



Innovative Contracting: Why they do the things they do?

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Innovative Contracting Methods

What are we going to Discuss????

Why
Innovative
Contracting
can be
useful?

What are the
different
methods?

Some
specifics
about a few
of the
methods

New ideas?

Why Innovative Contracting can be useful?

- Reduce Overall Contract Time
- Allow for Contractor Innovation
- Better Plans
- Most Economic Plan Cost
- Easier Administration
- Control Budget

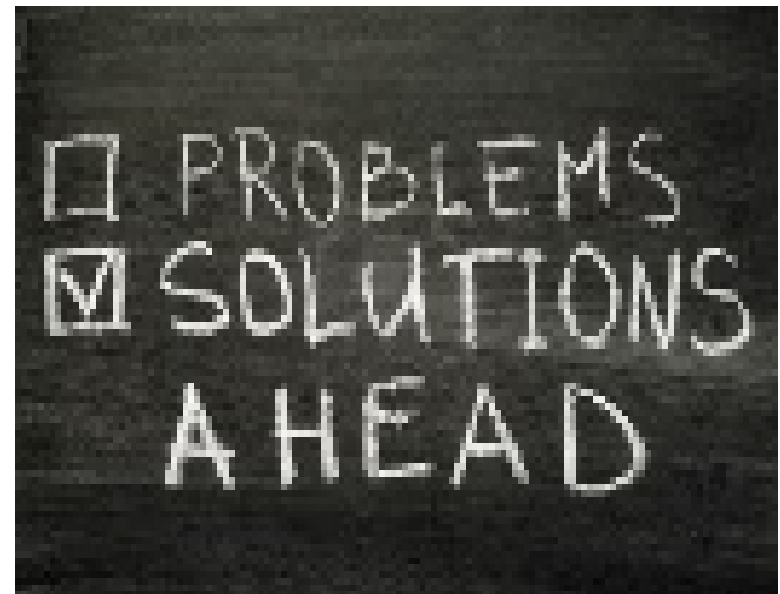
Innovative Contracting Methods?

- A+B
- Lane Rental
- Constructability Reviews
- Incentives/Disincentives
- Locked Incentive Date (LID – No Excuse Bonus)



More...Innovative Contracting Methods?

- Design Build
- Additive Alternates
- Indefinite Delivery Indefinite Quantity (IDIQ)
- Construction Manager/General Contractor (CMGC)



A+B Bidding

A+B bidding reduces contract time on projects. Contractors bid the time to complete the project and a dollar amount for work items. Uses 'Traditional' Method, but adds a time factor

- Contractors bid cost + time:

$$(A) + (B \times \text{Road User Cost/Day}) = \text{Total Bid}$$

- Contract is awarded to the lowest bid of the combination of cost + time.
- A+B+C – Multiple Components (staging, detours, etc.....)

Why use Use A+B

- **Benefits**

- Improved coordination between prime and sub-contractors
- Reduced construction time minimizes impacts to users.
- Contractors should be taking a close look at putting together a well conceived schedule.

- **Project Selection**

- A+B bidding should focus on projects with significant impacts to motorists, businesses, emergency services, or other groups that will be directly impacted by the project.

A+B Example

Assumptions:

Maximum number of allowed bid days = 100days

Road User Cost = \$1,000/Day

	Cost "A"	Time "B"	Cost +Time (A+B)
Bidder #1	\$487,000	100 Days (\$100,000)	\$487,000 + \$100,000 = \$587,000
Bidder #2	\$490,000	87 Days (\$87,000)	\$490,000 + \$87,000 = \$577,000
Bidder #3	\$500,000	80 Days (\$80,000)	\$500,000 + \$80,000 = \$580,000

Bidder #2 would be the apparent low bidder

What Size Project?

