TSD401 FACILITIES CAPACITY REVIEW

03.14.2016

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FACILITIES REVIEW

- Review 2012 Capacities Study
- 2016 Capacities

CONSTRUCTION DELIVERY METHODS

- Design/Bid/Build
- Design/Build
- CMA
- CMGC

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DETERMINING CAPACITY OF YOUR FACILITIES

- Idaho Dept of Ed does not have a standard
- Idaho Division of Building Safety does not have a standard
- International Building Code
  - Classroom Areas 20sf/occ
  - Shops and Other Voc. Rooms 50sf/occ
- International Mechanical Code
  - Occupants < or = 9 yrs: 40sf/occ
  - Occupants > 9 yrs: 28sf/occ
- Other State Standards
- National Data

DETERMINING CAPACITY OF YOUR FACILITIES

- Other State Standards
  - North Dakota Department of Instruction
  - Wyoming School Facilities Department
  - California Department of Education
  - Texas Education Agency
  - Universal Child Care Licensing Standards

- National Data
  - School Planning and Management
    - Annual School Construction Report

DETERMINING CAPACITY OF YOUR FACILITIES

- Elementary Schools
  - Classrooms = 35 sf/occ
  - School = 129 sf/occ

- Middle Schools
  - Classrooms = 37 sf/occ x 0.85 Utilization Rate
  - School = 138 sf/occ

- High Schools
  - Classrooms = 40 sf/occ x 0.8 Utilization Rate
  - School = 165 sf/occ

PLANNING STANDARDS

STATE OF IDAHO RECOMMENDATIONS FOR ACREAGE OF SCHOOL FACILITIES

DETERMINING THE CAPACITIES OF YOUR SITES

- Elementary
  - Minimum of 5 acres
  - Additional acre for each 100 pupils

- Junior High Schools
  - 10 acres for enrollments to 300
  - 15 acres for enrollments to 500
  - 20 acres + 1 acre for each 100 pupils for enrollments > 500

- Senior High Schools
  - 20 acres for enrollments to 400
  - 25 acres for enrollments to 800
  - 30 acres + 1 acres for each 100 pupils for enrollments > 800

PLANNING STANDARDS

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05.2012 - TSD401 Facility Service Life

Expected Service Life of Facilities	Years
Masonry	*77
Wood	*51
Concrete	*87
Steel	*77
Portable Structures	**25

*Survey on Actual Service Lives of North American Buildings 2004
**Capital Assets of Local Governments Suggested Useful Lives

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03.2012 STUDY REVIEW

Teton High School/Vo-Ag	
Building Data	
Total Building Square Footage (TBSF)	90,000
Number of Classrooms	29
Total Classroom Square Footage (TCSF)	29,512
Actual Student Body (2012)	413
Capacity	
Widely Accepted Standard Method [TCSF/(40 sf/occ.) x 0.8 Utilization Rate]	590
2011 National Median Method [TBSF/(165 sf/occ.)]	545
Capacity Range of 545-590 Students	70-76%

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03.2012 STUDY REVIEW

Teton Middle School	
Building Data	
Total Building Square Footage (TBSF)	61,773*
Number of Classrooms	22*
Total Classroom Square Footage (TCSF)	19,512
Actual Student Body (2012)	381
Capacity	
Widely Accepted Standard Method [TCSF/(37 sf/occ.) x 0.85 Utilization Rate]	448
2011 National Median Method [TBSF/(138 sf/occ.)]	447
Capacity Range of 447-448 Students	85%

*Figures deviate from District provided figures

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03.2012 STUDY REVIEW

Rendezvous Upper Elementary School	
Building Data	
Total Building Square Footage (TBSF)	26,036
Number of Classrooms	13
Total Classroom Square Footage (TCSF)	9,083
Actual Student Body (2012)	256
Capacity	
Widely Accepted Standard Method [TCSF/(35 sf/occ.)]	259
2011 National Median Method [TBSF/(129 sf/occ.)]	201
Capacity Range of 201-259 Students	99-127%

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03.2012 STUDY REVIEW

Driggs Elementary School/Basin High School	
Building Data	
Total Building Square Footage (TBSF)	46,538*
Number of Classrooms	22*
Total Classroom Square Footage (TCSF)	13,781*
Actual Student Body (2012)	280
Capacity	
Widely Accepted Standard Method [TCSF/(35 sf/occ.)]	393
2011 National Median Method [TBSF/(129 sf/occ.)]	360
Capacity Range of 360-393 Students	71-78%

