Construction Delivery Methods for Public Projects

Wake County and Wake County Public School System
Facilities Department
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Presentation Overview

- Delivery methods for public construction
- Methods proposed for use by WCPSS for remaining projects in CIP 2013

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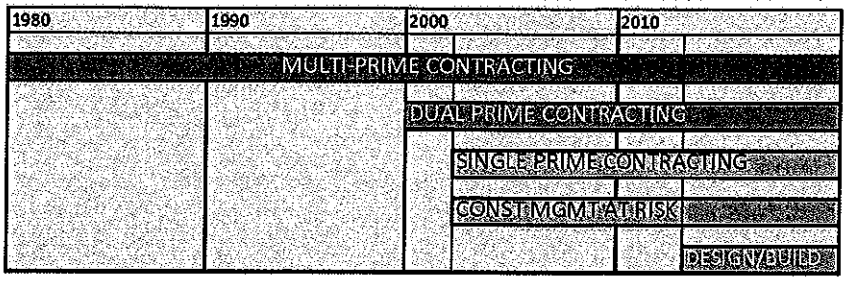
History of Public Delivery Methods in North Carolina



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Recent State Law Changes on Construction Delivery Methods

Per NC Legislature - June 2014 – HB 1043:

- Advance justification by public bodies now required for Other Project Delivery approaches (other than Multi-Prime, Single Prime, or Dual Bidding)
- Determine advantages/disadvantages of Other Delivery Approaches in lieu of Traditional Delivery Approaches

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Traditional Methods

A. Multi-Prime Construction
   - Typically 4-6 "prime" trade packages are bid
   - Each Prime contracts with the Owner
   - No Involvement in Design Phase

B. Single Prime Construction
   - All work bid as single package
   - No Involvement in Design Phase

C. Dual Prime – Options A & B Bid Concurrently
   - May chose either option after bids received
   - No Involvement in Design Phase

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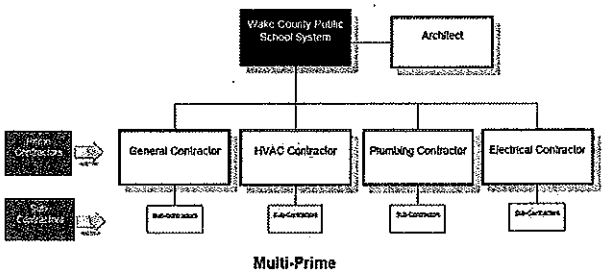
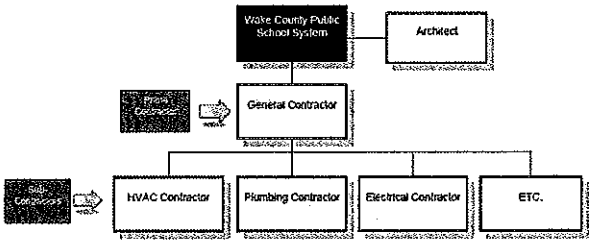
Traditional Delivery Methods



Multi-Prime



Single-Prime

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More Recent Allowed Methods

D. Construction Manager at Risk
- Involved throughout Design Phase
- Responsible for coordination and complete construction
- Prequalifies all subcontractors
- Publicly bids all subcontracts
- Selection of CM is similar to selection of designers

E. Design/Build
- Similar to CM except Design/Construction by single entity
- Variation - Design/Build Bridging
- Newly Approved Method by Legislature in 2013

F. Other Contracting Methods
- Requires Approval by State Building Commission

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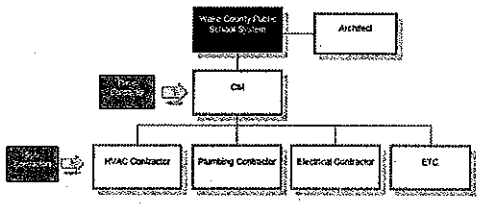
Construction Manager at Risk



- Selection based on qualifications
- Fixed Fee established for design phase services and for management of construction
- "Preconstruction Services" – design phase involvement
- Involvement throughout the life of the project