- Any Size (\$600k to \$380M)

Number of Projects

- 2000 to 2008 – 44 Projects
- 2015 to 2018 – 26 Projects

Time Savings

- 23% reduction in bid times
- More time saved with Incentives

Project Costs

- Winning Bid is averaging 3% less than Engineer Estimate

Lane-Rental

Lane-rental reduces impacts to the traveling public by minimizing the time lanes are closed.

Contractors are charged a fee for closing lanes and shoulders due to construction activities. The concept focuses on the time that the public is affected, NOT the overall contract time.



MnDOT has used this procurement 4 times since 2014

Use for short-term durations

- Daily lane closures
- Minimize time lanes are closed
- Bidding similar to A+B or provide a “pool”
- Better public perception due to fewer un-utilized lane closures

OCIC Recommendations

- Keep it simple
- Use on short-term segments of a project
 - Short-duration mill and overlay
 - Turn Lane Construction
 - Center pier construction
 - Finishing work after roadway is open

Constructability Reviews

Constructability Reviews

The industry provides valuable feedback into key areas that the Agency may not be able to quantify during the project development process. Feedback on preliminary plans has the potential to significantly reduce project costs and construction timelines.



Constructability Reviews

- One-on-one meetings with contractors at about 40-50% design
- Obtain input from Contractors early
- Incorporate input back into design
- Consider bringing in subs if issues demand
- Past Examples
 - TH 36
 - I-35 Duluth
 - TH 10 Detroit Lakes

Becoming popular with both MnDOT staff and Contractors

Incentive/Disincentive

Incentives/Disincentives

The contractor is paid for early completion of a project or segment of the project, as provided for in the contract. If the contractor completes the project later than the time allowed, disincentive money is usually subtracted from payments due.



Incentive/Disincentives

- Offer incentives to reduce contract time
 - Entire Project
 - Stage Completion
- Reinforce an important completion date
- Improved public relations by information businesses/residents that you are committed to completing the project as quickly as possible.
- Contract changes can lead to disputes regarding incentive payments

LID (Locked Incentive Date)

Locked Incentive Date

A locked incentive date provides an incentive if the contractor completes the work required early. Contractors are not allowed any extensions in the completion date, regardless if extensions are owner caused or not.

If Contractor accepts the LID they are still compensated for extra work, but not time.

Use of LID's

- A LID is usually associated with a risk the Department is trying to prevent
 - Examples:
 - Long Term closure of major highway or interchange
 - Milestone deadline impacting adjacent project
 - Avoid winter suspension
 - Contractor has more at risk with LID
- Normal incentive if we have little or no risk



Design Build Best Value

Definition:

A procurement process where price and other key factors can be considered in the evaluation and selection process to minimize impacts and enhance the long-term performance and value of construction.



Design Build Best Value



- What factors might be used for evaluation??
 - ✓ *Time*
 - ✓ *Quality*
 - ✓ *Qualifications*
 - ✓ *Innovation*

Best Value

Some Example Criteria that has been evaluated (custom tailored for each project):

1. Price
2. Risk Understanding and Mitigation
3. Key Personnel
4. Minimize construction related impacts to local communities

5. Schedule

38 projects since 2002

6. Safety

2 currently in procurement

7. MOT

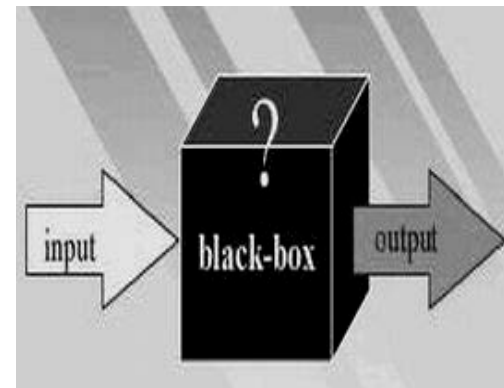
3 planned for the near future

Additive Alternates

Additive Alternates

A bidding technique that may be used when it is necessary to keep the contract amount within a budget limit and let the industry compete on the largest scope that fits within the budget.