*Figures include maintenance square footage and second floor classrooms

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03.2012 STUDY REVIEW

Driggs Elementary School	
Building Data	
Total Building Square Footage (TBSF)	34,368*
Number of Classrooms	18*
Total Classroom Square Footage (TCSF)	13,781*
Actual Student Body (2012)	250
Capacity	
Widely Accepted Standard Method [TCSF/(35 sf/occ.)]	269
2011 National Median Method [TBSF/(129 sf/occ.)]	266*
Capacity Range of 266-269 Students	93-94%

*Figures modified to exclude space not utilized by Driggs Elementary

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03.2012 STUDY REVIEW

Victor Elementary School	
Building Data	
Total Building Square Footage (TBSF)	22,382
Number of Classrooms	9
Total Classroom Square Footage (TCSF)	6,703
Actual Student Body (2012)	187
Capacity	
Widely Accepted Standard Method [TCSF/(35 sf/occ.)]	191
2011 National Median Method [TBSF/(129 sf/occ.)]	173
Capacity Range of 173-191 Students	98-108%

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03.2012 STUDY REVIEW

Tetonia Elementary School	
Building Data	
Total Building Square Footage (TBSF)	15,158
Number of Classrooms	8
Total Classroom Square Footage (TCSF)	4,300
Actual Student Body (2012)	86
Capacity	
Widely Accepted Standard Method [TCSF/(35 sf/occ.)]	122
2011 National Median Method [TBSF/(129 sf/occ.)]	117
Capacity Range of 117-122 Students	70-74%

TSD401 FACILITIES CAPACITY REVIEW

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03.2012 STUDY REVIEW

03.2012 - TSD401 Facilities Capacities					
Facility	**Student Body**	**Max. Capacity Range**	**% of Max. Capacity**	**Age of Facility**	**% of Service Life**
Teton High School	413	545-590	70-76%	1998	18%
Teton Middle School	381	447-448	85%	2009	4%
Rendezvous Elementary School	256	201-259	99-127%	1958	110%
Driggs Elementary/Basin High School	280	360-393	71-78%	1952/72	81%
Driggs Elementary School	250	266-269	93-94%	1952/72	81%
Victor Elementary School	187	173-191	98-108%	1948	95%
Tetonia Elementary School	86	117-122	70-74%	1953	79%

TSD401 FACILITIES CAPACITY REVIEW

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03.2016 - TSD401 Facilities Capacities								
Facility	**Student Body 2012**	**Student Body 2016**	**Capacity Range**	**% of Capacity 2012**	**% of Capacity 2016**	**Age of Facility**	**% of Service Life 2012**	**% of Service Life 2016**
THS	413	490	545-590	70-76%	83-90%	1998	18%	23%
TMS	381	407	447-448	85%	91%	2009	4%	9%
RUES	256	262	201-259	99-127%	101-130%	1958	110%	118%
DES/BHS	280	377	360-393	71-78%	96-104%	1952/72	81%	86%
DES	250	317	266-269	93-94%	117-119%	1952/72	81%	86%
VES	187	189	173-191	98-108%	99-109%	1948	95%	100%
TES	86	100	117-122	70-74%	82-85%	1953	79%	84%

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03.2012 STUDY REVIEW

03.2012 - TSD401 Site Capacities			
Facility	**Acres**	**State Recommendation**	**% of Capacity**
Teton High School	40	25 acres	63%
Teton Middle School	40	15 acres	37%
Rendezvous Upper Elementary School	6.58	7.62 acres	116%
Driggs Elementary/Basin High School	8	8.17 acres	102%
Victor Elementary School	2.5	6.89 acres	276%
Tetonia Elementary School	4	6 acres	150%

WHAT'S WRONG WITH OVERCROWDING?

- Overcrowding is sharply linked with…
  - lower achievement
  - students paying less attention
  - more violence
  - spread of illness

HOW DO WE DEAL WITH OVERCROWDING?

- Do nothing.
- Fill the playground and parking areas with "temporary" facilities;
- Convert gymnasiums, stages, libraries, computer labs, special education rooms, teachers' work rooms, and storage areas into classrooms;
- Attempt to move students elsewhere (bus them);
- Adopt new schedules (multi-track/year round); and/or
- Expand and/or replace facilities.

