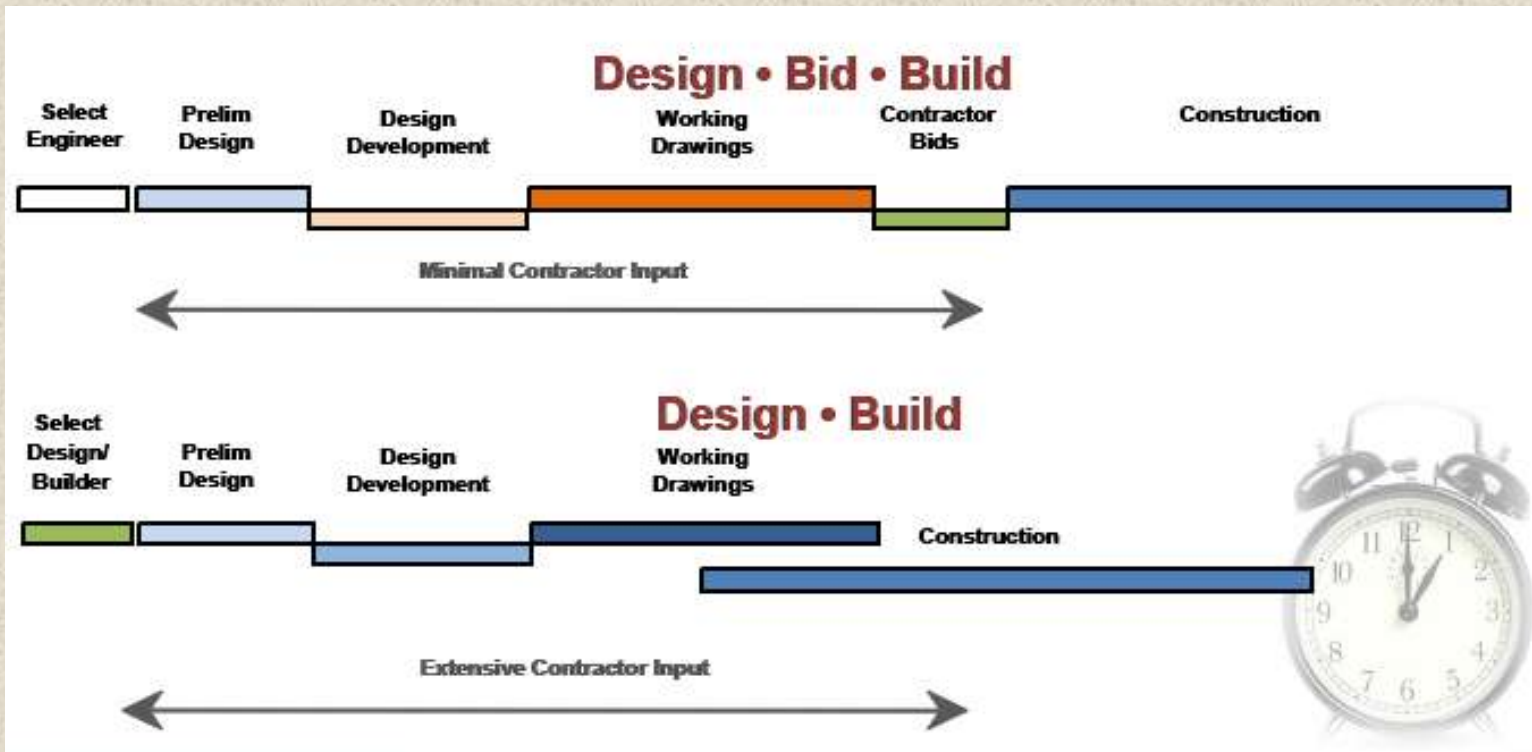
“All provisions of 637.207(a) are applicable to Design-Build projects.”