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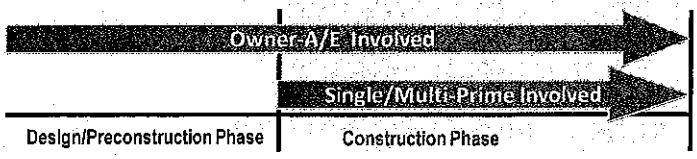
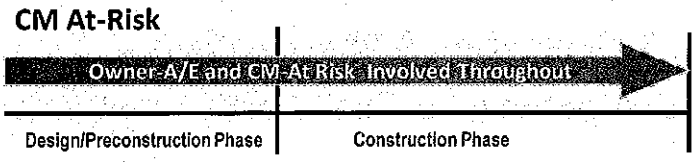
Traditional Bid vs. CM At Risk Involvement

Single or Multi-Prime Bid



CM At-Risk



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Features of the Construction Manager at Risk Delivery Method

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Construction Manager at Risk

Preconstruction Phase

- Detailed Cost Estimates
- Constructability Reviews
- Value Engineering Analysis
- Schedule Development & Coordination
- Site Utilization & Phasing Plans
- Competitive Public Bid of Subcontracts

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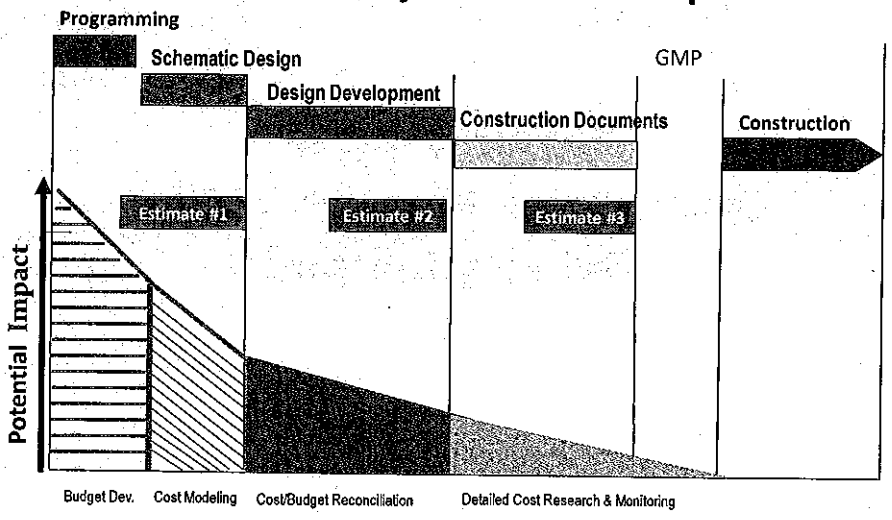
Value of Early Contractor Input



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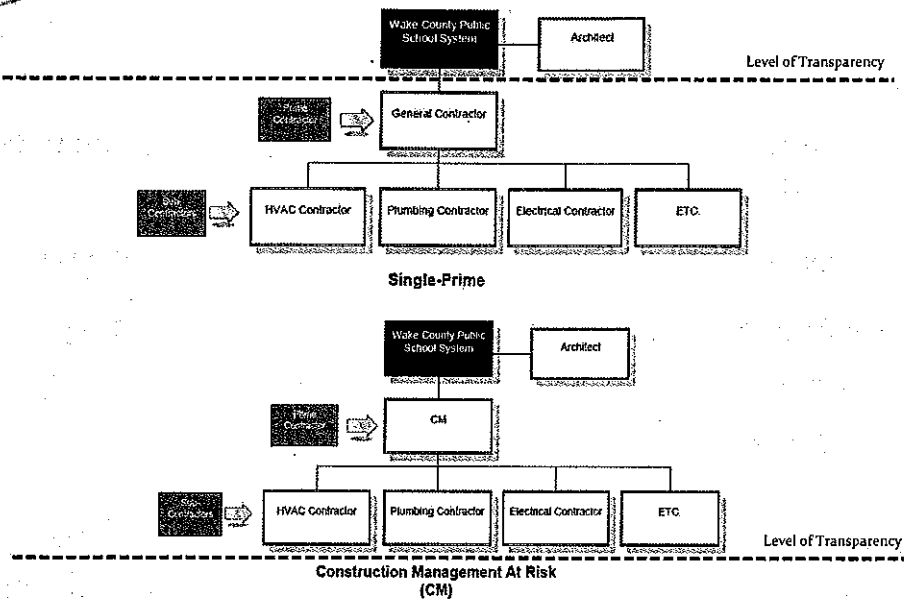
Level of Transparency



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Transparency

- CM - Transparency in the overall process
  - Contract is Open Book; easily checked
  - Subcontractors prequalified
  - Sub bids publicly opened and lowest responsive is selected