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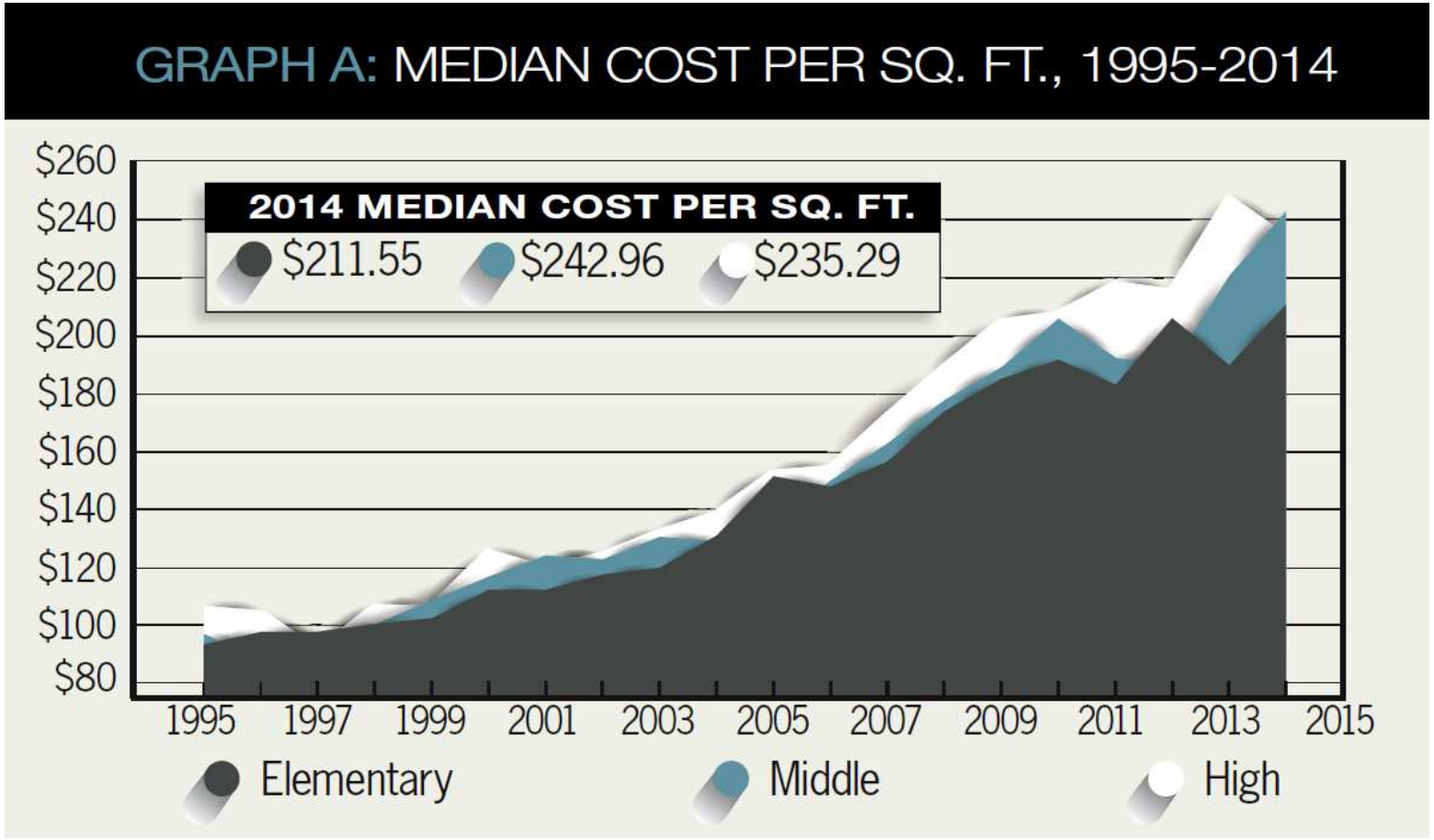
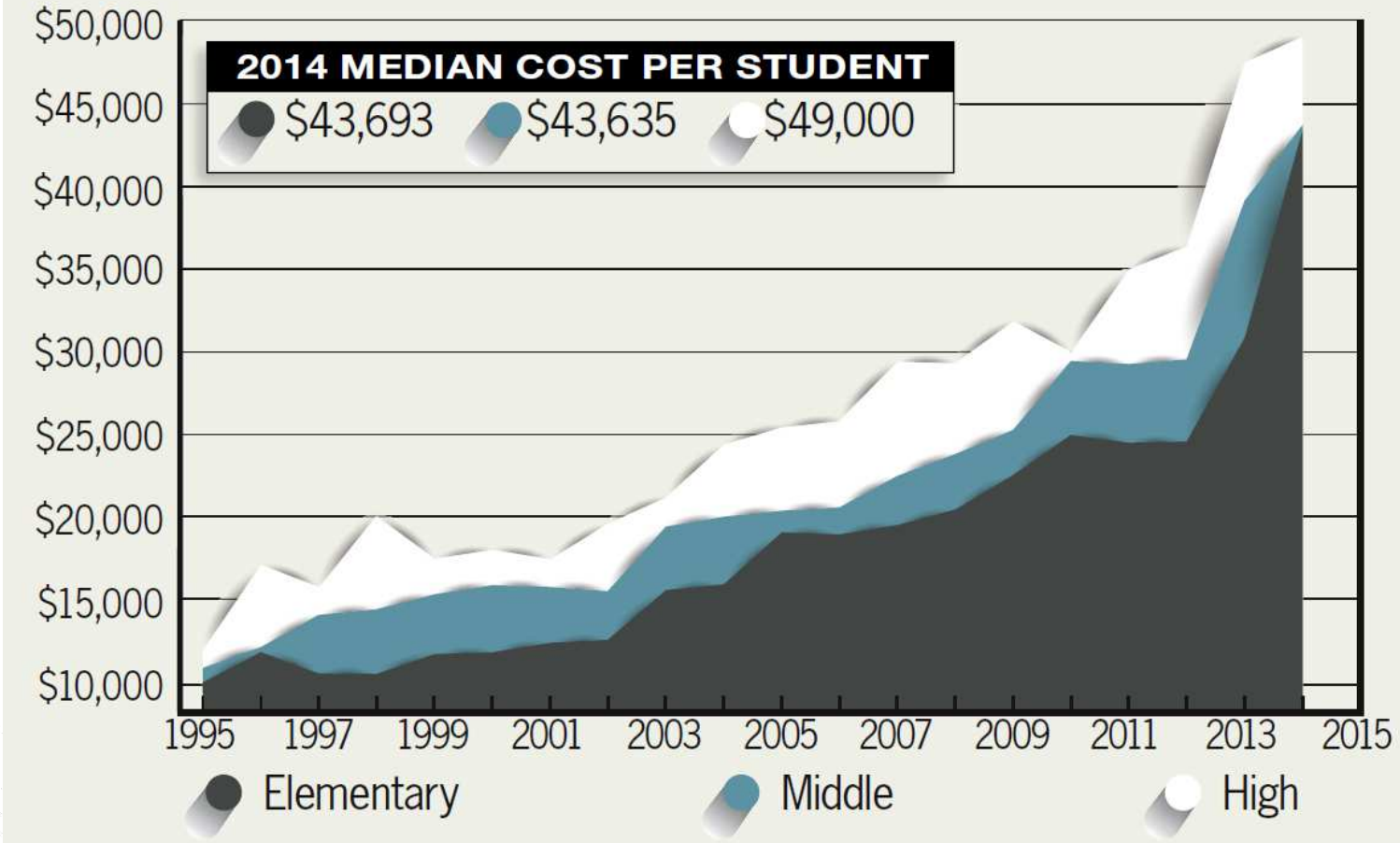
SCHOOL PLANNING & MANAGEMENT
20TH ANNUAL SCHOOL CONSTRUCTION REPORT FEBRUARY 2015



