# Effective Cost Estimating for Decision Making

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# Sample Items/Topics to Consider

- Educational Programs
- Energy Savings Programs
- Fleet Replacement
- Capital Expenditures
- Office Equipment

#### **Educational Programs**

- What is the goal/outcome wanted by leadership?
- What are the goals of the program?
- Is there data to support gains desired by the proposed program? (Either through published data or internal trials)
- What is the cost of each incremental gain?



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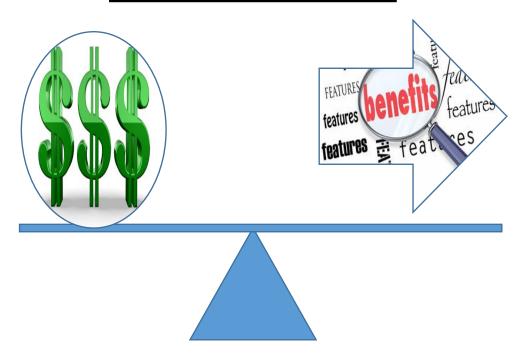
# Education Programs Cont'

#### **Cost to Consider**

- Personnel cost
- Program cost (software, books, license and support)
- Material cost (non re-useable materials and tools, handouts)
- Equipment cost (computers, tech equip, other?)
- Facilities cost
- On going cost to maintain (license, support, expansion)
- Training cost

# Education Programs Cont'

#### Cost vs Benefit



# Education Programs Cont'

- To do a proper evaluation there needs to be some measure of the effectiveness of the program results (either from published data or internal study/trial period).
- What are the results of not implementing (i.e. put the student in special education and what is the cost of that in the long run?)
- The fine line is always the cost vs the incremental improvement desired.

#### Energy Savings Program Evaluation

- Cost to contract vs doing in house
- Know what you are giving up down the road
- Are there "unknown allowances" you are agreeing to?
- Sold as no cost to the board



# Energy Saving Cont'

- What are you required to agree to do to help them achieve their ("your") saving goals?
- Realize that you may be in a sole source situation if controls are not open source (non proprietary)
- Beware of secondary ramifications of contractor's actions

### Energy Savings Cont'

- First step to in house is automated controls
- Training on how to use is critical
- Most will work over WAN
- Do you give up control of the controls?

# Energy Savings Cont'

- Key factor in energy savings is the determination of the "Base Year" which everything is compared to
- Adjustments is one big "got ya"
- Make sure saving reported by the contractor can be verified
- Adjustments through software are very difficult to follow and/or identify

# Fleet/Vehicle Planning

- Be aware of the age of your fleet
- Decision to replace or keep
  - Fuel efficiency
  - Ongoing maintenance cost
  - Mileage per year (use for evaluation calculations)
  - Try to keep buses eligible for Fleet Renewal Funds

# Fleet/Vehicle Planning Cont'

- Try to work toward 10% replacement each year
- Design bid specs to allow most competition possible
- Consider the purchase extended drive train warranty (can not be use to determine low bidder but can be used in life cycle cost). 10yr/200,000mile
- Make sure to include other fuel treatment in life cycle cost

#### **Estimating Capital Cost**

- Prioritize the new construction/maintenace projects needed in the next few years.
- Determine funds available for these projects.
- Get architect/engineer estimates.
- Maintenance is always the first thing cut
- Neglect will cost more in the long run

### Estimating Capital Cost Cont'

- Usually the newer HVAC equipment is more efficient than older models (use in analysis to justify replacement)
- What is the cost to repair vs replace
- Growth/Reduction in ADM should drive new construction needs

### Estimating Capital Cost Cont'

- All capital expenditures are subject to Public Works Law
- Wind Insurance required by contractors
- Timing of decisions (needs, staffing, occupancy)

### Combating and Eliminating Waste in Schools

- Reduce duplication within schools
- Instill an energy saving mindset with all staff
- Central office review of all financially binding contracts
- Evaluate staffing at each school (formula for support staff allocation)
- Automate paper process where feasible



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Questions?????