- Single Prime – Very limited transparency
  - Only the total project bid amount is provided
  - Method of subcontractor selection is not disclosed
  - Unqualified subcontractors may be used

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Subcontractor Prequalification

- Subs are identified and evaluated; approved as capable and qualified
- On average – majority of subs are same as Single Prime
- Both methods provide 97 – 100% of subcontracting dollars to North Carolina subs
- 90% of CM cost goes to the subcontractors

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Minority Business Enterprise Utilization

	Single Prime	CM
History of MBE Participation (PLAN 2004 / CIP 2006)	7.5%	23%

- With Single Prime, minimal outreach
- With CM, extensive MBE recruitment effort
- With CM, effort made to create small work packages that MBEs can bid
- With CM, more work contracted out since they cannot self-perform
- With CM, mentoring of MBE occurs

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Schedule Control

- Schedules are initially developed during the design phase
- CM staffed better to monitor schedule closely
- Overall schedule efficiency better on CM projects

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Relative Costs of Delivery Methods

Single Prime Contracting

- Amount of profit included in bid determined by current market conditions
- Potential for Fee/ Profit Increase during project

CM At Risk

- Fee is negotiated and set in the contract
- On bid Day, CM does have the possibility to have higher cost due to:
  - More onsite personnel than Single Prime
  - More subs bonded with CM
  - MBE outreach effort
  - Effort required to pre-qualify subs
  - Preconstruction services

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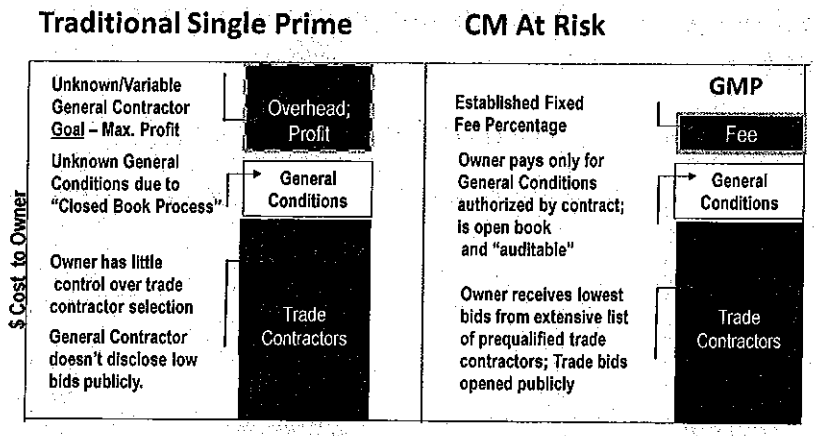
Relative Costs of Single Prime vs. CM



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Previous WCPSS School Cost Experience with Single Prime vs. CM (in $/square foot)

	Single Prime (SP)	# SP Schools	CM	# CM Schools
Elementary	$171.18	6	$158.41	9
Middle	$177.34	1	$169.36	3
High	$160.90	2	$150.32	3

- CM elementary building cost is 7% lower than Single Prime
- CM middle building cost is 4% lower than Single Prime
- CM high building cost is 7% lower than Single Prime

Data is from 2004 to present. All cost are in today's dollars. Bid prices for schools bid before 2014 were escalated to present using Means Historical City Cost Index.

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CM At Risk Selection Process

- Similar to Designer Selection Process
- Process outlined in NCGS 143-64.31
- Develop Evaluation Criteria
- Establish Selection Committee
- Solicit qualification packages
- Receive qualification packages
- Review & shortlist firms
- Interview & rank finalists
- Negotiate contract terms & fee with top ranked CM
  - if negotiations prove unsuccessful, contact #2 ranked CM

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CM At Risk Selection Process

Typical Selection Criteria

- Experience on similar projects
- Capabilities for Preconstruction services
- Local knowledge and proximity to project
- Project staff (experience & availability)
- References - proven results
- Financial resources, bonding capability, insurance limits
- Relationship with local trade contractors
- Historical fixed fees on other projects
- Litigation history

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Use of CM Process

LOCALLY

Wake County Government

- Justice Center
- Detention Center Expansion
- Davie Street Parking Deck
- Public Safety Center Renovations
- WakeBrook Mental Health Campus
- Vernon Malone Academy (CTE High School)