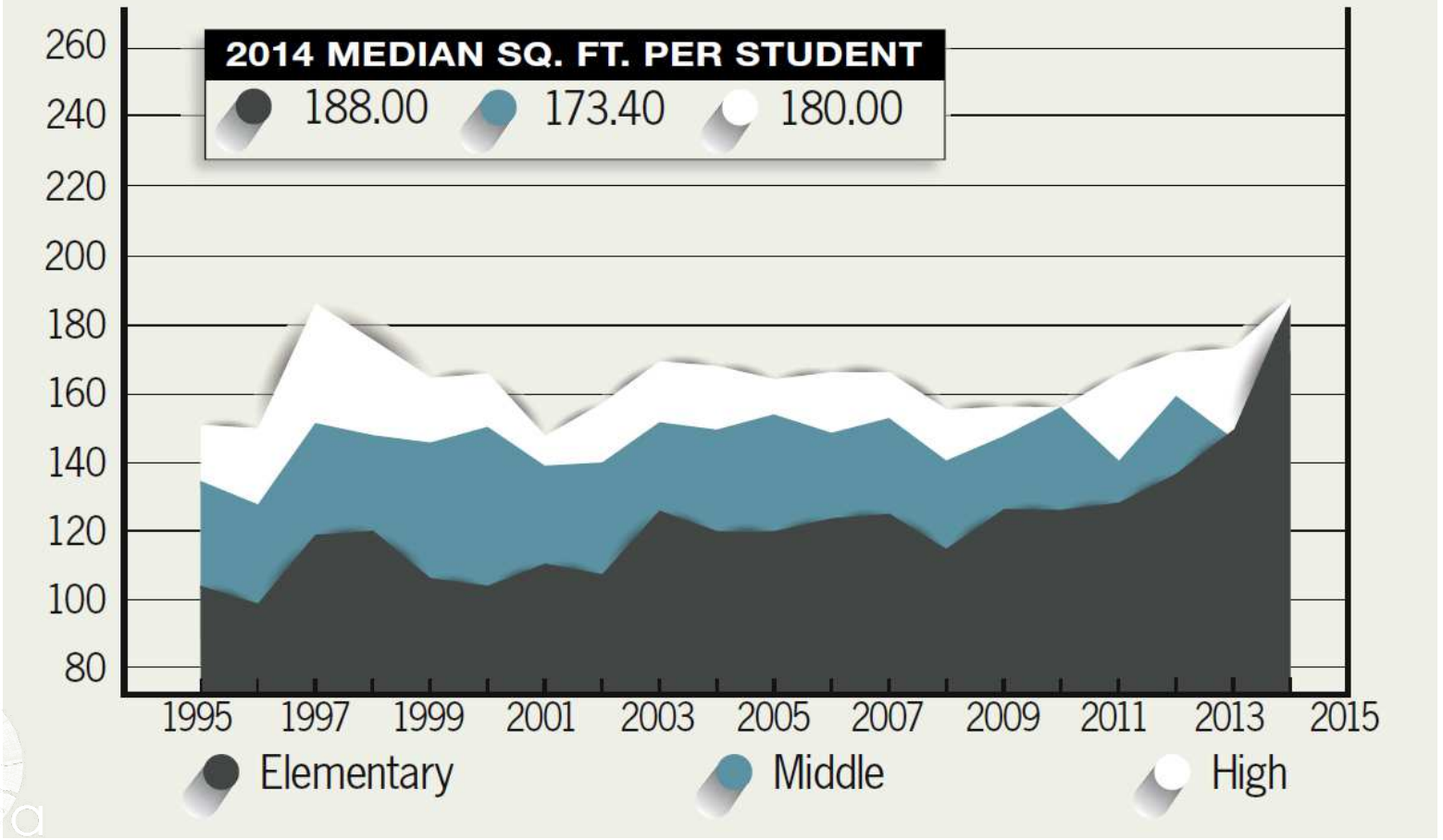
SCHOOL PLANNING & MANAGEMENT
20TH ANNUAL SCHOOL CONSTRUCTION REPORT FEBRUARY 2015