***Note: The Design Builder cannot be Assigned responsibility to perform any Acceptance (Verification) functions.**



Design-Build Time Savings

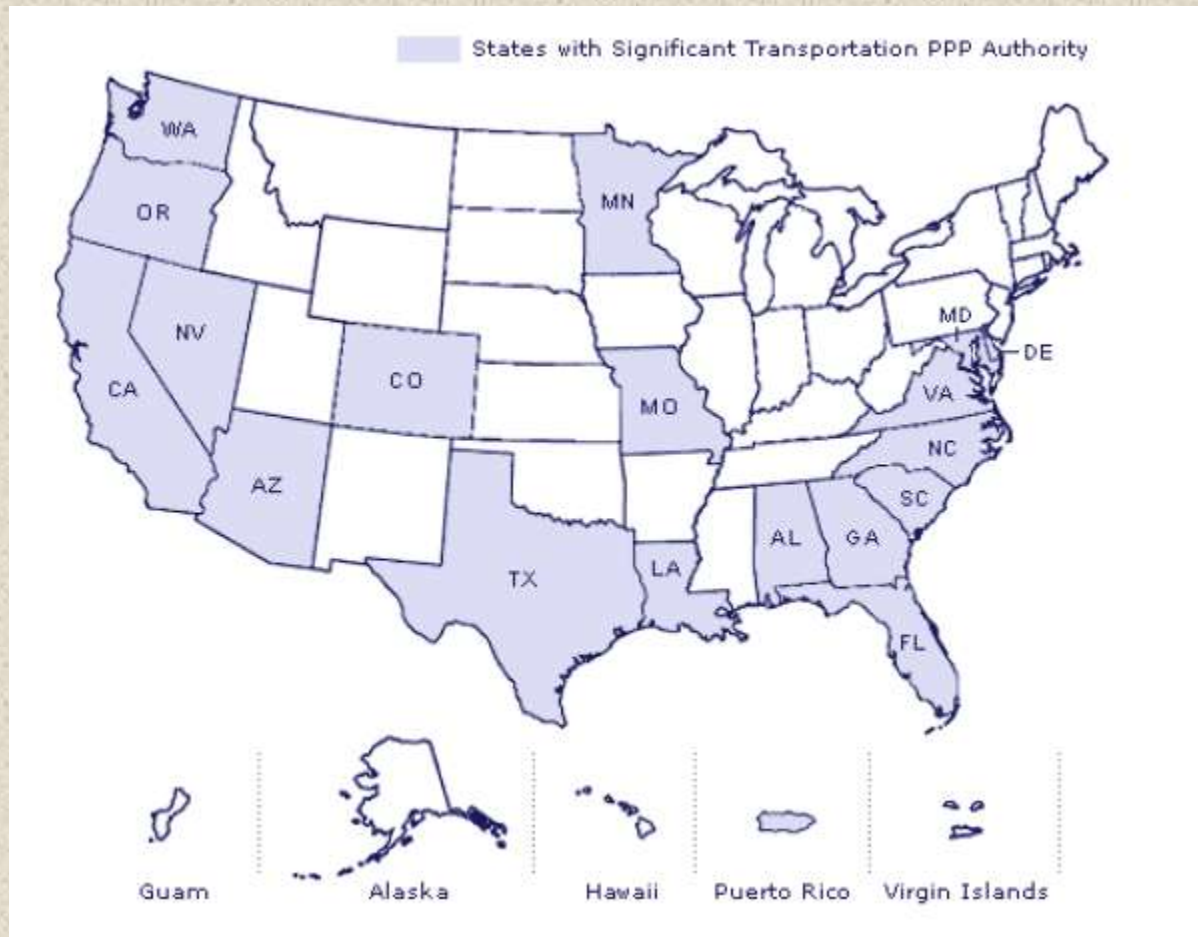


P3 Project Delivery

Public-private partnerships (P3s) are contractual agreements formed between a public agency and a private sector entity that allow for greater private sector participation in the delivery and financing of transportation projects.



States with Significant Transportation P3 Authority



CMGC Project Delivery

CMGC is a Project Team consisting of three components:

- An Owner
- A Contract with a Designer
- A Two Phase Contract with a General Contractor
 - Phase one – A “Construction Management” consulting contract to help with design.
 - Phase two – A “General Contracting” contract to build the project.



CMGC Project Delivery

- SEP-14 is necessary as 23 USC does not allow CMGC.
- SEP-14 approval does not provide statutory authority of override state law.
- Utah has programmatic SEP-14 authorization.
- 3 annual SEP-14 reports available at:

<http://www.udot.utah.gov/main/uconowner.gf?n=15227226925482829>



Comparison of Potential Barriers

CMGC

- State Law
- State Personnel Resources/Training
- Minimal Guidance
- New Procedures
- Concern with transparency of the selection process.

Design-Build

- State Law
- State personnel resources
- Less owner control over final design
- Higher procurement costs
- Concern with transparency of the selection process.



FHWA's Long Term Project Delivery Goals

All contracting agencies should have a project delivery “toolbox” including:

- Design-bid-build
- Design-build
- Construction Manager General Contractor (Construction Manager at-Risk)
- Alliance Contracting
- Performance Contracting
- ID/IQ contracting
- Other



Now with Alternative Contracting - Major Contract Terms Disputed

1. Scope of Work
2. Site Conditions
3. Owner Rights of Approval
4. Payment and Guarantees
5. Dealing with Other Project Contractors
6. Changes
7. Project Controls
8. Time Extensions
9. Force Majeure
10. Delay-Related Damages
11. Limitations of Liability
12. Warranty



“They build what we accept.”

-James B. Sorenson, FHWA



Questions?