City of Raleigh

Wake Technical Community College

- Majority of projects in 2012 Bond will be CM

OTHER NC PUBLIC BODIES

In addition to WCPSS, the other large school systems in NC use CM

- Charlotte- Mecklenburg
- Guilford County

UNC System and City of Charlotte

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Private Industry Uses CM Extensively

- SAS
- Red Hat
- BCBS
- BB&T
- Fidelity
- Glaxo
- IBM
- Bank of America
- MetLife
- Cisco
- Lowes
- TWC
- Wells Fargo
- First Citizens
- YMCA
- Duke Energy
- WakeMed
- BASF
- Biogen
- Novartis

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Delivery Method General Advantages - Recap

	Single Prime	CM
Advance Public Justification of Use per (H1043)	Advantage	
Prime Contractor Selection		Advantage
Involvement in Design Process		Advantage
Prequalified Sub-contractors		Advantage
Transparency of Overall Process		Advantage
History of MBE Participation (PLAN 2004 / CIP 2006)		Advantage
Schedule Efficiency		Advantage
Potential for Fee/Profit Increases by Prime Contractor		Advantage

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CM At Risk - Importance to WCPSS

- Critical Schedule Dates for School Openings
- Cost Control from Beginning of the Project
- Transparency of Overall Process
- CM as Advocate vs. Adversary
- MBE Participation

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CIP 2013 Wake County School Projects Recommended for CM at Risk

Projects	Bond Est. Cost Per Project
5 New Elementary Schools to Open in Fall 2017	$18M
1 New Middle School to Open in Fall 2018	$36M
Vandora Springs Elementary Renovation/Addition	$17M
Lincoln Heights Elementary Renovation/Addition	$16M
Brooks Elementary Renovation/Addition	$17M
Garner High Renovation/Addition	$55M
Stough Elementary Renovation/Addition (Fully Funded in Next Bond)	$20M
East Wake Middle Renovation/Addition (Fully Funded in Next Bond)	$20M
Apex High Renovation/Addition (Fully Funded in Next Bond)	$42M

Note:
Includes budgeted public infrastructure

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CIP 2013 Projects Recommended for Single Prime Contracting Method

- Rolesville Elementary School Renovation
- $80 Million in Other Projects, including:
  - Life Cycle Replacements
  - Security System Installations
  - Mobile/Modular Relocations

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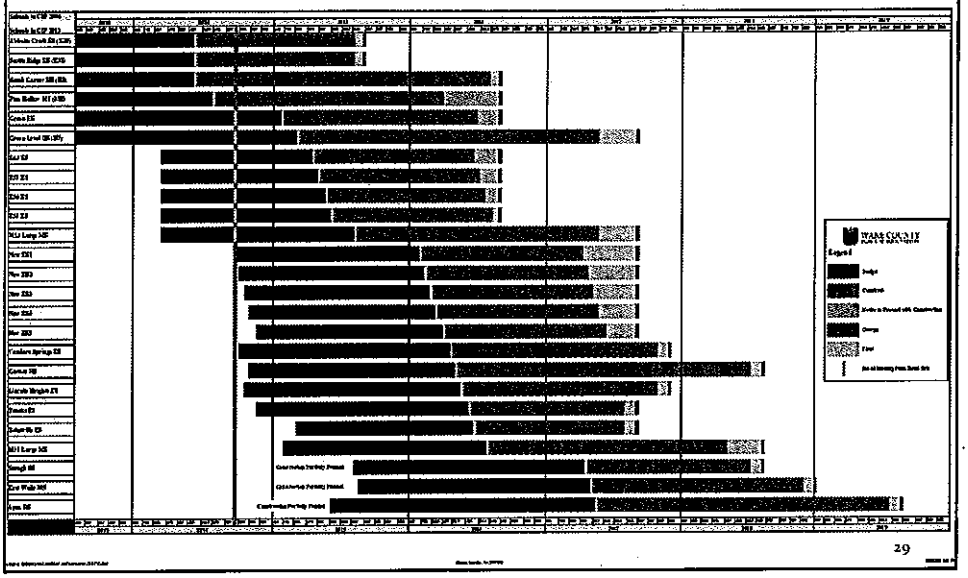
CIP 2013 School Project Development Schedule



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Next Steps

- Formal Approval by Board of Education – Aug. 19
- Advertise Request for Qualifications – Aug. 24
- Interview Short Listed CM Firms – Oct. 3-7
- Board of Education Approves Selections – Dec. 2
- CM's Begin Preconstruction on First Projects – Dec. 3

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Questions

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