GRAPH B: MEDIAN COST PER STUDENT, 1995-2014



SCHOOL PLANNING & MANAGEMENT
20TH ANNUAL SCHOOL CONSTRUCTION REPORT FEBRUARY 2015

GRAPH C: MEDIAN SQ. FT. PER STUDENT, 1995-2014



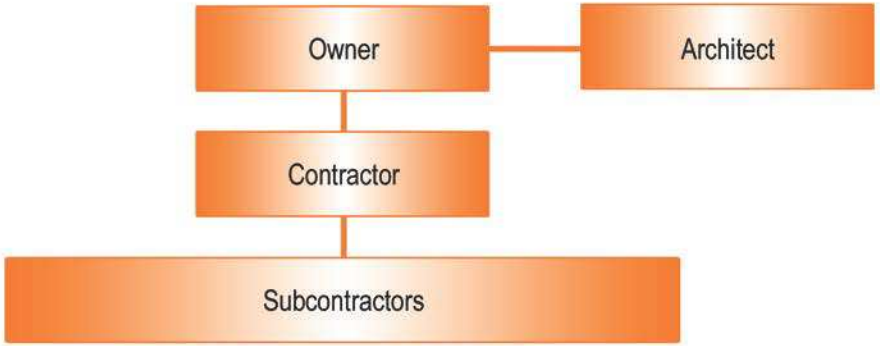
DESIGN-BID-BUILD

PROS

- Traditional method most widely used
- Theoretically, the lowest possible price
- Transparent procurement

