



# COST ESTIMATING PROCEDURES, TOOLS AND CONSIDERATIONS

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# Estimating vs Bidding

- Estimating
  - 1) *...to calculate approximate amount or value of something*
  - 2) *... to form an opinion about or evaluate*
  - 3) *... How is Contractor Going to Bid (not found in any dictionary)*
- Bid
  - 1) *...To offer or propose (an amount) (Contractually Binding)*

# How Do Contractors Estimate ?

- Determined by Contractor
  - (can't be "Materially Unbalanced")
  - Know Costs + Unknown Costs
  - HCCS / Other Software ?
  - Internal Process / Programs
  - Calculation of Actual Costs + Risk
  - Experience (Risk / Reward)

# The \$Million ? (or much more!)

How Attractive Have You Made  
The Project to Industry ?



Your Design / Contract Affects Price !

Are You Promoting Competition (Primes and  
Subs) ?

- Accurate (Bidable) Plans and Quantities
- Appropriate Risk Allocation
- Constructable Schedule

# What Creates Variability In Bids (The Big Three)

- Schedule
  - Staging – Shifts - Mobilizations
  - Night Work
  - Short Work Windows
  - Large LD's
- Utilities
  - During Construction ?
  - Unknowns – Trans 220 Recovery a Risk
- Environmental
  - Risk
  - Work Limitations

# Plans

- Inaccurate Plans – Contractors Can Determine Quickly - Is Confidence Developed ?
- Accurate Quantities
- Confusing Method of Payment – Notes in Plans
- Undistributed Quantities
  - Especially on Blended Items !
- PPP or Incidental (items that may change)
  - Earthwork
  - Ice for Structures
  - Water
  - Etc....

# Other Considerations

- Urban Projects
  - Lack of Staging Areas
  - Pedestrian Accommodation Responsibility
  - Traffic
  - Buildings
- Time of Year (Weather Concerns)
  - Constructability
  - Safety – Snow – Ice – Frostbite = Unattractive
- Time of Let - Let Complex Projects Early
  - Some Contractors are Hungry Early
  - Cash Flow – Pay Notes

# Contract Admin. Staff

- Who is Project Leader / Supervisors
  - Will Disputes Be Resolved ?
  - Will Quantities be Measured and Paid Fairly ?
  - Extra Work ?
  - Will CRI's be Accepted ?
  - Will Materials Penalties and Non-Conforming Work be Handled Reasonably ?
  - Will Project Be a Headache to Manage ?

# Last Thoughts

- Historic Unit Prices Not Enough
  - Consider Recent Risk Developments
  - Spec. Changes
  - “Fancy Stuff” is expensive
- Scheduling is Biggest Factor – Labor Costs and Risk
- Commodity Prices can be Volatile and very difficult to predict
- Strongly Consider Addenda Requests and Constructability Review Comments

# How Can WTBA / Industry Help ?

- WTBA is Willing to Work with WisDOT / Consultant Design Teams
  - Accurate Estimates Are Important to Industry Also
  - Bidding Information Is Proprietary
  - Anti-Trust Concerns



Questions ?