Very transparent.....no black box



Additive Alternates

Why use it?????

Promote competition, maximize or enhance the work within a defined budget, and minimize work (cost) added through the change order process.

What can these provisions do?????

- ✓ Help maximize the scope for projects within limited or tight budgets.
- ✓ If there is some uncertainty regarding the cost of the project and features can be incrementally scoped to maximize use of available funds.
- ✓ If the project scope can be tailored to include add-ons in priority of importance.
- ✓ Obtain the best options for the available funds where substitutions are specified that improve quality or performance within the defined budget.

Indefinite Delivery/Indefinite Quantity (IDIQ)

IDIQ

IDIQ contract is a method to “provides for an indefinite quantity, within stated limits, of supplies or services during a fixed period of time”



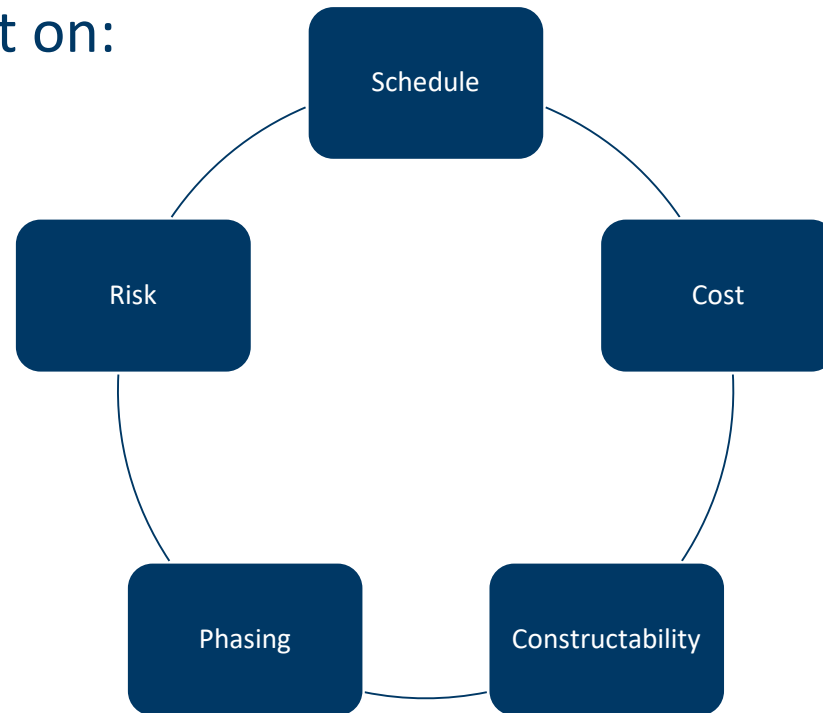
MnDOT has used IDIQ procurement 67 times since 2013

Why in the world would we want to use IDIQ!!!!

- ▶ Multiple contracts of similar scope in close proximity
- ▶ Districts often determine a budget for a type of work before knowing the exact locations of the work
- ▶ District budgets can be difficult to maintain at the end of the year
- ▶ Reduce the amount of overall contracts needed to perform this work
- ▶ We were using funds that should have been spent on road projects to buy plow blades, salt, etc.

Construction Manager/General Contractor (CMGC)

