Fleet management
Bus Purchase

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OSBA leads the way to educational excellence by serving Ohio's public school board members and the diverse districts they represent through superior service, unwavering advocacy and creative solutions.

Do you have a bus purchase plan?

The danger of no plan

- As buses age . . .
  - Increased need for mechanic's time
  - Increased maintenance costs – parts
  - Decreased reliability
  - Potential failing MVI inspections
  - Loss of fuel economy compared with new buses
  - Environmental concerns – exhaust, particulates
  - Parts availability
- And then all of a sudden:
  - Not enough buses left to do the job!

Traps to avoid

- Arbitrary rules not supported by data
- Strictly age or mileage based
- No consideration of fleet capacity
- Buy only when we have the cash
- Wait until next year, then bring it up

Getting to success

- Design a bus replacement plan
  - Evaluate short term needs
  - Evaluate long term needs
  - Collect the data to support the need
  - Understand the financial impact
- Sell the plan
  - Develop understanding of the cost of not buying new buses

Another way . . . Data driven

Evaluate your buses:

- Cost analysis
  - Repair costs (separate from routine service)
  - Fuel costs
  - Labor cost
- Calculate your fleet averages

Compare your costs

- Individual buses to your fleet average
- Your fleet average to state average
- Your fleet average to an average of your peers
  - Where to get the data?
    - Most recent cost analysis report

State average cost per assigned bus

	FY 14	Your cost
Maintenance & Repair (+ supplies)	$ 3,731	?
Fuel	$ 6,793	?
Tires and Tubes	$ 472	?
Bus Insurance	$ 650	
Other	$ 529	

What to do with the numbers?

- If your fleet average compares well to others, at least you are average!
- That does not stop you from improving
- Look at individual buses in your fleet
  - Arrange them by cost of operation/mile
  - Fuel+Maintenance+supplies

Then do what with the results?

- Most cost effective buses should be primary route buses
- Average cost buses should be approaching the end of their routing life
- Worst buses should be off route

The critical number:

Current Bus operating cost

- Operating cost of a new bus

= fiscal benefit of replacement

Example:

Old bus: 6000 maint + 7000 fuel=	13000
New bus: 1000 maint + 3500 fuel =	4500
Fiscal benefit:	$8500

Other factors

- Dependability
  - A bus that has a history of failure/ breakdown
- Buses that no longer fit your need
- 200,000 mile buses
- Ohio rust factor (8 -12 years)

And more factors…

- Environmental concerns
  - How dirty is your exhaust?
- Alternative fuel goals
- Worker's comp issues – equipment related
- District population trend

Before you start buying . . .

- Assess your fleet needs
- Do not buy buses just because old buses are failing, buy buses because you need them in your fleet!

Assessing fleet needs

- Primary Needs
  - Handicap/WC buses needed
  - Seats for regular ed students per tier
  - Vehicle count (different than seating cap)
- Secondary needs
  - Route backup buses, maintenance rotations (state average 1:5)
- Nonroutine needs
  - Daily interfering trips (field trips)

Knowing the needs . . .

- Decide on your optimal fleet size
- Compare your useful fleet to your optimal fleet size
  - This gives you your short-term need

For your healthy buses:

- Plot their useful life cycle
  - Cost effective, rust-free, dependable
- Schedule new bus purchases in years when buses are below average usefulness
- Those buses rotate to sub status, new buses move to primary routes

Important note

- You will need to rotate the bus assignments
  - Newest buses to long routes
  - Previous effective buses move down the routing ladder
  - Formerly mediocre buses to sub status
  - Worst buses leave the fleet

The field trip decision

- Keep one or two better buses available for long field trips
  - Or
- Pull newer buses off routes for longer field trips

- Either one has positives and negatives

Two cautions

- Avoid loading up on one model year
  - They will all wear out at the same time
- Work with the treasurer to meet fiscal capacity – balancing operating cost with capital cost

All things being equal:

- Use age or mileage as a starting point
- Remember that bus cost is more closely related to age than mileage
- Annually evaluate this base-line plan in light of the cost and other factors discussed earlier

Life Cycle notes

- Special ed buses
  - Shorter life span, more specialized eqpmt
  - Accumulate mileage quicker
- Regular route buses
  - Longer life span
  - Body wear, brakes, driveline, seating damage
- Field trip and sub buses
  - Abused, problems not always reported
  - Orphaned—no regular tlc

And now, to buy a bus

- Legal aspects
- Timeline
- Needs analysis
- Specifications
- Process
- Purchase options
- Delivery

Legal aspects

- Tax money, requires competitive bidding, with all of its own elements!
- RC 153.54 Bid guaranty
  - Bond for 100% or Credit letter of 10%
  - Held by district to ensure bid is accepted
  - If bidder does not accept bid, they forfeit the bid guaranty

More legal aspects

- RC 3313.172 – allows districts to purchase outright or lease-purchase
  - What is a lease-purchase?
- RC 3313.41 – disposal of old buses. Any property with value over 10,000 must be auctioned, unless sold to another school

And more legal . . .