CONS

- Little control over who bids and builds the project
- No input from Contractor on documents prior to bidding
- No control of construction cost prior to bidding



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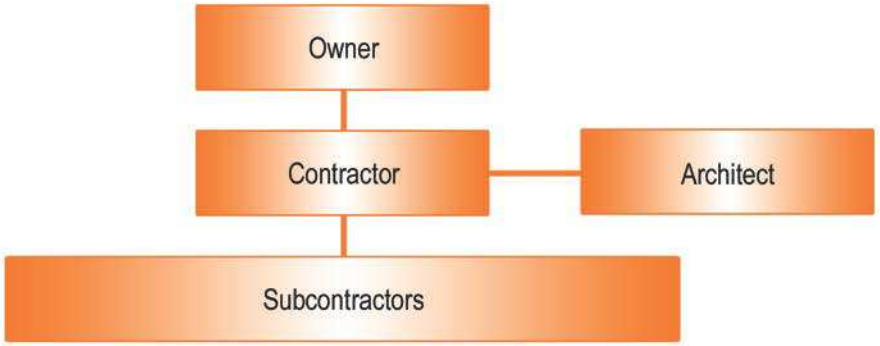
DESIGN-BUILD

PROS

- Single source of responsibility
- Allows Contractor and Architect to work as a team
- Establishes early and accurate cost estimates

CONS

- Eliminates checks and balances between Architect and Contractor
- The Project will be only as good as the proposal criteria given to the DB team
- Contractor has the final word on Aesthetics
- Contractor controls the flow of communication



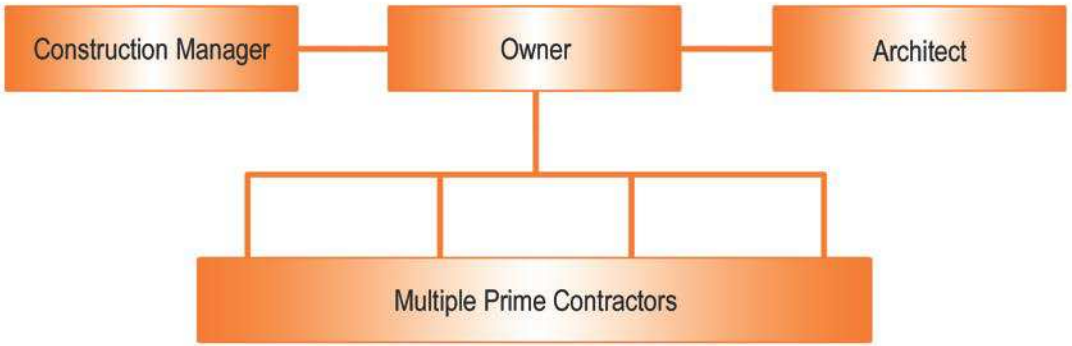
CONSTRUCTION MANAGER (CM) CONSTRUCTION MANAGER AGENCY (CMA)

PROS

- Construction Manager chosen through pre-qualification
- Can help establish preliminary costs but with no guarantees
- Allows for value engineering throughout design

CONS

- Construction Manager does not bond the project
- No single source of responsibility
- Owner holds multiple contracts (Heavy Owner involvement throughout)
- Can create finger pointing between prime contractors



CONSTRUCTION MANAGER GENERAL CONTRACTOR (CMGC)

CONSTRUCTION MANAGER AT RISK (CMAR)

PROS

- Owner maintains traditional control over project design and quality
- Increases opportunity to use local labor force
- Develops early and accurate scheduling
- Develops early and accurate costs
- Owner has guaranteed cost prior to bidding (no surprises)
- Maintains checks and balances between Architect and Contractor

CONS

- Can result in inflated costs