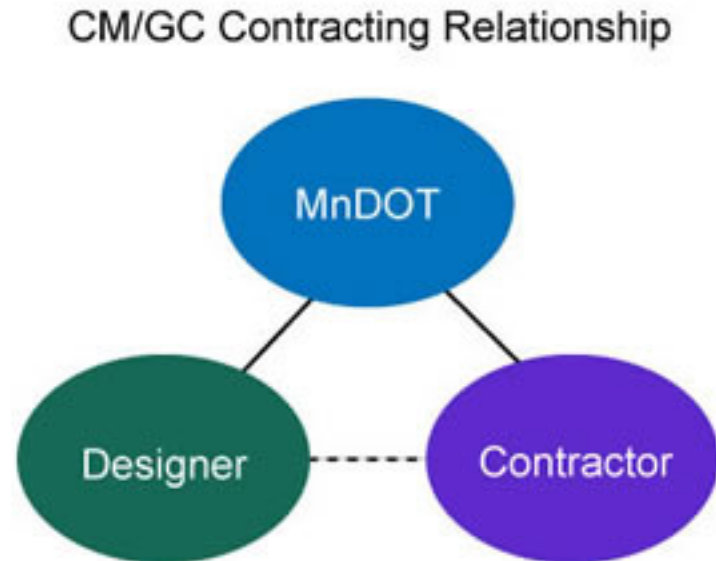
- CMGC is an alternative process to designing and constructing projects.
- Contractor hired during project design
- Provide input on:



- Construct project if an agreed to price can be reached

When to Use CMGC?

- Particularly beneficial for projects with:
 - Inherent 3rd party risk
 - Technical complexities/new technologies
 - Complex staging
 - Significant schedule/budget constraints



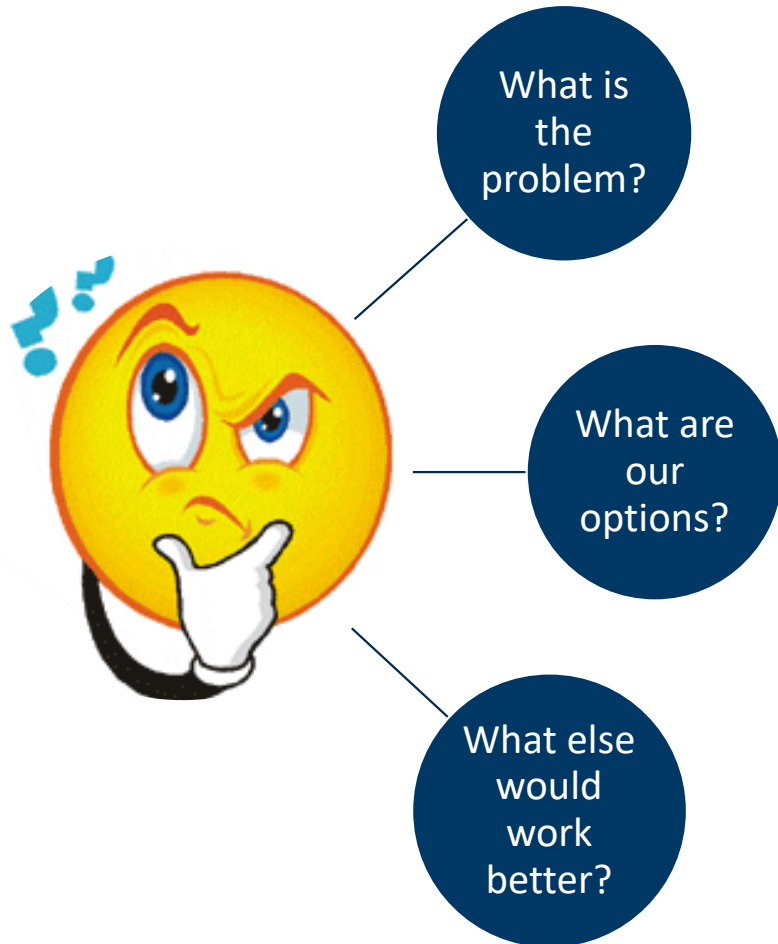
CMGC Projects

Six projects out of an allowed 10 since 2012

- Winona Bridge
- TH 53 Bridge
- Smith Ave. High Bridge in St. Paul
- 3rd Ave Bridge
- Storm-water Storage Facility
- Twin Ports Interchange



MnDOT's Perspective





What has worked well?

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<http://www.dot.state.mn.us/const/tools/innovativecontract.html>