- RC 3313.41 – also allows donation to eligible nonprofit (fire department)
- RC 3313.46 – any purchase over 25,000 requires competitive bid
  - Legal ad – 2 times at least 14 days in advance of opening or advertise 1 time and post notice on web

RC 3313.46 continued

- Bids must be opened on advertised date and time, unless formally extended (board action required)
- None but the lowest responsible bid shall be accepted
- May reject all bids

RC 3313.46 continued

- If two or more bids are equal, either may be accepted
  - But in no case can bid be divided
- If collusion is suspected among bidders, those bids must be rejected

RC 3327.08

- Empowers schools to purchase buses, either on their own or through consortiums
- But only after competitive bidding
- No reference in this section to other types of motor vehicles

Needs analysis

- What capacity bus?
  - Real capacity, not rated capacity
  - Standardized capacity in fleet?
    - It takes 2 small buses to cover 1 large one
  - Special ed buses
    - Is there room for another wheelchair
    - Can you take the whole class in 1 trip?

Vehicle style

- Conventional vs. transit
  - Passenger capacity
  - Wheelbase
  - Visibility
  - Maintainability
- Within transit
  - Front or rear engine?

Engine Size

- Most engines are now Cummins C
- 200 hp, 220 hp, 240 hp
- Torque ratings
- What do you need:
  - Power to manage your district
  - Good fuel economy
  - Lowest entry cost

Other engine items

- Cylinder configuration I-6, V-8
- EPA compliance equipment
  - Exhaust after treatment
  - SCR (selective catalytic reduction) systems standard
    - Requires the use of DEF (diesel exhaust fluid)
  - Some EGR still in market

Construction standards

- All buses nationwide comply with FMVSS standards
  - Self certification, with aftermarket testing
- Ohio buses also comply with Ohio school bus construction standards
- Includes listing of approved options
- Ohio's standard limits other items

Identifying specific options

- Industry changes regularly
- Work with vendors or industry experts to learn about options, what benefits they may have, and how they meet your needs
- Options must be approved
- New option test process – via OSP

Decide what you want

- Look at what others have purchased
- Evaluate what has worked for you
- Determine if cost is worth it for you

- There is nothing wrong with buying a state minimum standard bus!

Delivery dates

- Typical benchmark – 9 months
- Most districts try to buy to get a bus before school starts
- Better time to buy: Fall or Winter

If you need a bus NOW!

- Resolution of urgent necessity
  - Waives competitive bid
  - But . . .
- Another option- alternate bids with delivery stipulations
- Find a new bus on a dealer's lot that is already built and ready for you
  - Accept it the way it was built, may not match your other buses.

Your bid packet

- Size and style of bus
- Chassis specifications
- Body specifications
- Instructions to the bidder
- Vendor information and affirmation
- Property Tax affirmation
- Bid bond instructions

Legal ad

- Placed once or twice
  - Notice of bid
  - Bid opening date
  - Contact information

Bid opening

- This is a formal process
- Bids must be received before the opening
- No changes accepted after the deadline
- No bids accepted after the deadline
- Read aloud, many vendors will want to see copies

Bid analysis

- Compare separate bids carefully, making certain it is apples to apples
- Exceptions to a bid requirement may result in a cost advantage
- If you asked for option pricing, make certain all vendors bid the same option

What is a ‘responsible bid’?

- Vendor needs to meet your specifications
- You can also consider history, with respect to:
  - Quality of previous purchases
  - Quality of work and facilities of vendor
  - General ability and capacity to fill bid
  - Competence, integrity and judgment

Unique situations

- You may reject all bids
- If two bids are equal and lower, either may be accepted. You may NOT divide the purchase between the two bidders.
- If you believe there is collusion between the bidders, those bids shall be rejected

Do you really want to stick with just one brand?

Diversity

- Increased inventory
- Requires more product knowledge
- Wider dealer network
- Increases bidding competitiveness
- Major issues are compartmentalized, minimizing fleet impact

Similar Vehicles

- Inventory is easy
- Product knowledge is leveraged
- Common defects are known
- Decrease bidding competition
- Major issues can paralyze fleet
  - "Carpenter Syndrome"

Buy it !

- Issue Purchase Contract
  - Stick to the bid
- Upon delivery, inspect
- When in compliance, OSP Inspection
- Title must be on site
- OSP inspectors will leave you a form to send to BMV for registration
- Insure it

Disposal of old buses

- Any bus that is over 10 years old is considered to be a local bus, and may be sold or disposed of as needed
- Any ‘funded’ bus that is less than 10 years old must be made available to other eligible programs, and may not be sold without ODE permission.

Lease Purchase

- An alternative to outright purchase is the lease-purchase
- This is actually an installment purchase, not a traditional lease
- With low rates, it is possible that the interest cost is less than your operating cost of an old bus
- The net effect is if you lease-purchase several buses, you may save enough operating cost to reduce the effective price of the bus by 20-30k.

Closing points

- Consortium bids
- Joint purchases with other districts
- Use of outside services to bid
- Understanding the industry margins and pricing

Thank you!

Ohio School Boards Association

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